(1) H2O	WATER	
(2) C2H4O2	ACETIC ACID	
(3) CCL4	METHANE,TETRACHLORO	

KRISHNAMURTY V.V.G., MURTI P.S., VENKATA RAO C.
J.SCI.IND.RES. 12B(1953)583

TEMPERATURE = 27.5 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
87.168	12.802	0.030	0.0	4.485	95.515
77.140	22.679	0.181	0.0	8.501	91.499
69.513	29.978	0.509	0.0	11.880	88.120
55.587	42.460	1.953	0.759	17.082	82.159
52.296	45.181	2.523	1.472	20.531	77.997

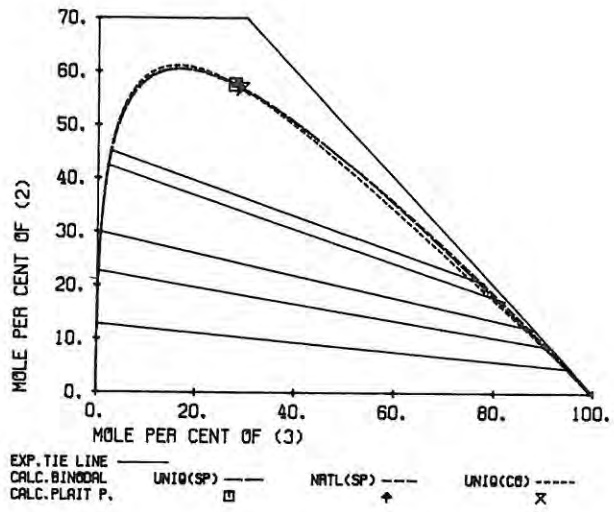
SPECIFIC MODEL PARAMETERS IN KELVIN

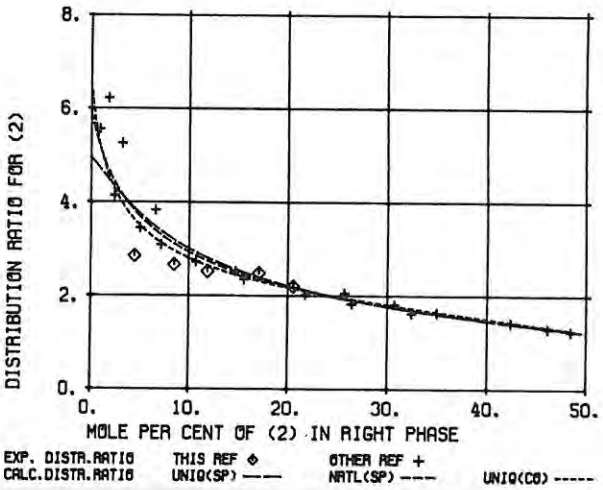
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-238.97	-48.556	185.08	-374.61
1 3	525.57	861.16	2102.8	1267.2
2 3	29.822	60.388	473.17	-92.441

R1 = 0.9200 R2 = 2.2024 R3 = 3.3900
Q1 = 1.400 Q2 = 2.072 Q3 = 2.910

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.87
NRTL (SPECIFIC PARAMETERS)	0.78
UNIQUAC (COMMON PARAMETERS)	1.12





2
CCl_4-$C_2H_4O_2$

(1) H2O	WATER
(2) C2H4O2	ACETIC ACID
(3) CCL4	METHANE,TETRACHLORO

PRINCE R.G.H., HUNTER T.G.
CHEM.ENG.SCI. 6(1957)245

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
94.873	5.088	0.039	0.170	0.916	98.915
89.896	10.030	0.074	0.168	2.419	97.413
82.393	17.429	0.178	0.248	5.053	94.699
77.442	22.233	0.325	0.326	7.180	92.495
70.156	29.187	0.657	0.556	10.695	88.749
62.143	36.578	1.279	0.767	15.557	83.676
53.412	44.123	2.465	1.315	21.747	76.938
47.939	48.469	3.592	1.757	26.445	71.798
41.883	52.743	5.374	2.790	32.399	64.812

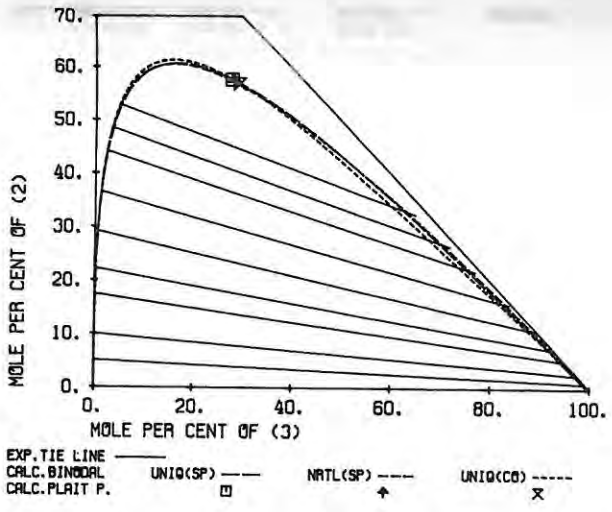
SPECIFIC MODEL PARAMETERS IN KELVIN

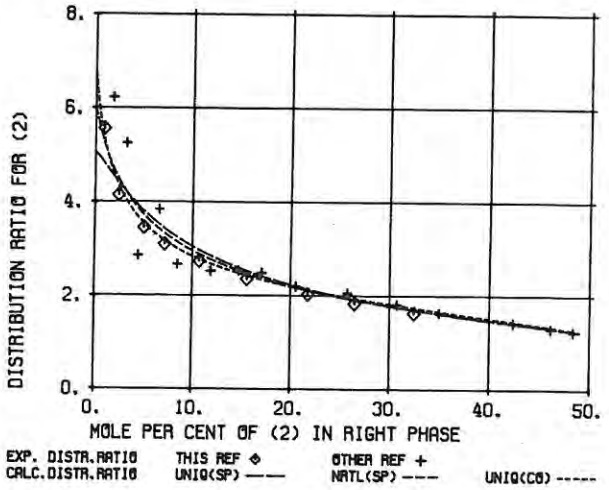
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-238.97	-48.556	185.08	-374.61
1 3	525.57	861.16	2102.8	1267.2
2 3	29.822	60.388	473.17	-92.441

R1 = 0.9200 R2 = 2.2024 R3 = 3.3900
Q1 = 1.400 Q2 = 2.072 Q3 = 2.910

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.73
NRTL (SPECIFIC PARAMETERS)	0.59
UNIQUAC (COMMON PARAMETERS)	0.86





3
CCl_4-$C_2H_4O_2$

4

CCl_4-$C_2H_4O_2$

(1) H2O WATER

(2) C2H4O2 ACETIC ACID

(3) CCL4 METHANE,TETRACHLORO

FUSE K., IGUCHI A.
KAGAKU KOGAKU 34(1970)1001

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
88.724	11.157	0.119	0.421	1.792	97.787
83.004	16.798	0.198	0.666	3.196	96.139
74.203	25.378	0.418	1.135	6.617	92.248
61.713	37.261	1.026	2.280	14.729	82.991
42.377	53.023	4.600	3.735	25.733	70.532
38.137	55.713	6.150	4.489	30.700	64.811
34.651	57.439	7.910	5.190	34.935	59.875
27.621	60.101	12.277	6.381	42.326	51.292
26.395	59.955	13.650	7.372	46.073	46.555
23.852	60.064	16.084	8.307	48.383	43.310

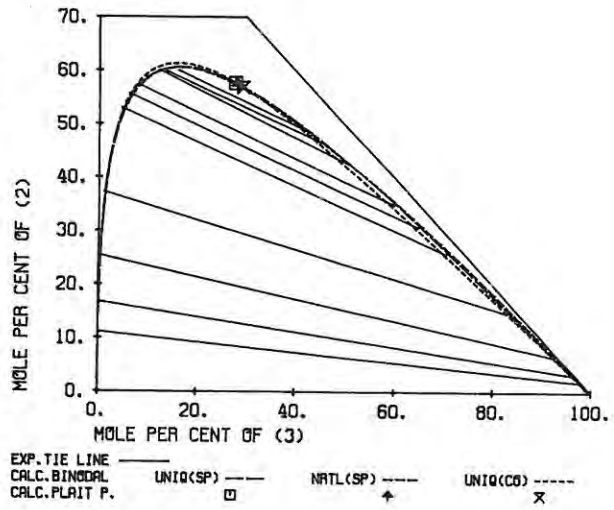
SPECIFIC MODEL PARAMETERS IN KELVIN

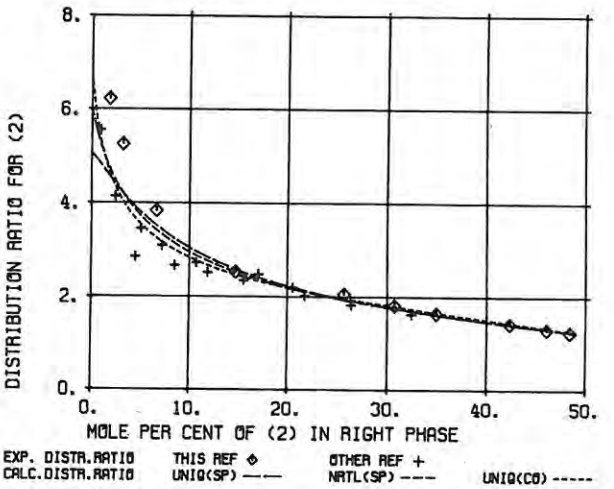
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-238.97	-48.556	185.08	-374.61
1 3	525.57	861.16	2102.8	1267.2
2 3	29.822	60.388	473.17	-92.441

R1 = 0.9200 R2 = 2.2024 R3 = 3.3900
Q1 = 1.400 Q2 = 2.072 Q3 = 2.910

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.64
NRTL (SPECIFIC PARAMETERS)	0.66
UNIQUAC (COMMON PARAMETERS)	0.90





5

CCl_4-C_2H_6O

(1) C3H8O3 GLYCEROL

(2) C2H6O ETHANOL

(3) CCL4 METHANE,TETRACHLORO

MCDONALD H.J., KLUENDER A.F., LANE R.W.
J.PHYS.CHEM. 46(1942)946

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
90.782	8.643	0.575	0.166	0.994	98.840
76.472	21.687	1.840	0.312	9.348	90.340
63.028	33.053	3.919	1.036	15.679	83.285
51.176	41.964	6.860	2.052	24.620	73.328
43.293	46.377	10.330	8.428	39.239	52.333

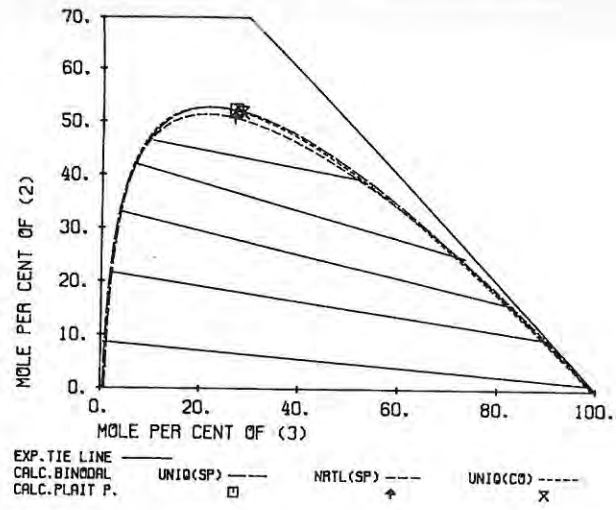
SPECIFIC MODEL PARAMETERS IN KELVIN

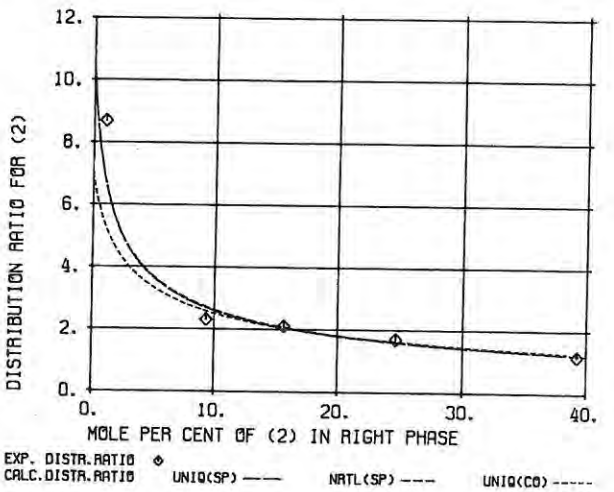
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-9.5920	-274.21	-181.37	-468.95
1 3	300.09	329.12	1039.6	1426.6
2 3	74.791	-165.69	545.76	-497.24

R1 = 3.5857 R2 = 2.1055 R3 = 3.3900
Q1 = 3.060 Q2 = 1.972 Q3 = 2.910

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.22
NRTL (SPECIFIC PARAMETERS)	1.09
UNIQUAC (COMMON PARAMETERS)	1.38





(1) H2O WATER

(2) C2H6O ETHANOL

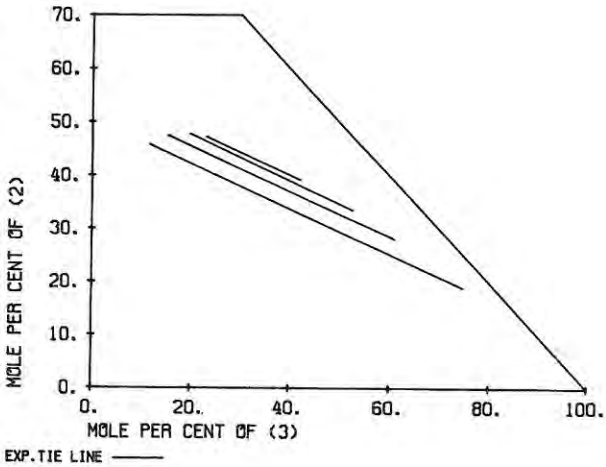
(3) CCL4 METHANE,TETRACHLORO

BONNER W.D.
J.PHYS.CHEM. 14(1910)738

TEMPERATURE = 0.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
42.518	45.823	11.659	6.240	18.977	74.783
37.142	47.429	15.429	10.869	28.099	61.032
32.397	47.759	19.844	13.742	33.532	52.726
29.595	47.244	23.162	18.654	39.277	42.069



(1) CCL4 METHANE,TETRACHLORO

(2) C3H6O 2-PROPANONE

(3) H2O WATER

BUCHANAN R.H.
IND.ENG.CHEM. 44(1952)2449

TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
97.826	2.090	0.084	0.028	1.066	98.906
89.959	9.801	0.240	0.032	3.447	96.521
88.391	11.292	0.317	0.034	3.884	96.081
67.812	29.146	3.042	0.056	8.209	91.736
62.979	33.194	3.827	0.059	9.141	90.800
50.966	43.629	5.405	0.090	12.012	87.899
39.686	53.525	6.789	0.189	14.956	84.854
32.153	57.861	9.987	0.286	17.626	82.087
23.479	60.132	16.388	0.468	21.776	77.756
18.418	59.892	21.690	0.844	25.028	74.128

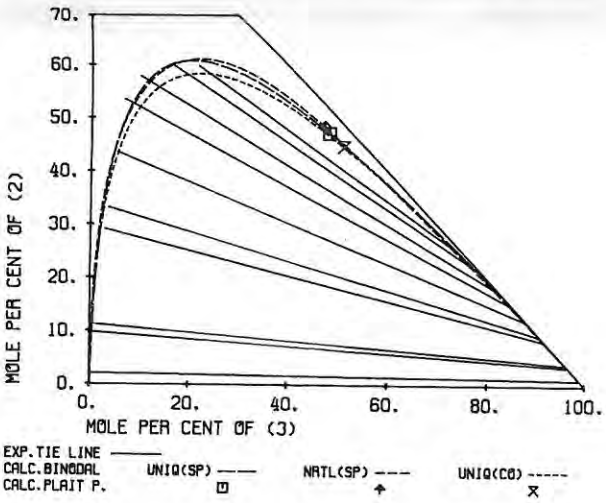
SPECIFIC MODEL PARAMETERS IN KELVIN

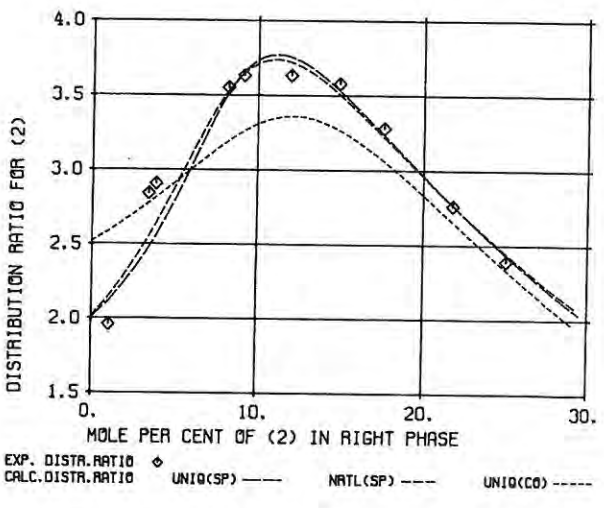
	UNIQUAC		NRTL(ALPHA=.2)	
I J	AIJ	AJI	AIJ	AJI
1 2	368.93	-141.50	770.01	-359.03
1 3	1003.8	595.35	1516.6	2074.8
2 3	463.04	-105.87	382.16	227.04

R1 = 3.3900 R2 = 2.5735 R3 = 0.9200
Q1 = 2.910 Q2 = 2.336 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.46
NRTL (SPECIFIC PARAMETERS)	0.55
UNIQUAC (COMMON PARAMETERS)	0.92





8

CCl_4-$C_3H_6O_2$

(1) CCL4 METHANE,TETRACHLORO

(2) C3H6O2 PROPANOIC ACID

(3) H2O WATER

IGUCHI A., FUSE K.
KAGAKU KOGAKU 36(1972)673

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
95.776	4.224	0.0	0.025	1.956	98.019
90.560	9.440	0.0	0.052	3.344	96.604
79.417	19.822	0.760	0.083	5.835	94.081
74.040	25.223	0.737	0.102	7.426	92.473
65.831	32.772	1.397	0.126	10.781	89.093
59.635	38.358	2.007	0.291	14.144	85.564
54.619	42.801	2.580	0.731	18.866	80.403
50.533	45.727	3.740	1.205	21.934	76.861
41.068	48.294	10.638	3.246	28.520	68.234
16.331	41.941	41.729	10.192	37.651	52.157

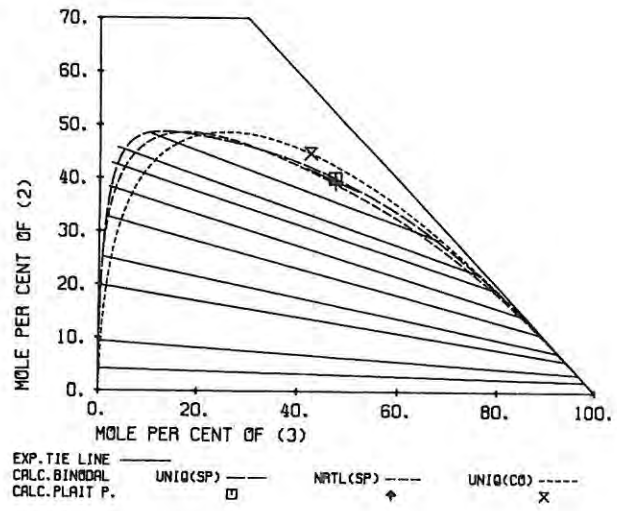
SPECIFIC MODEL PARAMETERS IN KELVIN

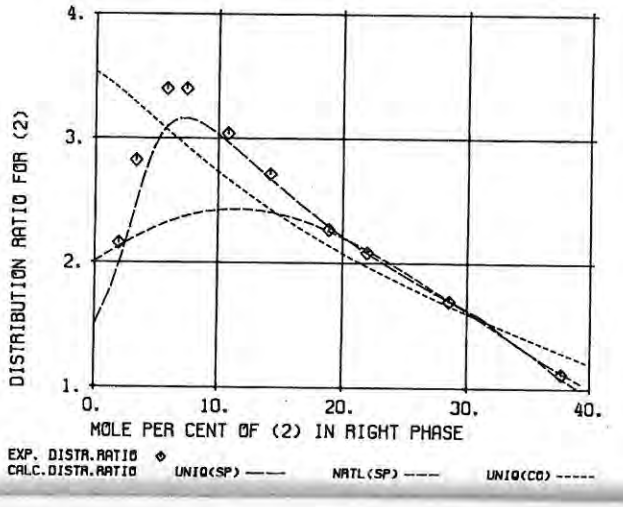
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	525.16	-250.92	693.53	-405.96
1 3	1470.0	1021.2	2588.4	2152.5
2 3	810.88	-225.50	361.86	86.533

R1 = 3.3900 R2 = 2.8768 R3 = 0.9200
Q1 = 2.910 Q2 = 2.612 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.41
NRTL (SPECIFIC PARAMETERS)	1.42
UNIQUAC (COMMON PARAMETERS)	2.20





9

CCl_4-C_3H_8O

(1) CCL4 METHANE,TETRACHLORO

(2) C3H8O 1-PROPANOL

(3) H2O WATER

DENZLER C.G.
J.PHYS.CHEM. 49(1945)358

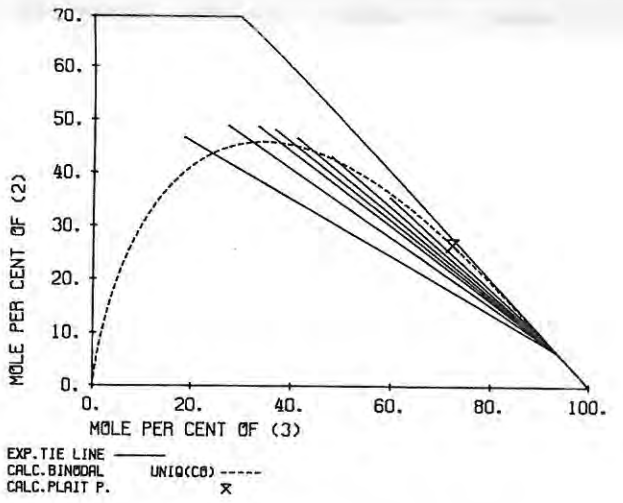
TEMPERATURE = 20.0 DEG C TYPE OF SYSTEM = 1

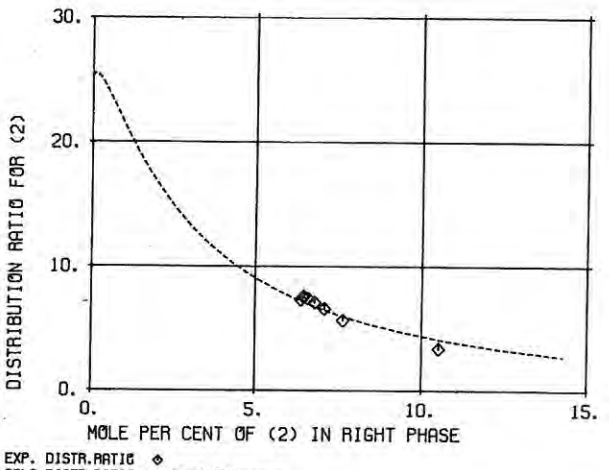
EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
34.977	46.594	18.429	0.035	6.387	93.578
23.937	48.838	27.225	0.038	6.467	93.495
18.077	48.672	33.251	0.041	6.588	93.371
15.260	48.075	36.665	0.052	6.795	93.153
12.383	46.534	41.083	0.059	7.083	92.858
8.948	43.065	47.987	0.100	7.643	92.257
4.948	35.416	59.636	0.327	10.507	89.166

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (COMMON PARAMETERS)	2.01





10

CCl_4-C_3H_8O

(1) CCL4 METHANE,TETRACHLORO

(2) C3H8O 2-PROPANOL

(3) H2O WATER

IZMAILOV N.A., FRANKE A.K.
ZH.FIZ.KHIM. 29(1955)263

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
98.479	1.521	0.0	0.013	3.681	96.306
96.005	3.995	0.0	0.026	5.373	94.601
89.635	9.567	0.798	0.041	6.749	93.210
70.749	23.740	5.511	0.114	8.896	90.990
56.812	31.166	12.022	0.160	9.869	89.970
43.737	37.152	19.111	0.207	10.649	89.144
33.492	39.782	26.726	0.302	11.446	88.252
19.658	39.488	40.855	0.486	12.916	86.598
14.461	37.273	48.266	0.755	14.742	84.503

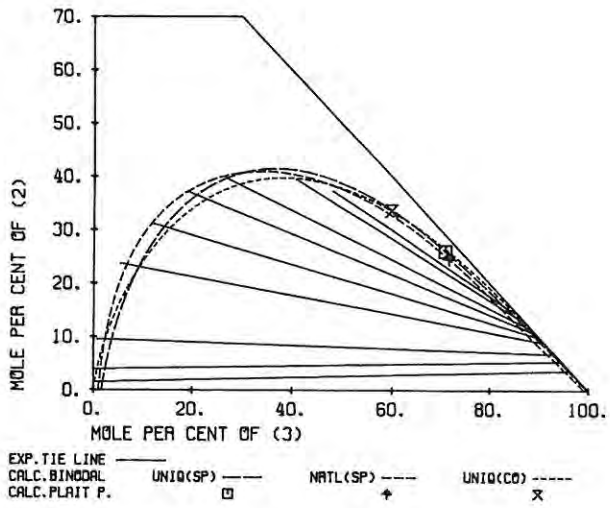
SPECIFIC MODEL PARAMETERS IN KELVIN

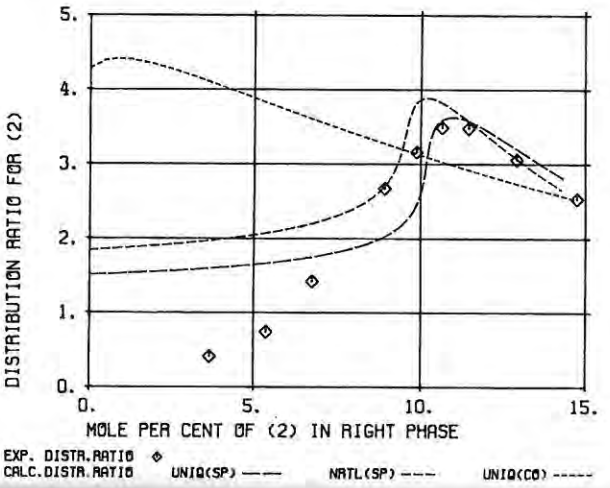
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	336.80	-85.423	703.29	-183.39
1 3	656.78	248.47	385.90	983.89
2 3	76.985	68.463	-244.79	964.61

R1 = 3.3900 R2 = 2.7791 R3 = 0.9200
Q1 = 2.910 Q2 = 2.508 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.38
NRTL (SPECIFIC PARAMETERS)	1.21
UNIQUAC (COMMON PARAMETERS)	3.38





11

CCl_4-$C_5H_4O_2$

(1) CCL4 METHANE,TETRACHLORO

(2) C5H4O2 FURFURAL

(3) H2O WATER

KRUPATKIN I.L., GLAGOLEVA M.F.
ZH.PRIKL.KHIM.(LENINGRAD) 42(1969)1526

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 2

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
75.060	23.786	1.153	0.074	0.942	98.985
53.271	43.284	3.446	0.087	1.149	98.765
30.726	59.820	9.454	0.075	1.283	98.642
21.075	66.856	12.070	0.037	1.459	98.504
5.286	73.991	20.723	0.013	1.627	98.360
12.830	73.283	13.887	0.025	1.758	98.216

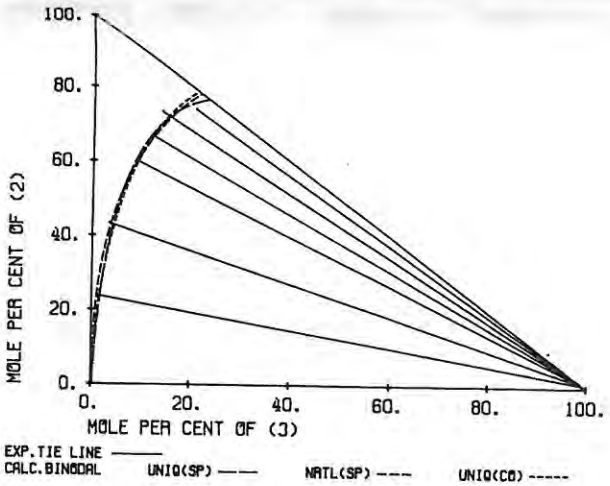
SPECIFIC MODEL PARAMETERS IN KELVIN

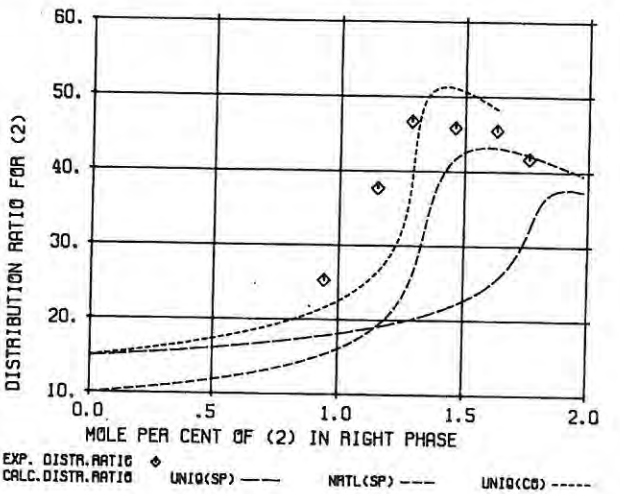
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	39.512	144.99	427.61	103.56
1 3	918.49	633.38	1527.6	1577.5
2 3	210.12	60.877	48.559	1164.6

R1 = 3.3900 R2 = 3.1680 R3 = 0.9200
Q1 = 2.910 Q2 = 2.484 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.55
NRTL (SPECIFIC PARAMETERS)	0.59
UNIQUAC (COMMON PARAMETERS)	0.65





(1) H2O WATER

(2) C6H11NO HEXANOIC ACID,6-AMINO,LACTAM

(3) CCL4 METHANE,TETRACHLORO

MORACHEVSKII A.G., SABININ V.E.
ZH.PRIKL.KHIM.(LENINGRAD) 33(1960)1775

TEMPERATURE = 20.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
97.585	2.389	0.026	0.0	0.543	99.457
94.640	5.315	0.045	0.0	1.489	98.511
94.374	5.580	0.046	0.0	1.624	98.376
90.553	9.324	0.123	0.841	2.945	96.214
88.076	11.732	0.191	1.663	4.237	94.099
82.718	16.399	0.883	2.460	6.788	90.752
31.253	17.590	1.157	3.249	7.628	89.123
73.142	23.408	3.450	5.494	12.244	82.262
66.378	27.047	6.575	7.585	16.906	75.509

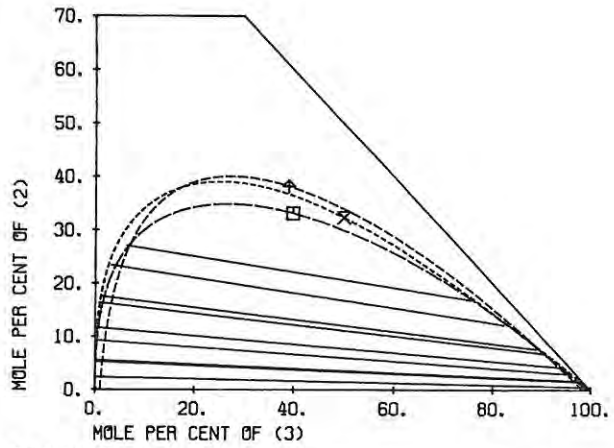
SPECIFIC MODEL PARAMETERS IN KELVIN

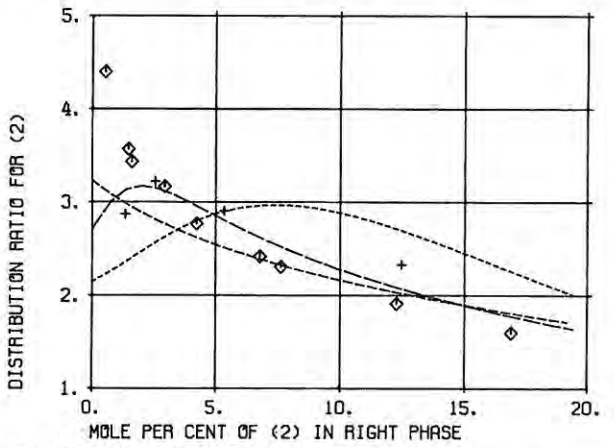
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-171.16	-79.783	448.77	-461.21
1 3	424.36	782.69	911.14	779.34
2 3	-46.065	61.435	144.92	54.695

R1 = 0.9200 R2 = 4.6106 R3 = 3.3900
Q1 = 1.400 Q2 = 3.724 Q3 = 2.910

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.05
NRTL (SPECIFIC PARAMETERS)	1.51
UNIQUAC (COMMON PARAMETERS)	2.19





(1) H2O WATER

(2) C6H11NO HEXANOIC ACID,6-AMINO,LACTAM

(3) CCL4 METHANE,TETRACHLORO

TETTAMANTI K., NOGRADI M., SAWINSKY J.
PERIOD.POLYTECH.,CHEM.ENG. 4(1960)201

TEMPERATURE = 20.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
99.992	0.0	0.008	0.085	0.0	99.915
96.090	3.882	0.028	0.170	1.352	98.478
91.694	8.252	0.054	0.254	2.559	97.187
83.940	15.519	0.540	0.419	5.340	94.240
59.925	28.995	11.079	1.547	12.442	86.011

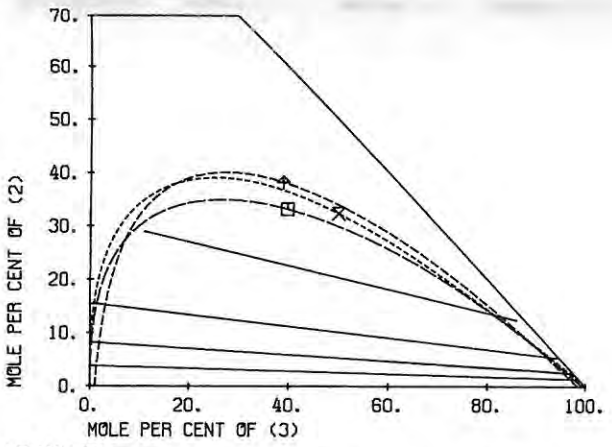
SPECIFIC MODEL PARAMETERS IN KELVIN

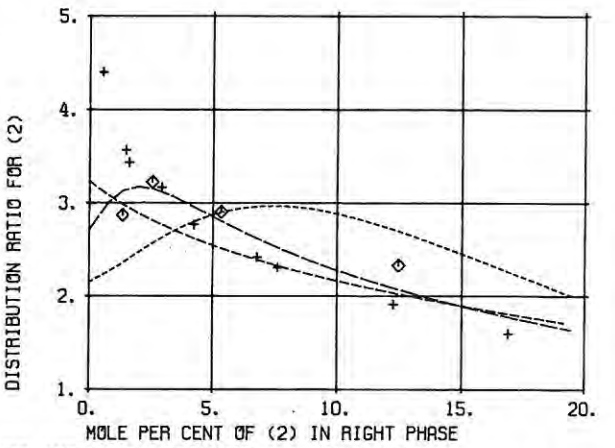
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-171.16	-79.783	448.77	-461.21
1 3	424.36	782.69	911.14	779.34
2 3	-46.065	61.435	144.92	54.695

R1 = 0.9200 R2 = 4.6106 R3 = 3.3900
Q1 = 1.400 Q2 = 3.724 Q3 = 2.910

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.89
NRTL (SPECIFIC PARAMETERS)	1.96
UNIQUAC (COMMON PARAMETERS)	1.11





(1) C7F16 HEPTANE, PERFLUORO

(2) C8F16O OCTANE, 1, 8-OXY, PERFLUORO

(3) CCL4 METHANE, TETRACHLORO

KYLE B.G., REED T.M.
J.CHEM.ENG.DATA 5(1960)266

TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 2

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
64.049	0.0	35.951	3.508	0.0	96.492
60.829	5.293	33.878	3.840	0.354	95.806
56.740	9.758	33.501	3.731	0.751	95.518
51.574	13.234	35.192	3.250	0.906	95.844
44.983	16.928	38.090	2.206	0.971	96.823
37.170	23.939	38.891	2.455	1.776	95.769
30.579	30.353	39.068	1.998	2.458	95.544
21.476	37.302	41.222	1.886	3.078	95.036
14.357	45.247	40.397	1.075	4.010	94.915
9.951	47.492	42.558	0.774	4.249	94.977
4.354	52.498	43.149	0.344	4.738	94.918
0.0	56.297	43.703	0.0	5.148	94.852

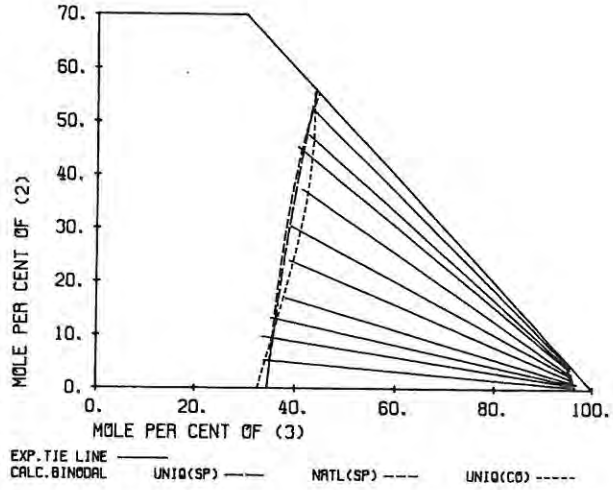
SPECIFIC MODEL PARAMETERS IN KELVIN

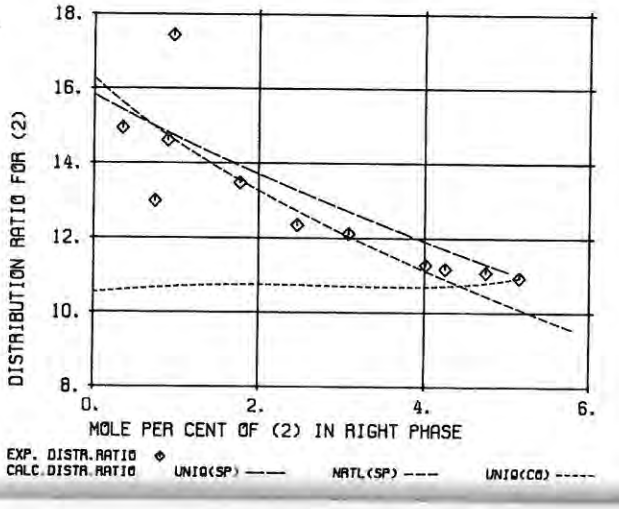
	UNIQUAC		NRTL(ALPHA=.2)	
I J	AIJ	AJI	AIJ	AJI
1 2	-1.7634	-0.60995	-60.800	-45.923
1 3	148.54	43.149	-39.586	1049.0
2 3	133.66	43.892	-134.15	1110.7

R1 = 7.8645 R2 = 8.3279 R3 = 3.3900
Q1 = 7.360 Q2 = 7.600 Q3 = 2.910

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.58
NRTL (SPECIFIC PARAMETERS)	0.72
UNIQUAC (COMMON PARAMETERS)	0.79





14 CCl_4-C_7F_{16}

(1) CCL4 METHANE, TETRACHLORO

(2) C10H14N2 NICOTINE

(3) H2O WATER

FOWLER R.T., NOBLE R.A.S.
J.APPL.CHEM. 4(1954)546

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
98.197	1.803	0.0	0.012	0.022	99.966
70.808	23.442	5.750	0.066	1.457	98.477
59.620	32.300	8.080	0.194	4.609	95.196
53.059	37.352	9.588	0.479	9.254	90.268
44.027	40.153	15.820	2.008	16.205	81.787

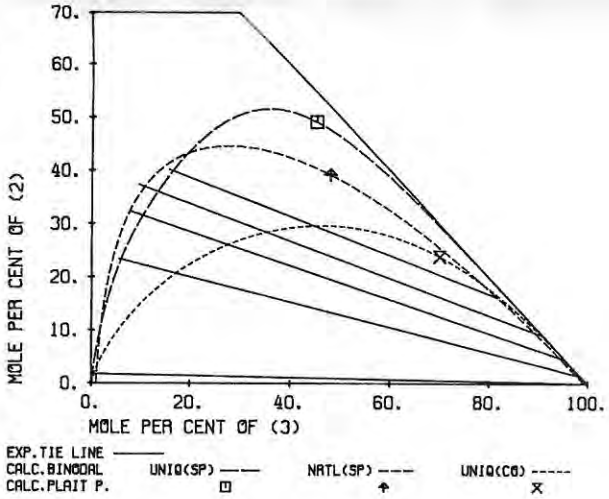
SPECIFIC MODEL PARAMETERS IN KELVIN

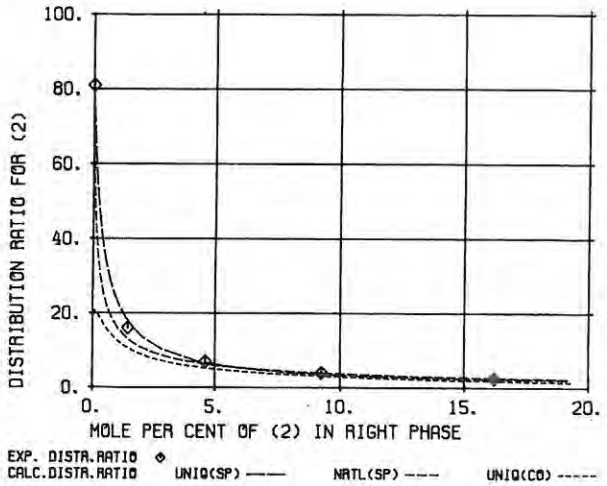
	UNIQUAC		NRTL(ALPHA=.2)	
I J	AIJ	AJI	AIJ	AJI
1 2	-480.12	548.41	-337.83	-641.02
1 3	1111.6	1042.0	893.50	1011.4
2 3	5.1139	-244.34	-65.392	77.825

R1 = 3.3900 R2 = 6.4898 R3 = 0.9200
Q1 = 2.910 Q2 = 4.621 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.08
NRTL (SPECIFIC PARAMETERS)	0.92
UNIQUAC (COMMON PARAMETERS)	6.61





15 CCl_4-$C_{10}H_{14}N_2$

(1) H2O WATER
(2) CH2O2 FORMIC ACID
(3) CHCL3 METHANE,TRICHLORO

OTHMER D.F., PING LIANG KU
J.CHEM.ENG.DATA 5(1960)42

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
91.720	7.780	0.499	2.163	0.196	97.641
84.467	14.853	0.680	2.173	0.432	97.395
77.889	21.258	0.853	2.181	0.785	97.034
72.114	25.855	1.031	2.195	1.187	96.618
66.947	31.794	1.259	2.207	1.687	96.106
61.974	36.499	1.527	2.224	2.233	95.543
58.382	39.875	1.742	2.242	2.799	94.959
39.963	56.274	3.763	2.368	7.230	90.402

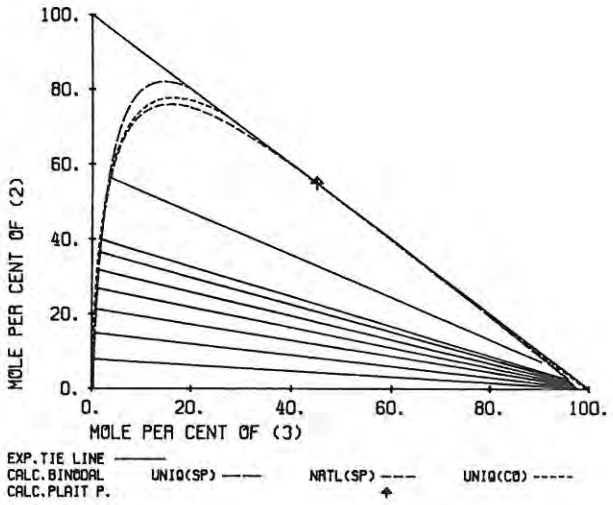
SPECIFIC MODEL PARAMETERS IN KELVIN

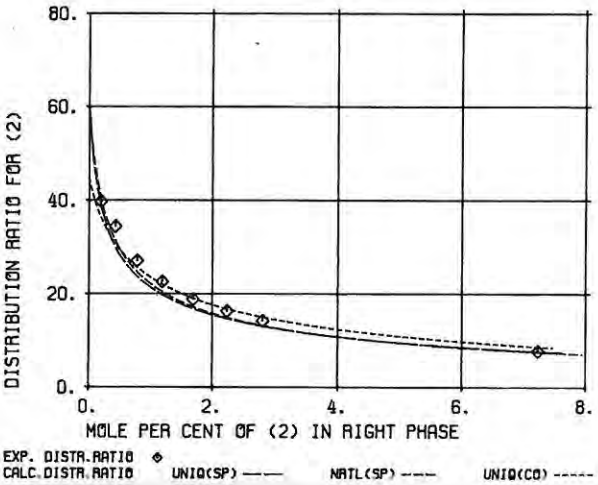
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-227.67	-245.14	-240.56	-381.59
1 3	268.42	489.31	1391.1	555.11
2 3	141.78	285.60	434.73	245.64

R1 = 0.9200 R2 = 1.5280 R3 = 2.8700
Q1 = 1.400 Q2 = 1.532 Q3 = 2.410

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.32
NRTL (SPECIFIC PARAMETERS)	0.34
UNIQUAC (COMMON PARAMETERS)	1.13





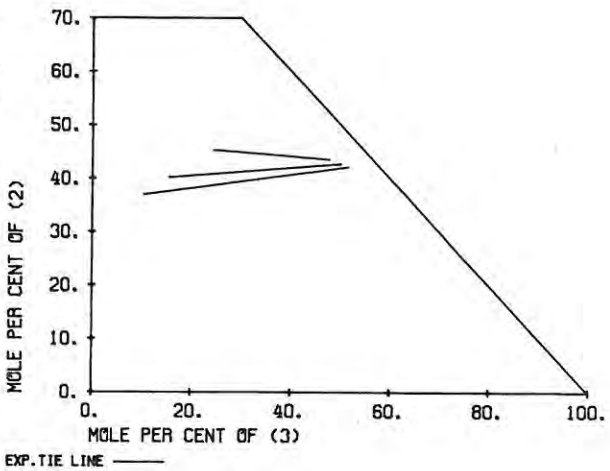
(1) CHCL3 METHANE,TRICHLORO
(2) CH4O METHANOL
(3) H2O WATER

BONNER W.D.
J.PHYS.CHEM. 14(1910)738

TEMPERATURE = 0.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
52.457	36.945	10.598	6.363	42.198	51.439
44.230	40.184	15.586	7.252	42.780	49.969
30.026	45.331	24.643	8.767	43.586	47.647



(1) CHCL3 METHANE,TRICHLORO

(2) C2H4O2 ACETIC ACID

(3) H2O WATER

WRIGHT A.
PROC.ROY.SOC.LONDON 49(1891)174

TEMPERATURE = 18.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
93.786	0.0	6.214	0.128	0.0	99.872
93.492	1.968	4.541	0.147	2.047	97.807
85.970	6.892	7.138	0.137	6.104	93.759
80.251	11.759	7.990	0.224	9.250	90.525
81.116	14.053	4.831	0.353	10.528	89.119
74.883	18.732	6.385	0.607	13.688	85.705
61.380	27.028	11.592	1.751	21.037	77.212
50.736	32.560	16.704	3.546	27.139	69.315
47.186	34.444	18.370	4.381	28.925	66.693

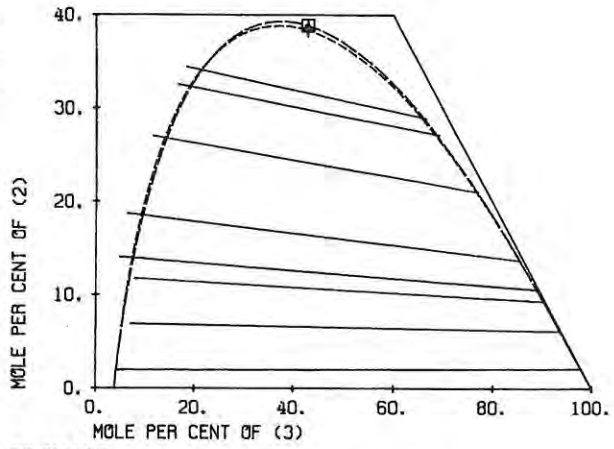
SPECIFIC MODEL PARAMETERS IN KELVIN

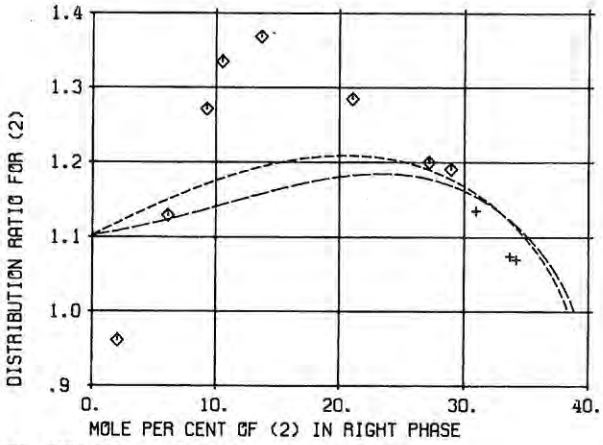
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	267.80	-110.57	295.10	-142.06
1	3	355.89	546.80	488.90	1779.9
2	3	100.20	-85.939	-55.868	176.02

R1 = 2.8700 R2 = 2.2024 R3 = 0.9200
Q1 = 2.410 Q2 = 2.072 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.01
NRTL (SPECIFIC PARAMETERS)	0.95





(1) CHCL3 METHANE,TRICHLORO

(2) C2H4O2 ACETIC ACID

(3) H2O WATER

WRIGHT A.
PROC.ROY.SOC.LONDON 50(1892)375

TEMPERATURE = 18.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
42.886	35.106	22.008	5.640	30.927	63.433
34.024	35.171	29.804	8.640	33.677	57.684
29.671	36.579	33.750	10.367	34.197	55.436

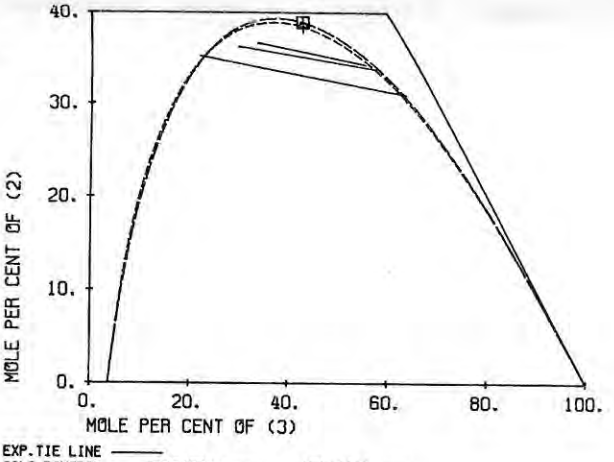
SPECIFIC MODEL PARAMETERS IN KELVIN

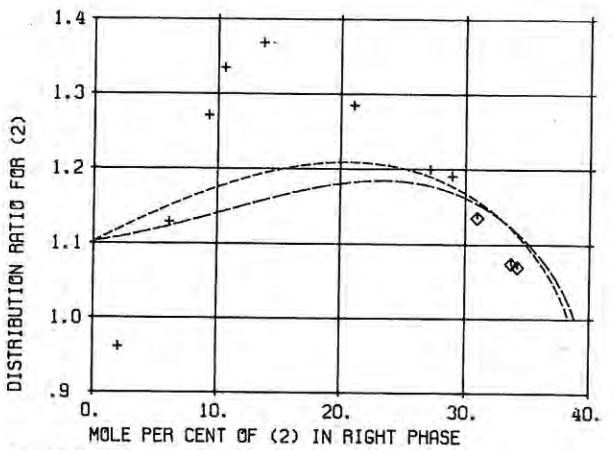
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	267.80	-110.57	295.10	-142.06
1	3	355.89	546.80	488.90	1779.9
2	3	100.20	-85.939	-55.868	176.02

R1 = 2.8700 R2 = 2.2024 R3 = 0.9200
Q1 = 2.410 Q2 = 2.072 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.99
NRTL (SPECIFIC PARAMETERS)	0.92





(1) CHCL3 METHANE,TRICHLORO

(2) C2H4O2 ACETIC ACID

(3) H2O WATER

BRANCKER A.V., HUNTER T.G., NASH A.W.
J.PHYS.CHEM. 44(1940)683

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
87.064	7.470	5.466	0.191	6.008	93.801
74.063	18.111	7.826	0.531	13.839	85.630
61.775	27.479	10.746	1.679	21.222	77.099
53.445	32.274	14.281	3.413	27.088	69.499

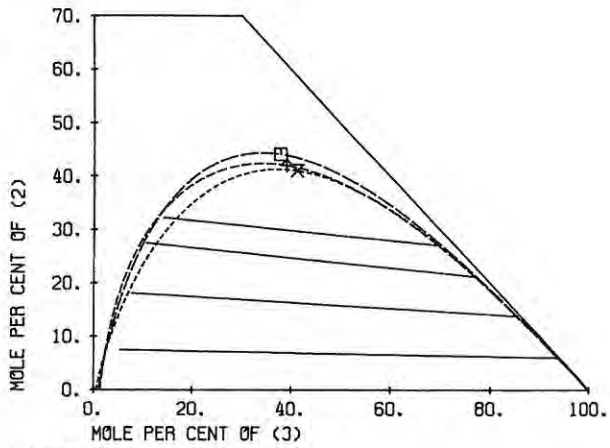
SPECIFIC MODEL PARAMETERS IN KELVIN

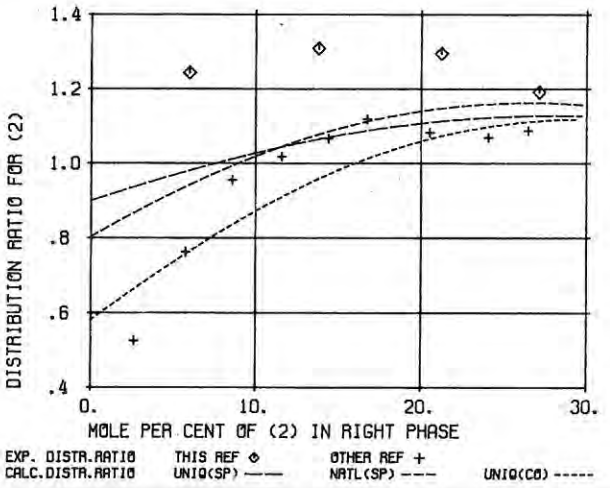
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-146.59	54.545	-525.92	57.819
1 3	659.85	379.05	759.74	1518.5
2 3	-121.08	-108.23	-364.94	-98.812

R1 = 2.8700 R2 = 2.2024 R3 = 0.9200
Q1 = 2.410 Q2 = 2.072 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.72
NRTL (SPECIFIC PARAMETERS)	1.78
UNIQUAC (COMMON PARAMETERS)	1.89





(1) CHCL3 METHANE,TRICHLORO

(2) C2H4O2 ACETIC ACID

(3) H2O WATER

OTHMER D.F., PING LIANG KU
J.CHEM.ENG.DATA 5(1960)42

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
99.472	0.0	0.528	0.122	0.0	99.878
97.823	1.392	0.784	0.268	2.649	97.083
94.174	4.417	1.408	0.348	5.784	93.867
89.534	8.223	2.243	0.455	8.610	90.934
85.084	11.823	3.092	0.651	11.611	87.738
80.706	15.400	3.894	0.889	14.438	84.672
76.464	18.771	4.765	1.154	16.778	82.068
71.988	22.220	5.792	1.546	20.530	77.924
67.304	25.694	7.002	2.687	24.037	73.276
62.902	28.761	8.337	3.566	26.449	69.985

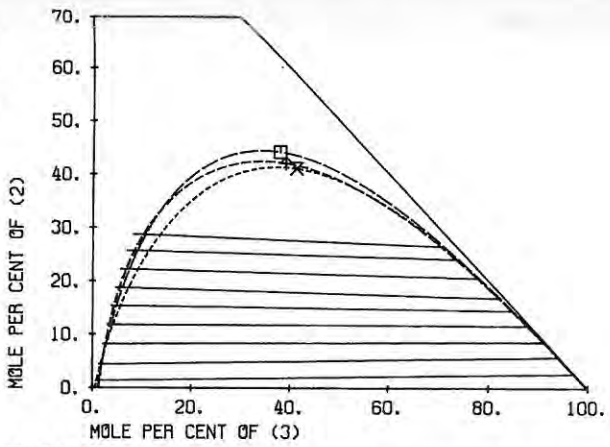
SPECIFIC MODEL PARAMETERS IN KELVIN

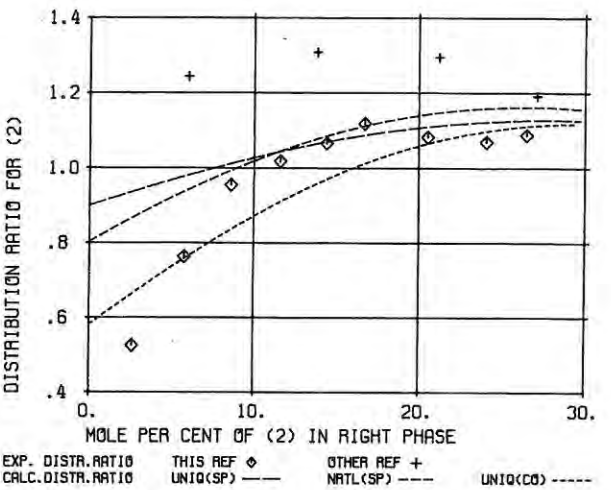
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-146.59	54.545	-525.92	57.819
1 3	659.85	379.05	759.74	1518.5
2 3	-121.08	-108.23	-364.94	-98.812

R1 = 2.8700 R2 = 2.2024 R3 = 0.9200
Q1 = 2.410 Q2 = 2.072 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.95
NRTL (SPECIFIC PARAMETERS)	0.86
UNIQUAC (COMMON PARAMETERS)	1.24





(1) CHCL3 METHANE,TRICHLORO

(2) C2H5CLO ETHANOL,2-CHLORO

(3) H2O WATER

ABABI V., POPA A., MIHAILA GH.
AN.STIINT.UNIV.AL.I.CUZA IASI. 9(1963)233

TEMPERATURE = 20.5 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
81.850	14.486	3.665	0.240	3.562	96.198
73.848	19.729	6.424	0.327	5.363	94.310
63.432	27.719	8.849	0.398	6.712	92.890
49.021	35.060	15.919	0.511	7.899	91.589
36.116	39.642	24.242	0.662	9.595	89.744
28.345	40.151	31.505	0.762	10.351	88.887
22.407	39.475	38.119	0.919	11.486	87.595
19.661	38.634	41.705	1.001	12.037	86.962
15.535	36.445	48.020	1.200	13.310	85.490

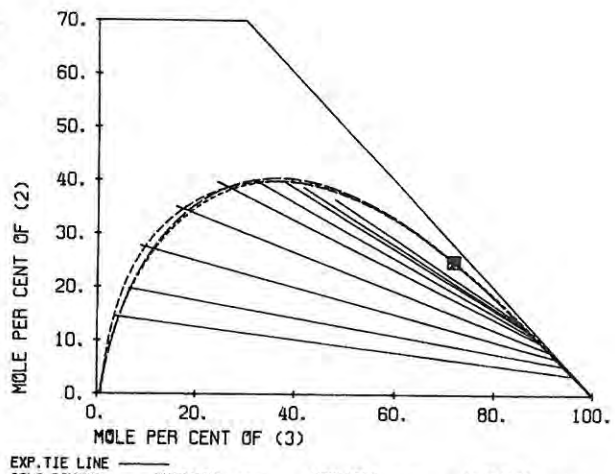
SPECIFIC MODEL PARAMETERS IN KELVIN

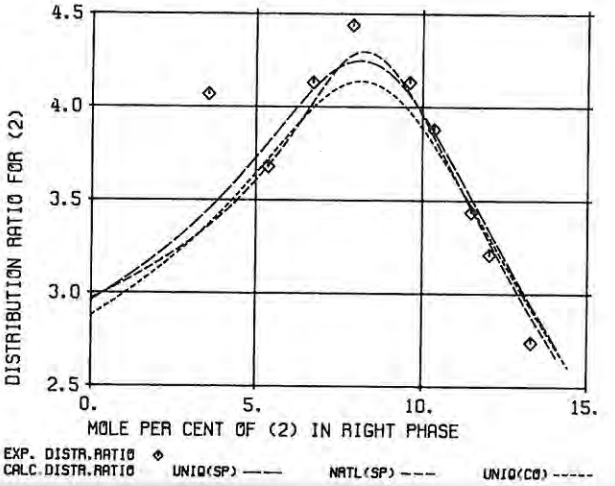
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	231.52	-70.165	655.36	-295.84
1 3	768.82	285.16	884.09	1313.0
2 3	-32.396	165.21	-333.52	1018.6

R1 = 2.8700 R2 = 2.6698 R3 = 0.9200
Q1 = 2.410 Q2 = 2.392 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.70
NRTL (SPECIFIC PARAMETERS)	0.50
UNIQUAC (COMMON PARAMETERS)	0.73





22 $CHCl_3$-C_2H_5ClO

(1) CHCL3 METHANE,TRICHLORO

(2) C2H6O ETHANOL

(3) H2O WATER

KHANINA E.P.,BEREGOVYKH V.V., PAVLENKO T.G., TIMOFEEV V.S.
ZH.FIZ.KHIM. 52(1978)1558

TEMPERATURE = 20.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
97.564	1.784	0.652	0.097	4.187	95.716
92.926	5.181	1.893	0.102	7.507	92.392
82.735	12.584	4.681	0.106	10.788	89.106
74.395	17.953	7.652	0.092	13.728	86.180
64.403	23.618	11.980	0.092	14.135	85.773
54.236	28.671	17.093	0.206	14.817	84.977
40.806	33.604	25.590	0.401	15.524	84.076
34.972	34.222	30.806	0.505	16.608	82.887
27.105	34.340	38.555	0.694	17.615	81.691
22.637	34.383	42.980	1.194	19.105	79.701

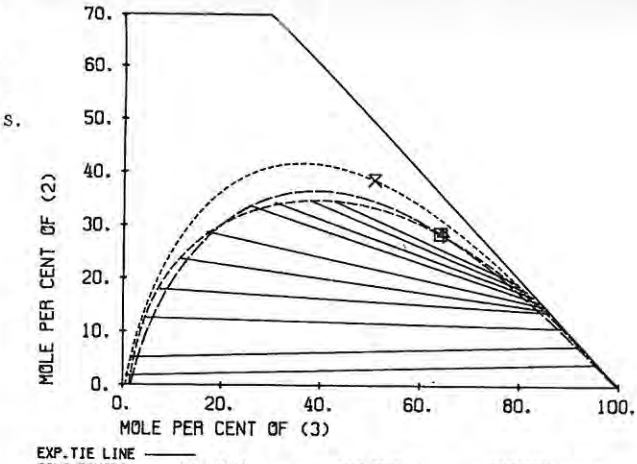
SPECIFIC MODEL PARAMETERS IN KELVIN

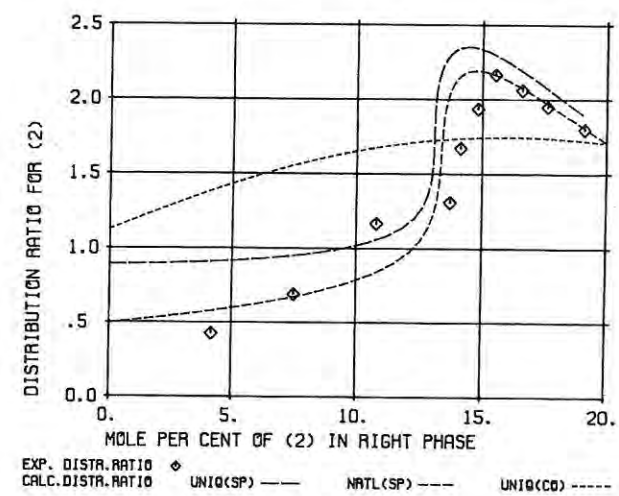
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	504.88	-126.98	1047.2	-385.18
1 3	610.76	253.86	836.10	2424.7
2 3	-129.94	331.69	90.875	214.44

R1 = 2.8700 R2 = 2.1055 R3 = 0.9200
Q1 = 2.410 Q2 = 1.972 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.12
NRTL (SPECIFIC PARAMETERS)	0.59
UNIQUAC (COMMON PARAMETERS)	4.66





23 $CHCl_3$-C_2H_6O

(1) CHCL3 METHANE,TRICHLORO

(2) C3H6O 2-PROPANONE

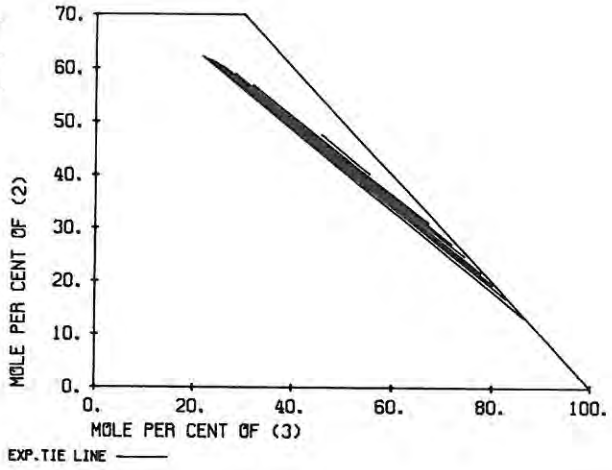
(3) H2O WATER

BONNER W.D.
J.PHYS.CHEM. 14(1910)738

TEMPERATURE = 0.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
16.078	62.219	21.703	0.257	13.286	86.457
15.533	61.738	22.729	0.400	16.803	82.796
14.657	61.141	24.202	0.508	19.504	79.989
15.090	61.437	23.473	0.508	19.504	79.989
14.255	60.554	25.190	0.618	21.696	77.686
13.892	60.206	25.901	0.845	24.799	74.356
12.814	58.981	28.205	1.079	27.080	71.841
11.237	56.890	31.873	1.784	31.054	67.162
6.606	47.674	45.721	4.292	40.326	55.382



(1) CHCL3 METHANE,TRICHLORO

(2) C3H6O 2-PROPANONE

(3) H2O WATER

BRANCKER A.V., HUNTER T.G., NASH A.W.
J.PHYS.CHEM. 44(1940)683

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
78.175	16.069	5.756	0.155	0.959	98.886
56.677	36.813	6.510	0.194	2.761	97.045
46.506	46.068	7.426	0.253	4.683	95.064
39.641	51.603	8.756	0.279	6.229	93.492
34.608	54.968	10.424	0.326	8.236	91.437
25.193	58.112	16.695	0.416	12.983	86.601
17.059	57.103	25.838	1.037	21.079	77.884

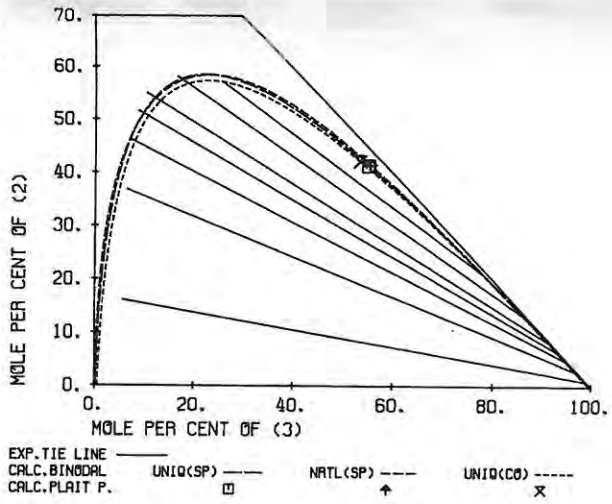
SPECIFIC MODEL PARAMETERS IN KELVIN

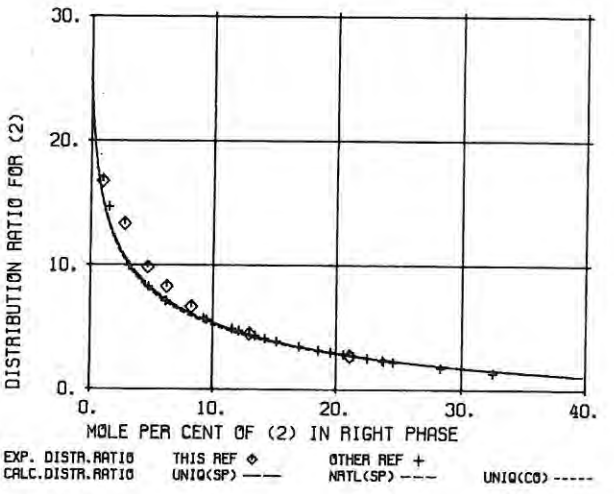
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	112.04	-178.71	-5.0568	-315.17
1	3	1041.0	311.36	1411.8	1116.7
2	3	312.58	-55.970	40.758	529.20

R1 = 2.8700 R2 = 2.5735 R3 = 0.9200
Q1 = 2.410 Q2 = 2.336 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.36
NRTL (SPECIFIC PARAMETERS)	1.53
UNIQUAC (COMMON PARAMETERS)	1.49





(1) CHCL3 METHANE,TRICHLORO

(2) C3H6O 2-PROPANONE

(3) H2O WATER

BANCROFT W.D., HUBARD S.D.
J.AM.CHEM.SOC. 64(1942)347

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
49.218	43.671	7.111	0.121	6.135	93.745
37.680	53.279	9.041	0.184	9.468	90.348
26.606	58.576	14.819	0.322	14.244	85.434
18.364	58.902	22.734	0.666	19.543	79.790
13.714	56.095	30.192	1.153	23.703	75.144
9.253	49.956	40.791	1.942	28.320	69.738

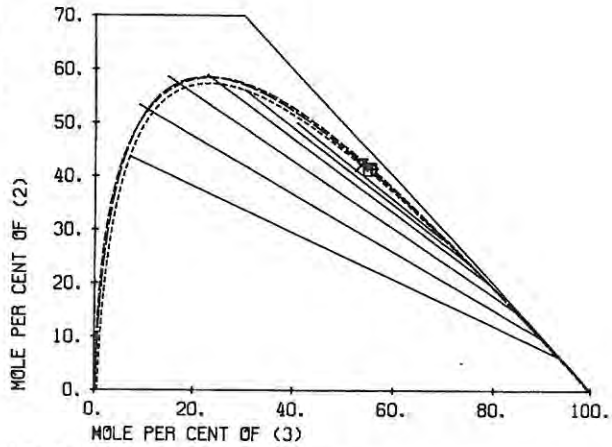
SPECIFIC MODEL PARAMETERS IN KELVIN

		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	112.04	-178.71	-5.0568	-315.17
1	3	1041.0	311.36	1411.8	1116.7
2	3	312.58	-55.970	40.758	529.20

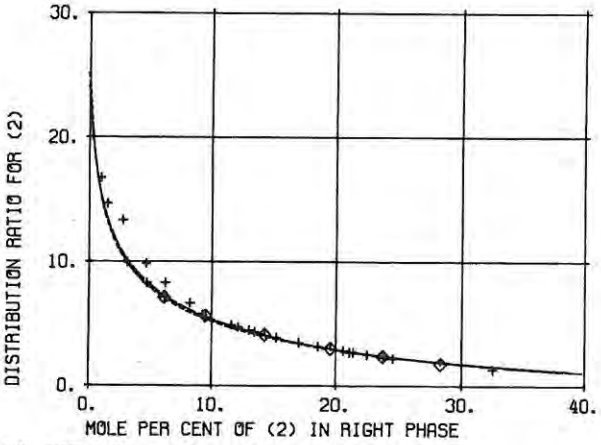
R1 = 2.8700 R2 = 2.5735 R3 = 0.9200
Q1 = 2.410 Q2 = 2.336 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.89
NRTL (SPECIFIC PARAMETERS)	1.00
UNIQUAC (COMMON PARAMETERS)	1.11



EXP.TIE LINE ——
CALC.BINODAL UNIQ(SP) —— NRTL(SP) ---- UNIQ(CO) -----
CALC.PLAIT P. □ + ×



EXP. DISTR.RATIO THIS REF ◇ OTHER REF +
CALC.DISTR.RATIO UNIQ(SP) —— NRTL(SP) ---- UNIQ(CO) -----

(1) CHCL3 METHANE,TRICHLORO

(2) C3H6O 2-PROPANONE

(3) H2O WATER

REINDERS W., DE MINJER C.H.
RECL.TRAV.CHIM.PAYS-BAS. 66(1947)573

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
75.305	21.833	2.861	0.141	1.485	98.373
64.898	31.358	3.744	0.163	3.146	96.691
56.250	39.217	4.533	0.168	4.737	95.094
50.037	44.205	5.758	0.173	6.193	93.634
38.249	53.085	8.666	0.183	9.239	90.577
31.311	56.625	12.063	0.191	11.562	88.246
30.105	57.204	12.692	0.213	12.125	87.663
26.463	58.387	15.150	0.258	13.445	86.297
23.879	58.944	17.176	0.327	15.185	84.487
21.057	59.009	19.934	0.423	17.003	82.574
18.528	58.997	22.476	0.522	18.566	80.912
16.503	58.335	25.162	0.770	20.578	78.652
15.669	57.738	26.592	0.874	21.374	77.752
14.365	56.769	28.866	0.937	22.496	76.566
12.325	54.542	33.134	1.154	23.778	75.067
11.812	54.070	34.119	1.218	24.532	74.250
6.442	43.634	49.924	2.810	32.493	64.697

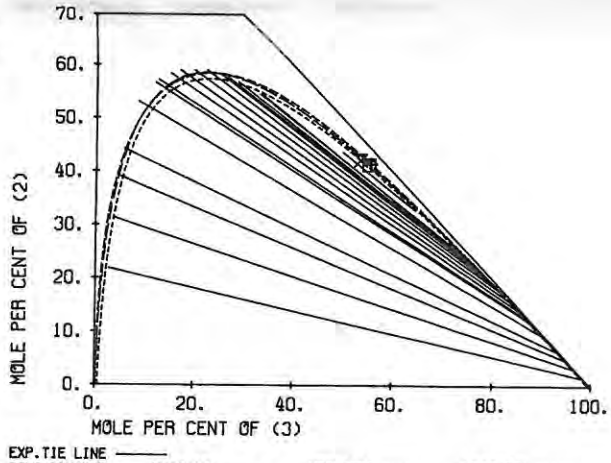
SPECIFIC MODEL PARAMETERS IN KELVIN

		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	112.04	-178.71	-5.0568	-315.17
1	3	1041.0	311.36	1411.8	1116.7
2	3	312.58	-55.970	40.758	529.20

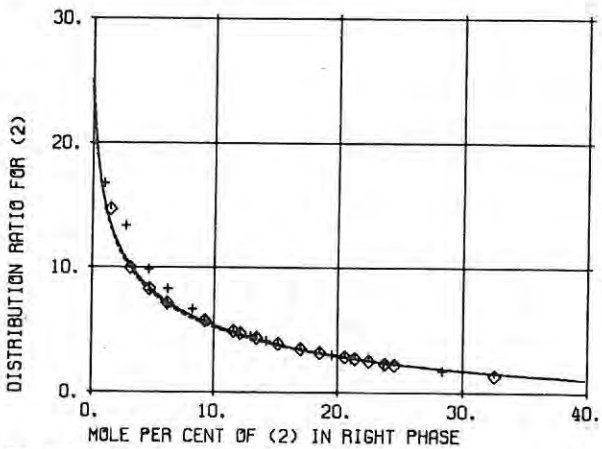
R1 = 2.8700 R2 = 2.5735 R3 = 0.9200
Q1 = 2.410 Q2 = 2.336 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.83
NRTL (SPECIFIC PARAMETERS)	0.92
UNIQUAC (COMMON PARAMETERS)	1.20



EXP.TIE LINE ——
CALC.BINODAL UNIQ(SP) —— NRTL(SP) ---- UNIQ(CO) -----
CALC.PLAIT P. □ + ×



EXP. DISTR.RATIO THIS REF ◇ OTHER REF +
CALC.DISTR.RATIO UNIQ(SP) —— NRTL(SP) ---- UNIQ(CO) -----

28

$CHCl_3$-C_3H_6O

(1) CHCL3 METHANE,TRICHLORO

(2) C3H6O 2-PROPANONE

(3) H2O WATER

REINDERS W., DE MINJER C.H.
RECL.TRAV.CHIM.PAYS-BAS. 66(1947)573

TEMPERATURE = 60.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
63.952	32.326	3.722	0.145	2.578	97.278
42.806	48.232	8.962	0.155	6.066	93.779
25.825	53.420	20.755	0.263	10.254	89.483
14.002	51.642	34.356	0.852	17.956	81.192
9.655	46.148	44.197	1.659	22.489	75.851
7.320	41.375	51.305	2.274	25.421	72.305

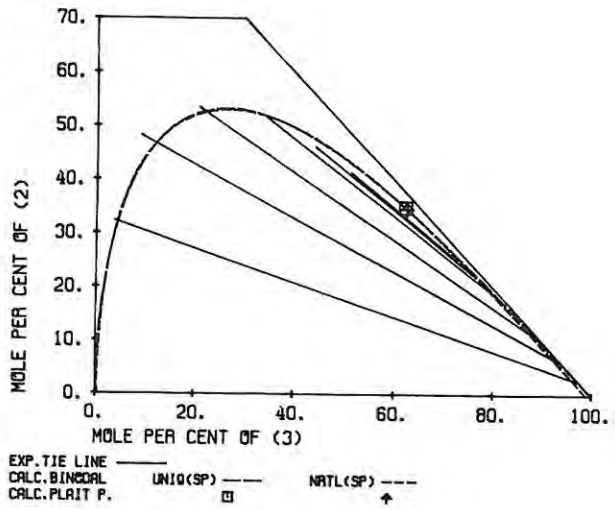
SPECIFIC MODEL PARAMETERS IN KELVIN

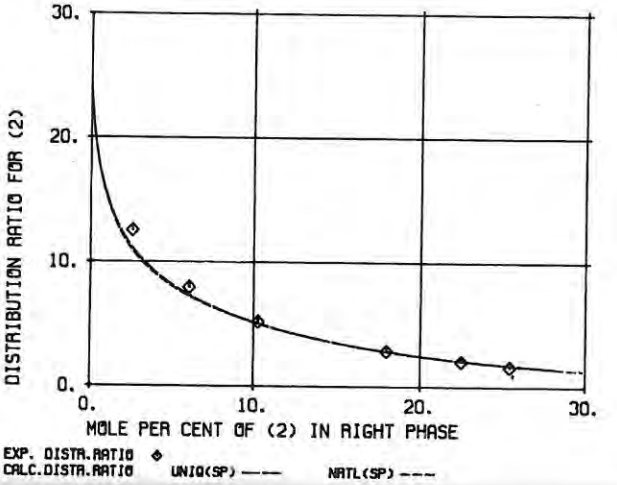
	UNIQUAC		NRTL(ALPHA=.2)	
I J	AIJ	AJI	AIJ	AJI
1 2	323.01	-292.79	229.76	-477.19
1 3	1529.7	386.73	1485.0	905.59
2 3	263.09	-25.362	-54.081	753.74

R1 = 2.8700 R2 = 2.5735 R3 = 0.9200
Q1 = 2.410 Q2 = 2.336 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.91
NRTL (SPECIFIC PARAMETERS)	1.05





29

$CHCl_3$-$C_3H_6O_2$

(1) CHCL3 METHANE,TRICHLORO

(2) C3H6O2 PROPANOIC ACID

(3) H2O WATER

IGUCHI A., FUSE K.
KAGAKU KOGAKU 36(1972)673

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
91.083	7.644	1.273	0.127	1.411	98.462
82.844	15.315	1.841	0.130	2.293	97.577
74.197	22.860	2.943	0.150	3.189	96.660
63.729	31.268	5.003	0.155	4.368	95.477
55.603	36.500	7.897	0.160	5.475	94.365
44.097	41.142	14.761	0.281	7.311	92.407
39.507	41.529	18.965	0.387	8.393	91.220
33.627	40.259	26.114	0.494	9.042	90.464
22.889	36.155	40.957	0.999	11.334	87.666
16.157	31.714	52.129	2.930	15.447	81.623

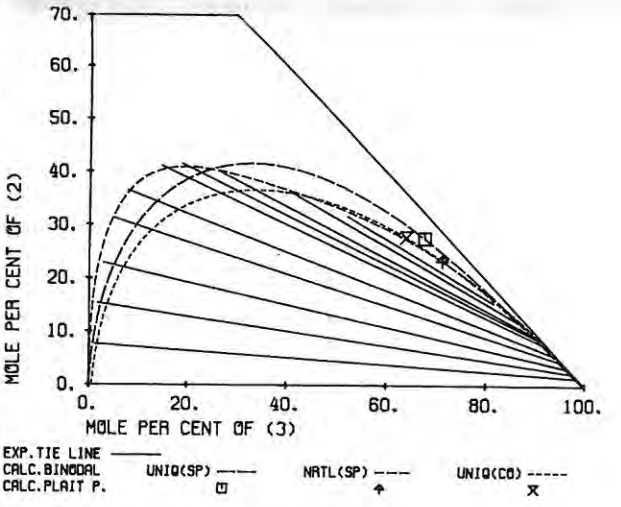
SPECIFIC MODEL PARAMETERS IN KELVIN

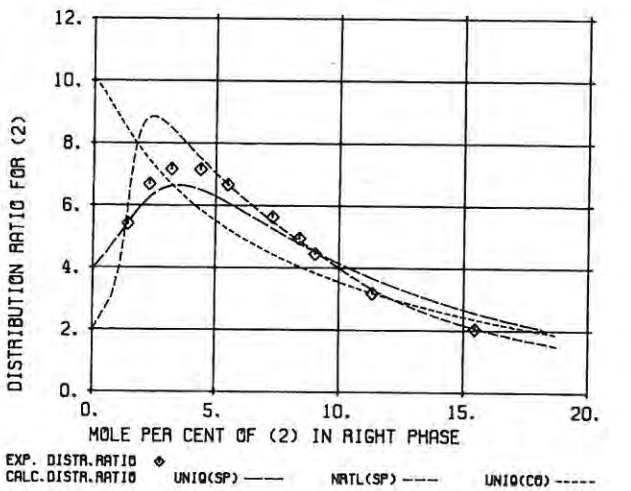
	UNIQUAC		NRTL(ALPHA=.2)	
I J	AIJ	AJI	AIJ	AJI
1 2	417.94	-228.61	1804.1	-880.74
1 3	1243.3	257.67	1943.3	2207.7
2 3	176.22	-20.420	476.94	73.994

R1 = 2.8700 R2 = 2.8768 R3 = 0.9200
Q1 = 2.410 Q2 = 2.612 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.83
NRTL (SPECIFIC PARAMETERS)	0.52
UNIQUAC (COMMON PARAMETERS)	2.83





(1) CHCL3 METHANE,TRICHLORO

(2) C3H8O 2-PROPANOL

(3) H2O WATER

IZMAILOV N.A., FRANKE A.K.
ZH.FIZ.KHIM. 29(1955)263

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
93.742	4.980	1.278	0.063	1.851	98.086
74.364	19.985	5.651	0.117	4.424	95.458
67.895	24.033	8.073	0.136	4.949	94.916
52.806	32.969	14.225	0.156	5.834	94.010
31.630	39.804	28.566	0.178	7.122	92.701
22.232	40.139	37.628	0.274	8.257	91.470
13.466	36.439	50.095	0.514	9.941	89.545
6.046	25.881	68.073	1.438	14.625	83.937

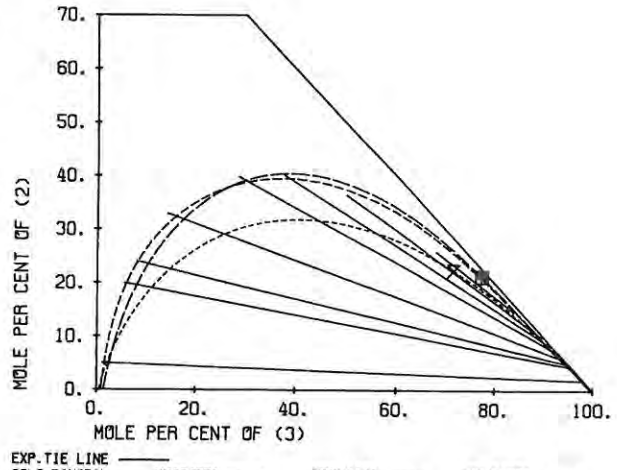
SPECIFIC MODEL PARAMETERS IN KELVIN

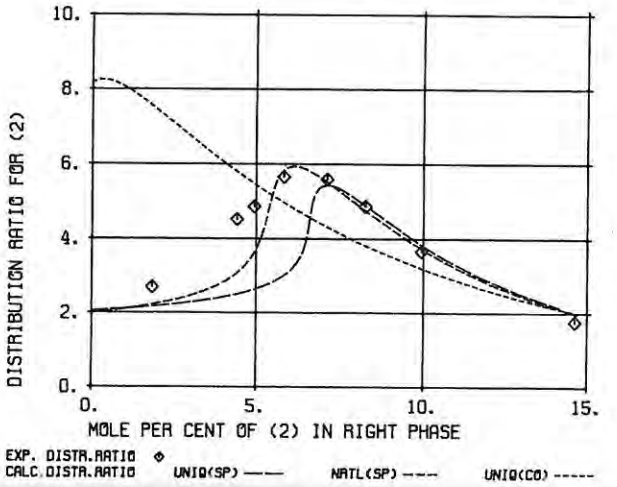
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	276.43	-42.811	955.11	-362.40
1 3	629.70	284.71	868.79	1297.7
2 3	-0.14886	169.40	-354.02	1132.2

R1 = 2.8700 R2 = 2.7791 R3 = 0.9200
Q1 = 2.410 Q2 = 2.508 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.17
NRTL (SPECIFIC PARAMETERS)	0.69
UNIQUAC (COMMON PARAMETERS)	3.39





(1) CHCL3 METHANE,TRICHLORO

(2) C5H4O2 FURFURAL

(3) H2O WATER

KRUPATKIN I.L., GLAGOLEVA M.F.
ZH.PRIKL.KHIM.(LENINGRAD) 42(1969)1526

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 2

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
72.718	20.126	7.157	0.108	0.279	99.614
49.201	41.867	8.933	0.086	0.639	99.276
32.491	57.409	10.101	0.063	0.940	98.997
23.406	63.880	12.714	0.048	1.103	98.850
14.755	70.578	14.667	0.032	1.352	98.616
6.834	74.681	18.485	0.016	1.634	98.350

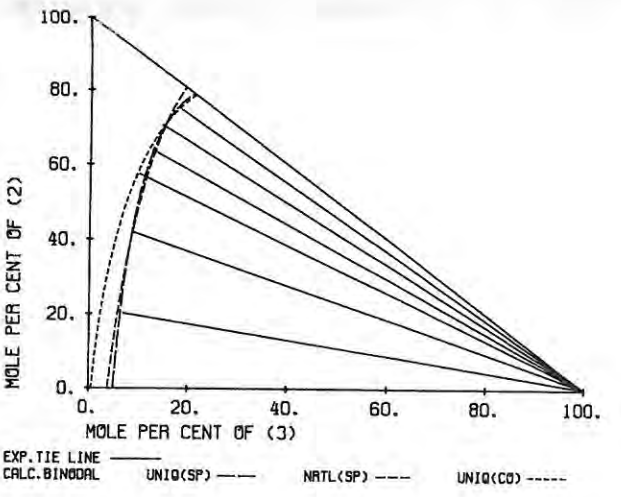
SPECIFIC MODEL PARAMETERS IN KELVIN

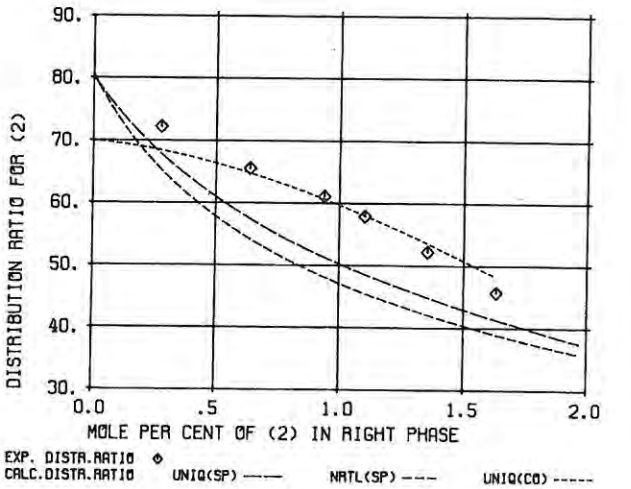
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-107.05	58.669	-193.99	2.0775
1 3	382.44	300.38	525.79	1017.8
2 3	260.51	35.961	107.92	1054.3

R1 = 2.8700 R2 = 3.1680 R3 = 0.9200
Q1 = 2.410 Q2 = 2.484 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.38
NRTL (SPECIFIC PARAMETERS)	0.64
UNIQUAC (COMMON PARAMETERS)	1.11





32

$CHCl_3$-C_6H_7N

(1) C7H16 HEPTANE

(2) CHCL3 METHANE,TRICHLORO

(3) C6H7N ANILINE

PALATNIK L.S., ET AL.
ZH.FIZ.KHIM. 33(1959)1939

TEMPERATURE = 18.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
87.228	4.887	7.885	5.957	4.604	89.439
78.111	11.410	10.479	7.996	10.836	81.168
71.361	15.147	13.492	10.036	14.477	75.487
67.904	16.714	15.382	11.064	16.027	72.908
54.390	22.311	23.299	18.386	21.725	59.889
43.554	24.689	31.758	26.306	24.375	49.318

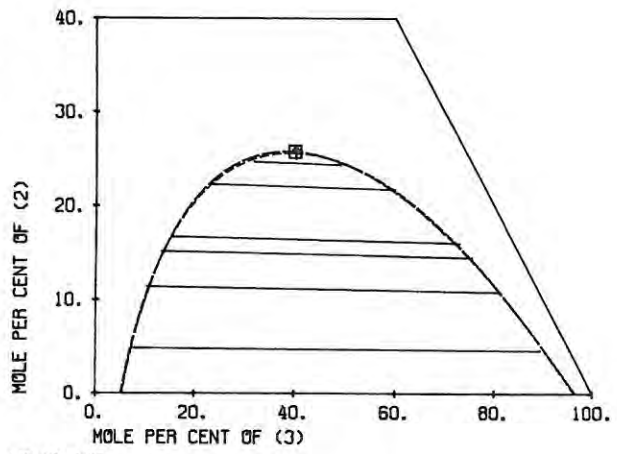
SPECIFIC MODEL PARAMETERS IN KELVIN

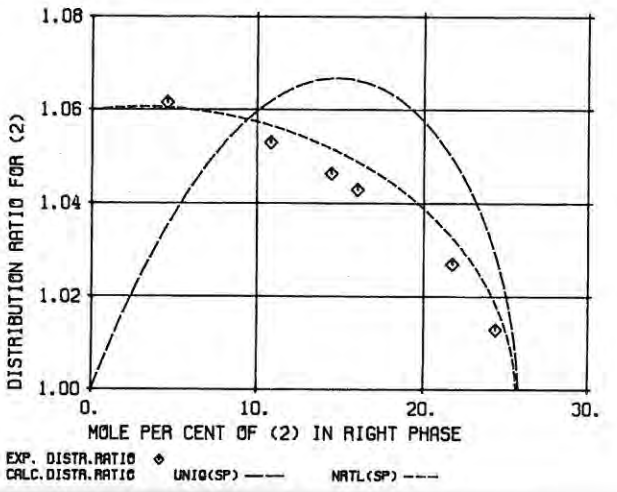
	UNIQUAC		NRTL(ALPHA=.2)	
I J	AIJ	AJI	AIJ	AJI
1 2	-39.351	-21.790	-47.408	-239.22
1 3	277.36	54.002	520.61	676.90
2 3	-211.00	220.80	-293.74	32.530

R1 = 5.1742 R2 = 2.8700 R3 = 3.7165
Q1 = 4.396 Q2 = 2.410 Q3 = 2.816

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.29
NRTL (SPECIFIC PARAMETERS)	0.25





33

$CHCl_3$-$C_6H_{11}NO$

(1) CHCL3 METHANE,TRICHLORO

(2) C6H11NO HEXANOIC ACID,6-AMINO,LACTAM

(3) H2O WATER

KUDRYAVTSEVA G.I., KRUTIKOVA A.D.
ZH.PRIKL.KHIM.(LENINGRAD) 26(1953)1190

TEMPERATURE = 20.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
86.101	11.008	2.892	0.163	0.750	99.087
75.594	19.747	4.659	0.189	1.436	98.376
66.416	25.664	7.920	0.215	2.253	97.532
55.943	29.156	14.901	0.230	3.022	96.748
42.443	30.354	27.203	0.250	3.882	95.868

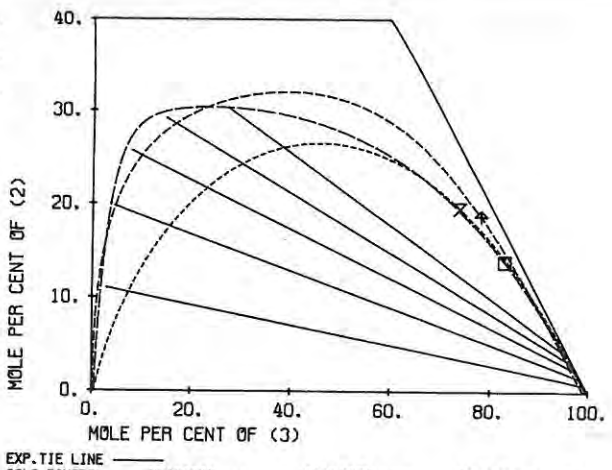
SPECIFIC MODEL PARAMETERS IN KELVIN

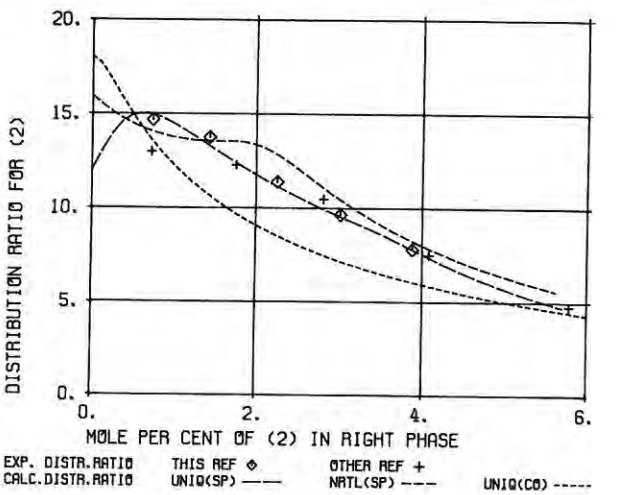
	UNIQUAC		NRTL(ALPHA=.2)	
I J	AIJ	AJI	AIJ	AJI
1 2	369.52	-227.56	-617.98	286.05
1 3	857.89	263.80	1504.9	869.92
2 3	1132.6	-250.83	-475.04	1141.7

R1 = 2.8700 R2 = 4.6106 R3 = 0.9200
Q1 = 2.410 Q2 = 3.724 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.45
NRTL (SPECIFIC PARAMETERS)	0.73
UNIQUAC (COMMON PARAMETERS)	3.57





(1) CHCL3 METHANE,TRICHLORO

(2) C6H11NO HEXANOIC ACID,6-AMINO,LACTAM

(3) H2O WATER

TETTAMANTI K., NOGRADI M., SAWINSKY J.
PERIOD.POLYTECH.,CHEM.ENG. 4(1960)201

TEMPERATURE = 20.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
99.538	0.0	0.462	0.125	0.0	99.875
88.969	9.534	1.497	0.160	0.734	99.106
74.604	21.593	3.803	0.208	1.759	98.033
64.320	29.502	6.177	0.254	2.814	96.931
44.062	30.692	25.246	0.305	4.082	95.613
26.330	27.589	46.081	0.370	5.786	93.844

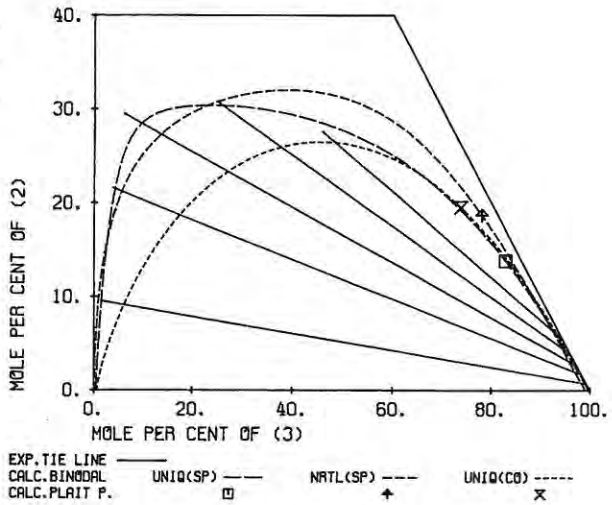
SPECIFIC MODEL PARAMETERS IN KELVIN

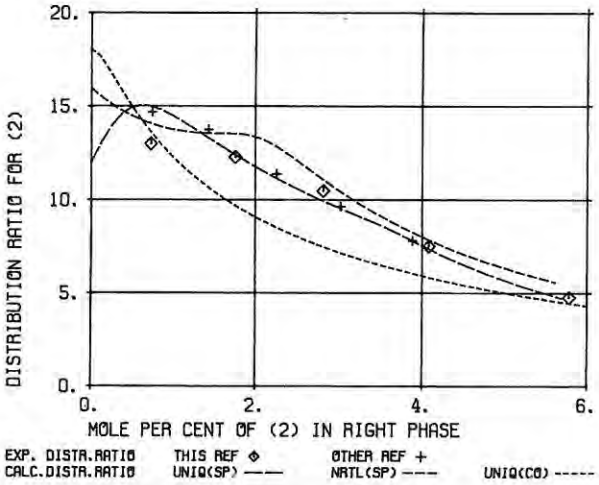
	UNIQUAC		NRTL(ALPHA=.2)	
I J	AIJ	AJI	AIJ	AJI
1 2	369.52	-227.56	-617.98	286.05
1 3	857.89	253.80	1504.9	869.92
2 3	1132.6	-250.83	-475.04	1141.7

R1 = 2.8700 R2 = 4.6106 R3 = 0.9200
Q1 = 2.410 Q2 = 3.724 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.57
NRTL (SPECIFIC PARAMETERS)	1.44
UNIQUAC (COMMON PARAMETERS)	3.55





(1) H2O WATER

(2) CH4O METHANOL

(3) CH2CL2 METHANE,DICHLORO

KHANINA E.P., PAVLENKO T.G., MALYSHEVA O.A., TIMOFEEV V.S.
ZH.FIZ.KHIM. 52(1978)1558

TEMPERATURE = 20.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
95.209	4.680	0.110	0.468	0.526	99.005
88.851	11.034	0.116	1.383	1.814	96.803
83.901	15.810	0.289	0.913	3.852	95.234
79.125	20.427	0.449	1.350	5.567	93.082
74.593	24.892	0.515	1.335	7.259	91.406
67.324	31.303	1.373	2.157	10.915	86.928

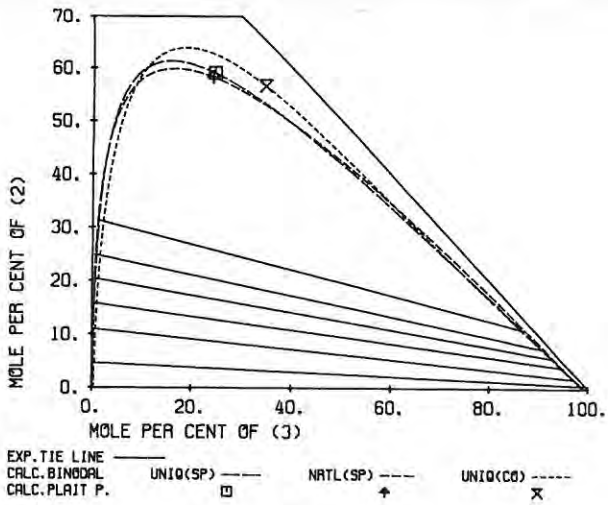
SPECIFIC MODEL PARAMETERS IN KELVIN

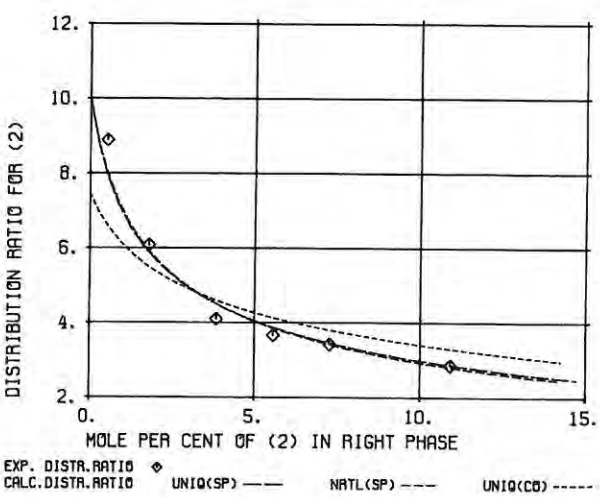
	UNIQUAC		NRTL(ALPHA=.2)	
I J	AIJ	AJI	AIJ	AJI
1 2	-119.40	-250.23	-61.678	-419.22
1 3	528.46	666.46	1561.7	833.45
2 3	190.90	-14.145	527.83	-282.00

R1 = 0.9200 R2 = 1.4311 R3 = 2.2564
Q1 = 1.400 Q2 = 1.432 Q3 = 1.988

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.25
NRTL (SPECIFIC PARAMETERS)	0.25
UNIQUAC (COMMON PARAMETERS)	0.74





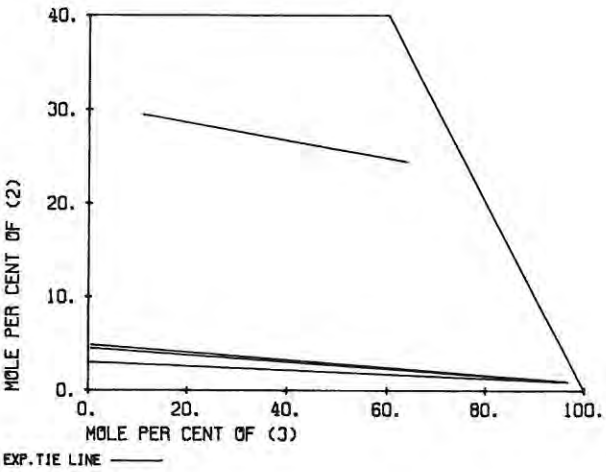
(1) H2O	WATER
(2) C2H4O2	ACETIC ACID
(3) CH2CL2	METHANE,DICHLORO

CASARICO A.
ANN.CHIM.(ROME) 41(1951)199

TEMPERATURE = 19.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
96.460	3.008	0.532	2.308	0.928	96.764
94.848	4.505	0.647	2.534	0.940	96.526
94.475	4.849	0.676	2.759	0.966	96.275
59.438	29.425	11.138	11.814	24.454	63.732



(1) H2O	WATER
(2) C2H4O2	ACETIC ACID
(3) CH2CL2	METHANE,DICHLORO

SABININ V.E., KIYA-OGLU N.V., GORICHNINA V.P.
ZH.PRIKL.KHIM.(LENINGRAD) 43(1970)1776

TEMPERATURE = 20.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
94.668	4.852	0.480	0.929	2.508	96.563
87.344	11.628	1.028	2.240	11.018	86.742
81.671	16.668	1.662	3.058	16.777	80.164
68.915	25.383	5.702	5.846	23.299	70.855

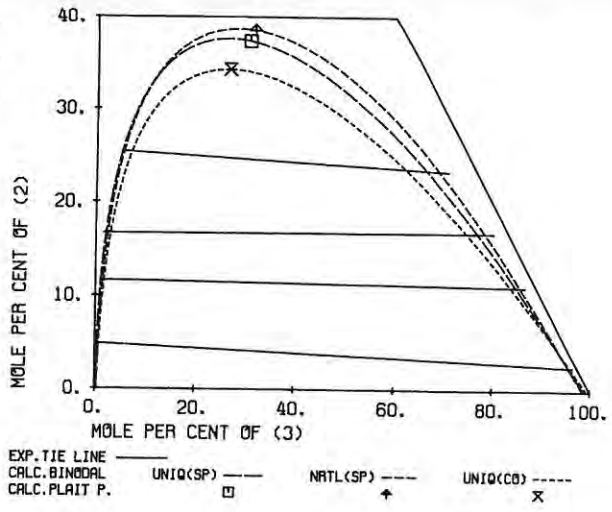
SPECIFIC MODEL PARAMETERS IN KELVIN

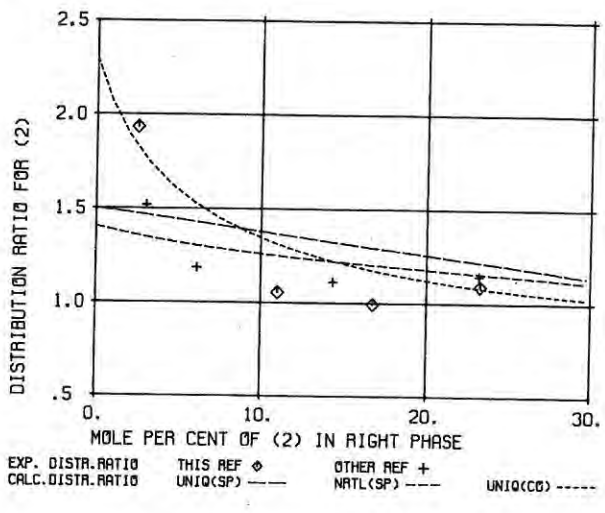
	UNIQUAC		NRTL(ALPHA=.2)	
I J	AIJ	AJI	AIJ	AJI
1 2	-89.211	-81.695	-77.014	-188.15
1 3	524.55	591.00	1232.9	751.37
2 3	-48.951	71.304	-232.69	102.66

R1 = 0.9200 R2 = 2.2024 R3 = 2.2564
Q1 = 1.400 Q2 = 2.072 Q3 = 1.988

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.43
NRTL (SPECIFIC PARAMETERS)	1.03
UNIQUAC (COMMON PARAMETERS)	2.06





38

CH_2Cl_2-$C_2H_4O_2$

(1) H2O WATER

(2) C2H4O2 ACETIC ACID

(3) CH2CL2 METHANE,DICHLORO

SABININ V.E., KIYA-OGLU N.V., GORICHNINA V.P.
ZH.PRIKL.KHIM.(LENINGRAD) 43(1970)1776

TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
94.648	4.630	0.722	1.386	3.050	95.564
91.724	7.278	0.998	2.273	6.136	91.591
81.703	15.976	2.321	4.354	14.369	81.277
64.884	25.612	8.504	8.559	23.231	68.210

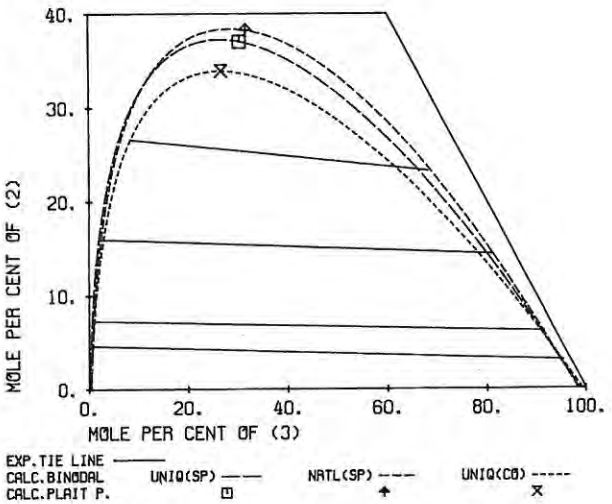
SPECIFIC MODEL PARAMETERS IN KELVIN

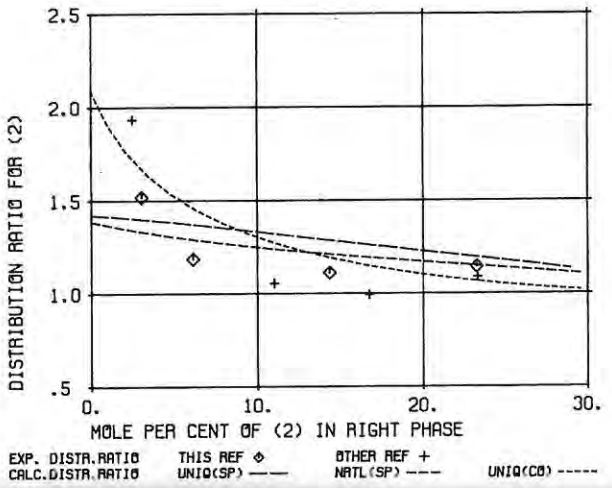
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	-89.211	-81.695	-77.014	-188.15
1	3	524.55	591.00	1232.9	751.37
2	3	-48.951	71.304	-232.69	102.66

R1 = 0.9200 R2 = 2.2024 R3 = 2.2564
Q1 = 1.400 Q2 = 2.072 Q3 = 1.988

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.83
NRTL (SPECIFIC PARAMETERS)	0.60
UNIQUAC (COMMON PARAMETERS)	1.86





39

CH_2Cl_2-$C_3H_6O_2$

(1) CH2CL2 METHANE,DICHLORO

(2) C3H6O2 PROPANOIC ACID

(3) H2O WATER

SABININ V.E., KIYA-OGLU N.V., GORICHNINA V.P.
ZH.PRIKL.KHIM.(LENINGRAD) 43(1970)1776

TEMPERATURE = 20.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
84.630	13.544	1.826	0.459	2.050	97.491
67.242	27.532	5.225	0.958	3.944	95.098
41.824	35.495	22.681	1.634	7.183	91.182

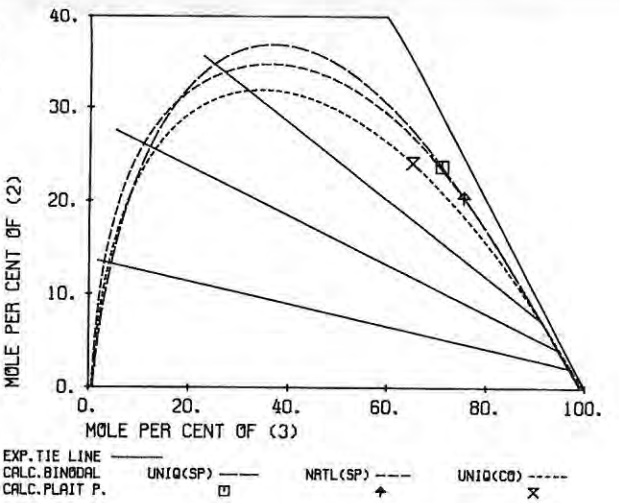
SPECIFIC MODEL PARAMETERS IN KELVIN

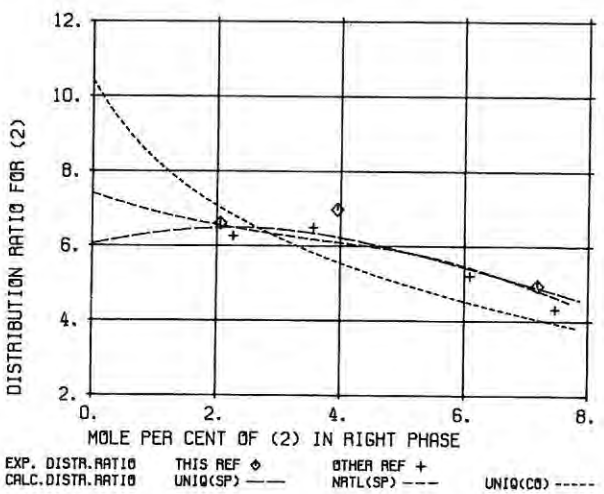
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	187.15	-117.37	-195.27	196.66
1	3	739.38	281.20	1010.7	921.86
2	3	72.639	54.624	-409.02	1121.2

R1 = 2.2564 R2 = 2.8758 R3 = 0.9200
Q1 = 1.988 Q2 = 2.612 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.72
NRTL (SPECIFIC PARAMETERS)	1.46
UNIQUAC (COMMON PARAMETERS)	2.26





(1) CH2CL2 METHANE,DICHLORO

(2) C3H6O2 PROPANOIC ACID

(3) H2O WATER

SABININ V.E., KIYA-OGLU N.V., GORICHNINA V.P.
ZH.PRIKL.KHIM.(LENINGRAD) 43(1970)1776

TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
77.235	14.147	8.618	0.962	2.259	96.779
66.830	23.088	10.082	1.329	3.554	95.117
47.952	31.702	20.346	2.011	6.087	91.902
30.877	32.258	36.865	2.472	7.472	90.056

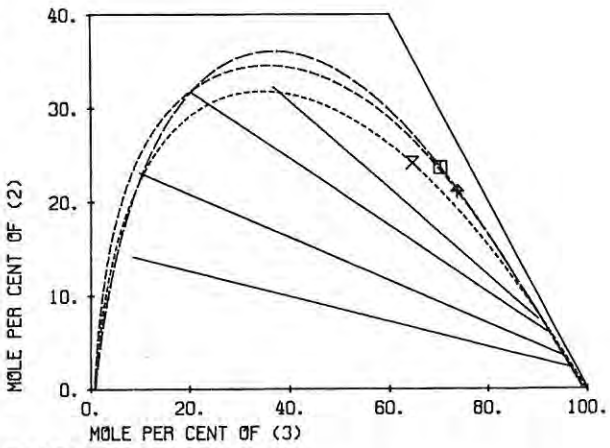
SPECIFIC MODEL PARAMETERS IN KELVIN

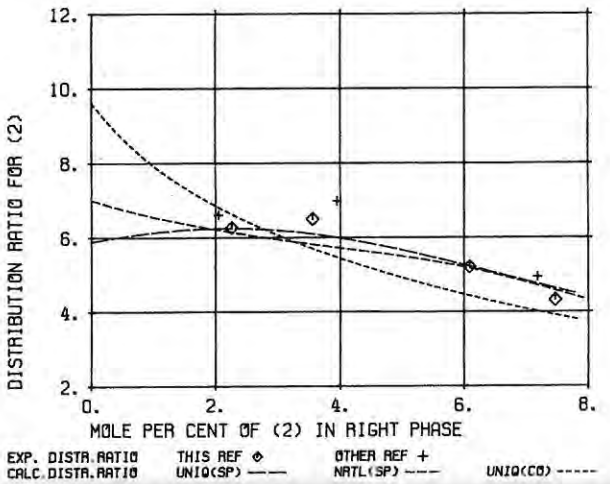
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	187.15	-117.37	-195.27	196.66
1 3	739.38	281.20	1010.7	921.86
2 3	72.639	54.624	-409.02	1121.2

R1 = 2.2564 R2 = 2.8768 R3 = 0.9200
Q1 = 1.988 Q2 = 2.612 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.26
NRTL (SPECIFIC PARAMETERS)	1.25
UNIQUAC (COMMON PARAMETERS)	1.94





(1) CH2CL2 METHANE,DICHLORO

(2) C4H8O2 BUTANOIC ACID

(3) H2O WATER

SABININ V.E., KIYA-OGLU N.V., GORICHNINA V.P.
ZH.PRIKL.KHIM.(LENINGRAD) 43(1970)1776

TEMPERATURE = 20.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
81.807	16.786	1.408	0.132	0.849	99.019
64.048	30.912	5.040	0.157	1.296	98.548
39.819	43.495	16.686	0.183	1.806	98.012
19.270	42.373	38.357	0.186	2.310	97.504

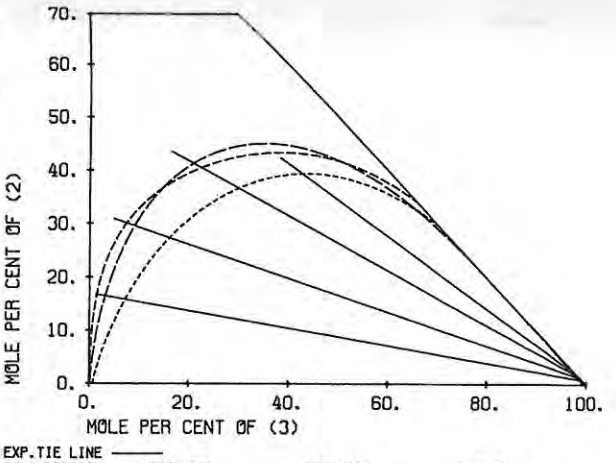
SPECIFIC MODEL PARAMETERS IN KELVIN

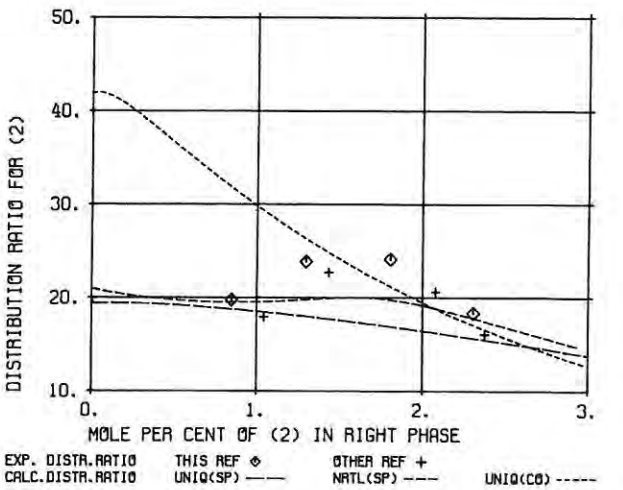
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	59.826	-48.514	-15.680	-28.176
1 3	1028.6	587.50	1599.4	1127.2
2 3	80.222	81.344	-357.11	1320.6

R1 = 2.2564 R2 = 3.5512 R3 = 0.9200
Q1 = 1.988 Q2 = 3.152 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.61
NRTL (SPECIFIC PARAMETERS)	1.25
UNIQUAC (COMMON PARAMETERS)	3.64





42

CH_2Cl_2-$C_4H_8O_2$

(1) CH2CL2 METHANE,DICHLORO

(2) C4H8O2 BUTANOIC ACID

(3) H2O WATER

SABININ V.E., KIYA-OGLU N.V., GORICHNINA V.P.
ZH.PRIKL.KHIM.(LENINGRAD) 43(1970)1775

TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
76.706	18.716	4.578	0.609	1.043	98.348
59.394	32.554	8.051	0.618	1.433	97.949
38.953	42.930	18.117	0.680	2.081	97.239
17.685	38.270	44.046	0.712	2.379	95.909

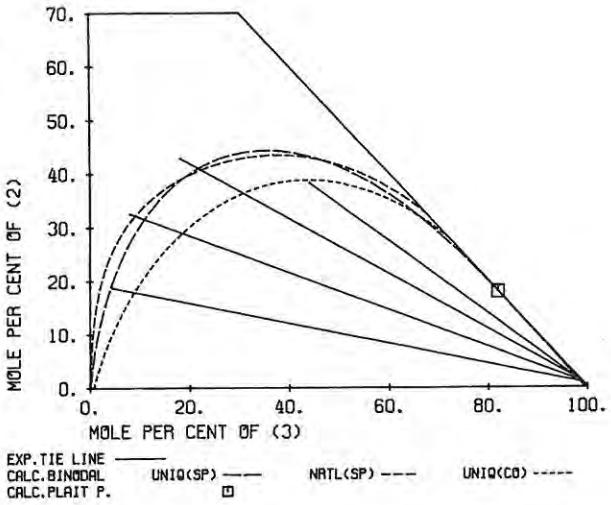
SPECIFIC MODEL PARAMETERS IN KELVIN

I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	59.826	-48.514	-15.680	-28.176
1 3	1028.6	587.50	1599.4	1127.2
2 3	80.222	81.344	-357.11	1320.6

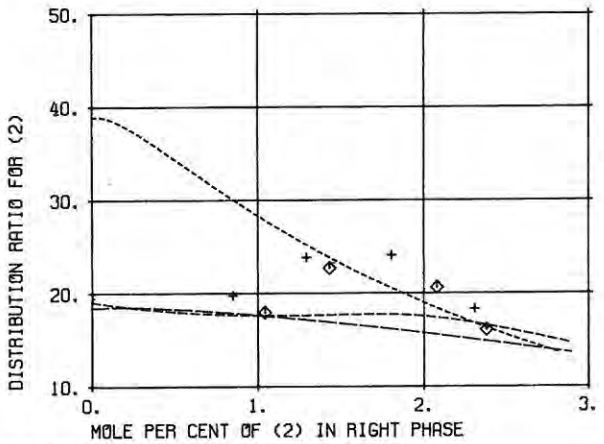
R1 = 2.2564 R2 = 3.5512 R3 = 0.9200
Q1 = 1.988 Q2 = 3.152 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.85
NRTL (SPECIFIC PARAMETERS)	1.63
UNIQUAC (COMMON PARAMETERS)	3.27



EXP.TIE LINE ——
CALC.BINODAL UNIQ(SP) —— NRTL(SP) ---- UNIQ(CO) -----
CALC.PLAIT P. ⊡



EXP. DISTR.RATIO THIS REF ◇ OTHER REF +
CALC.DISTR.RATIO UNIQ(SP) —— NRTL(SP) ---- UNIQ(CO) -----

43

CH_2Cl_2-$C_5H_4O_2$

(1) CH2CL2 METHANE,DICHLORO

(2) C5H4O2 FURFURAL

(3) H2O WATER

KRUPATKIN I.L., GLAGOLEVA M.F.
ZH.PRIKL.KHIM.(LENINGRAD) 42(1969)1525

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 2

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
78.812	16.544	4.644	0.392	0.260	99.349
51.077	37.198	11.724	0.331	0.644	99.025
38.269	48.200	13.531	0.288	0.794	98.918
25.636	57.479	16.885	0.246	1.048	98.706
18.862	63.353	17.785	0.203	1.275	98.522
9.114	70.280	20.607	0.068	1.630	98.302

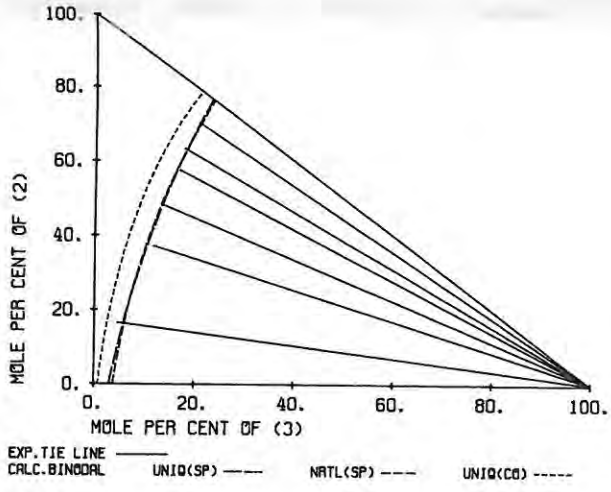
SPECIFIC MODEL PARAMETERS IN KELVIN

I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	32.277	-17.233	-204.28	150.91
1 3	484.44	313.16	546.27	953.55
2 3	127.56	150.71	11.332	1234.3

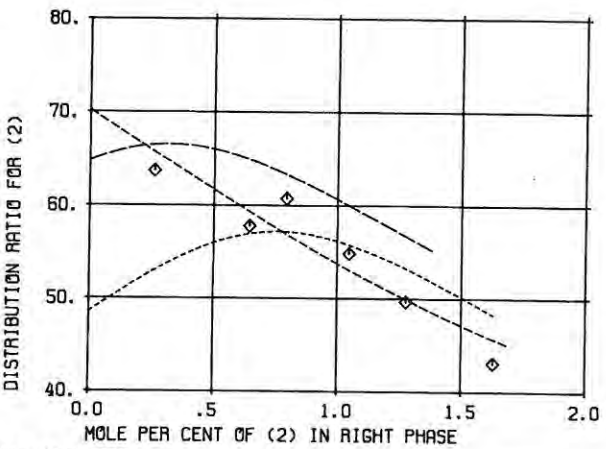
R1 = 2.2564 R2 = 3.1680 R3 = 0.9200
Q1 = 1.988 Q2 = 2.484 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.37
NRTL (SPECIFIC PARAMETERS)	0.47
UNIQUAC (COMMON PARAMETERS)	1.79



EXP.TIE LINE ——
CALC.BINODAL UNIQ(SP) —— NRTL(SP) ---- UNIQ(CO) -----



EXP. DISTR.RATIO ◇
CALC.DISTR.RATIO UNIQ(SP) —— NRTL(SP) ---- UNIQ(CO) -----

CH_2Cl_2-$C_6H_{11}NO$

(1) CH2CL2 METHANE,DICHLORO

(2) C6H11NO HEXANOIC ACID,6-AMINO,LACTAM

(3) H2O WATER

KUDRYAVTSEVA G.I., KRUTIKOVA A.D.
ZH.PRIKL.KHIM.(LENINGRAD) 26(1953)1190

TEMPERATURE = 20.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
87.864	7.169	4.967	0.441	1.136	98.423
75.990	13.977	10.034	0.470	1.922	97.608
62.201	18.435	19.364	0.520	2.686	96.794
50.159	21.319	28.522	0.597	3.413	95.990
39.154	22.329	38.517	0.691	4.021	95.289

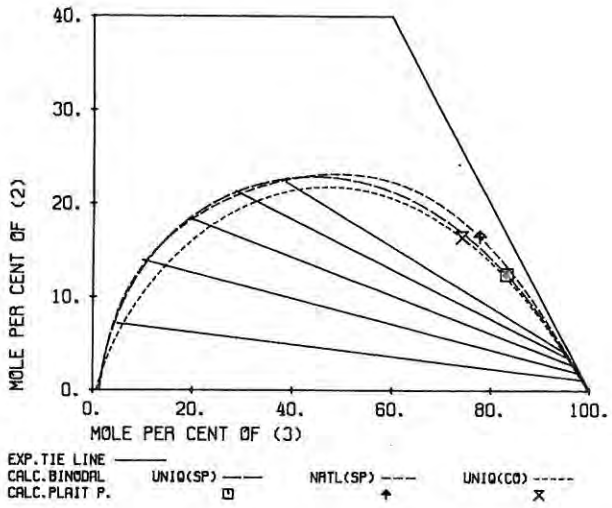
SPECIFIC MODEL PARAMETERS IN KELVIN

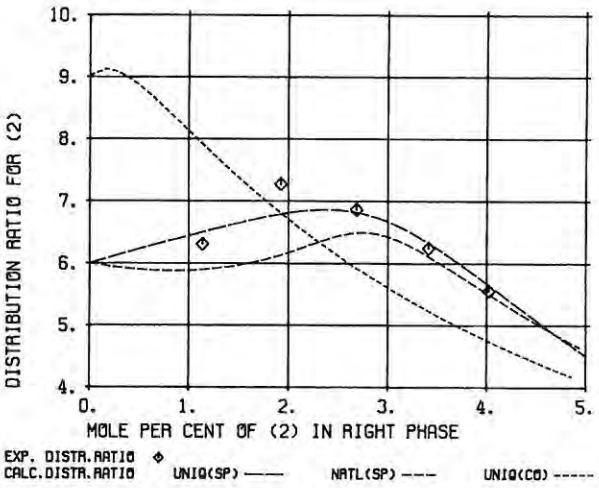
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	239.27	-165.00	-784.54	34.081
1 3	610.69	474.19	762.69	1305.4
2 3	103.07	-136.30	-810.37	1147.5

R1 = 2.2564 R2 = 4.6106 R3 = 0.9200
Q1 = 1.988 Q2 = 3.724 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.18
NRTL (SPECIFIC PARAMETERS)	0.23
UNIQUAC (COMMON PARAMETERS)	1.16





CH_2O_2-$C_2H_4Cl_2$

(1) H2O WATER

(2) CH2O2 FORMIC ACID

(3) C2H4CL2 ETHANE,1,2-DICHLORO

UDOVENKO V.V., ALEXANDROVA L.P.
ZH.FIZ.KHIM. 32(1958)1889

TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
92.613	7.018	0.369	0.055	0.380	99.566
88.168	11.396	0.436	0.273	0.590	99.137
87.037	12.521	0.442	0.164	0.697	99.139
81.251	18.032	0.717	0.272	1.102	98.625
75.005	24.093	0.902	0.488	1.784	97.729
68.956	29.941	1.103	0.541	1.900	97.558
64.824	33.580	1.596	0.805	3.106	96.089
56.519	40.864	2.617	1.167	4.630	94.203
40.185	53.751	6.064	3.000	12.183	84.817
31.519	52.180	16.301	8.258	33.806	57.936

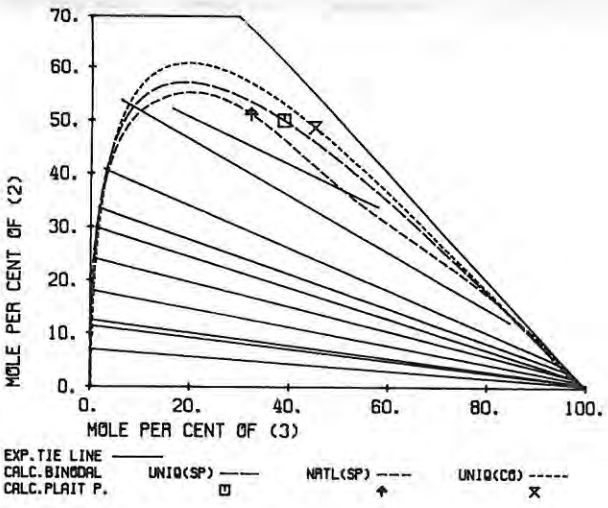
SPECIFIC MODEL PARAMETERS IN KELVIN

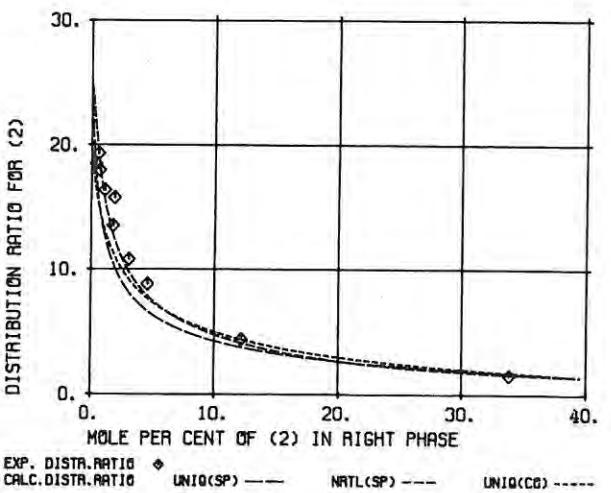
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-408.32	-207.05	1479.2	-1024.5
1 3	416.13	791.02	2306.6	1817.3
2 3	-31.766	138.63	638.81	29.031

R1 = 0.9200 R2 = 1.5280 R3 = 2.9308
Q1 = 1.400 Q2 = 1.532 Q3 = 2.528

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.91
NRTL (SPECIFIC PARAMETERS)	0.85
UNIQUAC (COMMON PARAMETERS)	2.94





(1) H2O WATER

(2) CH2O2 FORMIC ACID

(3) C2H4CL2 ETHANE,1,2-DICHLORO

UDOVENKO V.V., ALEXANDROVA L.P.
ZH.FIZ.KHIM. 32(1958)1889

TEMPERATURE = 45.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
92.301	7.287	0.412	0.164	0.490	99.345
86.552	12.774	0.673	0.327	0.915	98.758
85.778	13.499	0.724	0.435	1.037	98.527
78.105	20.897	0.997	0.811	1.752	97.438
73.810	24.955	1.235	0.915	2.318	96.767
69.215	29.259	1.525	1.336	3.068	95.597
63.314	34.515	2.172	1.798	4.218	93.984
53.279	42.976	3.745	2.647	6.278	91.075
48.039	46.980	4.981	3.327	7.641	89.031
32.355	54.561	13.084	9.055	19.030	71.916
25.801	54.877	19.322	12.082	31.414	56.504

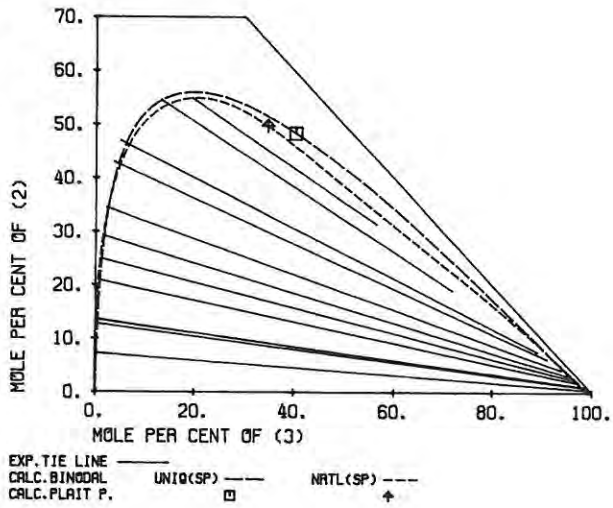
SPECIFIC MODEL PARAMETERS IN KELVIN

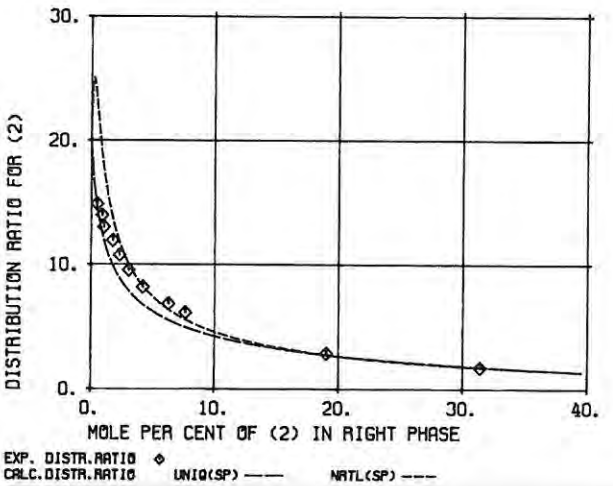
	UNIQUAC		NRTL(ALPHA=.2)	
I J	AIJ	AJI	AIJ	AJI
1 2	-311.13	-207.68	1965.7	-1200.5
1 3	349.69	750.96	2522.9	1021.1
2 3	-25.561	233.75	650.36	9.5909

R1 = 0.9200 R2 = 1.5280 R3 = 2.9308
Q1 = 1.400 Q2 = 1.532 Q3 = 2.528

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.78
NRTL (SPECIFIC PARAMETERS)	0.90





(1) H2O WATER

(2) CH2O2 FORMIC ACID

(3) C2H4CL2 ETHANE,1,2-DICHLORO

UDOVENKO V.V., ALEXANDROVA L.P.
ZH.FIZ.KHIM. 32(1958)1889

TEMPERATURE = 60.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
93.134	6.499	0.366	0.328	0.577	99.095
89.914	9.639	0.447	0.436	0.885	98.679
85.929	13.395	0.676	0.435	1.435	98.131
78.131	20.744	1.125	0.915	2.430	96.655
73.185	25.216	1.599	1.335	3.121	95.543
66.558	31.189	2.252	1.797	4.315	93.888
63.742	33.597	2.660	2.202	5.150	92.648
52.045	43.146	4.809	3.472	7.877	88.651
48.726	45.549	5.725	4.534	10.445	85.021
44.676	48.246	7.079	10.044	16.223	73.733

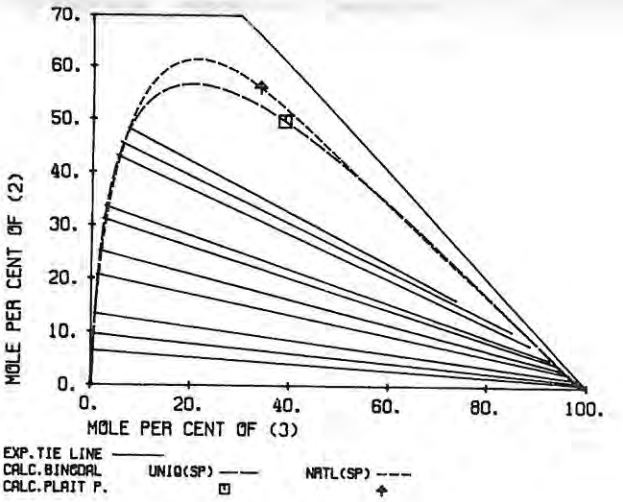
SPECIFIC MODEL PARAMETERS IN KELVIN

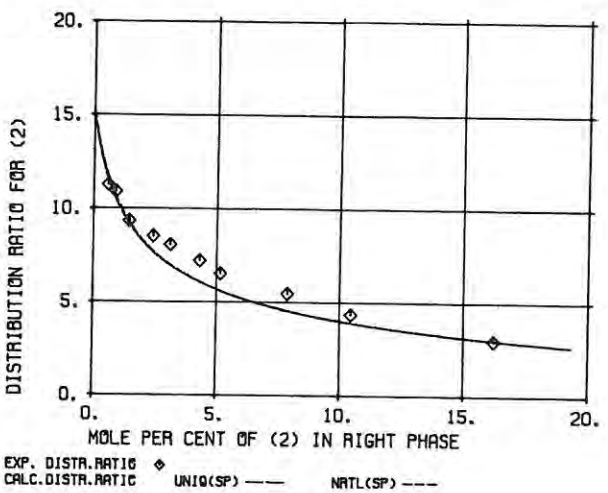
	UNIQUAC		NRTL(ALPHA=.2)	
I J	AIJ	AJI	AIJ	AJI
1 2	-212.29	-219.54	1159.7	-954.97
1 3	273.66	792.97	1463.7	933.16
2 3	12.474	254.33	784.28	-62.035

R1 = 0.9200 R2 = 1.5280 R3 = 2.9308
Q1 = 1.400 Q2 = 1.532 Q3 = 2.528

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.54
NRTL (SPECIFIC PARAMETERS)	1.49





(1) C4H8O2 ACETIC ACID,ETHYL ESTER
(2) CH2O2 FORMIC ACID
(3) H2O WATER

RAMANA RAO M.V., SOMASUNDARA RAO K., VENKATA RAO C.
J.SCI.IND.RES. 20B(1961)379

TEMPERATURE = 35.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
76.630	2.836	20.533	2.063	1.073	96.863
68.803	5.599	25.599	2.219	2.102	95.679
63.528	7.733	28.739	2.438	3.320	94.242
57.470	9.677	32.853	2.631	4.350	93.018
50.708	11.471	37.820	3.001	5.557	91.442
36.949	14.147	48.904	4.076	8.205	87.719

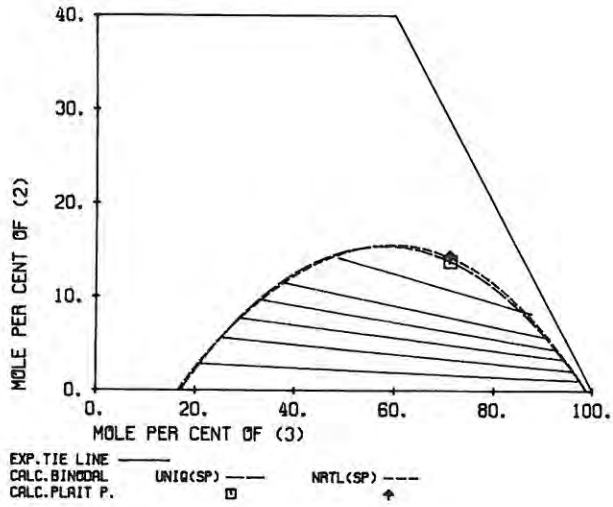
SPECIFIC MODEL PARAMETERS IN KELVIN

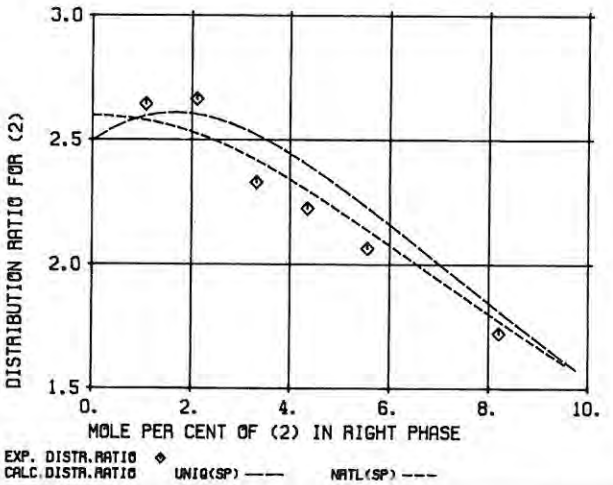
I	J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1	2	-250.46	-204.02	606.10	-613.60
1	3	335.32	123.88	114.47	1280.2
2	3	-409.76	198.02	93.024	-358.31

R1 = 3.4786 R2 = 1.5280 R3 = 0.9200
Q1 = 3.116 Q2 = 1.532 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.35
NRTL (SPECIFIC PARAMETERS)	0.29





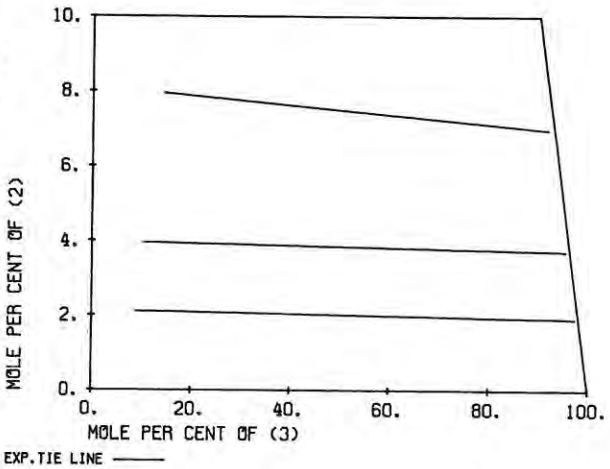
(1) C4H8O2 FORMIC ACID,PROPYL ESTER
(2) CH2O2 FORMIC ACID
(3) H2O WATER

RIUS A., ALFONSO C.
AN.R.SOC.ESP.FIS.QUIM. 51B(1955)649

TEMPERATURE = 40.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
88.905	2.110	8.985	0.713	1.904	97.383
85.515	3.951	10.534	0.870	3.717	95.412
77.561	7.943	14.496	1.229	6.969	91.802



(1) C5H4O2 FURFURAL

(2) CH2O2 FORMIC ACID

(3) H2O WATER

LANGFORD R.E., HERIC E.L.
J.CHEM.ENG.DATA 17(1972)87

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
77.269	0.512	22.219	1.960	0.990	97.050
70.605	2.729	26.666	2.439	2.278	95.283
64.004	4.820	31.176	2.810	3.162	94.028
49.463	8.862	41.675	3.970	5.198	90.833
40.321	10.721	48.958	5.049	6.509	88.442
25.427	11.905	62.667	9.379	9.153	81.468

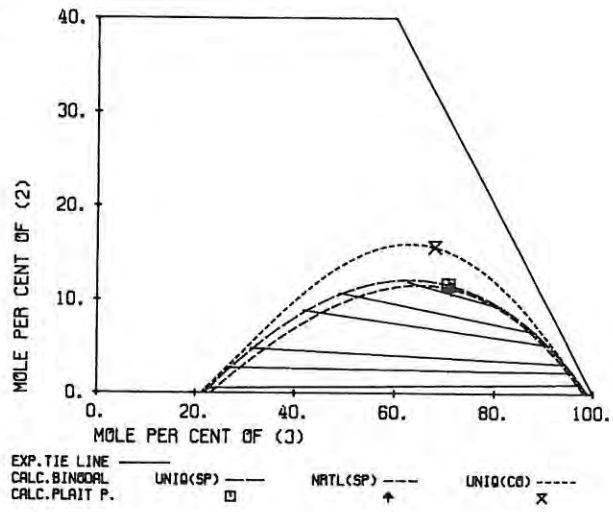
SPECIFIC MODEL PARAMETERS IN KELVIN

		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	-333.21	-480.97	745.20	-517.04
1	3	110.78	190.59	22.522	1209.4
2	3	-627.56	136.29	-10.682	-492.26

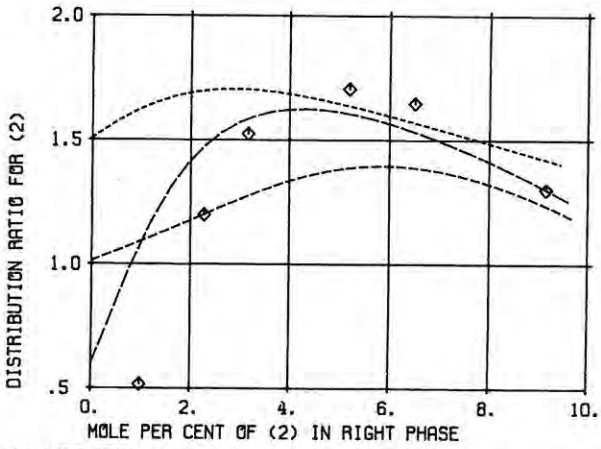
R1 = 3.1680 R2 = 1.5280 R3 = 0.9200
Q1 = 2.484 Q2 = 1.532 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.82
NRTL (SPECIFIC PARAMETERS)	0.98
UNIQUAC (COMMON PARAMETERS)	1.66



EXP.TIE LINE ——
CALC.BINODAL UNIQ(SP) —— NRTL(SP) ---- UNIQ(CO) -----
CALC.PLAIT P.



EXP. DISTR.RATIO ◇
CALC.DISTR.RATIO UNIQ(SP) —— NRTL(SP) ---- UNIQ(CO) -----

(1) C5H4O2 FURFURAL

(2) CH2O2 FORMIC ACID

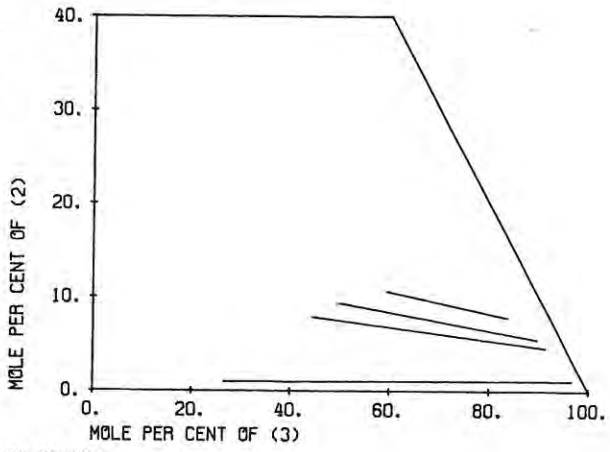
(3) H2O WATER

LANGFORD R.E., HERIC E.L.
J.CHEM.ENG.DATA 17(1972)87

TEMPERATURE = 35.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
72.436	0.976	26.589	2.234	1.090	96.676
47.575	7.850	44.575	4.098	4.595	91.307
40.663	9.331	50.007	4.829	5.471	89.700
29.883	10.590	59.527	8.488	7.811	83.701



EXP.TIE LINE ——

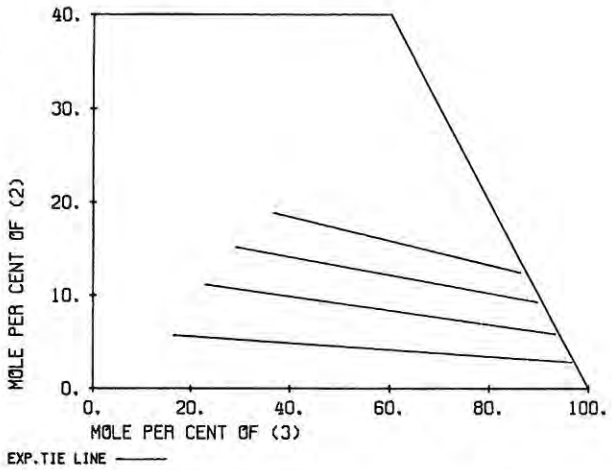
(1) C5H10O2 ACETIC ACID,PROPYL ESTER
(2) CH2O2 FORMIC ACID
(3) H2O WATER

RAMANA RAO M.V., SOMASUNDARA RAO K., VENKATA RAO C.
J.SCI.IND.RES. 20B(1961)379

TEMPERATURE = 35.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
77.755	5.726	16.518	0.528	2.845	96.627
65.902	11.145	22.952	0.734	5.858	93.408
55.685	15.163	29.152	0.987	9.270	89.743
44.439	18.850	36.712	1.213	12.424	86.363



(1) C5H10O2 BUTANOIC ACID,METHYL ESTER
(2) CH2O2 FORMIC ACID
(3) H2O WATER

RAMANA RAO M.V., DAKSHINAMURTY P., VENKATA RAO C.
INDIAN J.TECHNOL. 1(1963)220

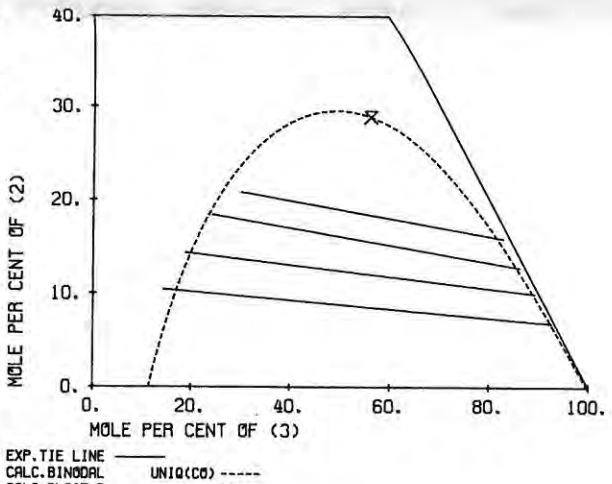
TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 1

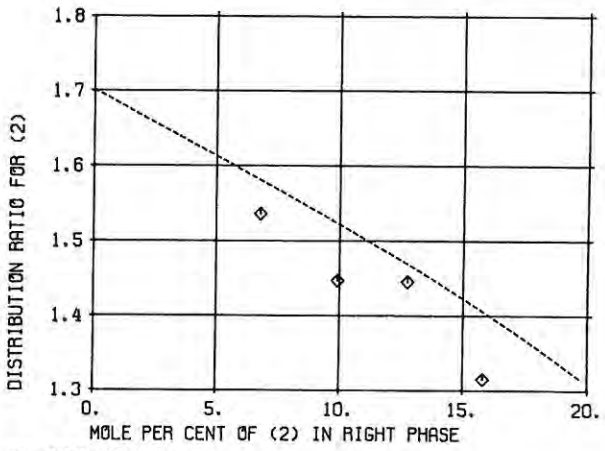
EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
75.132	10.437	14.431	0.641	6.796	92.563
66.764	14.355	18.881	0.842	9.922	89.235
57.293	18.386	24.321	1.102	12.722	86.176
49.126	20.781	30.093	1.387	15.802	82.811

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (COMMON PARAMETERS)	0.93





(1) H2O WATER
(2) CH2O2 FORMIC ACID
(3) C6H6 BENZENE

UDOVENKO V.V., ALEKSANDROVA L.P.
ZH.FIZ.KHIM. 37(1963)52

TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 2

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
90.689	9.232	0.079	0.043	0.203	99.753
82.268	17.614	0.118	0.052	0.423	99.525
73.926	25.912	0.162	0.065	0.795	99.141
67.808	31.879	0.313	0.086	1.198	98.715
41.159	57.409	1.432	0.149	4.737	95.114
19.927	76.342	3.732	0.819	12.035	87.146

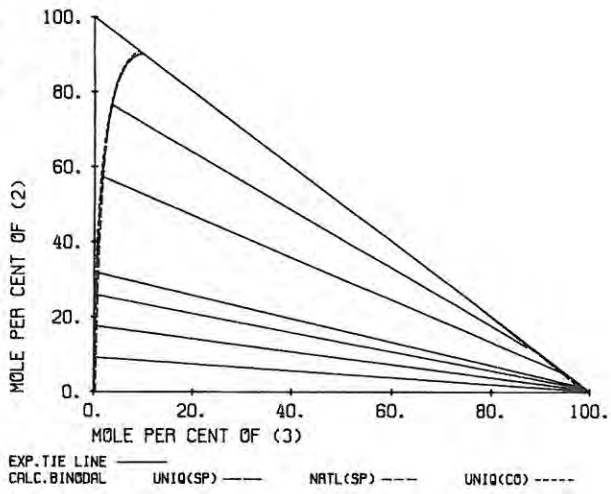
SPECIFIC MODEL PARAMETERS IN KELVIN

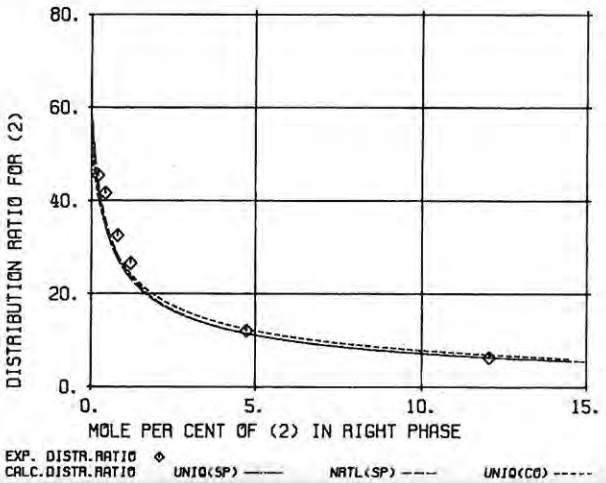
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	-276.64	-190.36	-429.88	-169.81
1	3	302.73	598.94	1187.0	1087.7
2	3	160.64	292.74	695.69	201.58

R1 = 0.9200 R2 = 1.5280 R3 = 3.1878
Q1 = 1.400 Q2 = 1.532 Q3 = 2.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.56
NRTL (SPECIFIC PARAMETERS)	0.37
UNIQUAC (COMMON PARAMETERS)	0.74





(1) H2O WATER
(2) CH2O2 FORMIC ACID
(3) C6H6 BENZENE

UDOVENKO V.V., ALEKSANDROVA L.P.
ZH.FIZ.KHIM. 37(1963)52

TEMPERATURE = 45.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
90.067	9.853	0.080	0.043	0.271	99.686
83.436	16.419	0.145	0.087	0.491	99.423
72.424	27.278	0.298	0.129	1.047	98.824
62.119	37.328	0.553	0.172	1.984	97.844
40.942	57.304	1.753	0.212	5.369	94.420
28.022	68.817	3.161	0.417	8.725	90.858

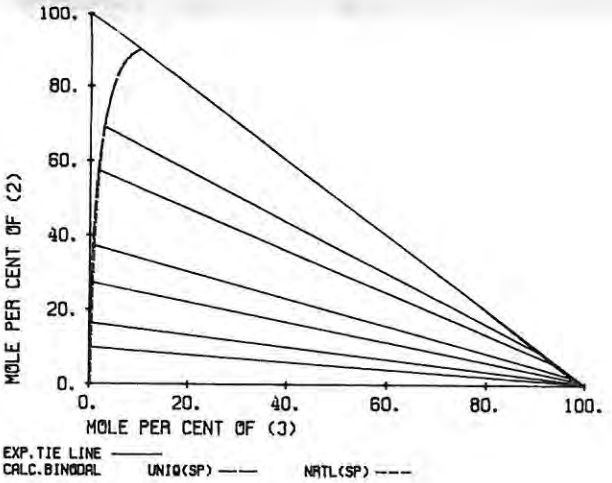
SPECIFIC MODEL PARAMETERS IN KELVIN

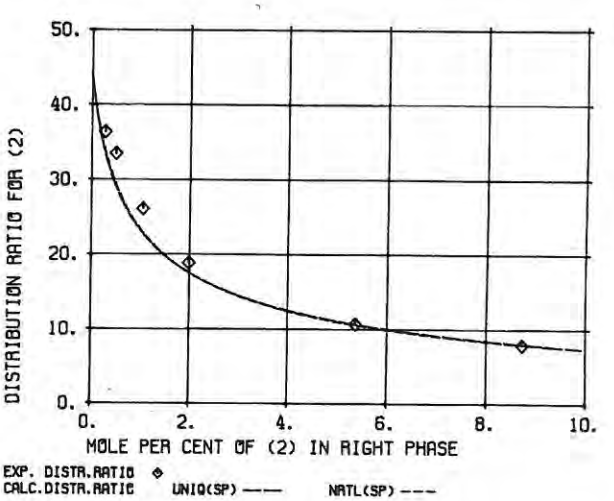
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	-240.29	-173.97	-347.62	-149.86
1	3	322.29	672.37	1314.6	1230.7
2	3	151.20	342.99	680.31	263.13

R1 = 0.9200 R2 = 1.5280 R3 = 3.1878
Q1 = 1.400 Q2 = 1.532 Q3 = 2.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.41
NRTL (SPECIFIC PARAMETERS)	0.23





(1) H2O WATER
(2) CH2O2 FORMIC ACID
(3) C6H6 BENZENE

UDOVENKO V.V., ALEKSANDROVA L.P.
ZH.FIZ.KHIM. 37(1963)52

TEMPERATURE = 60.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
90.547	9.321	0.133	0.087	0.271	99.642
77.071	22.615	0.314	0.129	0.912	98.959
62.417	36.846	0.737	0.257	2.166	97.577
53.006	45.659	1.335	0.510	3.679	95.810
28.713	67.264	4.022	1.034	9.230	89.736

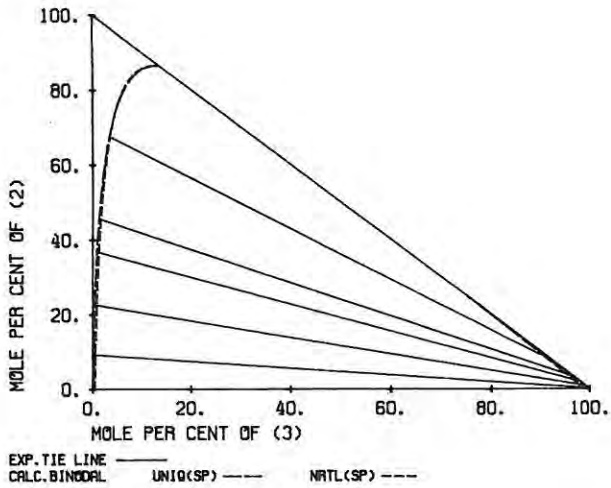
SPECIFIC MODEL PARAMETERS IN KELVIN

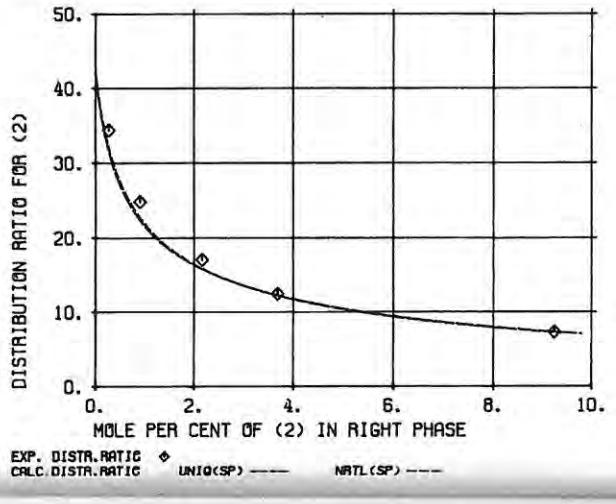
	UNIQUAC		NRTL(ALPHA=.2)	
I J	AIJ	AJI	AIJ	AJI
1 2	-237.92	-200.69	-316.67	-214.51
1 3	299.94	621.54	1267.1	1132.7
2 3	135.81	355.14	663.75	262.67

R1 = 0.9200 R2 = 1.5280 R3 = 3.1878
Q1 = 1.400 Q2 = 1.532 Q3 = 2.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.58
NRTL (SPECIFIC PARAMETERS)	0.36





(1) C6H12O2 ACETIC ACID,BUTYL ESTER
(2) CH2O2 FORMIC ACID
(3) H2O WATER

RAMANA RAO M.V., SOMASUNDARA RAO K., VENKATA RAO C.
J.SCI.IND.RES. 20B(1961)379

TEMPERATURE = 35.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
69.370	9.447	21.183	0.190	6.527	93.283
61.532	13.386	25.082	0.234	9.543	90.222
56.338	16.418	27.245	0.281	12.386	87.333
48.701	20.691	30.607	0.394	16.073	83.533
44.324	22.873	32.803	0.555	18.987	80.458
39.488	25.712	34.801	0.798	22.311	76.891

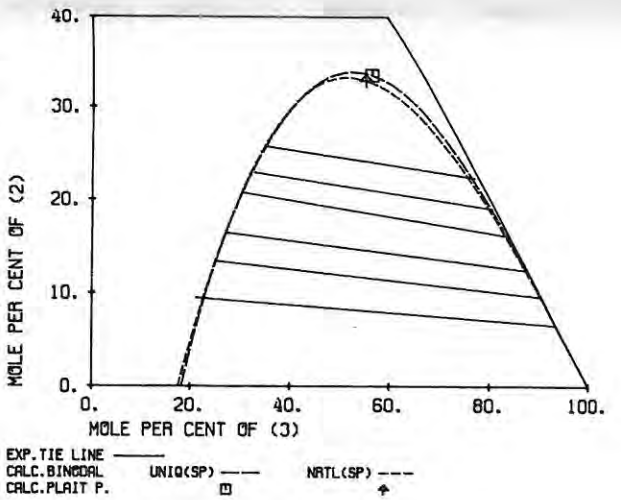
SPECIFIC MODEL PARAMETERS IN KELVIN

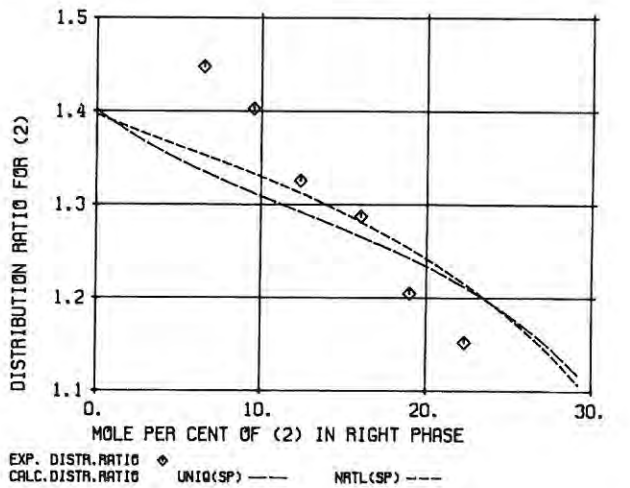
	UNIQUAC		NRTL(ALPHA=.2)	
I J	AIJ	AJI	AIJ	AJI
1 2	40.307	-218.84	-192.37	287.47
1 3	174.70	404.39	103.89	2360.7
2 3	23.424	-542.18	-577.94	821.09

R1 = 4.8274 R2 = 1.5280 R3 = 0.9200
Q1 = 4.196 Q2 = 1.532 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.43
NRTL (SPECIFIC PARAMETERS)	0.44





(1) C6H1202 BUTANOIC ACID,ETHYL ESTER
(2) CH202 FORMIC ACID
(3) H20 WATER

RAMANA RAO M.V., DAKSHINAMURTY P., VENKATA RAO C.
INDIAN J.TECHNOL. 1(1963)220

TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
77.396	9.619	12.986	0.211	7.714	92.076
71.618	12.921	15.461	0.330	10.650	89.020
66.412	16.664	16.924	0.384	13.865	85.752
60.098	19.702	20.200	0.438	16.780	82.782
55.110	22.317	22.573	0.514	19.200	80.286
49.587	24.564	25.849	0.596	21.825	77.579

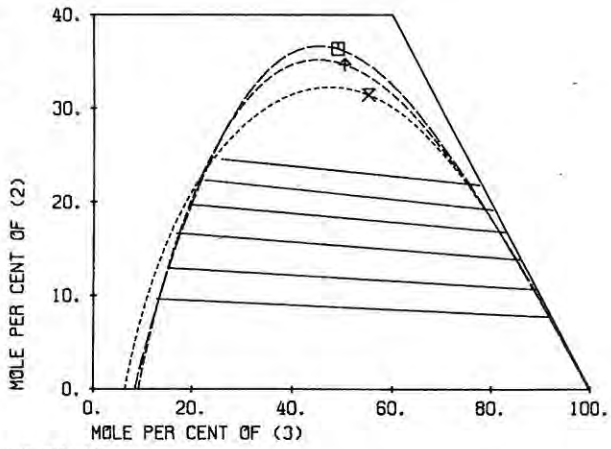
SPECIFIC MODEL PARAMETERS IN KELVIN

I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	80.110	29.221	-355.95	188.77
1 3	512.09	89.214	254.62	1758.3
2 3	-252.11	259.66	-485.25	401.37

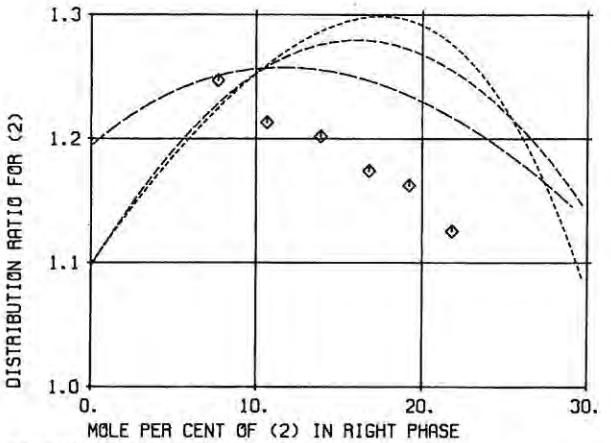
R1 = 4.8274 R2 = 1.5280 R3 = 0.9200
Q1 = 4.196 Q2 = 1.532 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.63
NRTL (SPECIFIC PARAMETERS)	0.67
UNIQUAC (COMMON PARAMETERS)	0.89



EXP.TIE LINE
CALC.BINODAL UNIQ(SP) NRTL(SP) UNIQ(CO)
CALC.PLAIT P.



EXP. DISTA.RATIO
CALC.DISTA.RATIO UNIQ(SP) NRTL(SP) UNIQ(CO)

(1) C6H1202 1,3-DIOXANE,4,4-DIMETHYL
(2) CH202 FORMIC ACID
(3) H20 WATER

PUGACH L.M., OGORODNIKOV S.K., IDLIS G.S.
ZH.PRIKL.KHIM.(LENINGRAD) 47(1974)1856

TEMPERATURE = 20.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
80.369	0.0	19.631	3.590	0.0	96.410
80.630	0.317	19.054	3.504	0.093	96.402
79.047	0.895	20.058	3.553	0.253	96.194
76.035	1.882	22.083	3.517	0.531	95.952
70.306	3.556	26.138	3.717	1.064	95.219
55.518	7.138	37.344	4.347	2.471	93.182
43.594	9.399	47.007	5.349	3.894	90.757
23.015	9.433	67.552	9.631	6.659	83.709

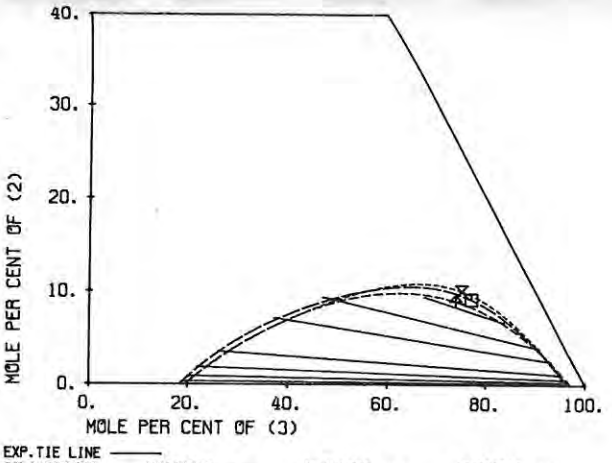
SPECIFIC MODEL PARAMETERS IN KELVIN

I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-134.72	68.382	564.57	-815.17
1 3	604.70	-92.620	111.37	1003.1
2 3	-165.07	133.22	-203.04	-586.07

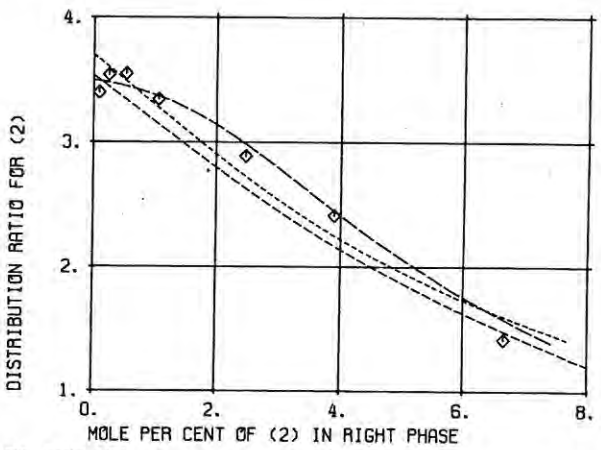
R1 = 4.5327 R2 = 1.5280 R3 = 0.9200
Q1 = 3.796 Q2 = 1.532 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.29
NRTL (SPECIFIC PARAMETERS)	0.79
UNIQUAC (COMMON PARAMETERS)	0.50



EXP.TIE LINE
CALC.BINODAL UNIQ(SP) NRTL(SP) UNIQ(CO)
CALC.PLAIT P.



EXP. DISTA.RATIO
CALC.DISTA.RATIO UNIQ(SP) NRTL(SP) UNIQ(CO)

60

CH_2O_2-$C_6H_{14}O$

(1) H2O WATER

(2) CH2O2 FORMIC ACID

(3) C6H14O 2-PENTANOL,4-METHYL

RAJA RAO M., RAMAMURTY M., VENKATA RAO C.
CHEM.ENG.SCI. 8(1958)265

TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
97.274	2.467	0.259	29.870	5.925	64.205
93.683	6.024	0.293	30.490	10.862	58.648
89.840	9.830	0.330	31.994	13.258	54.748
85.380	14.182	0.438	32.707	16.356	50.937
79.440	19.994	0.566	34.207	18.715	47.078
76.749	22.569	0.683	35.593	20.895	43.512
70.952	28.001	1.047	35.202	21.650	43.149
61.985	35.606	2.409	38.275	26.365	35.360

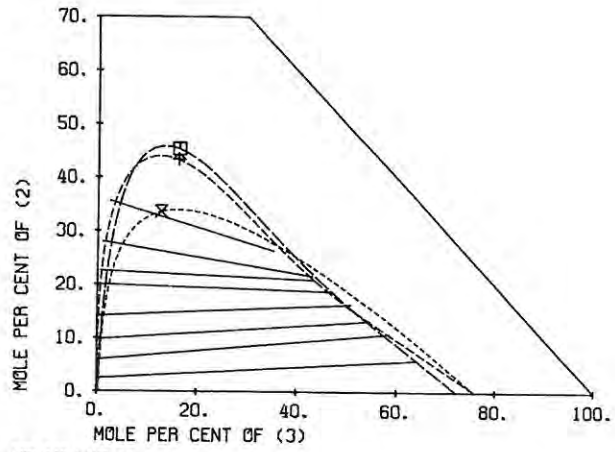
SPECIFIC MODEL PARAMETERS IN KELVIN

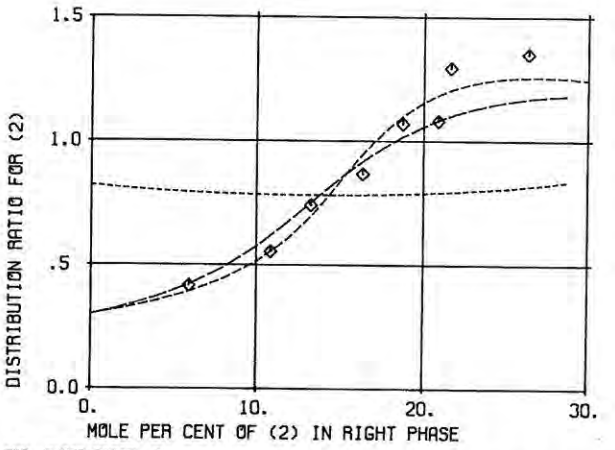
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	648.37	-255.61	1471.2	-691.96
1 3	213.04	158.26	2695.3	38.258
2 3	78.063	189.59	862.87	-256.96

R1 = 0.9200 R2 = 1.5280 R3 = 4.8015
Q1 = 1.400 Q2 = 1.532 Q3 = 4.124

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.93
NRTL (SPECIFIC PARAMETERS)	0.64
UNIQUAC (COMMON PARAMETERS)	3.16





61

CH_2O_2-$C_7H_{14}O_2$

(1) C7H14O2 ACETIC ACID,PENTYL ESTER

(2) CH2O2 FORMIC ACID

(3) H2O WATER

KRISHNAMURTY R., JAYARAMA RAO G., VENKATA RAO C.
J.SCI.IND.RES. 21D(1962)282

TEMPERATURE = 28.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
83.089	5.214	11.697	0.082	3.478	96.440
75.490	9.875	14.635	0.108	7.247	92.645
64.141	16.436	19.423	0.155	13.597	86.248
60.202	19.347	20.450	0.184	16.483	83.333
49.979	25.536	24.485	0.331	24.769	74.900

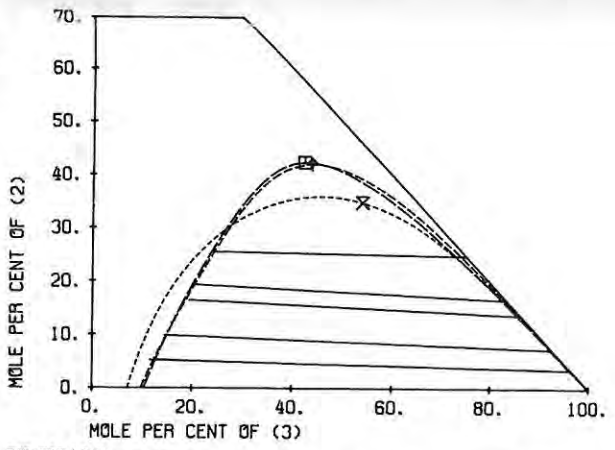
SPECIFIC MODEL PARAMETERS IN KELVIN

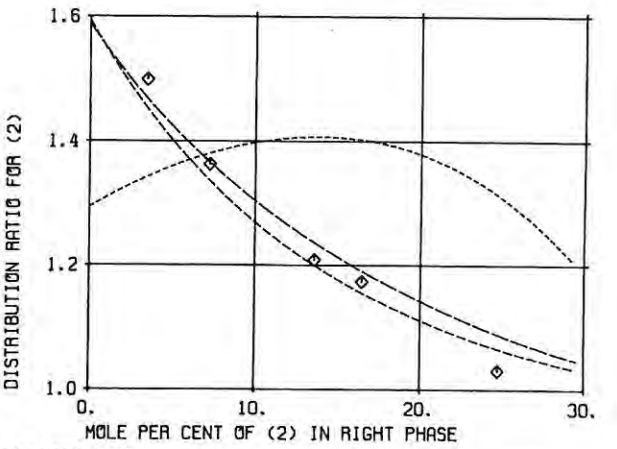
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	78.226	133.78	-344.28	703.87
1 3	484.91	81.892	287.41	2325.6
2 3	-237.12	351.14	-603.76	1005.8

R1 = 5.5018 R2 = 1.5280 R3 = 0.9200
Q1 = 4.736 Q2 = 1.532 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.54
NRTL (SPECIFIC PARAMETERS)	0.31
UNIQUAC (COMMON PARAMETERS)	1.82





(1) H2O WATER

(2) CH2O2 FORMIC ACID

(3) C9H10O2 BENZOIC ACID,ETHYL ESTER

JAYA RAMA RAO G., VEKKATA RAO C.
J.SCI.IND.RES. 16B(1957)102

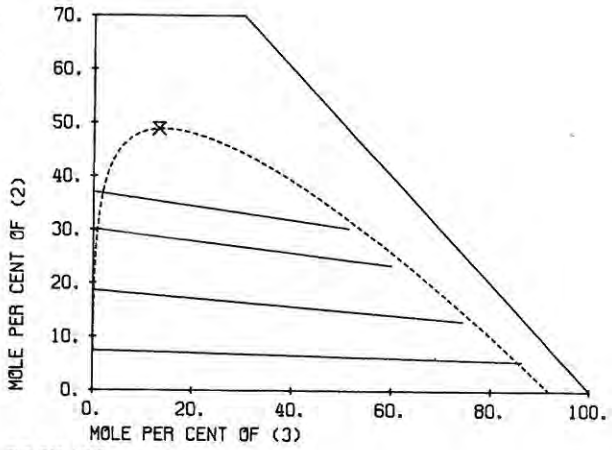
TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

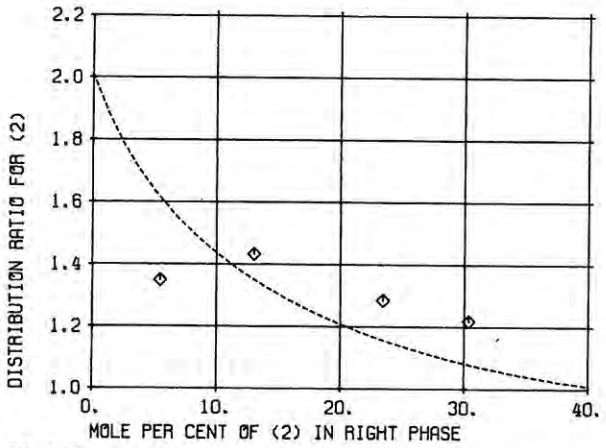
LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
92.517	7.443	0.040	8.161	5.517	86.323
81.257	18.665	0.078	12.646	13.024	74.330
69.687	30.117	0.196	16.695	23.432	59.873
62.489	36.969	0.542	18.332	30.338	51.330

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (COMMON PARAMETERS)	1.25



EXP.TIE LINE ——
CALC.BINODAL UNIQ(CO) -----
CALC.PLAIT P. ⊼



EXP. DISTR.RATIO ◇
CALC.DISTR.RATIO UNIQ(CO) -----

(1) C8H10 BENZENE,ETHYL

(2) C3H6O 2-PROPANONE

(3) CH3NO FORMIC ACID,AMIDE

BLANK M.G.
UKR.KHIM.ZH.(RUSS.ED.) 29(1963)1009

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
96.400	3.500	0.100	0.600	1.700	97.700
86.100	13.700	0.200	0.800	7.500	91.700
74.900	24.800	0.300	1.000	14.700	84.300
63.400	35.300	1.300	2.200	22.300	75.500
53.600	43.400	3.000	3.200	29.400	67.400
42.600	50.700	6.700	6.000	38.000	56.000
35.900	53.500	10.600	8.600	43.000	48.400
32.700	54.300	13.000	10.200	45.100	44.700

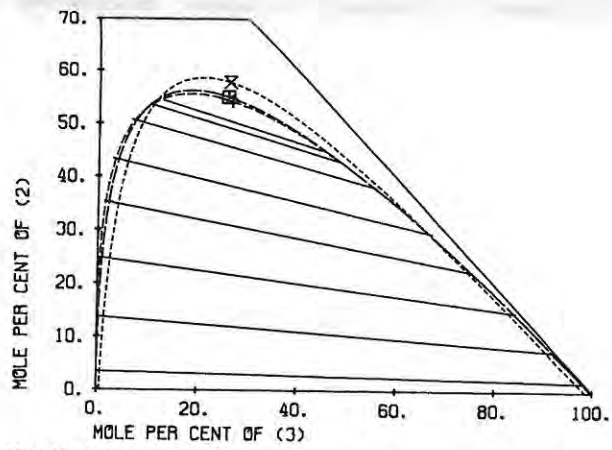
SPECIFIC MODEL PARAMETERS IN KELVIN

		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	236.96	-194.19	151.11	-140.55
1	3	1398.0	235.79	2615.9	1290.5
2	3	365.88	-136.19	307.14	-20.254

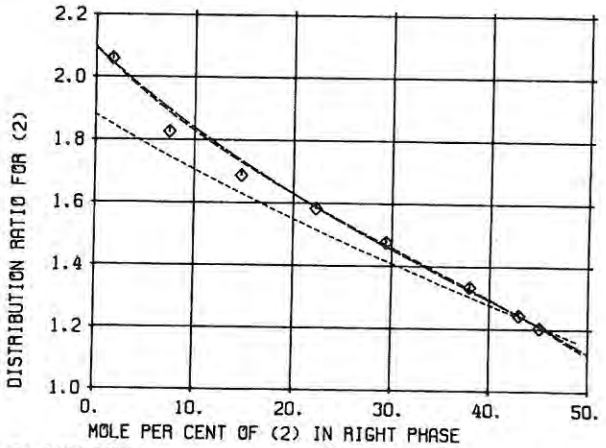
R1 = 4.5972 R2 = 2.5735 R3 = 1.6928
Q1 = 3.508 Q2 = 2.336 Q3 = 1.644

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.39
NRTL (SPECIFIC PARAMETERS)	0.21
UNIQUAC (COMMON PARAMETERS)	1.19



EXP.TIE LINE ——
CALC.BINODAL UNIQ(SP) —— NRTL(SP) ---- UNIQ(CO) -----
CALC.PLAIT P. ⊡ ✦ ⊼



EXP. DISTR.RATIO ◇
CALC.DISTR.RATIO UNIQ(SP) —— NRTL(SP) ---- UNIQ(CO) -----

(1) C9H12 BENZENE,ISOPROPYL

(2) C3H6O 2-PROPANONE

(3) CH3NO FORMIC ACID,AMIDE

BLANK M.G.
UKR.KHIM.ZH.(RUSS.ED.) 29(1963)1009

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
92.500	7.400	0.100	0.400	4.000	95.600
85.100	14.800	0.100	0.600	8.100	91.300
78.700	21.100	0.200	0.900	12.000	87.100
73.000	26.500	0.500	1.000	15.500	83.500
64.700	34.600	0.700	1.300	21.300	77.400
59.100	39.500	1.400	1.800	25.200	73.000
55.000	42.800	2.200	2.000	27.900	70.100
46.000	49.700	4.300	3.200	34.800	62.000
38.700	54.000	7.300	4.800	40.600	54.600
29.300	57.200	13.500	8.700	47.900	43.400

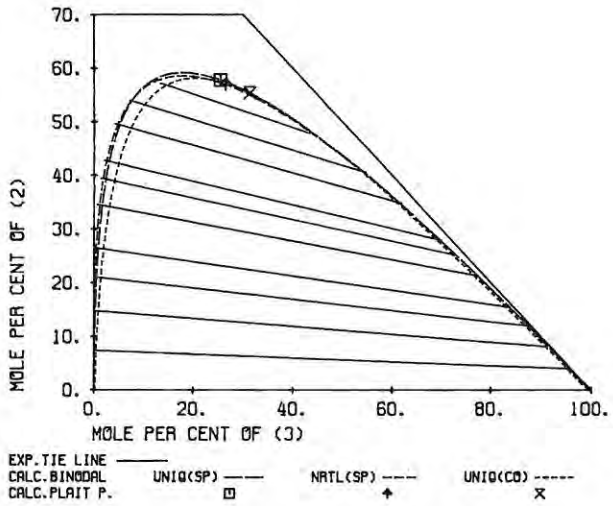
SPECIFIC MODEL PARAMETERS IN KELVIN

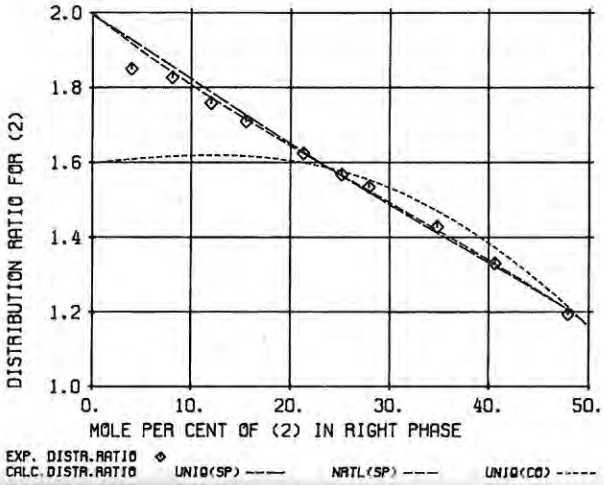
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	242.03	-190.70	67.003	-41.274
1 3	1383.6	234.13	2718.3	1512.9
2 3	371.56	-144.38	346.14	-36.468

R1 = 5.2708 R2 = 2.5735 R3 = 1.6928
Q1 = 4.044 Q2 = 2.336 Q3 = 1.644

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.42
NRTL (SPECIFIC PARAMETERS)	0.23
UNIQUAC (COMMON PARAMETERS)	1.68





(1) H2O WATER

(2) CH3NO FORMIC ACID,AMIDE

(3) C5H4O2 FURFURAL

MASKHULIYA V.P., KRUPATKIN I.L.
FAZOVYE RAVNOVESIYA,NO.2,KALININ,EDITOR:I.KRUPATKIN
(1975)25

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
95.206	2.672	2.122	21.717	1.737	76.546
91.629	5.546	2.825	22.204	3.587	74.210
89.055	7.387	3.557	24.374	3.916	71.709
85.926	9.582	4.492	25.964	5.355	68.681
81.249	12.767	5.984	27.499	7.542	64.959
76.116	15.857	8.027	27.226	9.334	63.440
66.400	19.729	13.871	34.421	10.361	55.218

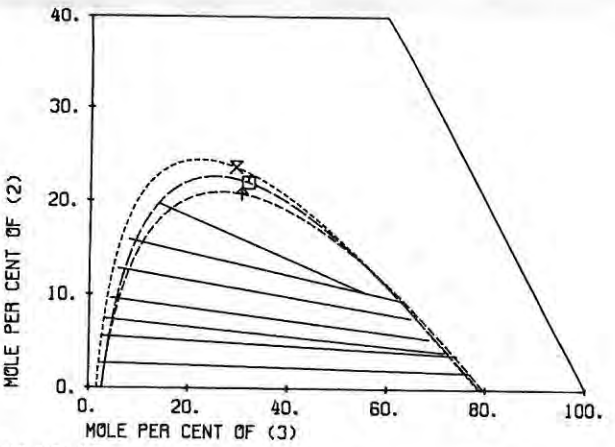
SPECIFIC MODEL PARAMETERS IN KELVIN

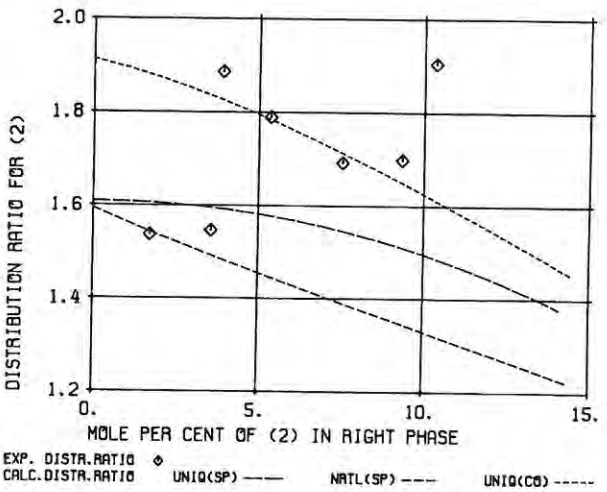
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-225.98	133.47	-111.99	86.578
1 3	11.485	291.69	1056.0	93.190
2 3	-27.702	236.73	-52.576	320.90

R1 = 0.9200 R2 = 1.6928 R3 = 3.1680
Q1 = 1.400 Q2 = 1.644 Q3 = 2.484

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.96
NRTL (SPECIFIC PARAMETERS)	1.28
UNIQUAC (COMMON PARAMETERS)	1.12





(1) CH3NO2 METHANE,NITRO

(2) C2H4O2 ACETIC ACID

(3) H2O WATER

SKRZEC A.E., MURPHY N.F.
IND.ENG.CHEM. 46(1954)2245

TEMPERATURE = 26.7 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
93.873	0.0	6.127	3.039	0.0	96.961
88.201	2.613	9.186	4.304	2.340	93.356
81.648	4.595	13.757	5.130	4.172	90.698
77.082	5.804	17.114	5.588	5.341	89.071
74.787	6.551	18.662	6.064	6.319	87.617
64.541	9.897	25.561	8.012	8.603	83.385

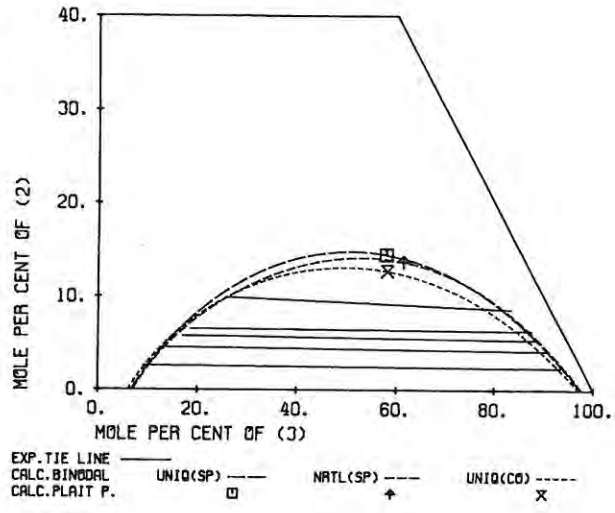
SPECIFIC MODEL PARAMETERS IN KELVIN

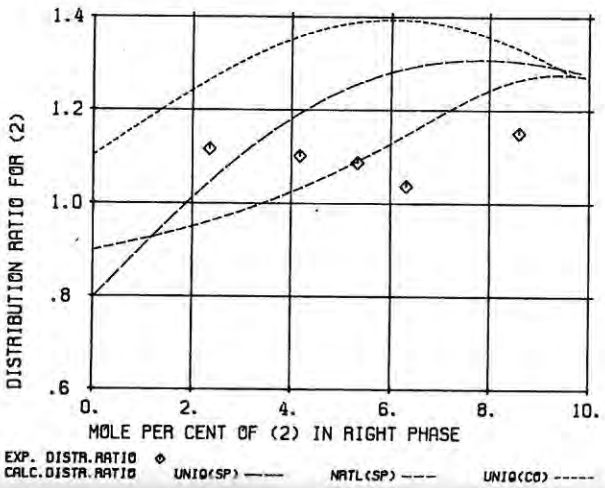
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-130.12	-110.53	706.31	-708.05
1 3	386.71	258.56	410.68	866.02
2 3	-333.09	102.04	67.480	-686.61

R1 = 2.0086 R2 = 2.2024 R3 = 0.9200
Q1 = 1.868 Q2 = 2.072 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.43
NRTL (SPECIFIC PARAMETERS)	0.45
UNIQUAC (COMMON PARAMETERS)	0.72





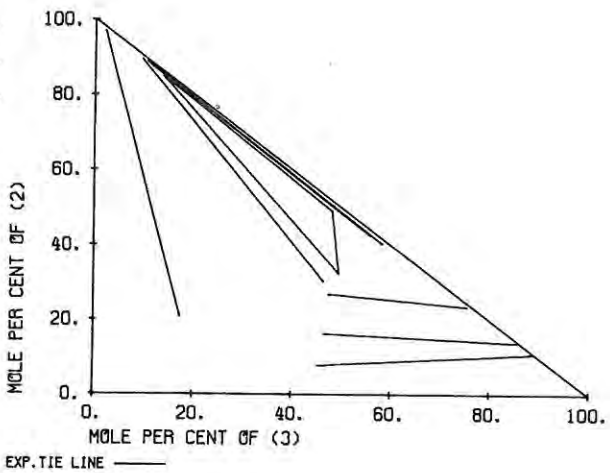
(1) C12H26O 1-DODECANOL

(2) CH3NO2 METHANE,NITRO

(3) C2H6O2 1,2-ETHANEDIOL

MARKUZIN N.P., NIKANOROVA L.A.
ZH.OBSHCH.KHIM. 32(1962)3469

TEMPERATURE = 28.0 DEG C TYPE OF SYSTEM = 3



EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	UPPER PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
46.698	7.864	45.437				0.368	10.839	88.793
37.095	16.277	46.628				0.504	13.835	85.662
25.632	26.847	47.522				0.981	23.447	75.572
18.075	32.414	49.510	1.350	84.976	13.674	2.829	49.045	48.126
			1.640	42.558	55.802	0.767	88.025	11.208
			1.325	40.444	58.231	0.632	88.891	10.478
23.257	30.298	46.445	1.039	89.505	9.456			
61.712	20.880	17.409	1.003	96.989	2.008			

(1) C6H12 CYCLOHEXANE
(2) C6H6 BENZENE
(3) CH3NO2 METHANE,NITRO

WECK H.I., HUNT H.
IND.ENG.CHEM. 46(1954)2521

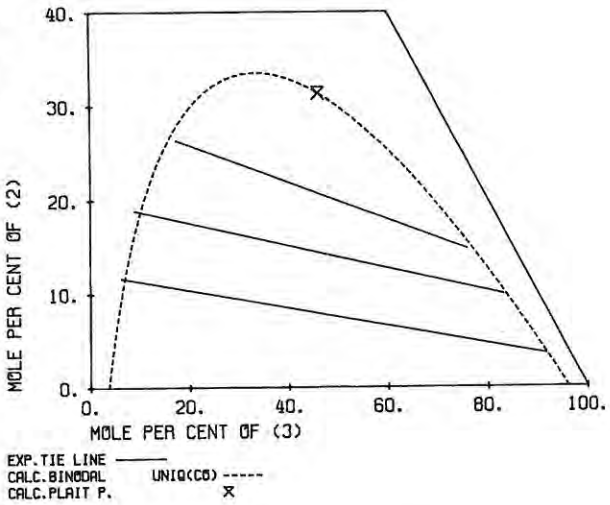
TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

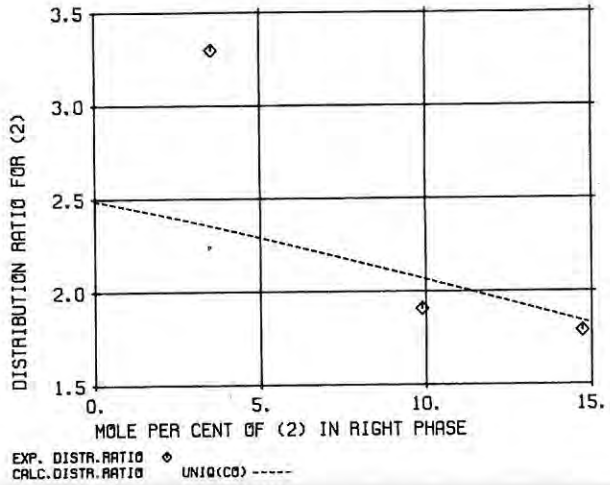
EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
82.036	11.651	6.314	4.696	3.533	91.771
72.127	18.856	9.017	6.957	9.883	83.161
56.282	26.345	17.373	9.371	14.722	75.907

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (COMMON PARAMETERS)	0.91

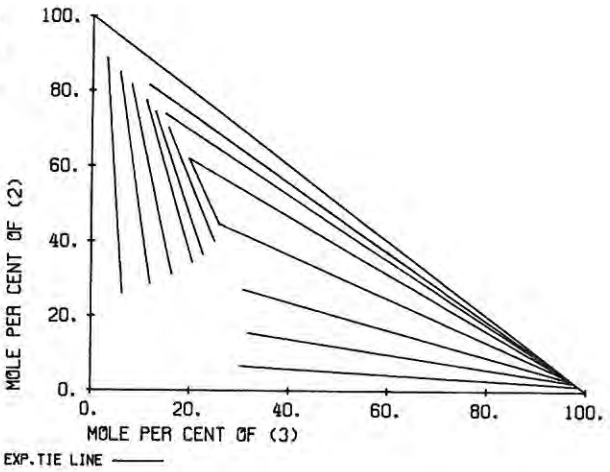




(1) C6H14O 1-HEXANOL
(2) CH3NO2 METHANE,NITRO
(3) H2O WATER

SAZONOV V.P., MARKUZIN N.P., FILIPPOV V.V.
ZH.PRIKL.KHIM.(LENINGRAD) 50(1977)1524

TEMPERATURE = 21.0 DEG C TYPE OF SYSTEM = 3



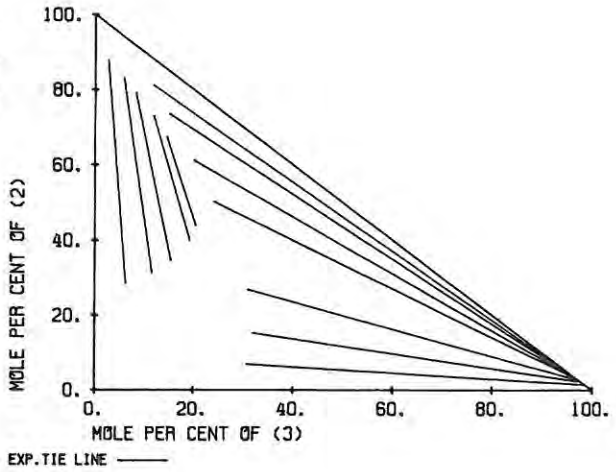
EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	UPPER PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
63.100	6.600	30.300				0.100	1.500	98.400
52.800	15.400	31.800				0.100	2.300	97.600
42.300	27.000	30.700				0.100	2.800	97.100
29.600	44.600	25.800	18.300	62.000	19.700	0.100	3.400	96.500
			11.300	73.800	14.900	0.080	3.420	96.500
			7.000	81.400	11.600	0.040	3.360	96.600
			0.000	93.200	6.800	0.0	3.400	96.600
35.200	39.900	24.900	14.400	70.100	15.500			
41.000	36.400	22.600	12.800	74.400	12.800			
45.200	34.300	20.500	11.600	77.400	11.000			
52.500	31.200	16.300	10.300	81.700	8.000			
59.400	28.600	12.000	9.500	84.900	5.600			
67.700	26.000	6.300	8.400	88.600	3.000			
76.800	23.200	0.0	7.500	92.500	0.0			

(1) C6H14O 1-HEXANOL
(2) CH3NO2 METHANE,NITRO
(3) H2O WATER

SAZONOV V.P., MARKUZIN N.P., FILIPPOV V.V.
ZH.PRIKL.KHIM.(LENINGRAD) 50(1977)1524

TEMPERATURE = 23.0 DEG C TYPE OF SYSTEM = 3A



EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	UPPER PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
62.200	7.000	30.800				0.100	1.500	98.400
52.700	15.300	32.000				0.100	2.300	97.600
42.200	26.800	31.000				0.100	2.800	97.100
25.600	50.200	24.200				0.100	3.500	96.400
			18.700	61.200	20.100	0.100	3.500	96.400
			11.300	73.600	15.100	0.060	3.440	96.500
			7.000	81.200	11.800	0.030	3.470	96.500
			0.000	93.100	6.900	0.0	3.500	96.500
17.900	67.500	14.600	35.500	44.000	20.500			
15.000	73.000	12.000	40.700	40.000	19.300			
12.500	79.200	8.300	49.900	34.600	15.500			
11.100	83.000	5.900	57.000	31.300	11.700			
9.600	87.700	2.700	65.200	28.500	6.300			
8.200	91.800	0.0	73.600	26.400	0.0			

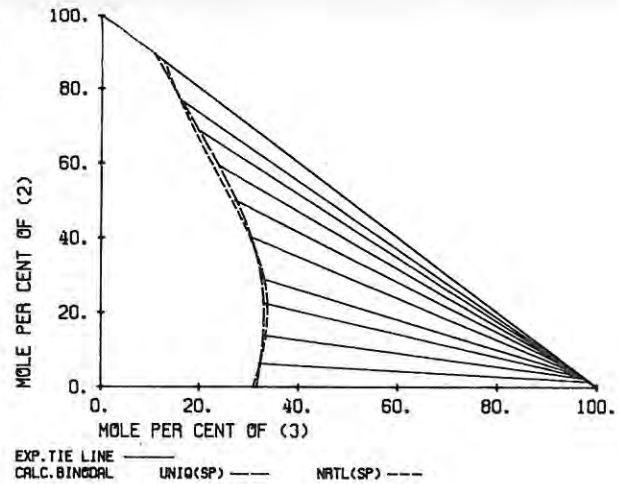
(1) C6H14O 1-HEXANOL
(2) CH3NO2 METHANE,NITRO
(3) H2O WATER

SAZONOV V.P., MARKUZIN N.P., FILIPPOV V.V.
ZH.PRIKL.KHIM.(LENINGRAD) 50(1977)1524

TEMPERATURE = 40.0 DEG C TYPE OF SYSTEM = 2

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
61.600	6.300	32.100	0.090	1.510	98.400
53.000	13.800	33.200	0.090	2.410	97.500
44.500	22.400	33.100	0.090	2.810	97.100
38.400	29.100	32.500	0.090	3.310	96.600
29.500	40.300	30.200	0.090	3.610	96.300
11.400	68.500	20.100	0.040	4.260	95.700
7.000	76.300	16.700	0.020	4.280	95.700
0.000	89.300	10.700	0.0	4.300	95.700
22.800	50.000	27.200	0.090	4.310	95.600
16.900	59.300	23.800	0.060	4.340	95.600



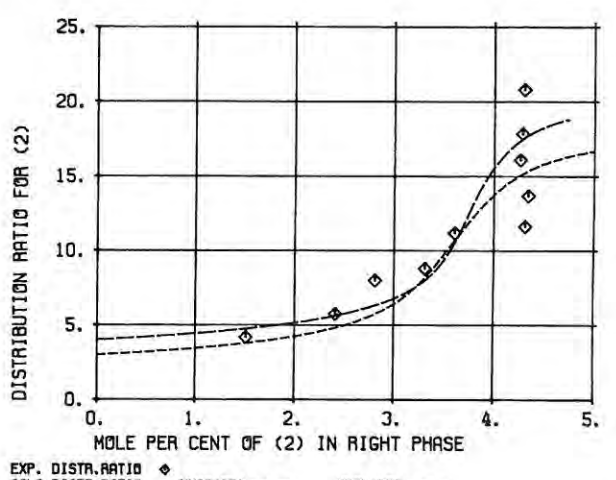
SPECIFIC MODEL PARAMETERS IN KELVIN

I J	UNIQUAC AIJ	AJI	NRTL(ALPHA=.2) AIJ	AJI
1 2	419.32	-18.011	669.26	82.182
1 3	74.291	333.35	-141.28	2192.2
2 3	353.78	204.68	327.23	774.33

R1 = 4.8031 R2 = 2.0086 R3 = 0.9200
Q1 = 4.132 Q2 = 1.868 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC	(SPECIFIC PARAMETERS)	0.19
NRTL	(SPECIFIC PARAMETERS)	0.56



(1) C9H20O 1-NONANOL
(2) C10H8 NAPHTHALENE
(3) CH3NO2 METHANE,NITRO

SAZONOV V.P., CHERNYSHEVA M.F.
ZH.PRIKL.KHIM.(LENINGRAD) 51(1978)1019

TEMPERATURE = 20.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
82.952	0.0	17.048	1.821	0.0	98.179
75.898	5.077	19.025	1.912	2.252	95.836
67.232	10.243	22.525	2.677	4.934	92.389
60.109	14.206	25.685	3.643	7.551	88.806
55.510	17.239	27.250	4.836	10.211	84.953

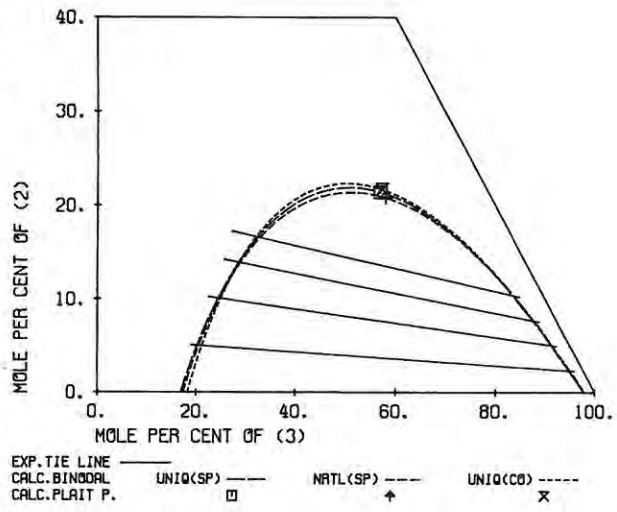
SPECIFIC MODEL PARAMETERS IN KELVIN

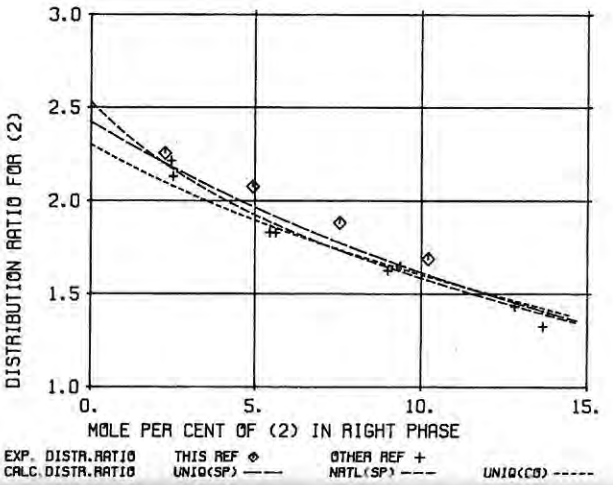
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-52.301	94.409	-74.389	-265.26
1 3	390.19	41.626	125.08	1069.0
2 3	6.7120	86.049	-20.766	-147.08

R1 = 6.8263 R2 = 4.9808 R3 = 2.0086
Q1 = 5.752 Q2 = 3.440 Q3 = 1.868

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.94
NRTL (SPECIFIC PARAMETERS)	0.99
UNIQUAC (COMMON PARAMETERS)	1.05





(1) C9H20O 1-NONANOL
(2) C10H8 NAPHTHALENE
(3) CH3NO2 METHANE,NITRO

SAZONOV V.P., CHERNYSHEVA M.F.
ZH.PRIKL.KHIM.(LENINGRAD) 51(1978)1019

TEMPERATURE = 23.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
81.430	0.0	18.570	2.268	0.0	97.732
73.563	5.401	21.036	2.934	2.438	94.628
65.101	10.289	24.609	3.867	5.626	90.507
54.197	15.452	30.351	5.963	9.361	84.676
45.964	18.374	35.662	8.160	12.820	79.019

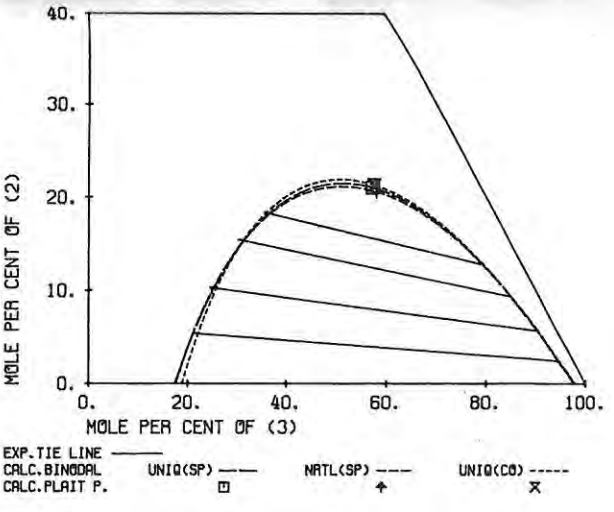
SPECIFIC MODEL PARAMETERS IN KELVIN

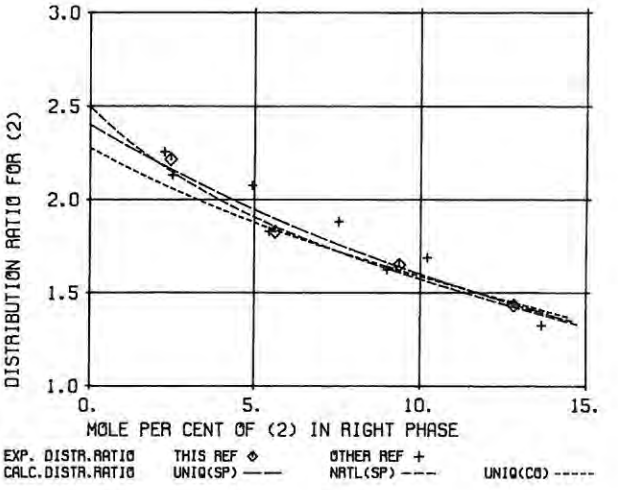
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-52.301	94.409	-74.389	-265.26
1 3	390.19	41.626	125.08	1069.0
2 3	6.7120	86.049	-20.766	-147.08

R1 = 6.8263 R2 = 4.9808 R3 = 2.0086
Q1 = 5.752 Q2 = 3.440 Q3 = 1.868

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.39
NRTL (SPECIFIC PARAMETERS)	0.33
UNIQUAC (COMMON PARAMETERS)	0.39





(1) C9H20O 1-NONANOL

(2) C10H8 NAPHTHALENE

(3) CH3NO2 METHANE,NITRO

SAZONOV V.P., CHERNYSHEVA M.F.
ZH.PRIKL.KHIM.(LENINGRAD) 51(1978)1019

TEMPERATURE = 24.9 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
80.680	0.0	19.320	2.766	0.0	97.234
71.495	5.325	23.180	3.219	2.500	94.282
60.767	9.967	29.266	4.508	5.446	90.045
52.088	14.610	33.302	6.480	8.989	84.531
38.843	18.110	43.047	10.880	13.666	75.453

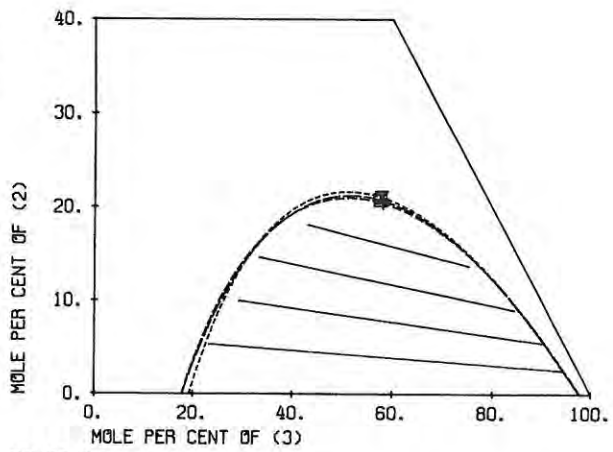
SPECIFIC MODEL PARAMETERS IN KELVIN

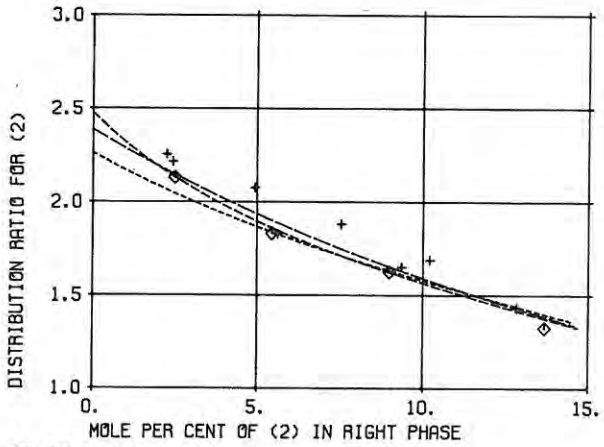
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-52.301	94.409	-74.389	-265.26
1 3	390.19	41.626	125.08	1069.0
2 3	6.7120	86.049	-20.766	-147.08

R1 = 6.8263 R2 = 4.9808 R3 = 2.0086
Q1 = 5.752 Q2 = 3.440 Q3 = 1.868

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.87
NRTL (SPECIFIC PARAMETERS)	0.96
UNIQUAC (COMMON PARAMETERS)	0.85





(1) C10H22O 1-DECANOL

(2) C9H20O 1-NONANOL

(3) CH3NO2 METHANE,NITRO

SAZONOV V.P., GROMAKOVSKAYA A.G., ZHURALEV E.F.
ZH.PRIKL.KHIM.(LENINGRAD) 50(1977)587

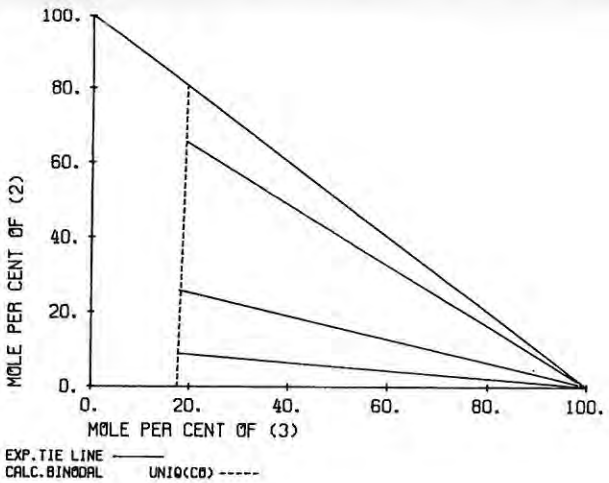
TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 2

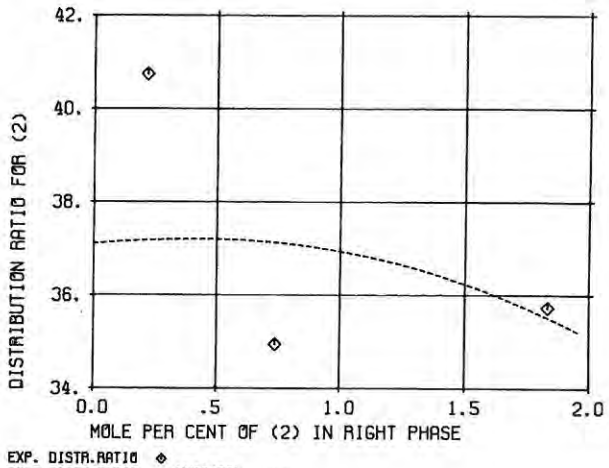
EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
73.337	8.812	17.851	1.222	0.216	98.561
56.248	25.772	17.980	0.949	0.737	98.314
15.240	65.533	19.226	0.438	1.834	97.728

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (COMMON PARAMETERS)	0.29

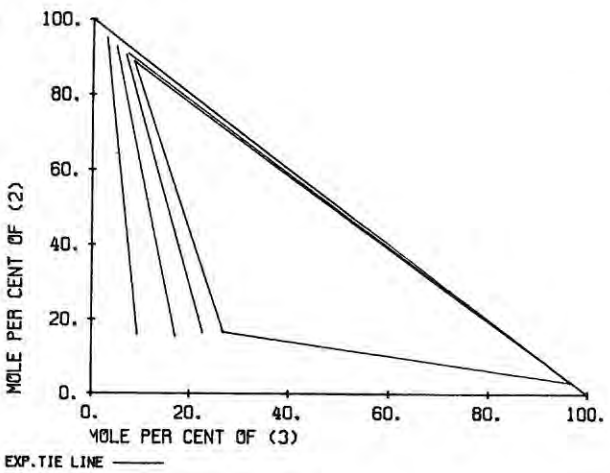




(1) C9H20O 1-NONANOL
(2) CH3NO2 METHANE,NITRO
(3) H2O WATER

SAZONOV V.P., CHERNYSHEVA M.F.
ZH.PRIKL.KHIM.(LENINGRAD) 51(1978)1764

TEMPERATURE = 20.0 DEG C TYPE OF SYSTEM = 3



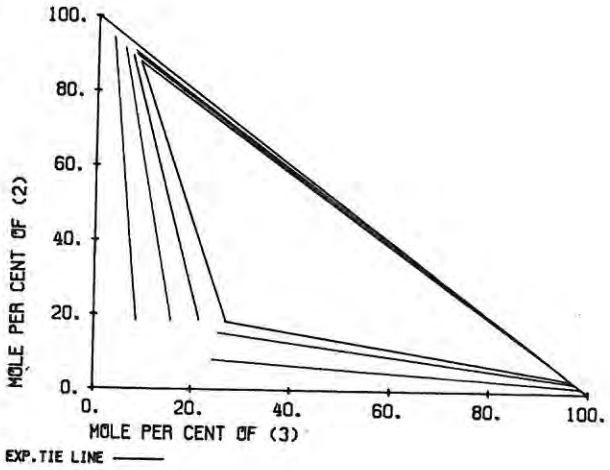
EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	UPPER PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
74.982	0.0	25.018				0.001	0,0	99.999
56.577	16.615	26.808	2.819	88.880	8.301	0.0	3.209	96.791
			2.029	91.008	6.963	0.0	3.278	96.722
			0.0	93.532	6.468	0.000	3.381	96.619
60.836	16.532	22.632	2.679	90.617	6.704			
67.455	15.474	17.071	2.410	92.849	4.741			
74.884	15.840	9.276	2.049	95.217	2.734			
83.338	16.662	0.0	1.821	98.179	0.0			

(1) C9H20O 1-NONANOL
(2) CH3NO2 METHANE,NITRO
(3) H2O WATER

SAZONOV V.P., CHERNYSHEVA M.F.
ZH.PRIKL.KHIM.(LENINGRAD) 51(1978)1764

TEMPERATURE = 23.0 DEG C TYPE OF SYSTEM = 3



EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	UPPER PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
74.982	0.0	25.018				0.001	0.0	99.999
67.628	8.053	24.319				0.0	1.309	98.691
59.289	15.316	25.395				0.0	2.635	97.365
54.848	18.229	26.923	3.463	87.851	8.686	0.0	3.347	96.653
			2.403	89.968	7.629	0.000	3.381	96.619
			1.770	90.977	7.253	0.0	3.485	96.515
			0.0	93.224	6.776	0.0	3.519	96.481
59.774	18.802	21.424	3.460	89.445	7.095			
65.854	18.405	15.742	3.057	91.504	5.439			
73.078	18.394	8.529	2.528	94.384	3.088			
81.619	18.381	0.0	2.268	97.732	0.0			

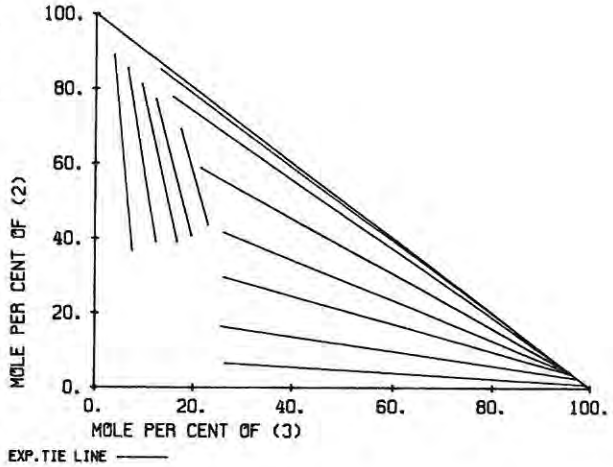
(1) C9H20O 1-NONANOL

(2) CH3NO2 METHANE,NITRO

(3) H2O WATER

SAZONOV V.P., CHERNYSHEVA M.F.
ZH.PRIKL.KHIM.(LENINGRAD) 51(1978)1764

TEMPERATURE = 45.1 DEG C TYPE OF SYSTEM = 3A



EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	UPPER PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
73.540	0.0	26.460				0.003	0.0	99.997
67.073	6.569	26.358				0.0	0.935	99.065
57.953	16.416	25.630				0.0	2.502	97.498
44.404	29.578	26.018				0.0	3.693	96.307
32.362	41.638	26.000				0.0	4.010	95.990
			19.935	58.780	21.285	0.000	4.117	95.883
			6.547	77.857	15.596	0.0	4.224	95.776
			1.898	85.122	12.980	0.0	4.367	95.633
			0.0	88.196	11.804	0.0	4.548	95.452
33.580	43.572	22.848	13.481	69.246	17.273			
39.849	40.623	19.527	10.566	77.244	12.190			
44.383	38.981	16.636	9.392	81.251	9.357			
48.734	38.971	12.296	8.060	85.450	6.490			
55.771	36.708	7.521	7.217	89.148	3.635			
63.006	36.994	0.0	6.645	93.355	0.0			

(1) H2O WATER

(2) CH4O METHANOL

(3) C2HCL3 ETHENE,TRICHLORO

KRISHNAMURTY V.V.G., MURTI P.S., VENKATA RAO C.
J.SCI.IND.RES. 12B(1953)583

TEMPERATURE = 27.5 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
90.858	9.069	0.074	0.0	1.017	98.983
84.559	15.255	0.186	0.0	2.019	97.981
81.178	18.583	0.239	0.0	3.900	96.100
77.892	21.831	0.277	0.0	4.935	95.065
75.222	24.479	0.298	0.0	5.878	94.122
73.077	26.587	0.337	0.0	6.807	93.193
70.432	29.191	0.377	0.0	9.514	90.486
68.081	31.482	0.436	1.283	14.432	84.285

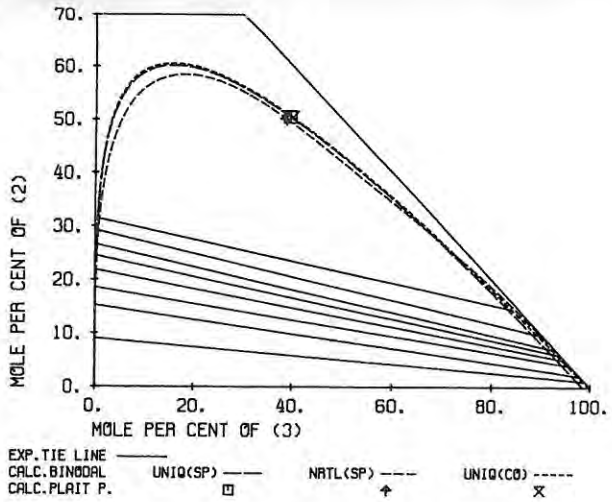
SPECIFIC MODEL PARAMETERS IN KELVIN

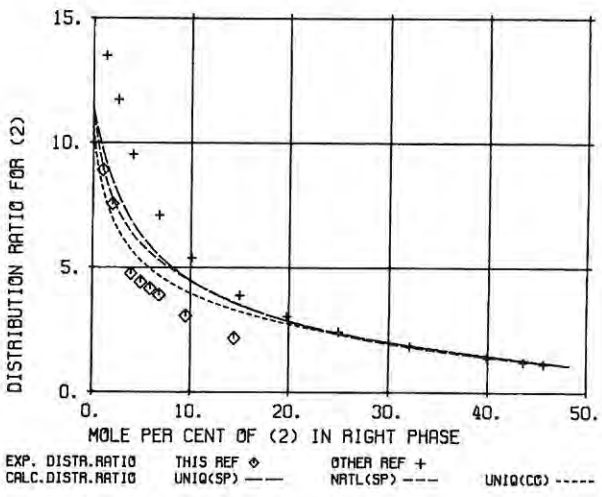
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-610.17	-56.666	459.62	-517.73
1 3	868.91	570.62	2896.2	2509.0
2 3	-64.077	117.49	501.29	106.50

R1 = 0.9200 R2 = 1.4311 R3 = 3.3092
Q1 = 1.400 Q2 = 1.432 Q3 = 2.860

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	2.24
NRTL (SPECIFIC PARAMETERS)	2.26
UNIQUAC (COMMON PARAMETERS)	1.74





(1) H2O WATER

(2) CH4O METHANOL

(3) C2HCL3 ETHENE,TRICHLORO

ROETHLIN S., CRUETZEN J.L., SCHULTZE G.R.
CHEM.ING.TECH. 29(1957)211

TEMPERATURE = 20.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
82.300	17.550	0.150	0.100	1.300	98.600
69.800	29.900	0.300	0.200	2.550	97.250
60.200	39.100	0.700	0.300	4.100	95.600
50.000	48.300	1.700	0.600	6.800	92.600
41.900	54.400	3.700	1.150	10.100	88.750
35.100	58.300	6.600	1.700	15.000	83.300
29.800	60.300	9.900	2.600	19.800	77.600
26.200	60.700	13.100	3.700	25.000	71.300
21.400	59.250	19.350	5.700	32.050	62.250
17.900	55.750	26.350	8.550	39.900	51.550
15.700	53.350	30.950	10.250	43.600	46.150
15.050	52.100	32.850	11.200	45.650	43.150

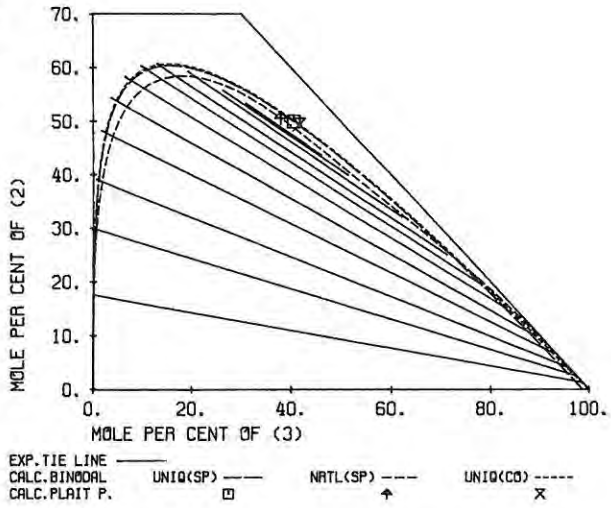
SPECIFIC MODEL PARAMETERS IN KELVIN

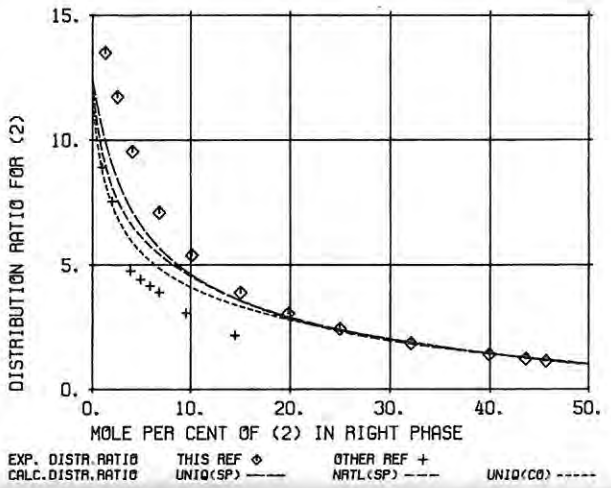
	UNIQUAC		NRTL(ALPHA=.2)	
I J	AIJ	AJI	AIJ	AJI
1 2	-610.17	-56.666	459.62	-517.73
1 3	868.91	570.62	2896.2	2509.0
2 3	-64.077	117.49	501.29	106.50

R1 = 0.9200 R2 = 1.4311 R3 = 3.3092
Q1 = 1.400 Q2 = 1.432 Q3 = 2.860

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.90
NRTL (SPECIFIC PARAMETERS)	1.51
UNIQUAC (COMMON PARAMETERS)	2.64





(1) H2O WATER

(2) CH4O METHANOL

(3) C2HCL3 ETHENE,TRICHLORO

ROETHLIN S., CRUETZEN J.L., SCHULTZE G.R.
CHEM.ING.TECH. 29(1957)211

TEMPERATURE = 35.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
82.800	16.950	0.250	0.100	1.150	98.750
69.700	29.950	0.350	0.250	2.700	97.050
60.350	38.800	0.850	0.500	4.750	94.750
50.100	47.900	2.000	1.000	8.000	91.000
42.100	53.700	4.200	1.500	11.600	86.900
35.050	57.650	7.300	2.500	17.200	80.300
29.800	59.450	10.750	3.850	23.450	72.700
25.450	59.400	15.150	5.450	29.000	65.550
23.400	58.600	18.000	6.750	32.800	60.450
19.800	55.700	24.500	9.250	39.100	51.650
19.250	55.000	25.750	9.850	40.350	49.800
16.250	51.300	32.450	13.000	46.250	40.750

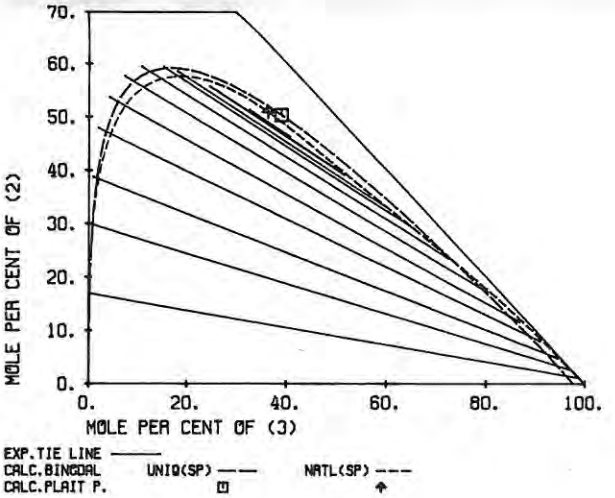
SPECIFIC MODEL PARAMETERS IN KELVIN

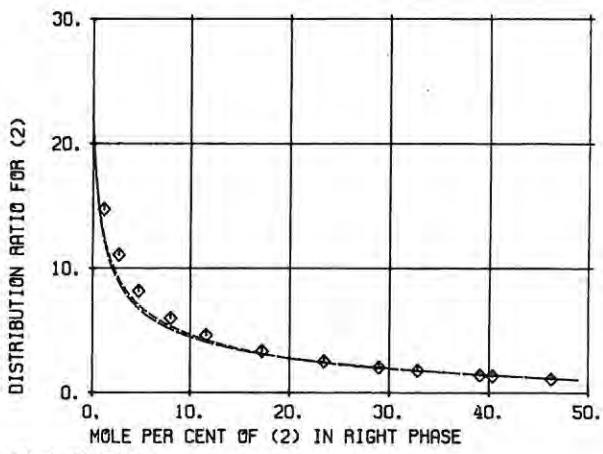
	UNIQUAC		NRTL(ALPHA=.2)	
I J	AIJ	AJI	AIJ	AJI
1 2	-329.16	-218.79	1106.9	-896.30
1 3	487.30	529.13	2567.1	1736.3
2 3	-48.748	307.55	580.45	68.663

R1 = 0.9200 R2 = 1.4311 R3 = 3.3092
Q1 = 1.400 Q2 = 1.432 Q3 = 2.860

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.81
NRTL (SPECIFIC PARAMETERS)	1.15





(1) H2O WATER
(2) CH4O METHANOL
(3) C2HCL3 ETHENE,TRICHLORO

ROETHLIN S., CRUETZEN J.L., SCHULTZE G.R.
CHEM.ING.TECH. 29(1957)211

TEMPERATURE = 50.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
82.900	16.800	0.300	0.200	1.750	98.050
69.750	29.750	0.500	0.450	3.500	96.050
60.450	38.550	1.000	0.700	5.650	93.650
49.100	48.350	2.550	1.550	10.300	88.150
42.300	53.150	4.550	2.300	13.850	83.850
35.800	56.350	7.850	3.500	19.700	76.800
31.700	57.650	10.650	4.900	25.200	69.900
27.900	57.800	14.300	6.700	30.450	62.850
24.350	56.650	19.000	8.700	35.100	56.200
22.300	55.350	22.350	10.250	38.300	51.450
19.200	52.300	28.500	13.150	43.400	43.450

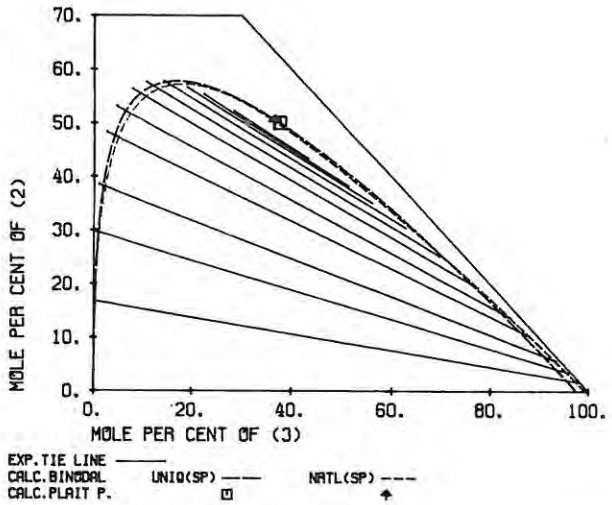
SPECIFIC MODEL PARAMETERS IN KELVIN

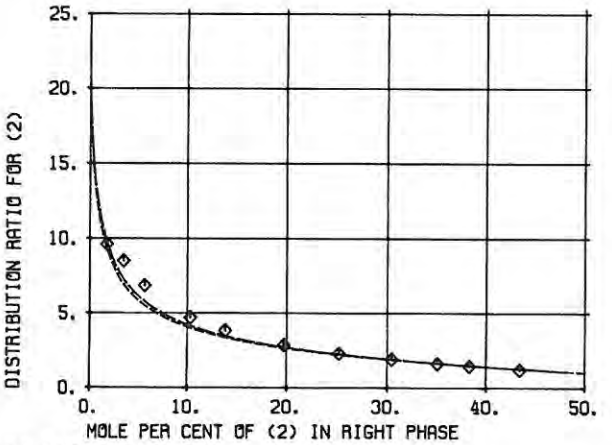
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	-290.42	-244.04	967.60	-898.64
1	3	487.31	544.92	2192.2	1091.7
2	3	-54.939	330.71	552.43	29.269

R1 = 0.9200 R2 = 1.4311 R3 = 3.3092
Q1 = 1.400 Q2 = 1.432 Q3 = 2.860

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS) 1.70
NRTL (SPECIFIC PARAMETERS) 1.57





(1) H2O WATER
(2) CH4O METHANOL
(3) C2H4CL2 ETHANE,1,2-DICHLORO

IZMAILOV N.A., FRANKE A.K.
ZH.FIZ.KHIM. 29(1955)620

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
92.456	7.272	0.272	0.544	0.917	98.540
84.939	14.690	0.371	0.539	2.121	97.340
73.190	26.068	0.743	1.574	4.720	93.705
66.536	32.276	1.187	2.061	6.664	91.275
57.531	39.954	2.515	2.488	10.912	86.600
37.414	52.010	10.576	6.097	23.263	70.640
31.381	52.453	16.166	9.079	30.629	60.291
28.519	51.468	20.013	10.279	32.963	56.758

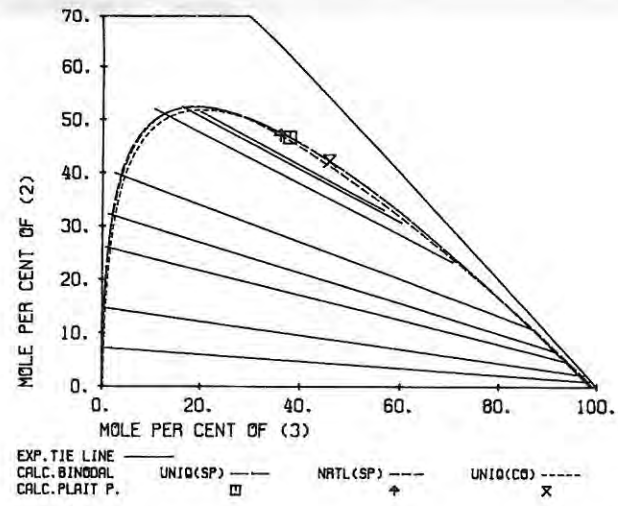
SPECIFIC MODEL PARAMETERS IN KELVIN

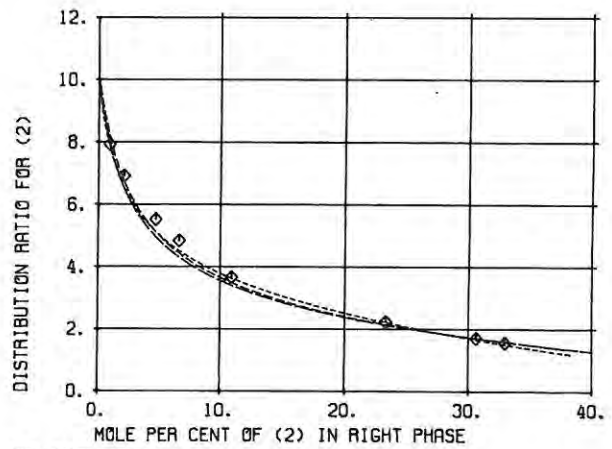
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	-177.22	-187.79	1020.1	-814.90
1	3	429.01	638.14	1790.4	944.01
2	3	-66.033	307.47	512.05	-18.927

R1 = 0.9200 R2 = 1.4311 R3 = 2.9308
Q1 = 1.400 Q2 = 1.432 Q3 = 2.528

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS) 0.90
NRTL (SPECIFIC PARAMETERS) 0.61
UNIQUAC (COMMON PARAMETERS) 2.65





(1) C3H3N PROPENOIC ACID,NITRILE

(2) CH4O METHANOL

(3) H2O WATER

NOVIKOVA K.E., KONDRATEVA N.M.
ZH.FIZ.KHIM. 39(1965)1432

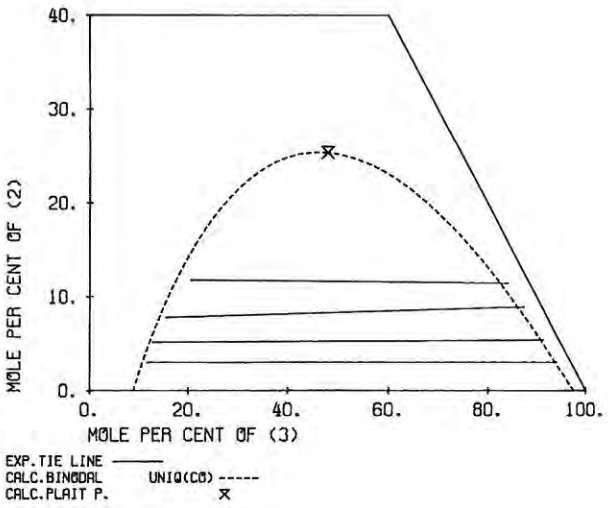
TEMPERATURE = 20.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

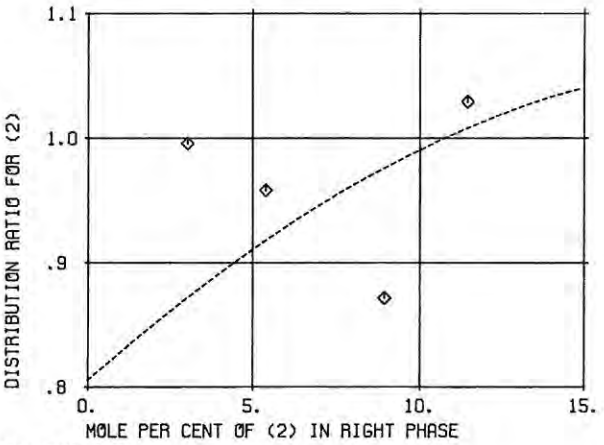
LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
85.166	3.014	11.820	2.842	3.027	94.131
81.925	5.169	12.906	3.194	5.395	91.411
76.601	7.788	15.611	3.648	8.933	87.420
67.689	11.768	20.544	4.347	11.436	84.217

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (COMMON PARAMETERS)	1.13



EXP.TIE LINE ——
CALC.BINODAL UNIQ(CG) -----
CALC.PLAIT P. ✕



EXP. DISTA.RATIO ◇
CALC.DISTA.RATIO UNIQ(CG) -----

(1) CH4O METHANOL

(2) C3H6O2 ACETIC ACID,METHYL ESTER

(3) C6H12 CYCLOHEXANE

SUGI H., NITTA T., KATAYAMA T.
J.CHEM.ENG.JPN. 9(1976)12

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
79.970	1.250	18.780	13.670	0.850	85.480
78.130	2.020	19.850	15.220	1.370	83.410
76.970	2.600	20.430	17.200	1.870	80.930
74.310	3.440	22.250	18.140	2.470	79.390
72.630	4.060	23.310	19.600	3.040	77.360
71.180	4.420	24.400	21.120	3.360	75.520
67.960	5.110	26.930	22.950	4.070	72.980

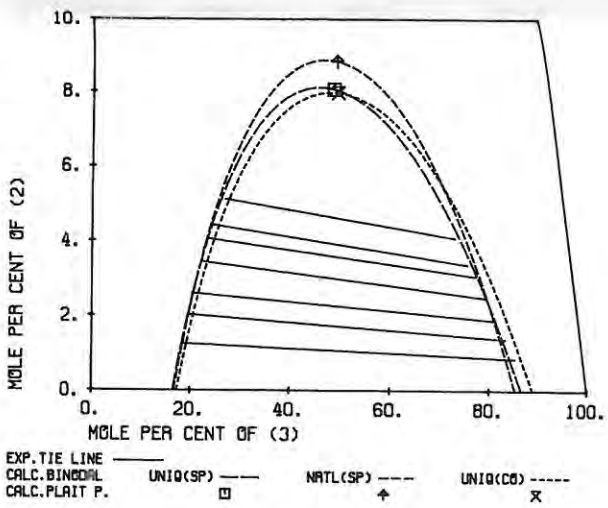
SPECIFIC MODEL PARAMETERS IN KELVIN

		UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1	2	-16.965	-64.745	169.39	-580.60
1	3	12.535	625.79	385.68	467.08
2	3	-4.7990	-10.666	-234.39	-218.92

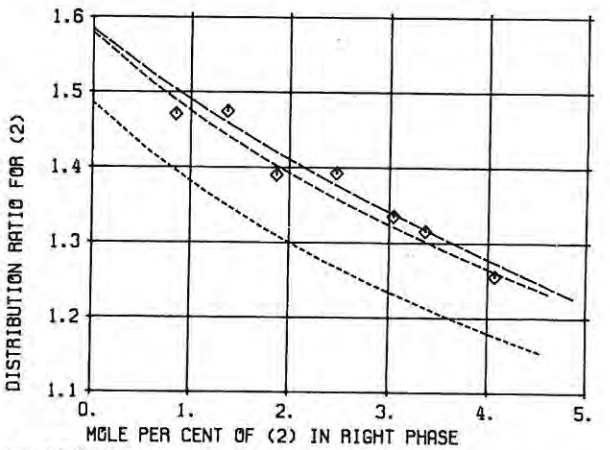
R1 = 1.4311 R2 = 2.8042 R3 = 4.0464
Q1 = 1.432 Q2 = 2.576 Q3 = 3.240

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.35
NRTL (SPECIFIC PARAMETERS)	0.57
UNIQUAC (COMMON PARAMETERS)	1.22



EXP.TIE LINE ——
CALC.BINODAL UNIQ(SP) —— NRTL(SP) ---- UNIQ(CG) -----
CALC.PLAIT P. ◻ ✦ ✕



EXP. DISTA.RATIO ◇
CALC.DISTA.RATIO UNIQ(SP) —— NRTL(SP) ---- UNIQ(CG) -----

(1) C3H7NO2 PROPANE,1-NITRO

(2) CH4O METHANOL

(3) H2O WATER

HANKINSON R.W., THOMPSON D.
J.CHEM.ENG.DATA 10(1965)18

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
82.446	11.475	6.079	0.682	12.587	86.731
67.051	21.884	11.066	0.740	14.728	84.532
48.319	34.840	16.841	0.859	18.854	80.287
36.062	40.141	23.797	1.106	22.075	76.819
25.874	43.671	30.454	1.570	27.131	71.298
21.104	43.889	35.006	2.271	31.804	65.925

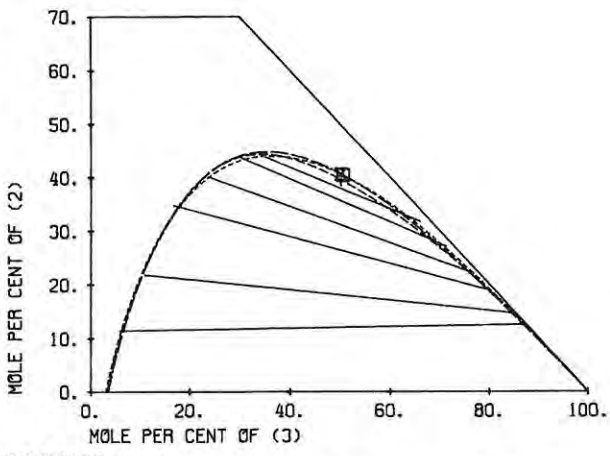
SPECIFIC MODEL PARAMETERS IN KELVIN

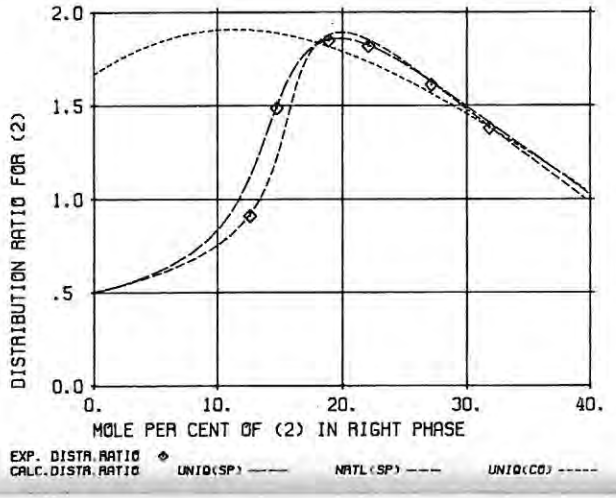
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	757.36	-183.64	836.34	-159.44
1	3	499.46	296.51	598.47	2472.6
2	3	-43.494	182.69	761.22	-69.326

R1 = 3.3573 R2 = 1.4311 R3 = 0.9200
Q1 = 2.948 Q2 = 1.432 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.62
NRTL (SPECIFIC PARAMETERS)	0.65
UNIQUAC (COMMON PARAMETERS)	1.79





(1) CH4O METHANOL

(2) C3H8O 2-PROPANOL

(3) C6H14 HEXANE

RADICE F.C., KNICKLE H.N.
J.CHEM.ENG.DATA 20(1975)371

TEMPERATURE = 5.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
88.637	0.0	11.363	10.361	0.0	89.639
86.909	1.801	11.291	12.192	0.079	87.729
83.674	2.766	13.560	14.151	0.287	85.562
80.096	4.172	15.732	17.191	0.613	82.196
76.138	5.447	18.415	20.508	1.244	78.248
66.472	7.279	26.249	27.668	2.814	69.519
59.931	8.592	31.477	30.140	4.334	65.526

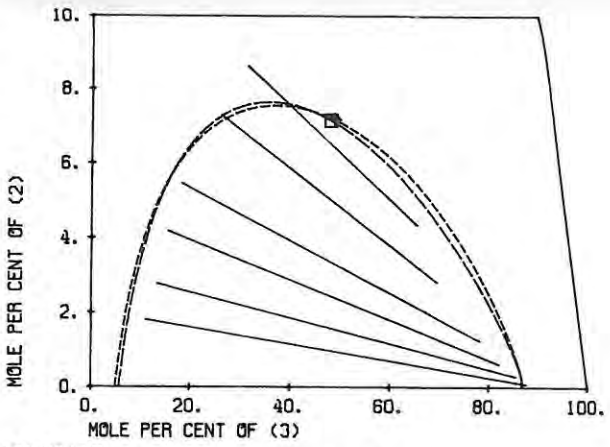
SPECIFIC MODEL PARAMETERS IN KELVIN

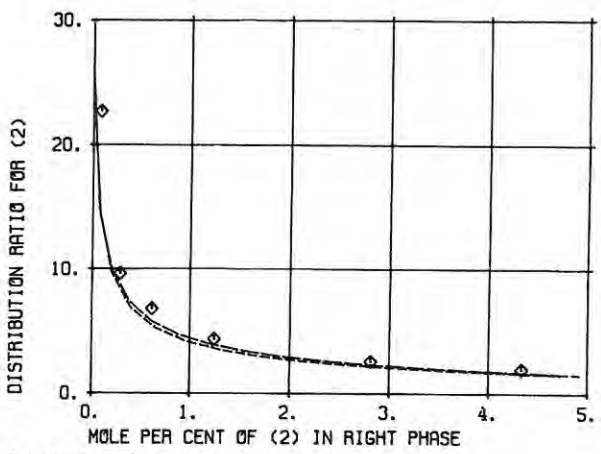
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	29.648	-375.98	234.41	-1351.5
1	3	58.409	543.80	708.59	273.30
2	3	-108.29	-63.481	-889.36	-340.72

R1 = 1.4311 R2 = 2.7791 R3 = 4.4998
Q1 = 1.432 Q2 = 2.508 Q3 = 3.856

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.27
NRTL (SPECIFIC PARAMETERS)	1.40





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CH_4O-C_3H_8O

(1) CH4O METHANOL

(2) C3H8O 2-PROPANOL

(3) C6H14 HEXANE

RADICE F.C., KNICKLE H.N.
J.CHEM.ENG.DATA 20(1975)371

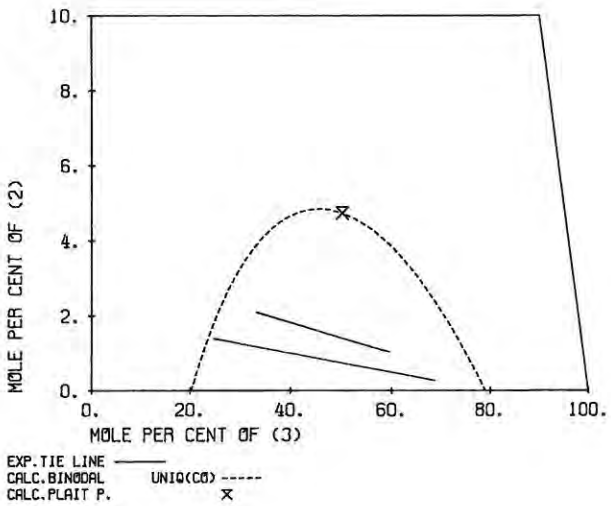
TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

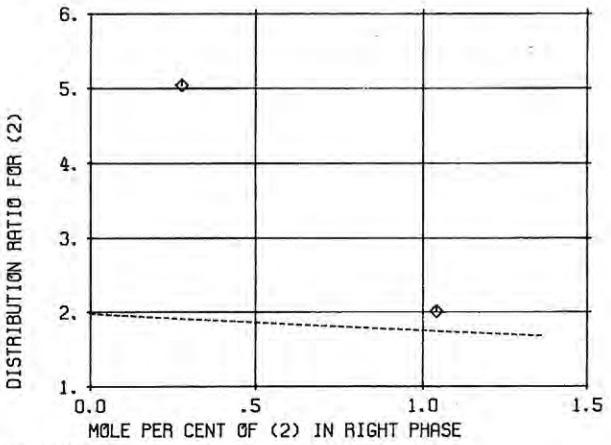
EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
80.154	0.0	19.836	23.226	0.0	76.774
73.831	1.396	24.773	30.917	0.277	68.806
64.623	2.090	33.288	39.478	1.041	59.480

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (COMMON PARAMETERS) 3.16





89

CH_4O-$C_4H_4Cl_2$

(1) H2O WATER

(2) CH4O METHANOL

(3) C4H4CL2 1,3-BUTADIENE,2,3-DICHLORO

VOJTKO J., HRUSOVSKY M., KANALA A.
CHEM.ZVESTI 21(1967)443

TEMPERATURE = 20.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
91.527	8.457	0.016	0.467	2.624	96.909
81.886	18.030	0.084	0.783	5.134	94.084
67.258	32.557	0.185	1.082	7.875	91.043
55.222	44.213	0.565	1.433	10.159	88.408
45.818	52.783	1.399	1.910	14.769	83.321
38.024	59.427	2.549	2.269	17.341	80.390
24.135	68.185	7.680	3.306	25.784	70.910

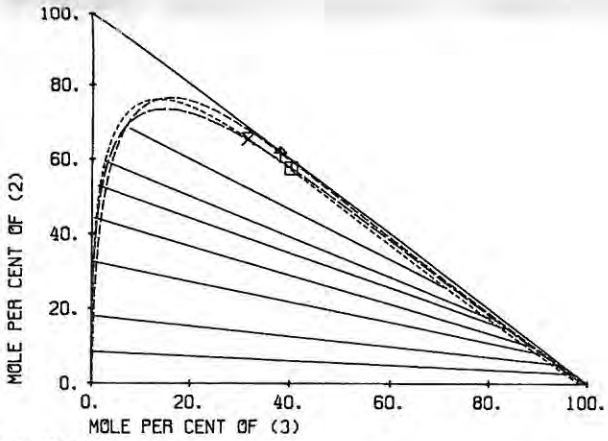
SPECIFIC MODEL PARAMETERS IN KELVIN

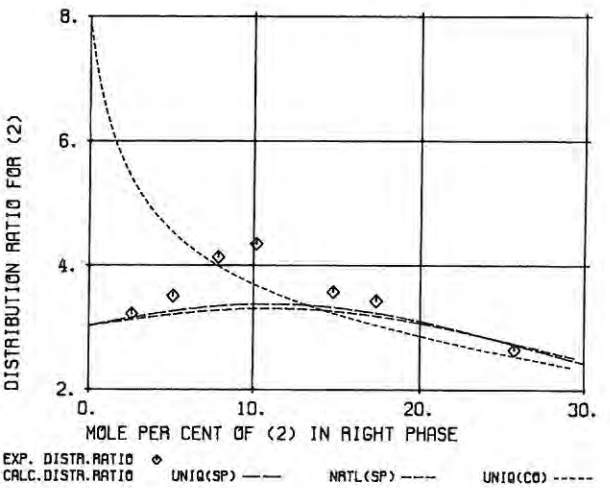
	UNIQUAC		NRTL(ALPHA=.2)	
I J	AIJ	AJI	AIJ	AJI
1 2	-45.181	73.836	208.81	-47.899
1 3	350.15	805.25	1395.5	1029.7
2 3	16.272	434.77	582.35	102.99

R1 = 0.9200 R2 = 1.4311 R3 = 3.8166
Q1 = 1.400 Q2 = 1.432 Q3 = 3.424

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS) 0.97
NRTL (SPECIFIC PARAMETERS) 1.12
UNIQUAC (COMMON PARAMETERS) 1.55





(1) H2O WATER

(2) CH4O METHANOL

(3) C4H6O2 ACETIC ACID,ETHENYL ESTER

NAKAMURA A.
KOGYO KAGAKU ZASSHI 71(1968)319

TEMPERATURE = 20.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
99.510	0.0	0.490	5.047	0.0	94.953
98.174	1.331	0.495	6.314	1.014	92.672
92.752	6.595	0.653	7.320	6.537	86.143
86.987	12.164	0.849	9.240	11.582	80.178
81.891	16.978	1.131	9.134	15.407	75.458
74.368	23.601	2.031	9.939	19.345	70.716
62.094	33.385	4.521	16.098	24.843	59.059

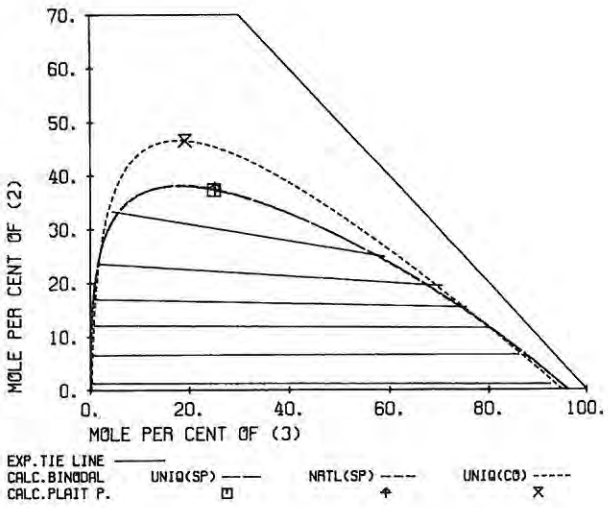
SPECIFIC MODEL PARAMETERS IN KELVIN

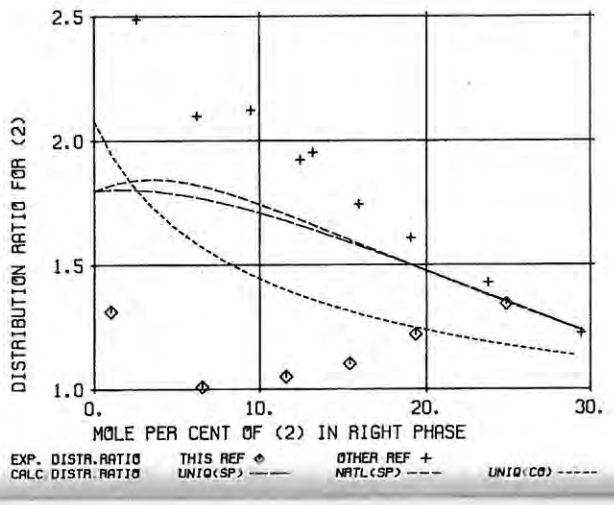
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-763.11	101.89	965.45	-635.70
1 3	537.86	415.38	2285.6	552.64
2 3	-189.69	-59.214	196.46	76.904

R1 = 0.9200 R2 = 1.4311 R3 = 3.2485
Q1 = 1.400 Q2 = 1.432 Q3 = 2.904

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.94
NRTL (SPECIFIC PARAMETERS)	1.98
UNIQUAC (COMMON PARAMETERS)	1.29





(1) H2O WATER

(2) CH4O METHANOL

(3) C4H6O2 ACETIC ACID,ETHENYL ESTER

RUDAKOVSKAYA T.S., ET AL.
ZH.PRIKL.KHIM.(LENINGRAD) 41(1968)583

TEMPERATURE = 20.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
92.937	6.456	0.606	2.307	2.594	95.099
86.292	13.048	0.660	4.425	6.220	89.355
78.882	20.093	1.025	4.747	9.463	85.790
74.656	23.917	1.427	8.192	12.437	79.371
72.519	25.760	1.721	8.902	13.196	77.902
69.691	27.842	2.467	10.888	15.961	73.152
65.847	30.622	3.531	13.982	19.033	66.985
59.595	33.933	6.472	18.238	23.738	58.024
54.287	36.074	9.639	23.931	29.434	46.635

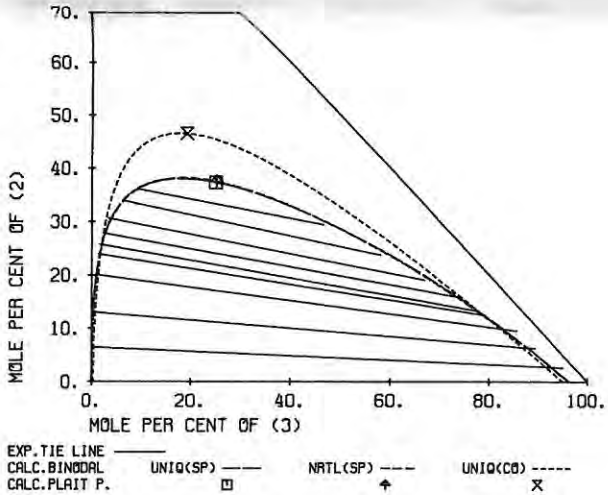
SPECIFIC MODEL PARAMETERS IN KELVIN

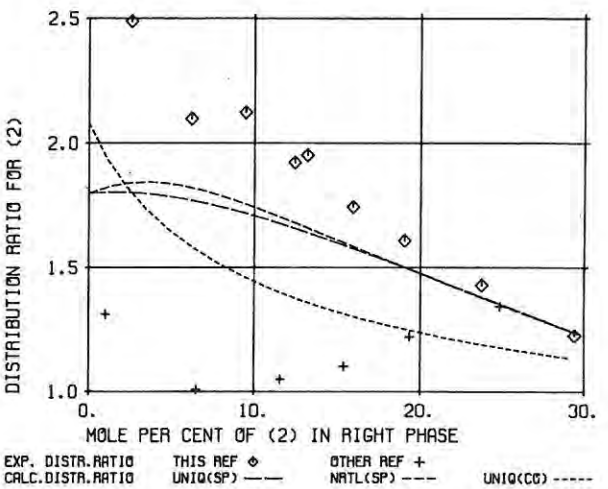
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-763.11	101.89	965.45	-635.70
1 3	537.86	415.38	2285.6	552.64
2 3	-189.69	-59.214	196.46	76.904

R1 = 0.9200 R2 = 1.4311 R3 = 3.2485
Q1 = 1.400 Q2 = 1.432 Q3 = 2.904

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.45
NRTL (SPECIFIC PARAMETERS)	1.43
UNIQUAC (COMMON PARAMETERS)	3.14





(1) C6H12 CYCLOHEXANE

(2) C4H8O FURAN,TETRAHYDRO

(3) CH4O METHANOL

SUGI H., NITTA T., KATAYAMA T.
J.CHEM.ENG.JPN. 9(1976)12

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
85.300	0.360	14.340	17.790	0.340	81.870
83.500	0.820	15.680	18.620	0.760	80.620
78.930	1.670	19.400	21.210	1.530	77.260
74.580	2.400	23.020	23.800	2.230	73.970
70.160	2.890	26.950	26.110	2.680	71.210

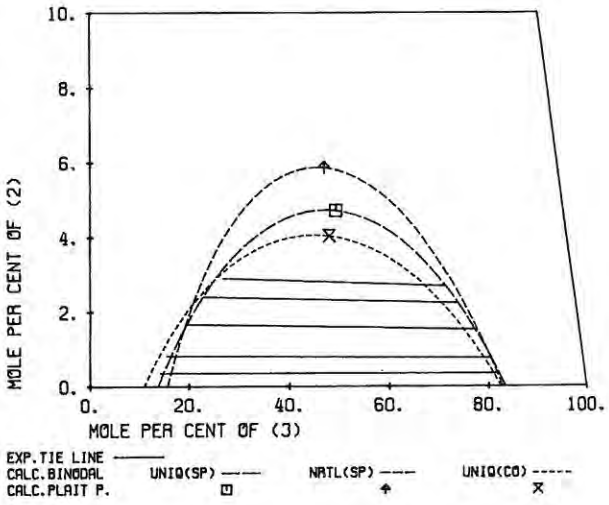
SPECIFIC MODEL PARAMETERS IN KELVIN

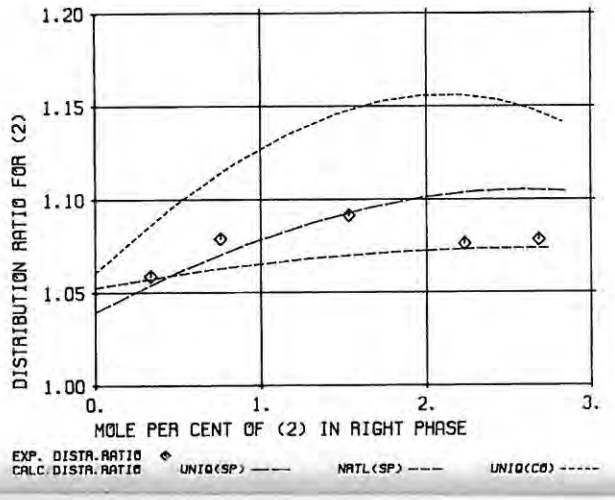
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	-59.532	-130.17	-447.04	-336.27
1	3	618.50	13.935	445.78	396.55
2	3	-159.85	8.7418	-748.38	427.75

R1 = 4.0464 R2 = 2.9415 R3 = 1.4311
Q1 = 3.240 Q2 = 2.720 Q3 = 1.432

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.25
NRTL (SPECIFIC PARAMETERS)	0.68
UNIQUAC (COMMON PARAMETERS)	1.43





(1) C4H8O2 ACETIC ACID,ETHYL ESTER

(2) CH4O METHANOL

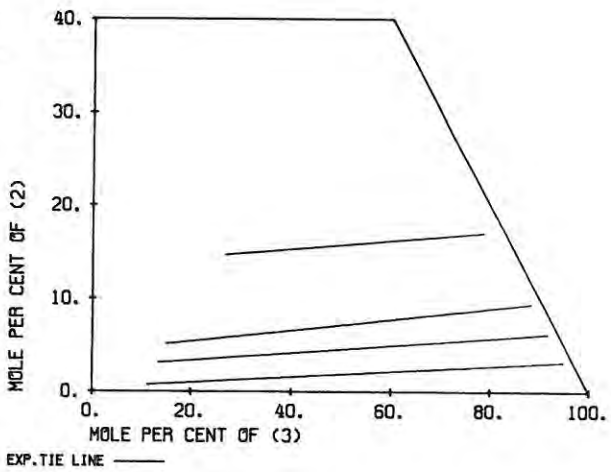
(3) H2O WATER

BEECH D.G., GLASSTONE S.
J.CHEM.SOC. (1938)67

TEMPERATURE = 0.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
87.760	0.746	11.495	2.153	3.179	94.668
83.240	3.116	13.643	2.202	6.184	91.614
79.578	5.117	15.305	2.435	9.390	88.174
58.522	14.684	26.794	4.337	17.051	78.612



(1) C4H8O2 ACETIC ACID,ETHYL ESTER
(2) CH4O METHANOL
(3) H2O WATER

BEECH D.G., GLASSTONE S.
J.CHEM.SOC. (1938)67

TEMPERATURE = 20.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
83.144	2.392	14.464	1.782	2.573	95.646
75.803	6.979	17.218	1.918	5.400	92.683
67.427	11.056	21.518	2.173	7.520	90.307
64.481	12.783	22.735	2.523	9.913	87.564
50.765	17.496	31.739	3.725	14.343	81.932
39.100	20.663	40.237	6.019	18.178	75.803

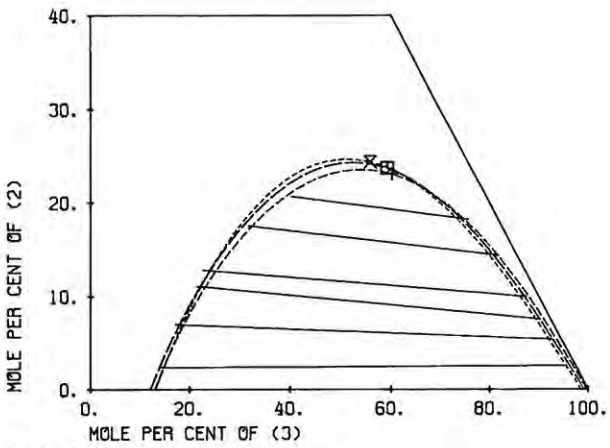
SPECIFIC MODEL PARAMETERS IN KELVIN

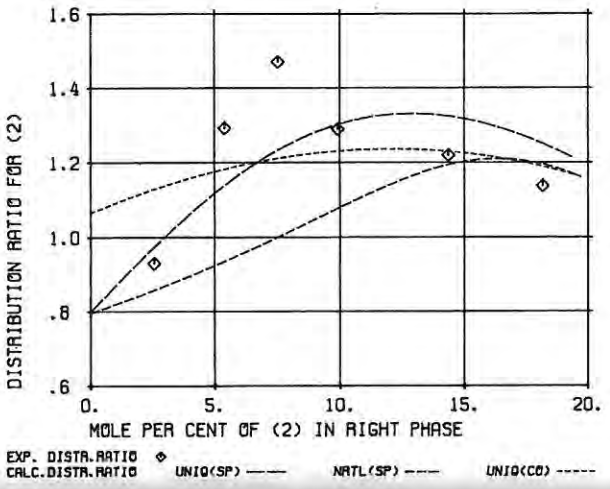
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-49.932	-118.89	561.00	-265.31
1 3	374.80	126.62	149.88	1500.7
2 3	-340.40	103.49	230.22	-216.92

R1 = 3.4786 R2 = 1.4311 R3 = 0.9200
Q1 = 3.116 Q2 = 1.432 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.53
NRTL (SPECIFIC PARAMETERS)	0.70
UNIQUAC (COMMON PARAMETERS)	1.17





(1) C4H8O2 ACETIC ACID,ETHYL ESTER
(2) CH4O METHANOL
(3) H2O WATER

AKITA K., YOSHIDA F.
J.CHEM.ENG.DATA 8(1963)484

TEMPERATURE = 70.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
76.207	0.0	23.793	1.333	0.0	98.667
69.039	4.182	26.778	1.608	3.871	94.521
64.177	6.382	29.441	2.035	5.030	92.935
53.190	10.272	36.538	2.745	7.813	89.442
46.403	12.909	40.688	3.646	10.234	86.120
35.240	16.294	48.466	4.981	12.251	82.768
33.568	17.148	49.284	5.250	15.331	79.419

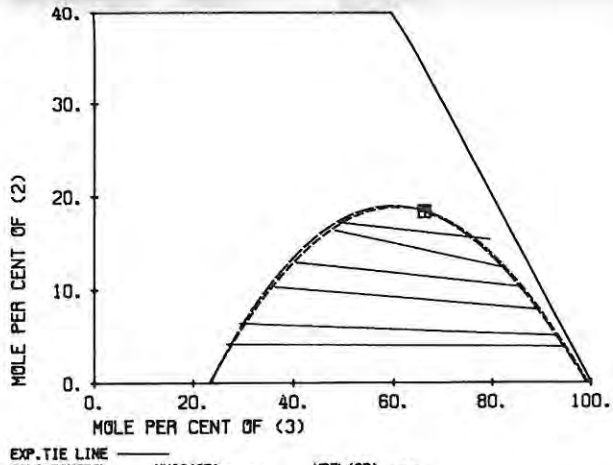
SPECIFIC MODEL PARAMETERS IN KELVIN

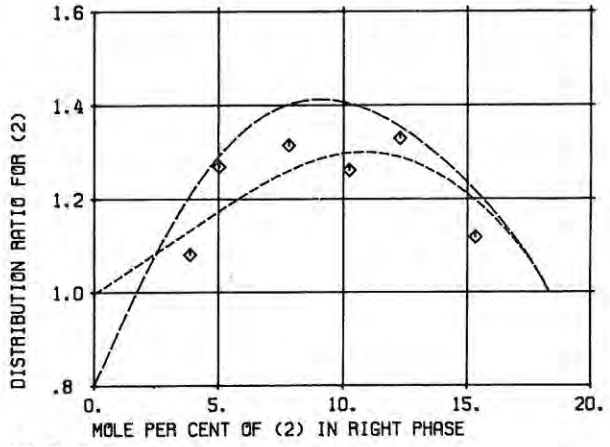
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-135.87	-234.67	638.54	-254.57
1 3	243.69	207.78	-20.116	1712.3
2 3	-477.25	116.23	271.48	-234.94

R1 = 3.4786 R2 = 1.4311 R3 = 0.9200
Q1 = 3.116 Q2 = 1.432 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.56
NRTL (SPECIFIC PARAMETERS)	0.52





(1) CH4O METHANOL

(2) C4H9NO MORPHOLINE

(3) C7H16 HEPTANE

TAGLIAVINI G., ARICH G.
RIC.SCI. 28(1958)1902

TEMPERATURE = 18.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
91.100	0.0	8.900	10.450	0.0	89.550
87.720	3.610	8.670	10.350	0.740	88.910
74.280	16.580	9.140	9.920	3.820	86.260
72.120	18.530	9.350	9.340	4.230	86.430
58.040	31.190	10.770	8.580	8.950	82.470
44.860	41.610	13.530	8.230	15.670	76.100
37.110	47.440	15.450	7.770	20.460	71.770
28.450	51.930	19.620	7.330	26.830	65.840
21.120	53.060	25.820	6.440	34.610	58.950

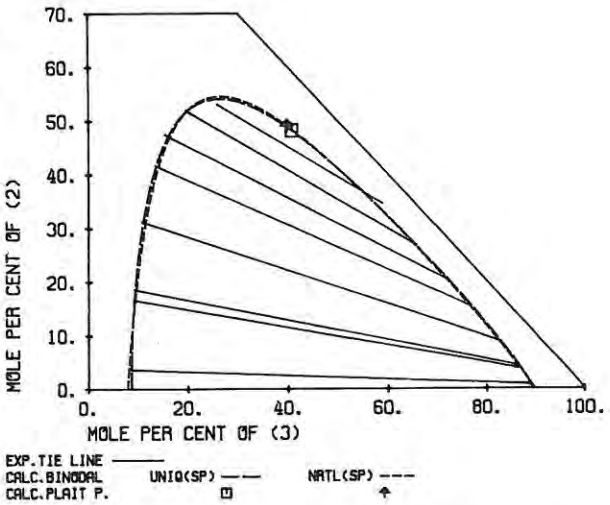
SPECIFIC MODEL PARAMETERS IN KELVIN

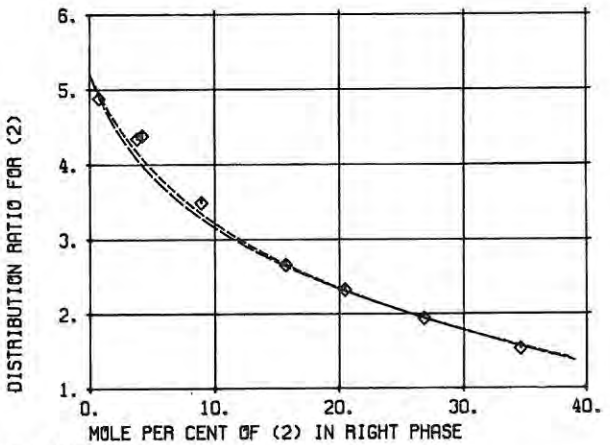
	UNIQUAC		NRTL(ALPHA=.2)	
I J	AIJ	AJI	AIJ	AJI
1 2	-239.49	325.72	-256.75	44.822
1 3	8.0479	680.19	553.56	422.41
2 3	-4.6706	165.21	456.90	58.160

R1 = 1.4311 R2 = 3.4740 R3 = 5.1742
Q1 = 1.432 Q2 = 2.796 Q3 = 4.396

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.40
NRTL (SPECIFIC PARAMETERS)	0.50





(1) CH4O METHANOL

(2) C4H9NO MORPHOLINE

(3) C7H16 HEPTANE

TAGLIAVINI G., ARICH G.
RIC.SCI. 28(1958)1902

TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
88.350	0.0	11.650	16.810	0.0	83.190
83.070	4.830	12.100	16.510	1.530	81.960
73.620	13.570	12.810	15.790	5.030	79.180
67.030	19.060	13.910	15.500	7.340	77.160
55.440	28.590	15.970	15.050	13.600	71.350
48.190	32.880	18.930	15.630	18.610	65.760
37.570	35.750	26.680	21.300	26.480	52.220

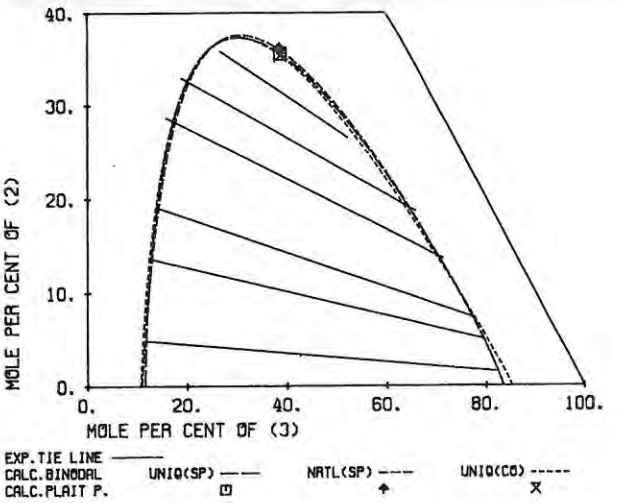
SPECIFIC MODEL PARAMETERS IN KELVIN

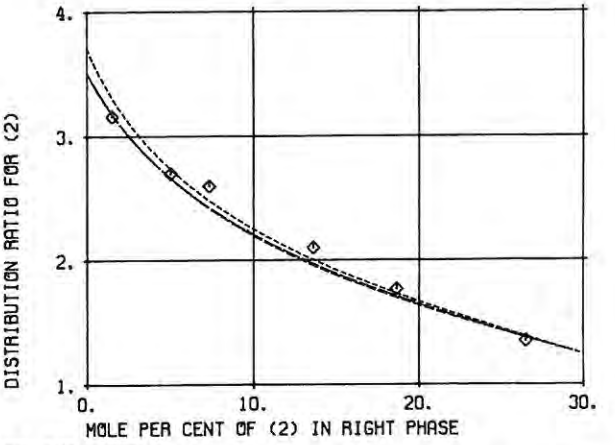
	UNIQUAC		NRTL(ALPHA=.2)	
I J	AIJ	AJI	AIJ	AJI
1 2	-241.57	207.67	-422.25	-2.2091
1 3	2.0824	649.07	565.80	345.19
2 3	2.7717	95.752	473.12	-223.06

R1 = 1.4311 R2 = 3.4740 R3 = 5.1742
Q1 = 1.432 Q2 = 2.796 Q3 = 4.396

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.64
NRTL (SPECIFIC PARAMETERS)	0.73
UNIQUAC (COMMON PARAMETERS)	0.90





(1) CH4O METHANOL
(2) C4H9NO MORPHOLINE
(3) C7H16 HEPTANE

TAGLIAVINI G., ARICH G.
RIC.SCI. 28(1958)1902

TEMPERATURE = 40.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
84.860	0.0	15.140	25.360	0.0	74.640
79.350	4.150	16.500	25.330	1.860	72.810
73.150	8.760	18.090	26.580	4.540	68.880
66.000	14.300	19.700	27.900	8.380	63.720
59.680	18.360	21.960	31.200	12.240	56.560

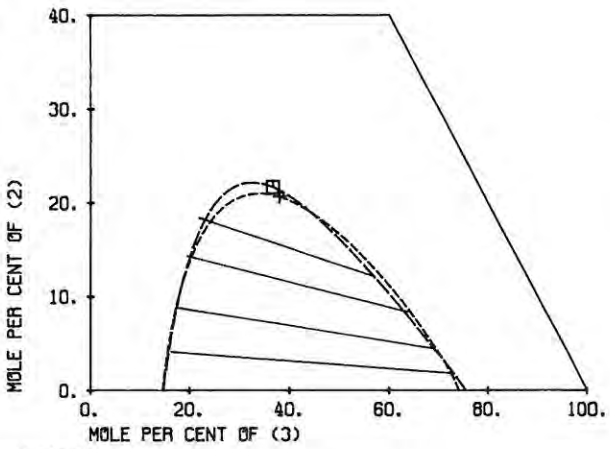
SPECIFIC MODEL PARAMETERS IN KELVIN

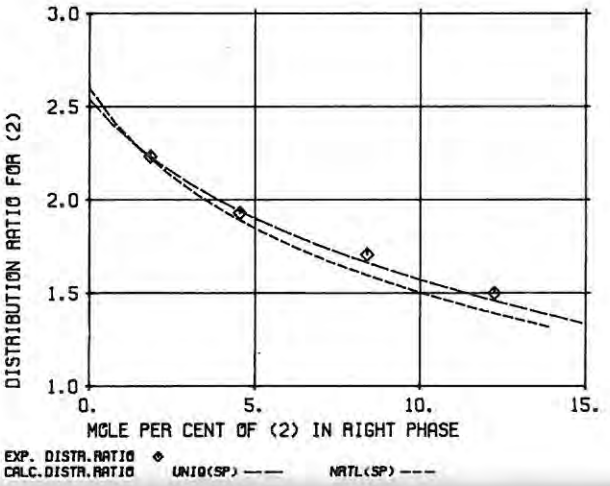
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	-89.653	-4.7683	-215.12	-360.63
1	3	0.35877	612.81	604.65	250.35
2	3	132.88	8.1873	866.57	-610.47

R1 = 1.4311 R2 = 3.4740 R3 = 5.1742
Q1 = 1.432 Q2 = 2.796 Q3 = 4.396

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.38
NRTL (SPECIFIC PARAMETERS)	0.56





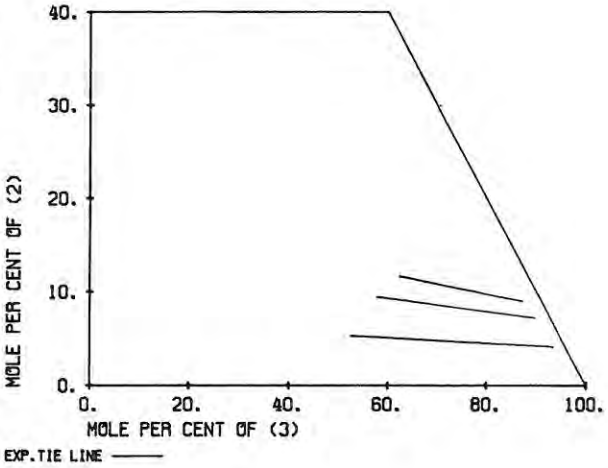
(1) C4H10O 1-BUTANOL
(2) CH4O METHANOL
(3) H2O WATER

MUELLER A.J., PUGSLEY L.I., FERGUSON J.B.
J.PHYS.CHEM. 35(1931)1314

TEMPERATURE = 0.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
42.054	5.287	52.659	2.510	4.120	93.370
32.677	9.405	57.918	3.110	7.195	89.694
25.925	11.632	62.443	3.813	8.954	87.233



(1) C4H10O 1-BUTANOL
(2) CH4O METHANOL
(3) H2O WATER

MUELLER A.J., PUGSLEY L.I., FERGUSON J.B.
J.PHYS.CHEM. 35(1931)1314

TEMPERATURE = 15.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
45.254	3.148	51.598	2.115	2.813	95.071
41.183	5.358	53.459	2.319	4.804	92.876
35.997	7.727	56.276	2.548	6.148	91.304
30.372	9.777	59.851	2.966	7.574	89.460
23.296	11.534	65.170	4.043	9.083	86.874
18.482	11.814	69.704	5.171	9.736	85.094

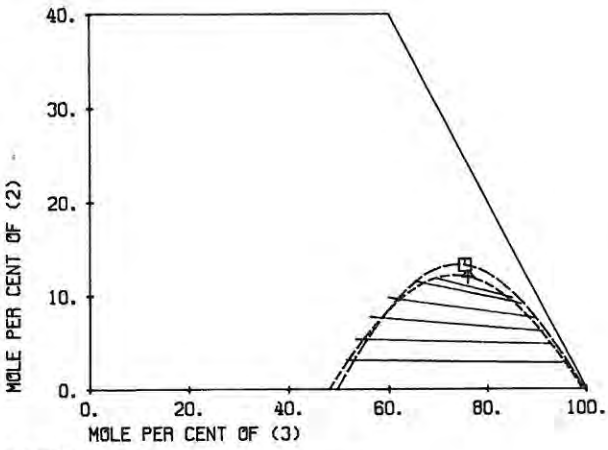
SPECIFIC MODEL PARAMETERS IN KELVIN

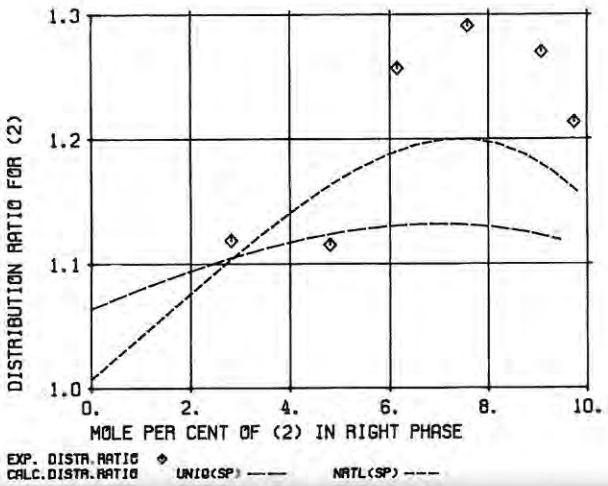
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	355.54	-164.09	706.80	-69.193
1	3	-82.688	443.56	-320.70	1664.7
2	3	-85.451	-321.92	100.23	-61.005

R1 = 3.4543 R2 = 1.4311 R3 = 0.9200
Q1 = 3.052 Q2 = 1.432 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.99
NRTL (SPECIFIC PARAMETERS)	0.80





(1) C4H10O 1-BUTANOL
(2) CH4O METHANOL
(3) H2O WATER

MUELLER A.J., PUGSLEY L.I., FERGUSON J.B.
J.PHYS.CHEM. 35(1931)1314

TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
42.416	3.165	54.419	1.917	2.673	95.410
35.667	6.067	58.266	2.298	5.254	92.447
30.419	7.907	61.674	2.790	6.391	90.819
27.704	8.458	63.838	3.327	7.240	89.434
23.195	9.178	67.627	4.139	7.969	87.892
16.439	9.731	73.830	6.120	8.777	85.103

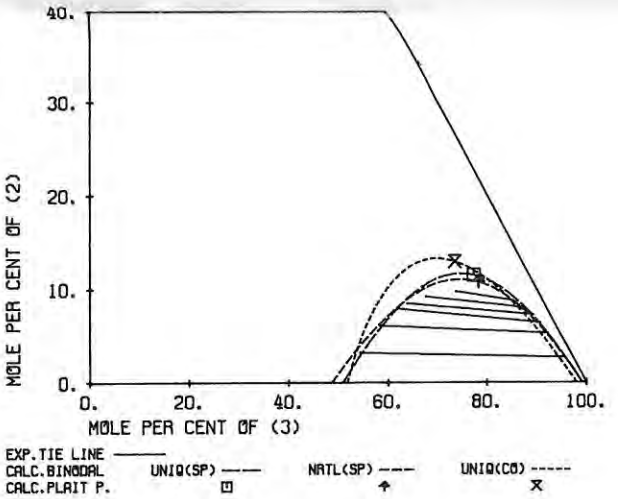
SPECIFIC MODEL PARAMETERS IN KELVIN

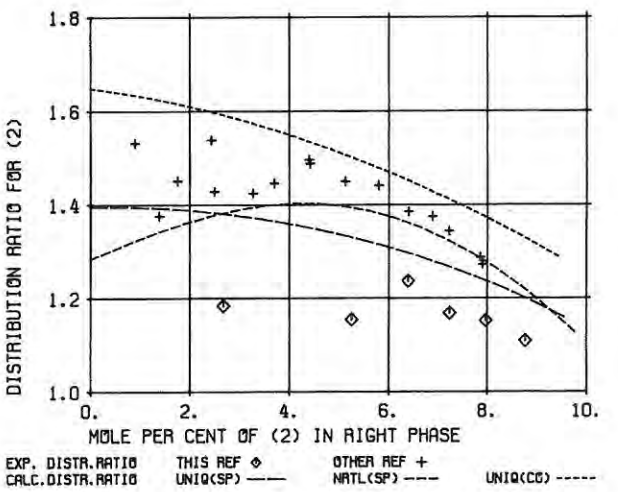
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	320.76	-199.90	703.82	-178.09
1	3	-68.151	396.99	-344.40	1756.8
2	3	-81.520	-319.75	45.740	-147.43

R1 = 3.4543 R2 = 1.4311 R3 = 0.9200
Q1 = 3.052 Q2 = 1.432 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.80
NRTL (SPECIFIC PARAMETERS)	0.57
UNIQUAC (COMMON PARAMETERS)	2.41





(1) C4H10O 1-BUTANOL
(2) CH4O METHANOL
(3) H2O WATER

MUELLER A.J., PUGSLEY L.I., FERGUSON J.B.
J.PHYS.CHEM. 35(1931)1314

TEMPERATURE = 45.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
39.354	4.190	56.456	1.683	1.617	96.701
32.953	6.421	60.626	2.043	3.622	94.335
27.738	7.791	64.471	2.642	4.914	92.444
22.350	8.419	69.231	3.864	6.244	89.892
16.361	8.598	75.041	5.623	7.127	87.250

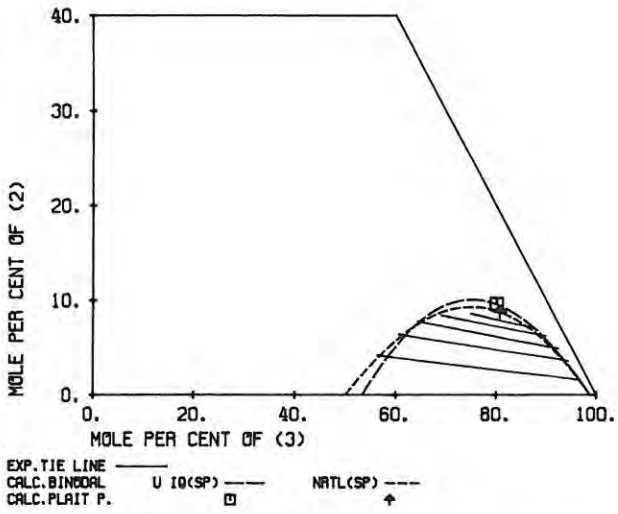
SPECIFIC MODEL PARAMETERS IN KELVIN

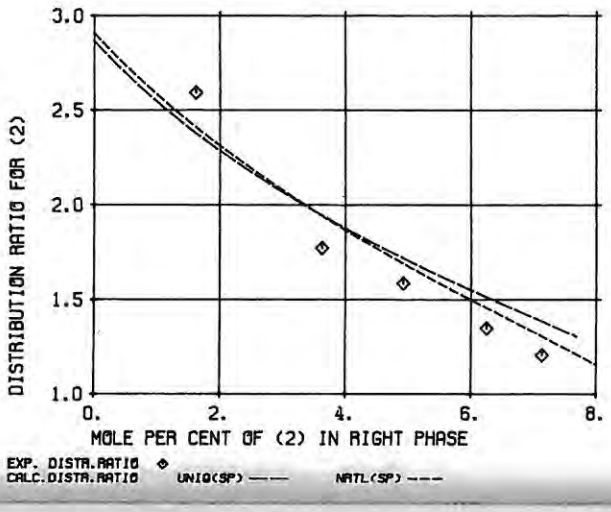
I J	UNIQUAC AIJ	AJI	NRTL(ALPHA=.2) AIJ	AJI
1 2	201.20	-285.19	225.09	-393.42
1 3	-63.331	372.64	-357.69	1740.5
2 3	-112.95	-233.81	-130.04	-229.65

R1 = 3.4543 R2 = 1.4311 R3 = 0.9200
Q1 = 3.052 Q2 = 1.432 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS) 0.62
NRTL (SPECIFIC PARAMETERS) 0.44





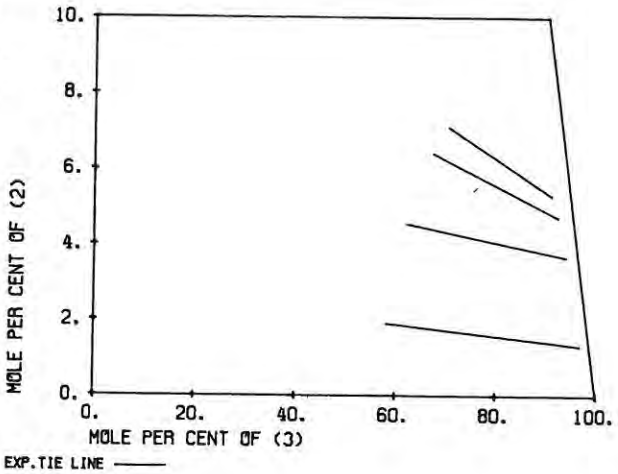
(1) C4H10O 1-BUTANOL
(2) CH4O METHANOL
(3) H2O WATER

MUELLER A.J., PUGSLEY L.I., FERGUSON J.B.
J.PHYS.CHEM. 35(1931)1314

TEMPERATURE = 60.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
39.752	1.900	58.348	1.815	1.320	96.865
33.189	4.537	62.275	2.443	3.664	93.892
26.303	6.411	67.287	3.144	4.721	92.135
22.416	7.098	70.486	3.836	5.286	90.878



(1) C4H10O 1-BUTANOL

(2) CH4O METHANOL

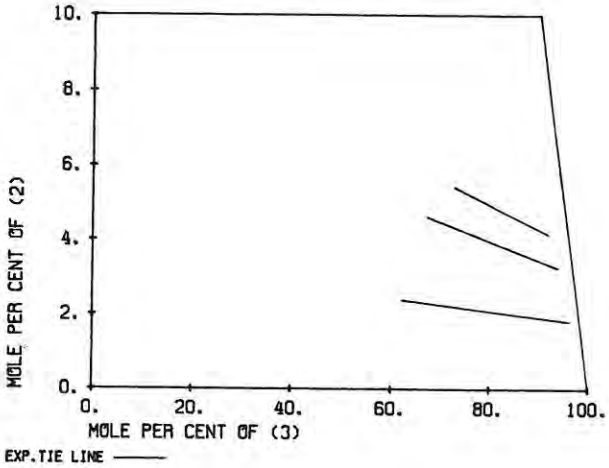
(3) H2O WATER

MUELLER A.J., PUGSLEY L.I., FERGUSON J.B.
J.PHYS.CHEM. 35(1931)1314

TEMPERATURE = 75.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
35.326	2.383	62.291	2.043	1.818	96.139
28.104	4.621	67.275	2.902	3.262	93.836
21.791	5.418	72.791	3.929	4.155	91.916



(1) C4H10O 1-BUTANOL

(2) CH4O METHANOL

(3) H2O WATER

PROCHAZKA O., SUSHKA J., PICK J.
COLLECT.CZECH.CHEM.COMMUN. 40(1975)781

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
46.201	1.377	52.421	1.891	0.899	97.210
45.106	1.905	52.989	1.898	1.384	96.718
42.414	3.566	54.020	2.026	2.496	95.479
37.581	5.348	57.071	2.158	3.697	94.145
35.913	6.588	57.499	2.198	4.402	93.400
33.506	7.444	59.050	2.354	5.133	92.513
28.215	8.871	62.914	2.494	6.403	91.103
25.098	9.712	65.190	2.928	7.226	89.846
22.555	10.115	67.329	3.311	7.856	88.834

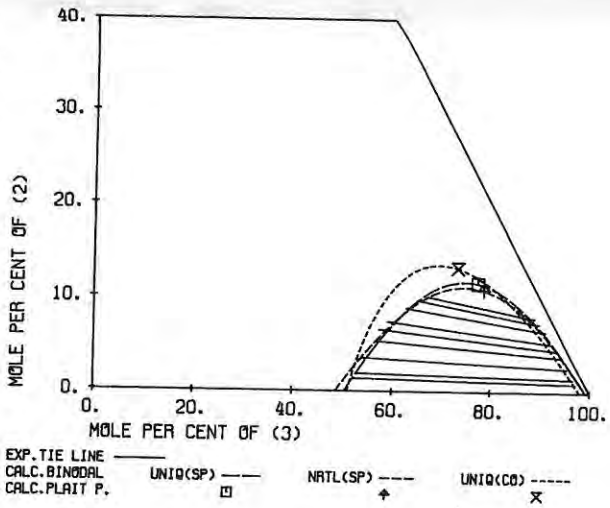
SPECIFIC MODEL PARAMETERS IN KELVIN

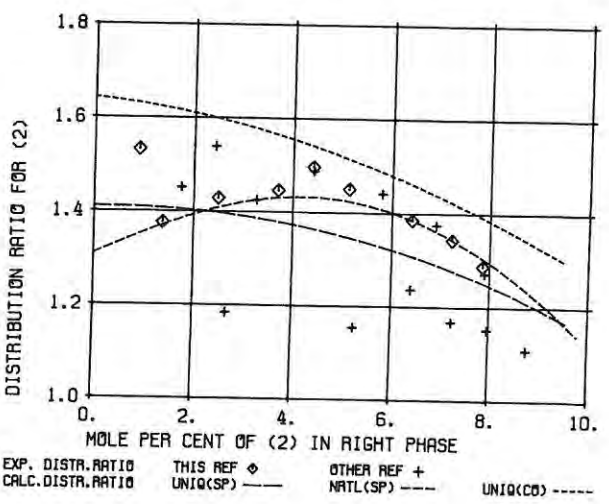
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	320.76	-199.90	703.82	-178.09
1	3	-68.151	396.99	-344.40	1756.8
2	3	-81.520	-319.75	45.740	-147.43

R1 = 3.4543 R2 = 1.4311 R3 = 0.9200
Q1 = 3.052 Q2 = 1.432 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.54
NRTL (SPECIFIC PARAMETERS)	0.42
UNIQUAC (COMMON PARAMETERS)	1.86





(1) C4H10O 1-BUTANOL

(2) CH4O METHANOL

(3) H2O WATER

PROCHAZKA O., SUSHKA J., PICK J.
COLLECT.CZECH.CHEM.COMMUN. 40(1975)781

TEMPERATURE = 45.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
43.177	1.457	55.366	1.538	0.890	97.572
40.954	2.191	56.854	1.489	1.247	97.264
37.844	3.850	58.306	1.719	2.289	95.992
33.473	5.272	61.255	1.927	3.359	94.714
27.668	7.448	64.884	2.234	4.857	92.909
24.326	8.405	67.269	2.659	5.770	91.571
22.329	8.725	68.946	2.935	6.150	90.915

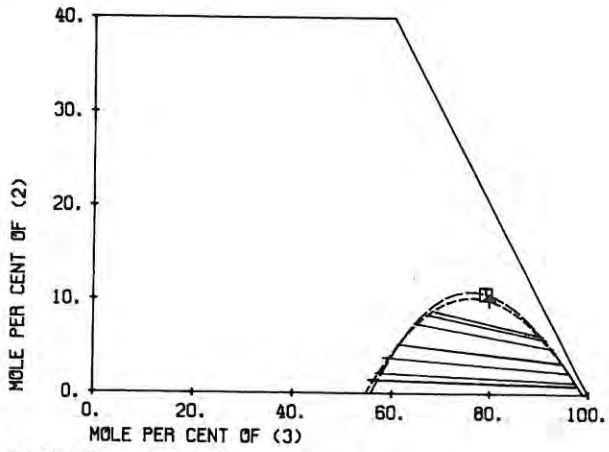
SPECIFIC MODEL PARAMETERS IN KELVIN

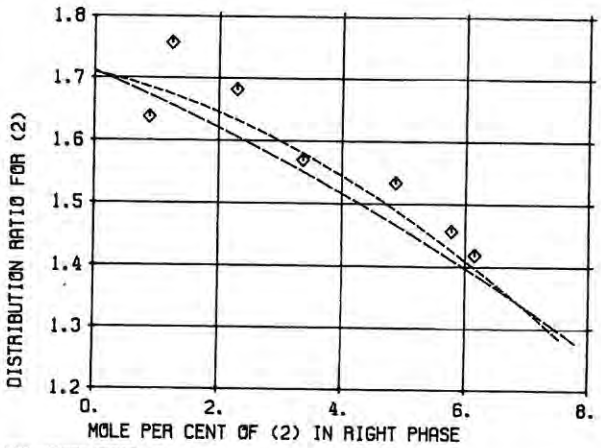
I J	UNIQUAC AIJ	AJI	NRTL(ALPHA=.2) AIJ	AJI
1 2	221.84	-184.91	259.86	-144.27
1 3	-100.56	441.67	-441.60	1912.0
2 3	-69.666	-231.74	-29.675	-174.04

R1 = 3.4543 R2 = 1.4311 R3 = 0.9200
Q1 = 3.052 Q2 = 1.432 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC	(SPECIFIC PARAMETERS)	0.58
NRTL	(SPECIFIC PARAMETERS)	0.42





(1) C4H10O 1-BUTANOL

(2) CH4O METHANOL

(3) H2O WATER

PROCHAZKA O., SUSHKA J., PICK J.
COLLECT.CZECH.CHEM.COMMUN. 40(1975)781

TEMPERATURE = 65.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
39.309	1.635	59.056	1.619	0.892	97.489
37.836	2.222	59.941	1.623	1.192	97.185
34.176	4.006	61.818	1.691	2.287	96.022
28.826	5.566	65.608	1.982	3.302	94.716
21.107	7.127	71.767	2.435	4.820	92.744

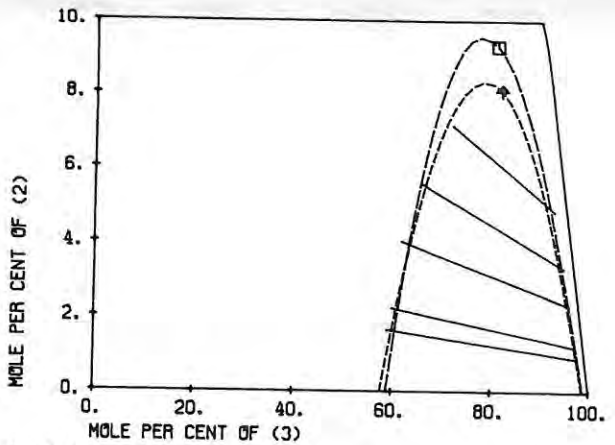
SPECIFIC MODEL PARAMETERS IN KELVIN

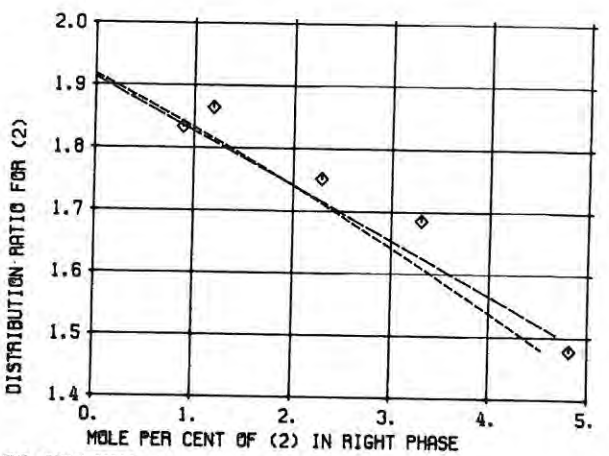
I J	UNIQUAC AIJ	AJI	NRTL(ALPHA=.2) AIJ	AJI
1 2	204.47	-204.91	233.08	-227.88
1 3	-116.90	461.71	-488.99	1959.1
2 3	-79.411	-216.70	-116.03	-195.57

R1 = 3.4543 R2 = 1.4311 R3 = 0.9200
Q1 = 3.052 Q2 = 1.432 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC	(SPECIFIC PARAMETERS)	0.76
NRTL	(SPECIFIC PARAMETERS)	0.66





(1) C4H10O 1-BUTANOL
(2) CH4O METHANOL
(3) H2O WATER

SUGI H., KATAYAMA T.
J.CHEM.ENG.JPN. 10(1977)400

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
45.310	2.540	52.150	1.740	1.750	96.510
42.690	3.740	53.570	1.770	2.430	95.800
40.940	4.660	54.400	2.070	3.270	94.660
35.560	6.580	57.860	2.420	4.420	93.160
31.300	8.360	60.340	2.820	5.800	91.380
26.430	9.490	64.080	3.320	6.900	89.780
21.890	10.050	68.060	4.300	7.900	87.800

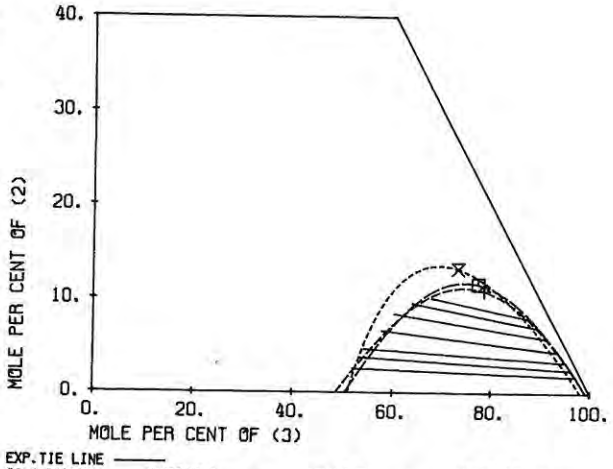
SPECIFIC MODEL PARAMETERS IN KELVIN

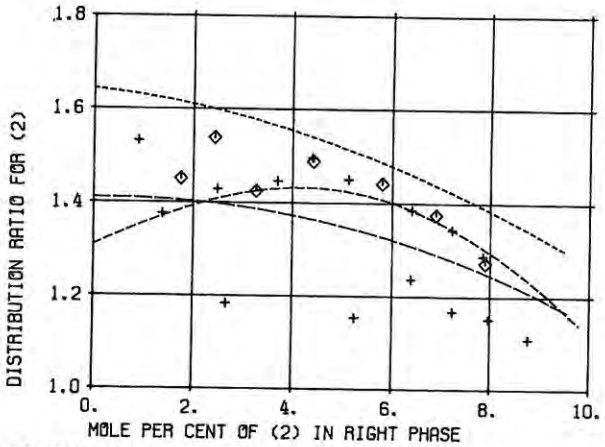
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	320.76	-199.90	703.82	-178.09
1 3	-68.151	396.99	-344.40	1756.8
2 3	-81.520	-319.75	45.740	-147.43

R1 = 3.4543 R2 = 1.4311 R3 = 0.9200
Q1 = 3.052 Q2 = 1.432 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.57
NRTL (SPECIFIC PARAMETERS)	0.33
UNIQUAC (COMMON PARAMETERS)	1.72





(1) C6H12 CYCLOHEXANE
(2) C4H10O ETHER,DIETHYL
(3) CH4O METHANOL

SUGI H., NITTA T., KATAYAMA T.
J.CHEM.ENG.JPN. 9(1976)12

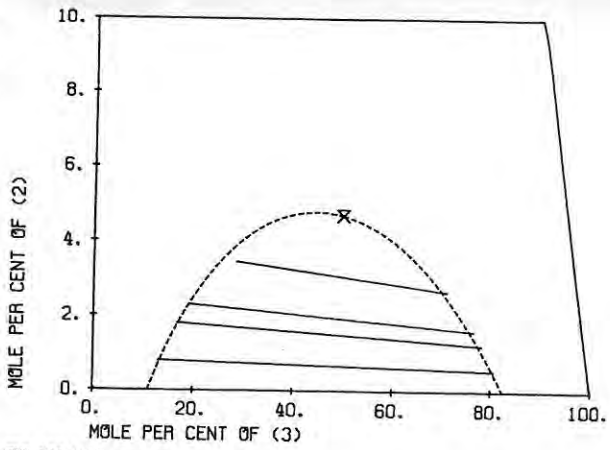
TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

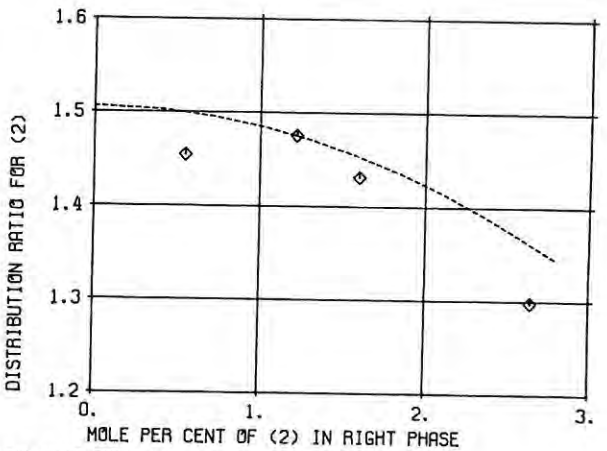
EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
85.980	0.800	13.220	18.800	0.550	80.650
81.310	1.800	16.890	20.570	1.220	78.210
78.200	2.290	19.510	21.850	1.600	76.550
67.930	3.440	28.630	26.390	2.650	70.960

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (COMMON PARAMETERS)	0.63





110

CH_4O-C_5H_8

(1) H2O WATER

(2) CH4O METHANOL

(3) C5H8 1,3-BUTADIENE,2-METHYL

LESTEVA T.M., OGORODNIKOV S.K., MOROZOVA V.I.
ZH.PRIKL.KHIM.(LENINGRAD) 39(1966)2134

TEMPERATURE = 15.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
84.457	15.514	0.030	1.125	0.0	98.875
90.773	9.170	0.057	0.752	0.0	99.248
95.909	4.063	0.027	0.377	0.0	99.623
77.904	22.033	0.062	0.750	0.632	98.618
82.012	17.958	0.030	0.376	0.634	98.990
52.414	46.779	0.807	0.746	1.469	97.785
42.392	55.922	1.685	1.101	4.125	94.774
38.324	59.042	2.635	0.728	6.138	93.135

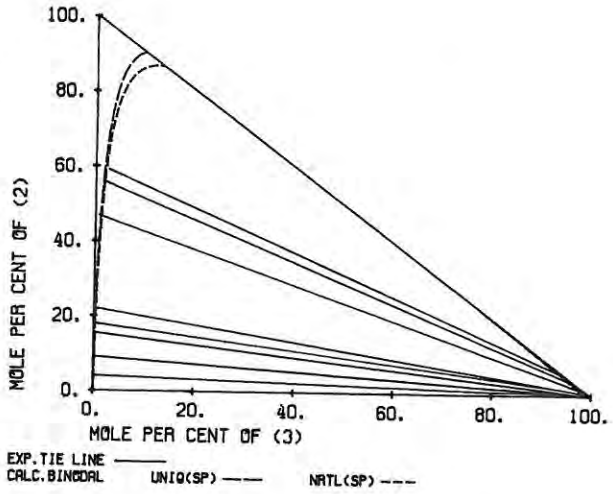
SPECIFIC MODEL PARAMETERS IN KELVIN

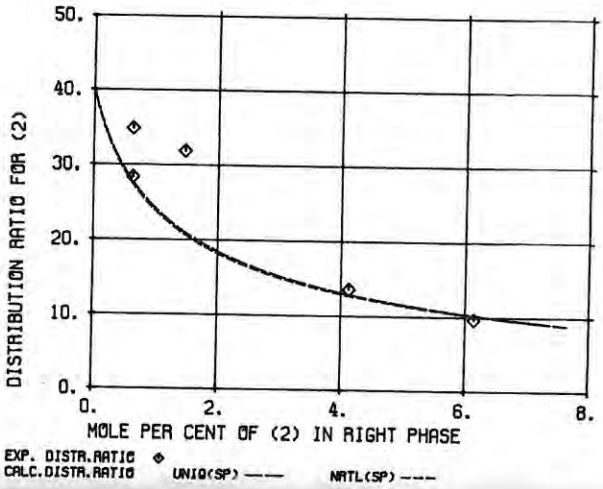
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-292.22	-124.37	-433.50	11.073
1 3	301.02	733.18	1378.6	955.66
2 3	105.72	416.59	524.07	295.83

R1 = 0.9200 R2 = 1.4311 R3 = 3.3638
Q1 = 1.400 Q2 = 1.432 Q3 = 3.012

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.48
NRTL (SPECIFIC PARAMETERS)	0.47





111

CH_4O-$C_5H_8O_2$

(1) H2O WATER

(2) CH4O METHANOL

(3) C5H8O2 PROPENOIC ACID,2-METHYL,METHYL ESTER

KOOI J.
RECL.TRAV.CHIM.PAYS-BAS. 68(1949)34

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
96.265	3.605	0.130	1.588	5.061	93.351
91.535	8.174	0.291	5.478	8.681	85.841
85.420	13.987	0.593	9.283	13.050	77.667
80.266	18.749	0.986	13.079	15.934	70.987
74.176	23.996	1.828	17.643	22.045	60.312
67.085	28.942	3.973	29.034	27.627	43.339
64.326	30.445	5.229	34.829	31.333	33.838

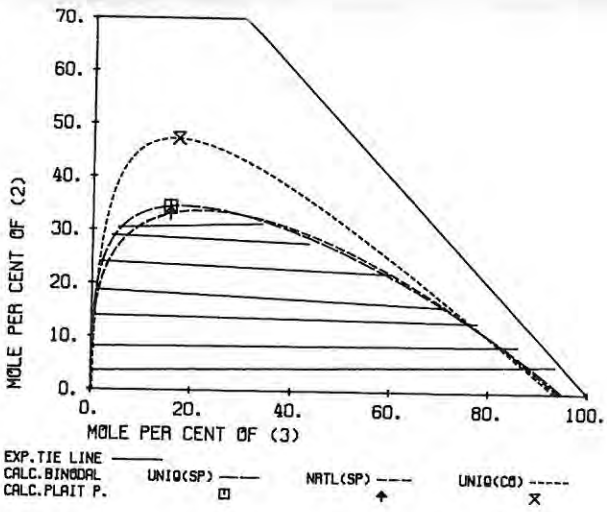
SPECIFIC MODEL PARAMETERS IN KELVIN

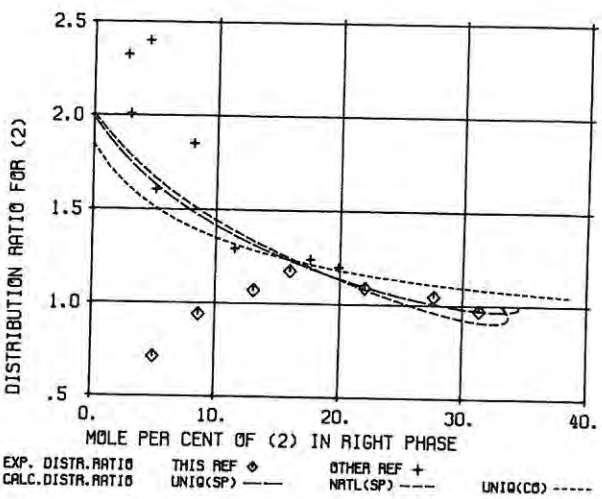
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-442.48	-122.69	-146.52	365.88
1 3	450.03	422.95	2585.4	476.27
2 3	-266.40	257.74	-139.42	600.55

R1 = 0.9200 R2 = 1.4311 R3 = 3.9215
Q1 = 1.400 Q2 = 1.432 Q3 = 3.564

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.19
NRTL (SPECIFIC PARAMETERS)	1.44
UNIQUAC (COMMON PARAMETERS)	4.19





(1) H2O WATER

(2) CH4O METHANOL

(3) C5H8O2 PROPENOIC ACID,2-METHYL,METHYL ESTER

FROLOV A.F., ET AL.
IZV.VYSSH.UCHEBN.ZAVED.KHIM.KHIM.TEKHNOL. 8(1965)570

TEMPERATURE = 20.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
99.718	0.0	0.282	6.324	0.0	93.676
93.320	6.296	0.384	6.060	2.708	91.231
88.762	10.801	0.437	8.501	4.499	87.000
84.379	15.087	0.534	9.180	8.150	82.670
74.816	23.838	1.346	9.610	19.894	70.496

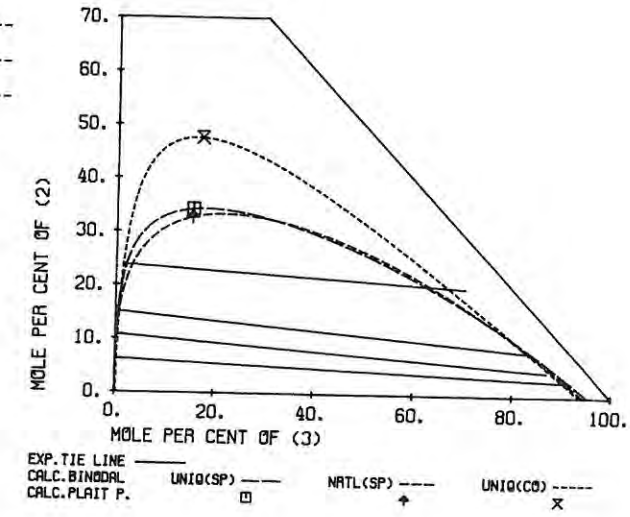
SPECIFIC MODEL PARAMETERS IN KELVIN

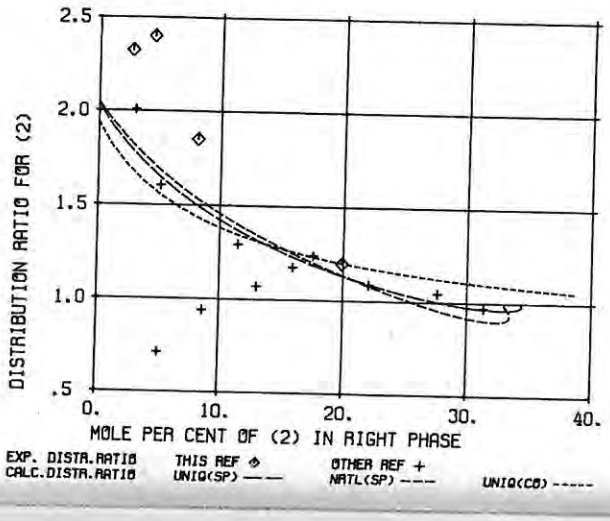
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-442.48	-122.69	-146.52	365.88
1 3	450.03	422.95	2585.4	476.27
2 3	-266.40	257.74	-139.42	600.55

R1 = 0.9200 R2 = 1.4311 R3 = 3.9215
Q1 = 1.400 Q2 = 1.432 Q3 = 3.564

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.58
NRTL (SPECIFIC PARAMETERS)	1.39
UNIQUAC (COMMON PARAMETERS)	1.15





(1) H2O WATER

(2) CH4O METHANOL

(3) C5H8O2 PROPENOIC ACID,2-METHYL,METHYL ESTER

CHUBAROV G.A., DANOV S.M., BROVKINA G.V., KUPRIYANOV T.V.
ZH.PRIKL.KHIM.(LENINGRAD) 51(1978)443

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
93.535	6.004	0.461	8.356	2.990	88.654
91.196	8.265	0.539	9.151	5.145	85.704
84.265	14.873	0.862	12.722	11.496	75.781
76.830	21.773	1.398	16.557	17.572	65.871

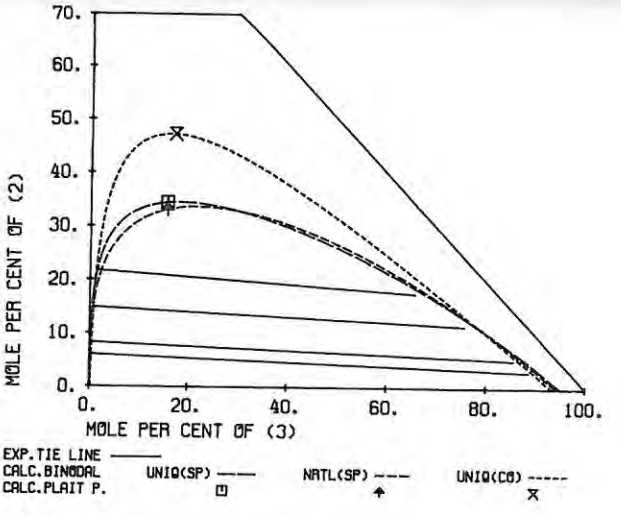
SPECIFIC MODEL PARAMETERS IN KELVIN

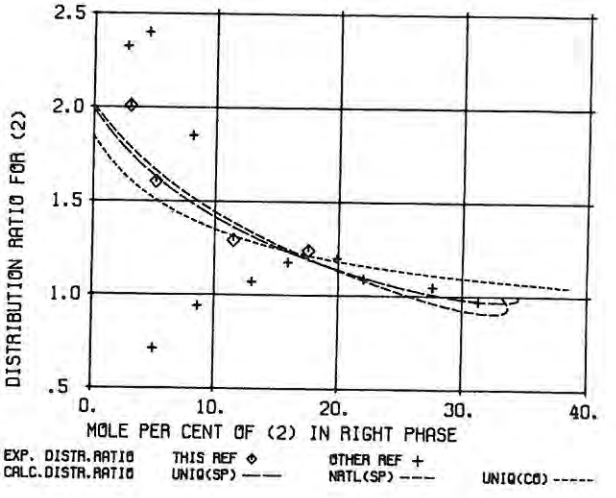
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-442.48	-122.69	-146.52	365.88
1 3	450.03	422.95	2585.4	476.27
2 3	-266.40	257.74	-139.42	600.55

R1 = 0.9200 R2 = 1.4311 R3 = 3.9215
Q1 = 1.400 Q2 = 1.432 Q3 = 3.564

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.03
NRTL (SPECIFIC PARAMETERS)	1.08
UNIQUAC (COMMON PARAMETERS)	1.19





(1) H2O WATER

(2) CH4O METHANOL

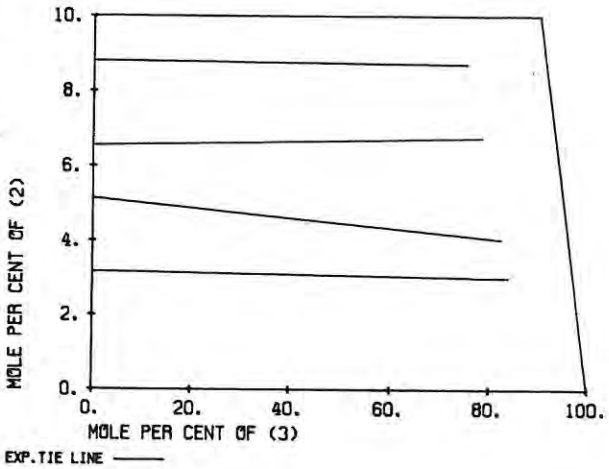
(3) C5H8O2 PROPENOIC ACID,2-METHYL,METHYL ESTER

CHUBAROV G.A., DANOV S.M., BROVKINA G.V., KUPRIYANOV T.V.
ZH.PRIKL.KHIM.(LENINGRAD) 51(1978)443

TEMPERATURE = 70.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
96.451	3.164	0.384	13.090	2.999	83.911
94.412	5.130	0.458	13.635	4.035	82.330
92.933	6.554	0.512	15.011	6.752	78.237
90.600	8.808	0.591	16.170	8.713	75.117



(1) C6H12 CYCLOHEXANE

(2) C5H10 CYCLOPENTANE

(3) CH4O METHANOL

TAKEUCHI S., NITTA T., KATAYAMA T.
J.CHEM.ENG.JPN. 8(1975)248

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
87.090	0.0	12.910	17.520	0.0	82.480
73.340	12.580	14.080	16.620	3.260	80.120
72.590	12.710	14.700	16.590	3.300	80.110
54.020	28.610	17.370	14.990	8.860	76.150
34.760	42.300	22.940	12.850	16.970	70.180
24.280	47.930	27.790	11.540	24.500	63.960
17.080	49.360	33.560	10.010	30.750	59.240
16.500	48.050	35.450	10.470	33.130	56.400

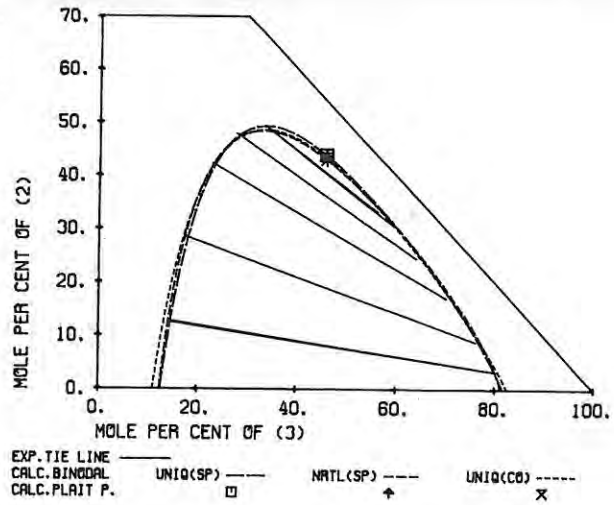
SPECIFIC MODEL PARAMETERS IN KELVIN

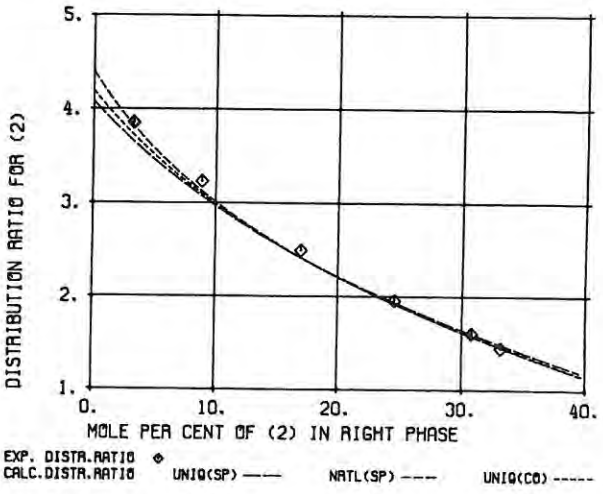
	UNIQUAC		NRTL(ALPHA=.2)	
I J	AIJ	AJI	AIJ	AJI
1 2	-15.774	-16.726	-97.419	-56.868
1 3	647.16	3.4857	544.82	318.02
2 3	485.41	-6.0894	361.38	234.33

R1 = 4.0464 R2 = 3.3720 R3 = 1.4311
Q1 = 3.240 Q2 = 2.700 Q3 = 1.432

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.51
NRTL (SPECIFIC PARAMETERS)	0.58
UNIQUAC (COMMON PARAMETERS)	0.59





(1) H2O WATER

(2) CH4O METHANOL

(3) C5H10O2 PROPANOIC ACID,ETHYL ESTER

JAGANNADHA RAO R., VENKATA RAO C.
J.APPL.CHEM. 7(1957)435

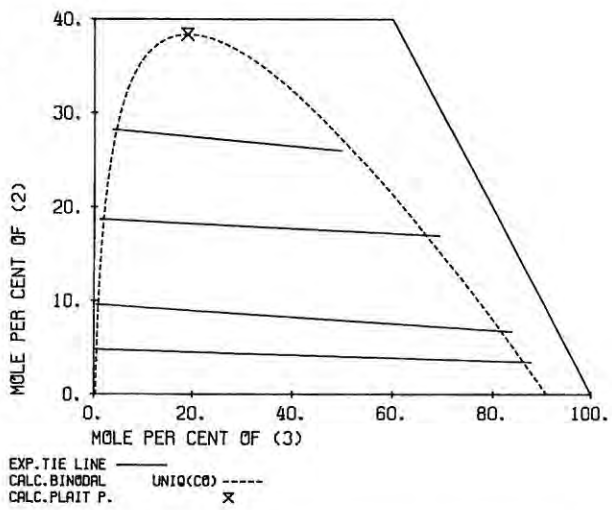
TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 1

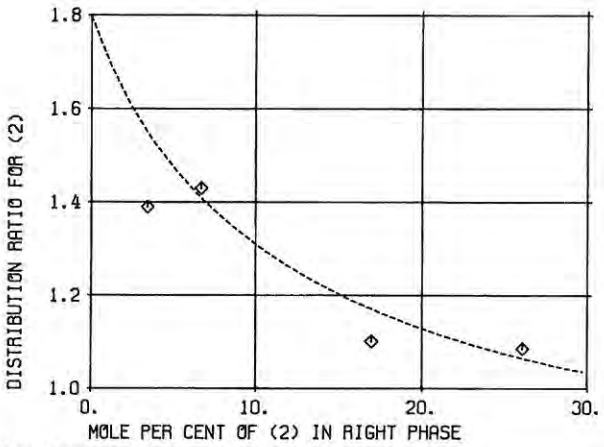
EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
94.801	4.808	0.391	8.717	3.460	87.823
89.870	9.587	0.543	9.439	6.704	83.858
80.022	18.702	1.276	13.564	16.975	69.461
67.978	28.254	3.767	24.033	26.032	49.935

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (COMMON PARAMETERS)	0.95





(1) C5H12O 1-PENTANOL

(2) CH4O METHANOL

(3) H2O WATER

LEBEDINSKAYA N.A., ET AL.
KHIM.PROM-ST.(MOSCOW) (1976)16

TEMPERATURE = 20.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
48.101	13.217	38.682	0.378	1.793	97.829
38.638	18.935	42.427	0.429	4.128	95.443
32.180	21.793	46.027	0.466	8.798	90.735
26.136	23.104	50.760	0.690	12.655	86.655
17.455	23.802	58.743	1.451	16.302	82.247

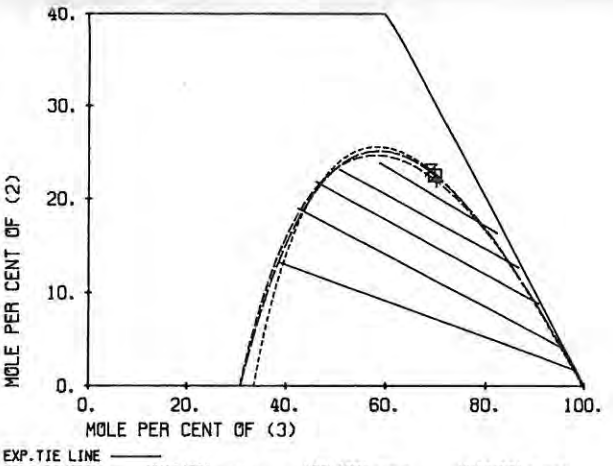
SPECIFIC MODEL PARAMETERS IN KELVIN

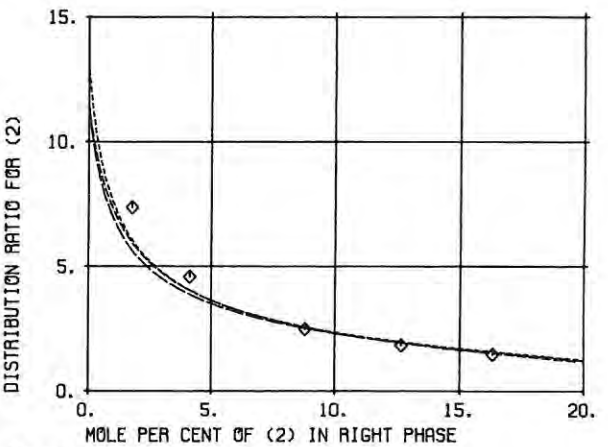
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	-109.19	-343.73	-508.67	-233.31
1	3	69.052	310.11	-135.22	1874.2
2	3	-333.40	115.31	-245.85	155.92

R1 = 4.1287 R2 = 1.4311 R3 = 0.9200
Q1 = 3.592 Q2 = 1.432 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.81
NRTL (SPECIFIC PARAMETERS)	0.78
UNIQUAC (COMMON PARAMETERS)	0.88





(1) C7H16 HEPTANE

(2) C6H6 BENZENE

(3) CH4O METHANOL

WITTRIG T.S.
THESIS ILLINOIS 1977

TEMPERATURE = 6.8 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
89.800	0.0	10.200	8.100	0.0	91.900
80.300	9.800	9.900	8.600	4.200	87.200
73.300	11.900	14.800	9.400	4.800	85.800
73.000	12.300	14.700	9.800	5.800	84.400
68.200	15.800	16.000	11.200	7.300	81.500
64.200	16.400	19.400	11.700	7.700	80.600
58.400	20.200	21.400	13.800	10.500	75.700

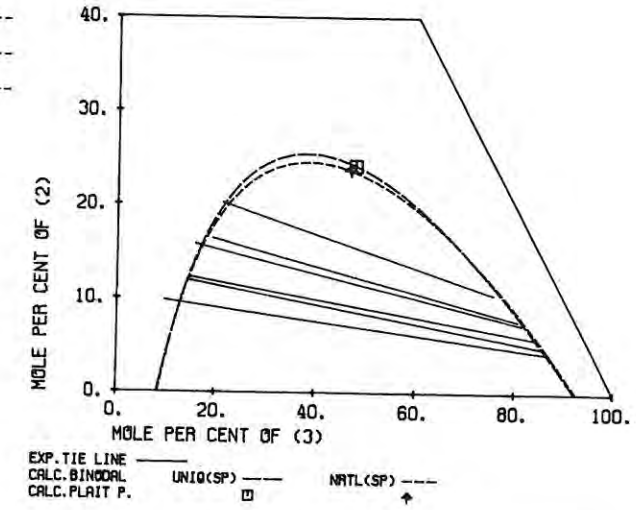
SPECIFIC MODEL PARAMETERS IN KELVIN

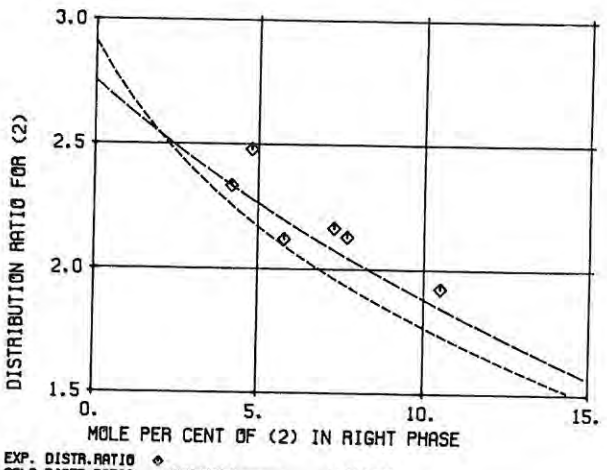
I J	UNIQUAC AIJ	AJI	NRTL(ALPHA=.2) AIJ	AJI
1 2	55.852	-90.662	27.085	-266.12
1 3	689.14	8.8469	453.96	516.13
2 3	215.71	-71.223	-34.497	98.175

R1 = 5.1742 R2 = 3.1878 R3 = 1.4311
Q1 = 4.396 Q2 = 2.400 Q3 = 1.432

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.69
NRTL (SPECIFIC PARAMETERS)	0.76





(1) C7H16 HEPTANE

(2) C6H6 BENZENE

(3) CH4O METHANOL

WITTRIG T.S.
THESIS ILLINOIS 1977

TEMPERATURE = 13.8 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
88.400	0.0	11.600	8.000	0.0	92.000
80.200	6.400	13.400	9.300	2.000	88.700
78.700	8.600	12.700	9.900	3.000	87.100
67.200	11.500	21.300	11.200	4.500	84.300
58.500	17.900	23.600	14.100	9.000	76.900
52.900	18.000	29.100	17.000	10.400	72.600
44.300	18.700	37.000	21.100	13.100	65.800

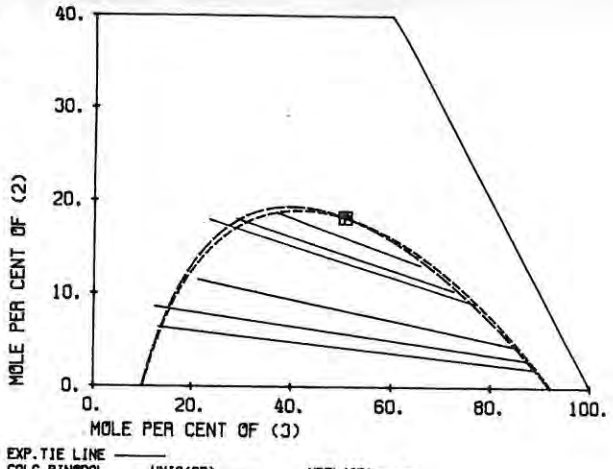
SPECIFIC MODEL PARAMETERS IN KELVIN

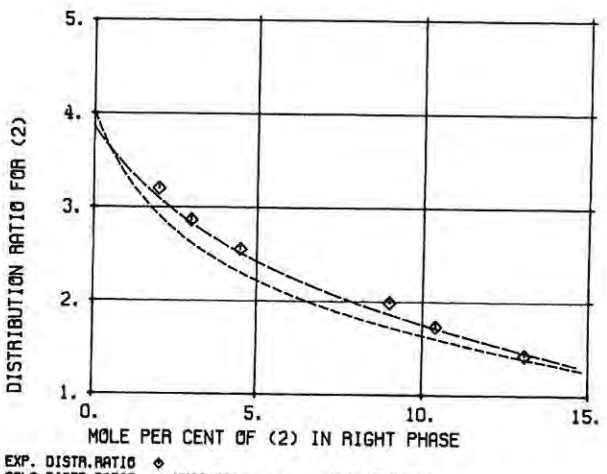
I J	UNIQUAC AIJ	AJI	NRTL(ALPHA=.2) AIJ	AJI
1 2	92.194	-199.65	172.78	-521.56
1 3	678.79	9.9500	424.15	540.07
2 3	201.68	-143.65	-28.354	-61.370

R1 = 5.1742 R2 = 3.1878 R3 = 1.4311
Q1 = 4.396 Q2 = 2.400 Q3 = 1.432

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.74
NRTL (SPECIFIC PARAMETERS)	0.87





(1) C7H16 HEPTANE

(2) C6H6 BENZENE

(3) CH4O METHANOL

WITTRIG T.S.
THESIS ILLINOIS 1977

TEMPERATURE = 32.8 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
78.800	0.0	21.200	11.700	0.0	88.300
70.300	4.800	24.900	14.800	2.100	83.100
66.800	7.200	26.000	14.900	3.300	81.800
63.700	7.900	28.400	16.800	4.000	79.200
60.900	8.800	30.300	18.800	4.600	76.600
49.200	8.800	42.000	23.700	7.000	69.300

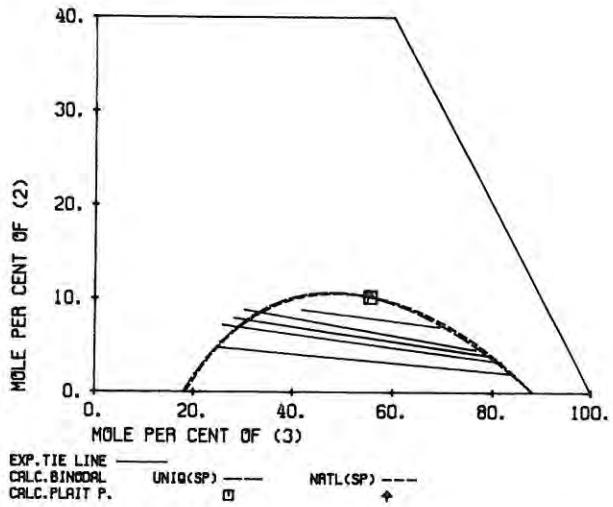
SPECIFIC MODEL PARAMETERS IN KELVIN

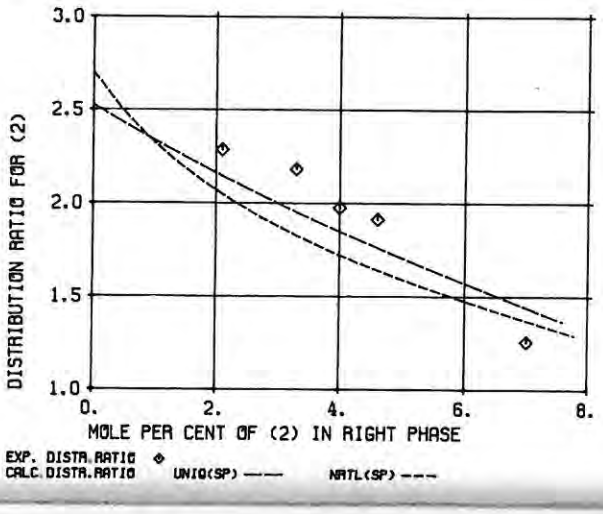
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-108.03	216.66	157.35	-590.50
1 3	639.76	3.4314	324.56	568.52
2 3	78.022	144.39	-125.53	-169.07

R1 = 5.1742 R2 = 3.1878 R3 = 1.4311
Q1 = 4.396 Q2 = 2.400 Q3 = 1.432

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.72
NRTL (SPECIFIC PARAMETERS)	0.72





(1) H2O WATER

(2) CH4O METHANOL

(3) C6H6 BENZENE

UDOVENKO V.V., MAZANKO T.F.
ZH.FIZ.KHIM. 37(1963)2324

TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
96.914	3.027	0.059	0.215	1.328	98.457
94.033	5.894	0.073	0.426	2.278	97.296
89.043	10.881	0.075	0.634	3.446	95.920
82.463	17.379	0.158	0.838	4.595	94.567
72.481	27.123	0.395	1.037	5.950	93.013
62.875	36.310	0.816	1.232	7.388	91.380
53.700	44.600	1.700	1.219	9.136	89.646
46.399	50.494	3.106	1.402	11.040	87.557
40.860	54.319	4.821	1.592	11.860	86.548
35.236	57.341	7.423	1.772	13.284	84.945
29.389	59.386	11.225	3.305	21.677	75.019
25.521	59.495	14.985	3.978	22.975	73.048
17.791	55.993	26.215	6.370	36.710	56.920

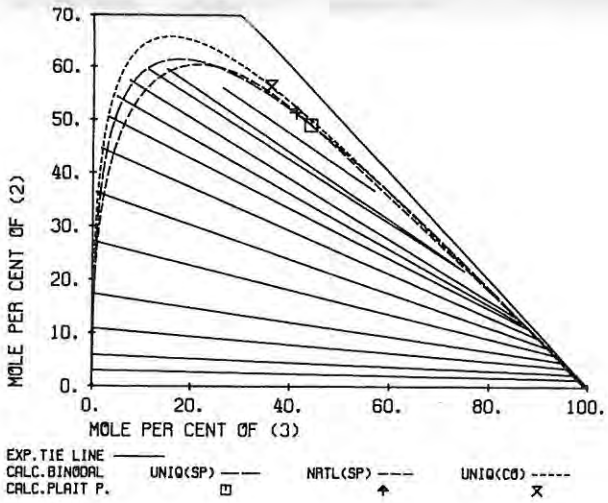
SPECIFIC MODEL PARAMETERS IN KELVIN

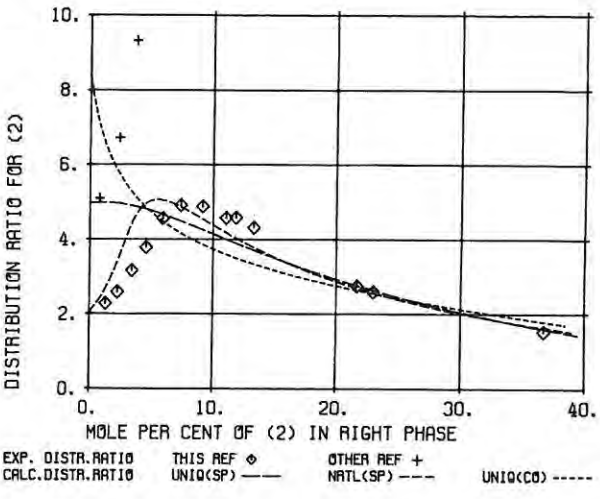
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-284.24	266.87	1347.9	-693.61
1 3	315.18	753.90	2106.1	1391.5
2 3	-51.480	428.62	508.70	118.62

R1 = 0.9200 R2 = 1.4311 R3 = 3.1878
Q1 = 1.400 Q2 = 1.432 Q3 = 2.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.38
NRTL (SPECIFIC PARAMETERS)	1.31
UNIQUAC (COMMON PARAMETERS)	2.96





(1) H2O WATER

(2) CH4O METHANOL

(3) C6H6 BENZENE

UDOVENKO V.V., MAZANKO T.F.
ZH.FIZ.KHIM. 37(1963)2324

TEMPERATURE = 45.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
97.208	2.733	0.059	0.429	1.446	98.126
94.033	5.894	0.073	0.639	2.274	97.088
88.842	11.033	0.126	0.843	3.557	95.600
82.920	16.843	0.236	1.457	4.914	93.629
73.325	26.111	0.564	2.051	6.459	91.490
67.876	31.303	0.821	2.421	8.621	88.958
58.158	40.300	1.543	3.158	11.097	85.745
54.960	43.169	1.871	3.501	12.903	83.596
48.032	48.562	3.406	3.868	13.267	82.866
44.010	51.327	4.662	4.178	15.590	80.232
35.608	55.180	9.213	4.396	20.595	75.009
27.961	56.619	15.421	5.198	27.277	67.525
20.265	55.071	24.664	7.585	36.075	56.340

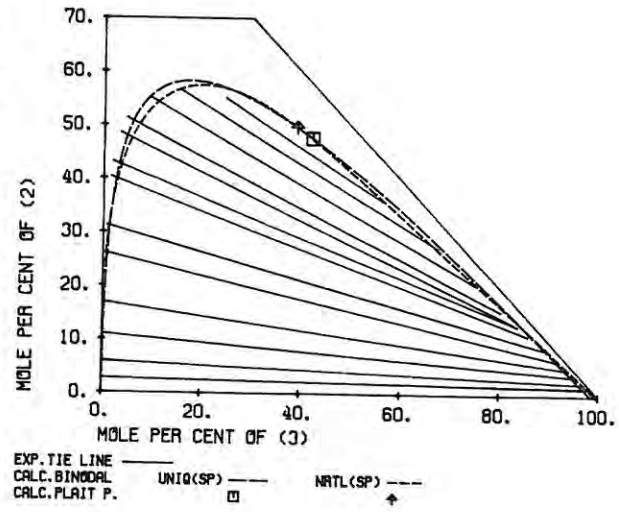
SPECIFIC MODEL PARAMETERS IN KELVIN

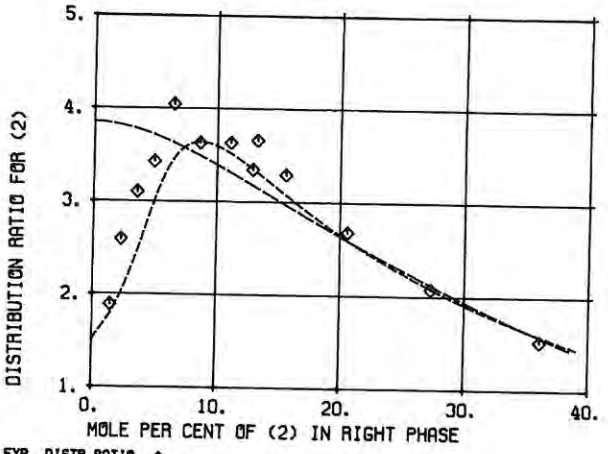
I J	UNIQUAC AIJ	AJI	NRTL(ALPHA=.2) AIJ	AJI
1 2	-140.47	144.84	1303.5	-648.68
1 3	331.19	583.44	2827.9	1190.2
2 3	-56.442	495.96	535.76	109.02

R1 = 0.9200 R2 = 1.4311 R3 = 3.1878
Q1 = 1.400 Q2 = 1.432 Q3 = 2.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.88
NRTL (SPECIFIC PARAMETERS)	0.76





(1) H2O WATER

(2) CH4O METHANOL

(3) C6H6 BENZENE

UDOVENKO V.V., MAZANKO T.F.
ZH.FIZ.KHIM. 37(1963)2324

TEMPERATURE = 60.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
97.810	2.120	0.070	1.277	1.436	97.287
94.283	5.596	0.121	1.270	2.380	96.350
89.471	10.379	0.150	1.662	4.907	93.431
83.602	16.137	0.262	2.065	5.342	92.593
77.667	21.868	0.465	2.835	7.514	89.651
69.351	29.777	0.872	3.200	8.995	87.805
65.330	33.440	1.230	3.551	10.649	85.800
60.584	37.638	1.778	3.928	10.823	85.248
54.883	42.501	2.616	4.248	13.027	82.725
48.774	47.061	4.166	5.162	18.657	76.181
45.601	48.997	5.402	5.383	22.198	72.419
40.665	51.863	7.472	5.997	23.801	70.202
35.721	53.459	10.819	7.171	26.686	66.143
27.813	52.707	19.479	11.510	36.104	52.386
23.734	50.202	26.063	12.864	40.988	46.147

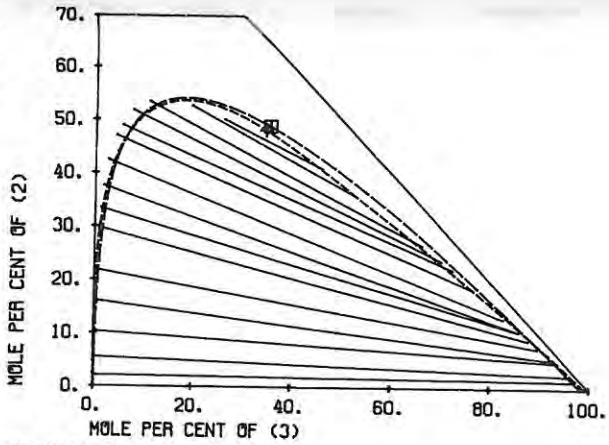
SPECIFIC MODEL PARAMETERS IN KELVIN

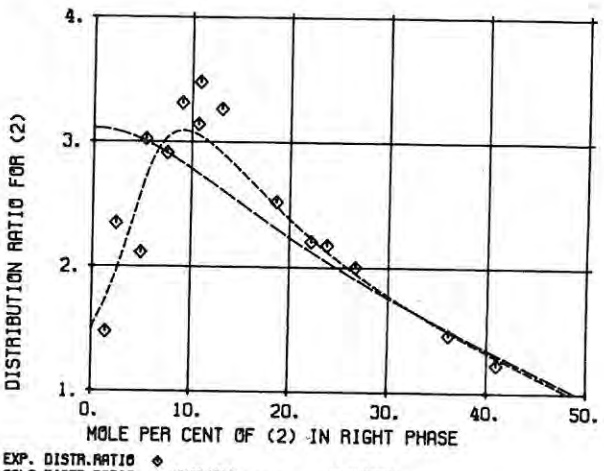
I J	UNIQUAC AIJ	AJI	NRTL(ALPHA=.2) AIJ	AJI
1 2	-334.07	240.38	1356.6	-703.07
1 3	283.21	633.85	3008.7	1161.3
2 3	-85.755	364.15	590.53	47.990

R1 = 0.9200 R2 = 1.4311 R3 = 3.1878
Q1 = 1.400 Q2 = 1.432 Q3 = 2.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.21
NRTL (SPECIFIC PARAMETERS)	0.76





(1) H2O WATER
(2) CH4O METHANOL
(3) C6H6 BENZENE

MERTSLIN R.V., KAMAEVSKAYA L.A., NIKURASHINA N.I.
ZH.FIZ.KHIM. 40(1966)2539

TEMPERATURE = 26.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
95.886	4.067	0.048	0.516	0.798	98.687
83.843	16.052	0.104	0.807	2.389	96.804
63.984	35.282	0.734	1.051	3.783	95.166

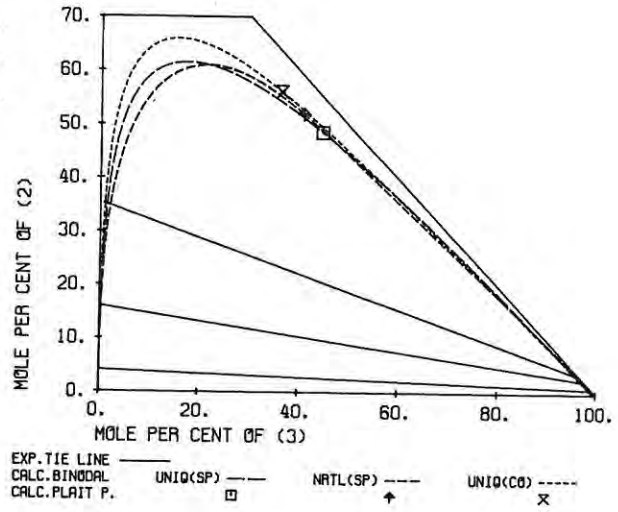
SPECIFIC MODEL PARAMETERS IN KELVIN

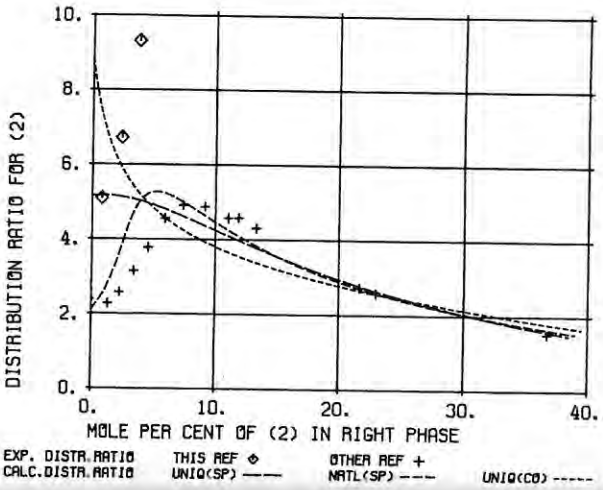
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-284.24	266.87	1347.9	-693.61
1 3	315.18	753.90	2106.1	1391.5
2 3	-51.480	428.62	508.70	118.62

R1 = 0.9200 R2 = 1.4311 R3 = 3.1878
Q1 = 1.400 Q2 = 1.432 Q3 = 2.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.25
NRTL (SPECIFIC PARAMETERS)	1.03
UNIQUAC (COMMON PARAMETERS)	1.58





(1) C6H6O PHENOL
(2) CH4O METHANOL
(3) H2O WATER

PRUTTON C.F., WALSH T.J., DESAI A.M.
IND.ENG.CHEM. 42(1950)1210

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
32.229	0.0	67.771	1.725	0.0	98.275
28.143	1.983	69.874	1.846	0.731	97.423
26.397	3.371	70.232	1.945	1.352	96.703
21.679	5.169	73.152	2.272	3.021	94.707
12.100	8.885	79.014	4.108	7.698	88.193

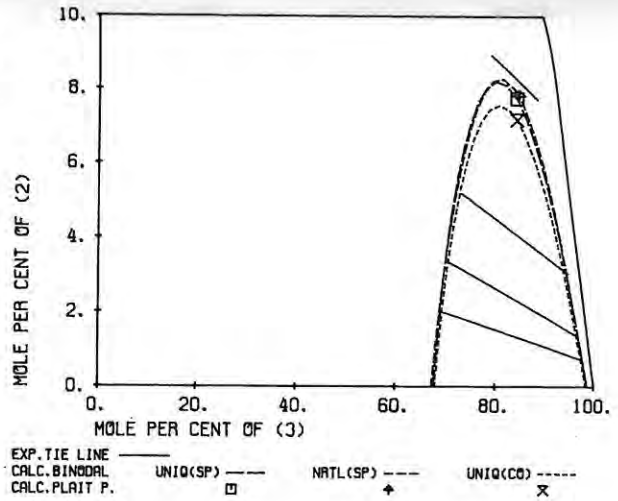
SPECIFIC MODEL PARAMETERS IN KELVIN

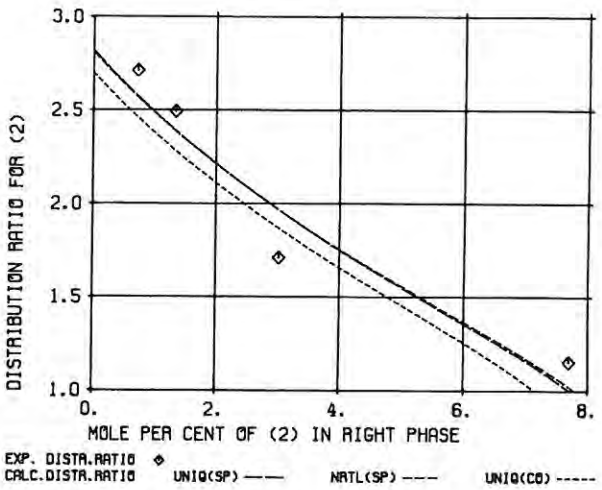
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-270.21	-80.219	-42.444	-33.676
1 3	-257.86	566.90	-567.84	1884.0
2 3	-235.52	129.16	55.212	44.631

R1 = 3.5517 R2 = 1.4311 R3 = 0.9200
Q1 = 2.680 Q2 = 1.432 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.45
NRTL (SPECIFIC PARAMETERS)	0.44
UNIQUAC (COMMON PARAMETERS)	0.61





(1) H2O	WATER
(2) CH4O	METHANOL
(3) C6H10	CYCLOHEXENE

WASHBURN E.R., GRAHAM C.L., ARNOLD G.B., TRANSUE L.F.
J.AM.CHEM.SOC. 62(1940)1454

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
94.365	5.635	0.0	0.0	0.256	99.744
82.744	17.231	0.025	0.0	0.511	99.489
89.113	10.863	0.024	0.0	0.511	99.489
79.790	20.185	0.025	0.0	0.766	99.234
72.578	27.342	0.080	0.0	1.019	98.981
34.564	63.729	1.707	0.0	3.020	96.980
23.759	72.519	3.722	0.0	5.213	94.787

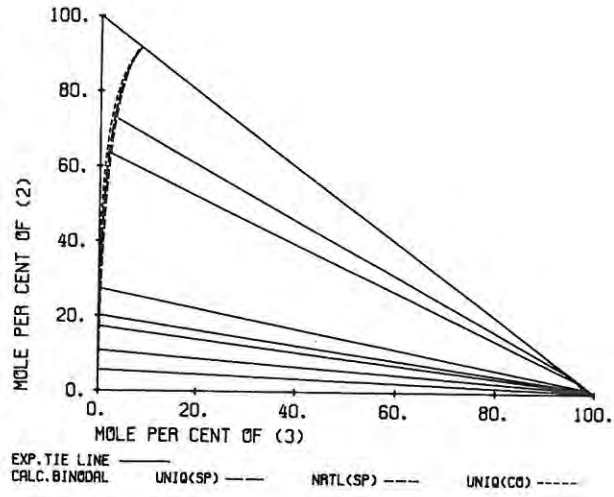
SPECIFIC MODEL PARAMETERS IN KELVIN

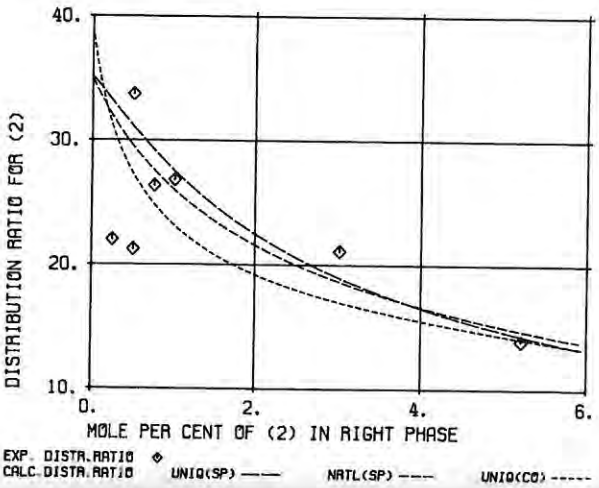
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-203.92	-59.166	-209.25	34.904
1 3	285.65	756.70	1559.9	1392.3
2 3	67.011	606.75	507.40	529.89

R1 = 0.9200 R2 = 1.4311 R3 = 3.8143
Q1 = 1.400 Q2 = 1.432 Q3 = 3.027

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.42
NRTL (SPECIFIC PARAMETERS)	0.26
UNIQUAC (COMMON PARAMETERS)	0.39





(1) CH4O	METHANOL
(2) C7H6O2	BENZOIC ACID
(3) C6H12	CYCLOHEXANE

SERGEEVA V.F., ET AL.
ZH.OBSHCH.KHIM. 41(1971)1895

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
82.100	0.0	17.900	7.500	0.0	92.500
81.100	0.600	18.300	9.900	0.400	89.700
79.300	1.400	19.300	12.200	0.800	87.000
77.100	2.400	20.500	14.400	1.300	84.300
74.600	3.400	22.000	16.800	1.700	81.500
73.100	4.200	22.700	19.000	2.100	78.900
71.600	5.000	23.400	22.900	2.700	74.400

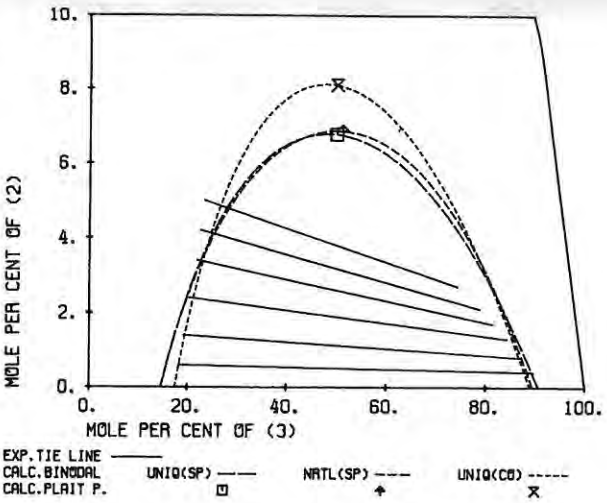
SPECIFIC MODEL PARAMETERS IN KELVIN

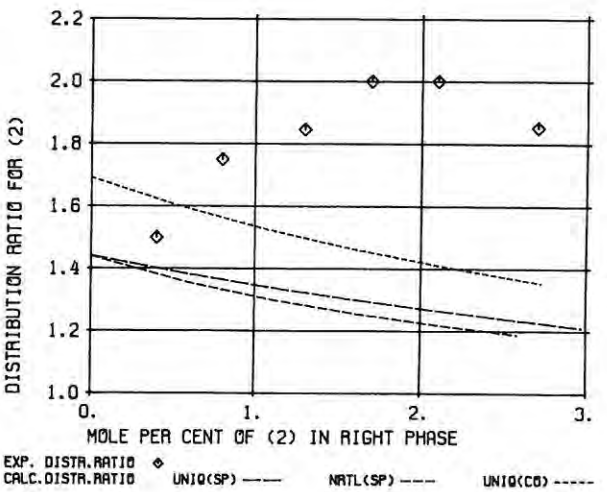
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-8.3649	-72.360	322.69	-921.90
1 3	12.256	678.14	373.25	539.45
2 3	-46.742	-7.8853	-619.13	-362.75

R1 = 1.4311 R2 = 4.3230 R3 = 4.0464
Q1 = 1.432 Q2 = 3.344 Q3 = 3.240

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.31
NRTL (SPECIFIC PARAMETERS)	1.57
UNIQUAC (COMMON PARAMETERS)	1.51





(1)	C6H12	CYCLOHEXANE
(2)	C10H8	NAPHTHALENE
(3)	CH4O	METHANOL

SERGEEVA V.F., ET AL.
ZH.OBSHCH.KHIM. 41(1971)1895

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
92.500	0.0	7.500	17.900	0.0	82.100
87.800	2.200	10.000	18.600	0.700	80.700
84.100	3.500	12.400	19.300	1.400	79.300
79.800	4.600	15.600	20.100	2.000	77.900
74.700	5.700	19.600	21.400	2.600	76.000
68.400	6.700	24.900	21.900	3.200	74.900
61.200	7.300	31.500	24.400	4.000	71.600
54.100	7.800	38.100	26.300	4.600	69.100

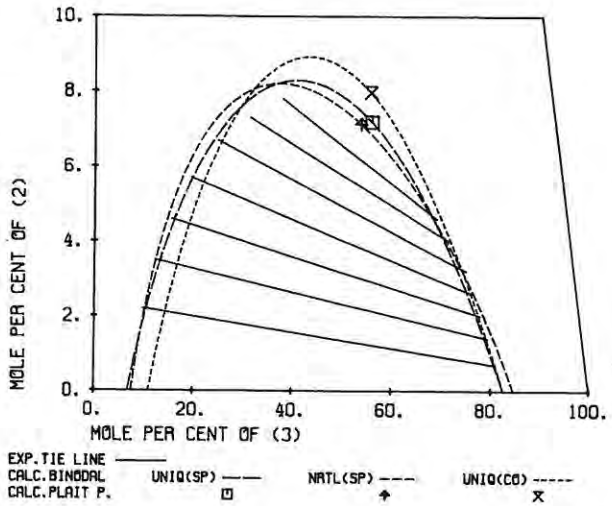
SPECIFIC MODEL PARAMETERS IN KELVIN

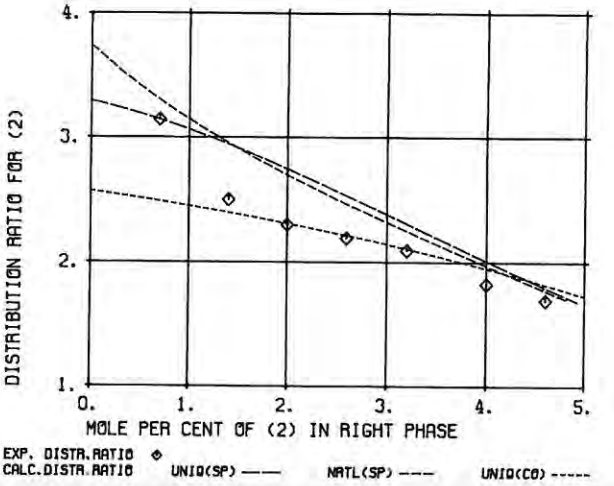
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-11.799	-24.202	-647.20	-376.15
1 3	753.28	-8.1030	659.47	300.44
2 3	36.338	110.15	-681.65	725.01

R1 = 4.0464 R2 = 4.9808 R3 = 1.4311
Q1 = 3.240 Q2 = 3.440 Q3 = 1.432

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.29
NRTL (SPECIFIC PARAMETERS)	0.99
UNIQUAC (COMMON PARAMETERS)	1.06





(1)	CH4O	METHANOL
(2)	C12H11N	AMINE,DIPHENYL
(3)	C6H12	CYCLOHEXANE

SERGEEVA V.F., ET AL.
ZH.OBSHCH.KHIM. 41(1971)1895

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
82.100	0.0	17.900	7.500	0.0	92.500
80.000	0.500	19.500	11.300	0.300	88.400
78.900	0.800	20.300	14.500	0.600	84.900
77.600	1.100	21.300	18.400	0.900	80.700
76.200	1.500	22.300	21.300	1.200	77.500
74.900	1.800	23.300	24.700	1.600	73.700
73.600	2.000	24.400	29.500	1.800	68.700
71.200	2.400	26.400	36.100	2.200	61.700

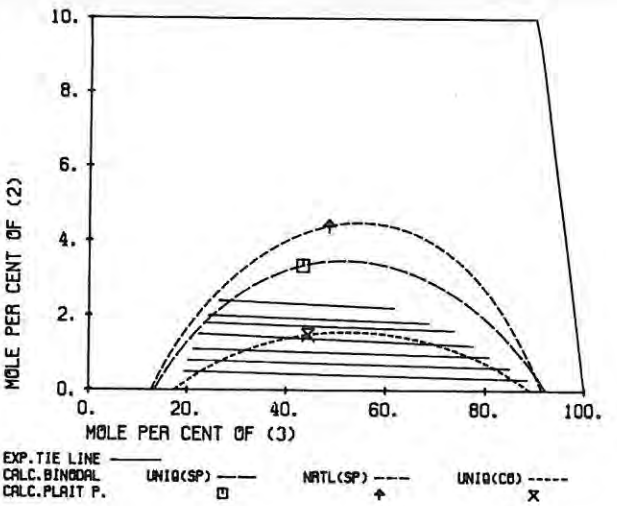
SPECIFIC MODEL PARAMETERS IN KELVIN

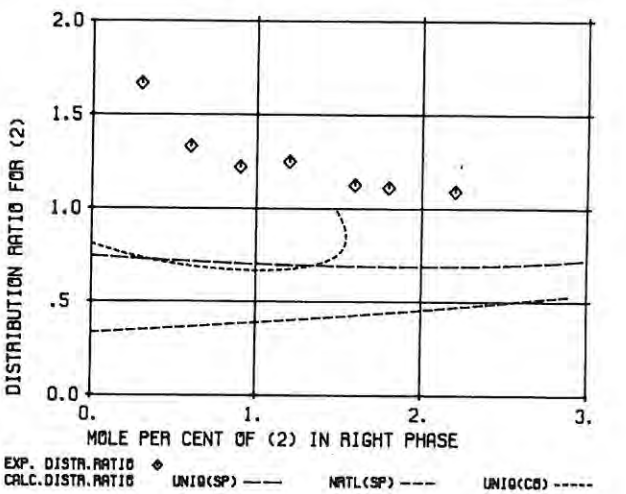
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	103.66	-179.61	873.57	-1245.0
1 3	14.019	704.77	379.39	578.07
2 3	-108.50	-75.541	-987.32	-856.11

R1 = 1.4311 R2 = 6.5760 R3 = 4.0464
Q1 = 1.432 Q2 = 4.636 Q3 = 3.240

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.39
NRTL (SPECIFIC PARAMETERS)	2.32
UNIQUAC (COMMON PARAMETERS)	1.45





(1) CH4O METHANOL

(2) C18H3602 OCTADECANOIC ACID

(3) C6H12 CYCLOHEXANE

SERGEEVA V.F., ESKARAEVA L.A.
ZH.OBSHCH.KHIM. 39(1969)731

TEMPERATURE = 40.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
72.620	0.0	27.380	24.510	0.0	75.490
71.340	0.060	28.600	32.790	0.010	67.200
66.100	2.850	31.050	32.810	0.530	66.660
65.310	3.130	31.560	33.000	0.710	66.290
57.280	3.340	39.380	36.840	0.880	62.280

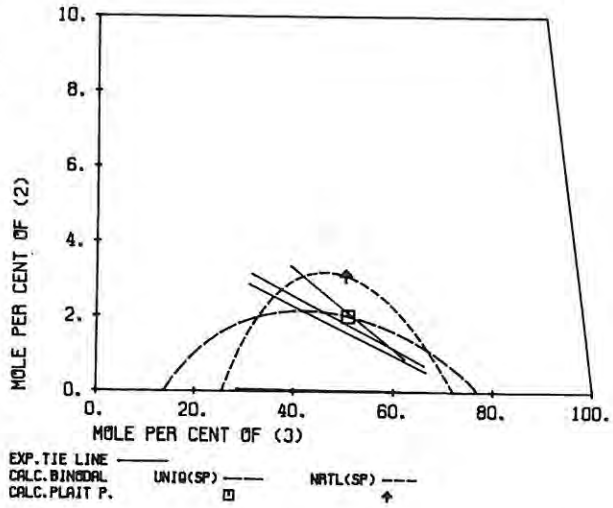
SPECIFIC MODEL PARAMETERS IN KELVIN

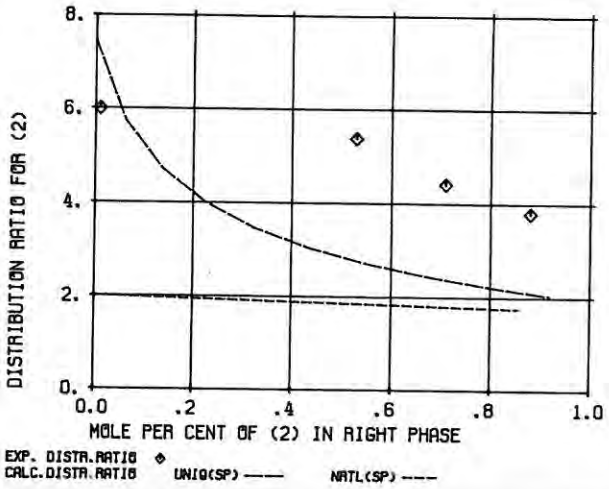
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-18.696	-65.942	-293.49	455.50
1 3	50.527	518.15	421.67	360.27
2 3	-32.129	-26.291	-350.76	1201.6

R1 = 1.4311 R2 =12.9928 R3 = 4.0464
Q1 = 1.432 Q2 =10.712 Q3 = 3.240

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.47
NRTL (SPECIFIC PARAMETERS)	1.36





(1) C6H1202 ACETIC ACID,BUTYL ESTER

(2) CH4O METHANOL

(3) H2O WATER

JAGANNADHA RAO R., VENKATA RAO C.
J.APPL.CHEM. 7(1957)435

TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
91.701	1.689	6.610	0.111	1.894	97.995
87.404	3.908	8.688	0.097	4.444	95.460
81.357	9.285	9.358	0.134	9.092	90.774
66.675	19.920	13.405	0.360	18.146	81.494
48.777	30.203	21.020	1.192	27.813	70.995

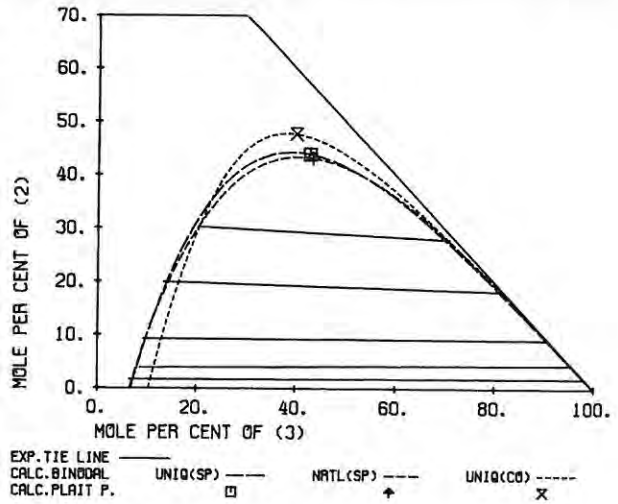
SPECIFIC MODEL PARAMETERS IN KELVIN

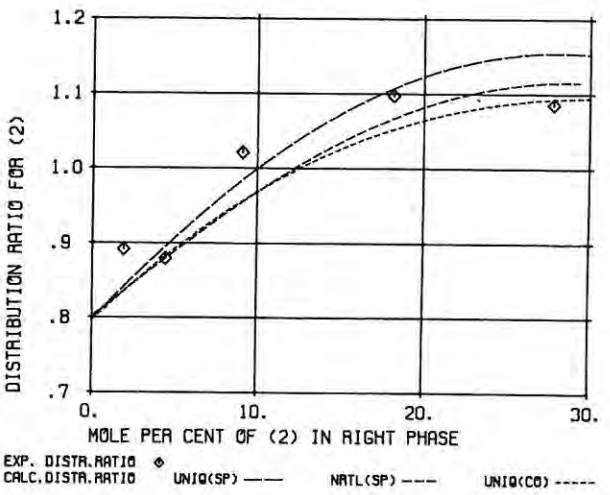
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	48.236	-44.117	-386.02	418.40
1 3	531.76	116.68	404.00	2358.7
2 3	-221.05	-9.4739	-473.85	416.46

R1 = 4.8274 R2 = 1.4311 R3 = 0.9200
Q1 = 4.196 Q2 = 1.432 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC.PARAMETERS)	0.44
NRTL (SPECIFIC PARAMETERS)	0.32
UNIQUAC (COMMON PARAMETERS)	1.50





(1) C6H1202 BUTANOIC ACID,ETHYL ESTER

(2) CH4O METHANOL

(3) H2O WATER

JAGANNADHA RAO R., VENKATA RAO C.
J.APPL.CHEM. 7(1957)435

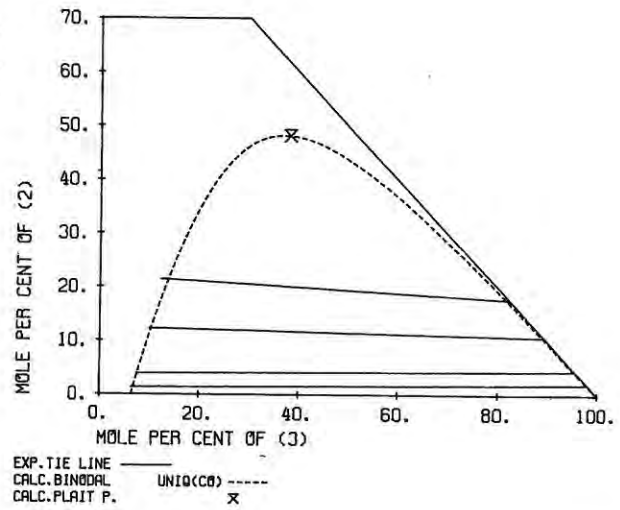
TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 1

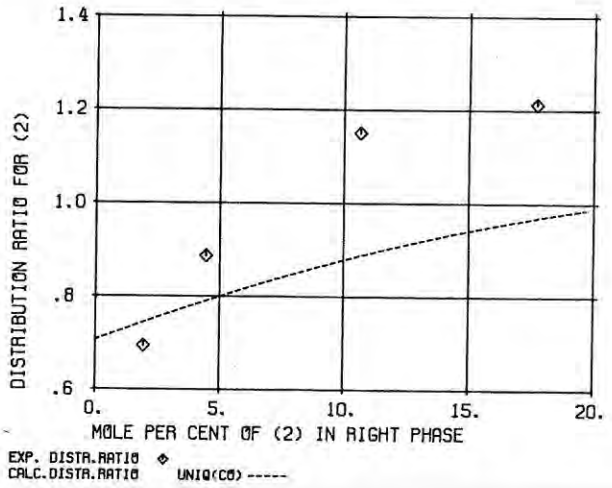
EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
92.019	1.355	6.626	0.095	1.951	97.954
88.449	3.947	7.604	0.113	4.447	95.440
77.612	12.273	10.115	0.135	10.668	89.197
66.140	21.457	12.403	0.359	17.700	81.941

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (COMMON PARAMETERS) 1.02





(1) C7H16 HEPTANE

(2) C6H14 HEXANE

(3) CH4O METHANOL

WITTRIG T.S.
THESIS ILLINOIS 1977

TEMPERATURE = 32.8 DEG C TYPE OF SYSTEM = 2

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
80.600	0.0	19.400	13.000	0.0	87.000
62.500	14.700	22.800	11.000	2.300	86.700
52.200	22.700	25.100	10.400	4.900	84.700
41.600	33.000	25.400	9.100	7.700	83.200
31.600	42.100	26.300	7.400	10.100	82.500
26.100	45.900	28.000	6.000	13.200	80.800
18.400	53.800	27.800	4.100	15.500	80.400
16.600	54.400	29.000	4.500	16.600	78.900
6.100	58.200	35.700	1.800	22.900	75.300
0.0	62.600	37.400	0.0	29.600	70.400

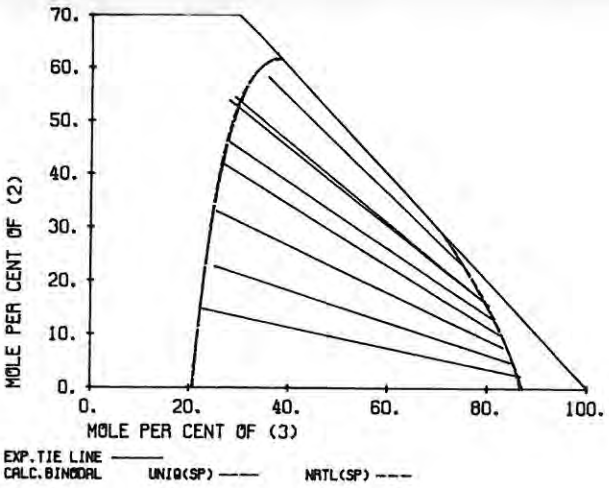
SPECIFIC MODEL PARAMETERS IN KELVIN

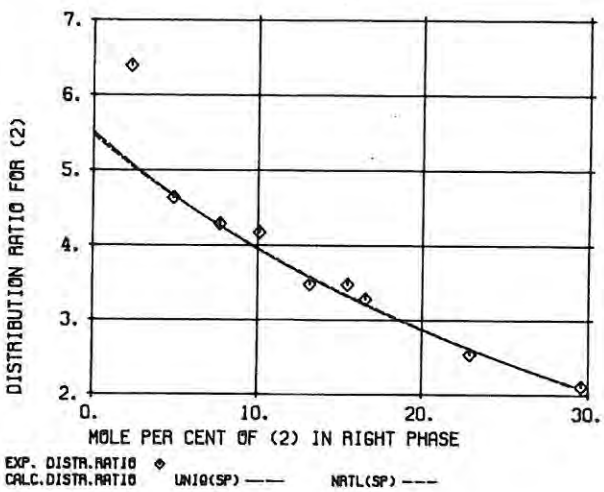
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	-71.593	57.909	-325.46	295.13
1	3	620.68	2.3547	305.35	560.90
2	3	547.69	-2.0154	258.44	475.42

R1 = 5.1742 R2 = 4.4998 R3 = 1.4311
Q1 = 4.396 Q2 = 3.856 Q3 = 1.432

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS) 0.70
NRTL (SPECIFIC PARAMETERS) 0.72





(1) C6H14O 1-HEXANOL

(2) CH4O METHANOL

(3) H2O WATER

LEBEDINSKAYA N.A., ET AL.
KHIM.PROM-ST.(MOSCOW) (1976)16

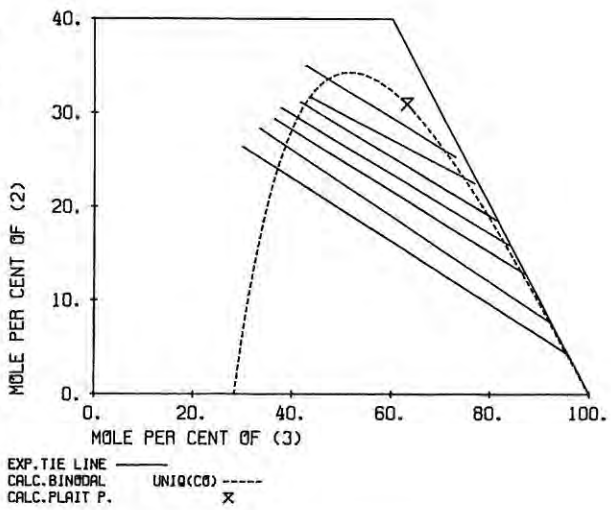
TEMPERATURE = 20.0 DEG C TYPE OF SYSTEM = 1

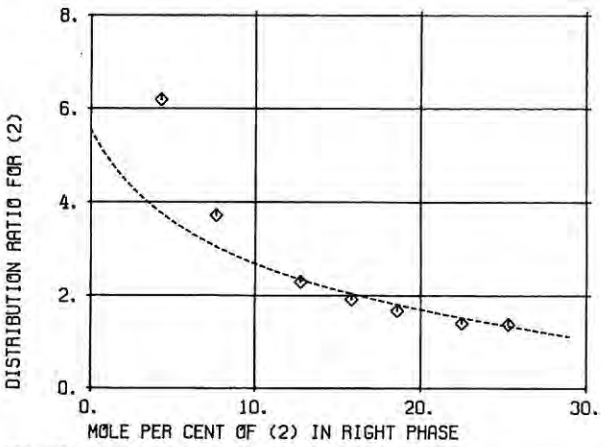
EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
43.495	26.395	30.109	0.110	4.262	95.628
38.074	28.332	33.593	0.150	7.614	92.235
34.040	29.319	36.641	0.195	12.778	87.026
31.550	30.490	37.959	0.220	15.875	83.906
27.032	31.131	41.838	0.306	18.571	81.123
24.563	31.630	43.807	0.725	22.501	76.774
22.113	35.002	42.885	1.759	25.320	72.921

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (COMMON PARAMETERS)	2.98





(1) H2O WATER

(2) CH4O METHANOL

(3) C7H8 TOLUENE

MASON L.S., WASHBURN E.R.
J.AM.CHEM.SOC. 59(1937)2076

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
98.568	1.422	0.010	0.255	0.0	99.745
94.043	5.945	0.012	0.305	0.286	99.408
86.272	13.703	0.026	0.330	0.572	99.098
90.693	9.291	0.016	0.330	0.572	99.098
78.812	21.128	0.060	0.369	1.138	98.492
71.992	27.893	0.115	0.447	2.259	97.294
70.081	29.781	0.138	0.660	6.044	93.296

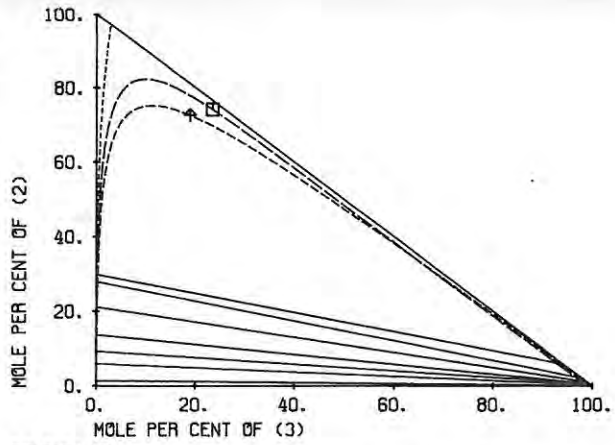
SPECIFIC MODEL PARAMETERS IN KELVIN

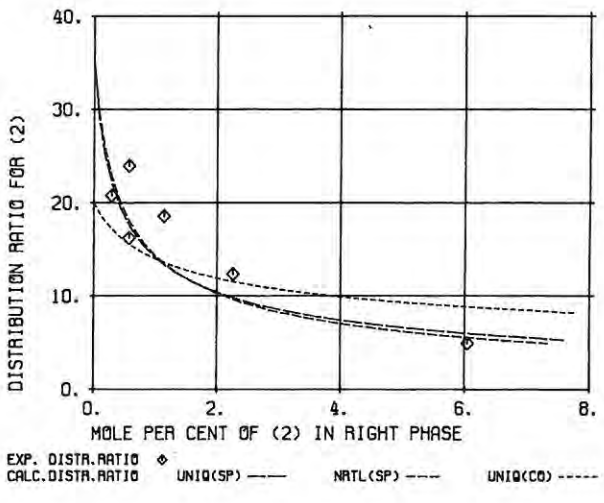
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	-174.97	-288.54	-543.60	-385.81
1	3	311.77	666.30	1745.0	1241.7
2	3	121.24	167.48	818.50	-442.13

R1 = 0.9200 R2 = 1.4311 R3 = 3.9228
Q1 = 1.400 Q2 = 1.432 Q3 = 2.968

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.67
NRTL (SPECIFIC PARAMETERS)	0.53
UNIQUAC (COMMON PARAMETERS)	0.77





(1) C7H8O TOLUENE,4-HYDROXY

(2) CH4O METHANOL

(3) H2O WATER

PRUTTON C.F., WALSH T.J., DESAI A.M.
IND.ENG.CHEM. 42(1950)1210

TEMPERATURE = 35.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
51.415	0.0	48.585	0.460	0.0	99.540
44.689	4.599	50.712	0.532	4.785	94.683
34.314	11.520	54.166	0.597	7.141	92.263
30.984	13.745	55.271	0.734	8.364	90.902
22.784	17.945	59.271	1.000	10.637	88.363
17.630	19.190	63.180	1.486	12.807	85.707
15.342	19.420	65.239	1.835	13.529	84.636

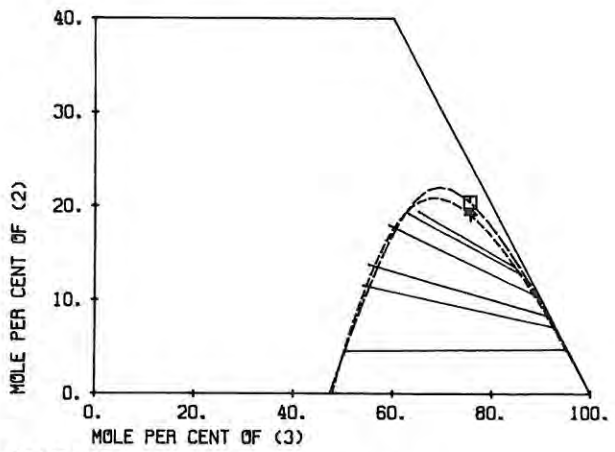
SPECIFIC MODEL PARAMETERS IN KELVIN

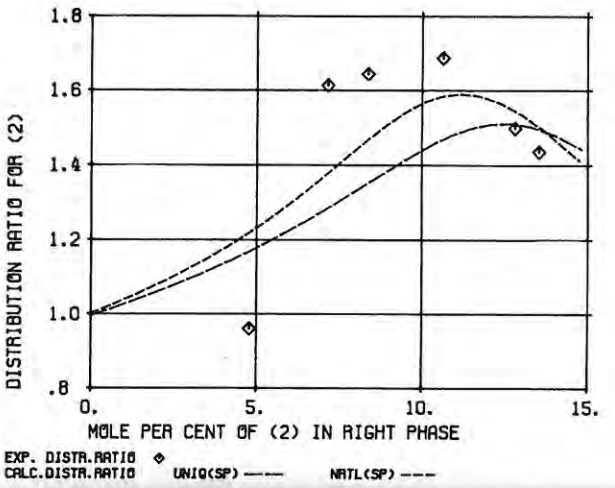
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	724.35	8.3651	840.48	102.41
1	3	-221.62	794.61	-371.32	2580.3
2	3	275.73	-85.345	199.99	293.15

R1 = 4.2867 R2 = 1.4311 R3 = 0.9200
Q1 = 3.248 Q2 = 1.432 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.59
NRTL (SPECIFIC PARAMETERS)	0.40





(1) H2O WATER

(2) CH4O METHANOL

(3) C7H14O2 ACETIC ACID,PENTYL ESTER

JAGANNADHA RAO R., VENKATA RAO C.
J.APPL.CHEM. 7(1957)435

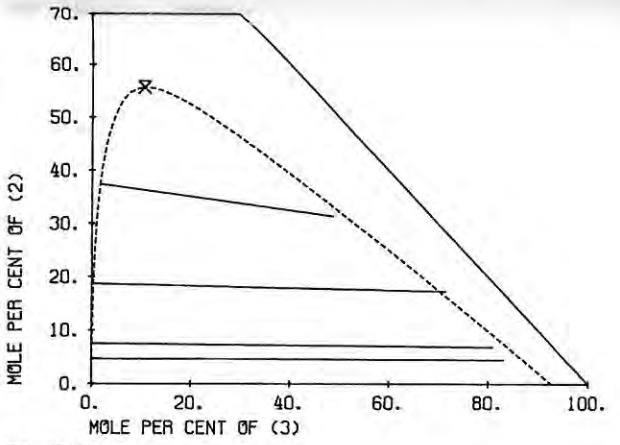
TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 1

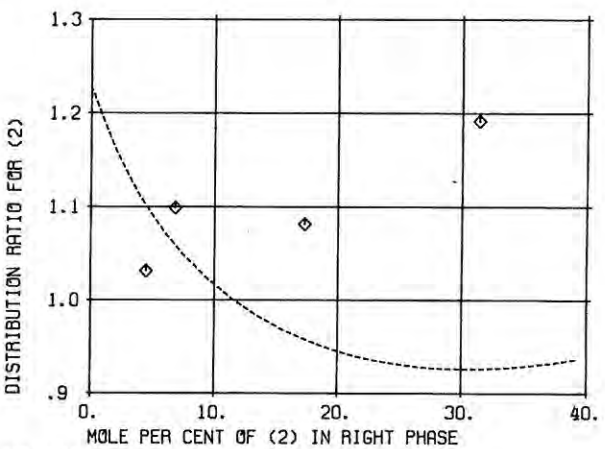
EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
95.264	4.678	0.058	12.413	4.537	83.050
92.394	7.532	0.074	12.189	6.853	80.958
81.096	18.695	0.208	11.178	17.284	71.538
60.465	37.365	2.171	19.733	31.356	48.912

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (COMMON PARAMETERS)	2.26





(1) C7H16O 1-HEPTANOL

(2) CH4O METHANOL

(3) H2O WATER

LEBEDINSKAYA N.A., ET AL.
KHIM.PROM-ST.(MOSCOW) (1976)16

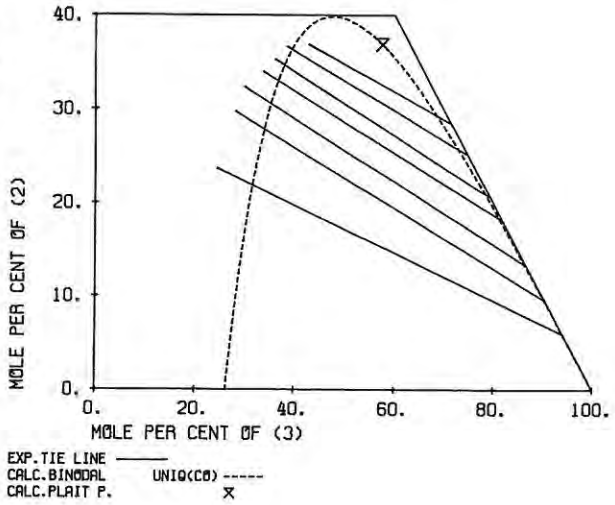
TEMPERATURE = 20.0 DEG C TYPE OF SYSTEM = 1

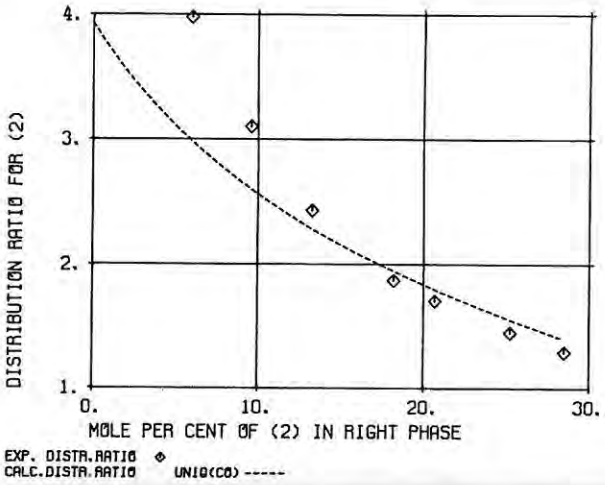
EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
51.855	23.679	24.466	0.032	5.952	94.015
42.074	29.728	28.198	0.084	9.587	90.329
37.632	32.313	30.055	0.120	13.294	86.585
32.211	33.963	33.826	0.160	18.173	81.666
28.498	35.302	36.200	0.200	20.691	79.109
24.829	36.646	38.525	0.263	25.261	74.476
20.159	36.893	42.948	0.288	28.536	71.176

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (COMMON PARAMETERS) 2.51





(1) H2O WATER

(2) CH4O METHANOL

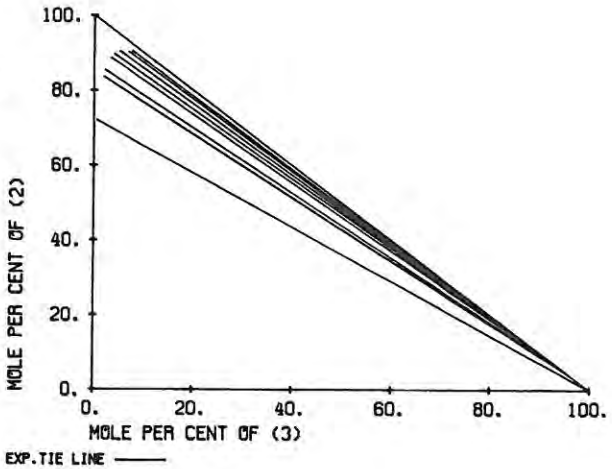
(3) C8H18 PENTANE,2,2,4-TRIMETHYL

BUCHOWSKI H., TEPEREK J.
ROCZ.CHEM. 33(1959)1093

TEMPERATURE = 18.0 DEG C TYPE OF SYSTEM = 2

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
27.395	72.002	0.603	0.0	0.0	100.000
14.400	83.633	1.966	0.000	4.151	95.849
12.337	85.351	2.312	0.0	4.485	95.515
7.875	88.665	3.460	0.0	6.782	93.217
6.144	89.708	4.148	0.000	8.060	91.940
4.359	90.455	5.187	0.0	8.690	91.310
2.703	90.248	7.050	0.000	10.543	89.457
1.695	90.552	7.753	0.0	15.237	84.763
0.000	87.862	12.138	0.0	17.729	82.271



(1) H2O WATER

(2) CH4O METHANOL

(3) C8H18 PENTANE,2,2,4-TRIMETHYL

BUCHOWSKI H., TEPEREK J.
ROCZ.CHEM. 33(1959)1093

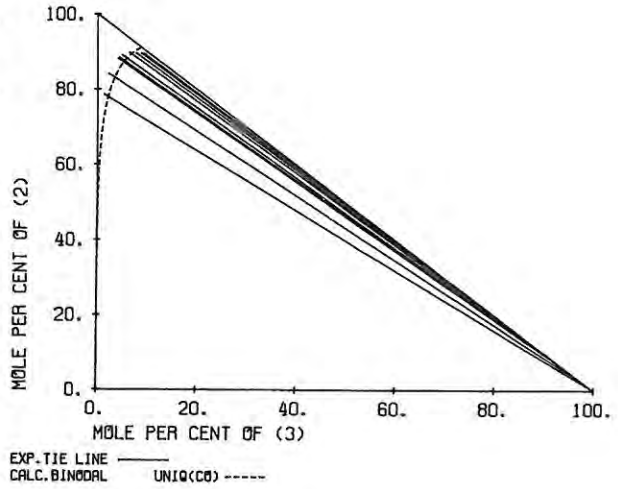
TEMPERATURE = 20.0 DEG C TYPE OF SYSTEM = 2

EXPERIMENTAL TIE LINES IN MOLE PCT

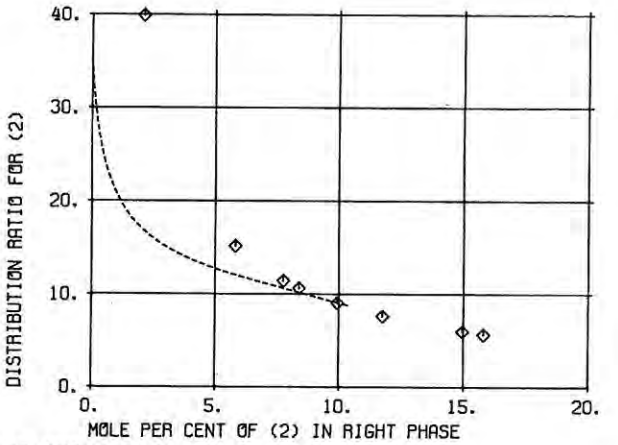
LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
20.043	78.602	1.355	0.0	0.0	100.000
13.534	84.107	2.359	0.0	2.107	97.893
7.634	88.212	4.154	0.0	5.808	94.192
7.118	88.483	4.399	0.000	7.743	92.257
5.884	89.105	5.011	0.0	8.376	91.624
3.682	89.833	6.485	0.0	9.931	90.069
2.540	89.615	7.845	0.000	11.750	88.250
1.521	89.568	8.911	0.0	14.954	85.046
1.099	89.504	9.397	0.0	15.800	84.200

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (COMMON PARAMETERS) 2.40



EXP.TIE LINE ——
CALC.BINODAL UNIQ(C6) -----



EXP. DISTR.RATIO ◇
CALC.DISTR.RATIO UNIQ(C6) -----

(1) C8H18O 1-OCTANOL

(2) CH4O METHANOL

(3) H2O WATER

LEBEDINSKAYA N.A., ET AL.
KHIM.PROM-ST.(MOSCOW) (1976)16

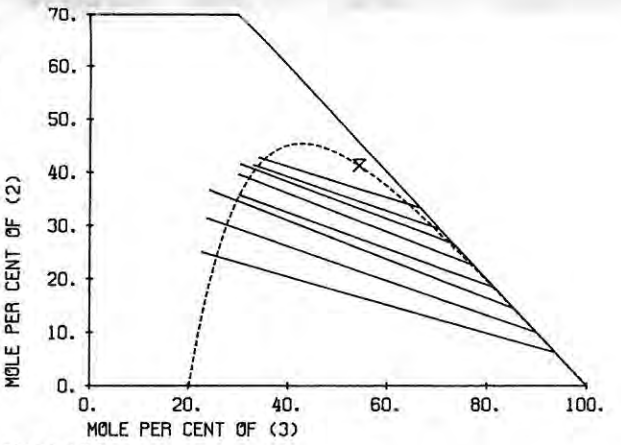
TEMPERATURE = 20.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

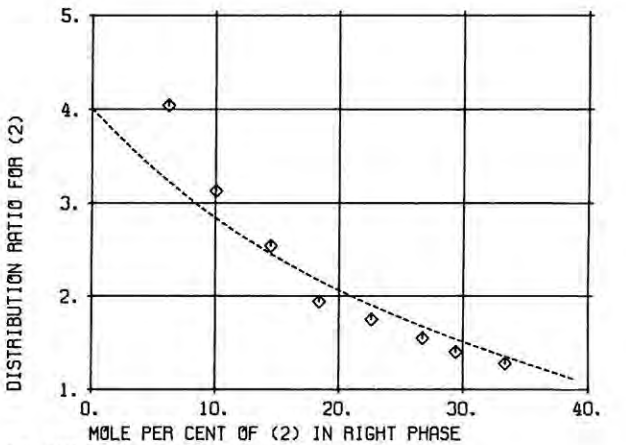
LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
52.274	25.026	22.700	0.015	6.194	93.792
44.850	31.329	23.822	0.030	10.018	89.952
39.151	36.643	24.206	0.062	14.435	85.503
34.031	35.727	30.242	0.079	18.399	81.521
30.357	39.572	30.071	0.115	22.620	77.265
28.102	41.473	30.426	0.169	26.720	73.111
25.645	41.366	32.990	0.224	29.423	70.353
23.140	42.738	34.122	0.265	33.369	66.366

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (COMMON PARAMETERS) 3.27



EXP.TIE LINE ——
CALC.BINODAL UNIQ(C6) -----
CALC.PLAIT P. ⊼



EXP. DISTR.RATIO ◇
CALC.DISTR.RATIO UNIQ(C6) -----

(1) H2O WATER

(2) CH4O METHANOL

(3) C11H10 NAPHTHALENE,1-METHYL

PRUTTON C.F., WALSH T.J., DESAI A.M.
IND.ENG.CHEM. 42(1950)1210

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
100.000	0.0	0.0	0.0	0.0	100.000
72.736	27.264	0.0	0.0	4.291	95.709
60.432	39.568	0.0	0.0	5.115	94.885
36.683	62.736	0.581	0.0	7.523	92.477
29.376	69.280	1.344	0.0	10.217	89.783
24.010	73.565	2.425	0.0	12.070	87.930

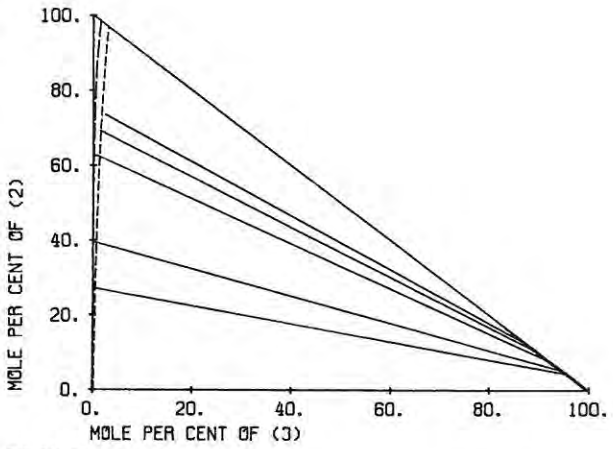
SPECIFIC MODEL PARAMETERS IN KELVIN

		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	-41.470	65.988	125.92	87.484
1	3	342.70	850.09	1294.7	1334.6
2	3	106.89	446.30	937.33	196.54

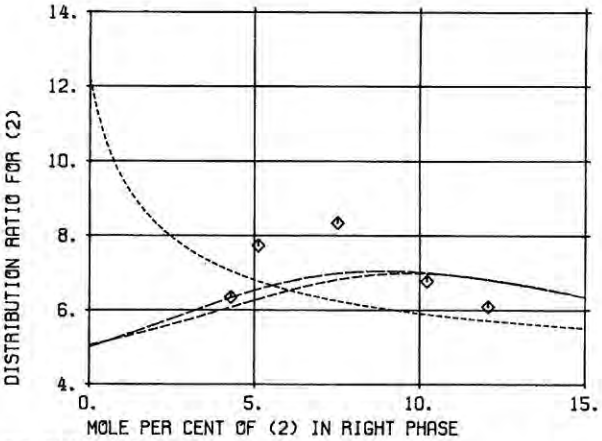
R1 = 0.9200 R2 = 1.4311 R3 = 5.7158
Q1 = 1.400 Q2 = 1.432 Q3 = 4.008

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.74
NRTL (SPECIFIC PARAMETERS)	0.61
UNIQUAC (COMMON PARAMETERS)	1.22



EXP.TIE LINE ——
CALC.BINODAL UNIQ(SP) —— NRTL(SP) ---- UNIQ(CO) -----



EXP. DISTR.RATIO ◇
CALC.DISTR.RATIO UNIQ(SP) —— NRTL(SP) ---- UNIQ(CO) -----

(1) H2O WATER

(2) CH4O METHANOL

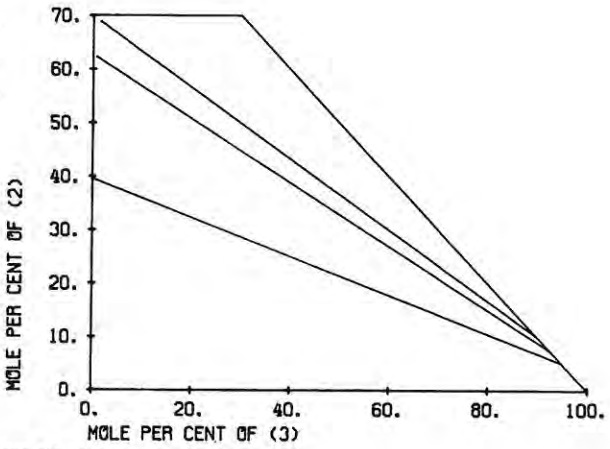
(3) C11H10 NAPHTHALENE,1-METHYL

PRUTTON C.F., WALSH T.J., DESAI A.M.
IND.ENG.CHEM. 42(1950)1210

TEMPERATURE = 35.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
100.000	0.0	0.0	0.0	0.0	100.000
60.432	39.568	0.0	0.0	5.115	94.885
36.929	62.291	0.780	0.0	7.523	92.477
29.586	68.852	1.562	0.0	10.217	89.783



EXP.TIE LINE ——

(1) H2O WATER
(2) CH4O METHANOL
(3) C12H10O ETHER,DIPHENYL

PURNELL J.H., BOWDEN S.T.
J.CHEM.SOC. (1954)539

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
81.691	18.309	0.0	0.0	1.053	98.947
70.302	29.698	0.0	0.0	3.610	96.390
53.202	46.755	0.043	0.0	5.579	94.421
42.556	57.180	0.264	0.0	7.484	92.516
31.624	67.531	0.845	0.0	11.554	88.446
22.626	75.747	1.627	0.0	20.021	79.979
13.461	82.926	3.613	0.0	30.106	69.894

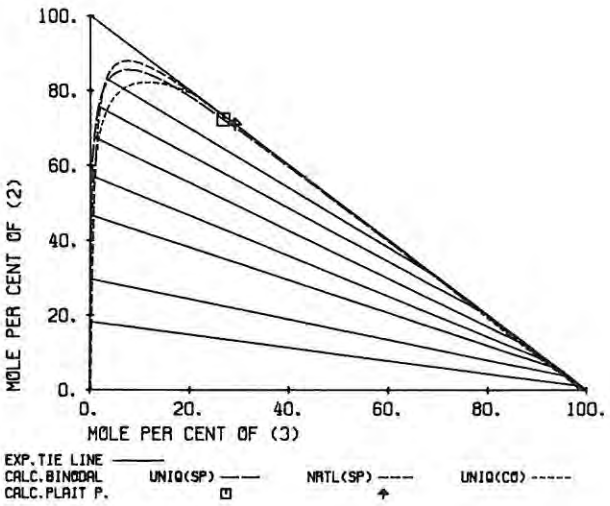
SPECIFIC MODEL PARAMETERS IN KELVIN

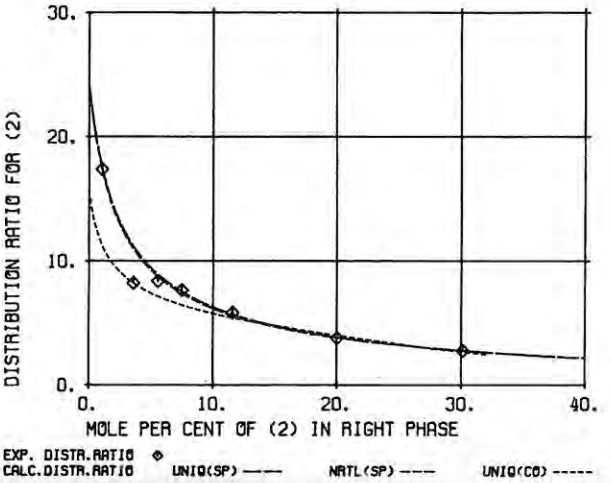
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	-423.70	-74.877	-938.25	554.01
1	3	293.85	649.97	1381.1	1149.9
2	3	-25.771	408.82	807.56	-68.632

R1 = 0.9200 R2 = 1.4311 R3 = 6.2873
Q1 = 1.400 Q2 = 1.432 Q3 = 4.480

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.56
NRTL (SPECIFIC PARAMETERS)	0.54
UNIQUAC (COMMON PARAMETERS)	2.25





(1) C12H24 1-DODECENE
(2) C12H24O DODECANE,1,2-EPOXY
(3) CH4O METHANOL

VOJTKO J., HRUSOVSKY M., FANCOVIC K., RATTAY V., HARGAS R.
CHEM.ZVESTI 27(1973)477

TEMPERATURE = 0.5 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
92.130	0.0	7.870	1.327	0.0	98.673
80.920	3.029	16.051	1.594	0.416	97.990
67.250	8.119	24.630	1.886	0.959	97.155
52.411	10.875	36.714	2.036	1.596	96.368
26.603	15.042	58.355	3.196	3.484	93.320
12.605	12.625	74.770	4.111	4.981	90.908

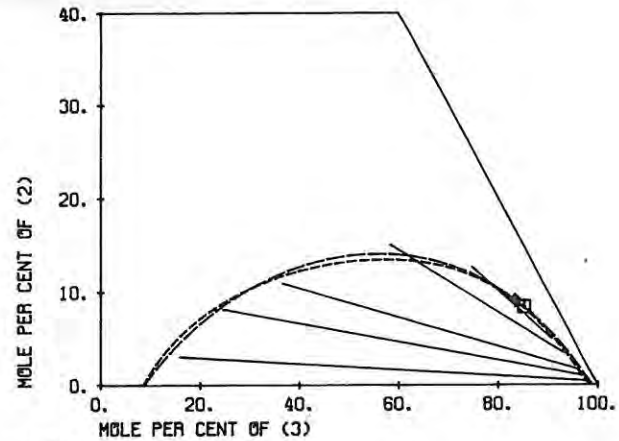
SPECIFIC MODEL PARAMETERS IN KELVIN

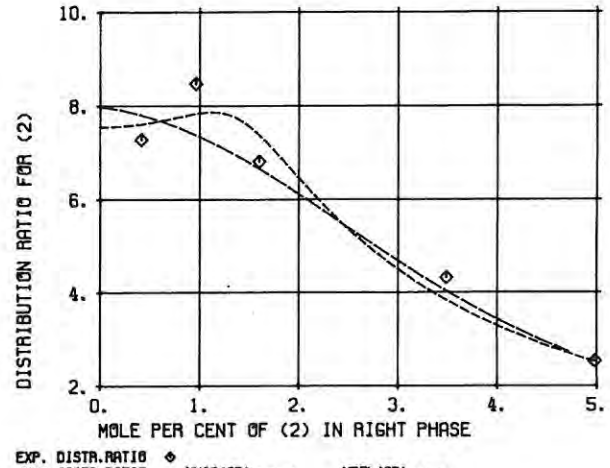
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	20.602	-17.042	-764.86	-110.61
1	3	675.97	32.274	290.81	954.70
2	3	54.627	105.85	-833.77	1125.7

R1 = 8.3161 R2 = 8.3359 R3 = 1.4311
Q1 = 6.884 Q2 = 6.716 Q3 = 1.432

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.54
NRTL (SPECIFIC PARAMETERS)	0.68





(1) CS2 CARBON DISULFIDE

(2) C6H14 HEXANE

(3) C6F14 HEXANE,PERFLUORO

PLISKIN I., TREYBAL R.E.
J.CHEM.ENG.DATA 11(1966)49

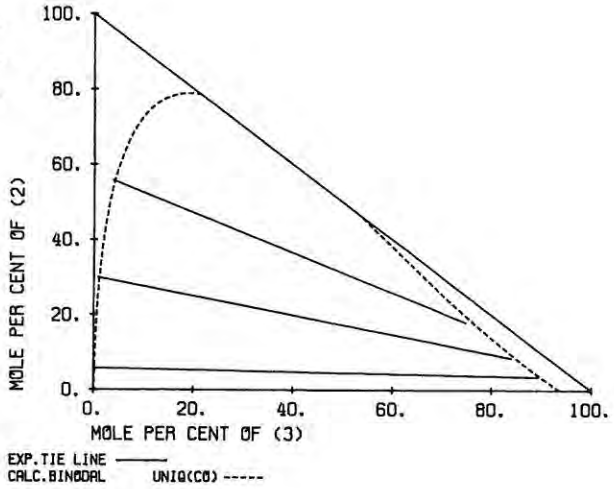
TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

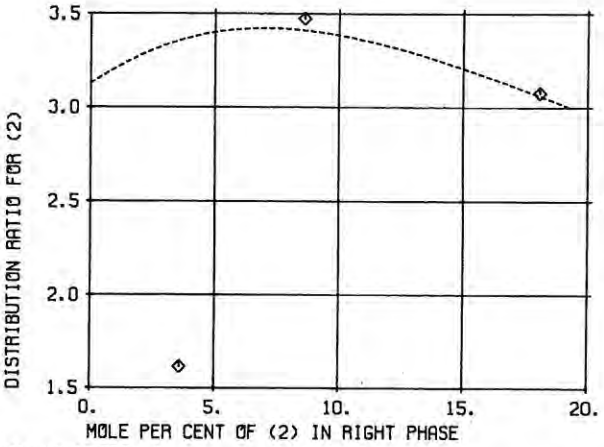
EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
99.887	0.0	0.113	6.373	0.0	93.627
93.994	5.823	0.183	6.939	3.606	89.455
69.134	29.924	0.942	7.410	8.614	83.976
40.440	55.672	3.888	7.188	18.098	74.714

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (COMMON PARAMETERS)	0.77





(1) H2O WATER

(2) C2H4O2 ACETIC ACID

(3) C2CL4 ETHENE,TETRACHLORO

FUSE K., IGUCHI A.
KAGAKU KOGAKU 34(1970)1001

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
84.510	15.311	0.179	3.517	2.110	94.373
83.484	16.334	0.182	3.494	3.118	93.387
79.831	19.943	0.226	3.473	4.063	92.464
69.955	29.671	0.374	3.415	6.608	89.978
59.679	39.720	0.601	3.312	11.151	85.537
47.703	51.051	1.246	3.100	20.459	76.442
27.306	66.362	6.333	3.465	33.891	62.643
23.244	67.738	9.018	3.849	42.144	54.007
22.122	67.896	9.982	4.317	45.701	49.982
20.315	67.682	12.003	4.297	46.223	49.480
21.454	66.893	11.653	4.223	48.137	47.641

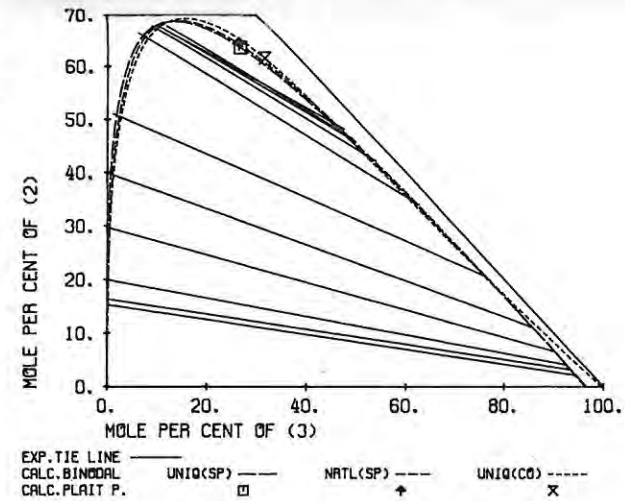
SPECIFIC MODEL PARAMETERS IN KELVIN

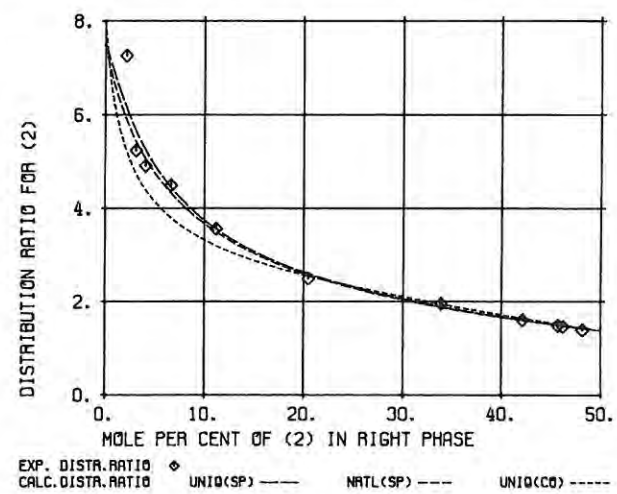
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	-249.26	-57.329	-521.57	99.648
1	3	765.22	420.28	2278.1	555.92
2	3	46.855	108.20	511.81	-137.28

R1 = 0.9200 R2 = 2.2024 R3 = 3.8879
Q1 = 1.400 Q2 = 2.072 Q3 = 3.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.68
NRTL (SPECIFIC PARAMETERS)	0.67
UNIQUAC (COMMON PARAMETERS)	2.03





148

C_2Cl_4-C_3H_6O

(1) C2CL4 ETHENE,TETRACHLORO

(2) C3H6O 2-PROPANONE

(3) H2O WATER

RAJA RAO M., VENKATA RAO C.
TRANS.INDIAN INST.CHEM.ENGRS. 7(1954-55)78

TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
93.135	5.988	0.877	0.012	3.085	96.903
85.961	13.204	0.835	0.025	5.906	94.069
78.708	20.106	1.186	0.065	8.790	91.144
69.836	29.057	1.106	0.096	11.727	88.176
62.172	36.446	1.382	0.115	14.014	85.871
55.013	41.766	3.221	0.150	16.402	83.449
47.530	47.701	4.769	0.154	18.325	81.520
39.534	53.406	7.061	0.177	21.002	78.821
27.754	58.510	13.736	0.345	25.172	74.483
14.714	57.710	27.577	0.754	30.229	69.018

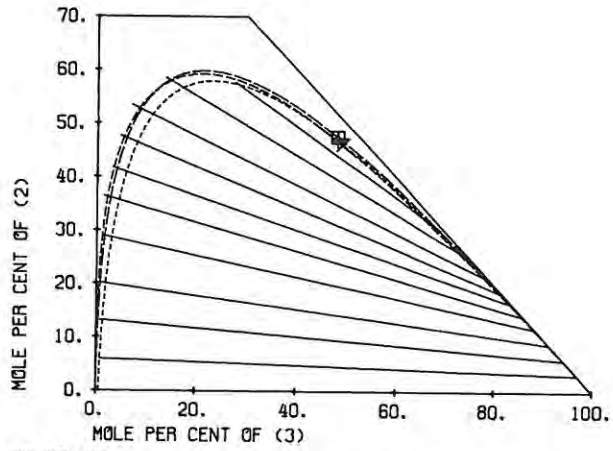
SPECIFIC MODEL PARAMETERS IN KELVIN

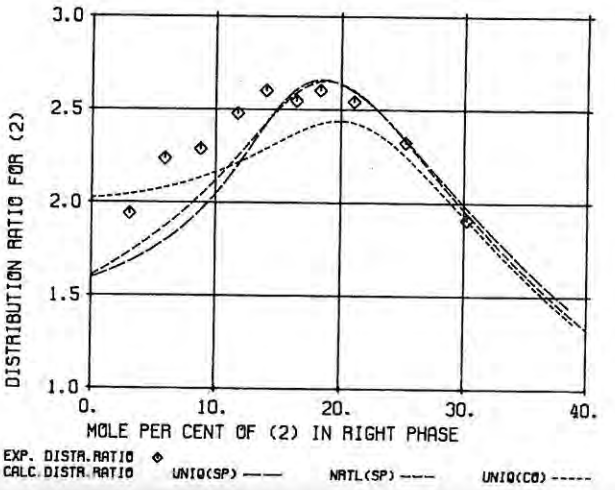
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	360.27	-119.46	483.32	-116.92
1 3	1504.4	605.60	2022.0	2382.4
2 3	343.18	-83.354	291.60	259.50

R1 = 3.8879 R2 = 2.5735 R3 = 0.9200
Q1 = 3.400 Q2 = 2.336 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.78
NRTL (SPECIFIC PARAMETERS)	0.67
UNIQUAC (COMMON PARAMETERS)	1.17





149

C_2Cl_4-$C_3H_6O_2$

(1) C2CL4 ETHENE,TETRACHLORO

(2) C3H6O2 PROPANOIC ACID

(3) H2O WATER

RAJA RAO M., VENKATA RAO C.
J.APPL.CHEM. 6(1956)269

TEMPERATURE = 31.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
96.919	3.081	0.0	0.023	2.186	97.791
90.058	9.942	0.0	0.031	4.693	95.276
85.014	14.986	0.0	0.046	6.478	93.475
80.454	19.136	0.410	0.069	8.729	91.202
73.669	25.547	0.784	0.140	13.413	86.448
67.451	31.422	1.127	0.424	18.970	80.606
64.407	34.124	1.469	0.640	21.877	77.482
56.416	40.145	3.439	1.514	28.789	69.697

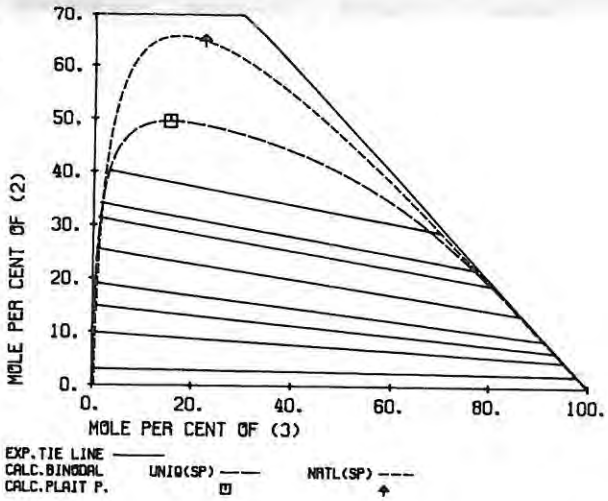
SPECIFIC MODEL PARAMETERS IN KELVIN

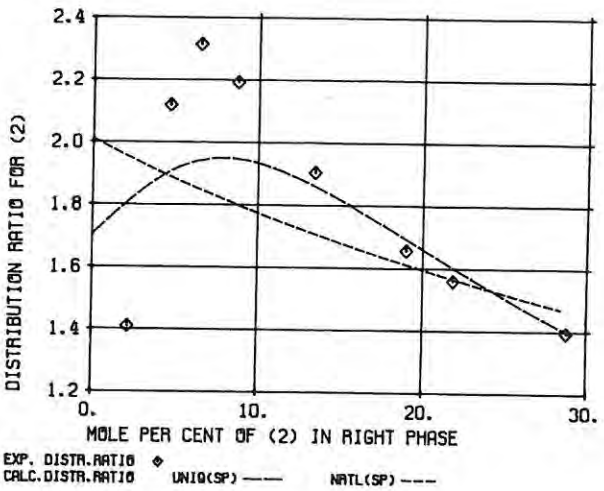
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	427.55	-234.64	-285.27	193.24
1 3	1248.1	814.03	1173.1	1577.7
2 3	898.74	-285.01	483.68	-256.39

R1 = 3.8879 R2 = 2.8768 R3 = 0.9200
Q1 = 3.400 Q2 = 2.612 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.46
NRTL (SPECIFIC PARAMETERS)	0.71





(1) H2O WATER

(2) C3H8O 2-PROPANOL

(3) C2CL4 ETHENE,TETRACHLORO

BERGELIN O., LOCKHART F.J., BROWN G.G.
TRANS.AM.INST.CHEM.ENG. 39(1943)173

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
95.699	4.301	0.0	0.0	1.638	98.362
95.223	4.777	0.0	0.0	1.908	98.092
92.843	7.157	0.0	0.445	4.665	94.890
92.847	7.153	0.0	0.445	4.665	94.890
91.158	8.829	0.013	0.870	7.305	91.825
90.762	9.225	0.013	0.868	7.801	91.332
90.085	9.875	0.040	1.716	8.279	90.006
88.527	11.376	0.097	1.685	10.980	87.335
85.436	14.302	0.262	3.990	15.305	80.705
84.032	15.620	0.348	3.205	15.848	80.947
79.811	19.363	0.826	4.633	18.792	76.574
74.906	23.506	1.587	5.339	19.429	75.232
70.592	26.831	2.576	6.676	21.120	72.204
61.338	33.089	5.573	8.492	24.391	67.117
56.890	35.710	7.400	9.033	25.823	65.144
54.560	36.925	8.515	10.136	27.542	62.322
48.402	39.498	12.100	11.739	29.317	58.944
45.174	40.240	14.586	14.665	32.231	53.104

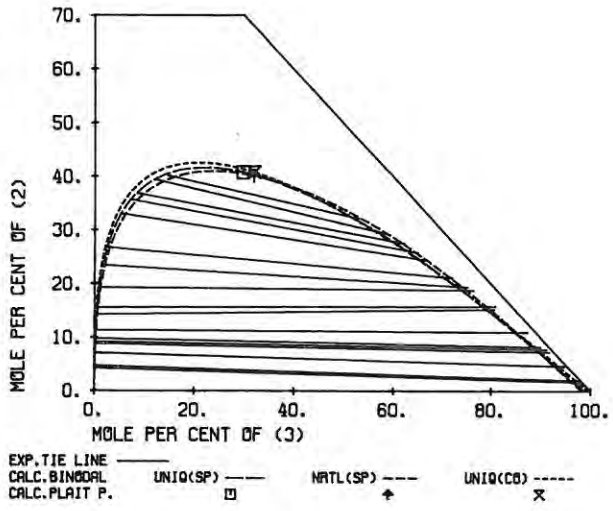
SPECIFIC MODEL PARAMETERS IN KELVIN

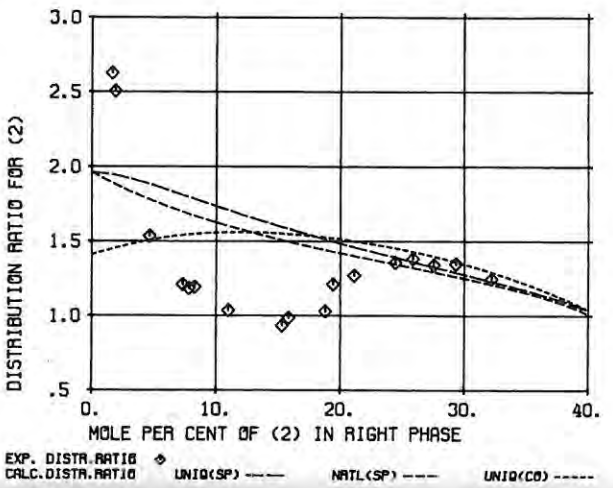
	UNIQUAC		NRTL(ALPHA=.2)	
I J	AIJ	AJI	AIJ	AJI
1 2	-1.4582	-112.24	319.11	-280.94
1 3	335.30	702.78	1877.8	708.87
2 3	-85.104	205.12	-100.12	328.53

R1 = 0.9200 R2 = 2.7791 R3 = 3.8879
Q1 = 1.400 Q2 = 2.508 Q3 = 3.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.92
NRTL (SPECIFIC PARAMETERS)	1.72
UNIQUAC (COMMON PARAMETERS)	1.57





(1) H2O WATER

(2) C2H4O2 ACETIC ACID

(3) C2HCL3 ETHENE,TRICHLORO

KRISHNAMURTY V.V.G., MURTI P.S., VENKATA RAO C.
J.SCI.IND.RES. 12B(1953)583

TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
97.067	2.918	0.015	0.0	1.088	98.912
94.306	5.679	0.016	0.0	1.734	98.266
91.794	8.190	0.016	0.0	3.013	96.987
89.589	10.377	0.034	0.0	4.274	95.726
87.384	12.563	0.053	0.0	5.518	94.482
84.822	15.048	0.130	0.0	6.745	93.255
83.173	16.635	0.192	0.0	7.955	92.045
80.643	19.056	0.301	0.0	9.149	90.851
78.699	20.886	0.415	0.0	10.327	89.673
76.691	22.773	0.536	0.679	11.612	87.709
73.816	25.533	0.651	1.331	13.978	84.691
69.570	29.471	0.959	1.314	16.164	82.522

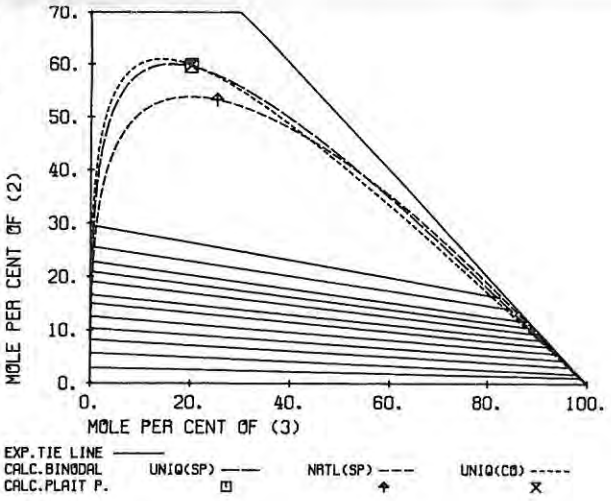
SPECIFIC MODEL PARAMETERS IN KELVIN

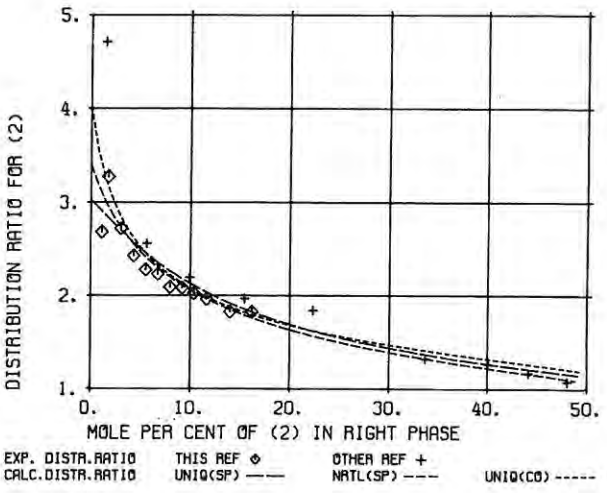
	UNIQUAC		NRTL(ALPHA=.2)	
I J	AIJ	AJI	AIJ	AJI
1 2	-290.66	-48.216	-198.29	-204.11
1 3	535.20	1034.4	2156.2	1566.1
2 3	79.159	-104.48	222.60	-247.48

R1 = 0.9200 R2 = 2.2024 R3 = 3.3092
Q1 = 1.400 Q2 = 2.072 Q3 = 2.860

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.36
NRTL (SPECIFIC PARAMETERS)	0.22
UNIQUAC (COMMON PARAMETERS)	0.60





(1) H2O WATER
(2) C2H4O2 ACETIC ACID
(3) C2HCL3 ETHENE,TRICHLORO

FUSE K., IGUCHI A.
KAGAKU KOGAKU 34(1970)543

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
92.964	6.827	0.209	9.918	1.448	88.634
85.323	14.398	0.278	9.691	5.621	84.688
77.793	21.743	0.463	9.458	9.912	80.629
68.559	30.345	1.096	9.159	15.424	75.417
56.050	41.013	2.937	8.785	22.314	68.900
51.646	44.441	3.913	8.664	33.660	57.675
41.310	50.740	7.950	8.763	40.082	51.155
37.695	51.661	10.644	9.850	44.160	45.990
33.021	51.902	15.077	13.981	48.071	37.948

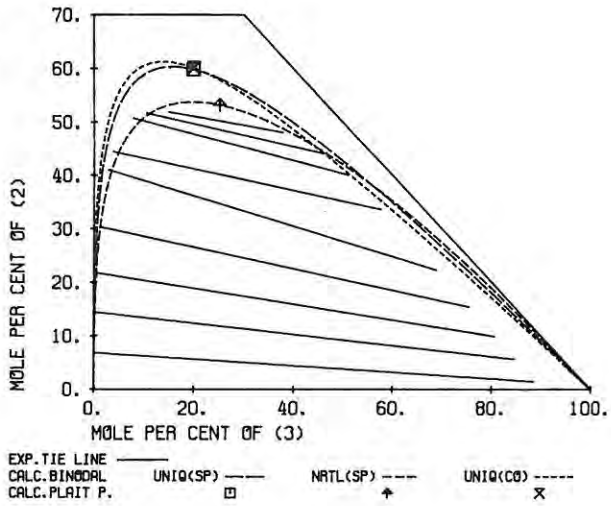
SPECIFIC MODEL PARAMETERS IN KELVIN

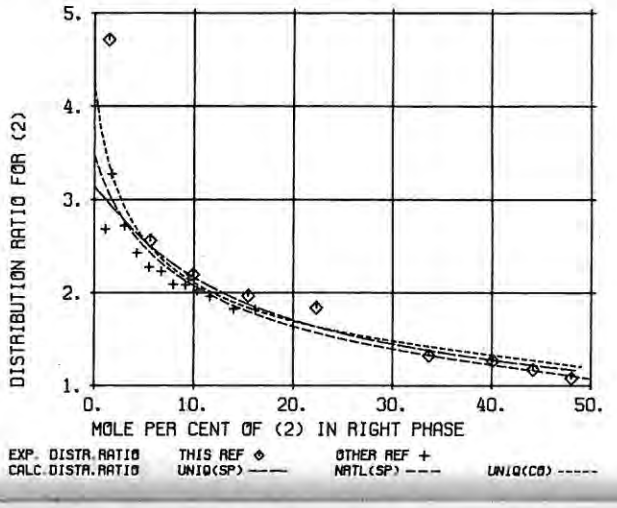
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-290.66	-48.216	-198.29	-204.11
1 3	535.20	1034.4	2156.2	1566.1
2 3	79.159	-104.48	222.60	-247.48

R1 = 0.9200 R2 = 2.2024 R3 = 3.3092
Q1 = 1.400 Q2 = 2.072 Q3 = 2.860

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	3.75
NRTL (SPECIFIC PARAMETERS)	3.54
UNIQUAC (COMMON PARAMETERS)	3.59





(1) C2HCL3 ETHENE,TRICHLORO
(2) C2H6O ETHANOL
(3) H2O WATER

COLBURN A.P., PHILLIPS J.C.
TRANS.AM.INST.CHEM.ENG. 40(1944)333

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
96.904	1.672	1.425	0.073	3.653	96.275
96.089	2.494	1.417	0.089	5.091	94.820
94.876	3.019	2.105	0.107	7.027	92.866
94.347	3.555	2.098	0.126	9.027	90.847
92.394	4.850	2.756	0.165	12.485	87.350
83.391	13.381	3.228	0.555	20.215	79.230
74.235	20.375	5.390	1.387	25.714	72.899
49.174	34.608	16.218	6.922	36.964	56.114

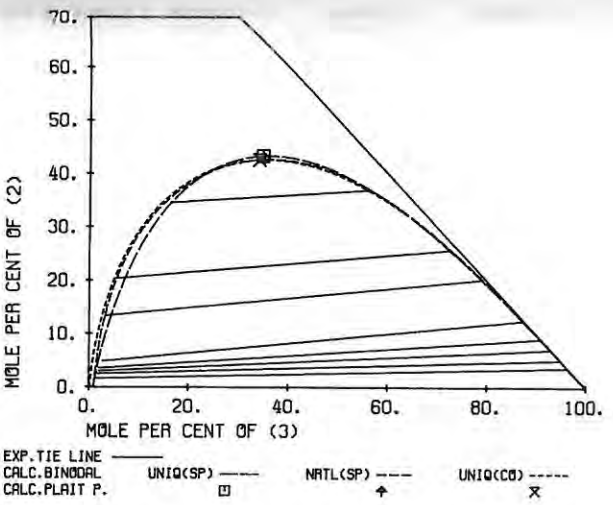
SPECIFIC MODEL PARAMETERS IN KELVIN

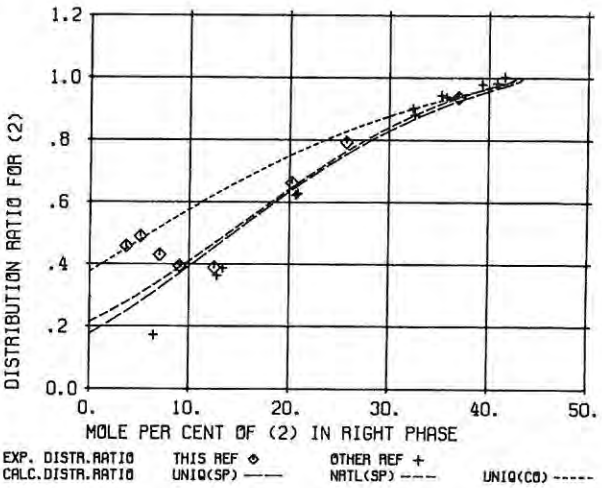
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	7.5913	-90.570	-1049.4	52.334
1 3	714.75	461.75	931.38	2434.4
2 3	-249.88	-148.10	-406.94	-959.95

R1 = 3.3092 R2 = 2.1055 R3 = 0.9200
Q1 = 2.860 Q2 = 1.972 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.53
NRTL (SPECIFIC PARAMETERS)	0.46
UNIQUAC (COMMON PARAMETERS)	0.73





(1) C2HCL3 ETHENE,TRICHLORO
(2) C2H6O ETHANOL
(3) H2O WATER

REINDERS W., DE MINJER C.H.
RECL.TRAV.CHIM.PAYS-BAS. 66(1947)552

TEMPERATURE = 20.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
97.452	1.118	1.430	0.061	6.480	93.460
93.959	4.644	1.397	0.166	12.767	87.067
93.436	5.172	1.392	0.167	13.338	86.495
85.202	12.830	1.969	0.482	20.607	78.912
84.970	13.064	1.965	0.483	20.817	78.701
60.338	29.159	10.503	3.391	32.372	64.237
60.797	28.658	10.545	3.560	32.561	63.879
53.122	33.266	13.611	5.164	35.246	59.590
52.442	33.571	13.987	5.539	35.768	58.693
41.997	38.487	19.515	9.646	39.312	51.043
36.131	40.090	23.779	13.029	40.808	46.163
29.322	41.675	29.003	16.796	41.558	41.645

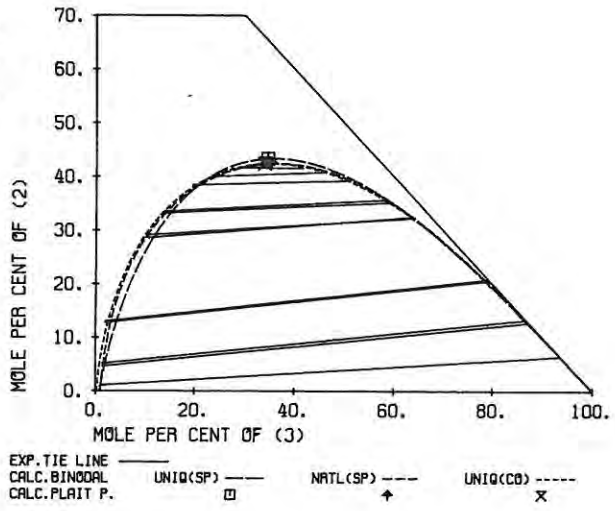
SPECIFIC MODEL PARAMETERS IN KELVIN

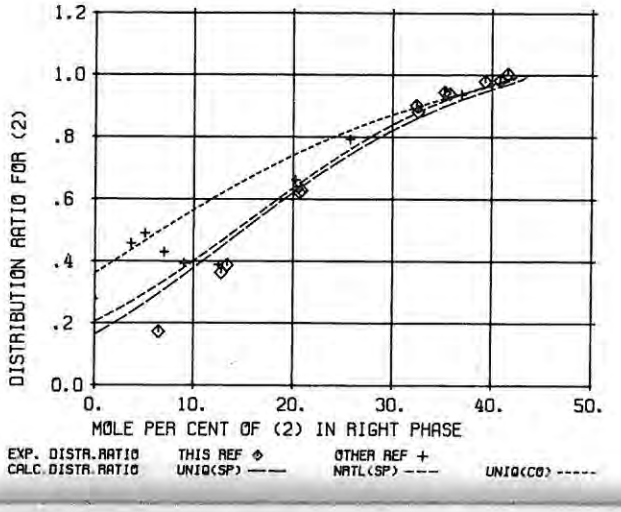
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	7.5913	-90.570	-1049.4	52.334
1 3	714.75	461.75	931.38	2434.4
2 3	-249.88	-148.10	-406.94	-959.95

R1 = 3.3092 R2 = 2.1055 R3 = 0.9200
Q1 = 2.860 Q2 = 1.972 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.70
NRTL (SPECIFIC PARAMETERS)	0.49
UNIQUAC (COMMON PARAMETERS)	0.95





(1) C2HCL3 ETHENE,TRICHLORO
(2) C2H6O ETHANOL
(3) H2O WATER

REINDERS W., DE MINJER C.H.
RECL.TRAV.CHIM.PAYS-BAS. 66(1947)552

TEMPERATURE = 67.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
86.383	10.319	3.299	0.281	11.957	87.762
69.826	22.701	7.472	0.959	19.942	79.100
56.424	30.025	13.550	2.141	25.443	72.415
47.884	33.520	18.596	4.331	29.723	65.946
34.719	36.728	28.553	9.949	35.086	54.965
26.130	37.956	35.914	13.654	36.192	50.154

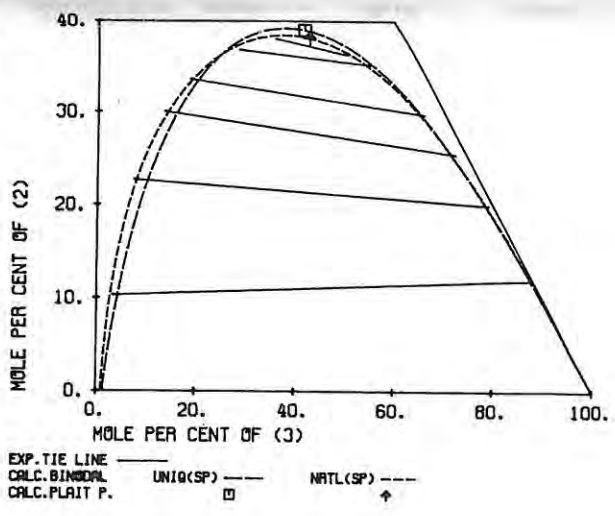
SPECIFIC MODEL PARAMETERS IN KELVIN

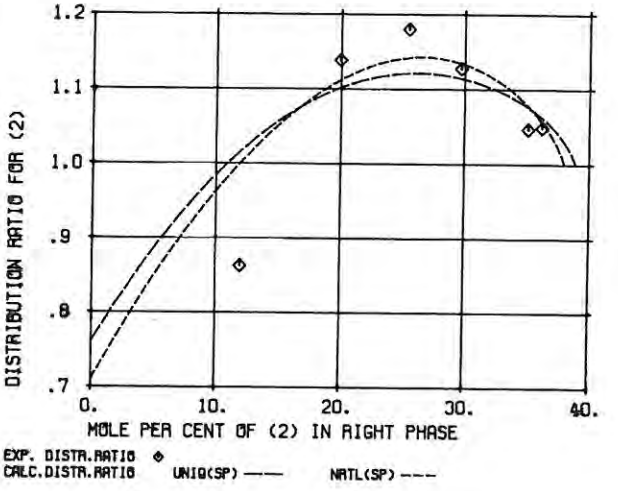
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	114.22	-165.92	-469.22	-137.36
1 3	742.70	432.30	1003.0	2212.9
2 3	-211.76	-54.337	-509.30	-83.304

R1 = 3.3092 R2 = 2.1055 R3 = 0.9200
Q1 = 2.860 Q2 = 1.972 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.88
NRTL (SPECIFIC PARAMETERS)	0.56





(1) C2HCL3 ETHENE,TRICHLORO

(2) C4H6O2 PROPENOIC ACID,2-METHYL

(3) H2O WATER

FROLOV A.F., ET AL.
ZH.PRIKL.KHIM.(LENINGRAD) 39(1966)1805

TEMPERATURE = 20.0 DEG C TYPE OF SYSTEM = 2

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
79.539	20.055	0.406	0.017	0.666	99.317
67.641	31.585	0.774	0.017	0.932	99.050
45.241	52.084	2.675	0.019	1.522	98.459
30.988	63.656	5.356	0.021	1.885	98.094
11.388	70.252	18.360	0.023	2.636	97.342

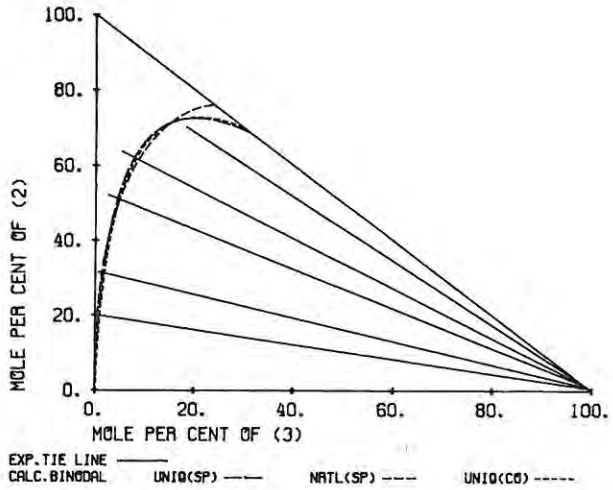
SPECIFIC MODEL PARAMETERS IN KELVIN

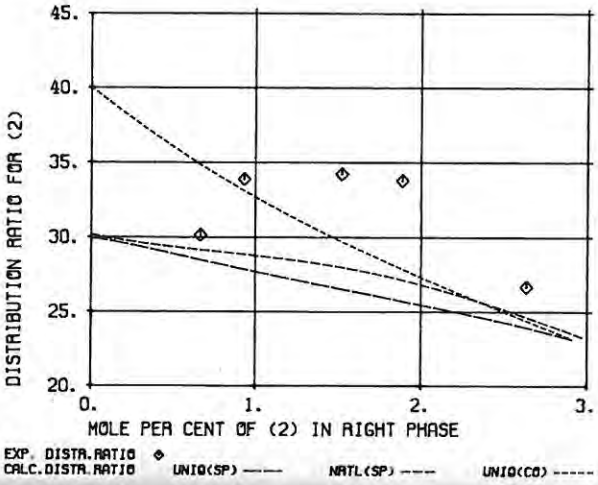
I	J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1	2	-127.82	190.59	-133.74	170.70
1	3	1457.8	1042.1	1832.8	1473.2
2	3	284.04	65.418	79.416	946.49

R1 = 3.3092 R2 = 3.3197 R3 = 0.9200
Q1 = 2.860 Q2 = 3.060 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.89
NRTL (SPECIFIC PARAMETERS)	1.09
UNIQUAC (COMMON PARAMETERS)	0.99





(1) C2HCL3 ETHENE,TRICHLORO

(2) C4H8O 2-BUTANONE

(3) H2O WATER

NEWMAN M., HAYWORTH C.B., TREYBAL R.E.
IND.ENG.CHEM. 41(1949)2039

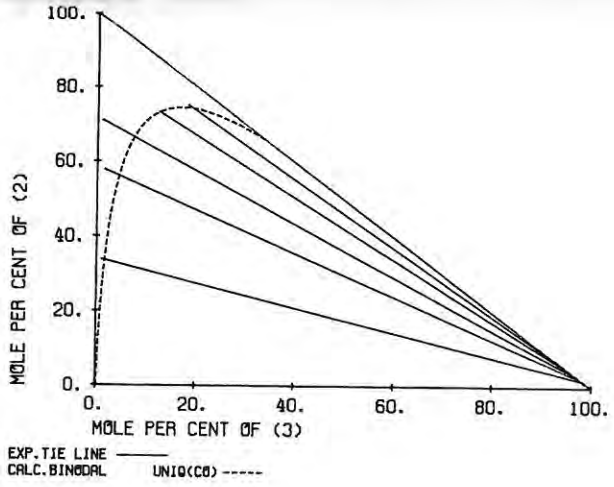
TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 2

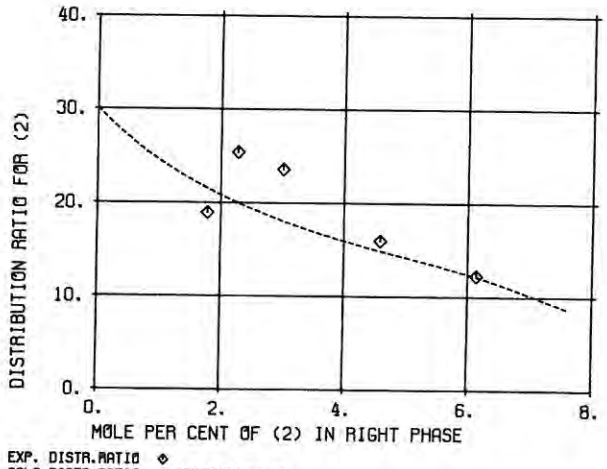
EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
65.149	33.750	1.101	0.055	1.782	98.163
40.638	57.774	1.588	0.053	2.275	97.672
27.948	70.976	1.076	0.048	3.013	96.939
14.218	73.327	12.455	0.034	4.584	95.382
6.590	75.064	18.346	0.029	6.136	93.835

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (COMMON PARAMETERS)	1.67





(1) C2HCL3 ETHENE,TRICHLORO

(2) C5H4O2 FURFURAL

(3) H2O WATER

RUCHAI N.S., RESHTO M.V., KHOLKIN YU.I.
ZH.PRIKL.KHIM.(LENINGRAD) 50(1977)2385

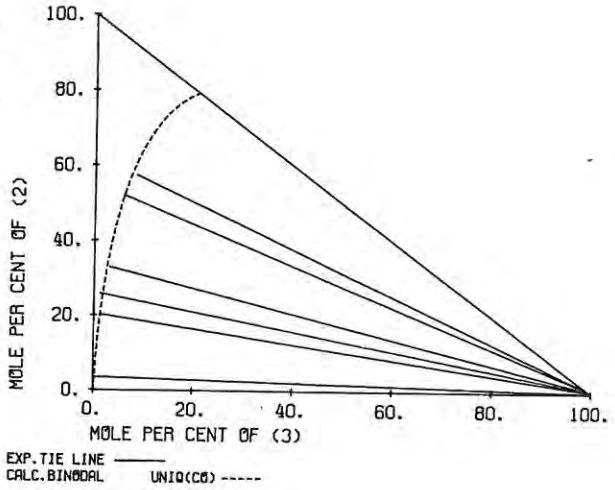
TEMPERATURE = 20.0 DEG C TYPE OF SYSTEM = 2

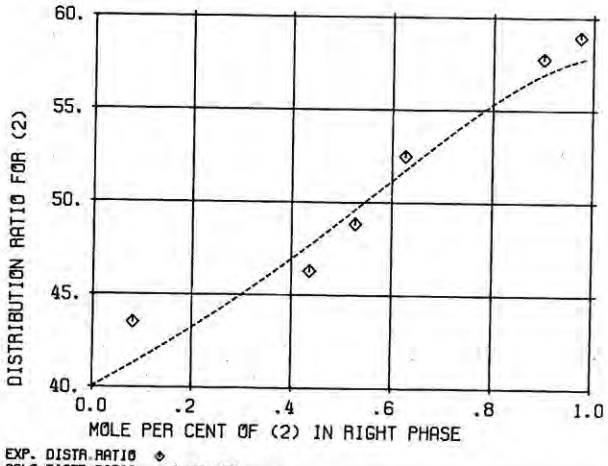
EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
96.478	3.522	0.0	0.008	0.081	99.911
78.458	20.179	1.362	0.008	0.436	99.556
72.893	25.766	1.341	0.008	0.528	99.464
63.904	32.873	3.223	0.008	0.626	99.365
42.085	52.012	5.903	0.009	0.900	99.091
34.161	57.384	8.455	0.010	0.974	99.016

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (COMMON PARAMETERS)	0.25





(1) C2HCL3 ETHENE,TRICHLORO

(2) C6H11NO HEXANOIC ACID,6-AMINO,LACTAM

(3) H2O WATER

TETTAMANTI K., NOGRADI M., SAWINSKY J.
PERIOD.POLYTECH.,CHEM.ENG. 4(1960)201

TEMPERATURE = 20.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
99.419	0.0	0.581	0.014	0.0	99.986
99.189	0.231	0.580	0.017	0.242	99.741
98.209	1.211	0.580	0.026	0.972	99.002
96.854	2.532	0.614	0.041	1.781	98.179
93.944	5.409	0.648	0.082	3.306	96.612
91.217	8.066	0.717	0.145	4.983	94.873
87.787	11.465	0.749	0.223	6.857	92.920
83.628	15.311	1.061	0.346	9.403	90.251
74.755	19.262	5.983	0.735	12.100	87.165

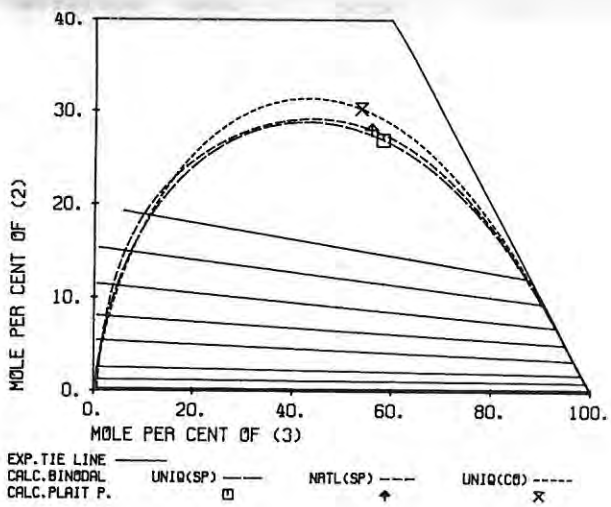
SPECIFIC MODEL PARAMETERS IN KELVIN

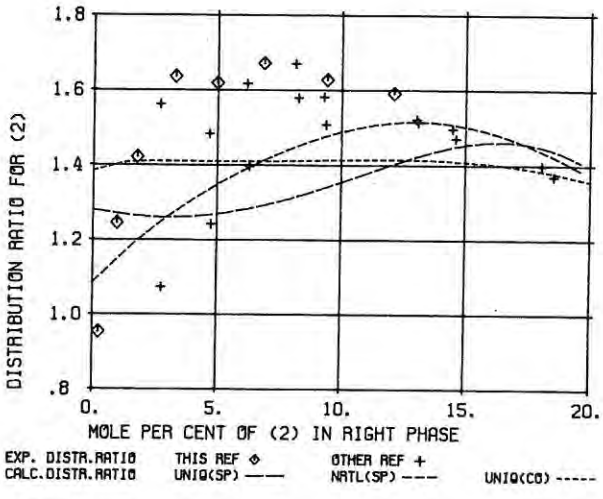
I	J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1	2	284.61	-173.08	-1743.8	-430.25
1	3	937.03	808.07	978.70	2026.7
2	3	-121.04	26.069	-661.97	-1289.9

R1 = 3.3092 R2 = 4.6106 R3 = 0.9200
Q1 = 2.860 Q2 = 3.724 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.09
NRTL (SPECIFIC PARAMETERS)	0.93
UNIQUAC (COMMON PARAMETERS)	1.16





(1) C2HCL3 ETHENE,TRICHLORO

(2) C6H11NO HEXANOIC ACID,6-AMINO,LACTAM

(3) H2O WATER

SEDMEROVA V., NOVAK J.P.
CHEM.PRUM. 16/41(1966)270

TEMPERATURE = 20.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
96.291	2.988	0.722	0.047	2.783	97.170
90.576	5.917	3.506	0.086	4.763	95.151
87.723	8.784	3.492	0.110	6.289	93.601
81.520	13.026	5.455	0.179	8.245	91.576
79.137	14.136	6.727	0.228	9.370	90.402
71.645	19.831	8.523	0.862	13.088	86.051
65.920	21.511	12.569	1.376	14.617	84.007
53.958	25.389	20.652	3.002	18.531	78.467

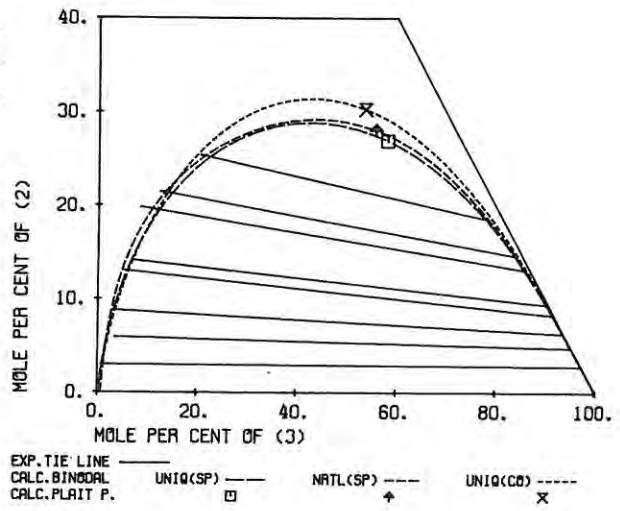
SPECIFIC MODEL PARAMETERS IN KELVIN

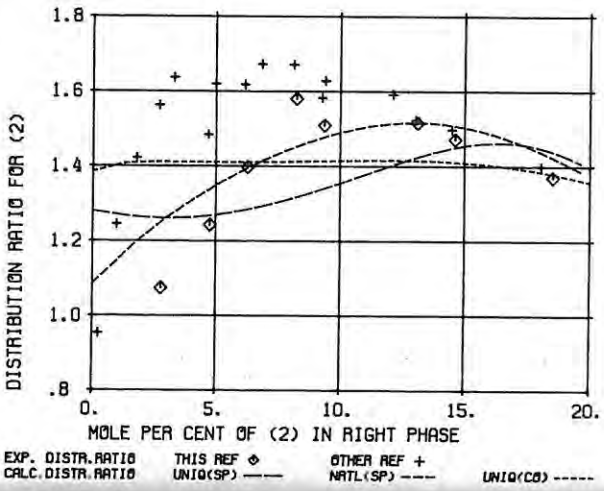
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	284.61	-173.08	-1743.8	-430.25
1 3	937.03	808.07	978.70	2026.7
2 3	-121.04	26.069	-661.97	-1289.9

R1 = 3.3092 R2 = 4.6106 R3 = 0.9200
Q1 = 2.860 Q2 = 3.724 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.77
NRTL (SPECIFIC PARAMETERS)	0.64
UNIQUAC (COMMON PARAMETERS)	0.55





(1) C2HCL3 ETHENE,TRICHLORO

(2) C6H11NO HEXANOIC ACID,6-AMINO,LACTAM

(3) H2O WATER

SEDMEROVA V., NOVAK J.P.
CHEM.PRUM. 16/41(1966)270

TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
94.350	4.218	1.432	0.047	2.699	97.254
90.227	6.954	2.818	0.086	4.688	95.226
86.523	9.991	3.486	0.110	6.176	93.715
80.320	13.585	6.095	0.278	8.131	91.591
77.969	14.680	7.350	0.374	9.276	90.351
66.457	19.836	13.706	1.134	13.022	85.844
63.021	21.699	15.280	1.585	14.489	83.925
50.480	25.270	24.251	3.223	18.059	78.717

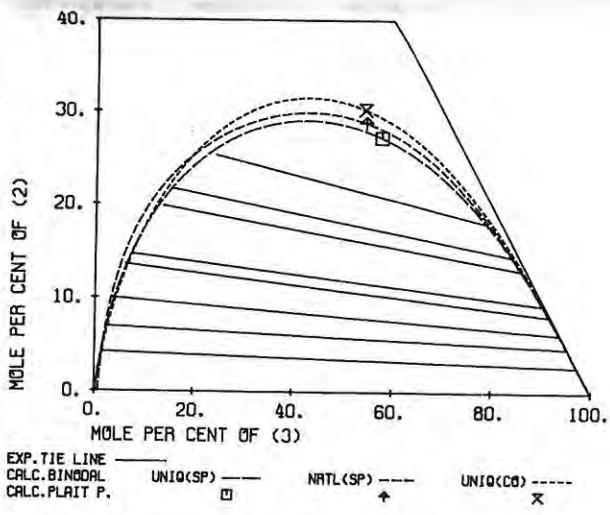
SPECIFIC MODEL PARAMETERS IN KELVIN

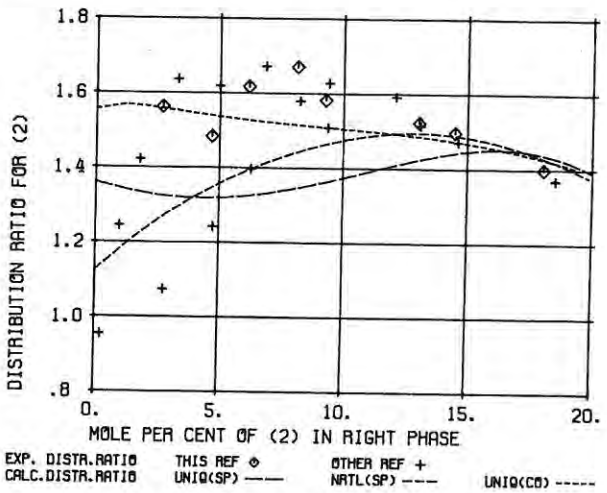
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	284.61	-173.08	-1743.8	-430.25
1 3	937.03	808.07	978.70	2026.7
2 3	-121.04	26.069	-661.97	-1289.9

R1 = 3.3092 R2 = 4.6106 R3 = 0.9200
Q1 = 2.860 Q2 = 3.724 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.59
NRTL (SPECIFIC PARAMETERS)	0.73
UNIQUAC (COMMON PARAMETERS)	0.49





(1) C2HCL3 ETHENE,TRICHLORO

(2) C6H11NO HEXANOIC ACID,6-AMINO,LACTAM

(3) H2O WATER

SEDMEROVA V., NOVAK J.P.
CHEM.PRUM. 16/41(1966)270

TEMPERATURE = 40.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
92.447	4.726	2.827	0.063	2.660	97.277
90.227	6.954	2.818	0.082	3.618	96.300
89.037	7.464	3.499	0.103	4.618	95.279
85.046	10.800	4.154	0.182	6.036	93.782
79.033	14.241	6.726	0.400	8.193	91.407
76.714	15.321	7.965	0.520	9.181	90.299
72.951	18.509	8.539	0.802	10.858	88.340
64.223	20.470	15.307	1.410	12.956	85.635
59.383	22.794	17.823	2.090	14.650	83.260
48.681	25.380	25.940	3.823	17.756	78.421

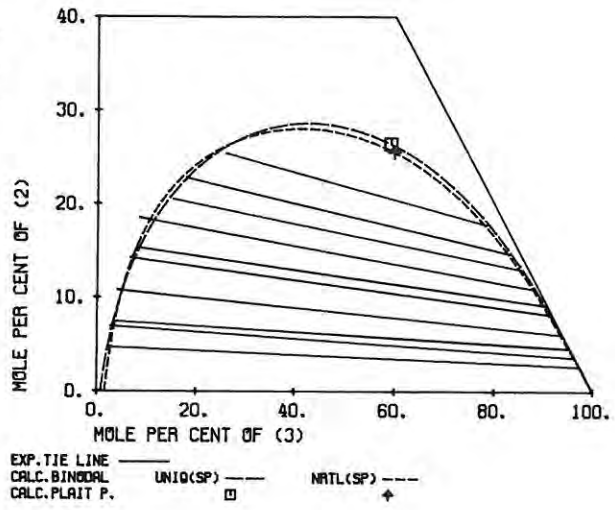
SPECIFIC MODEL PARAMETERS IN KELVIN

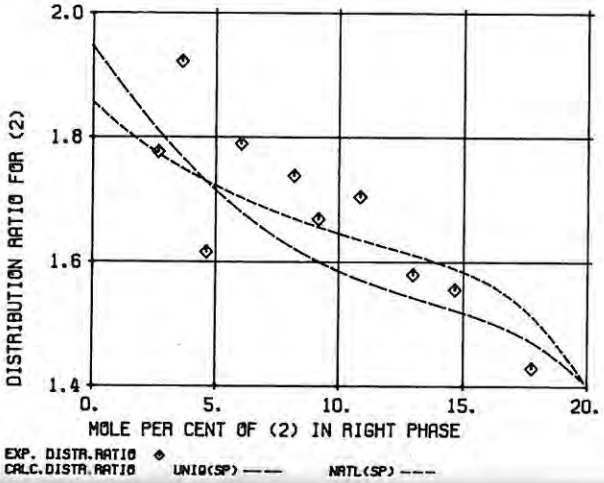
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	292.37	-169.67	724.20	-656.16
1 3	724.60	672.14	756.24	1799.6
2 3	-26.022	-58.173	42.957	-166.49

R1 = 3.3092 R2 = 4.6106 R3 = 0.9200
Q1 = 2.860 Q2 = 3.724 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS) 0.41
NRTL (SPECIFIC PARAMETERS) 0.43





(1) C2HCL3 ETHENE,TRICHLORO

(2) C10H14N2 NICOTINE

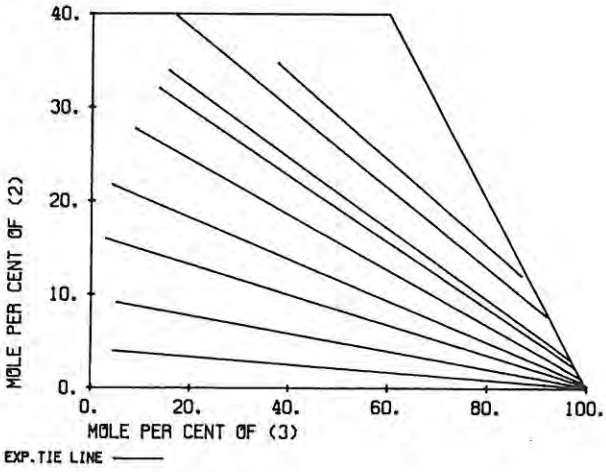
(3) H2O WATER

REILLY J., KELLEY D.F., OCONNOR M.
J.CHEM.SOC. (1941)275

TEMPERATURE = 17.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
91.396	3.939	4.664	0.014	0.055	99.932
85.612	9.121	5.267	0.011	0.151	99.838
81.099	15.948	2.952	0.017	0.353	99.630
74.074	21.708	4.218	0.014	0.557	99.428
63.407	27.725	8.868	0.024	1.125	98.851
54.306	32.012	13.682	0.041	2.239	97.721
50.559	33.922	15.520	0.069	3.064	96.868
43.171	39.839	16.990	0.357	7.706	91.937
27.671	34.727	37.602	1.069	12.021	86.910



(1) C2HCL302 ACETIC ACID,TRICHLORO

(2) C11H12N2O ANTIPYRINE

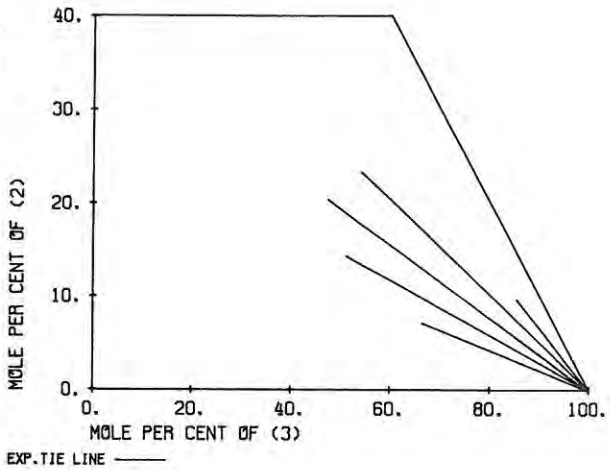
(3) H2O WATER

KRUPATKIN I.L., ROZHENTSOVA E.P.
ZH.FIZ.KHIM. 45(1971)556

TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 0

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
32.194	20.338	47.468	0.582	0.101	99.316
34.435	14.283	51.283	0.644	0.112	99.244
26.399	7.093	66.508	1.038	0.115	98.847
22.463	23.341	54.196	0.299	0.189	99.512
4.964	9.612	85.424	0.299	0.210	99.491



(1) C24H3804 PHTHALIC ACID,DI(2-ETHYLHEXYL) ESTER

(2) C2H2BR4 ETHANE,1,1,2,2-TETRABROMO

(3) C4H1003 DIETHYLENE GLYCOL

GARY L.H., CRICHTON J.S., FEILD R.
J.CHEM.ENG.DATA 3(1958)111

TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
96.416	0.0	3.584	0.246	0.0	99.754
85.594	10.867	3.540	0.294	3.325	96.381
75.039	21.465	3.496	0.318	7.189	92.493
64.742	31.805	3.453	0.381	11.746	87.873
54.464	41.792	3.744	0.495	17.215	82.290
44.681	51.620	3.699	0.720	23.942	75.337
34.604	60.776	4.619	1.399	32.713	65.888
24.176	68.782	7.042	2.839	44.912	52.248

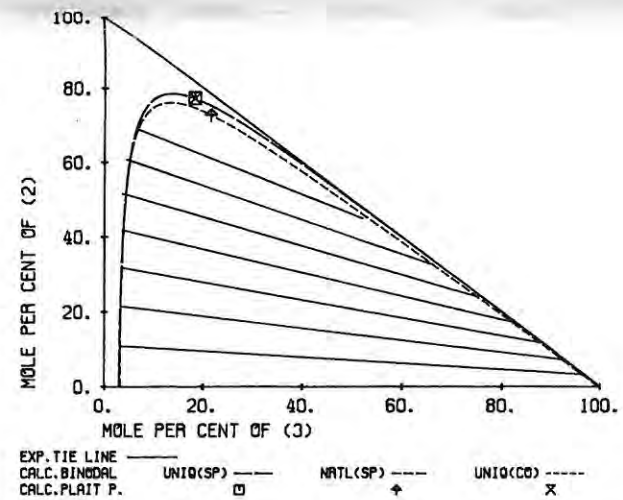
SPECIFIC MODEL PARAMETERS IN KELVIN

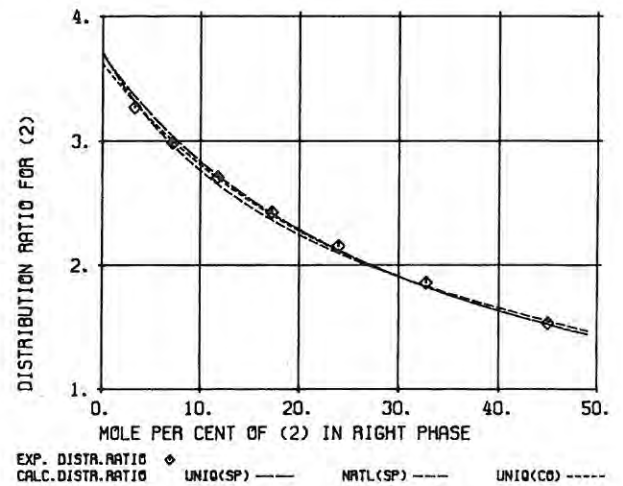
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	8.0875	27.927	-629.70	494.51
1	3	252.87	116.35	550.85	1305.1
2	3	127.01	-14.169	937.38	-371.82

R1 =16.1018 R2 = 4.6906 R3 = 4.0013
Q1 =12.848 Q2 = 3.784 Q3 = 3.568

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.61
NRTL (SPECIFIC PARAMETERS)	0.42
UNIQUAC (COMMON PARAMETERS)	0.61





(1) H2O WATER

(2) C2H2CL2O2 ACETIC ACID,DICHLORO

(3) C6H5CL BENZENE,CHLORO

PEAKE J.S., THOMPSON K.E.
IND.ENG.CHEM. 44(1952)2439

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
97.035	2.944	0.021	0.561	1.070	98.369
95.333	4.517	0.150	0.567	1.088	98.345
92.636	7.329	0.035	0.716	1.626	97.658
89.997	9.954	0.049	0.766	1.765	97.469
86.653	12.983	0.364	0.902	2.269	96.829
82.989	16.143	0.868	1.008	2.624	96.368
79.481	18.932	1.587	1.125	2.979	95.896
75.565	21.913	2.522	1.625	4.368	94.007

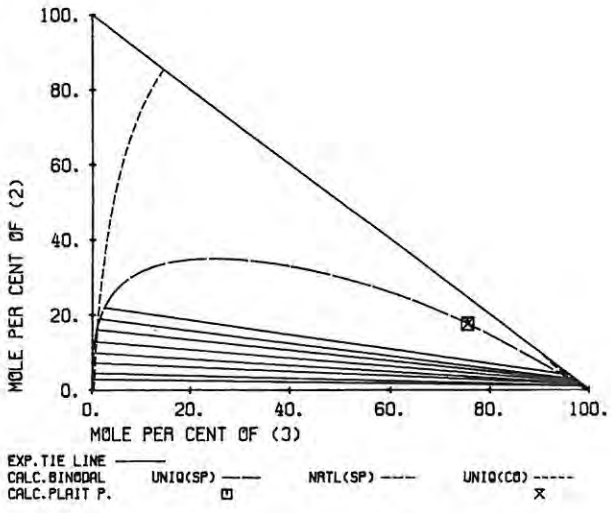
SPECIFIC MODEL PARAMETERS IN KELVIN

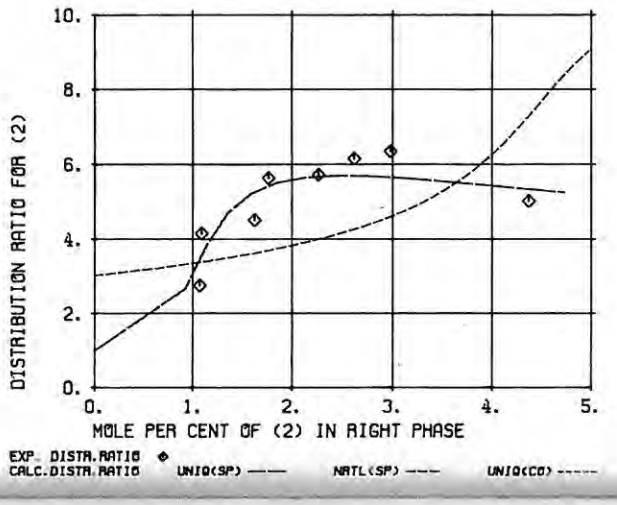
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	715.59	-343.46	592.30	-75.714
1 3	423.82	906.49	1145.7	999.01
2 3	-176.18	468.79	356.60	571.54

R1 = 0.9200 R2 = 3.3619 R3 = 3.8127
Q1 = 1.400 Q2 = 2.908 Q3 = 2.844

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.16
NRTL (SPECIFIC PARAMETERS)	0.45
UNIQUAC (COMMON PARAMETERS)	0.16





(1) C2H3CL3 ETHANE,1,1,2-TRICHLORO

(2) C3H6O 2-PROPANONE

(3) H2O WATER

TREYBAL R.E., WEBER L.D., DALEY J.F.
IND.ENG.CHEM. 38(1946)817

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
80.186	17.724	2.090	0.074	1.937	97.989
77.070	20.375	2.556	0.077	2.125	97.799
59.013	35.965	5.022	0.102	4.827	95.071
52.817	41.350	5.833	0.113	6.033	93.855
49.178	44.001	6.821	0.124	6.857	93.019
37.689	52.725	9.586	0.166	9.932	89.902
35.994	53.787	10.219	0.171	10.366	89.463
34.969	54.354	10.677	0.175	10.707	89.117
32.199	55.551	12.249	0.191	11.648	88.161
30.697	56.191	13.112	0.203	12.329	87.467
25.040	58.340	16.620	0.292	14.983	84.725
19.164	59.371	21.465	0.405	18.131	81.464
14.560	56.964	28.476	0.779	21.978	77.243
9.943	52.482	37.575	1.501	27.388	71.110

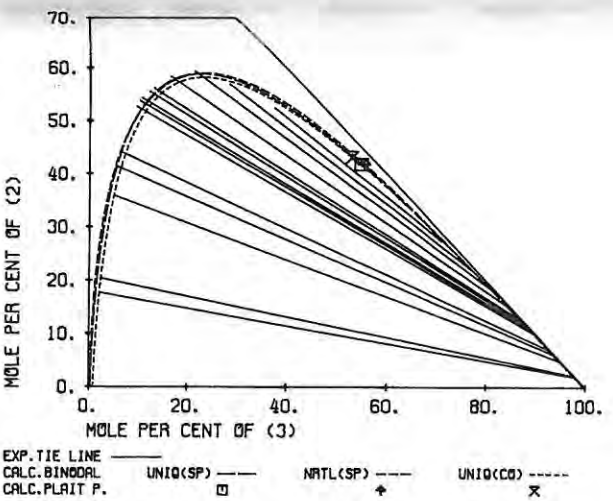
SPECIFIC MODEL PARAMETERS IN KELVIN

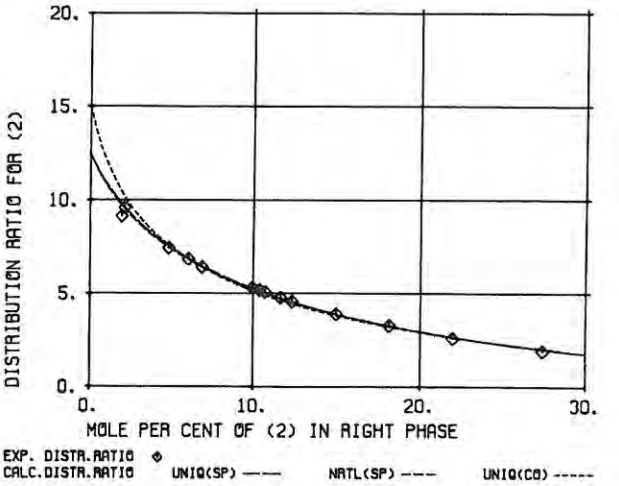
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	168.08	-158.59	-198.14	21.091
1 3	1005.7	229.73	1300.9	1237.3
2 3	314.25	-55.813	9.0838	571.74

R1 = 3.5260 R2 = 2.5735 R3 = 0.9200
Q1 = 2.948 Q2 = 2.336 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.48
NRTL (SPECIFIC PARAMETERS)	0.59
UNIQUAC (COMMON PARAMETERS)	0.75





(1) C2H3CL3 ETHANE,1,1,2-TRICHLORO

(2) C4H8O 2-BUTANONE

(3) H2O WATER

NEWMAN M., HAYWORTH C.B., TREYBAL R.E.
IND.ENG.CHEM. 41(1949)2039

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 2

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
90.145	9.855	0.0	0.056	0.258	99.686
70.165	26.562	3.272	0.051	0.725	99.224
51.008	43.421	5.571	0.043	1.574	98.384
36.781	55.773	7.446	0.033	2.482	97.484
23.102	64.814	12.084	0.024	3.536	96.440
10.149	70.684	19.167	0.017	5.254	94.729

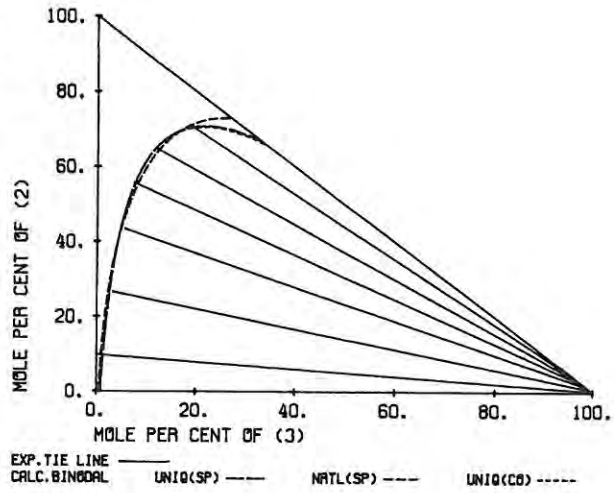
SPECIFIC MODEL PARAMETERS IN KELVIN

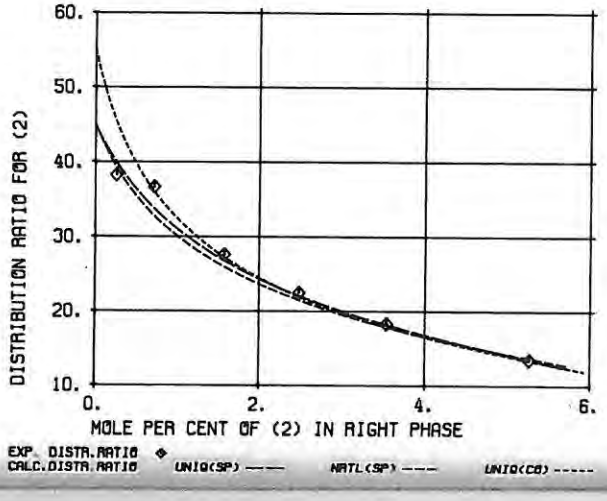
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-67.170	12.304	-145.28	-61.099
1 3	758.81	308.03	1062.7	1104.1
2 3	337.47	4.4505	88.755	856.59

R1 = 3.5260 R2 = 3.2479 R3 = 0.9200
Q1 = 2.948 Q2 = 2.876 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.34
NRTL (SPECIFIC PARAMETERS)	0.40
UNIQUAC (COMMON PARAMETERS)	0.35





(1) C2H3N ACETIC ACID,NITRILE

(2) C2H6O ETHANOL

(3) C6H14 HEXANE

SUGI H., KATAYAMA T.
J.CHEM.ENG.JPN. 11(1978)167

TEMPERATURE = 40.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
81.530	8.790	9.680	10.030	1.660	88.310
76.980	12.990	10.030	10.750	2.510	86.740
73.240	16.220	10.540	11.220	3.320	85.460
68.080	19.420	12.500	11.950	4.330	83.720
64.640	21.690	13.670	13.320	5.670	81.010
61.470	23.310	15.220	14.070	7.720	78.210
52.520	26.950	20.530	16.420	10.860	72.720
50.030	27.480	22.490	18.190	12.690	69.120

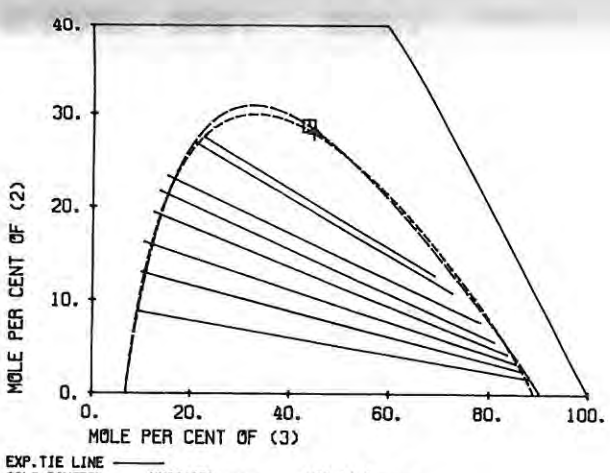
SPECIFIC MODEL PARAMETERS IN KELVIN

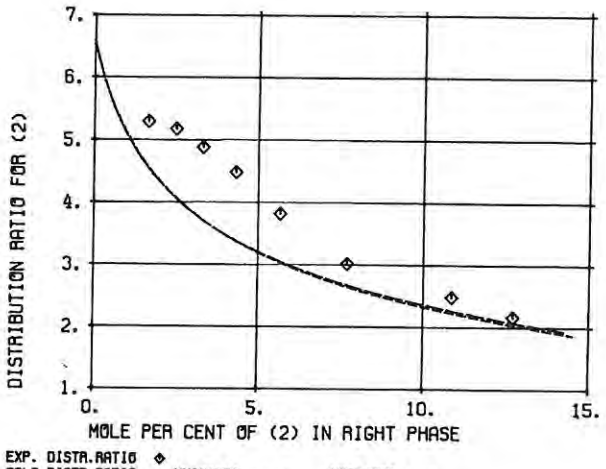
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	138.33	-238.27	225.23	-547.10
1 3	38.603	533.51	652.38	411.80
2 3	-12.562	231.51	248.66	0.82503

R1 = 1.8701 R2 = 2.1055 R3 = 4.4998
Q1 = 1.724 Q2 = 1.972 Q3 = 3.856

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.02
NRTL (SPECIFIC PARAMETERS)	1.16





(1) C3H3N PROPENOIC ACID,NITRILE
(2) C2H3N ACETIC ACID,NITRILE
(3) H2O WATER

PROKHOROVA V.V., ET AL.
ZH.FIZ.KHIM. 38(1964)1488

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
86.677	3.232	10.092	1.482	0.821	97.697
48.497	35.445	16.058	1.917	7.185	90.898
12.975	51.486	35.539	2.443	20.379	77.178

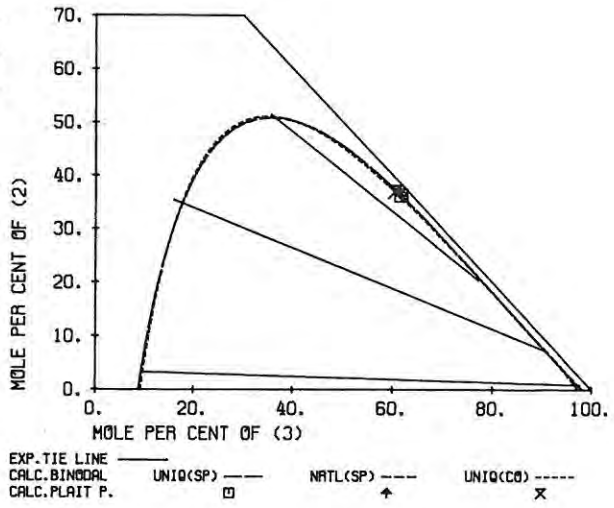
SPECIFIC MODEL PARAMETERS IN KELVIN

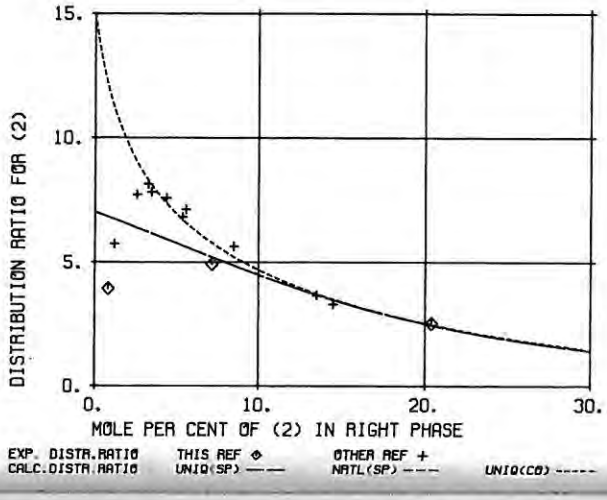
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	24.992	21.440	-27.096	95.447
1 3	326.12	228.14	316.42	993.78
2 3	140.19	115.83	76.406	590.18

R1 = 2.3144 R2 = 1.8701 R3 = 0.9200
Q1 = 2.052 Q2 = 1.724 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.17
NRTL (SPECIFIC PARAMETERS)	1.19
UNIQUAC (COMMON PARAMETERS)	1.24





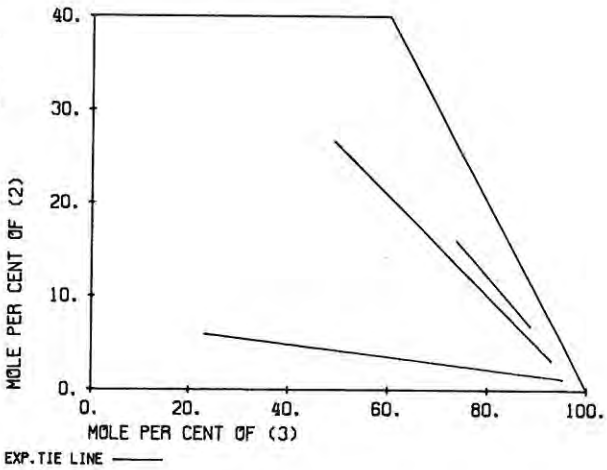
(1) C3H3N PROPENOIC ACID,NITRILE
(2) C2H3N ACETIC ACID,NITRILE
(3) H2O WATER

PROKHOROVA V.V., ET AL.
ZH.FIZ.KHIM. 38(1964)1488

TEMPERATURE = 70.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
77.016	0.0	22.984	3.831	0.0	96.169
70.780	5.920	23.300	3.691	1.193	95.117
24.243	26.644	49.113	4.025	3.141	92.833
10.300	15.964	73.736	4.594	6.815	88.591



(1) C3H3N PROPENOIC ACID,NITRILE

(2) C2H3N ACETIC ACID,NITRILE

(3) H2O WATER

VOLPICELLI G.
J.CHEM.ENG.DATA 13(1968)150

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
90.000	0.0	10.000	2.600	0.0	97.400
81.600	6.900	11.500	2.700	1.200	96.100
67.700	20.100	12.200	2.800	2.600	94.600
57.800	26.900	15.300	2.700	3.300	94.000
58.400	27.400	14.200	2.500	3.500	94.000
49.900	33.400	16.700	2.300	4.400	93.300
42.800	36.900	20.300	2.300	5.400	92.300
40.600	39.900	19.500	2.500	5.600	91.900
30.600	48.000	21.400	2.500	8.500	89.000
19.300	49.400	31.300	2.500	13.500	84.000
14.400	48.000	37.600	2.600	14.500	82.900

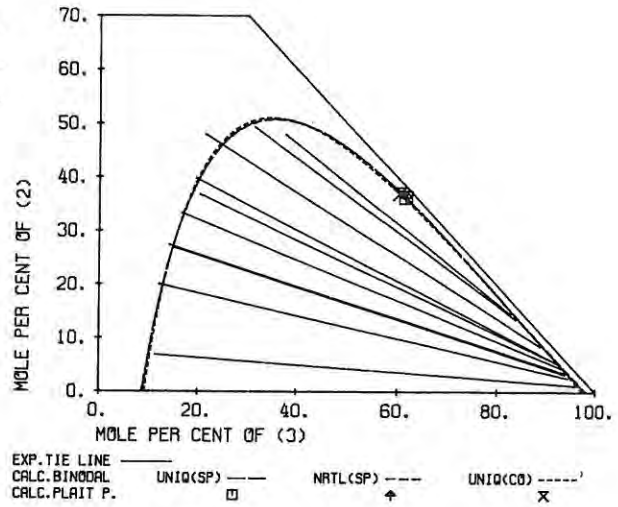
SPECIFIC MODEL PARAMETERS IN KELVIN

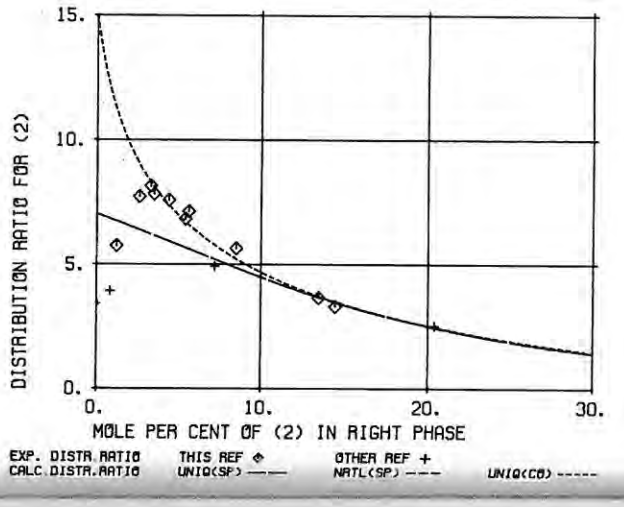
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	24.992	21.440	-27.096	95.447
1	3	326.12	228.14	316.42	993.78
2	3	140.19	115.83	76.406	590.18

R1 = 2.3144 R2 = 1.8701 R3 = 0.9200
Q1 = 2.052 Q2 = 1.724 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC	(SPECIFIC PARAMETERS)	1.08
NRTL	(SPECIFIC PARAMETERS)	1.07
UNIQUAC	(COMMON PARAMETERS)	0.90





(1) C3H3N PROPENOIC ACID,NITRILE

(2) C2H3N ACETIC ACID,NITRILE

(3) H2O WATER

VOLPICELLI G.
J.CHEM.ENG.DATA 13(1968)150

TEMPERATURE = 40.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
88.500	0.0	11.500	2.800	0.0	97.200
75.000	10.000	15.000	3.000	1.000	96.000
76.300	9.800	13.900	2.500	1.100	96.400
78.000	10.300	11.700	2.800	1.200	96.000
70.500	14.200	15.300	2.700	1.700	95.600
62.300	21.000	16.700	3.300	2.400	94.300
60.000	21.900	18.100	2.500	3.200	94.300
49.700	29.600	20.700	2.900	4.100	93.000
47.500	31.200	21.300	2.600	4.600	92.800
47.200	30.300	22.500	3.000	5.100	91.900
42.700	34.500	22.800	2.800	5.600	91.600
28.000	40.400	31.600	3.000	8.700	88.300
27.300	41.400	31.300	3.200	9.200	87.600
24.600	42.700	32.700	3.400	9.600	87.000
22.200	43.200	34.600	2.600	9.600	87.800
21.800	41.500	36.700	3.400	11.700	84.900

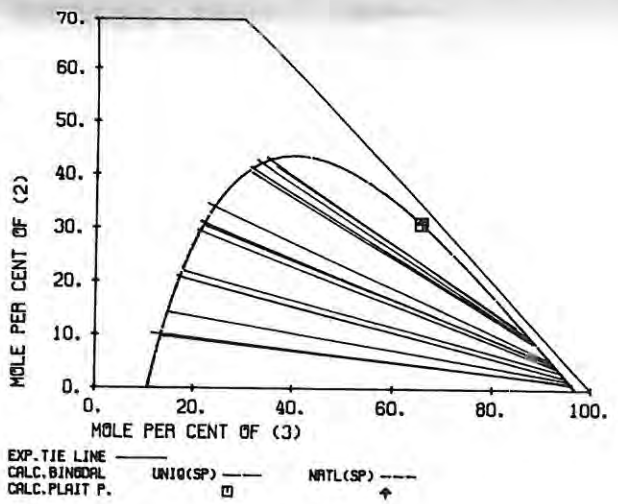
SPECIFIC MODEL PARAMETERS IN KELVIN

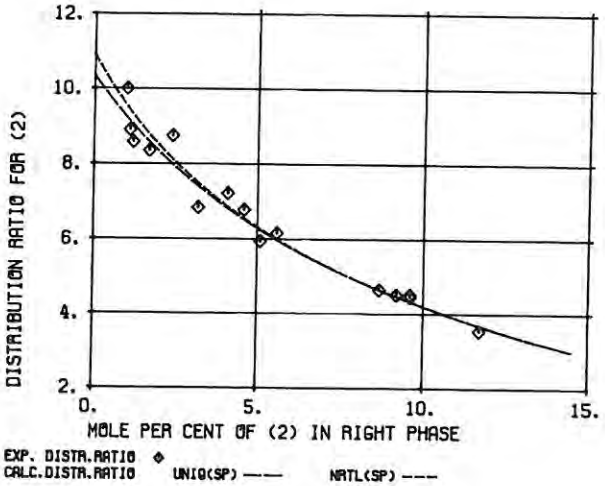
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	-1.5166	-39.879	-14.134	-95.855
1	3	343.80	183.69	316.65	909.03
2	3	44.540	190.77	-40.129	731.12

R1 = 2.3144 R2 = 1.8701 R3 = 0.9200
Q1 = 2.052 Q2 = 1.724 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC	(SPECIFIC PARAMETERS)	0.52
NRTL	(SPECIFIC PARAMETERS)	0.52





(1) C3H3N PROPENOIC ACID,NITRILE

(2) C2H3N ACETIC ACID,NITRILE

(3) H2O WATER

VOLPICELLI G.
J.CHEM.ENG.DATA 13(1968)150

TEMPERATURE = 60.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
82.700	0.0	17.300	3.300	0.0	96.700
68.800	11.600	19.600	3.600	1.400	95.000
64.800	13.300	21.900	3.300	1.800	94.900
57.800	17.200	25.000	3.300	2.300	94.400
43.700	25.900	30.400	3.800	4.600	91.600
21.000	30.800	48.200	5.300	11.600	83.100

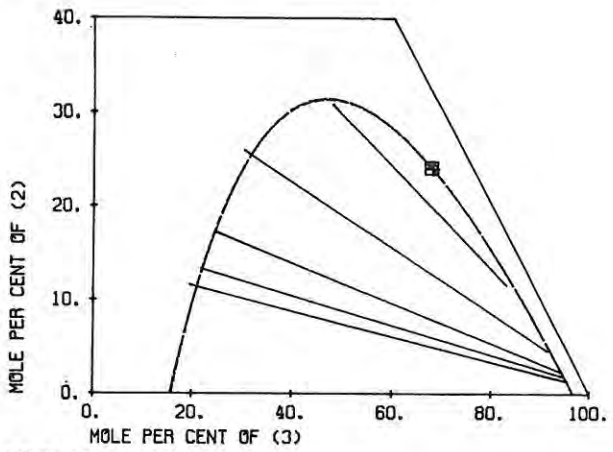
SPECIFIC MODEL PARAMETERS IN KELVIN

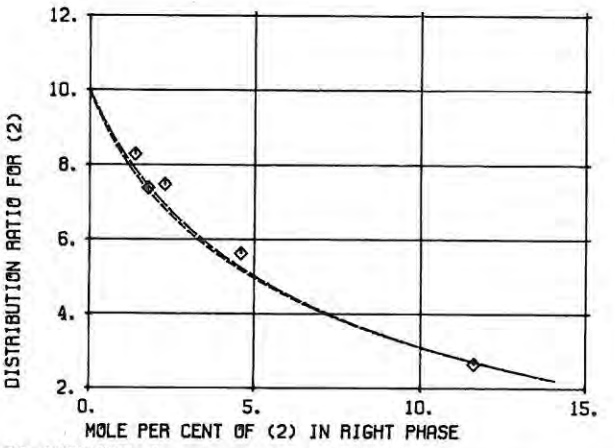
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	-24.772	-76.230	70.273	-239.95
1	3	277.79	210.73	217.48	1023.5
2	3	-73.051	259.73	-199.99	845.19

R1 = 2.3144 R2 = 1.8701 R3 = 0.9200
Q1 = 2.052 Q2 = 1.724 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC	(SPECIFIC PARAMETERS)	0.50
NRTL	(SPECIFIC PARAMETERS)	0.48





(1) C4H8O2 ACETIC ACID,ETHYL ESTER

(2) C2H3N ACETIC ACID,NITRILE

(3) H2O WATER

SUGI H., KATAYAMA T.
J.CHEM.ENG.JPN. 11(1978)167

TEMPERATURE = 60.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
62.310	12.770	24.920	1.080	2.100	96.820
55.000	17.740	27.260	1.170	2.990	95.840
42.540	23.010	34.450	1.180	4.520	94.300
35.540	25.720	38.740	1.210	5.730	93.060
29.630	26.970	43.400	1.230	7.060	91.710
25.180	27.490	47.330	1.510	8.000	90.490
15.790	25.810	58.400	2.230	11.540	86.230

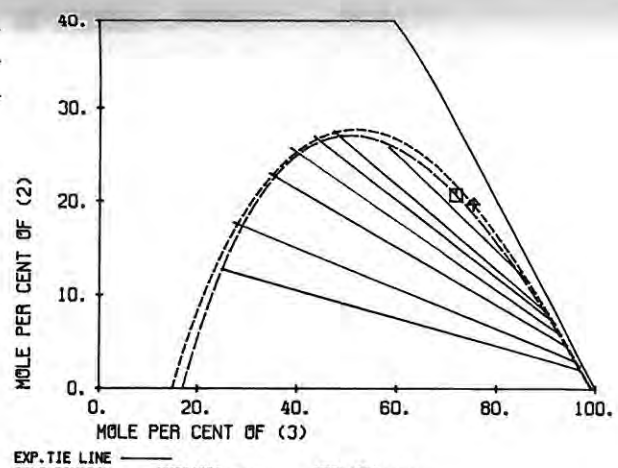
SPECIFIC MODEL PARAMETERS IN KELVIN

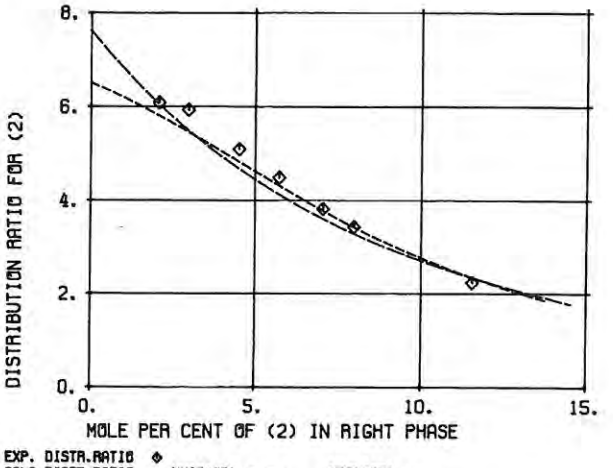
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	-190.08	155.03	266.96	-178.44
1	3	310.96	194.56	134.91	1546.3
2	3	-182.01	317.08	-475.89	1235.4

R1 = 3.4786 R2 = 1.8701 R3 = 0.9200
Q1 = 3.116 Q2 = 1.724 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC	(SPECIFIC PARAMETERS)	0.94
NRTL	(SPECIFIC PARAMETERS)	0.38





(1) C6H5CL BENZENE,CHLORO

(2) C2H3N ACETIC ACID,NITRILE

(3) H2O WATER

VENKATA SIVA RAMA RAO C. ET AL.
J.CHEM.ENG.DATA 23(1978)23

TEMPERATURE = 31.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
81.147	6.565	12.288	0.116	2.085	97.799
73.172	15.247	11.581	0.153	4.489	95.358
66.028	21.643	12.329	0.158	6.984	92.857
59.681	28.624	11.695	0.178	8.001	91.821
52.394	35.824	11.782	0.197	8.659	91.144
45.865	42.672	11.463	0.201	10.444	89.355
40.830	47.183	11.988	0.221	10.912	88.867

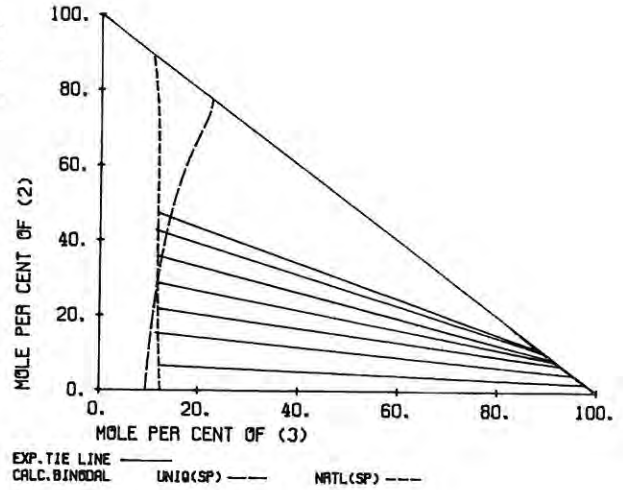
SPECIFIC MODEL PARAMETERS IN KELVIN

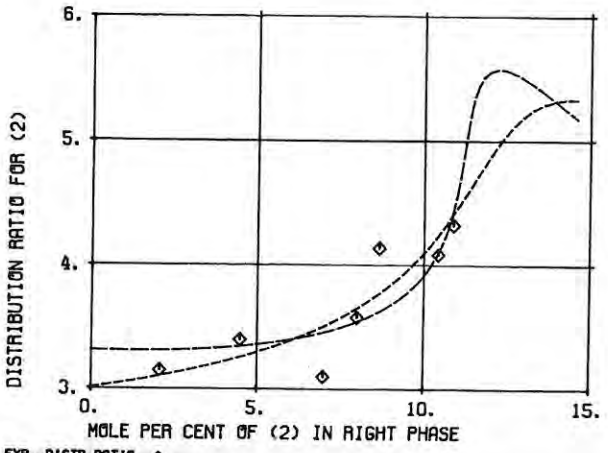
I J	UNIQUAC AIJ	AJI	NRTL(ALPHA=.2) AIJ	AJI
1 2	157.13	131.76	-12.646	548.56
1 3	226.88	246.74	172.47	1842.3
2 3	299.50	102.75	593.60	317.94

R1 = 3.8127 R2 = 1.8701 R3 = 0.9200
Q1 = 2.844 Q2 = 1.724 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.82
NRTL (SPECIFIC PARAMETERS)	0.23





(1) C7H16 HEPTANE

(2) C6H6 BENZENE

(3) C2H3N ACETIC ACID,NITRILE

HARTWIG G.M., HOOD G.C., MAYCOCK R.L.
J.PHYS.CHEM. 59(1955)52

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
85.599	6.381	8.019	4.782	3.588	91.630
76.395	12.322	11.283	6.229	7.869	85.902
63.290	19.775	16.935	9.344	13.907	76.749

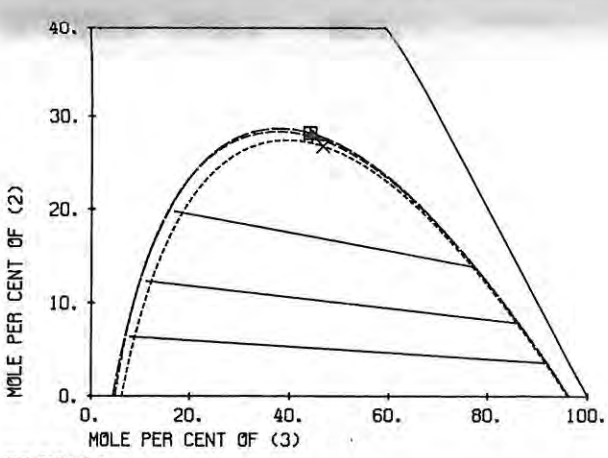
SPECIFIC MODEL PARAMETERS IN KELVIN

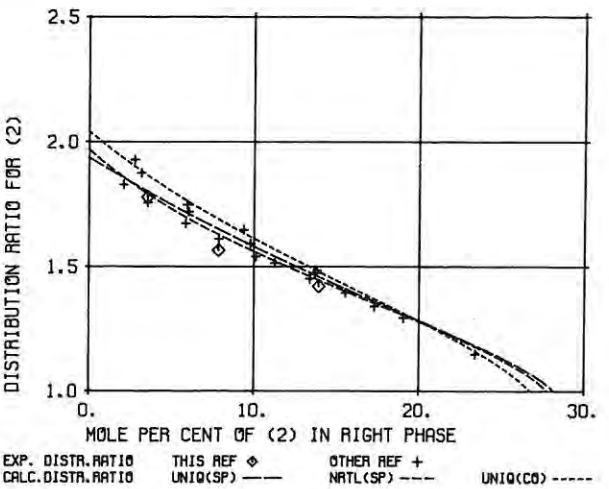
I J	UNIQUAC AIJ	AJI	NRTL(ALPHA=.2) AIJ	AJI
1 2	-77.340	119.27	-82.539	-170.79
1 3	632.92	29.945	557.12	689.63
2 3	18.087	72.756	-239.57	215.35

R1 = 5.1742 R2 = 3.1878 R3 = 1.8701
Q1 = 4.396 Q2 = 2.400 Q3 = 1.724

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.45
NRTL (SPECIFIC PARAMETERS)	0.44
UNIQUAC (COMMON PARAMETERS)	0.82





(1) C7H16 HEPTANE
(2) C6H6 BENZENE
(3) C2H3N ACETIC ACID,NITRILE

WERNER G., SCHUBERTH H.
J.PRAKT.CHEM. 4,31(1966)225

TEMPERATURE = 20.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
88.600	5.400	6.000	3.900	2.800	93.300
87.800	6.000	6.200	4.000	3.200	92.800
81.800	10.500	7.700	4.600	6.000	89.400
81.800	10.500	7.700	4.600	6.100	89.300
74.800	15.500	9.700	5.500	9.400	85.100
74.600	15.600	9.800	5.700	9.800	84.500
67.900	20.200	11.900	7.100	13.700	79.200
68.400	20.500	11.100	6.900	13.800	79.300

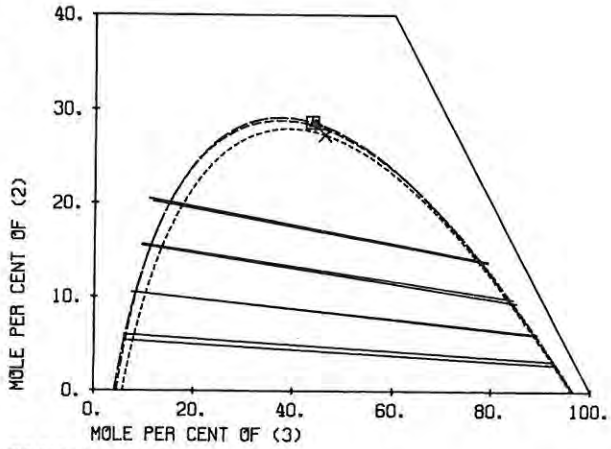
SPECIFIC MODEL PARAMETERS IN KELVIN

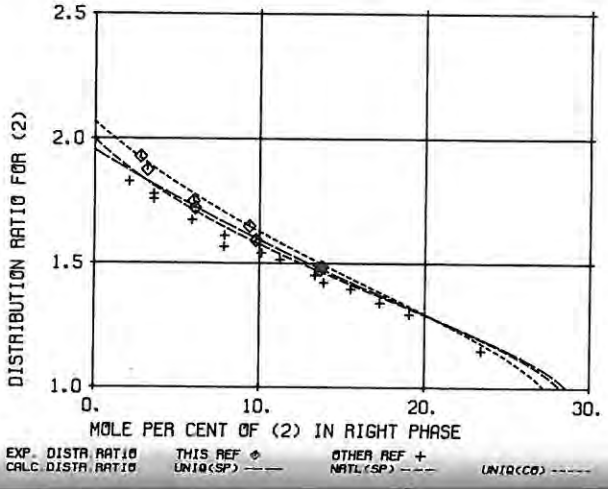
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-77.340	119.27	-82.539	-170.79
1 3	632.92	29.945	557.12	689.63
2 3	18.087	72.756	-239.57	215.35

R1 = 5.1742 R2 = 3.1878 R3 = 1.8701
Q1 = 4.396 Q2 = 2.400 Q3 = 1.724

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.85
NRTL (SPECIFIC PARAMETERS)	0.81
UNIQUAC (COMMON PARAMETERS)	1.66





(1) C7H16 HEPTANE
(2) C6H6 BENZENE
(3) C2H3N ACETIC ACID,NITRILE

PALMER D.A., SMITH B.D.
J.CHEM.ENG.DATA 17(1972)71

TEMPERATURE = 45.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
84.910	3.420	11.670	6.830	1.880	91.290
79.870	5.620	14.510	7.210	3.250	89.540
74.510	9.070	16.420	8.430	5.520	86.050
71.850	11.040	17.110	9.100	6.840	84.060
63.200	14.550	22.250	11.880	10.020	78.100
58.070	17.270	24.660	12.420	12.290	75.290
56.170	17.090	26.740	14.320	13.330	72.350
55.060	17.710	27.230	16.190	13.560	70.250
37.200	18.820	43.980	24.600	17.370	58.030

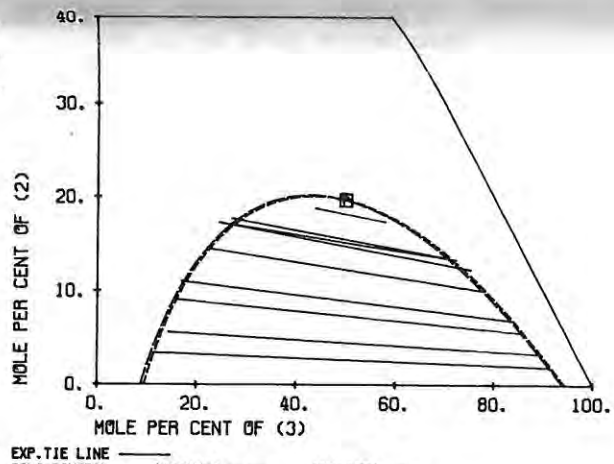
SPECIFIC MODEL PARAMETERS IN KELVIN

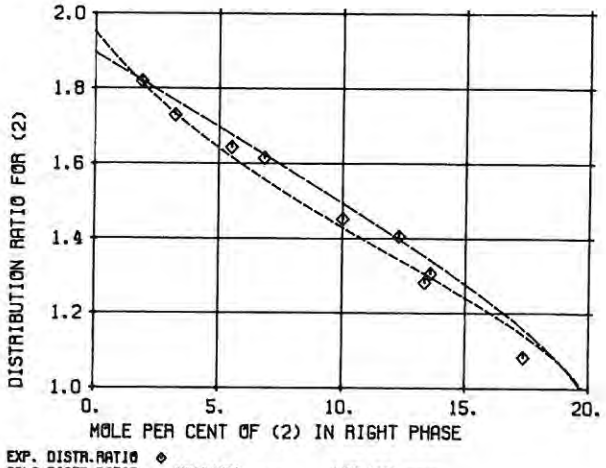
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-70.322	55.844	-126.34	-285.45
1 3	590.26	15.951	438.50	697.86
2 3	-17.008	71.450	-354.42	191.76

R1 = 5.1742 R2 = 3.1878 R3 = 1.8701
Q1 = 4.396 Q2 = 2.400 Q3 = 1.724

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.66
NRTL (SPECIFIC PARAMETERS)	0.60





(1) C7H16 HEPTANE

(2) C6H6 BENZENE

(3) C2H3N ACETIC ACID,NITRILE

SETHY A., CULLINAN H.T.
AICHE J. 21(1975)571

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
93.710	0.0	6.290	3.810	0.0	96.190
88.960	3.840	7.200	4.420	2.100	93.480
86.070	6.310	7.620	5.140	3.590	91.270
80.100	9.890	10.010	6.000	5.910	88.090
76.690	12.730	10.580	6.080	7.900	86.020
71.280	15.600	13.120	7.230	10.120	82.650
68.970	17.050	13.980	7.240	11.260	81.500
64.650	19.410	15.940	8.490	13.370	78.140
60.600	21.700	17.700	9.840	15.540	74.620
56.190	23.190	20.620	10.800	17.290	71.910
52.340	24.670	22.990	12.380	19.060	68.560
40.650	26.950	32.400	18.550	23.460	57.990

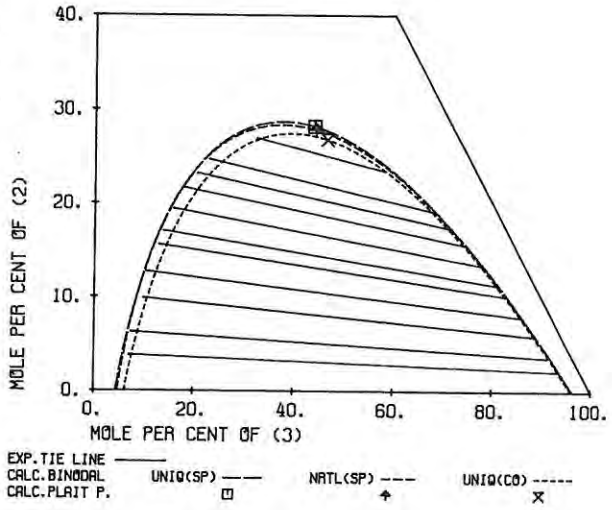
SPECIFIC MODEL PARAMETERS IN KELVIN

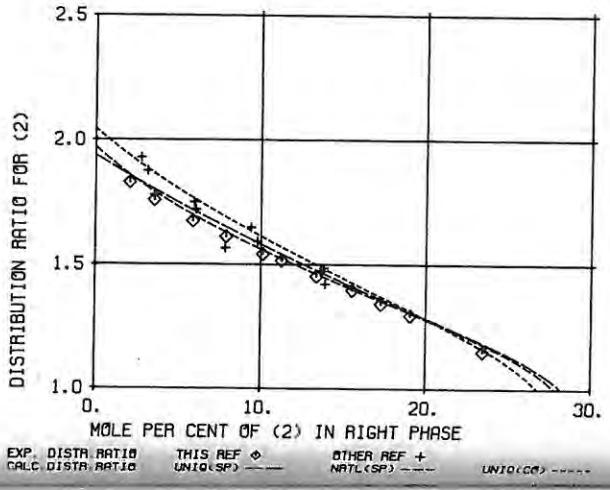
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-77.340	119.27	-82.539	-170.79
1 3	632.92	29.945	557.12	689.63
2 3	18.087	72.756	-239.57	215.35

R1 = 5.1742 R2 = 3.1878 R3 = 1.8701
Q1 = 4.396 Q2 = 2.400 Q3 = 1.724

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.45
NRTL (SPECIFIC PARAMETERS)	0.40
UNIQUAC (COMMON PARAMETERS)	0.98





(1) C15H32 PENTADECANE

(2) C6H6 BENZENE

(3) C2H3N ACETIC ACID,NITRILE

BONDARENKO M.F., ET AL.
KHIM.TEKHNOL.TOPL.MASEL (1972)4,8

TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
77.188	15.827	6.984	0.393	5.843	93.765
74.006	18.335	7.659	0.442	7.719	91.839
70.626	21.096	8.278	0.519	10.759	88.722
65.559	24.545	9.896	0.599	13.567	85.834
60.984	28.370	10.646	0.682	16.381	82.937

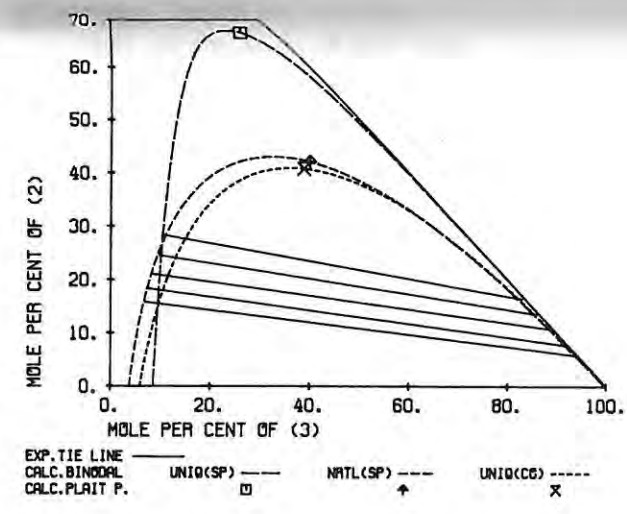
SPECIFIC MODEL PARAMETERS IN KELVIN

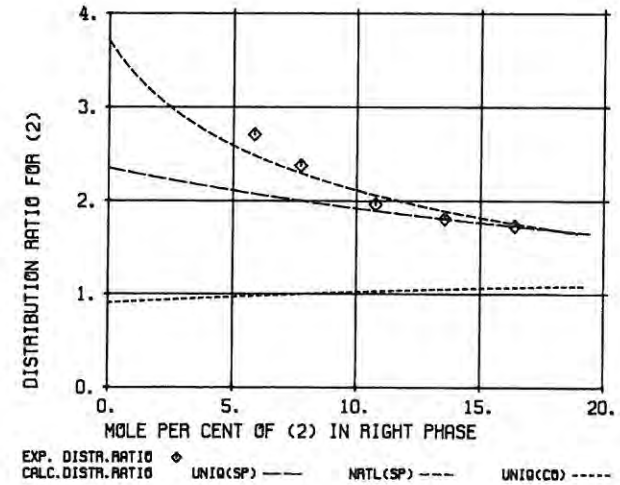
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	7.5319	27.842	-412.18	-154.01
1 3	436.19	254.05	492.91	1556.3
2 3	68.867	3.1813	167.74	-358.67

R1 =10.5694 R2 = 3.1878 R3 = 1.8701
Q1 = 8.716 Q2 = 2.400 Q3 = 1.724

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.93
NRTL (SPECIFIC PARAMETERS)	0.38
UNIQUAC (COMMON PARAMETERS)	3.94





(1) C6H6 BENZENE

(2) C2H3N ACETIC ACID,NITRILE

(3) H2O WATER

HARTWIG G.M., HOOD G.C., MAYCOCK R.L.
J.PHYS.CHEM. 59(1955)52

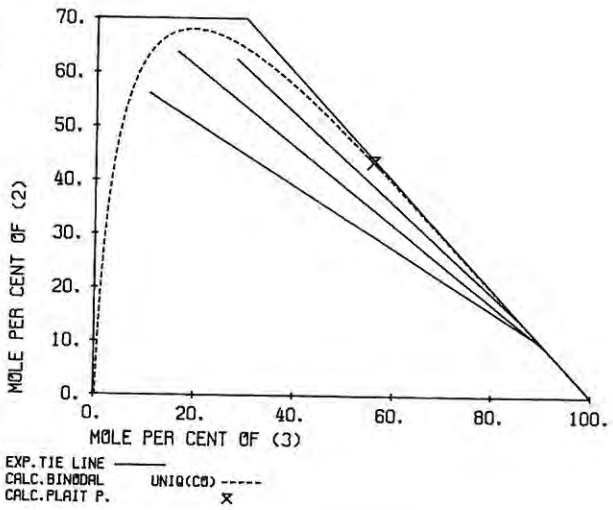
TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

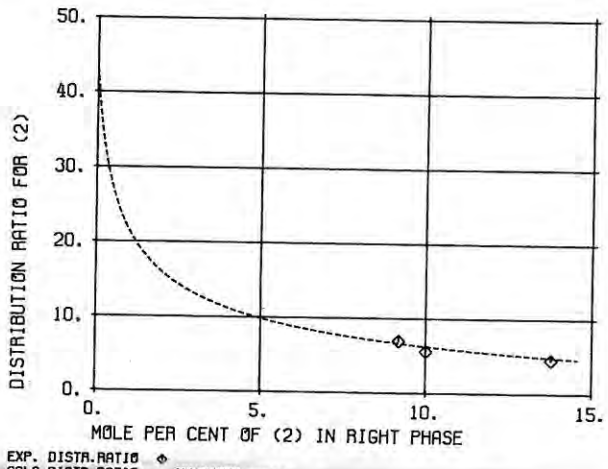
EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
19.893	63.747	16.360	0.0	9.169	90.831
33.226	56.039	10.735	0.0	9.998	90.002
9.340	62.394	28.266	0.0	13.782	86.218

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (COMMON PARAMETERS) 3.34





(1) C6H12O 2-PENTANONE,4-METHYL

(2) C2H3N ACETIC ACID,NITRILE

(3) H2O WATER

SUBBA RAO D. ET AL.
J.CHEM.ENG.DATA 24(1979)241

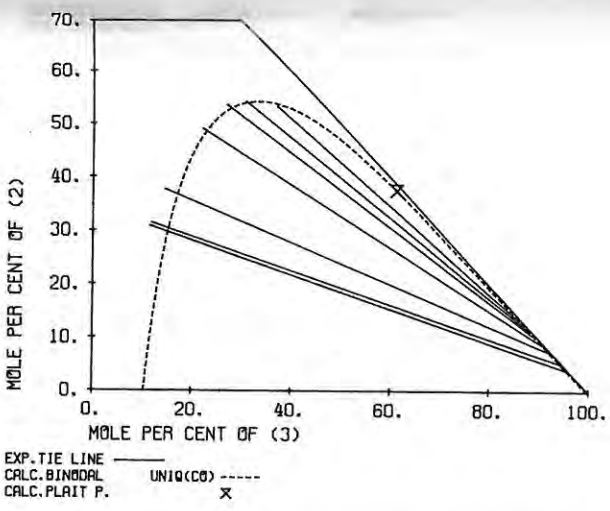
TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 1

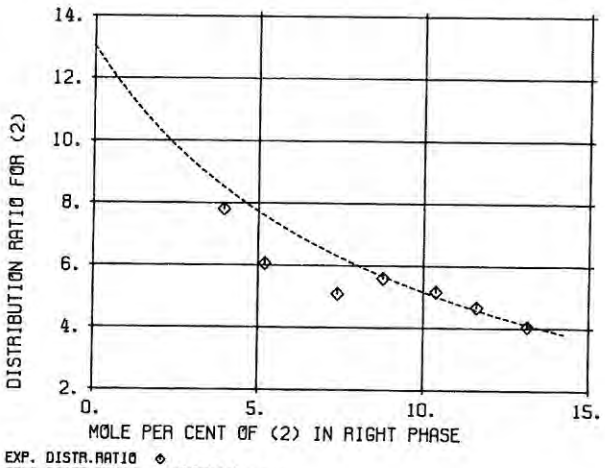
EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
57.505	30.847	11.648	0.190	3.951	95.858
56.591	31.461	11.948	0.213	5.195	94.592
47.673	37.704	14.624	0.339	7.405	92.255
28.849	49.079	22.072	0.407	8.784	90.809
19.420	53.588	26.992	0.456	10.378	89.166
14.947	54.185	30.867	0.506	11.621	87.874
9.607	53.300	37.093	0.580	13.160	86.260

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (COMMON PARAMETERS) 1.51





(1) C6H1202 ACETIC ACID,BUTYL ESTER

(2) C2H3N ACETIC ACID,NITRILE

(3) H20 WATER

VENKATA SIVA RAMA RAO C. ET AL.
J.CHEM.ENG.DATA 23(1978)23

TEMPERATURE = 31.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
83.007	6.894	10.099	0.157	0.445	99.398
79.516	9.575	10.909	0.158	0.805	99.037
71.994	16.208	11.798	0.160	1.811	98.029
58.899	26.547	14.554	0.178	2.799	97.023
51.900	33.217	14.883	0.182	4.646	95.172
47.111	38.675	14.214	0.202	5.709	94.090
38.094	44.076	17.831	0.205	7.057	92.738

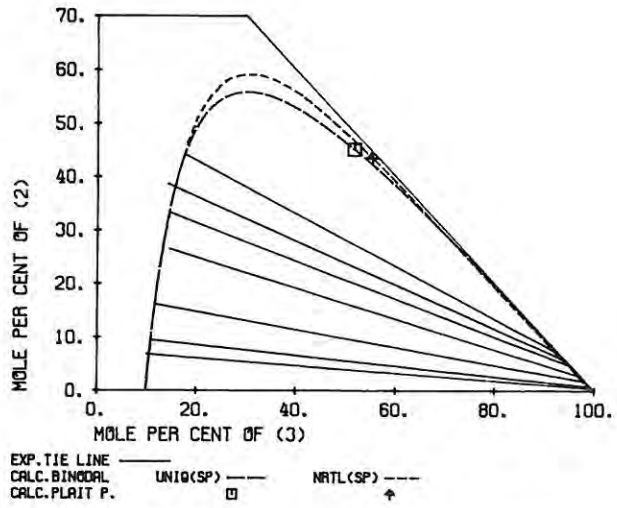
SPECIFIC MODEL PARAMETERS IN KELVIN

I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-44.118	-74.912	-89.462	-106.81
1 3	416.61	168.23	240.52	1442.8
2 3	88.592	37.578	221.97	435.64

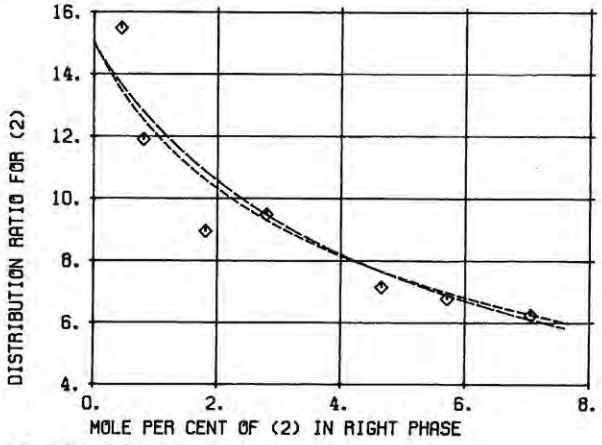
R1 = 4.8274 R2 = 1.8701 R3 = 0.9200
Q1 = 4.196 Q2 = 1.724 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.43
NRTL (SPECIFIC PARAMETERS)	0.43



EXP.TIE LINE ——
CALC.BINODAL UNIQ(SP) —— NRTL(SP) ----
CALC.PLAIT P. ◻ ◆



EXP. DISTR.RATIO ◇
CALC.DISTR.RATIO UNIQ(SP) —— NRTL(SP) ----

(1) C6H14 HEXANE

(2) C17H3402 HEXADECANOIC ACID,METHYL ESTER

(3) C2H3N ACETIC ACID,NITRILE

BARFORD R.A., BERTSCH R.J., ROTHBART H.L.
J.AM.OIL CHEM.SOC. 45(1968)141

TEMPERATURE = 20.0 DEG C TYPE OF SYSTEM = 2

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
79.636	8.222	12.142	5.015	0.342	94.643
66.803	13.698	19.499	4.644	0.575	94.781
37.317	22.447	40.237	4.514	0.711	94.775
11.188	26.091	62.721	1.825	1.916	96.259

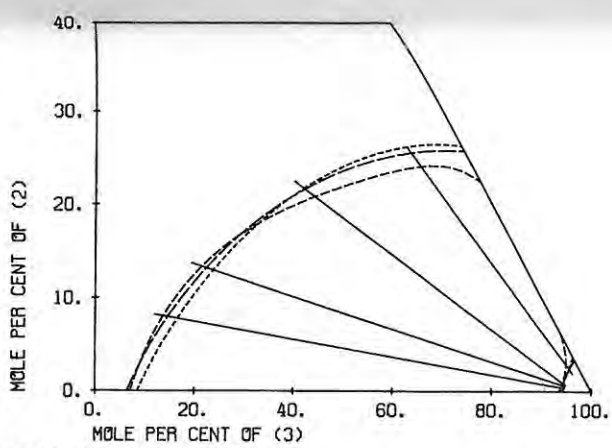
SPECIFIC MODEL PARAMETERS IN KELVIN

I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	4.6241	11.727	-9.2861	-272.60
1 3	556.78	34.279	493.14	595.34
2 3	250.56	27.178	-527.33	1544.8

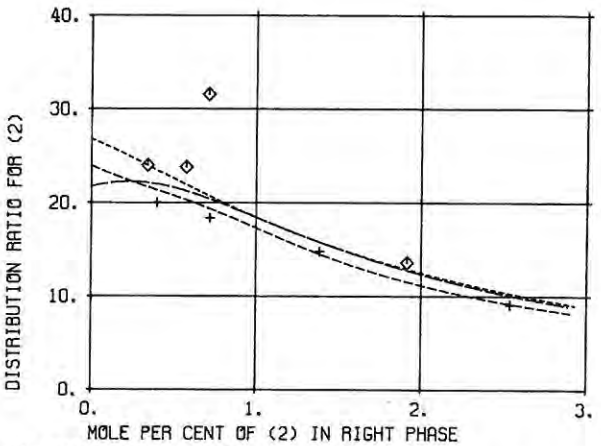
R1 = 4.4998 R2 =12.2458 R3 = 1.8701
Q1 = 3.856 Q2 =10.136 Q3 = 1.724

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.71
NRTL (SPECIFIC PARAMETERS)	0.95
UNIQUAC (COMMON PARAMETERS)	1.04



EXP.TIE LINE ——
CALC.BINODAL UNIQ(SP) —— NRTL(SP) ---- UNIQ(CO) -----



EXP. DISTR.RATIO THIS REF ◇ OTHER REF +
CALC.DISTR.RATIO UNIQ(SP) —— NRTL(SP) ---- UNIQ(CO) -----

(1) C6H14 HEXANE

(2) C17H3402 HEXADECANOIC ACID,METHYL ESTER

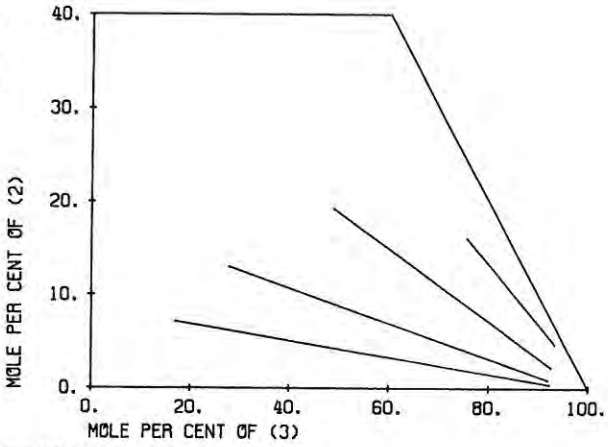
(3) C2H3N ACETIC ACID,NITRILE

BARFORD R.A., BERTSCH R.J., ROTHBART H.L.
J.AM.OIL CHEM.SOC. 45(1968)141

TEMPERATURE = 30.4 DEG C TYPE OF SYSTEM = 2

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
75.920	7.115	16.965	7.258	0.436	92.306
59.207	12.986	27.807	7.033	0.889	92.078
31.765	19.250	48.985	5.062	2.240	92.697
8.250	16.104	75.646	1.901	4.767	93.332



(1) C6H14 HEXANE

(2) C17H3402 HEXADECANOIC ACID,METHYL ESTER

(3) C2H3N ACETIC ACID,NITRILE

RUSLING J.F., BERTSCH R.J., BARFORD R.A., ROTHBART H.L.
J.CHEM.ENG.DATA 14(1969)169

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 2

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
73.935	7.990	18.075	6.625	0.399	92.976
60.516	13.257	26.227	5.896	0.721	93.383
33.428	20.540	46.032	4.679	1.388	93.933
10.307	23.098	66.595	1.770	2.538	95.692

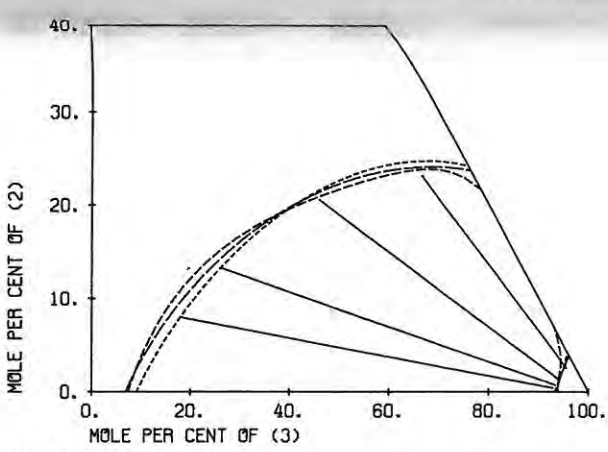
SPECIFIC MODEL PARAMETERS IN KELVIN

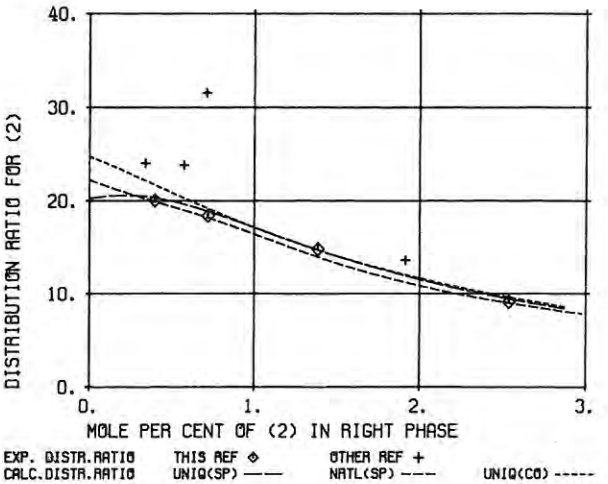
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	4.6241	11.727	-9.2861	-272.60
1	3	556.78	34.279	493.14	595.34
2	3	250.56	27.178	-527.33	1544.8

R1 = 4.4998 R2 =12.2458 R3 = 1.8701
Q1 = 3.856 Q2 =10.136 Q3 = 1.724

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.60
NRTL (SPECIFIC PARAMETERS)	0.84
UNIQUAC (COMMON PARAMETERS)	0.55





(1) C6H14 HEXANE

(2) C19H3602 9-OCTADECENOIC ACID(CIS),METHYL ESTER

(3) C2H3N ACETIC ACID,NITRILE

BARFORD R.A., BERTSCH R.J., ROTHBART H.L.
J.AM.OIL CHEM.SOC. 45(1968)141

TEMPERATURE = 20.0 DEG C TYPE OF SYSTEM = 2

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
77.778	7.568	14.654	5.481	0.406	94.113
65.479	12.527	21.995	5.135	0.701	94.164
35.598	19.929	44.473	3.959	1.529	94.511
12.355	21.443	66.202	1.413	2.743	95.845

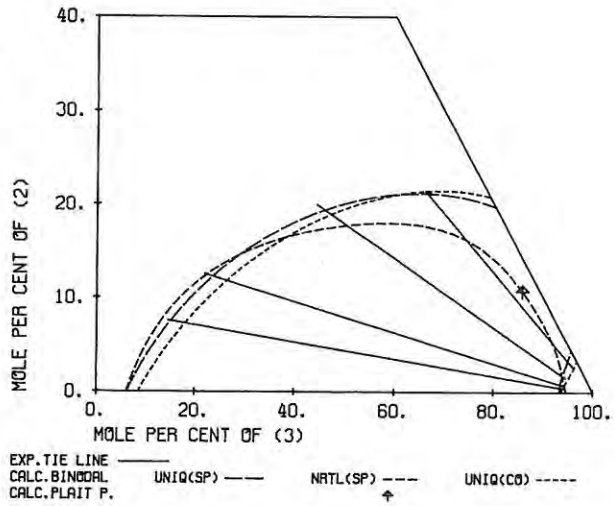
SPECIFIC MODEL PARAMETERS IN KELVIN

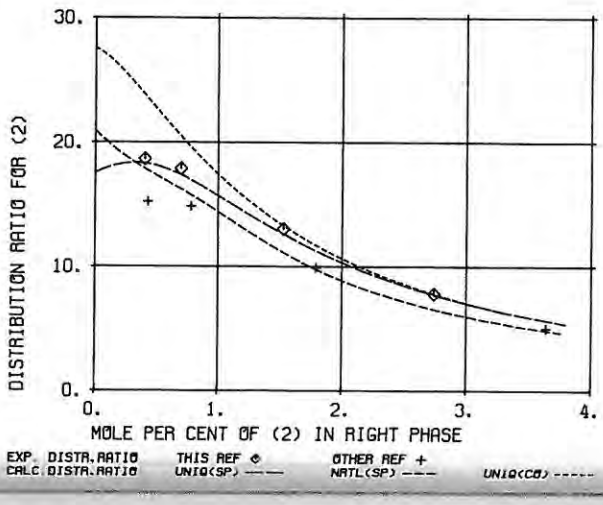
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	10.242	9.1914	-77.716	-344.39
1 3	569.76	27.180	529.14	590.41
2 3	252.77	17.879	-628.17	1533.3

R1 = 4.4998 R2 =13.3625 R3 = 1.8701
Q1 = 3.856 Q2 =11.003 Q3 = 1.724

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.58
NRTL (SPECIFIC PARAMETERS)	1.44
UNIQUAC (COMMON PARAMETERS)	0.84





(1) C6H14 HEXANE

(2) C19H3602 9-OCTADECENOIC ACID(CIS),METHYL ESTER

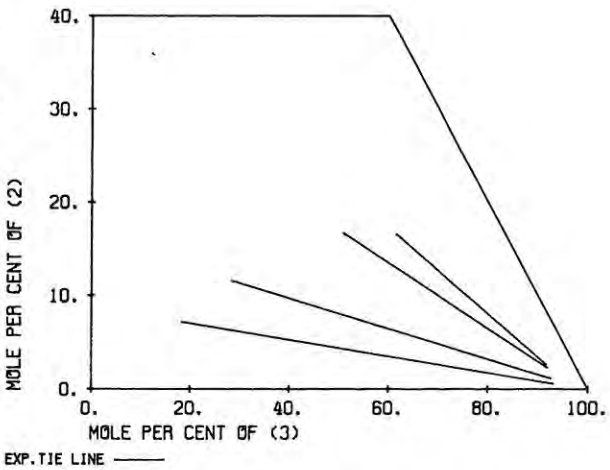
(3) C2H3N ACETIC ACID,NITRILE

BARFORD R.A., BERTSCH R.J., ROTHBART H.L.
J.AM.OIL CHEM.SOC. 45(1968)141

TEMPERATURE = 30.4 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
74.516	7.146	18.338	6.370	0.566	93.064
59.913	11.555	28.532	6.235	1.119	92.647
32.369	16.663	50.967	5.797	2.269	91.935
21.950	16.531	61.518	5.659	2.611	91.730



(1) C6H14 HEXANE

(2) C19H3602 9-OCTADECENOIC ACID(CIS),METHYL ESTER

(3) C2H3N ACETIC ACID,NITRILE

RUSLING J.F., BERTSCH R.J., BARFORD R.A., ROTHBART H.L.
J.CHEM.ENG.DATA 14(1969)169

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 2

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
78.035	6.557	15.408	7.675	0.431	91.895
66.064	11.637	22.299	7.605	0.784	91.611
35.045	17.817	47.137	5.118	1.795	93.087
11.099	18.322	70.580	1.781	3.640	94.579

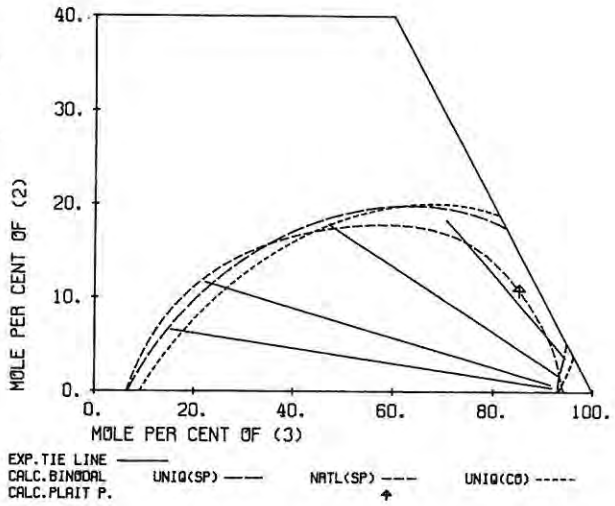
SPECIFIC MODEL PARAMETERS IN KELVIN

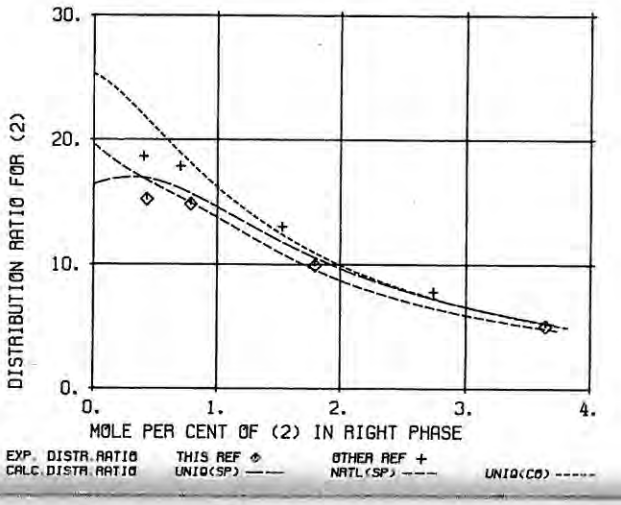
	UNIQUAC		NRTL(ALPHA=.2)	
I J	AIJ	AJI	AIJ	AJI
1 2	10.242	9.1914	-77.716	-344.39
1 3	569.76	27.180	529.14	590.41
2 3	252.77	17.879	-628.17	1533.3

R1 = 4.4998 R2 =13.3625 R3 = 1.8701
Q1 = 3.856 Q2 =11.003 Q3 = 1.724

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.72
NRTL (SPECIFIC PARAMETERS)	1.28
UNIQUAC (COMMON PARAMETERS)	1.10





(1) C7H8 TOLUENE

(2) C2H3N ACETIC ACID,NITRILE

(3) H2O WATER

SUBBA RAO D. ET AL.
J.CHEM.ENG.DATA 24(1979)241

TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
76.493	20.989	2.517	0.104	4.917	94.978
70.757	26.691	2.552	0.137	5.805	94.057
50.439	44.459	5.102	0.163	8.438	91.399
47.618	47.040	5.342	0.175	8.577	91.248
40.587	53.050	6.362	0.188	9.767	90.044
32.725	58.905	8.370	0.180	10.981	88.839
24.068	64.662	11.269	0.192	11.769	88.039
19.487	66.957	13.556	0.207	13.050	86.743
18.105	67.547	14.348	0.220	13.877	85.903
17.618	67.621	14.761	0.233	14.284	85.483
14.705	67.975	17.320	0.247	15.197	84.556

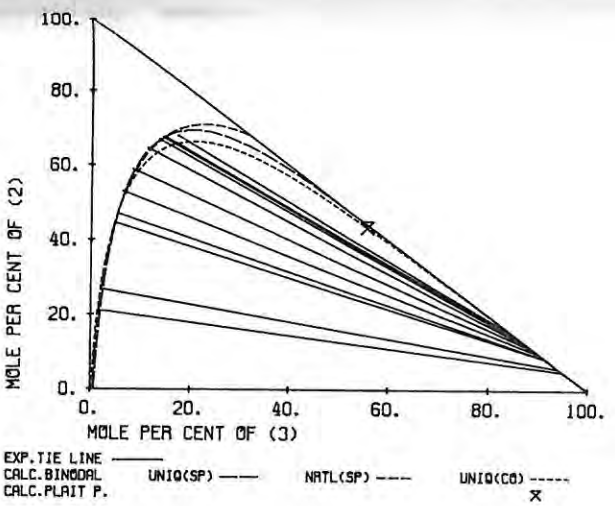
SPECIFIC MODEL PARAMETERS IN KELVIN

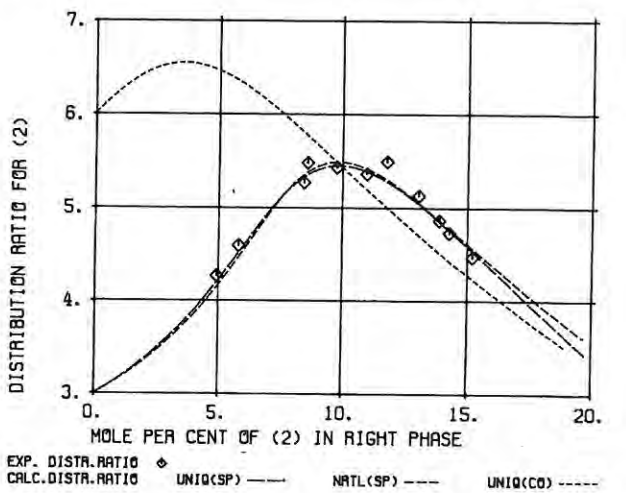
	UNIQUAC		NRTL(ALPHA=.2)	
I J	AIJ	AJI	AIJ	AJI
1 2	388.59	-121.25	440.17	-70.267
1 3	700.29	438.76	1068.5	1703.7
2 3	197.12	101.10	295.31	451.76

R1 = 3.9228 R2 = 1.8701 R3 = 0.9200
Q1 = 2.968 Q2 = 1.724 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.25
NRTL (SPECIFIC PARAMETERS)	0.32
UNIQUAC (COMMON PARAMETERS)	1.25





192

C_2H_3N-$C_7H_{14}O_2$

(1) C7H1402 ACETIC ACID,3-METHYLBUTYL ESTER

(2) C2H3N ACETIC ACID,NITRILE

(3) H20 WATER

SUBBA RAO D. ET AL.
J.CHEM.ENG.DATA 24(1979)241

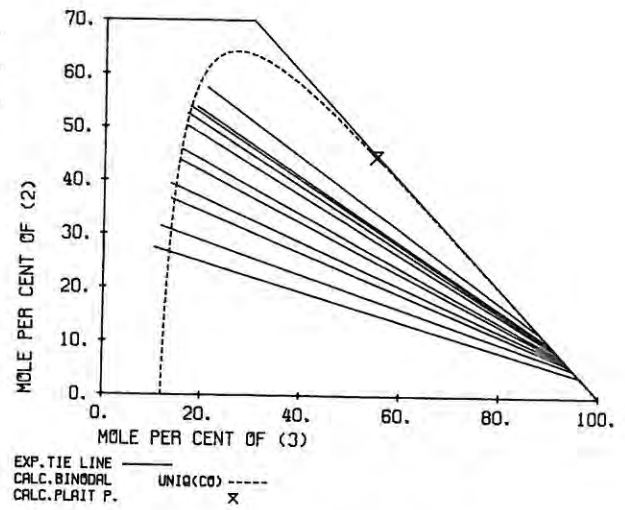
TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 1

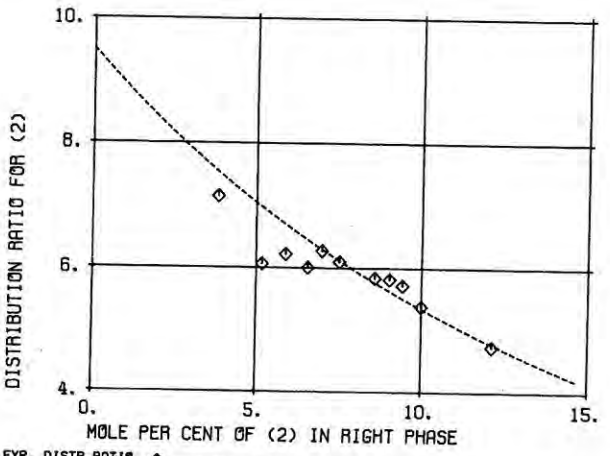
EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
62.089	27.476	10.435	0.095	3.843	96.062
56.750	31.405	11.845	0.104	5.178	94.718
49.678	36.636	13.685	0.112	5.890	93.998
46.883	39.405	13.712	0.121	6.562	93.317
40.646	43.808	15.546	0.129	6.983	92.888
38.293	45.826	15.881	0.138	7.514	92.348
32.864	50.172	16.964	0.147	8.594	91.259
30.592	52.594	16.814	0.156	9.037	90.807
28.731	53.879	17.390	0.156	9.424	90.419
27.540	53.749	18.711	0.165	9.988	89.846
21.835	57.436	20.730	0.177	12.129	87.694

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (COMMON PARAMETERS)	0.72





193

C_2H_3N-C_8H_{10}

(1) C8H10 BENZENE,DIMETHYL(ISOMER NOT SPECIFIED)

(2) C2H3N ACETIC ACID,NITRILE

(3) H20 WATER

VENKATA SIVA RAMA RAO C. ET AL.
J.CHEM.ENG.DATA 23(1978)23

TEMPERATURE = 31.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
82.551	4.700	12.749	0.070	1.802	98.128
78.790	7.829	13.380	0.126	4.088	95.787
76.556	10.275	13.169	0.186	6.624	93.190
67.597	18.760	13.643	0.191	8.869	90.941
63.268	23.542	13.191	0.238	12.314	87.448
52.850	34.659	12.491	0.243	14.379	85.378
42.561	45.705	11.735	0.319	18.591	81.090

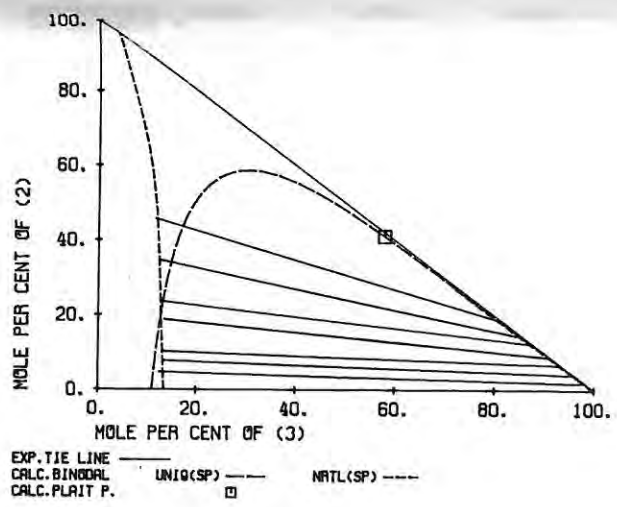
SPECIFIC MODEL PARAMETERS IN KELVIN

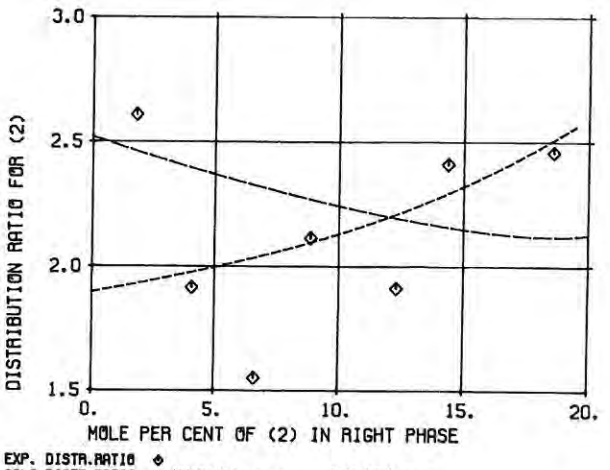
I J	UNIQUAC AIJ	AJI	NRTL(ALPHA=.2) AIJ	AJI
1 2	215.30	62.307	-68.894	531.22
1 3	247.11	224.41	144.72	1768.4
2 3	207.13	72.080	1078.6	-21.915

R1 = 4.6578 R2 = 1.8701 R3 = 0.9200
Q1 = 3.536 Q2 = 1.724 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.36
NRTL (SPECIFIC PARAMETERS)	0.49





(1) C15H32 PENTADECANE

(2) C8H10 BENZENE,ETHYL

(3) C2H3N ACETIC ACID,NITRILE

BONDARENKO M.F., ET AL.
KHIM.TEKHNOL.TOPL.MASEL (1972)4,8

TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
77.103	14.446	8.451	0.332	3.734	95.934
71.078	19.513	9.409	0.402	4.955	94.643
65.106	24.623	10.271	0.481	6.997	92.522
53.093	34.487	12.420	0.563	8.970	90.467
47.707	38.598	13.695	0.726	11.431	87.843

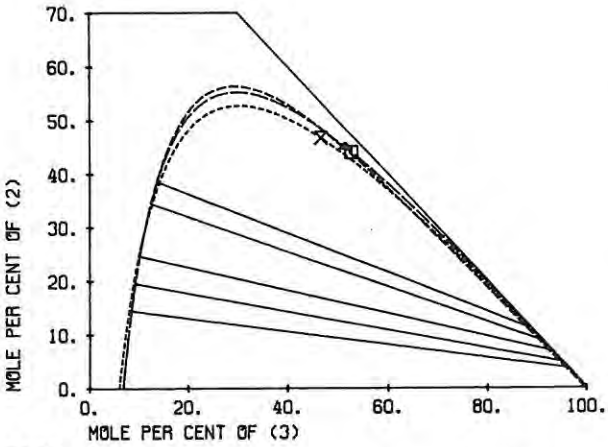
SPECIFIC MODEL PARAMETERS IN KELVIN

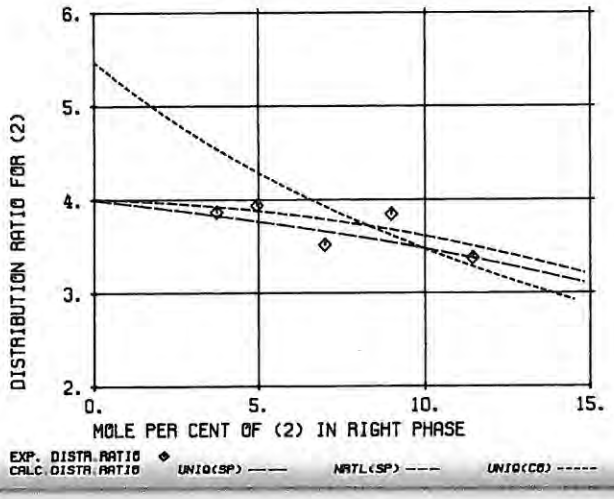
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	231.53	-133.38	22.926	139.38
1	3	529.84	163.00	344.56	1372.5
2	3	261.63	1.8622	255.07	346.60

R1 =10.5694 R2 = 4.5972 R3 = 1.8701
Q1 = 8.716 Q2 = 3.508 Q3 = 1.724

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.32
NRTL (SPECIFIC PARAMETERS)	0.26
UNIQUAC (COMMON PARAMETERS)	0.43





194 C_2H_3N-C_8H_{10}

(1) C15H32 PENTADECANE

(2) C10H8 NAPHTHALENE

(3) C2H3N ACETIC ACID,NITRILE

BONDARENKO M.F., ET AL.
KHIM.TEKHNOL.TOPL.MASEL (1972)4,8

TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
82.969	9.564	7.467	0.397	3.084	96.519
82.707	9.385	7.908	0.419	3.124	96.458
82.153	9.957	7.890	0.420	3.272	96.308
79.042	12.732	8.226	0.520	4.705	94.775
74.660	15.982	9.358	0.608	6.607	92.785
70.162	19.007	10.831	0.723	8.352	90.924
65.789	21.992	12.219	0.851	10.473	88.677

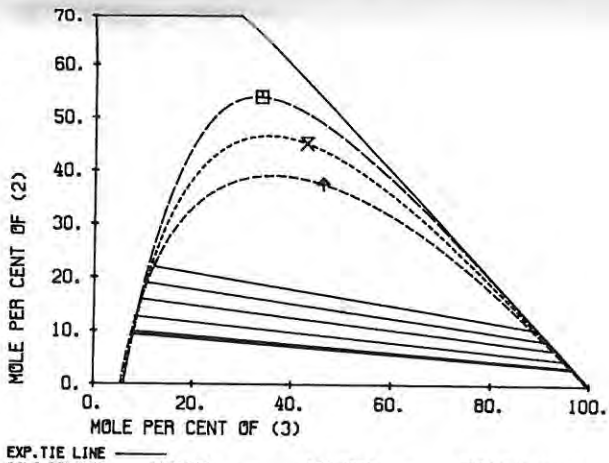
SPECIFIC MODEL PARAMETERS IN KELVIN

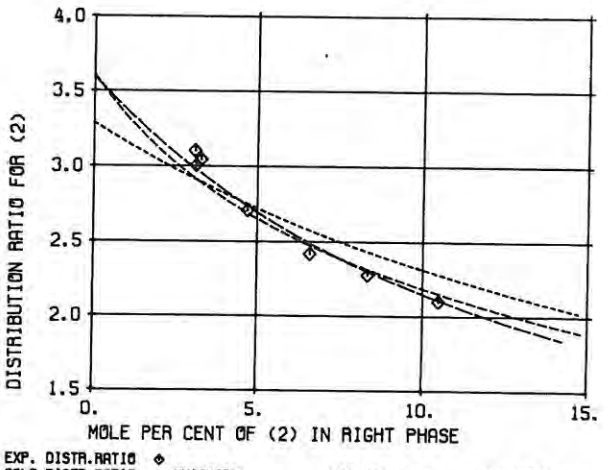
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	24.429	6.5148	-214.53	-164.37
1	3	516.21	215.43	401.55	1452.8
2	3	1.7316	123.80	15.992	-55.865

R1 =10.5694 R2 = 4.9808 R3 = 1.8701
Q1 = 8.716 Q2 = 3.440 Q3 = 1.724

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.41
NRTL (SPECIFIC PARAMETERS)	0.16
UNIQUAC (COMMON PARAMETERS)	0.38





195 C_2H_3N-$C_{10}H_8$

(1) C15H32 PENTADECANE
(2) C10H14 BENZENE,BUTYL
(3) C2H3N ACETIC ACID,NITRILE

BONDARENKO M.F., ET AL.
KHIM.TEKHNOL.TOPL.MASEL (1972)4,8

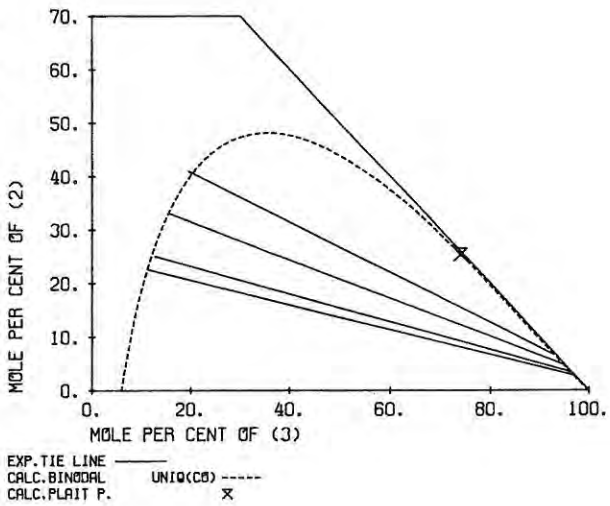
TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 1

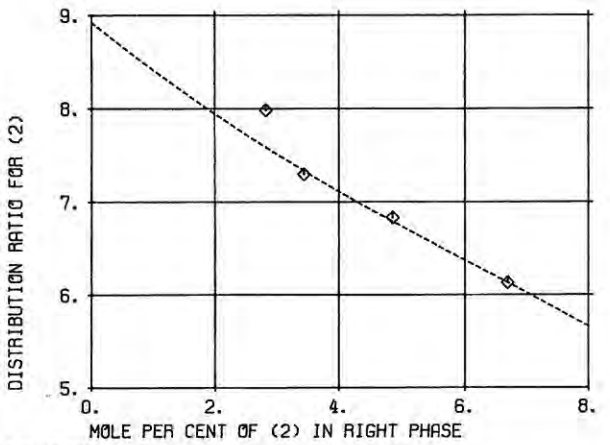
EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
65.924	22.562	11.513	0.249	2.826	96.925
62.048	25.059	12.893	0.295	3.435	96.271
51.318	33.106	15.575	0.326	4.845	94.829
39.362	40.984	19.654	0.407	6.684	92.910

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (COMMON PARAMETERS) 0.24





(1) C15H32 PENTADECANE
(2) C14H16 NAPHTHALENE,1-BUTYL
(3) C2H3N ACETIC ACID,NITRILE

BONDARENKO M.F., ET AL.
KHIM.TEKHNOL.TOPL.MASEL (1972)4,8

TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
72.096	14.370	13.534	0.289	1.619	98.092
65.238	19.758	15.004	0.316	2.184	97.500
56.659	26.220	17.121	0.369	3.076	96.555
56.024	26.496	17.480	0.370	3.187	96.442
45.422	31.754	22.824	0.449	4.087	95.464
36.561	34.967	28.472	0.564	5.528	93.908
20.496	40.345	39.160	0.728	7.697	91.575

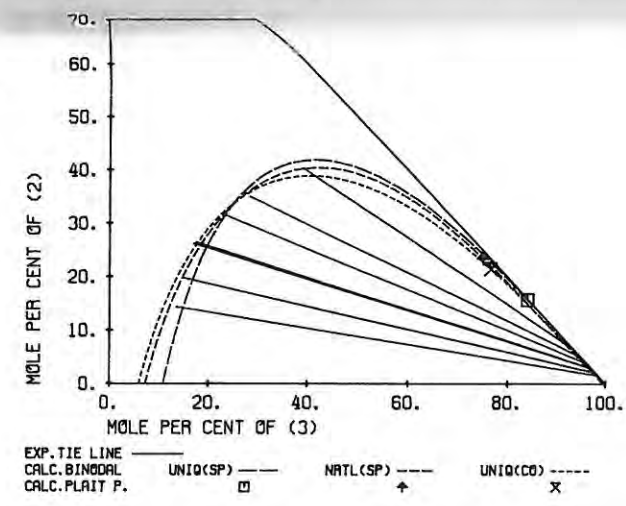
SPECIFIC MODEL PARAMETERS IN KELVIN

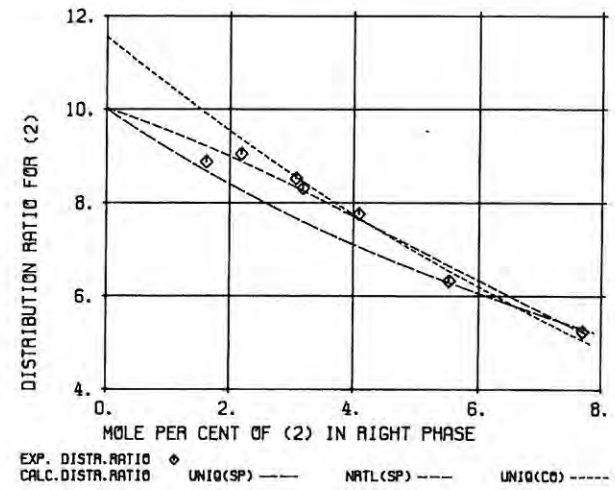
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	23.043	4.5991	75.687	-24.109
1	3	410.25	230.83	326.67	1361.0
2	3	119.01	98.880	-262.00	1025.4

R1 =10.5694 R2 = 7.7390 R3 = 1.8701
Q1 = 8.716 Q2 = 5.628 Q3 = 1.724

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS) 0.80
NRTL (SPECIFIC PARAMETERS) 0.39
UNIQUAC (COMMON PARAMETERS) 0.54





198

C_2H_3N-$C_{14}H_{22}$

(1) C15H32 PENTADECANE

(2) C14H22 BENZENE,OCTYL

(3) C2H3N ACETIC ACID,NITRILE

BONDARENKO M.F., ET AL.
KHIM.TEKHNOL.TOPL.MASEL (1972)4,8

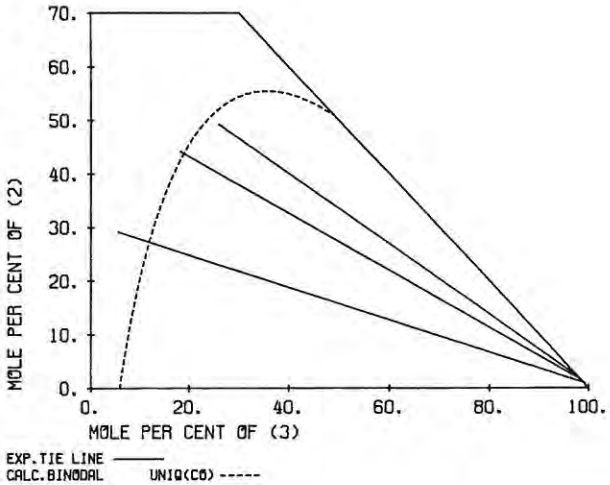
TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 1

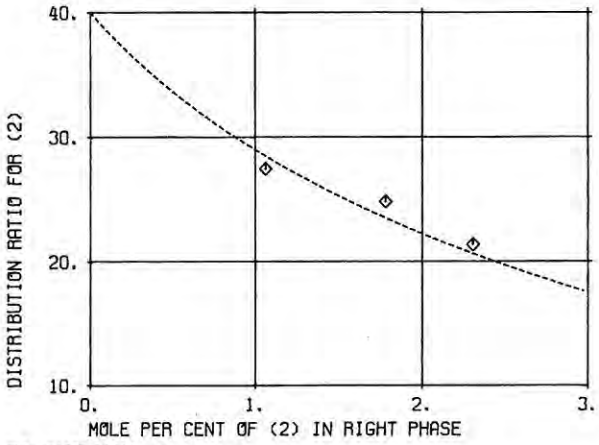
EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
65.100	29.165	5.734	0.223	1.062	98.715
37.480	44.169	18.352	0.166	1.780	98.055
24.757	49.239	26.004	0.147	2.304	97.549

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (COMMON PARAMETERS)	1.78





(1) C15H32 PENTADECANE

(2) C18H24 NAPHTHALENE,1-OCTYL

(3) C2H3N ACETIC ACID,NITRILE

BONDARENKO M.F., ET AL.
KHIM.TEKHNOL.TOPL.MASEL (1972)4,8

TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
74.222	13.850	11.928	0.219	0.386	99.395
63.307	23.322	13.371	0.201	0.639	99.160
52.342	30.410	17.249	0.183	0.879	98.938
43.215	36.622	20.163	0.164	1.086	98.751
30.654	43.791	25.556	0.145	1.393	98.461

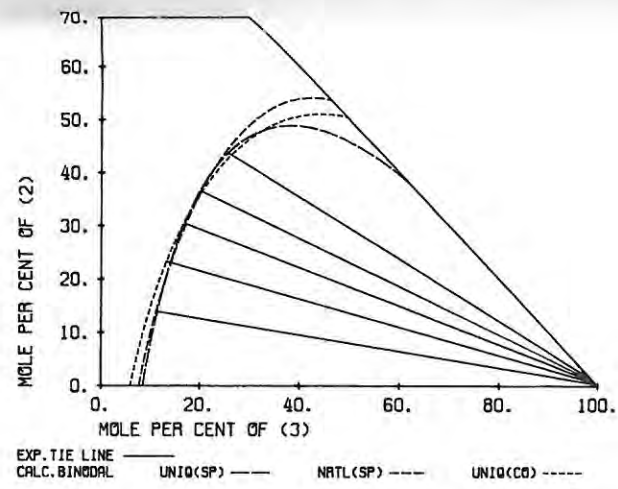
SPECIFIC MODEL PARAMETERS IN KELVIN

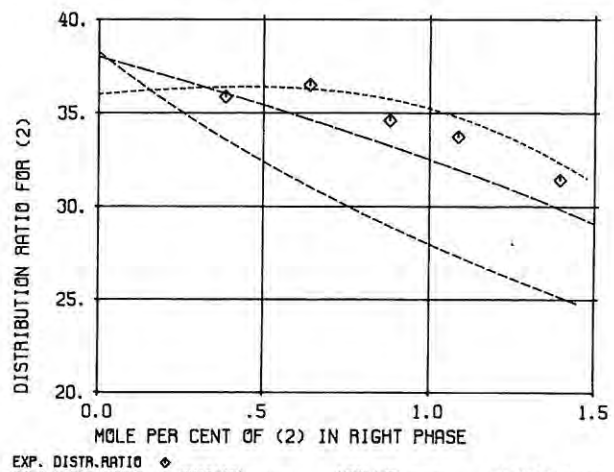
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	-32.568	32.073	-104.03	-4.2424
1	3	417.22	301.53	316.76	1287.2
2	3	242.06	49.645	-172.54	1183.0

R1 =10.5694 R2 =10.4366 R3 = 1.8701
Q1 = 8.716 Q2 = 7.788 Q3 = 1.724

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.21
NRTL (SPECIFIC PARAMETERS)	0.40
UNIQUAC (COMMON PARAMETERS)	0.43





199

C_2H_3N-$C_{15}H_{32}$

(1) C17H3402 HEXADECANOIC ACID,METHYL ESTER

(2) C19H3602 9-OCTADECENOIC ACID(CIS),METHYL ESTER

(3) C2H3N ACETIC ACID,NITRILE

RUSLING J.F., BERTSCH R.J., BARFORD R.A., ROTHBART H.L.
J.CHEM.ENG.DATA 14(1969)169

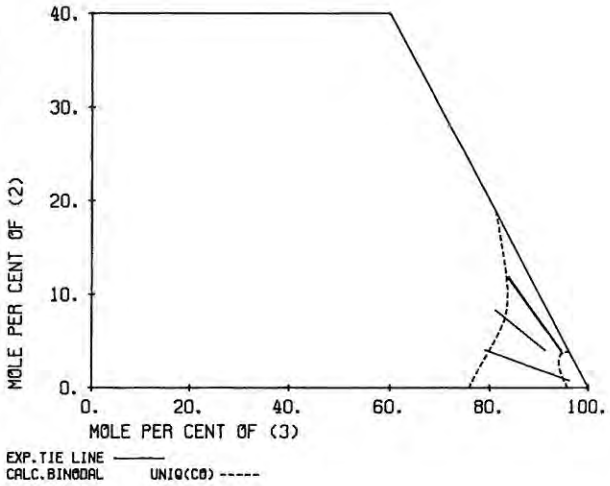
TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 2

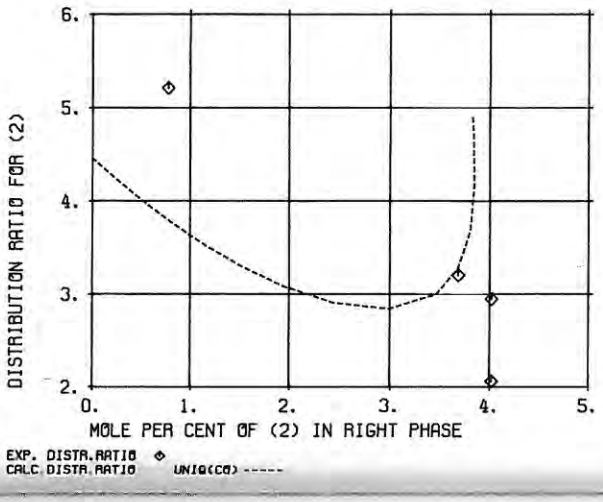
EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
16.834	4.036	79.130	3.009	0.775	96.216
4.593	11.796	83.611	1.452	3.683	94.866
10.536	8.271	81.194	4.680	4.018	91.301
4.360	11.848	83.793	1.455	4.018	94.527

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (COMMON PARAMETERS) 0.92





(1) C2H4CL2 ETHANE,1,1-DICHLORO

(2) C2H6O ETHANOL

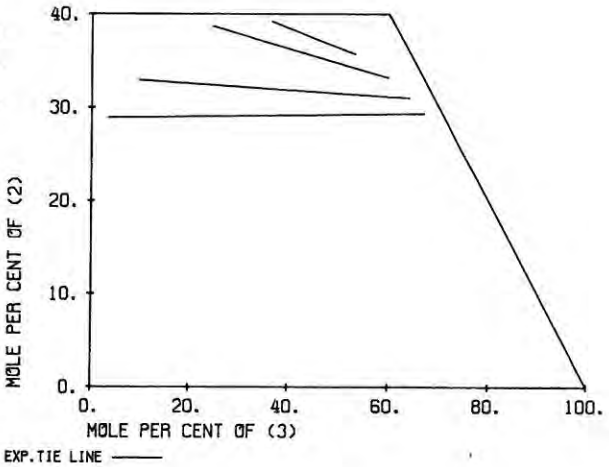
(3) H2O WATER

BONNER W.D.
J.PHYS.CHEM. 14(1910)738

TEMPERATURE = 0.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
67.490	28.924	3.586	3.661	29.361	66.978
57.278	32.916	9.807	4.971	31.031	63.998
36.592	38.729	24.679	6.962	33.201	59.837
24.140	39.206	36.655	10.969	35.744	53.287



(1) H2O WATER
(2) C2H4O2 ACETIC ACID
(3) C2H4CL2 ETHANE,1,2-DICHLORO

DUBOVSKAYA A.S., KARAPETYANTS M.KH.
ZH.FIZ.KHIM. 44(1970)2299

TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
93.330	6.160	0.510	2.126	3.827	94.047
86.372	12.553	1.074	2.100	6.929	90.971
79.541	18.580	1.879	4.002	14.406	81.592
70.514	26.020	3.466	7.510	21.402	71.088
65.287	29.610	5.104	11.459	26.443	62.098
58.191	33.492	8.318	17.048	30.931	52.021

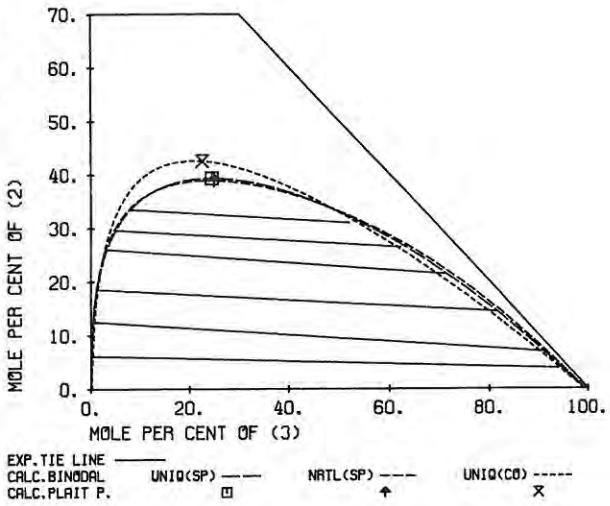
SPECIFIC MODEL PARAMETERS IN KELVIN

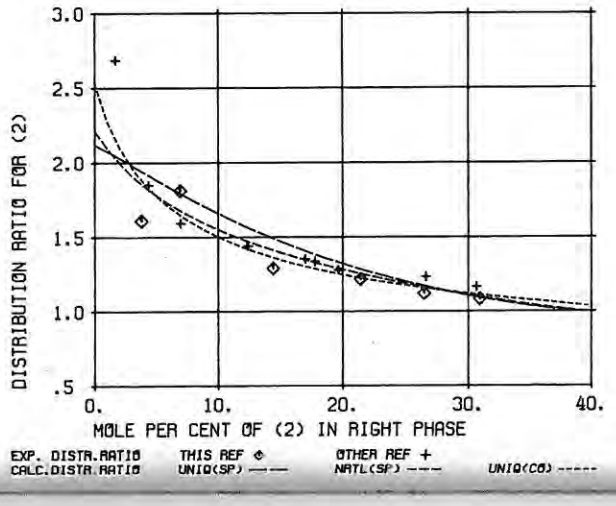
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-16.853	-58.866	503.62	-531.48
1 3	642.80	702.87	1878.8	1023.2
2 3	-166.46	399.33	-62.672	80.132

R1 = 0.9200 R2 = 2.2024 R3 = 2.9308
Q1 = 1.400 Q2 = 2.072 Q3 = 2.528

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.94
NRTL (SPECIFIC PARAMETERS)	0.98
UNIQUAC (COMMON PARAMETERS)	0.78





(1) H2O WATER
(2) C2H4O2 ACETIC ACID
(3) C2H4CL2 ETHANE,1,2-DICHLORO

FUSE K., IGUCHI A.
KAGAKU KOGAKU 34(1970)328

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
95.207	4.508	0.285	0.543	1.679	97.778
91.511	8.116	0.373	0.537	4.385	95.077
88.386	11.100	0.513	1.059	6.958	91.983
80.998	17.880	1.122	1.547	12.405	86.048
75.039	23.009	1.952	2.507	16.996	80.498
74.119	23.779	2.102	2.985	17.776	79.239
72.458	25.104	2.438	3.440	19.638	76.922
61.745	32.763	5.492	8.612	26.569	64.819
56.009	35.722	8.269	12.772	30.652	56.576

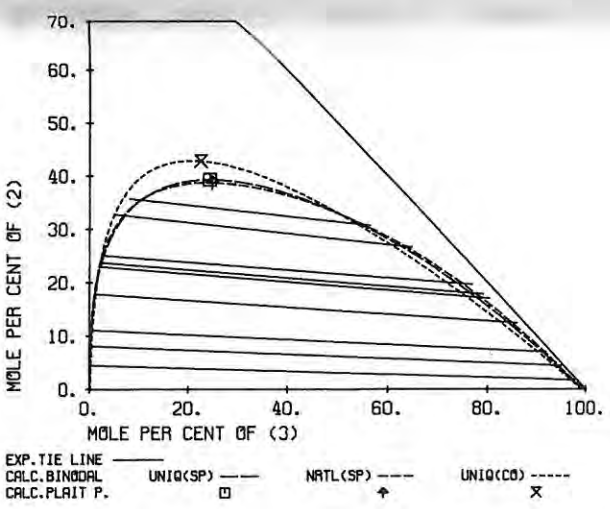
SPECIFIC MODEL PARAMETERS IN KELVIN

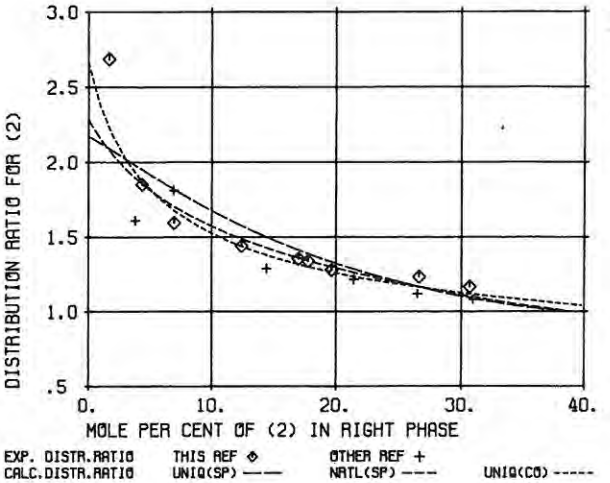
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-16.853	-58.866	503.62	-531.48
1 3	642.80	702.87	1878.8	1023.2
2 3	-166.46	399.33	-62.672	80.132

R1 = 0.9200 R2 = 2.2024 R3 = 2.9308
Q1 = 1.400 Q2 = 2.072 Q3 = 2.528

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.99
NRTL (SPECIFIC PARAMETERS)	0.77
UNIQUAC (COMMON PARAMETERS)	1.82





(1) C2H4CL2 ETHANE,1,2-DICHLORO
(2) C2H5CLO ETHANOL,2-CHLORO
(3) H2O WATER

ABABI V., POPA A., MIHAILA GH.
AN.STIINT.UNIV.AL.I.CUZA IASI. 9(1963)233

TEMPERATURE = 20.5 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
91.400	5.943	2.657	0.081	3.108	96.811
82.239	12.133	5.628	0.108	5.135	94.758
67.918	21.972	10.110	0.133	5.971	93.896
60.695	27.164	12.141	0.229	7.151	92.620
40.393	35.357	24.250	0.436	8.921	90.644
30.936	37.361	31.702	0.596	9.740	89.663
27.633	37.611	34.756	0.713	10.581	88.706
23.098	37.502	39.400	0.916	11.415	87.669
19.737	36.455	43.808	1.036	11.880	87.085
18.114	35.962	45.924	1.135	12.486	86.380

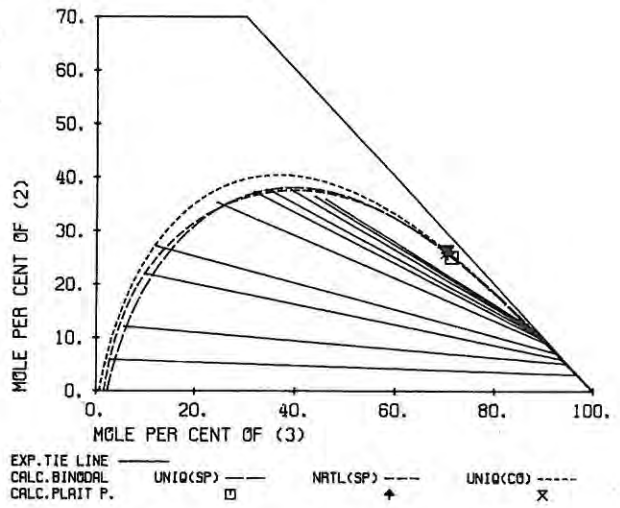
SPECIFIC MODEL PARAMETERS IN KELVIN

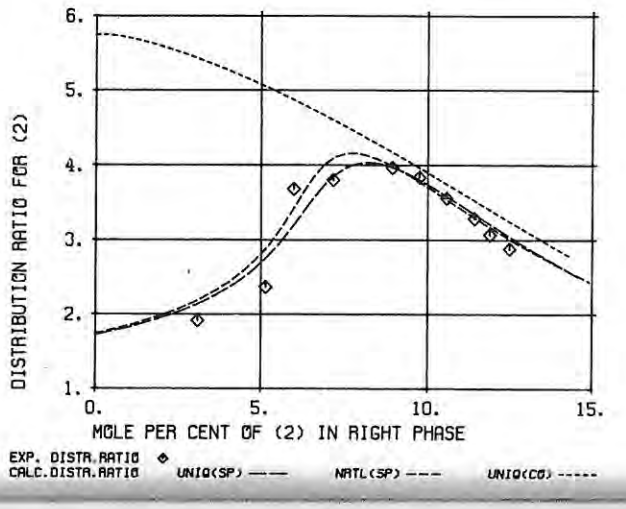
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	377.11	-130.18	933.32	-410.90
1 3	507.98	407.42	721.54	1872.5
2 3	-36.510	151.74	-308.15	892.70

R1 = 2.9308 R2 = 2.6698 R3 = 0.9200
Q1 = 2.528 Q2 = 2.392 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.63
NRTL (SPECIFIC PARAMETERS)	0.47
UNIQUAC (COMMON PARAMETERS)	1.51





(1) C2H4CL2 ETHANE,1,2-DICHLORO
(2) C3H6O2 PROPANOIC ACID
(3) H2O WATER

DUBOVSKAYA A.S., KARAPETYANTS M.KH.
ZH.FIZ.KHIM. 44(1970)2299

TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
85.267	11.618	3.116	0.364	3.025	96.612
67.966	24.336	7.698	0.434	5.502	94.065
48.821	31.191	19.989	0.857	8.650	90.493
26.084	32.522	41.394	3.003	14.505	82.491
29.116	32.898	37.986	3.225	14.961	81.814
20.029	30.065	49.906	4.636	17.221	78.143

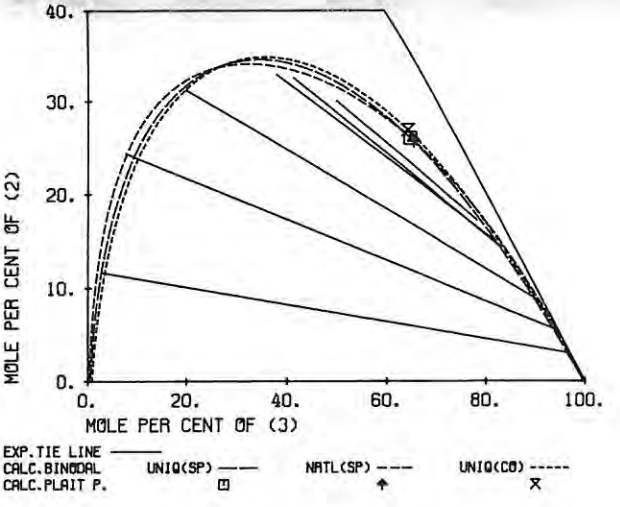
SPECIFIC MODEL PARAMETERS IN KELVIN

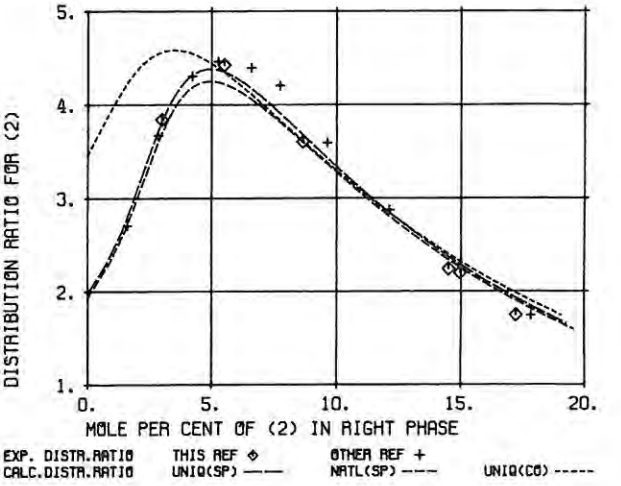
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	518.95	-256.17	1484.6	-833.88
1 3	920.01	237.44	1250.3	1719.6
2 3	374.14	-145.39	402.49	-79.164

R1 = 2.9308 R2 = 2.8768 R3 = 0.9200
Q1 = 2.528 Q2 = 2.612 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.86
NRTL (SPECIFIC PARAMETERS)	0.73
UNIQUAC (COMMON PARAMETERS)	1.10





(1) C2H4CL2 ETHANE,1,2-DICHLORO

(2) C3H6O2 PROPANOIC ACID

(3) H2O WATER

IGUCHI A., FUSE K.
KAGAKU KOGAKU 36(1972)673

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
92.452	4.374	3.174	0.173	1.616	98.211
83.826	10.570	5.605	0.180	2.877	96.943
74.411	18.223	7.366	0.208	4.232	95.561
68.352	23.484	8.164	0.257	5.265	94.478
62.183	28.899	8.917	0.333	6.575	93.092
56.977	32.508	10.515	0.413	7.732	91.856
46.283	34.598	19.119	0.703	9.623	89.674
35.446	34.785	29.769	1.416	12.105	86.479
20.614	31.070	48.316	4.296	17.832	77.872

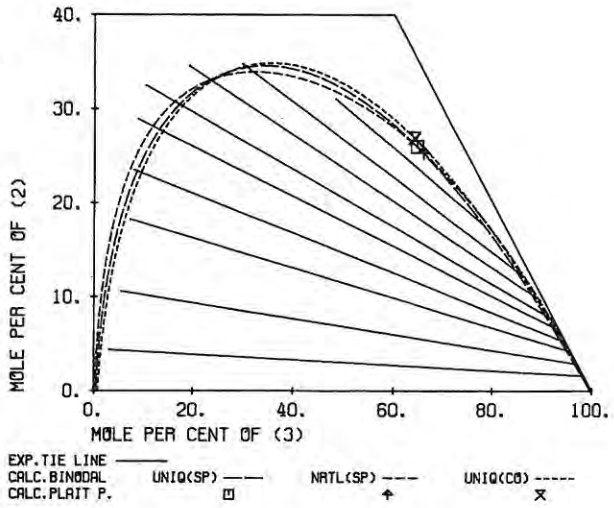
SPECIFIC MODEL PARAMETERS IN KELVIN

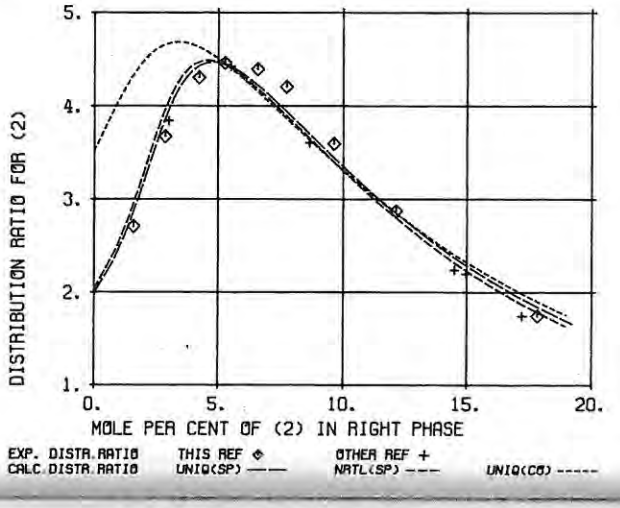
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	518.95	-256.17	1484.6	-833.88
1 3	920.01	237.44	1250.3	1719.6
2 3	374.14	-145.39	402.49	-79.164

R1 = 2.9308 R2 = 2.8768 R3 = 0.9200
Q1 = 2.528 Q2 = 2.612 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.25
NRTL (SPECIFIC PARAMETERS)	1.17
UNIQUAC (COMMON PARAMETERS)	1.30





(1) C2H4CL2 ETHANE,1,2-DICHLORO

(2) C3H8O 2-PROPANOL

(3) H2O WATER

IZMAILOV N.A., FRANKE A.K.
ZH.FIZ.KHIM. 29(1955)120

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
95.387	3.540	1.074	0.175	2.492	97.333
89.293	8.106	2.601	0.244	4.554	95.202
75.412	17.860	6.728	0.300	6.941	92.759
63.959	24.064	11.977	0.328	7.909	91.763
53.173	28.572	18.256	0.354	8.565	91.081
36.816	33.604	29.579	0.548	9.807	89.645
26.636	34.828	38.536	0.801	11.055	88.143
18.141	32.806	49.052	1.230	12.678	86.092

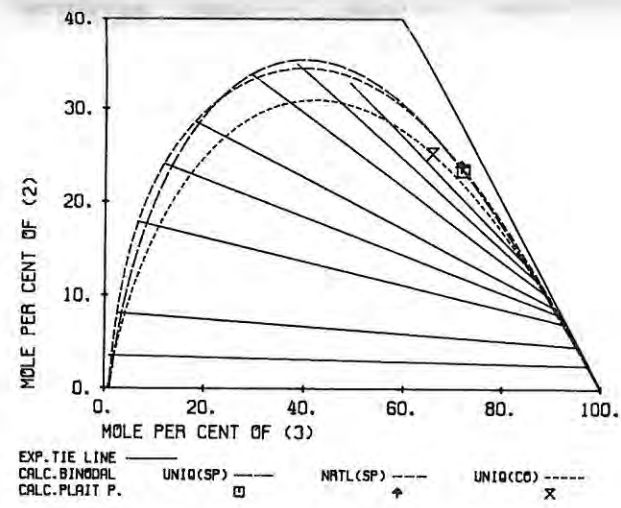
SPECIFIC MODEL PARAMETERS IN KELVIN

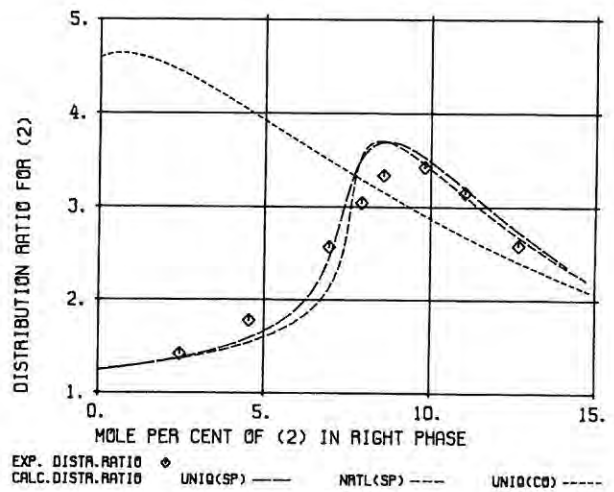
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	408.35	-135.17	1108.0	-482.67
1 3	701.76	290.66	854.94	1640.1
2 3	-43.345	158.32	-452.09	1090.3

R1 = 2.9308 R2 = 2.7791 R3 = 0.9200
Q1 = 2.528 Q2 = 2.508 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.55
NRTL (SPECIFIC PARAMETERS)	0.32
UNIQUAC (COMMON PARAMETERS)	2.40





(1) C2H4CL2 ETHANE,1,2-DICHLORO
(2) C4H8O2 BUTANOIC ACID
(3) H2O WATER

DUBOVSKAYA A.S., KARAPETYANTS M.KH.
ZH.FIZ.KHIM. 44(1970)2299

TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
16.638	38.970	44.392	0.179	2.239	97.582
48.676	35.756	15.567	0.179	2.239	97.582
76.716	17.147	6.137	0.179	2.239	97.582
85.018	9.782	5.201	0.179	2.239	97.582
5.446	29.026	65.528	0.160	2.286	97.555
42.902	37.752	19.346	0.160	2.286	97.555
45.127	37.390	17.482	0.160	2.286	97.555
58.375	31.001	10.624	0.160	2.286	97.555
60.540	29.707	9.753	0.160	2.286	97.555
30.453	41.006	28.541	0.181	2.485	97.334
48.323	36.116	15.561	0.181	2.485	97.334

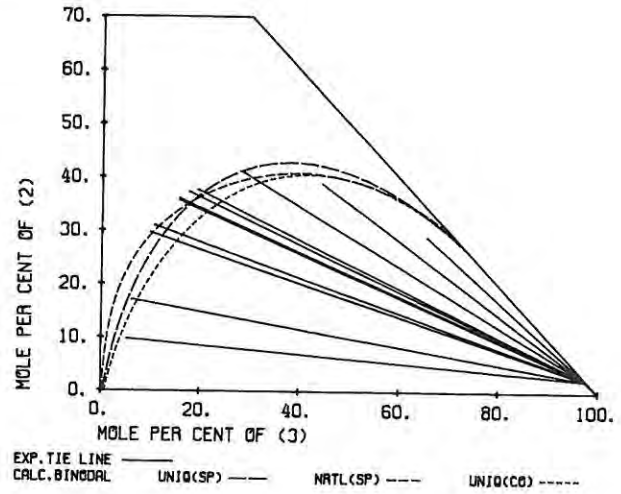
SPECIFIC MODEL PARAMETERS IN KELVIN

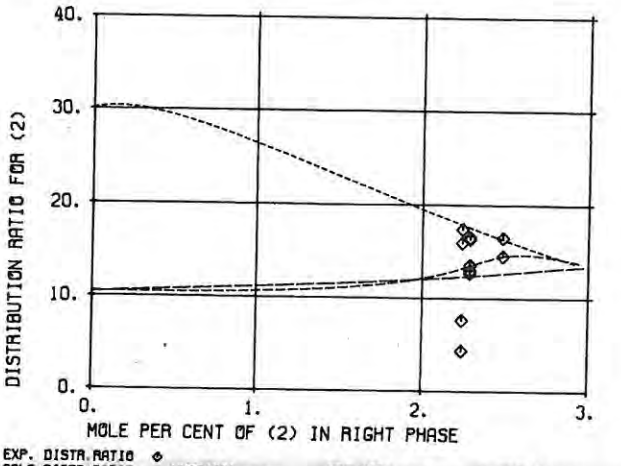
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-6.2653	119.14	171.80	0.21285
1 3	793.19	601.44	1251.1	1511.5
2 3	-62.882	252.30	-445.69	1478.2

R1 = 2.9308 R2 = 3.5512 R3 = 0.9200
Q1 = 2.528 Q2 = 3.152 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.21
NRTL (SPECIFIC PARAMETERS)	1.23
UNIQUAC (COMMON PARAMETERS)	1.91





(1) C2H4CL2 ETHANE,1,2-DICHLORO
(2) C6H11NO HEXANOIC ACID,6-AMINO,LACTAM
(3) H2O WATER

MORACHEVSKII A.G., SABININ V.E.
ZH.PRIKL.KHIM.(LENINGRAD) 33(1960)1775

TEMPERATURE = 20.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
96.297	2.610	1.093	0.155	1.102	98.743
87.071	7.614	5.314	0.188	2.610	97.203
82.754	10.398	6.848	0.243	3.800	95.958
82.582	10.569	6.849	0.244	3.893	95.864
69.388	15.761	14.851	0.420	4.979	94.601
63.030	17.867	19.103	0.712	5.989	93.300
56.418	20.131	23.451	1.034	7.077	91.889
40.883	22.764	36.353	2.193	9.616	88.191
39.108	22.842	38.050	2.378	9.954	87.668

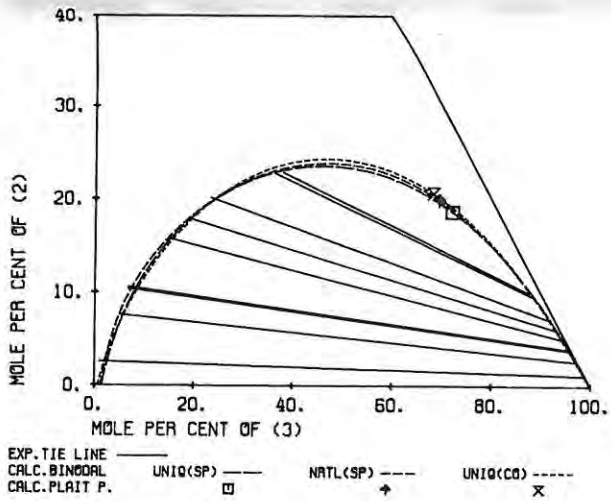
SPECIFIC MODEL PARAMETERS IN KELVIN

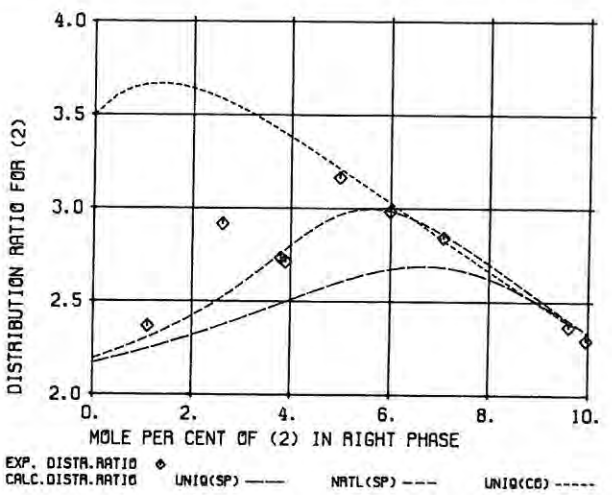
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	286.60	-173.27	1157.7	-849.47
1 3	590.02	435.90	767.44	1429.4
2 3	-76.802	-8.0864	182.68	-342.09

R1 = 2.9308 R2 = 4.6106 R3 = 0.9200
Q1 = 2.528 Q2 = 3.724 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.44
NRTL (SPECIFIC PARAMETERS)	0.29
UNIQUAC (COMMON PARAMETERS)	0.50





(1) C4H6O2 ACETIC ACID,ETHENYL ESTER

(2) C2H4O ACETALDEHYDE

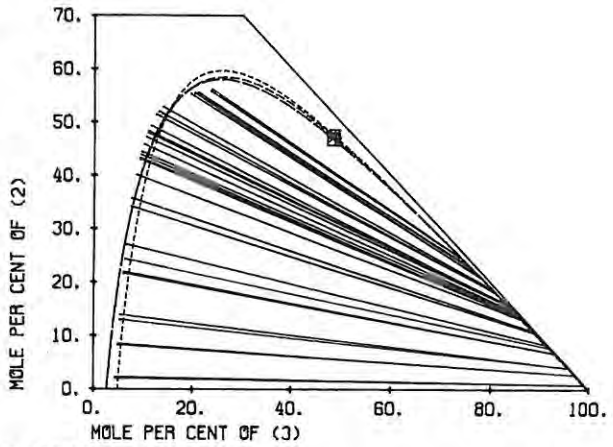
(3) H2O WATER

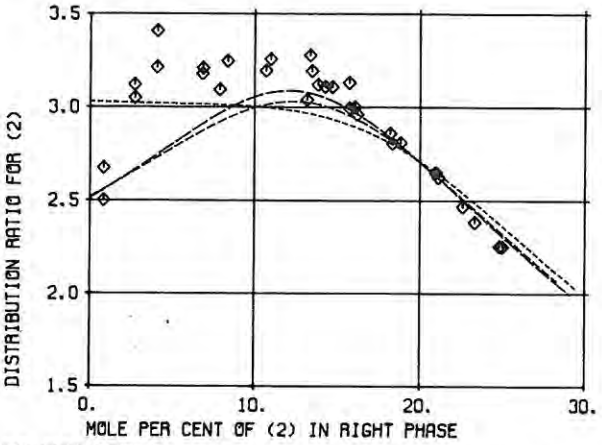
PRATT H.R.C., GLOVER S.T.
TRANS.INST.CHEM.ENG. 24(1946)54

TEMPERATURE = 20.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
93.373	2.069	4.558	0.257	0.827	98.916
93.210	2.235	4.555	0.257	0.836	98.908
86.510	8.440	5.050	0.297	2.706	96.997
86.628	8.320	5.053	0.297	2.728	96.975
81.639	13.019	5.341	0.336	4.053	95.611
80.588	13.892	5.520	0.336	4.076	95.588
72.269	21.666	6.066	0.443	6.819	92.738
71.983	21.961	6.056	0.444	6.844	92.712
69.291	24.356	6.353	0.498	7.874	91.628
66.287	27.089	6.624	0.344	8.345	91.311
58.268	34.156	7.576	0.616	10.694	88.690
56.599	35.726	7.676	0.618	10.973	88.409
51.257	40.127	8.616	0.727	13.203	86.070
46.611	43.881	9.507	0.741	13.388	85.871
47.637	43.120	9.243	0.742	13.507	85.750
47.329	43.282	9.388	0.759	13.874	85.367
45.901	44.474	9.625	0.776	14.306	84.918
44.019	45.837	10.144	0.807	14.750	84.444
39.150	49.356	11.494	0.844	15.764	83.392
42.283	47.221	10.497	0.844	15.764	83.392
40.695	48.303	11.002	0.874	16.098	83.028
41.065	48.060	10.875	0.875	16.226	82.899
34.936	52.009	13.055	0.979	18.179	80.842
36.017	51.412	12.571	0.981	18.313	80.706
33.243	52.864	13.893	1.014	18.806	80.179
24.264	55.482	20.254	1.169	20.928	77.903
25.146	55.330	19.524	1.186	21.083	77.731
23.402	55.630	20.968	1.295	22.545	76.160
24.140	55.503	20.357	1.365	23.272	75.363
20.619	55.846	23.535	1.510	24.768	73.722
20.026	56.211	23.764	1.544	24.953	73.503





SPECIFIC MODEL PARAMETERS IN KELVIN

		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	293.81	-94.756	276.67	-24.396
1	3	536.55	318.01	573.36	1661.2
2	3	329.64	-32.897	309.00	254.31

R1 = 3.2485 R2 = 1.8991 R3 = 0.9200
Q1 = 2.904 Q2 = 1.796 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.65
NRTL (SPECIFIC PARAMETERS)	0.69
UNIQUAC (COMMON PARAMETERS)	0.86

(1) C4H10O ETHER,DIETHYL

(2) C2H4O ACETALDEHYDE

(3) H2O WATER

SUSKA J.
COLLECT.CZECH.CHEM.COMMUN. 44(1979)1999

TEMPERATURE = 15.1 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
76.700	15.500	7.800	2.500	8.300	89.200
63.700	27.400	8.900	3.300	17.500	79.200
56.600	32.700	10.700	4.500	23.800	71.700
46.100	40.600	13.300	5.700	29.500	64.800
37.300	46.100	16.600	7.000	34.600	58.400

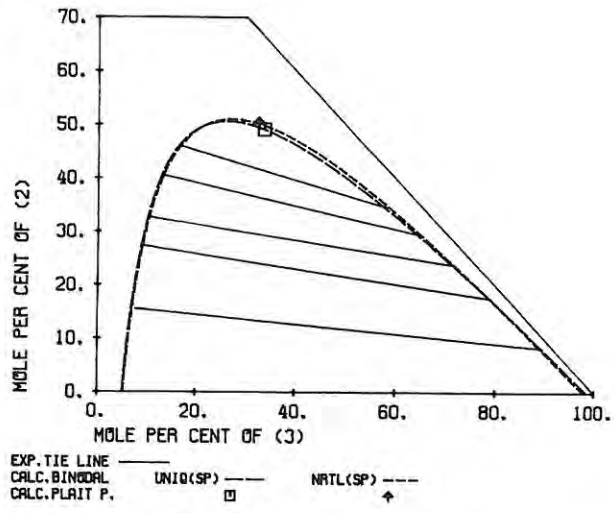
SPECIFIC MODEL PARAMETERS IN KELVIN

I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	125.60	113.44	-496.49	557.56
1 3	591.06	48.614	465.71	821.19
2 3	384.47	-27.487	244.93	-108.02

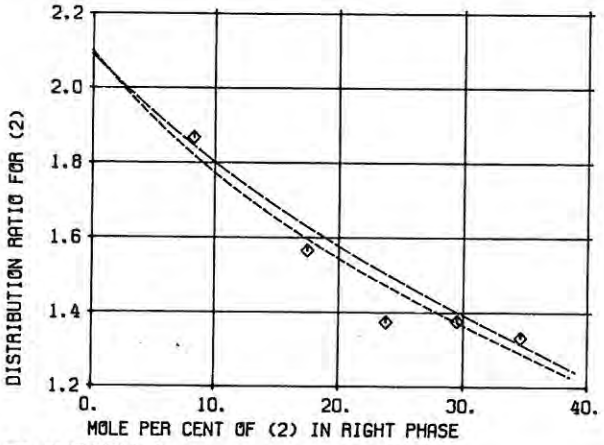
R1 = 3.3949 R2 = 1.8991 R3 = 0.9200
Q1 = 3.016 Q2 = 1.796 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.68
NRTL (SPECIFIC PARAMETERS)	0.62



EXP.TIE LINE ——
CALC.BINODAL UNIQ(SP) —— NRTL(SP) ----
CALC.PLAIT P.



EXP. DISTR.RATIO
CALC.DISTR.RATIO UNIQ(SP) —— NRTL(SP) ----

(1) C5H4O2 FURFURAL

(2) C2H4O ACETALDEHYDE

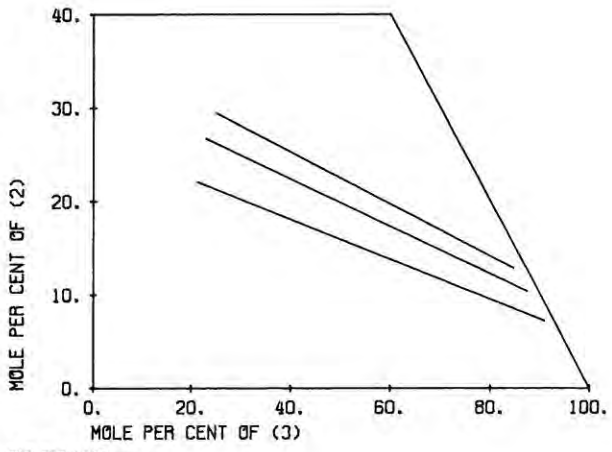
(3) H2O WATER

OTHMER D.F., TOBIAS P.E.
IND.ENG.CHEM. 34(1942)690

TEMPERATURE = 16.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
56.620	22.064	21.316	1.959	7.196	90.845
50.310	26.689	23.001	2.296	10.372	87.332
45.444	29.434	25.122	2.556	12.828	84.615



EXP.TIE LINE ——

(1) C6H6 BENZENE

(2) C2H4O ACETALDEHYDE

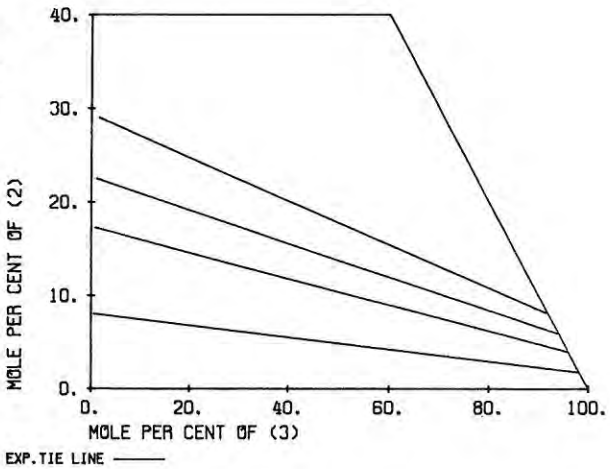
(3) H2O WATER

OTHMER D.F., TOBIAS P.E.
IND.ENG.CHEM. 34(1942)690

TEMPERATURE = 18.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
91.352	8.003	0.645	0.119	1.768	98.113
81.884	17.260	0.856	0.218	3.962	95.820
76.366	22.491	1.143	0.306	5.915	93.779
69.379	29.015	1.606	0.407	8.143	91.450



(1) C7H8 TOLUENE

(2) C2H4O ACETALDEHYDE

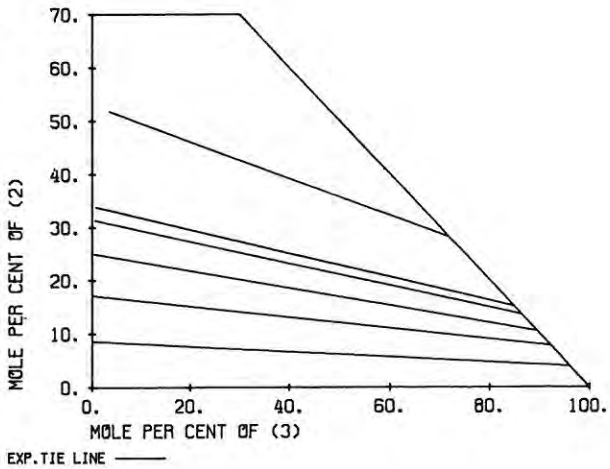
(3) H2O WATER

OTHMER D.F., TOBIAS P.E.
IND.ENG.CHEM. 34(1942)690

TEMPERATURE = 17.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
91.177	8.575	0.249	0.030	3.892	96.078
82.505	17.086	0.409	0.045	7.743	92.212
74.519	24.989	0.492	0.060	10.476	89.464
67.997	31.289	0.714	0.081	13.650	86.269
65.336	33.828	0.836	0.092	15.152	84.756
44.661	51.770	3.568	0.275	28.283	71.443



(1) C2H6O2 1,2-ETHANEDIOL

(2) C2H4O2 ACETIC ACID

(3) C4H8O2 ACETIC ACID,ETHYL ESTER

OREL A.
J.CHEM.ENG.DATA 12(1967)1

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
83.884	0.989	15.127	13.197	0.844	85.960
82.994	1.321	15.684	13.967	1.121	84.912
80.658	2.214	17.127	15.756	1.531	82.713
80.385	2.326	17.288	16.510	1.804	81.687
77.606	3.235	19.159	19.859	2.737	77.404
74.416	3.942	21.642	23.129	3.512	73.359
70.181	4.790	25.028	27.477	4.512	68.011
63.659	5.707	30.634	33.409	5.193	61.398

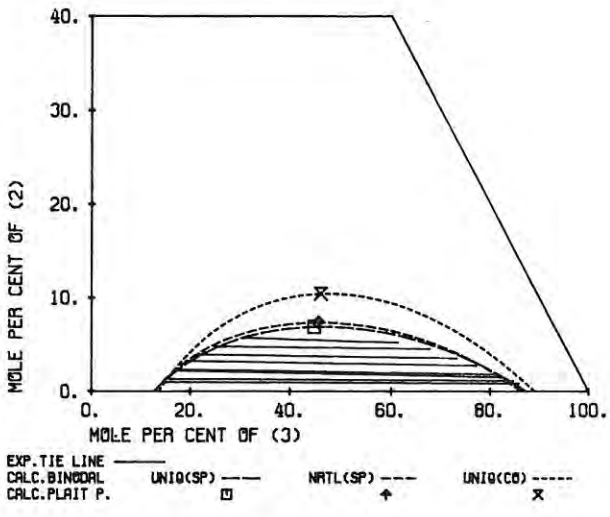
SPECIFIC MODEL PARAMETERS IN KELVIN

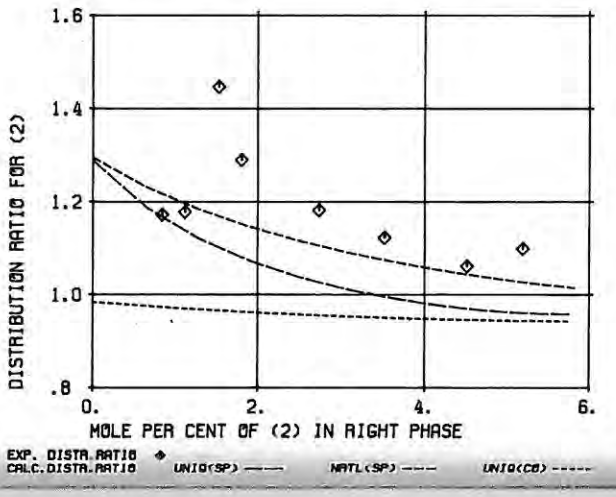
I J	UNIQUAC AIJ	AJI	NRTL(ALPHA=.2) AIJ	AJI
1 2	87.971	-391.53	324.88	-838.73
1 3	72.350	295.47	462.97	431.49
2 3	-303.67	-123.43	-464.49	-396.64

R1 = 2.4088 R2 = 2.2024 R3 = 3.4786
Q1 = 2.248 Q2 = 2.072 Q3 = 3.116

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.49
NRTL (SPECIFIC PARAMETERS)	0.77
UNIQUAC (COMMON PARAMETERS)	1.92





(1) C4H6O2 ACETIC ACID,ETHENYL ESTER

(2) C2H4O2 ACETIC ACID

(3) H2O WATER

TICHONOVA N.K., ET AL.
IZV.VYSSH.UCHEBN.ZAVED.KHIM.KHIM.TEKHNOL. 13(1970)175

TEMPERATURE = 20.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
99.524	0.0	0.476	0.425	0.0	99.575
81.177	7.776	11.047	0.617	4.727	94.656
70.226	12.422	17.352	0.754	7.427	91.818
62.817	17.852	19.330	1.004	9.619	89.377
55.120	21.259	23.621	1.170	12.301	86.530
42.412	23.546	34.042	2.530	15.468	82.002
29.907	25.824	44.269	7.089	18.993	73.918
24.220	24.366	51.414	8.316	20.048	71.637

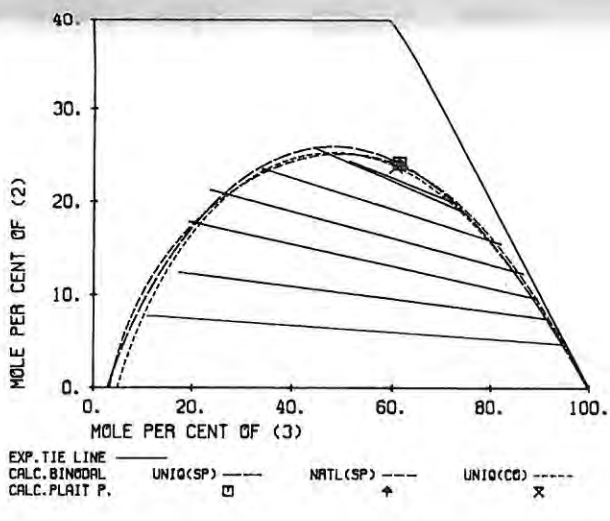
SPECIFIC MODEL PARAMETERS IN KELVIN

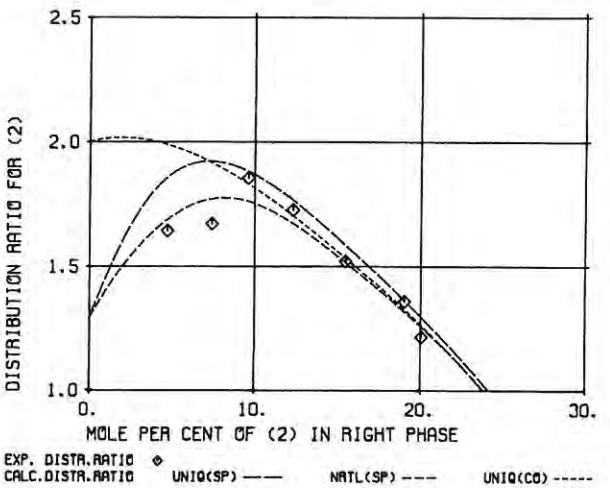
I J	UNIQUAC AIJ	AJI	NRTL(ALPHA=.2) AIJ	AJI
1 2	-80.671	-166.88	-1479.4	-445.64
1 3	573.81	219.51	522.78	1639.1
2 3	-308.92	81.515	-787.64	-754.87

R1 = 3.2485 R2 = 2.2024 R3 = 0.9200
Q1 = 2.904 Q2 = 2.072 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.89
NRTL (SPECIFIC PARAMETERS)	0.98
UNIQUAC (COMMON PARAMETERS)	1.18





(1) C4H8O 2-BUTANONE
(2) C2H4O2 ACETIC ACID
(3) H2O WATER

SKRZEC A.E., MURPHY N.F.
IND.ENG.CHEM. 46(1954)2245

TEMPERATURE = 26.7 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
63.617	0.0	36.383	7.311	0.0	92.689
60.547	0.851	38.601	8.049	0.307	91.644
57.986	1.482	40.531	8.623	0.538	90.839
56.287	1.878	41.835	8.733	0.586	90.681
52.640	2.494	44.866	9.717	0.958	89.325
47.994	2.937	49.069	10.228	1.140	88.631
44.769	3.051	52.180	10.669	1.247	88.084

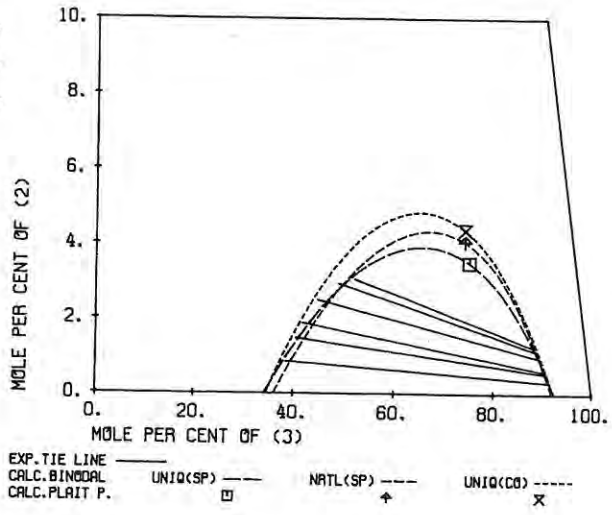
SPECIFIC MODEL PARAMETERS IN KELVIN

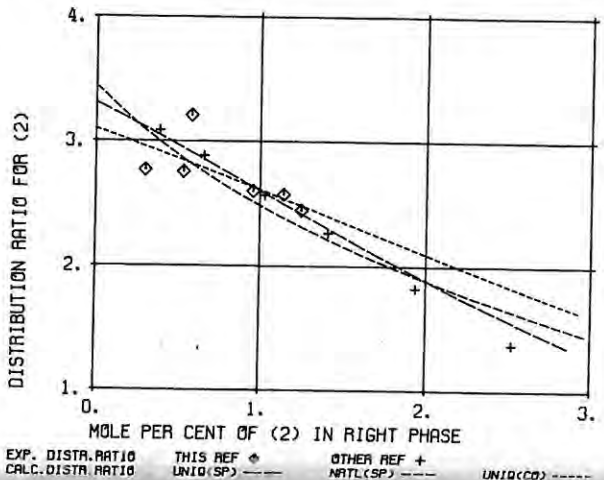
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-254.13	-4.5537	518.52	-916.62
1 3	345.53	-2.0882	7.0045	895.00
2 3	-301.02	254.15	-453.71	-533.93

R1 = 3.2479 R2 = 2.2024 R3 = 0.9200
Q1 = 2.876 Q2 = 2.072 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.21
NRTL (SPECIFIC PARAMETERS)	0.27
UNIQUAC (COMMON PARAMETERS)	0.36





(1) C4H8O 2-BUTANONE
(2) C2H4O2 ACETIC ACID
(3) H2O WATER

IGUCHI A., FUSE K.
KAGAKU KOGAKU 35(1971)477

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
61.025	1.210	37.765	8.220	0.392	91.388
56.633	1.911	41.456	8.910	0.662	90.428
50.454	2.644	46.902	9.988	1.029	88.984
44.785	3.194	52.021	11.225	1.410	87.366
34.895	3.534	61.571	13.371	1.936	84.693
27.693	3.460	68.848	17.430	2.521	80.049

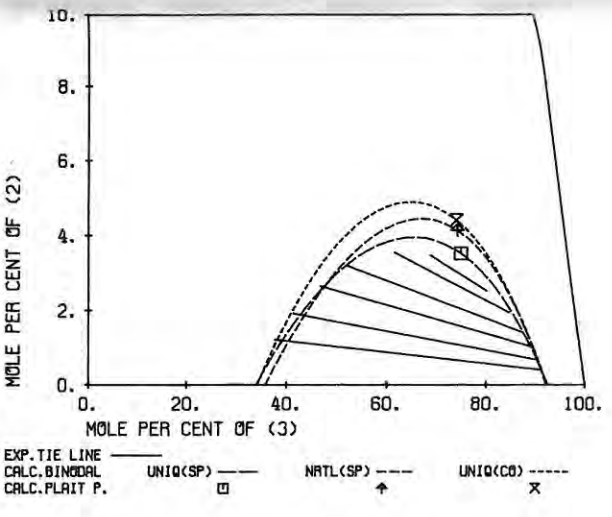
SPECIFIC MODEL PARAMETERS IN KELVIN

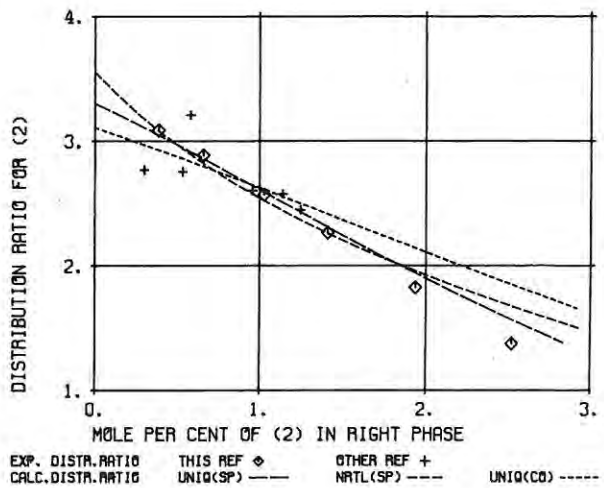
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-254.13	-4.5537	518.52	-916.62
1 3	345.53	-2.0882	7.0045	895.00
2 3	-301.02	254.15	-453.71	-533.93

R1 = 3.2479 R2 = 2.2024 R3 = 0.9200
Q1 = 2.876 Q2 = 2.072 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.23
NRTL (SPECIFIC PARAMETERS)	0.45
UNIQUAC (COMMON PARAMETERS)	0.59





(1) C4H8O2 ACETIC ACID,ETHYL ESTER

(2) C2H4O2 ACETIC ACID

(3) H2O WATER

SOHONI V.R., WARHADPANDE U.R.
IND.ENG.CHEM. 44(1952)1428

TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
78.362	3.091	18.547	1.771	0.899	97.329
71.716	5.892	22.391	2.002	1.762	96.236
64.855	8.368	26.777	2.359	2.666	94.975
57.982	10.504	31.513	2.718	3.490	93.791
53.210	12.332	34.457	2.902	4.294	92.804

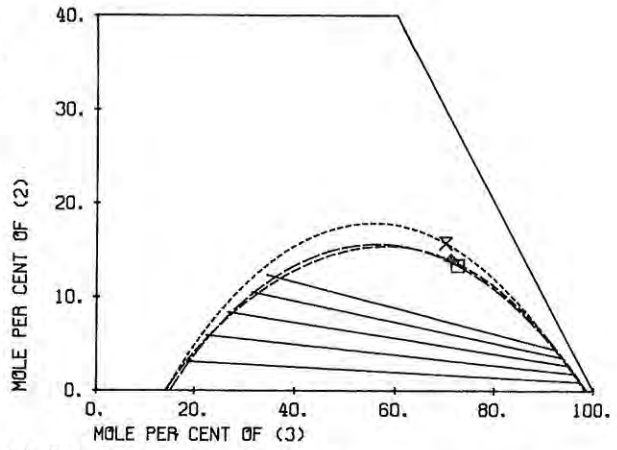
SPECIFIC MODEL PARAMETERS IN KELVIN

		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	-212.18	29.450	643.30	-702.57
1	3	376.94	97.519	166.36	1190.1
2	3	-259.46	188.77	-1.6825	-302.63

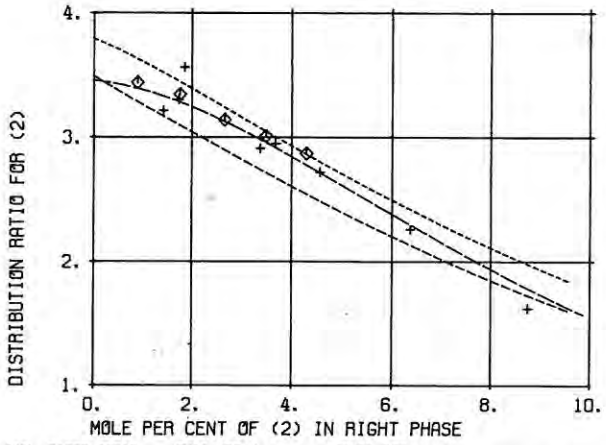
R1 = 3.4786 R2 = 2.2024 R3 = 0.9200
Q1 = 3.116 Q2 = 2.072 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.20
NRTL (SPECIFIC PARAMETERS)	0.30
UNIQUAC (COMMON PARAMETERS)	0.47



EXP.TIE LINE ——— CALC.BINODAL UNIQ(SP) —— NRTL(SP) ---- UNIQ(CO) ----- CALC.PLAIT P.



EXP. DISTR.RATIO THIS REF ◇ OTHER REF +
CALC.DISTR.RATIO UNIQ(SP) —— NRTL(SP) ---- UNIQ(CO) -----

(1) C4H8O2 ACETIC ACID,ETHYL ESTER

(2) C2H4O2 ACETIC ACID

(3) H2O WATER

GARNER F.H., ELLIS S.R.M.
CHEM.ENG.SCI. 2(1953)282

TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
71.981	4.572	23.447	1.805	1.423	96.772
70.917	5.723	23.360	1.817	1.733	96.449
56.066	9.824	34.110	2.396	3.375	94.229
26.617	14.203	59.180	6.931	8.756	84.313

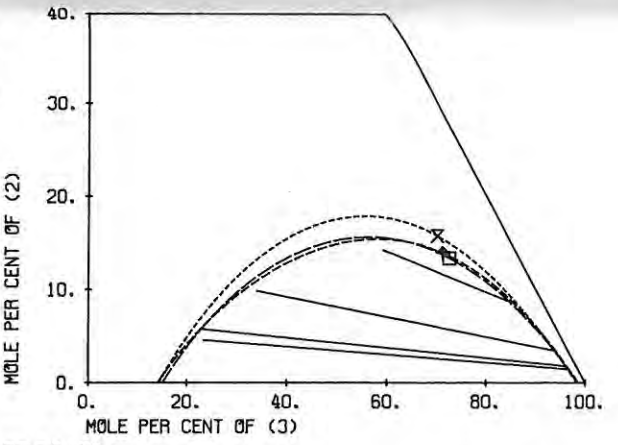
SPECIFIC MODEL PARAMETERS IN KELVIN

		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	-212.18	29.450	643.30	-702.57
1	3	376.94	97.519	166.36	1190.1
2	3	-259.46	188.77	-1.6825	-302.63

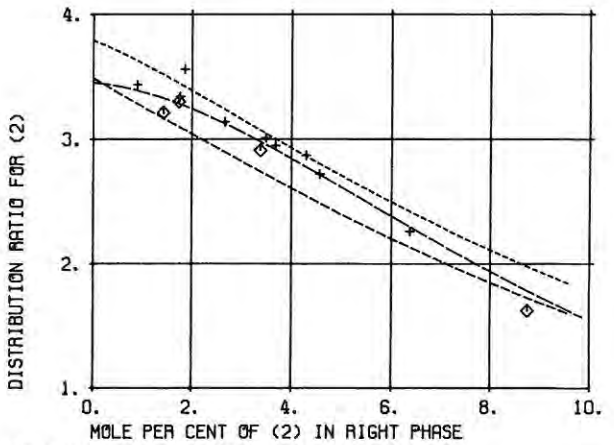
R1 = 3.4786 R2 = 2.2024 R3 = 0.9200
Q1 = 3.116 Q2 = 2.072 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.68
NRTL (SPECIFIC PARAMETERS)	0.89
UNIQUAC (COMMON PARAMETERS)	1.60



EXP.TIE LINE ——— CALC.BINODAL UNIQ(SP) —— NRTL(SP) ---- UNIQ(CO) ----- CALC.PLAIT P.



EXP. DISTR.RATIO THIS REF ◇ OTHER REF +
CALC.DISTR.RATIO UNIQ(SP) —— NRTL(SP) ---- UNIQ(CO) -----

(1) C4H8O2 ACETIC ACID,ETHYL ESTER

(2) C2H4O2 ACETIC ACID

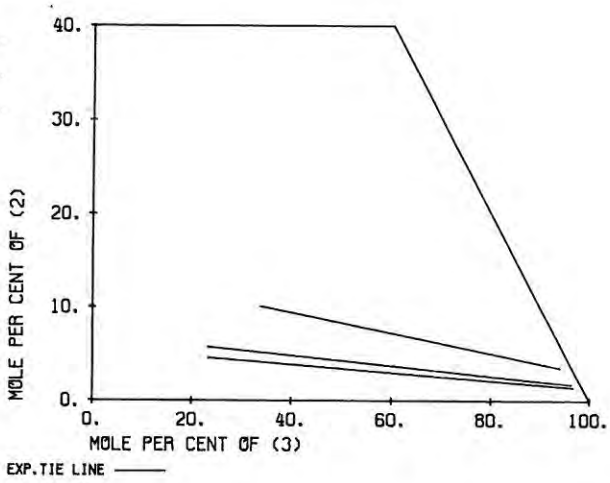
(3) H2O WATER

GARNER F.H., ELLIS S.R.M.
CHEM.ENG.SCI. 2(1953)282

TEMPERATURE = 40.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
71.981	4.572	23.447	1.805	1.423	96.772
70.917	5.723	23.360	1.817	1.733	96.449
56.112	10.049	33.839	2.404	3.528	94.069



(1) C4H8O2 ACETIC ACID,ETHYL ESTER

(2) C2H4O2 ACETIC ACID

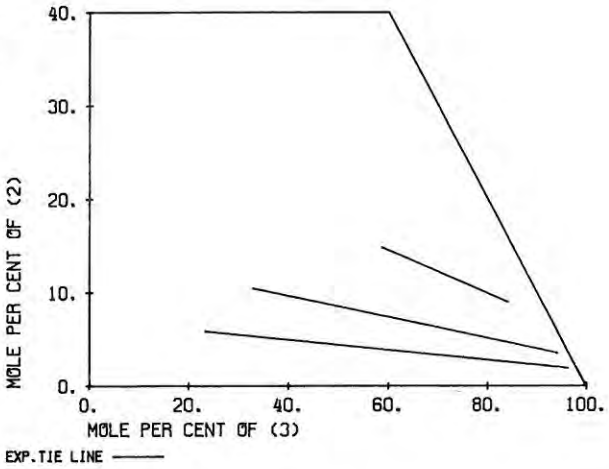
(3) H2O WATER

GARNER F.H., ELLIS S.R.M.
CHEM.ENG.SCI. 2(1953)282

TEMPERATURE = 50.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
70.811	5.838	23.351	1.823	1.873	96.304
2.404	3.528	94.069	2.400	3.451	94.149
56.744	10.460	32.796	2.404	3.528	94.069
26.477	14.828	58.695	6.960	8.970	84.071



(1) C4H8O2 ACETIC ACID,ETHYL ESTER

(2) C2H4O2 ACETIC ACID

(3) H2O WATER

MIRADA LILLO R., GONZALES TRIGO G.
AN.R.SOC.ESP.FIS.QUIM. 56B(1960)217

TEMPERATURE = 20.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
73.344	6.614	20.042	1.810	1.858	96.332
60.426	10.846	28.728	2.412	3.677	93.911
54.253	12.417	33.330	2.809	4.563	92.629
42.727	14.393	42.879	3.848	6.364	89.787

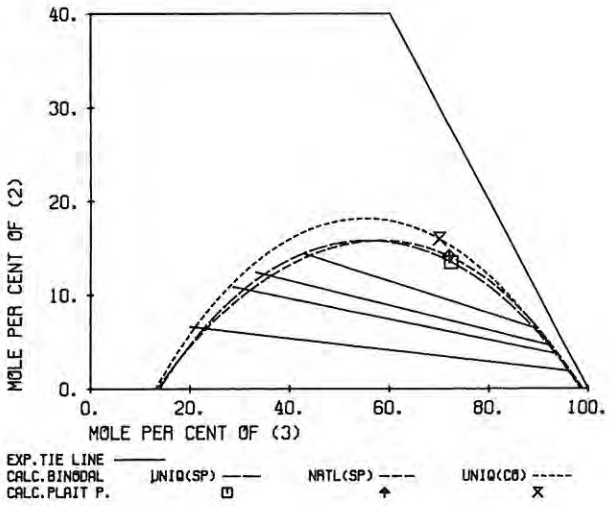
SPECIFIC MODEL PARAMETERS IN KELVIN

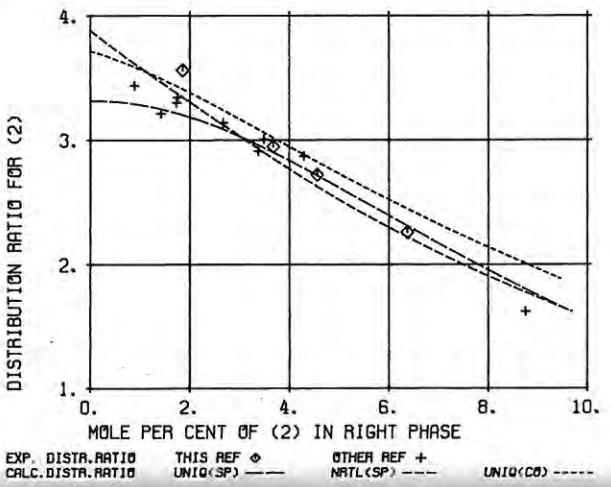
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	-212.18	29.450	643.30	-702.57
1	3	376.94	97.519	166.36	1190.1
2	3	-259.46	188.77	-1.6825	-302.63

R1 = 3.4786 R2 = 2.2024 R3 = 0.9200
Q1 = 3.116 Q2 = 2.072 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.46
NRTL (SPECIFIC PARAMETERS)	0.66
UNIQUAC (COMMON PARAMETERS)	0.66





(1) C4H8O2 PROPANOIC ACID,METHYL ESTER

(2) C2H4O2 ACETIC ACID

(3) H2O WATER

BOMSHTEIN A.L., TROFIMOV A.N., SERAFIMOV L.A.
ZH.PRIKL.KHIM.(LENINGRAD) 51(1978)1280

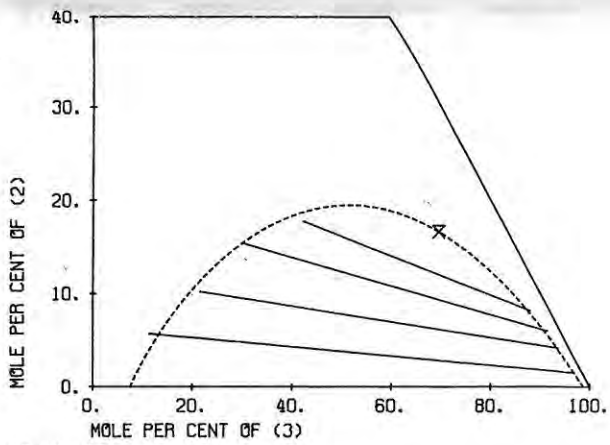
TEMPERATURE = 20.0 DEG C TYPE OF SYSTEM = 1

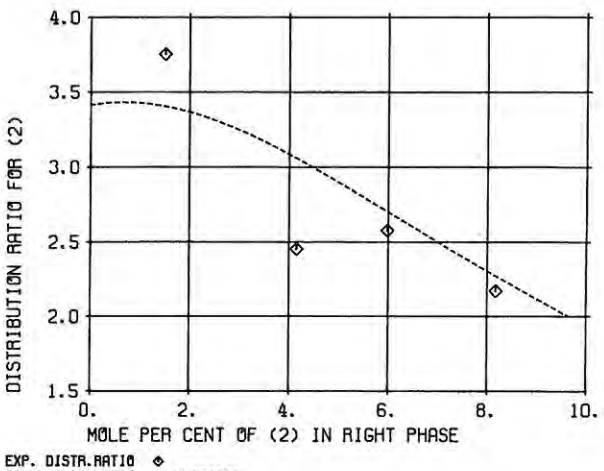
EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
82.810	5.670	11.520	1.520	1.510	96.970
68.130	10.180	21.690	2.180	4.150	93.670
54.590	15.410	30.000	2.530	5.980	91.490
39.950	17.740	42.310	3.870	8.170	87.960

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (COMMON PARAMETERS)	0.51





(1) C4H10O 1-BUTANOL

(2) C2H4O2 ACETIC ACID

(3) H2O WATER

SKRZEC A.E., MURPHY N.F.
IND.ENG.CHEM. 46(1954)2245

TEMPERATURE = 26.7 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
48.522	0.0	51.478	1.878	0.0	98.122
46.514	1.054	52.432	1.863	0.281	97.856
44.932	1.832	53.237	1.862	0.585	97.553
43.186	2.657	54.157	1.868	0.851	97.281
41.333	3.482	55.186	1.902	1.187	96.911
39.524	4.221	56.255	1.983	1.436	96.581
35.232	5.679	59.089	2.333	2.139	95.529
31.017	6.822	62.161	2.712	2.830	94.457

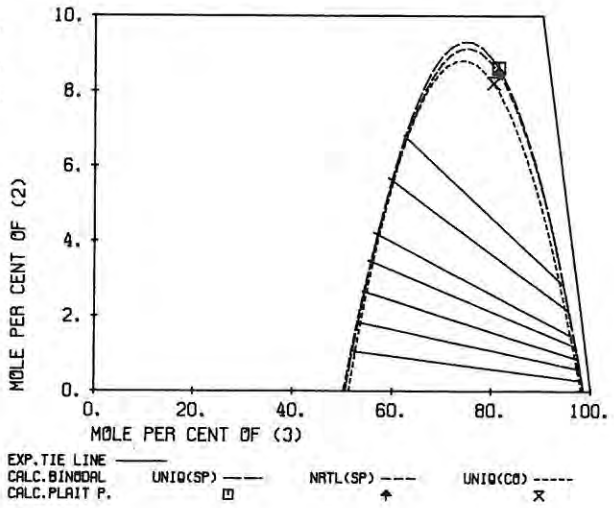
SPECIFIC MODEL PARAMETERS IN KELVIN

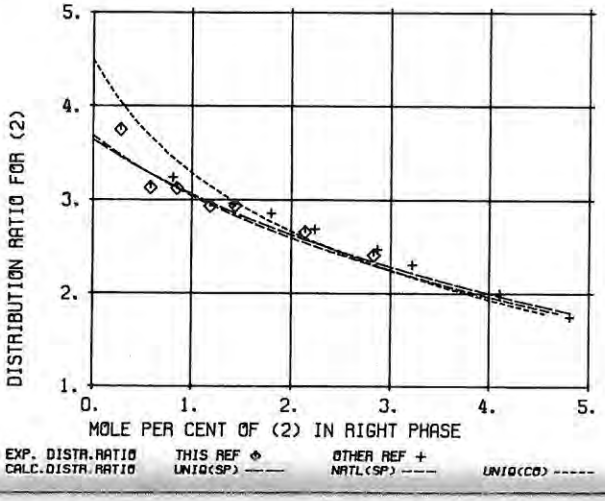
	UNIQUAC		NRTL(ALPHA=.2)	
I J	AIJ	AJI	AIJ	AJI
1 2	155.34	-211.40	192.64	-412.70
1 3	-30.037	311.03	-330.50	1601.7
2 3	-30.340	-170.32	-114.89	-182.85

R1 = 3.4543 R2 = 2.2024 R3 = 0.9200
Q1 = 3.052 Q2 = 2.072 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.16
NRTL (SPECIFIC PARAMETERS)	0.17
UNIQUAC (COMMON PARAMETERS)	0.29





(1) C4H10O 1-BUTANOL

(2) C2H4O2 ACETIC ACID

(3) H2O WATER

FUSE K., IGUCHI A.
KAGAKU KOGAKU 35(1971)801

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
43.930	2.624	53.446	1.529	0.809	97.661
40.553	4.200	55.247	1.551	1.418	97.032
38.251	5.130	56.619	1.564	1.796	96.640
35.303	6.014	58.683	1.664	2.236	96.101
30.617	7.088	62.295	1.888	2.867	95.245
28.597	7.424	63.979	2.078	3.218	94.705
23.598	8.207	68.195	2.819	4.105	93.076
20.784	8.418	70.798	4.032	4.813	91.156

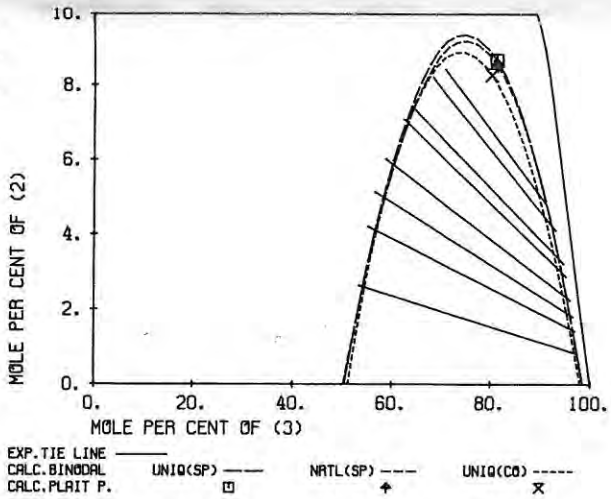
SPECIFIC MODEL PARAMETERS IN KELVIN

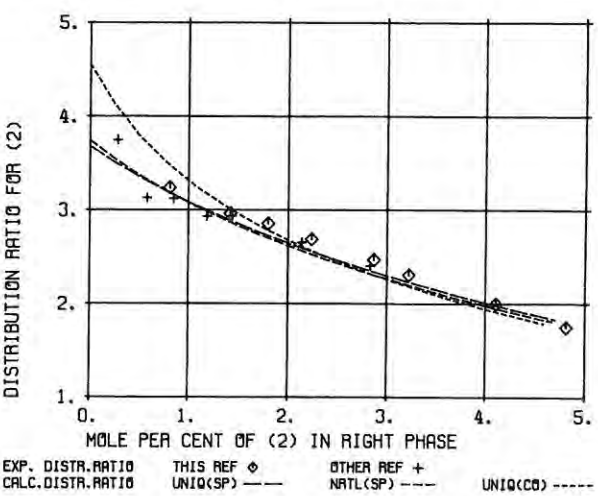
	UNIQUAC		NRTL(ALPHA=.2)	
I J	AIJ	AJI	AIJ	AJI
1 2	155.34	-211.40	192.64	-412.70
1 3	-30.037	311.03	-330.50	1601.7
2 3	-30.340	-170.32	-114.89	-182.85

R1 = 3.4543 R2 = 2.2024 R3 = 0.9200
Q1 = 3.052 Q2 = 2.072 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.54
NRTL (SPECIFIC PARAMETERS)	0.54
UNIQUAC (COMMON PARAMETERS)	0.95





(1) C4H10O ETHER,DIETHYL

(2) C2H4O2 ACETIC ACID

(3) H2O WATER

MAJOR C.J., SWENSON O.J.
IND.ENG.CHEM. 38(1946)834

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
84.773	4.725	10.501	1.822	1.951	96.227
74.591	9.462	15.947	2.076	3.844	94.080
63.359	14.174	22.467	2.413	5.812	91.775
52.281	18.123	29.596	3.047	7.907	89.046
39.625	20.705	39.671	4.247	10.443	85.309
28.229	21.048	50.723	6.553	13.315	80.132

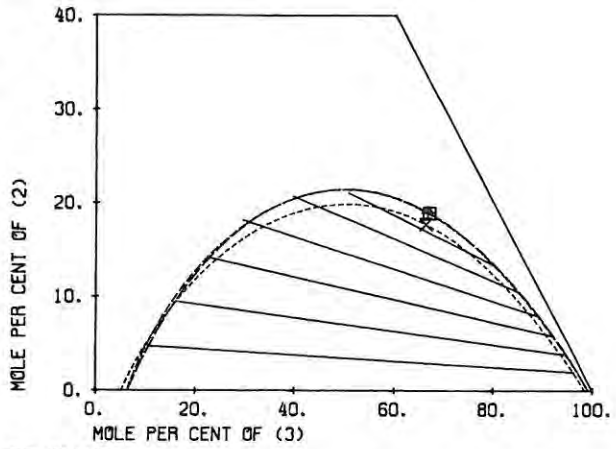
SPECIFIC MODEL PARAMETERS IN KELVIN

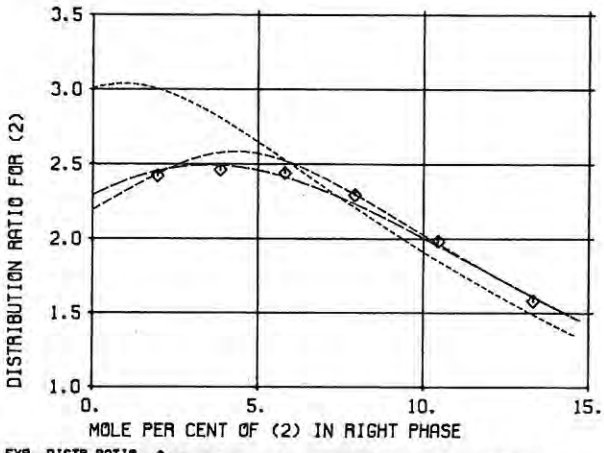
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	-212.01	26.114	955.63	-679.82
1	3	493.70	127.55	374.70	1168.1
2	3	-254.66	129.86	65.933	-58.806

R1 = 3.3949 R2 = 2.2024 R3 = 0.9200
Q1 = 3.016 Q2 = 2.072 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.31
NRTL (SPECIFIC PARAMETERS)	0.30
UNIQUAC (COMMON PARAMETERS)	0.83





(1) C4H10O ETHER,DIETHYL

(2) C2H4O2 ACETIC ACID

(3) H2O WATER

CASARICO A.
ANN.CHIM.(ROME) 41(1951)199

TEMPERATURE = 19.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
92.327	0.886	6.787	0.794	0.385	98.822
85.266	3.277	11.457	0.521	1.339	98.140
73.990	6.212	19.799	0.454	2.536	97.010
53.733	11.083	35.184	0.165	4.736	95.099
25.198	15.121	59.681	0.818	8.499	90.683

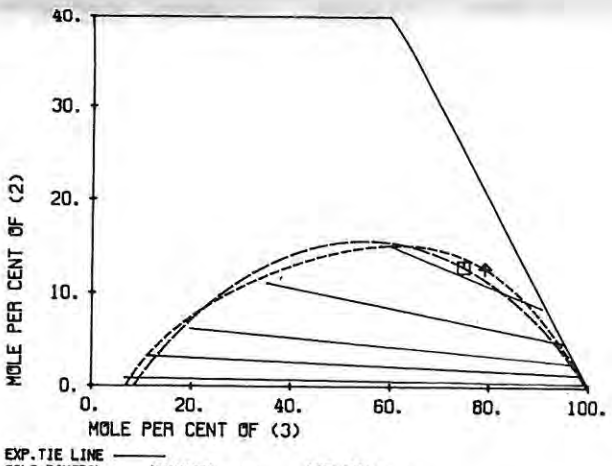
SPECIFIC MODEL PARAMETERS IN KELVIN

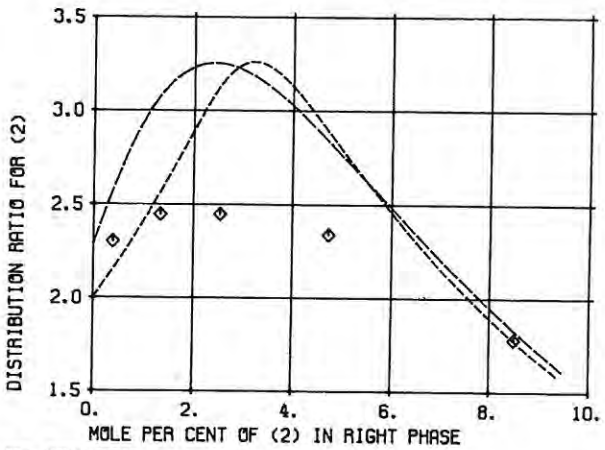
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	-339.02	-229.82	-860.01	-499.13
1	3	356.63	234.53	320.56	1548.0
2	3	-445.96	217.78	-1129.9	854.25

R1 = 3.3949 R2 = 2.2024 R3 = 0.9200
Q1 = 3.016 Q2 = 2.072 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.40
NRTL (SPECIFIC PARAMETERS)	0.55





(1) C5H4O2 FURFURAL
(2) C2H4O2 ACETIC ACID
(3) H2O WATER

SKRZEC A.E., MURPHY N.F.
IND.ENG.CHEM. 46(1954)2245

TEMPERATURE = 26.7 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
76.310	0.0	23.690	1.712	0.0	98.288
71.039	2.306	26.655	1.871	0.778	97.350
65.484	4.107	30.409	2.027	1.405	96.567
56.483	6.163	37.354	2.312	2.248	95.440
47.354	7.473	45.173	2.681	3.026	94.292
44.846	8.381	46.773	3.208	3.753	93.039
40.550	9.859	49.591	4.227	4.756	91.017
38.504	10.298	51.198	4.593	5.057	90.350

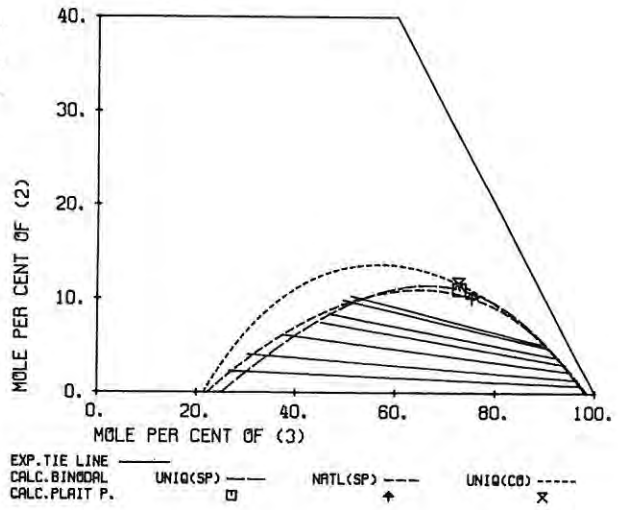
SPECIFIC MODEL PARAMETERS IN KELVIN

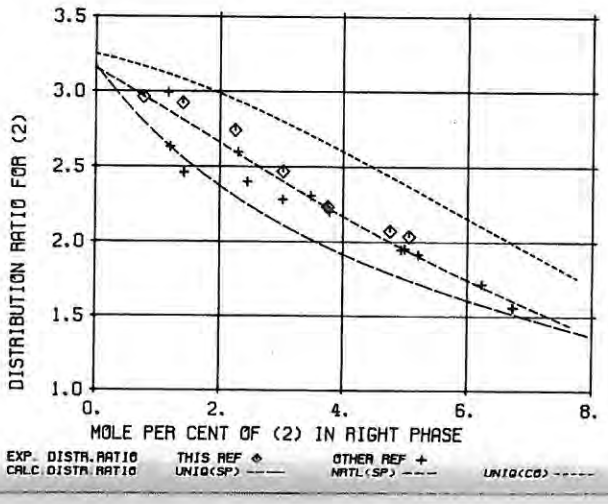
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	342.99	-361.92	514.63	-757.65
1 3	149.81	110.29	28.810	1248.6
2 3	-127.49	-419.83	-250.83	-502.50

R1 = 3.1680 R2 = 2.2024 R3 = 0.9200
Q1 = 2.484 Q2 = 2.072 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.79
NRTL (SPECIFIC PARAMETERS)	0.39
UNIQUAC (COMMON PARAMETERS)	1.89





(1) C5H4O2 FURFURAL
(2) C2H4O2 ACETIC ACID
(3) H2O WATER

PEGORARO M., GUGLIELMI G.
CHIM.IND.(MILAN) 37(1955)1035

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
67.091	3.507	29.402	2.131	1.425	96.444
53.088	6.896	40.017	2.767	3.021	94.211
49.391	8.324	42.285	2.785	3.732	93.483
40.228	9.616	50.156	3.928	4.936	91.136
30.840	10.708	58.453	4.916	6.236	88.849

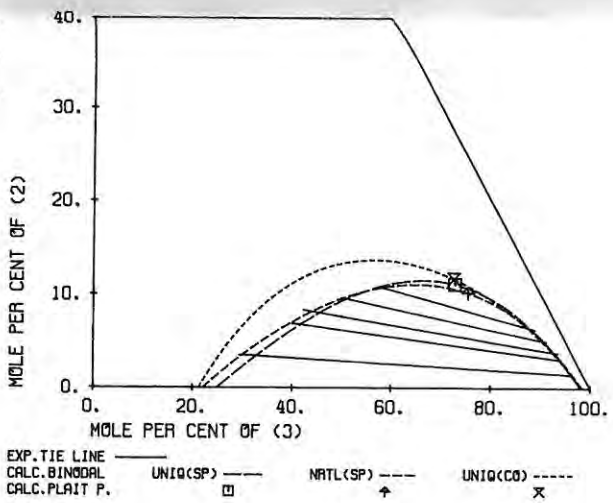
SPECIFIC MODEL PARAMETERS IN KELVIN

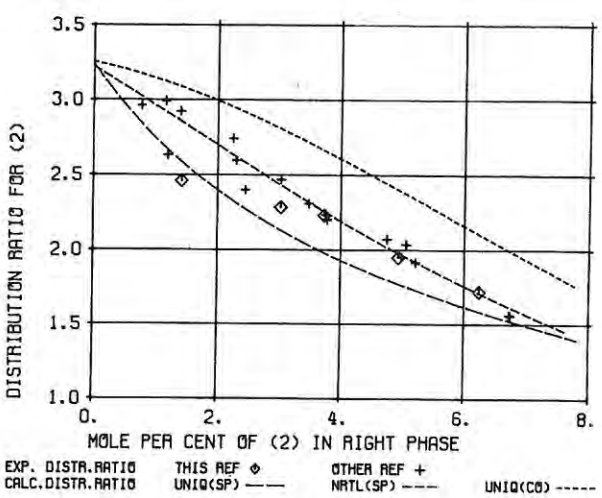
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	342.99	-361.92	514.63	-757.65
1 3	149.81	110.29	28.810	1248.6
2 3	-127.49	-419.83	-250.83	-502.50

R1 = 3.1680 R2 = 2.2024 R3 = 0.9200
Q1 = 2.484 Q2 = 2.072 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.01
NRTL (SPECIFIC PARAMETERS)	0.37
UNIQUAC (COMMON PARAMETERS)	2.07





(1) C5H4O2 FURFURAL

(2) C2H4O2 ACETIC ACID

(3) H2O WATER

HERIC E.L., RUTLEDGE R.M.
CAN.J.CHEM.ENG. 38(1960)46

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
67.622	3.491	28.887	1.937	1.167	96.896
58.683	5.966	35.351	2.458	2.297	95.245
49.809	8.031	42.160	3.228	3.480	93.292
39.787	9.740	50.472	4.441	4.987	90.572
28.138	10.498	61.364	6.873	6.721	86.407

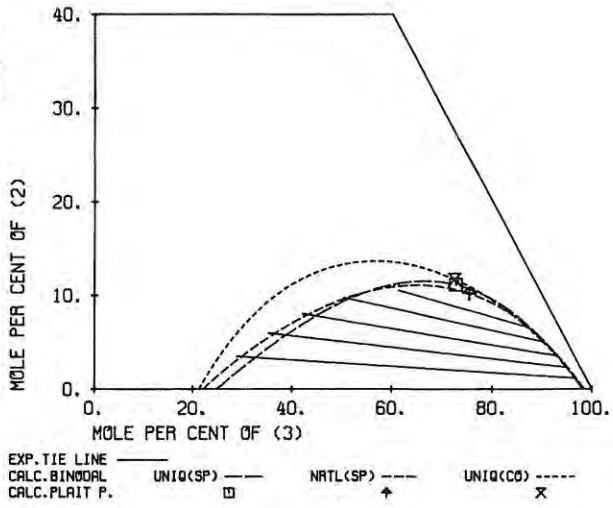
SPECIFIC MODEL PARAMETERS IN KELVIN

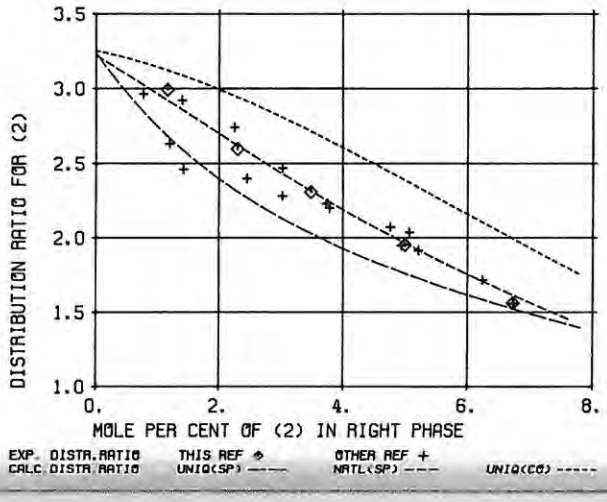
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	342.99	-361.92	514.63	-757.65
1 3	149.81	110.29	28.810	1248.6
2 3	-127.49	-419.83	-250.83	-502.50

R1 = 3.1680 R2 = 2.2024 R3 = 0.9200
Q1 = 2.484 Q2 = 2.072 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.89
NRTL (SPECIFIC PARAMETERS)	0.22
UNIQUAC (COMMON PARAMETERS)	1.86





(1) C5H4O2 FURFURAL

(2) C2H4O2 ACETIC ACID

(3) H2O WATER

HERIC E.L., RUTLEDGE R.M.
J.CHEM.ENG.DATA 5(1960)272

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
68.840	3.165	27.995	1.962	1.202	96.836
59.022	5.875	35.103	2.514	2.449	95.037
48.704	8.329	42.967	3.406	3.782	92.812
38.270	9.975	51.755	4.695	5.207	90.098
28.138	10.498	61.364	6.944	6.736	86.320

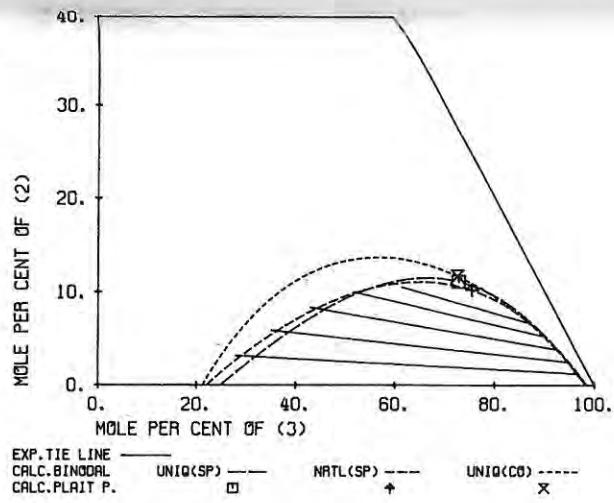
SPECIFIC MODEL PARAMETERS IN KELVIN

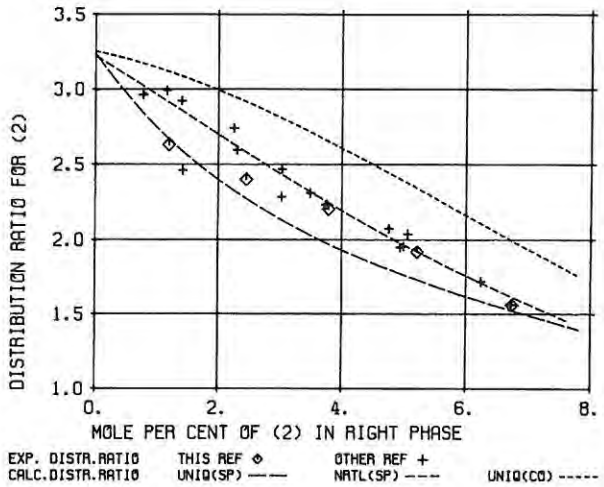
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	342.99	-361.92	514.63	-757.65
1 3	149.81	110.29	28.810	1248.6
2 3	-127.49	-419.83	-250.83	-502.50

R1 = 3.1680 R2 = 2.2024 R3 = 0.9200
Q1 = 2.484 Q2 = 2.072 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.91
NRTL (SPECIFIC PARAMETERS)	0.27
UNIQUAC (COMMON PARAMETERS)	1.81





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$C_2H_4O_2$-$C_5H_4O_2$

(1) C5H4O2 FURFURAL

(2) C2H4O2 ACETIC ACID

(3) H2O WATER

HERIC E.L., RUTLEDGE R.M.
J.CHEM.ENG.DATA 5(1960)272

TEMPERATURE = 35.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
69.308	1.944	28.748	2.077	0.764	97.159
60.215	4.801	34.984	2.628	1.912	95.460
53.594	6.461	39.945	3.153	2.775	94.071
45.244	8.128	46.627	4.060	3.875	92.065
35.838	9.308	54.853	5.495	5.088	89.417

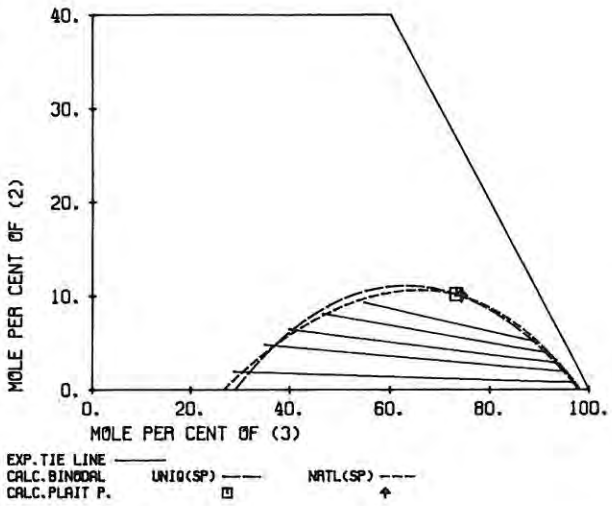
SPECIFIC MODEL PARAMETERS IN KELVIN

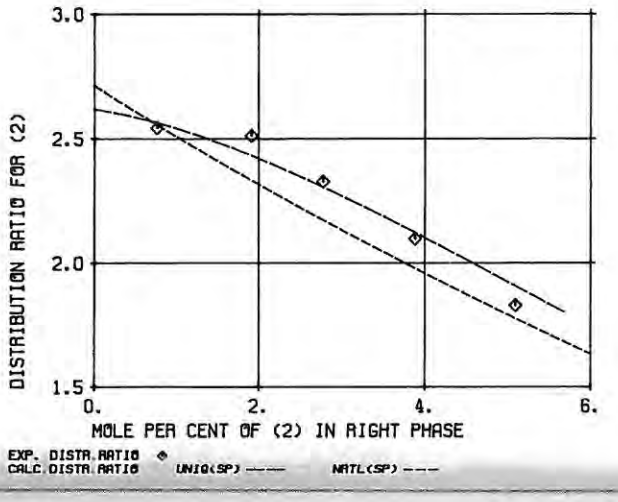
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-258.56	-1.6822	416.14	-665.47
1 3	135.40	102.85	-22.801	1270.0
2 3	-313.68	229.03	-205.88	-431.99

R1 = 3.1680 R2 = 2.2024 R3 = 0.9200
Q1 = 2.484 Q2 = 2.072 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.78
NRTL (SPECIFIC PARAMETERS)	0.43





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$C_2H_4O_2$-$C_5H_{10}O$

(1) C5H10O 3-PENTANONE

(2) C2H4O2 ACETIC ACID

(3) H2O WATER

HADDAD P.O., EDMISTER W.C.
J.CHEM.ENG.DATA 17(1972)275

TEMPERATURE = 70.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
71.192	4.770	24.038	1.180	1.735	97.085
71.611	4.684	23.705	1.180	1.745	97.074
54.406	10.996	34.598	1.798	4.707	93.495
54.555	10.962	34.483	1.826	4.758	93.416
46.686	13.440	39.874	2.267	6.252	91.482
46.784	13.376	39.841	2.297	6.313	91.390
33.868	16.405	49.728	4.146	9.841	86.013

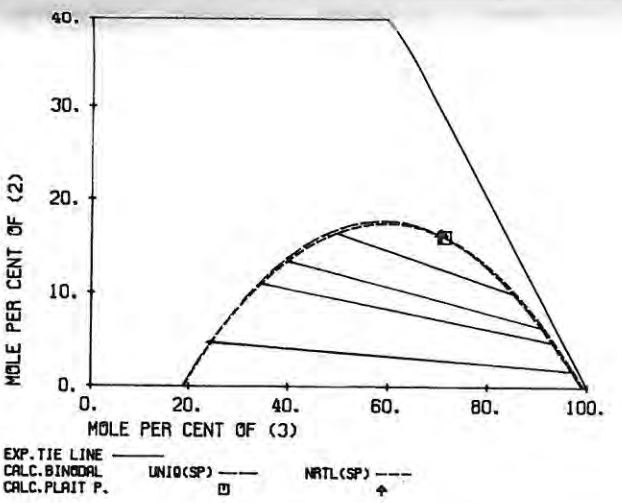
SPECIFIC MODEL PARAMETERS IN KELVIN

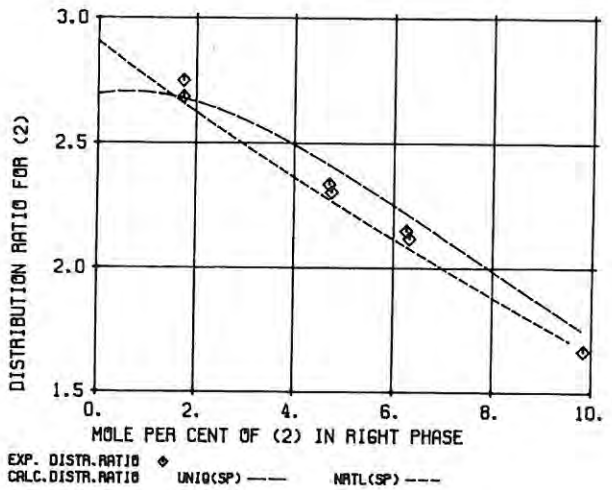
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-153.19	-85.952	444.69	-578.48
1 3	374.63	102.60	55.599	1648.4
2 3	-310.35	147.39	50.055	-300.88

R1 = 3.9223 R2 = 2.2024 R3 = 0.9200
Q1 = 3.416 Q2 = 2.072 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.26
NRTL (SPECIFIC PARAMETERS)	0.18





(1) C5H10O2 ACETIC ACID,ISOPROPYL ESTER

(2) C2H4O2 ACETIC ACID

(3) H2O WATER

HLAVATY K., LINEK J.
COLLECT.CZECH.CHEM.COMMUN. 38(1973)374

TEMPERATURE = 24.6 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
88.690	0.0	11.310	0.395	0.0	99.605
66.806	10.890	22.304	0.734	3.881	95.385
47.325	18.456	34.219	1.266	7.648	91.086
33.804	21.757	44.439	2.072	10.854	87.074
22.825	22.161	55.014	3.784	13.861	82.355
17.964	21.303	60.732	5.851	15.815	78.334

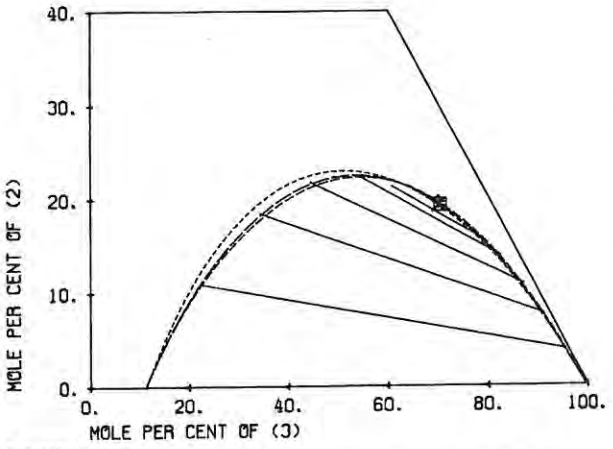
SPECIFIC MODEL PARAMETERS IN KELVIN

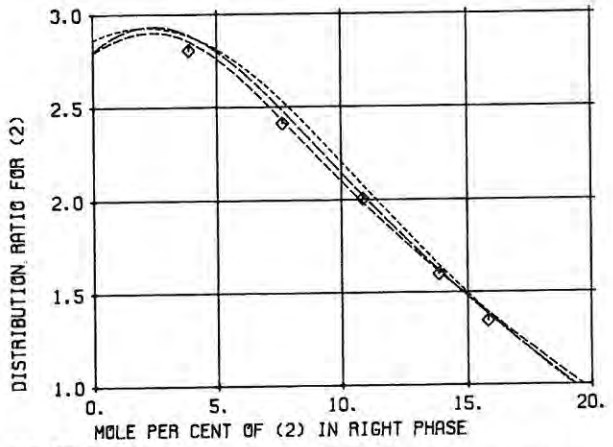
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-193.47	-14.584	713.58	-561.27
1 3	403.99	126.88	195.15	1601.4
2 3	-270.16	150.36	38.397	-11.587

R1 = 4.1522 R2 = 2.2024 R3 = 0.9200
Q1 = 3.652 Q2 = 2.072 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.26
NRTL (SPECIFIC PARAMETERS)	0.28
UNIQUAC (COMMON PARAMETERS)	0.52





(1) C5H10O2 BUTANOIC ACID,METHYL ESTER

(2) C2H4O2 ACETIC ACID

(3) H2O WATER

SITARAMA MURTY N., SUBRAHMANYAM V., DAKSHINA MURTY P.
J.CHEM.ENG.DATA 11(1966)335

TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
63.737	13.518	22.745	0.588	5.243	94.169
58.212	17.449	24.339	0.839	7.761	91.399
47.872	20.243	31.885	1.130	9.804	89.066
40.733	22.033	37.234	1.667	11.664	86.669
36.918	22.983	40.099	2.034	13.328	84.638
30.760	24.890	44.350	4.199	16.760	79.040

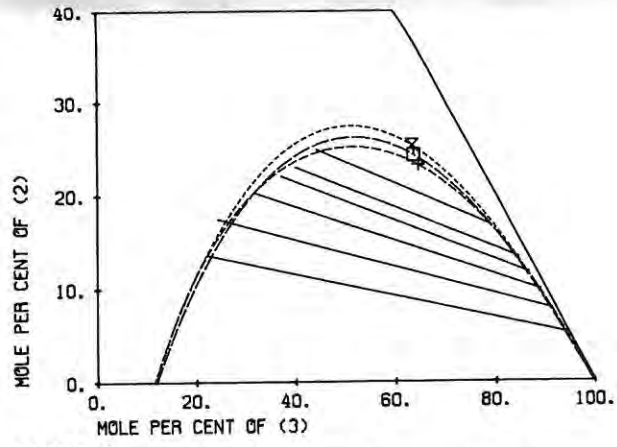
SPECIFIC MODEL PARAMETERS IN KELVIN

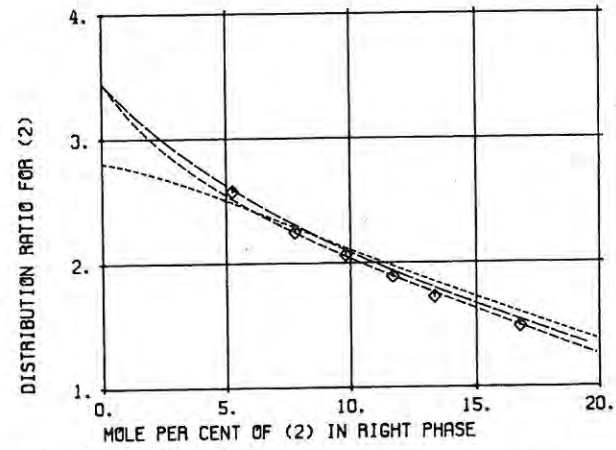
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-0.23557	-194.93	260.18	-438.72
1 3	395.00	133.43	185.64	1757.6
2 3	-213.25	0.85389	29.117	-99.443

R1 = 4.1530 R2 = 2.2024 R3 = 0.9200
Q1 = 3.656 Q2 = 2.072 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.65
NRTL (SPECIFIC PARAMETERS)	0.57
UNIQUAC (COMMON PARAMETERS)	0.86





238

$C_2H_4O_2$-$C_5H_{10}O_2$

(1) C5H10O2 PROPANOIC ACID,ETHYL ESTER

(2) C2H4O2 ACETIC ACID

(3) H2O WATER

JAYA RAMA RAO G., VENTAKA RAO C.
J.SCI.IND.RES. 14B(1955)444

TEMPERATURE = 28.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
83.799	4.224	11.977	0.476	1.758	97.766
72.496	10.384	17.121	0.615	4.150	95.235
62.882	15.385	21.733	0.887	6.447	92.666
49.444	20.235	30.322	1.302	9.281	89.416
38.234	23.550	38.216	2.167	12.166	85.666
27.822	24.373	47.805	3.762	15.368	80.870

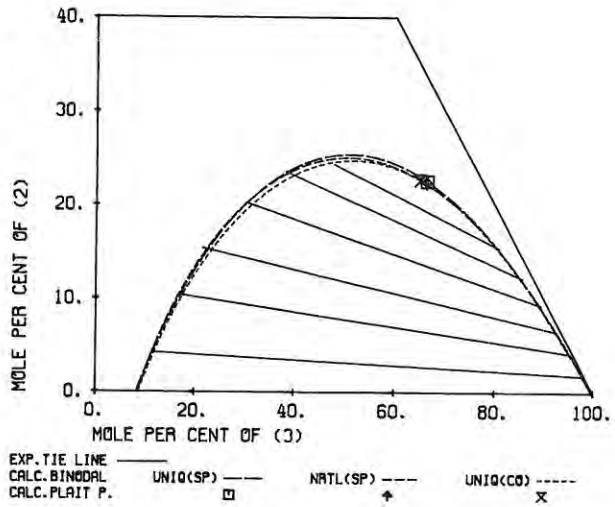
SPECIFIC MODEL PARAMETERS IN KELVIN

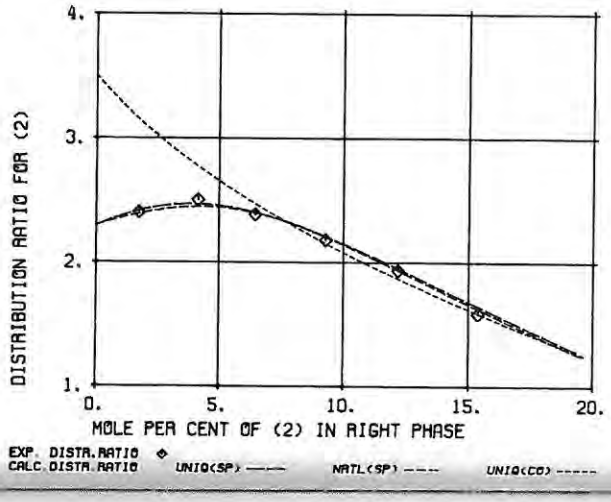
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	-163.95	3.7835	679.69	-511.28
1	3	465.57	126.76	265.37	1605.3
2	3	-247.27	122.02	73.128	11.787

R1 = 4.1530 R2 = 2.2024 R3 = 0.9200
Q1 = 3.656 Q2 = 2.072 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.26
NRTL (SPECIFIC PARAMETERS)	0.21
UNIQUAC (COMMON PARAMETERS)	0.51





239

$C_2H_4O_2$-$C_5H_{12}O$

(1) C5H12O 1-BUTANOL,3-METHYL

(2) C2H4O2 ACETIC ACID

(3) H2O WATER

FUSE K., IGUCHI A.
KAGAKU KOGAKU 35(1971)801

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
63.070	6.008	30.922	0.519	1.606	97.876
54.286	11.274	34.440	0.631	3.341	96.029
49.933	13.038	37.029	0.689	4.172	95.139
43.491	15.093	41.416	0.804	5.407	93.789
38.061	16.187	45.752	0.919	6.335	92.746
32.991	17.098	49.910	1.090	7.290	91.620
28.565	17.668	53.768	1.403	8.294	90.303
23.633	17.914	58.452	1.993	9.550	88.456
21.185	17.852	60.963	2.333	10.139	87.528
17.180	17.436	65.384	3.179	11.363	85.458

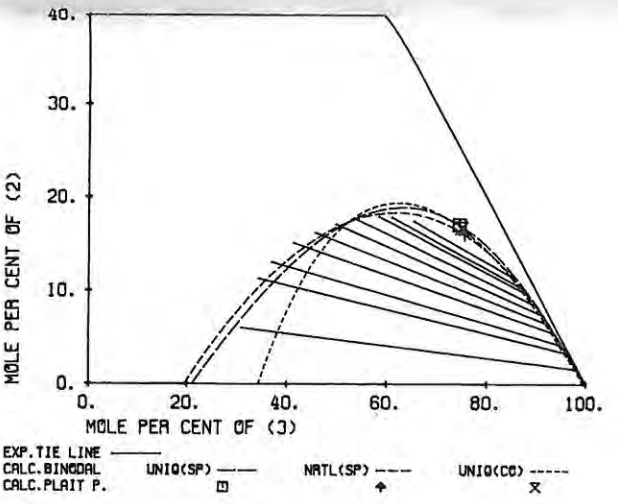
SPECIFIC MODEL PARAMETERS IN KELVIN

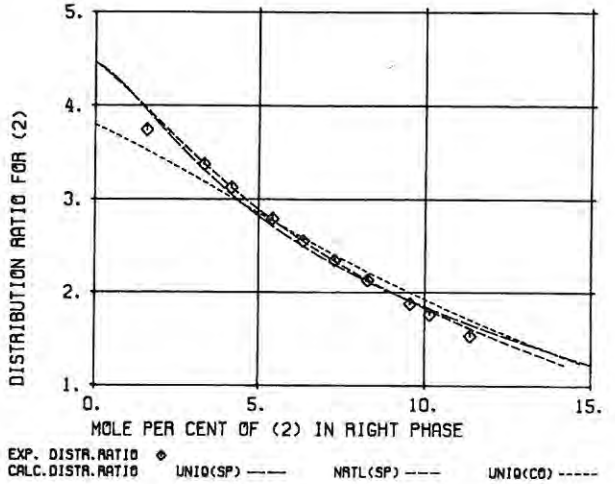
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	384.62	-318.92	610.35	-601.10
1	3	182.33	249.91	27.313	1807.9
2	3	17.453	-317.31	-66.424	-69.290

R1 = 4.1279 R2 = 2.2024 R3 = 0.9200
Q1 = 3.588 Q2 = 2.072 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.75
NRTL (SPECIFIC PARAMETERS)	0.51
UNIQUAC (COMMON PARAMETERS)	1.69





(1) H2O WATER
(2) C2H4O2 ACETIC ACID
(3) C6H5CL BENZENE,CHLORO

PEAKE J.S., THOMPSON K.E.
IND.ENG.CHEM. 44(1952)2439

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
94.376	5.606	0.018	0.359	1.337	98.304
89.314	10.643	0.042	0.435	3.165	96.400
85.062	14.829	0.108	0.539	5.685	93.776
80.978	18.822	0.200	0.635	7.761	91.604
73.853	25.701	0.447	0.895	13.258	85.847
70.521	28.845	0.634	0.964	14.581	84.455
65.040	33.863	1.097	1.319	20.177	78.504
56.102	41.581	2.317	2.093	27.407	70.500

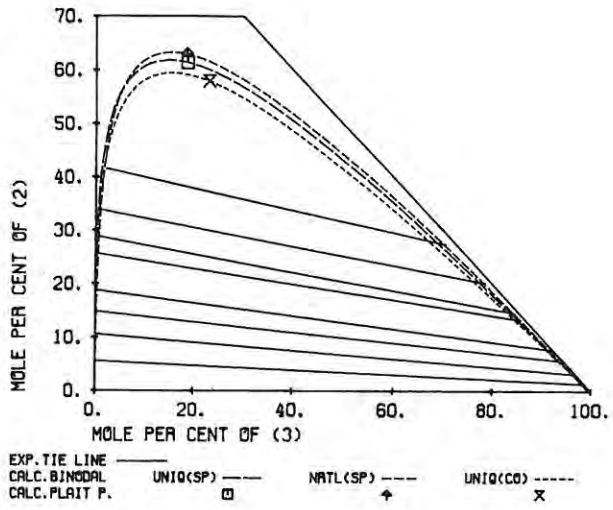
SPECIFIC MODEL PARAMETERS IN KELVIN

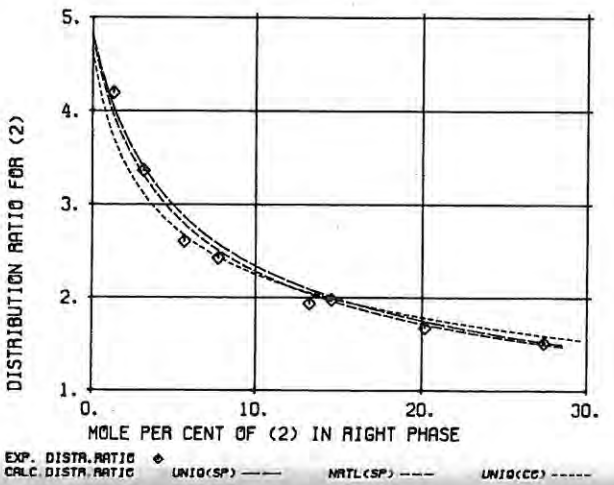
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-258.85	-117.14	-391.95	-216.63
1 3	488.62	813.20	1553.0	1145.1
2 3	44.178	-95.440	632.92	-577.80

R1 = 0.9200 R2 = 2.2024 R3 = 3.8127
Q1 = 1.400 Q2 = 2.072 Q3 = 2.844

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.48
NRTL (SPECIFIC PARAMETERS)	0.31
UNIQUAC (COMMON PARAMETERS)	0.64





(1) H2O WATER
(2) C2H4O2 ACETIC ACID
(3) C6H6 BENZENE

WADDELL J.
J.PHYS.CHEM. 2(1898)233

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
96.932	3.023	0.045	0.087	0.597	99.316
94.307	5.612	0.081	0.259	1.681	98.060
89.252	10.595	0.153	0.641	3.976	95.383
84.234	15.501	0.265	1.059	6.606	92.335
80.157	19.335	0.508	1.428	8.821	89.751
76.988	22.365	0.648	1.751	10.881	87.368
72.659	26.307	1.034	2.109	13.026	84.865
62.110	35.202	2.688	3.186	19.718	77.096
55.054	40.505	4.441	4.102	25.441	70.457
53.412	41.661	4.927	4.316	26.835	68.850
46.778	45.852	7.370	7.943	34.121	57.936
42.152	47.788	10.060	8.966	36.158	54.876
30.823	50.438	18.739	18.303	45.594	36.103

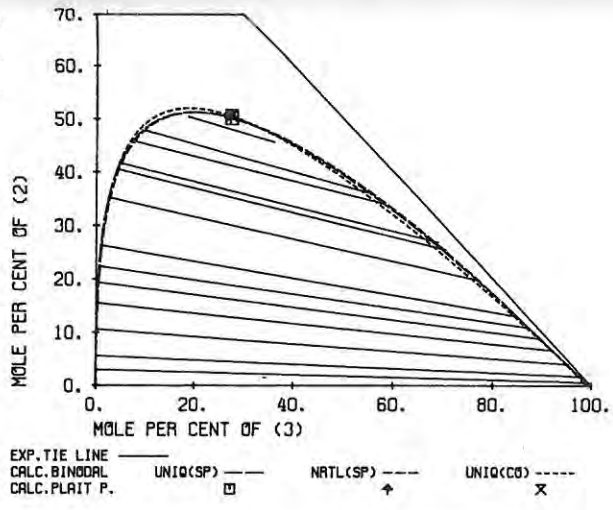
SPECIFIC MODEL PARAMETERS IN KELVIN

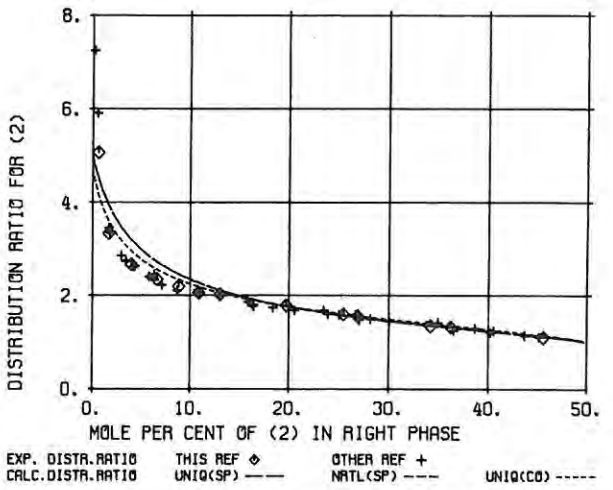
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-266.09	-129.95	-88.738	-325.86
1 3	596.58	703.31	1804.8	924.96
2 3	-69.726	0.82389E-01	188.14	-154.94

R1 = 0.9200 R2 = 2.2024 R3 = 3.1878
Q1 = 1.400 Q2 = 2.072 Q3 = 2.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.61
NRTL (SPECIFIC PARAMETERS)	0.62
UNIQUAC (COMMON PARAMETERS)	0.66





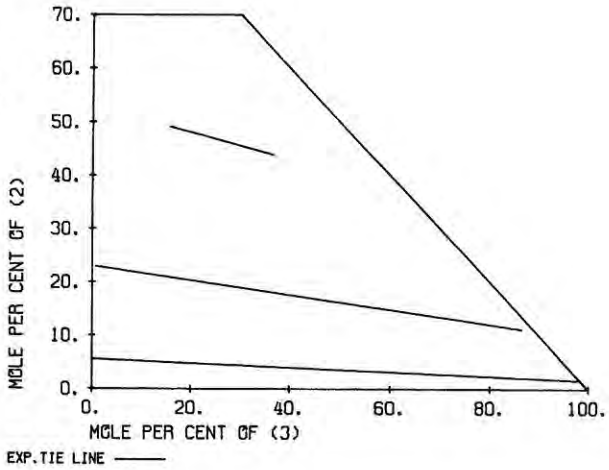
(1) H2O	WATER
(2) C2H4O2	ACETIC ACID
(3) C6H6	BENZENE

WADDELL J.
J.PHYS.CHEM. 2(1898)233

TEMPERATURE = 35.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
94.249	5.588	0.162	0.345	1.603	98.052
76.306	22.939	0.756	2.404	11.189	86.408
35.228	49.079	15.694	19.481	43.832	36.688



(1) H2O	WATER
(2) C2H4O2	ACETIC ACID
(3) C6H6	BENZENE

HAND D.B.
J.PHYS.CHEM. 34(1930)1961

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
98.577	1.414	0.010	0.004	0.195	99.801
93.876	6.072	0.053	0.173	1.811	98.016
88.926	10.958	0.116	0.471	4.197	95.332
69.060	29.619	1.320	1.647	16.426	81.928
66.327	32.010	1.663	2.042	18.378	79.580
58.883	38.135	2.982	2.802	23.899	73.299
56.450	39.905	3.645	3.360	27.039	69.601
40.236	49.333	10.431	7.123	34.866	58.011
37.290	50.109	12.601	9.113	38.602	52.285
35.091	50.563	14.345	10.717	40.512	48.771
30.219	50.243	19.538	15.487	45.149	39.364

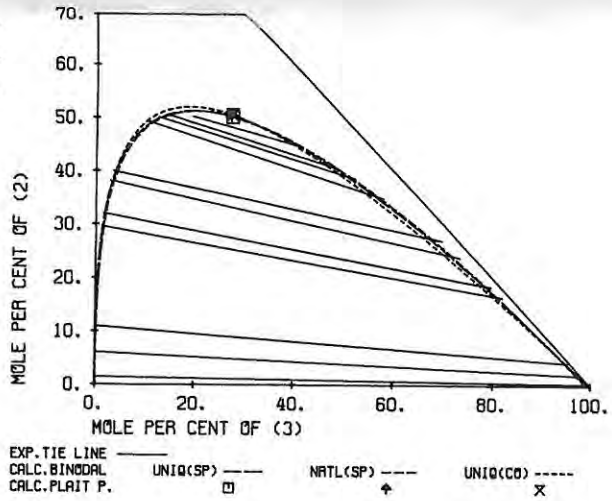
SPECIFIC MODEL PARAMETERS IN KELVIN

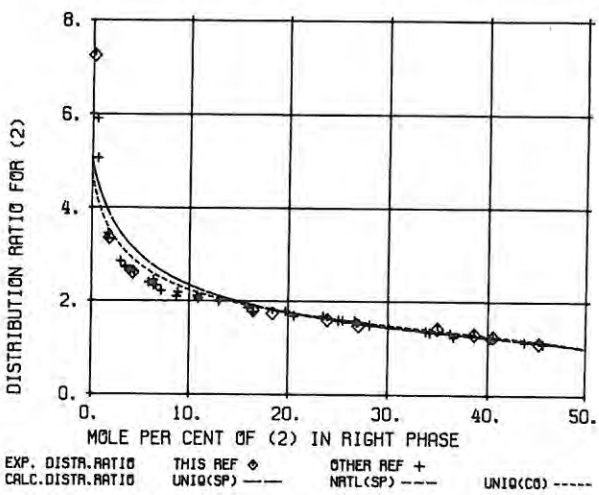
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-266.09	-129.95	-88.738	-325.86
1 3	596.58	703.31	1804.8	924.96
2 3	-69.726	0.82389E-01	188.14	-154.94

R1 = 0.9200 R2 = 2.2024 R3 = 3.1878
Q1 = 1.400 Q2 = 2.072 Q3 = 2.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.04
NRTL (SPECIFIC PARAMETERS)	1.07
UNIQUAC (COMMON PARAMETERS)	1.10





(1) H2O WATER

(2) C2H4O2 ACETIC ACID

(3) C6H6 BENZENE

GARNER F.H., ELLIS S.R.M., ROY U.N.G.
CHEM.ENG.SCI. 2(1953)14

TEMPERATURE = 30.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
91.474	8.424	0.102	1.025	2.948	96.026
76.464	22.790	0.747	2.933	10.780	86.287
57.270	39.358	3.372	6.192	23.482	70.326

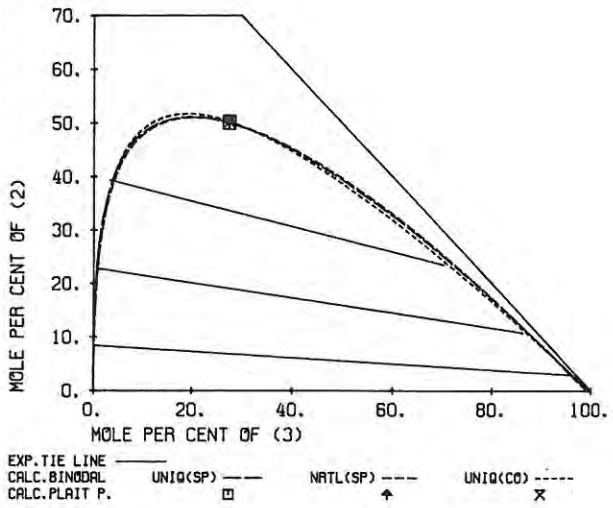
SPECIFIC MODEL PARAMETERS IN KELVIN

		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	-266.09	-129.95	-88.738	-325.86
1	3	596.58	703.31	1804.8	924.96
2	3	-69.726	0.82389E-01	188.14	-154.94

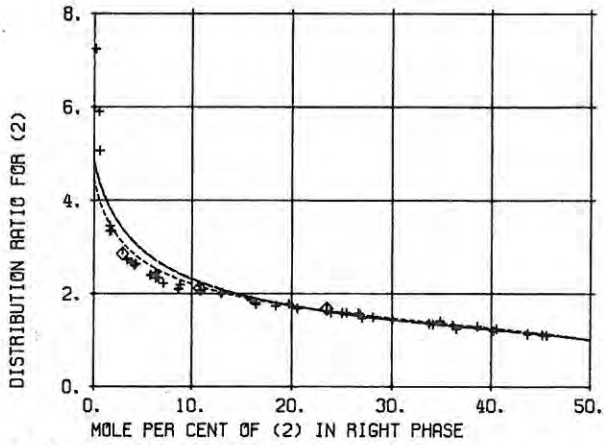
R1 = 0.9200 R2 = 2.2024 R3 = 3.1878
Q1 = 1.400 Q2 = 2.072 Q3 = 2.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.75
NRTL (SPECIFIC PARAMETERS)	0.85
UNIQUAC (COMMON PARAMETERS)	0.43



EXP.TIE LINE ——
CALC.BINODAL UNIQ(SP) —— NRTL(SP) --- UNIQ(CO) -----
CALC.PLAIT P. ⊡ ✦ ×



EXP. DISTR.RATIO THIS REF ✦ OTHER REF +
CALC.DISTR.RATIO UNIQ(SP) —— NRTL(SP) ---- UNIQ(CO) -----

(1) H2O WATER

(2) C2H4O2 ACETIC ACID

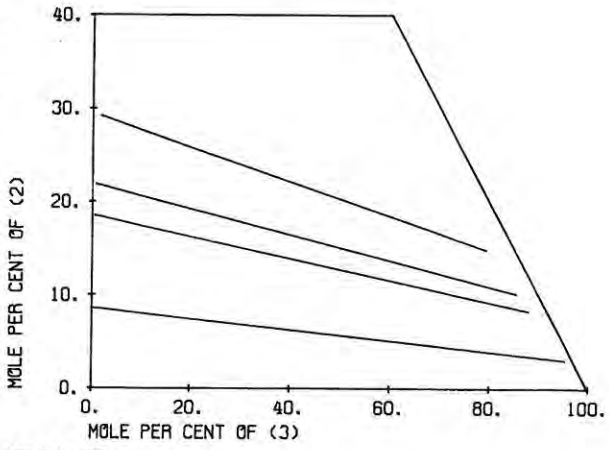
(3) C6H6 BENZENE

GARNER F.H., ELLIS S.R.M., ROY U.N.G.
CHEM.ENG.SCI. 2(1953)14

TEMPERATURE = 40.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
91.024	8.556	0.420	1.741	3.058	95.200
80.910	18.504	0.586	3.836	8.292	87.872
77.372	21.880	0.747	4.493	10.170	85.337
69.054	29.222	1.725	5.791	14.858	79.350



EXP.TIE LINE ——

(1) H2O WATER

(2) C2H4O2 ACETIC ACID

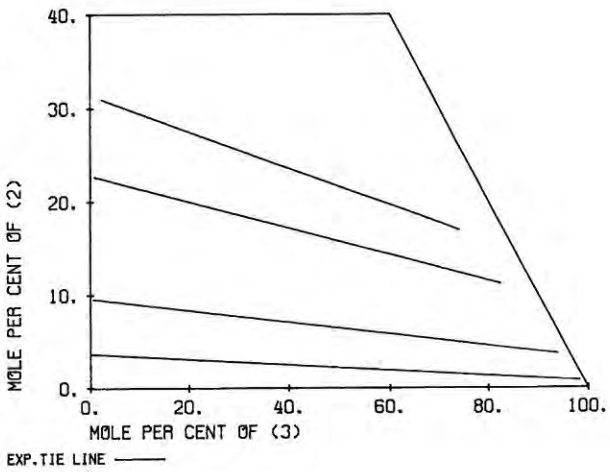
(3) C6H6 BENZENE

GARNER F.H., ELLIS S.R.M., ROY U.N.G.
CHEM.ENG.SCI. 2(1953)14

TEMPERATURE = 50.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
96.013	3.651	0.336	0.903	0.799	98.298
89.834	9.549	0.616	2.446	3.670	93.884
76.418	22.687	0.895	6.340	11.195	82.465
66.670	30.920	2.410	8.900	16.948	74.152



(1) H2O WATER

(2) C2H4O2 ACETIC ACID

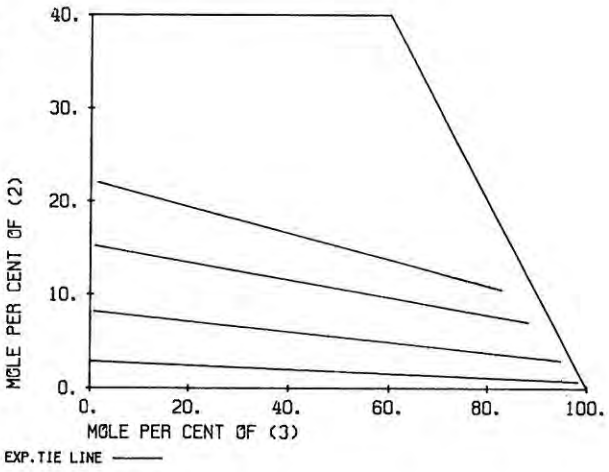
(3) C6H6 BENZENE

GARNER F.H., ELLIS S.R.M., ROY U.N.G.
CHEM.ENG.SCI. 2(1953)14

TEMPERATURE = 60.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
96.806	2.846	0.348	0.988	0.722	98.290
91.043	8.177	0.780	2.326	2.969	94.705
83.759	15.213	1.028	4.764	7.023	88.213
76.504	22.037	1.460	6.655	10.523	82.822



(1) H2O WATER

(2) C2H4O2 ACETIC ACID

(3) C6H6 BENZENE

JODRA L.G., OTERO J.L., SOLE J.
AN.R.SOC.ESP.FIS.QUIM. 51B(1955)741

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
96.865	3.061	0.074	0.432	0.518	99.050
94.062	5.781	0.158	0.858	1.673	97.468
88.283	11.482	0.235	0.853	4.350	94.798
85.641	14.050	0.309	1.271	5.845	92.885
81.272	18.329	0.399	1.262	8.708	90.030
76.841	22.588	0.570	1.669	10.888	87.444
73.202	25.931	0.867	1.660	12.951	85.388
69.133	29.628	1.239	2.054	15.899	82.046
63.286	34.592	2.122	2.825	20.582	76.593
56.474	39.737	3.789	3.953	25.025	71.021
47.044	45.937	7.020	7.144	33.725	59.131
41.784	48.297	9.919	11.372	40.193	48.434

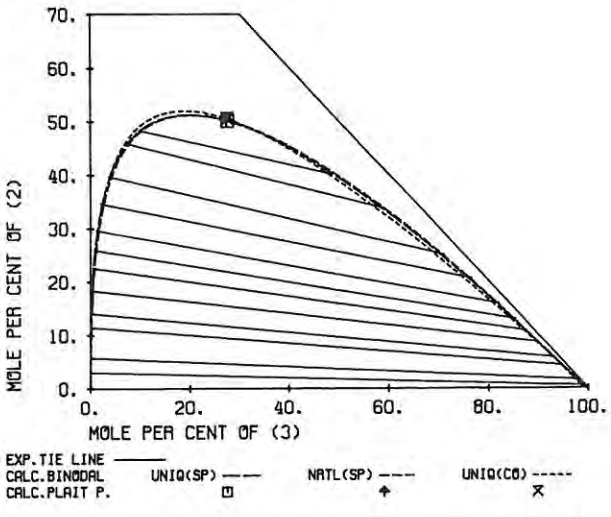
SPECIFIC MODEL PARAMETERS IN KELVIN

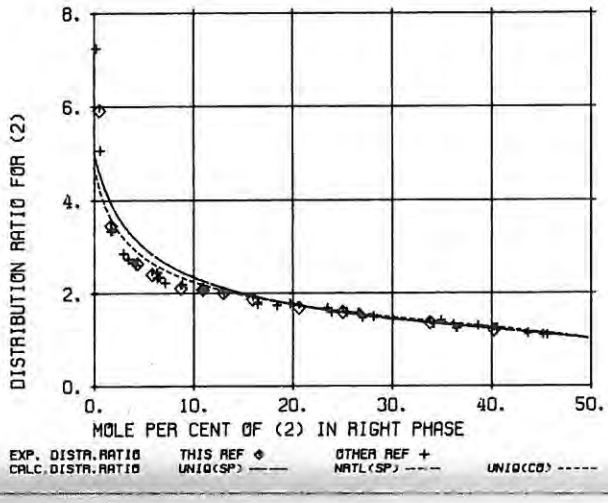
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-266.09	-129.95	-88.738	-325.86
1 3	596.58	703.31	1804.8	924.96
2 3	-69.726	0.82389E-01	188.14	-154.94

R1 = 0.9200 R2 = 2.2024 R3 = 3.1878
Q1 = 1.400 Q2 = 2.072 Q3 = 2.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.66
NRTL (SPECIFIC PARAMETERS)	0.68
UNIQUAC (COMMON PARAMETERS)	0.71





(1) H2O WATER

(2) C2H4O2 ACETIC ACID

(3) C6H6 BENZENE

TAGLIAVINI G., ARICH G., BIANCANI M.
ANN.CHIM.(ROME) 45(1955)292

TEMPERATURE = 60.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
90.142	9.716	0.142	1.694	4.573	93.734
81.479	18.290	0.232	4.098	10.082	85.819
70.921	27.674	1.405	5.553	18.443	76.005
63.380	33.444	3.175	7.317	24.031	68.651
51.704	40.989	7.306	9.275	31.608	59.117
44.276	43.840	11.884	13.080	36.376	50.544
38.994	45.166	15.841	18.556	40.259	41.186

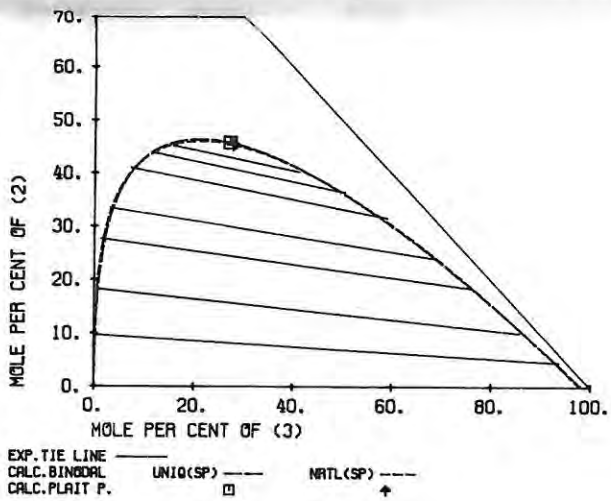
SPECIFIC MODEL PARAMETERS IN KELVIN

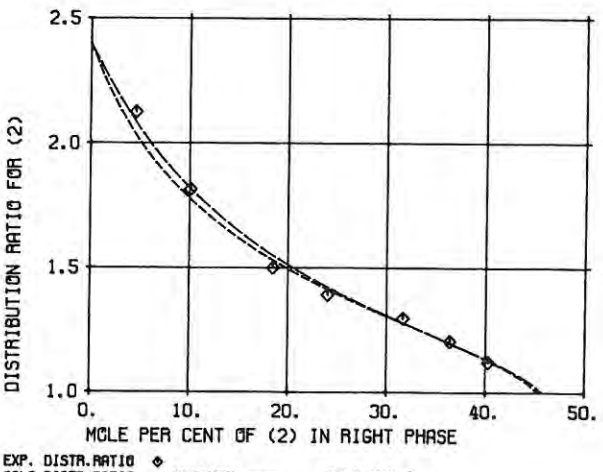
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-166.24	-105.19	40.441	-221.33
1 3	447.58	558.39	2517.2	814.26
2 3	-94.433	99.974	71.044	56.883

R1 = 0.9200 R2 = 2.2024 R3 = 3.1878
Q1 = 1.400 Q2 = 2.072 Q3 = 2.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.62
NRTL (SPECIFIC PARAMETERS)	0.54





(1) H2O WATER

(2) C2H4O2 ACETIC ACID

(3) C6H6 BENZENE

TAGLIAVINI G., ARICH G., BIANCANI M.
ANN.CHIM.(ROME) 45(1955)292

TEMPERATURE = 70.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
87.130	12.659	0.210	2.517	5.664	91.819
81.014	18.619	0.367	3.702	9.873	86.424
66.632	30.661	2.707	6.634	21.191	72.175
61.822	34.079	4.099	8.021	24.864	67.115
57.111	36.803	6.086	9.371	27.439	63.190
48.813	40.409	10.779	12.885	32.641	54.474
34.637	43.049	22.314	21.036	39.709	39.255

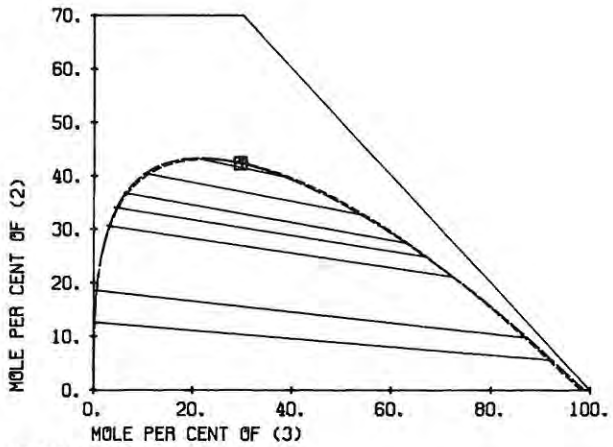
SPECIFIC MODEL PARAMETERS IN KELVIN

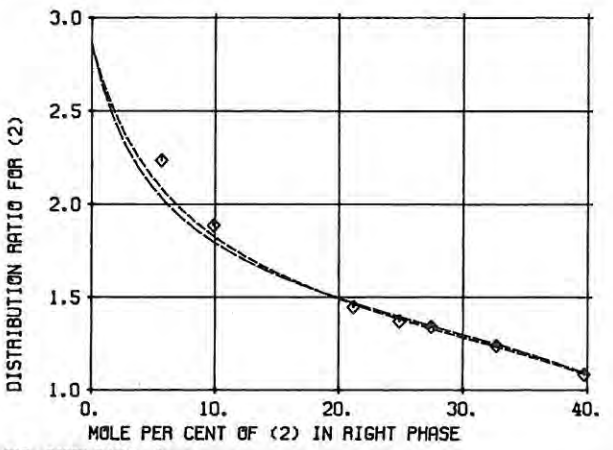
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	-754.90	-144.43	-389.95	-199.58
1	3	825.64	581.32	2904.3	885.89
2	3	-196.71	-351.26	-8.9633	-195.11

R1 = 0.9200 R2 = 2.2024 R3 = 3.1878
Q1 = 1.400 Q2 = 2.072 Q3 = 2.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC	(SPECIFIC PARAMETERS)	0.42
NRTL	(SPECIFIC PARAMETERS)	0.36





(1) H2O WATER

(2) C2H4O2 ACETIC ACID

(3) C6H6 BENZENE

TAGLIAVINI G., ARICH G., BIANCANI M.
ANN.CHIM.(ROME) 45(1955)292

TEMPERATURE = 80.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
90.293	9.508	0.198	2.937	4.279	92.784
80.844	18.452	0.704	4.879	10.734	84.387
76.309	22.282	1.409	6.009	12.979	81.013
66.127	30.250	3.623	7.733	21.112	71.155
60.261	34.254	5.485	10.791	25.452	63.757
54.936	37.306	7.758	13.634	29.277	57.089
45.984	40.595	13.421	19.916	35.152	44.932

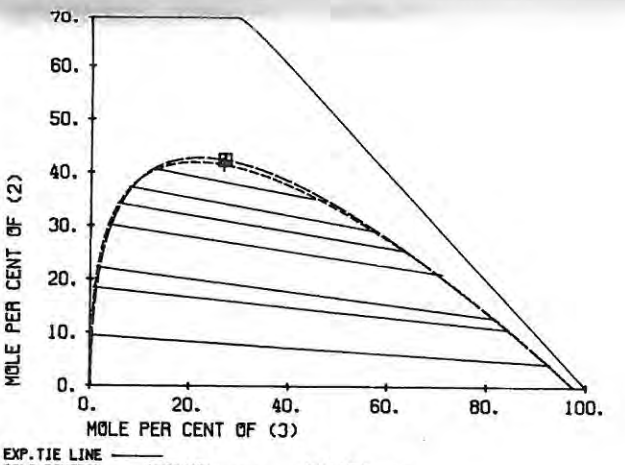
SPECIFIC MODEL PARAMETERS IN KELVIN

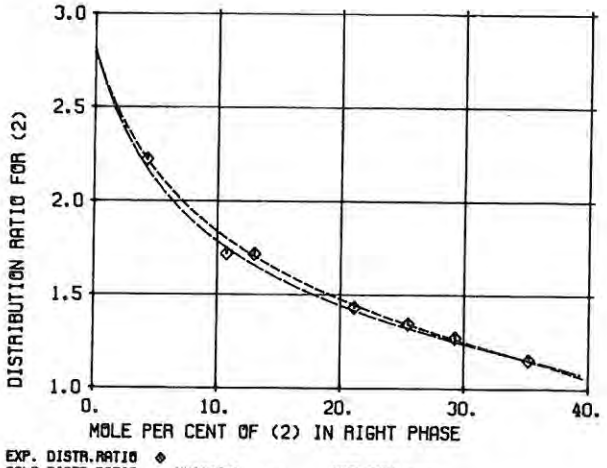
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	-103.27	-177.80	550.11	-586.49
1	3	325.26	546.15	2129.4	725.37
2	3	-83.302	95.250	129.76	43.847

R1 = 0.9200 R2 = 2.2024 R3 = 3.1878
Q1 = 1.400 Q2 = 2.072 Q3 = 2.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC	(SPECIFIC PARAMETERS)	0.43
NRTL	(SPECIFIC PARAMETERS)	0.28





(1) H2O WATER

(2) C2H4O2 ACETIC ACID

(3) C6H6 BENZENE

TAGLIAVINI G., ARICH G., BIANCANI M.
ANN.CHIM.(ROME) 45(1955)292

TEMPERATURE = 90.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
93.438	6.375	0.186	2.947	2.779	94.274
90.890	8.858	0.252	3.347	4.141	92.512
87.438	12.143	0.419	4.138	5.959	89.902
78.837	19.807	1.356	6.039	10.870	83.091
67.613	28.623	3.764	8.511	18.337	73.153
57.333	35.269	7.398	13.799	24.402	61.799
51.217	38.008	10.775	19.817	31.540	48.643

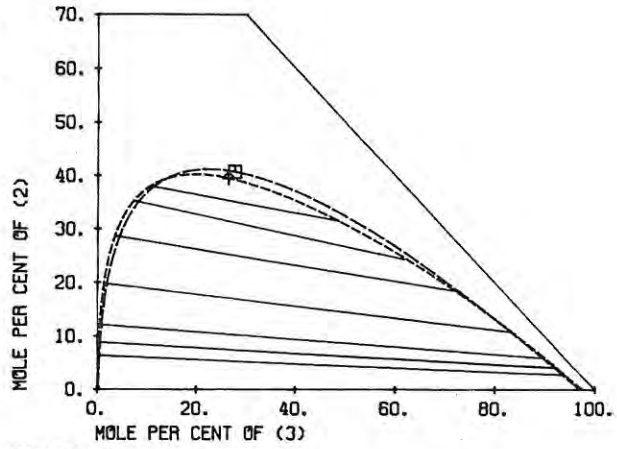
SPECIFIC MODEL PARAMETERS IN KELVIN

		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	-45.563	-195.33	1141.3	-847.36
1	3	256.07	562.68	2028.9	742.40
2	3	-59.285	104.05	508.12	-183.01

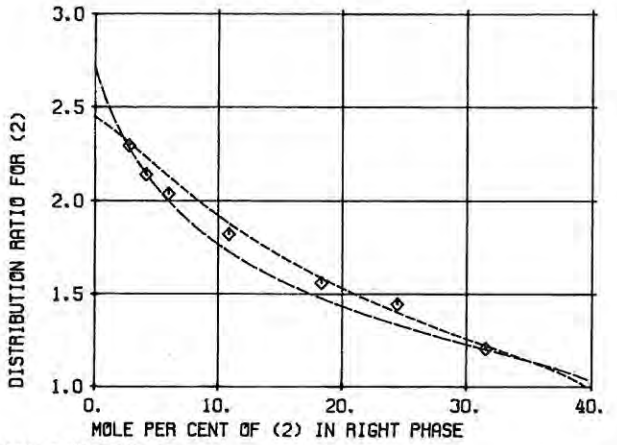
R1 = 0.9200 R2 = 2.2024 R3 = 3.1878
Q1 = 1.400 Q2 = 2.072 Q3 = 2.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.79
NRTL (SPECIFIC PARAMETERS)	0.40



EXP.TIE LINE ——
CALC.BINODAL UNIQ(SP) —— NRTL(SP) ---
CALC.PLAIT P. □ ◆



EXP. DISTR.RATIO ◇
CALC.DISTR.RATIO UNIQ(SP) —— NRTL(SP) ---

(1) H2O WATER

(2) C2H4O2 ACETIC ACID

(3) C6H6 BENZENE

TAGLIAVINI G., ARICH G., BIANCANI M.
ANN.CHIM.(ROME) 45(1955)292

TEMPERATURE = 100.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
80.168	18.470	1.362	6.430	10.249	83.321
75.371	22.420	2.209	7.877	13.470	78.653
70.799	25.920	3.281	9.259	16.898	73.843
66.959	28.689	4.352	10.594	19.864	69.541
58.233	34.202	7.566	15.308	26.486	58.206
53.778	36.382	9.841	18.489	29.479	52.032
48.998	37.828	13.174	23.021	32.489	44.490

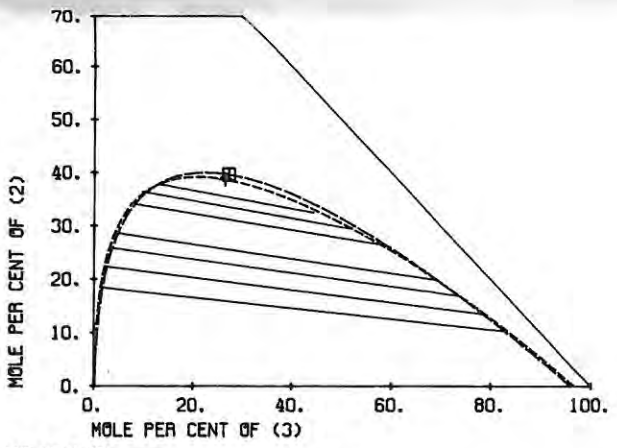
SPECIFIC MODEL PARAMETERS IN KELVIN

		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	-80.571	-195.76	952.47	-792.83
1	3	268.73	501.72	1974.1	668.80
2	3	-74.366	95.626	341.24	-105.93

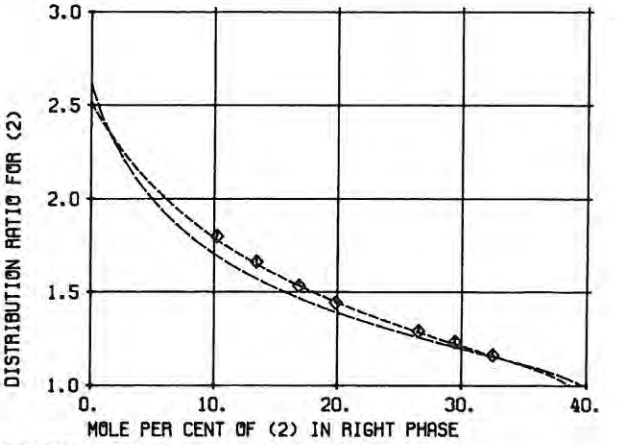
R1 = 0.9200 R2 = 2.2024 R3 = 3.1878
Q1 = 1.400 Q2 = 2.072 Q3 = 2.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.65
NRTL (SPECIFIC PARAMETERS)	0.18



EXP.TIE LINE ——
CALC.BINODAL UNIQ(SP) —— NRTL(SP) ---
CALC.PLAIT P. □ ◆



EXP. DISTR.RATIO ◇
CALC.DISTR.RATIO UNIQ(SP) —— NRTL(SP) ---

(1) H2O WATER

(2) C2H4O2 ACETIC ACID

(3) C6H6 BENZENE

TAGLIAVINI G., ARICH G., BIANCANI M.
ANN.CHIM.(ROME) 45(1955)292

TEMPERATURE = 110.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
89.830	9.654	0.516	4.546	5.207	90.247
79.843	18.511	1.646	7.188	10.303	82.510
74.991	22.449	2.561	9.668	14.618	75.714
65.820	29.064	5.116	12.952	20.316	66.733
62.875	30.898	6.227	14.506	22.521	62.973
58.122	33.513	8.365	18.001	27.314	54.685
52.789	35.600	11.611	23.115	30.863	46.022

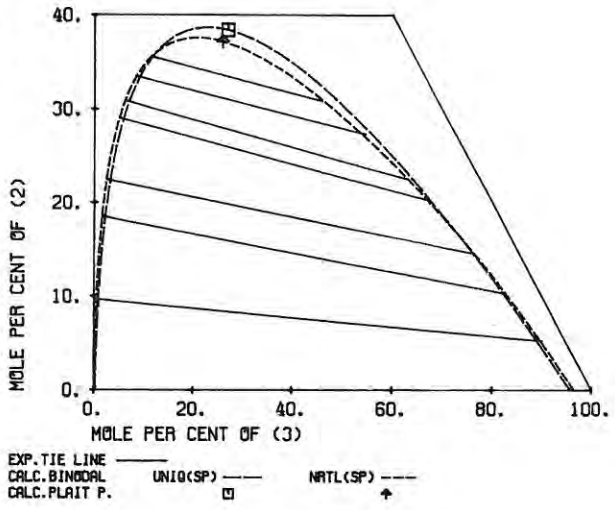
SPECIFIC MODEL PARAMETERS IN KELVIN

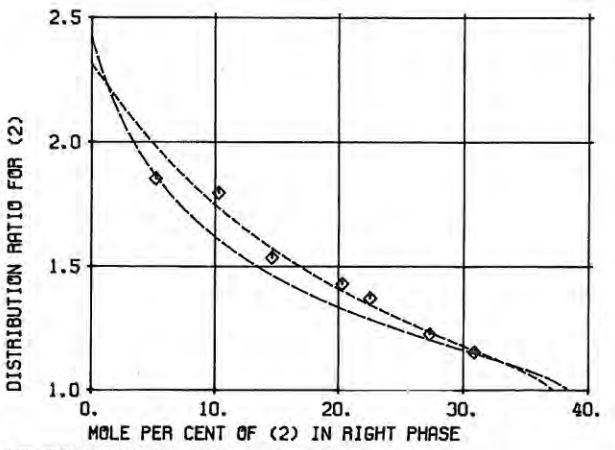
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	-45.366	-212.52	1142.5	-883.75
1	3	228.44	528.36	2017.7	668.34
2	3	-54.183	78.784	459.18	-192.59

R1 = 0.9200 R2 = 2.2024 R3 = 3.1878
Q1 = 1.400 Q2 = 2.072 Q3 = 2.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC	(SPECIFIC PARAMETERS)	0.79
NRTL	(SPECIFIC PARAMETERS)	0.31





(1) H2O WATER

(2) C2H4O2 ACETIC ACID

(3) C6H6 BENZENE

TAGLIAVINI G., ARICH G., BIANCANI M.
ANN.CHIM.(ROME) 45(1955)292

TEMPERATURE = 120.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
89.815	9.554	0.631	5.335	5.417	89.247
79.662	18.339	1.999	9.011	11.754	79.235
75.513	21.646	2.841	11.062	15.220	73.717
67.278	27.745	4.976	15.499	21.411	63.090
64.071	29.659	6.270	17.275	23.374	59.350
56.886	33.057	10.057	20.599	27.150	52.252
49.533	34.626	15.841	29.250	31.261	39.488

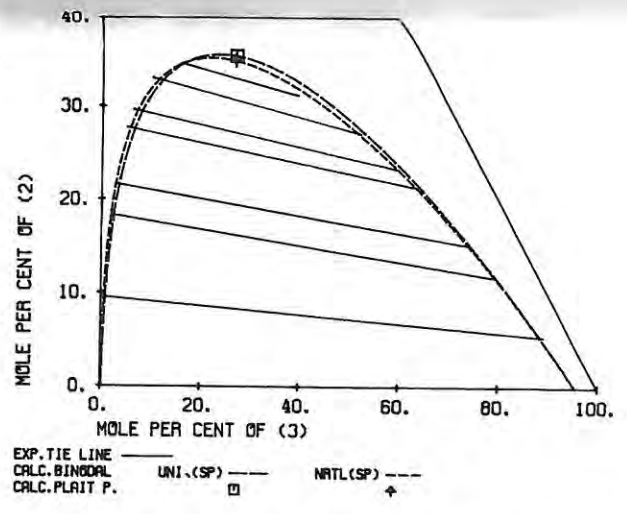
SPECIFIC MODEL PARAMETERS IN KELVIN

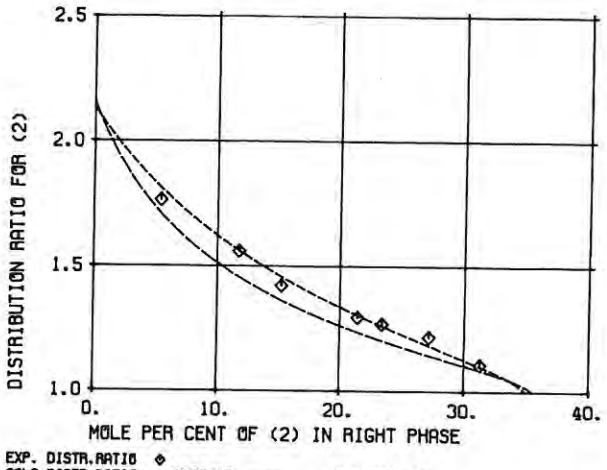
		UNIQUAC		NRTL(ALPHA=.2)	
I	J	AIJ	AJI	AIJ	AJI
1	2	-101.08	-197.16	1025.7	-827.30
1	3	278.51	502.35	2144.1	595.18
2	3	-181.39	211.44	94.297	93.817

R1 = 0.9200 R2 = 2.2024 R3 = 3.1878
Q1 = 1.400 Q2 = 2.072 Q3 = 2.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC	(SPECIFIC PARAMETERS)	0.68
NRTL	(SPECIFIC PARAMETERS)	0.45





(1) H2O WATER

(2) C2H4O2 ACETIC ACID

(3) C6H6 BENZENE

PRINCE R.G.H., HUNTER T.G.
CHEM.ENG.SCI. 6(1957)245

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
90.450	9.389	0.161	0.514	3.419	96.066
90.423	9.416	0.161	0.514	3.445	96.041
84.864	14.845	0.291	0.722	6.360	92.918
83.791	15.878	0.331	0.805	7.133	92.062
52.941	42.106	4.953	4.603	28.142	67.255
50.793	43.490	5.717	5.323	30.031	64.646

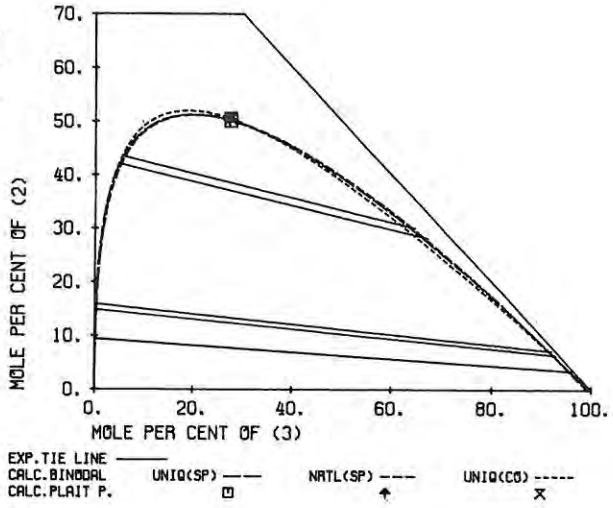
SPECIFIC MODEL PARAMETERS IN KELVIN

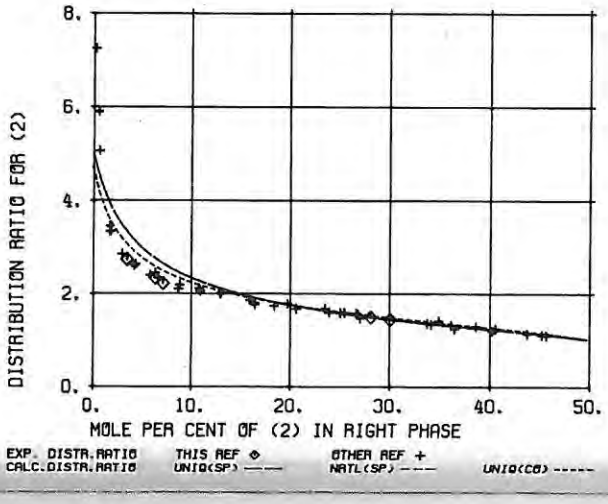
	UNIQUAC		NRTL(ALPHA=.2)	
I J	AIJ	AJI	AIJ	AJI
1 2	-266.09	-129.95	-88.738	-325.86
1 3	596.58	703.31	1804.8	924.96
2 3	-69.726	0.82389E-01	188.14	-154.94

R1 = 0.9200 R2 = 2.2024 R3 = 3.1878
Q1 = 1.400 Q2 = 2.072 Q3 = 2.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.53
NRTL (SPECIFIC PARAMETERS)	0.51
UNIQUAC (COMMON PARAMETERS)	0.58





(1) H2O WATER

(2) C2H4O2 ACETIC ACID

(3) C6H6 BENZENE

FUSE K., IGUCHI A.
KAGAKU KOGAKU 35(1971)107

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
84.177	15.539	0.285	0.849	6.341	92.810
69.576	29.073	1.351	2.052	16.421	81.527
53.050	42.256	4.694	3.555	26.665	69.780
47.727	45.684	6.589	6.387	36.497	57.115
37.551	49.942	12.507	10.631	43.672	45.697

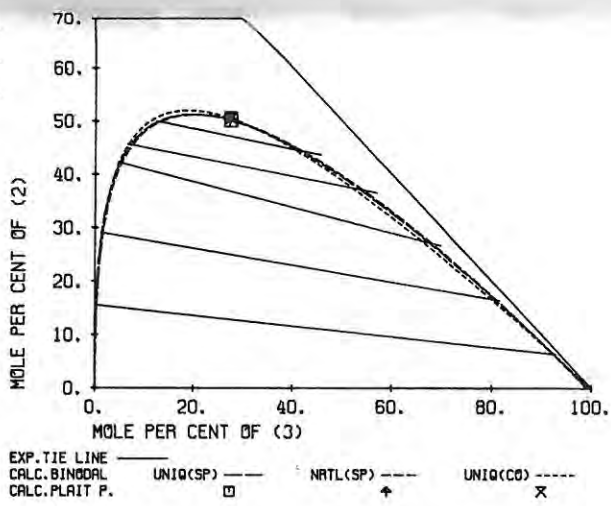
SPECIFIC MODEL PARAMETERS IN KELVIN

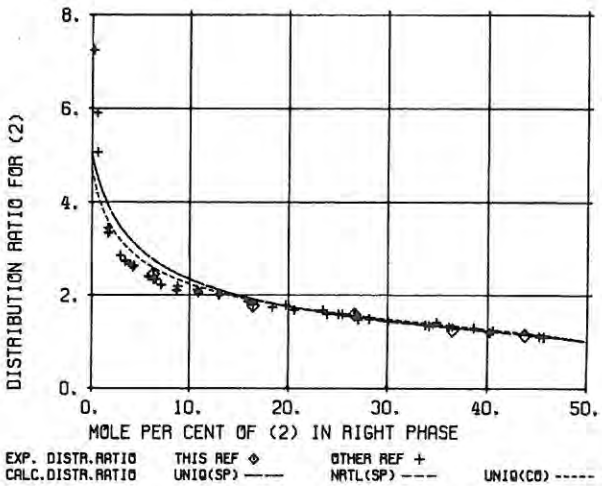
	UNIQUAC		NRTL(ALPHA=.2)	
I J	AIJ	AJI	AIJ	AJI
1 2	-266.09	-129.95	-88.738	-325.86
1 3	596.58	703.31	1804.8	924.96
2 3	-69.726	0.82389E-01	188.14	-154.94

R1 = 0.9200 R2 = 2.2024 R3 = 3.1878
Q1 = 1.400 Q2 = 2.072 Q3 = 2.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.11
NRTL (SPECIFIC PARAMETERS)	1.05
UNIQUAC (COMMON PARAMETERS)	1.36





(1) C6H1004 ACETALDEHYDE,DIACETATE

(2) C2H402 ACETIC ACID

(3) H20 WATER

SMITH J.C.
J.PHYS.CHEM. 46(1942)229

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
61.404	5.608	32.988	0.748	1.300	97.952
56.058	8.882	35.060	0.871	2.557	96.572
47.866	13.446	38.688	1.052	4.033	94.915
41.731	16.307	41.962	1.322	5.624	93.055
37.525	17.762	44.712	1.710	6.974	91.316
30.153	19.059	50.788	2.410	8.604	88.986
21.570	18.716	59.713	3.637	10.405	85.958

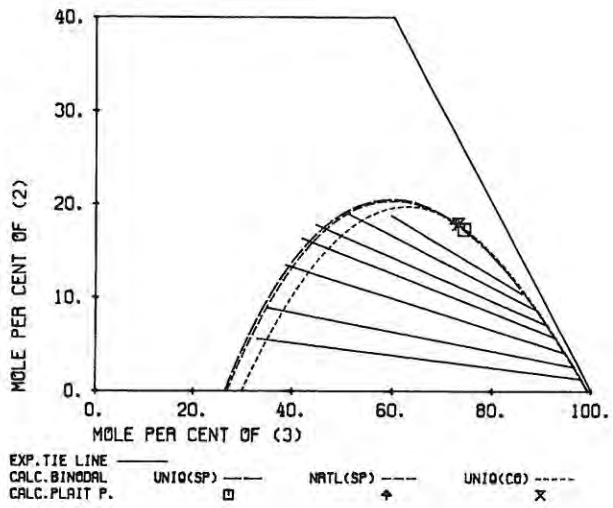
SPECIFIC MODEL PARAMETERS IN KELVIN

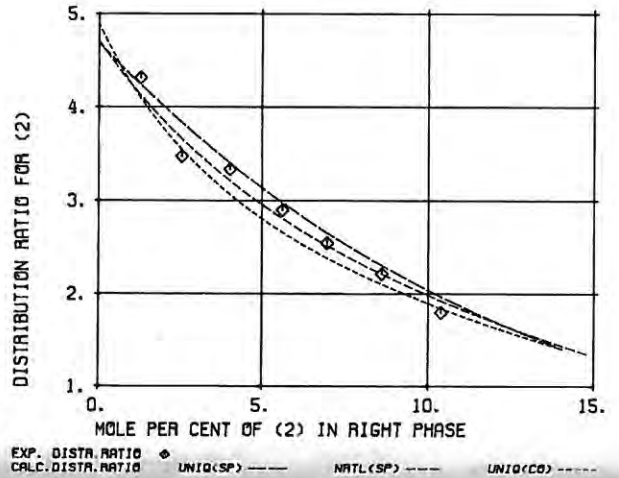
	UNIQUAC		NRTL(ALPHA=.2)	
I J	AIJ	AJI	AIJ	AJI
1 2	-129.46	109.27	357.15	-377.74
1 3	351.69	36.746	-75.473	1586.2
2 3	-125.10	125.00	-2.1213	190.88

R1 = 5.1542 R2 = 2.2024 R3 = 0.9200
Q1 = 4.532 Q2 = 2.072 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.60
NRTL (SPECIFIC PARAMETERS)	0.62
UNIQUAC (COMMON PARAMETERS)	1.20





(1) H20 WATER

(2) C2H402 ACETIC ACID

(3) C6H12 CYCLOHEXANE

FUSE K., IGUCHI A.
KAGAKU KOGAKU 34(1970)1226

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE			RIGHT PHASE		
(1)	(2)	(3)	(1)	(2)	(3)
86.007	13.936	0.057	0.0	1.090	98.910
70.671	29.184	0.144	0.0	2.753	97.247
53.993	45.473	0.534	0.0	5.680	94.320
39.750	58.796	1.454	0.0	9.410	90.590
27.009	70.294	2.697	0.0	15.252	84.748
22.273	74.050	3.677	0.0	17.922	82.078
12.920	78.736	8.344	0.431	25.535	74.034
10.067	78.812	11.122	0.426	29.258	70.315
7.708	78.577	13.715	0.420	33.811	65.769
7.186	78.437	14.376	0.420	34.277	65.303
7.069	78.160	14.771	0.416	36.800	62.783

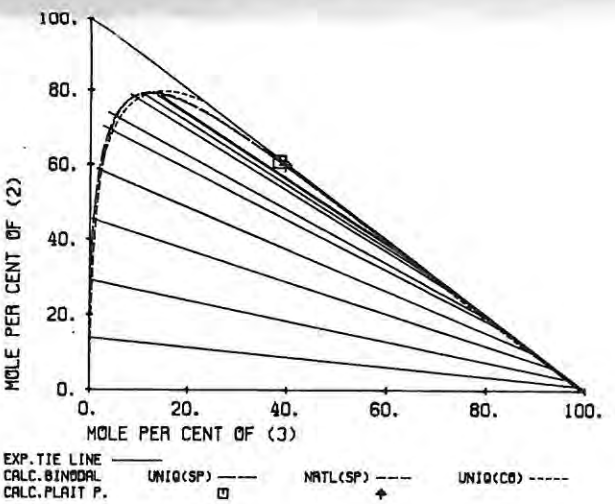
SPECIFIC MODEL PARAMETERS IN KELVIN

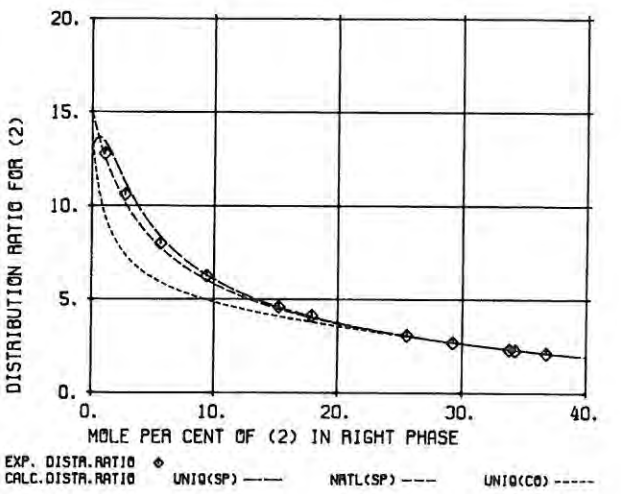
	UNIQUAC		NRTL(ALPHA=.2)	
I J	AIJ	AJI	AIJ	AJI
1 2	-360.25	118.84	-632.67	467.82
1 3	487.29	722.96	1580.6	1289.1
2 3	47.981	208.12	459.33	186.26

R1 = 0.9200 R2 = 2.2024 R3 = 4.0464
Q1 = 1.400 Q2 = 2.072 Q3 = 3.240

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.45
NRTL (SPECIFIC PARAMETERS)	0.55
UNIQUAC (COMMON PARAMETERS)	1.69





(1) C6H12O CYCLOHEXANOL

(2) C2H4O2 ACETIC ACID

(3) H2O WATER

SKRZEC A.E., MURPHY N.F.
IND.ENG.CHEM. 46(1954)2245

TEMPERATURE = 26.7 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
52.491	0.0	47.509	0.667	0.0	99.333
50.400	2.836	46.764	0.736	0.667	98.597
36.333	8.940	54.727	0.988	2.780	96.231
34.635	9.586	55.779	1.072	3.257	95.671
31.745	10.590	57.665	1.173	3.878	94.949
15.757	14.280	69.963	4.517	9.815	85.668

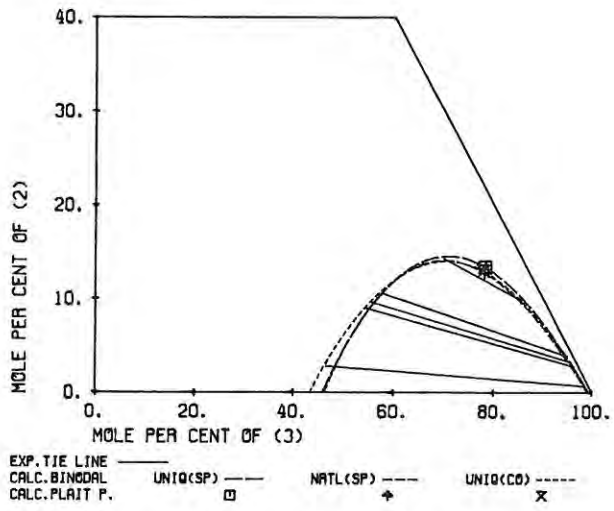
SPECIFIC MODEL PARAMETERS IN KELVIN

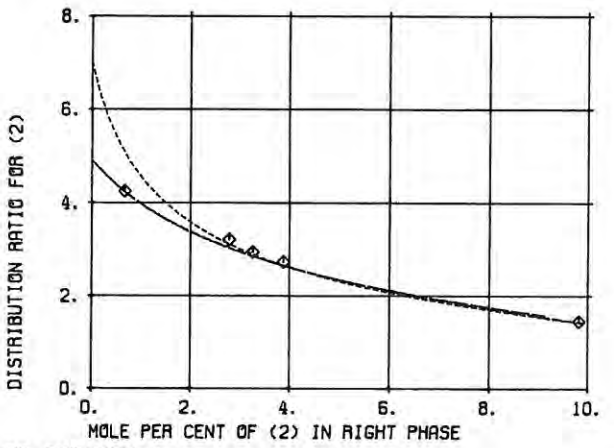
I J	UNIQUAC AIJ	AJI	NRTL(ALPHA=.2) AIJ	AJI
1 2	143.30	-230.04	-26.344	-269.64
1 3	-17.053	230.49	-308.40	1691.2
2 3	-16.603	-167.24	24.180	-23.108

R1 = 4.3489 R2 = 2.2024 R3 = 0.9200
Q1 = 3.512 Q2 = 2.072 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.35
NRTL (SPECIFIC PARAMETERS)	0.45
UNIQUAC (COMMON PARAMETERS)	0.58





(1) C6H12O 2-PENTANONE,4-METHYL

(2) C2H4O2 ACETIC ACID

(3) H2O WATER

SHERWOOD T.K., EVANS J.E., LONGCOR J.V.A.
IND.ENG.CHEM. 31(1939)1144

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
83.611	2.736	13.654	0.322	0.885	98.793
65.943	11.409	22.647	0.503	3.911	95.586
48.089	18.854	33.057	0.855	7.460	91.684
33.499	22.533	43.967	1.369	10.226	88.405
21.638	23.402	54.960	3.227	14.652	82.121

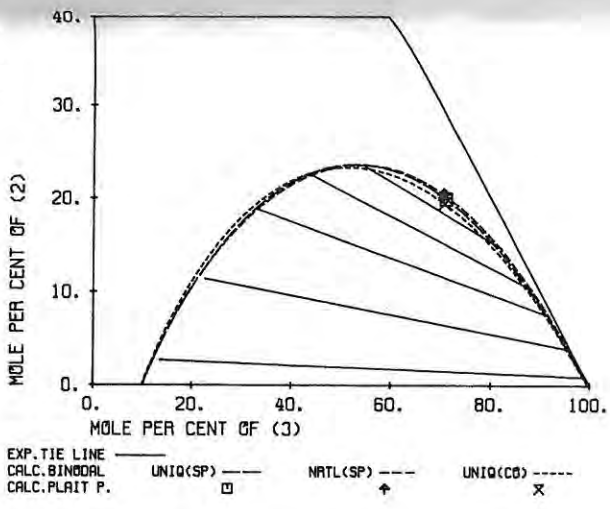
SPECIFIC MODEL PARAMETERS IN KELVIN

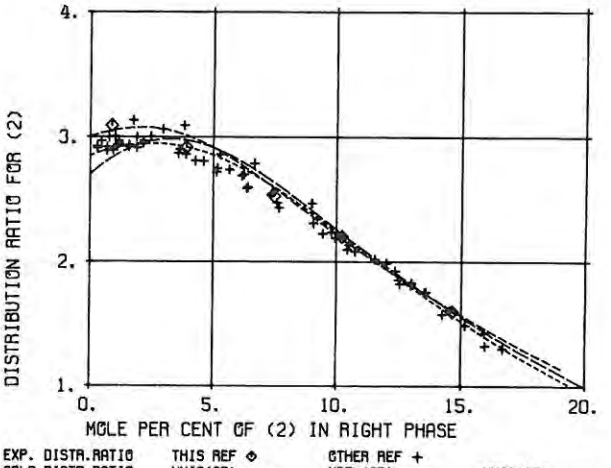
I J	UNIQUAC AIJ	AJI	NRTL(ALPHA=.2) AIJ	AJI
1 2	-225.65	-13.128	696.81	-565.15
1 3	437.77	107.98	228.70	1827.0
2 3	-278.01	128.06	-11.779	44.146

R1 = 4.5959 R2 = 2.2024 R3 = 0.9200
Q1 = 3.952 Q2 = 2.072 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.39
NRTL (SPECIFIC PARAMETERS)	0.32
UNIQUAC (COMMON PARAMETERS)	0.62





(1) C6H12O 2-PENTANONE,4-METHYL

(2) C2H4O2 ACETIC ACID

(3) H2O WATER

OTHMER D.F., WHITE R.E., TRUEGER E.
IND.ENG.CHEM. 33(1941)1240

TEMPERATURE = 22.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
70.529	9.100	20.370	0.481	2.973	96.546
57.790	15.096	27.114	0.643	5.280	94.078
36.537	21.857	41.606	1.374	9.957	88.669
26.926	22.832	50.242	2.124	12.538	85.338
19.920	22.442	57.638	2.956	14.248	82.796
14.922	21.159	63.919	4.416	15.963	79.621

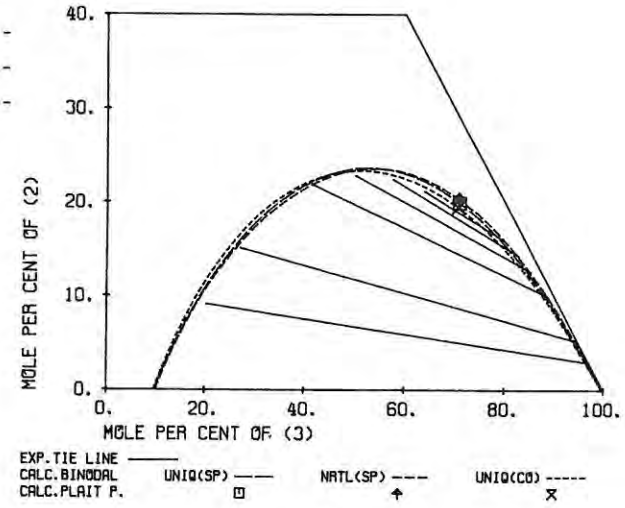
SPECIFIC MODEL PARAMETERS IN KELVIN

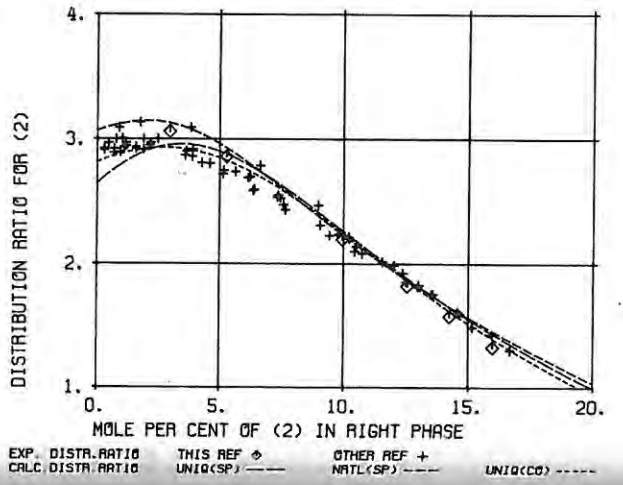
I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-225.65	-13.128	696.81	-565.15
1 3	437.77	107.98	228.70	1827.0
2 3	-278.01	128.06	-11.779	44.146

R1 = 4.5959 R2 = 2.2024 R3 = 0.9200
Q1 = 3.952 Q2 = 2.072 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	0.69
NRTL (SPECIFIC PARAMETERS)	0.67
UNIQUAC (COMMON PARAMETERS)	0.94





(1) C6H12O 2-PENTANONE,4-METHYL

(2) C2H4O2 ACETIC ACID

(3) H2O WATER

IGUCHI A., FUSE K.
KAGAKU KOGAKU 35(1971)477

TEMPERATURE = 25.0 DEG C TYPE OF SYSTEM = 1

EXPERIMENTAL TIE LINES IN MOLE PCT (GRAPH.INTERPOL.)

LEFT PHASE (1)	(2)	(3)	RIGHT PHASE (1)	(2)	(3)
86.360	5.533	8.107	0.420	1.765	97.815
72.554	11.857	15.589	0.541	3.834	95.625
56.227	18.589	25.185	0.727	6.665	92.608
44.697	22.226	33.077	0.947	8.996	90.058
30.801	23.884	45.315	1.607	12.011	86.382
24.833	23.823	51.345	2.246	13.572	84.181
21.433	23.505	55.062	2.856	14.573	82.571
16.720	22.743	60.537	3.965	15.935	80.100

SPECIFIC MODEL PARAMETERS IN KELVIN

I J	UNIQUAC AIJ	UNIQUAC AJI	NRTL(ALPHA=.2) AIJ	NRTL(ALPHA=.2) AJI
1 2	-225.65	-13.128	696.81	-565.15
1 3	437.77	107.98	228.70	1827.0
2 3	-278.01	128.06	-11.779	44.146

R1 = 4.5959 R2 = 2.2024 R3 = 0.9200
Q1 = 3.952 Q2 = 2.072 Q3 = 1.400

MEAN DEV. BETWEEN CALC. AND EXP. CONC. IN MOLE PCT

UNIQUAC (SPECIFIC PARAMETERS)	1.28
NRTL (SPECIFIC PARAMETERS)	1.29
UNIQUAC (COMMON PARAMETERS)	1.22