

1

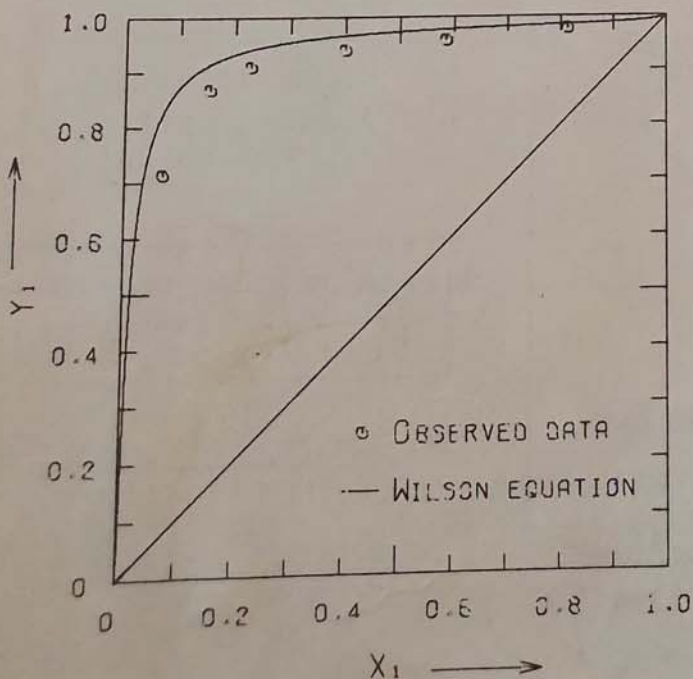
METHANE(1) - ETHANE(2)

DATA FROM RUHEMANN, M. (PROC. ROY. SOC. LONDON SER. VOL. A 171, P. 121 (1939))

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0700	0.7170	-88.00	3564.40
0.1540	0.8710	-88.00	5798.80
0.2280	0.9130	-88.00	7600.00
0.4000	0.9430	-88.00	11232.80
0.5850	0.9600	-88.00	15200.00
0.8130	0.9800	-88.00	22800.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.61184	389.930	266.000
2	6.80266	656.400	256.000



WILSON PARAMETERS	
Λ_{12}	= 1.12643
Λ_{21}	= 0.13810

ERROR* ON WILSON EQUATION	
Y_1	: 0.0536
$T [°C]$: 9.04

$$* \frac{\sum |Y_{1CALC} - Y_{1OBS}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{CALC} - T_{OBS}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

3

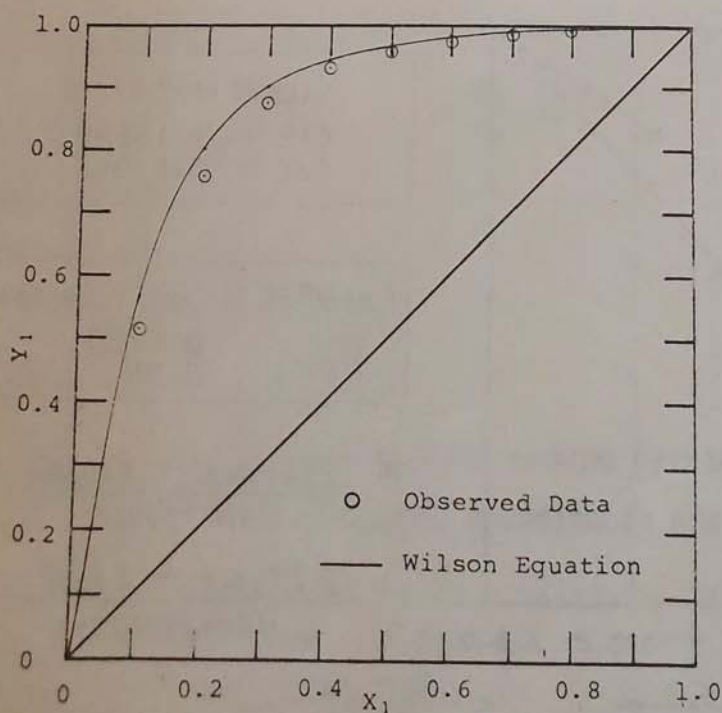
ETHANE(1) - BUTANE(2)*

DATA FROM KAY, W.B.: IND. ENG. CHEM., VOL. 32, P. 353 (1940).

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.1000	0.5170	36.10	5168.00
0.2000	0.7590	14.70	5168.00
0.3000	0.8760	-0.80	5168.00
0.4000	0.9300	-12.20	5168.00
0.5000	0.9570	-20.50	5168.00
0.6000	0.9750	-27.20	5168.00
0.7000	0.9860	-33.30	5168.00
0.8000	0.9920	-37.80	5168.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.80266	656.400	256.000
2	6.83029	945.900	240.000



Wilson Parameters

$$\Lambda_{12} = 0.73280$$

$$\Lambda_{21} = 1.5593$$

Error* on Wilson Equation

$$Y_1 : 0.0230$$

$$T[°C] : 0.559$$

$$* \frac{\sum |Y_{1,calc} - Y_{1,obs}|}{\text{Data Points}}$$

$$\frac{\sum |T_{calc} - T_{obs}|}{\text{Data Points}}$$

FIG. X - Y CURVE

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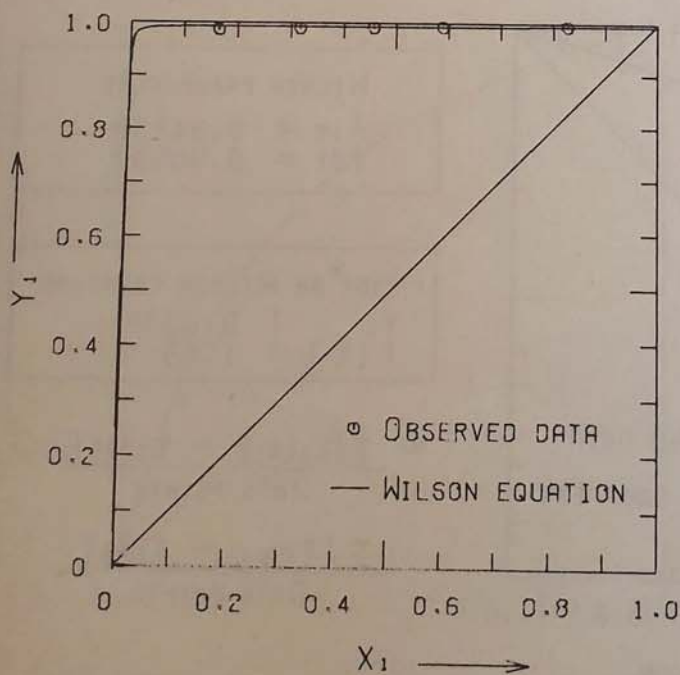
PROPANE(1) - N-DECANE(2)

DATA FROM REAMER, H. H., ET AL: J. CHEM. ENG. DATA., VOL 11(1), P. 17 (1966)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.1652	0.9910	71.11	2585.80
0.3178	0.9948	71.11	5171.50
0.4584	0.9961	71.11	7757.30
0.5899	0.9969	71.11	10343.00
0.8275	0.9985	71.11	15514.50

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.82973	813.200	248.000
2	7.31509	1705.600	212.590



WILSON PARAMETERS

$$\Lambda_{12} = 0.35720$$

$$\Lambda_{21} = 0.10660$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0043$$

$$T [^{\circ}\text{C}] : 36.57$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

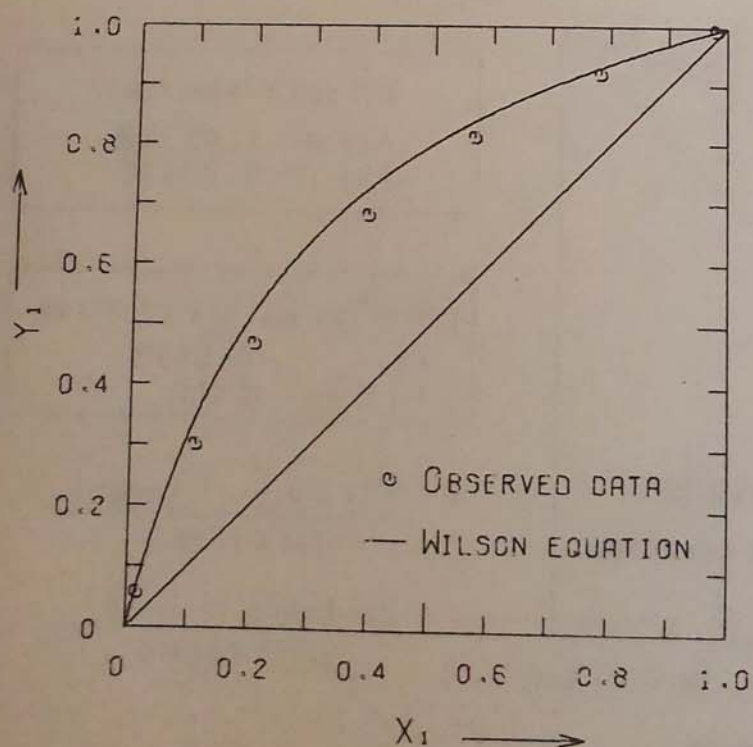
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DATA FROM GOFF, G. H., P. S. FARRINGTON, B. H. SAUF: IND. ENG. CHEM. VOL. 42, P. 735 (1950)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0170	0.0570	21.10	2068.72
0.1120	0.3020	21.10	2585.52
0.2070	0.4690	21.10	3103.08
0.3940	0.6810	21.10	4137.44
0.5710	0.8120	21.10	5171.80
0.7840	0.9200	21.10	6465.32
0.9830	0.9940	21.10	7759.60

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.81960	785.000	247.000
2	6.84290	926.100	240.000



WILSON PARAMETERS

$$\Lambda_{12} = 1.16942$$

$$\Lambda_{21} = 0.74448$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0298$$

$$T [^{\circ}\text{C}] : 1.36$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

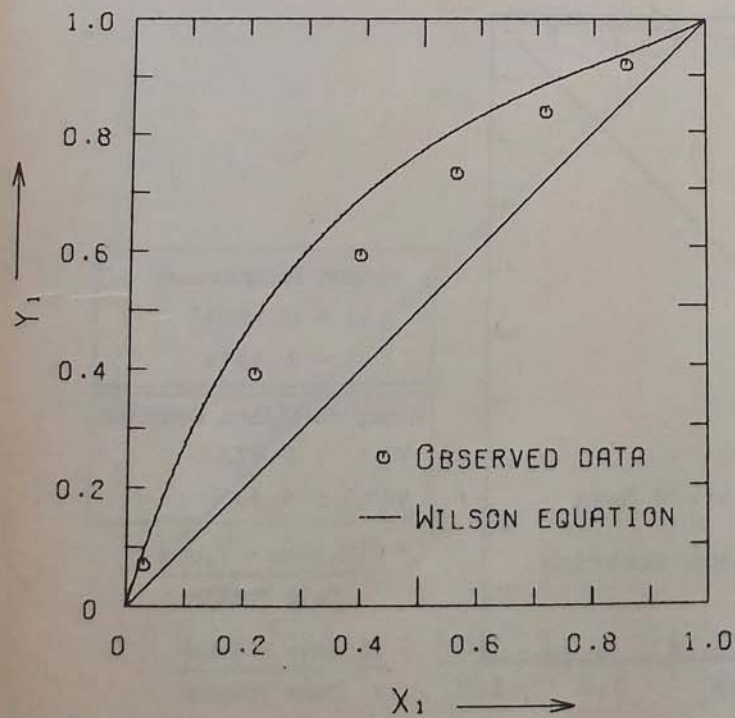
PROPENE(1) - I-BUTENE(2)

DATA FROM GOFF, G. H., P. S. FARRINGTON, B. H. SAGE: IND. ENG. CHEM. VOL. 42, P. 735 (1950)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0300	0.0700	71.10	7759.60
0.2190	0.3920	71.10	10343.60
0.3960	0.5900	71.10	12927.60
0.5600	0.7280	71.10	15511.60
0.7160	0.8340	71.10	18103.20
0.8580	0.9180	71.10	20687.20

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.81960	785.000	247.000
2	6.84290	926.100	240.000



WILSON PARAMETERS

$$\Lambda_{12} = 1.96088$$

$$\Lambda_{21} = 0.21215$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0645$$

$$T [^{\circ}\text{C}] : 3.27$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

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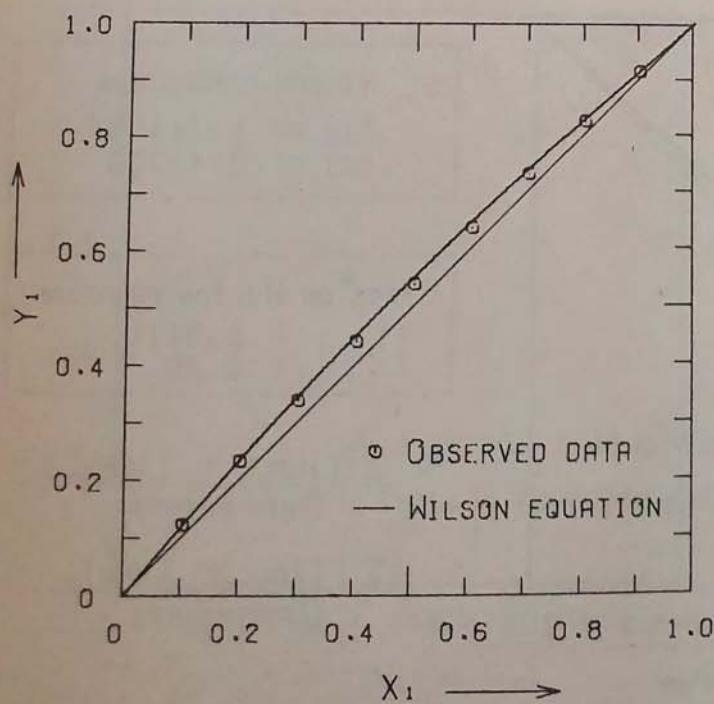
BUTENE(1) - BUTANE(2)

DATA FROM SAGE, B.H., W.N. LACEY: IND. ENG. CHEM., VOL. 40, P. 1299 (1948)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.1000	0.1200	37.78	2720.00
0.2000	0.2320	37.78	2777.00
0.3000	0.3370	37.78	2844.70
0.4000	0.4390	37.78	2906.20
0.5000	0.5370	37.78	2968.60
0.6000	0.6340	37.78	3025.60
0.7000	0.7280	37.78	3082.60
0.8000	0.8210	37.78	3134.20
0.9000	0.9110	37.78	3185.90

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.84290	926.100	240.000
2	6.83029	945.900	240.000



WILSON PARAMETERS

$$\Lambda_{12} = 1.64637$$

$$\Lambda_{21} = 0.48584$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0079$$

$$T [^{\circ}\text{C}] : 0.06$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

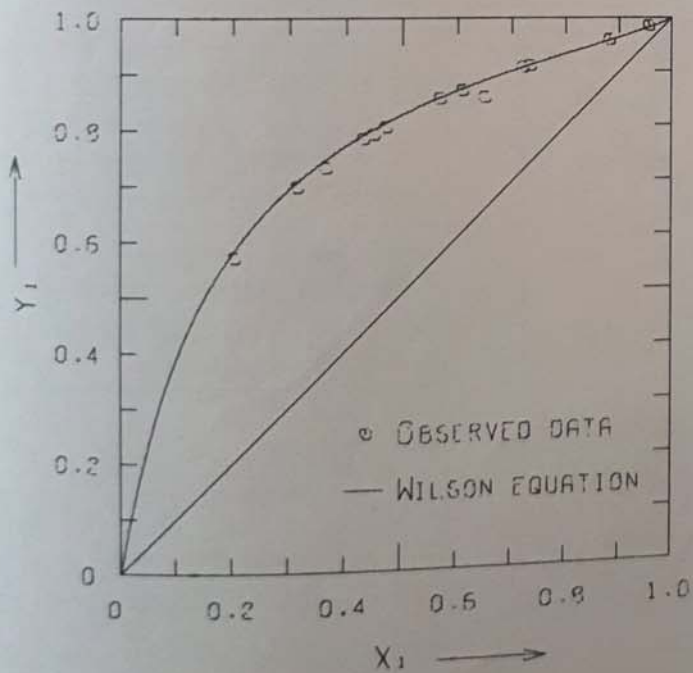
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DATA FROM ELSHAYAL, I. M., R. C. - Y. LU: J. APPL. CHEM., VOL. 19, P. 277 (1968)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.9570	0.9850	75.00	628.40
0.8820	0.9590	75.00	595.60
0.7350	0.9130	75.00	544.90
0.7210	0.9091	75.00	530.90
0.6505	0.8550	75.00	502.70
0.6091	0.8680	75.00	485.20
0.5690	0.8540	75.00	466.90
0.4730	0.8030	75.00	419.50
0.4512	0.7901	75.00	412.70
0.4330	0.7822	75.00	399.80
0.3650	0.7305	75.00	361.90
0.3150	0.6970	75.00	333.80
0.2051	0.5710	75.00	277.40

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.90565	1211.033	220.790
2	6.92374	1355.126	209.517



WILSON PARAMETERS

$$\Lambda_{12} = 1.41840$$

$$\Lambda_{21} = 0.37467$$

ERROR* ON WILSON EQUATION

$$Y_1 = 0.0100$$

$$T [^\circ\text{C}] = 0.56$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

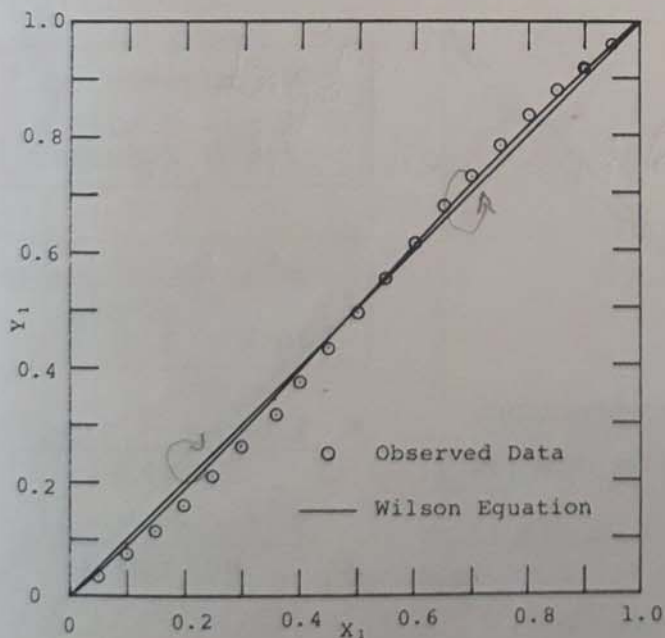
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DATA FROM K. KOJIMA, M. KATO, H. SUNGA, S. HASHIMOTO, KAGAKU KOGAKU, VOL. 32, P. 337 (1968)

X_1	Y_1	T [°C]	P [mmHg]	X_1	Y_1	T [°C]	P [mmHg]
0.0500	0.0357	80.19	760.00	0.8000	0.8326	78.42	760.00
0.1000	0.0745	79.70	760.00	0.8500	0.8794	78.77	760.00
0.1500	0.1169	79.28	760.00	0.9000	0.9233	79.16	760.00
0.2000	0.1628	78.87	760.00	0.9500	0.9639	79.59	760.00
0.2500	0.2118	78.52	760.00				
0.3000	0.2637	78.24	760.00				
0.3500	0.3181	77.99	760.00				
0.4000	0.3749	77.78	760.00				
0.4500	0.4324	77.61	760.00				
0.5000	0.4917	77.52	760.00				
0.5500	0.5515	77.49	760.00				
0.6000	0.6120	77.53	760.00				
0.6500	0.6796	77.64	760.00				
0.7000	0.7278	77.81	760.00				
0.7500	0.7819	78.08	760.00				

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.90565	1211.033	220.790
2	6.94504	1413.120	216.000



Wilson Parameters

$\Lambda_{12} = 1.1041$

$\Lambda_{21} = 1.0602$

Error* on Wilson Equation

$Y_1 : 0.0156$

$T[°C] : 2.90$

* $\frac{\sum |Y_{1calc} - Y_{1obs}|}{\text{Data Points}}$

Data Points

$\frac{\sum |T_{calc} - T_{obs}|}{\text{Data Points}}$

Data Points

FIG. X - Y CURVE

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DATA FROM MYERS H.S.: IND. ENG. CHEM. 48, 1104 (1956)

X_1	Y_1	T [°C]	P [mmHg]	X_1	Y_1	T [°C]	P [mmHg]
0.0150	0.0260	100.40	760.00	0.4830	0.6370	86.50	760.00
0.0350	0.0720	99.50	760.00	0.5100	0.6550	85.95	760.00
0.0520	0.1095	98.65	760.00	0.5315	0.6750	85.50	760.00
0.0930	0.1635	97.60	760.00	0.5730	0.7025	84.90	760.00
0.1095	0.2075	96.50	760.00	0.6170	0.7330	82.25	760.00
0.1670	0.2970	94.50	760.00	0.6650	0.7570	83.50	760.00
0.2035	0.3520	93.20	760.00	0.7050	0.7895	83.05	760.00
0.2310	0.3955	92.40	760.00	0.7390	0.8150	82.55	760.00
0.2690	0.4360	91.30	760.00	0.7770	0.8390	82.10	760.00
0.3070	0.4830	90.25	760.00	0.8210	0.8670	81.65	760.00
0.3370	0.5115	89.50	760.00	0.8605	0.8960	81.20	760.00
0.3610	0.5320	88.90	760.00	0.9000	0.9230	80.90	760.00
0.3985	0.5550	88.35	760.00	0.9335	0.9480	80.60	760.00
0.4200	0.5820	87.70	760.00	0.9650	0.9730	80.35	760.00
0.4480	0.6085	87.15	760.00				

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.90565	1211.033	220.790
2	6.82689	1272.864	221.630

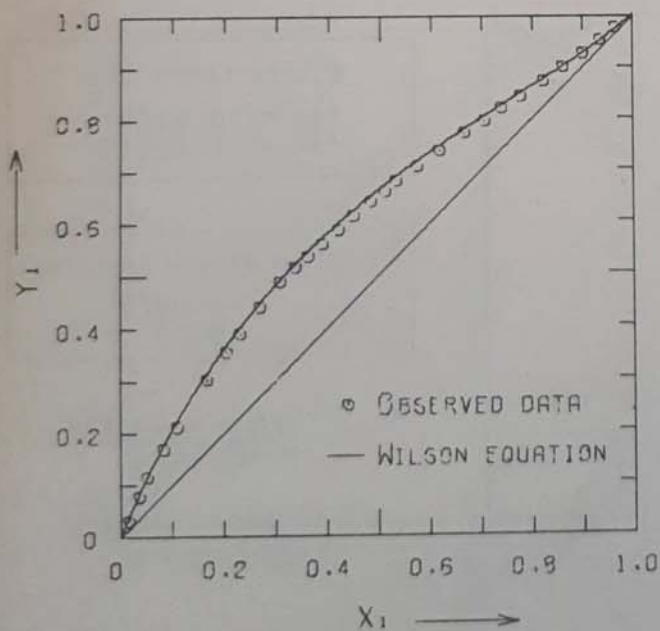


FIG. X - Y CURVE

WILSON PARAMETERS

$$\Lambda_{12} = 1.36957$$

$$\Lambda_{21} = 0.42750$$

ERROR* ON WILSON EQUATION

$$Y_1 \approx 0.0089$$

$$T [^{\circ}\text{C}] \approx 0.32$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

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DATA FROM ROSANOFF M.A., BACON C.W., SCHULZE J.F.W. J. AM. CHEM. SOC., 36, 1999 (1914)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.1000	0.2080	105.31	760.00
0.2000	0.3720	101.46	760.00
0.3000	0.5070	98.00	760.00
0.4000	0.6190	95.05	760.00
0.5000	0.7130	92.30	760.00
0.6000	0.7910	89.74	760.00
0.7000	0.8570	87.29	760.00
0.8000	0.9120	84.99	760.00
0.9000	0.9590	82.68	760.00
0.9500	0.9800	81.43	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.90565	1211.033	220.790
2	6.95464	1344.800	219.482

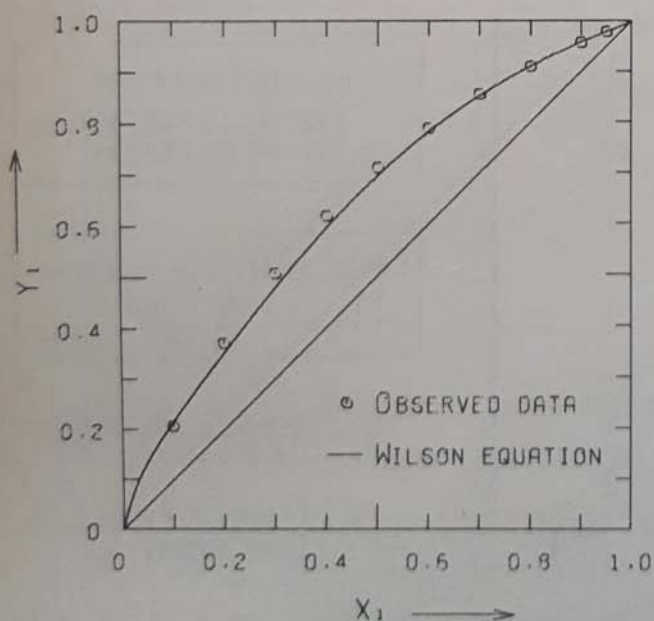


FIG. X - Y CURVE

WILSON PARAMETERS

$$\Lambda_{12} = 0.08547$$

$$\Lambda_{21} = 2.74288$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0104$$

$$T [^{\circ}\text{C}] : 0.42$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

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DATA FROM YORK R., HOLMES R.C. (IND. ENG. CHEM. 34, 345(1942))

X_1	Y_1	T [°C]	P [mmHg]	X_1	Y_1	T [°C]	P [mmHg]
0.0010	0.0140	65.10	100.00	0.8910	0.9150	53.00	100.00
0.0280	0.0700	64.60	100.00	0.9250	0.9420	52.60	100.00
0.0300	0.0770	64.20	100.00	0.9430	0.9560	52.20	100.00
0.0350	0.1080	64.00	100.00				
0.0980	0.2150	63.40	100.00				
0.1300	0.2550	62.30	100.00				
0.1700	0.3300	61.20	100.00				
0.2350	0.4350	59.60	100.00				
0.3250	0.5520	58.40	100.00				
0.4200	0.6150	57.00	100.00				
0.5050	0.6650	55.60	100.00				
0.6120	0.7450	55.20	100.00				
0.7000	0.8230	54.40	100.00				
0.8000	0.8450	53.80	100.00				
0.8500	0.8920	53.30	100.00				

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.95464	1344.800	219.482
2	6.92374	1355.126	209.519

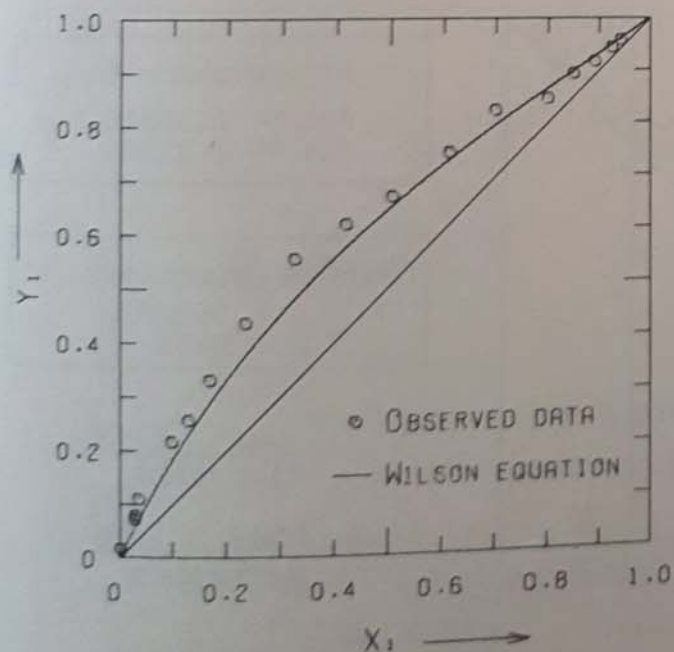


FIG. X - Y CURVE

WILSON PARAMETERS

$\Lambda_{12} = 1.13269$

$\Lambda_{21} = 0.69868$

ERROR* ON WILSON EQUATION

$Y_1 : 0.0255$

$T [^{\circ}\text{C}] : 0.47$

* $\frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$

$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$

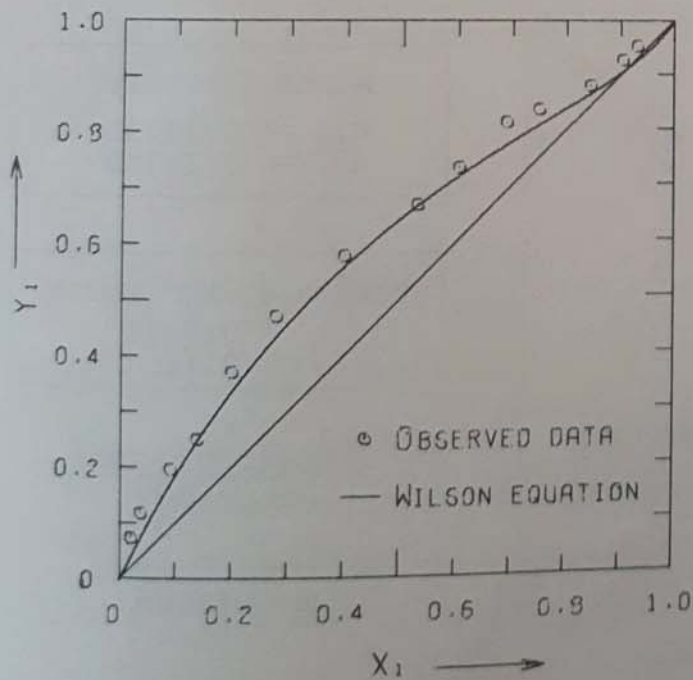
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DATA FROM YORK R., HOLMES R.C., IND. ENG. CHEM. 34, 345 (1942)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0200	0.0760	93.10	300.00
0.0380	0.1210	92.30	300.00
0.0910	0.2000	91.40	300.00
0.1400	0.2550	90.70	300.00
0.2020	0.3750	88.80	300.00
0.2800	0.4750	87.30	300.00
0.4000	0.5800	85.70	300.00
0.5300	0.6700	83.10	300.00
0.6050	0.7360	82.00	300.00
0.6900	0.8170	81.30	300.00
0.7500	0.8400	80.80	300.00
0.8450	0.8830	80.60	300.00
0.9050	0.9300	80.40	300.00
0.9320	0.9560	80.20	300.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.95464	1344.800	219.482
2	6.92374	1355.126	209.519



WILSON PARAMETERS

$$\Lambda_{12} = 1.62919$$

$$\Lambda_{21} = 0.23870$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0247$$

$$T [^{\circ}\text{C}] : 0.61$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

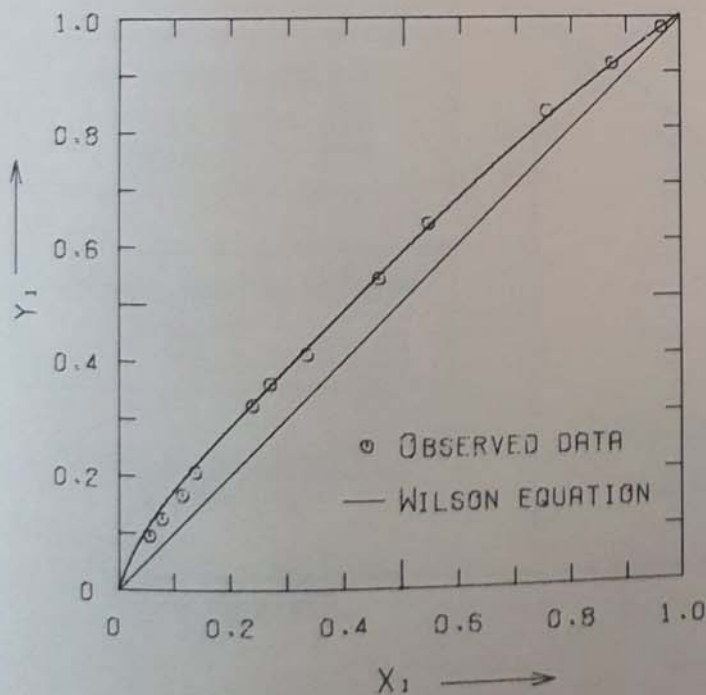
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DATA FROM CHAIYAVECH P., VAN WINKLE M., J. CHEM. ENG. DATA, VOL. 4, P. 53 (1959)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.0555	0.0900	45.10	20.00
0.0782	0.1200	44.90	20.00
0.1150	0.1620	44.60	20.00
0.1390	0.2010	44.40	20.00
0.2405	0.3180	43.62	20.00
0.2715	0.3550	43.37	20.00
0.3350	0.4055	42.95	20.00
0.4600	0.5350	41.98	20.00
0.5450	0.6300	41.30	20.00
0.7550	0.8250	39.75	20.00
0.8740	0.9100	39.10	20.00
0.9650	0.9750	38.70	20.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.95719	1424.255	213.206
2	6.92409	1420.000	206.000



WILSON PARAMETERS

$$\Lambda_{12} = 0.15671$$

$$\Lambda_{21} = 2.22885$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0104$$

$$T [^{\circ}\text{C}] : 0.17$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

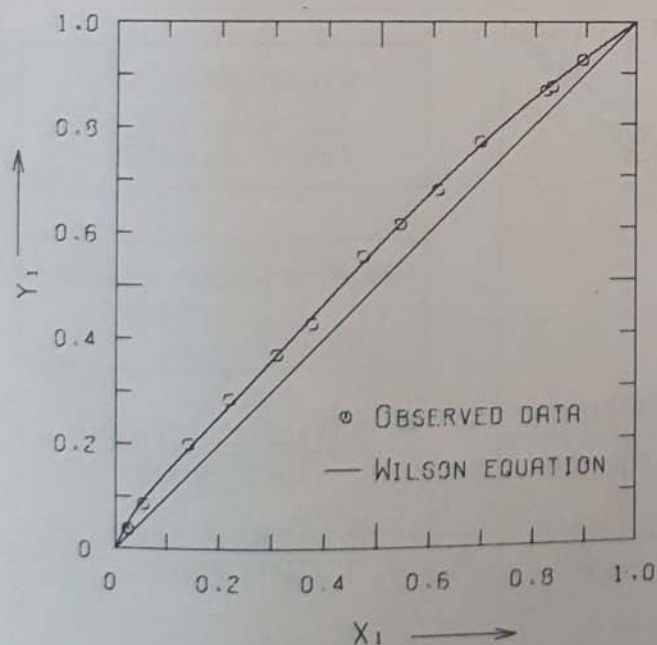
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DATA FROM MALYUSOV V.R., MALAFEEV N.A., ZHAVORONKOV N.M., ZH. FIZ. KHIM., VOL. 31, P. 699(1957)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0240	0.0360	66.00	50.00
0.0540	0.0840	65.00	50.00
0.1410	0.1980	64.00	50.00
0.2190	0.2840	62.80	50.00
0.3080	0.3665	62.20	50.00
0.3740	0.4240	61.80	50.00
0.4690	0.5500	61.60	50.00
0.5390	0.6100	61.20	50.00
0.6110	0.6740	61.00	50.00
0.6930	0.7650	60.60	50.00
0.8200	0.8640	59.40	50.00
0.8330	0.8720	59.20	50.00
0.8930	0.9240	58.80	50.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.95719	1424.255	213.206
2	6.92409	1420.000	206.000



WILSON PARAMETERS

$$\Lambda_{12} = 0.11565$$

$$\Lambda_{21} = 2.56240$$

ERROR* ON WILSON EQUATION

$$Y_1 \leq 0.0076$$

$$T [^{\circ}\text{C}] \leq 0.37$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

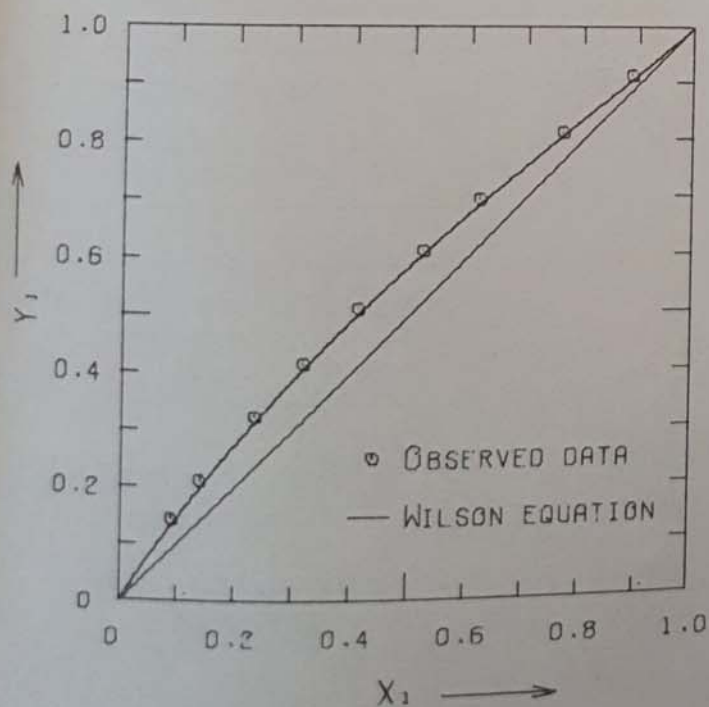
M. HIRATA AND S. OHE

DATA FROM WHITE W.S., VAN NINKLE M.: IND. ENG. CHEM. 46, 1284 (1954)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.0910	0.1440	80.72	100.00
0.1410	0.2110	80.15	100.00
0.2350	0.3240	79.33	100.00
0.3190	0.4150	78.64	100.00
0.4120	0.5110	77.86	100.00
0.5220	0.6110	76.98	100.00
0.6190	0.6990	76.19	100.00
0.7640	0.8140	75.03	100.00
0.8870	0.9140	74.25	100.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.95719	1424.255	213.206
2	6.92409	1420.000	206.000



WILSON PARAMETERS

$\Lambda_{12} = 1.39290$

$\Lambda_{21} = 0.55931$

ERROR* ON WILSON EQUATION

$Y_1 : 0.0085$

$T [^{\circ}\text{C}] : 0.21$

* $\frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$

$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$

FIG. X - Y CURVE

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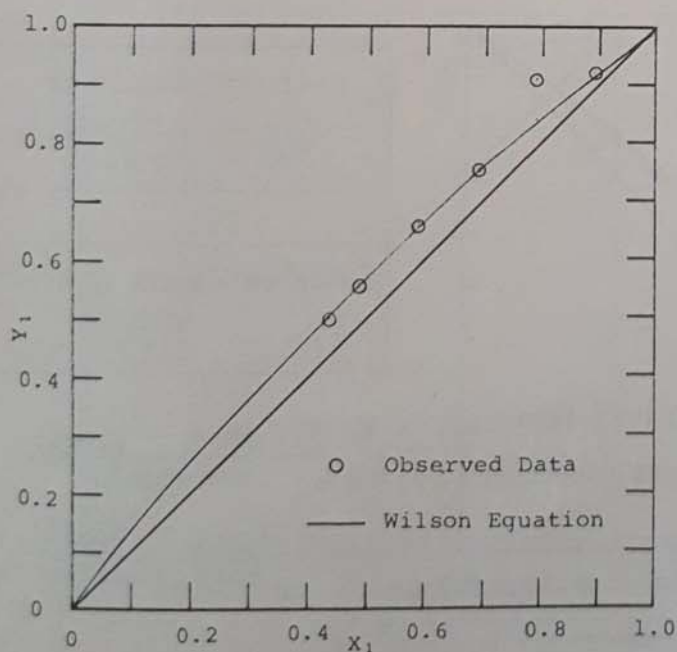
ETHYLBENZENE(1) - STYRENE(2)*

DATA FROM CHAIYAVECH P., VAN WINKLE M.: J. CHEM. ENG. DATA, VOL. 4, P. 53 (1959)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.4330	0.5010	97.00	200.00
0.4890	0.5585	96.42	200.00
0.5880	0.6500	95.65	200.00
0.6930	0.7510	94.85	200.00
0.7953	0.9110	94.20	200.00
0.8920	0.9200	93.40	200.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.95719	1424.255	213.206
2	6.92409	1420.000	206.000



Wilson Parameters

$\Lambda_{12} = 1.0267$

$\Lambda_{21} = 1.0169$

Error* on Wilson Equation

$Y_1 : 0.0150$

$T[°C] : 0.44$

* $\frac{\sum |Y_{1calc} - Y_{1obs}|}{\text{Data Points}}$

Data Points

$\frac{\sum |T_{calc} - T_{obs}|}{\text{Data Points}}$

Data Points

FIG. X - Y CURVE

M. HIRATA AND S. OHE

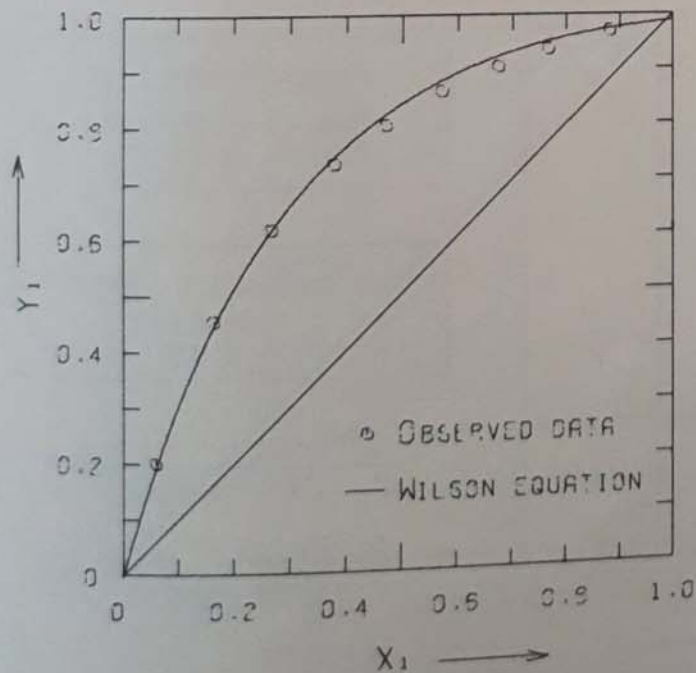
NAPHTHALENE(1)-TETRADECANE(2)

DATA FROM HAYNES S., VAN WINKLE, M.: IND. ENG. CHEM. 46, 334 (1954)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.0600	0.2040	117.20	10.00
0.1650	0.4530	111.40	10.00
0.2670	0.6220	106.70	10.00
0.3790	0.7380	102.20	10.00
0.4710	0.8070	98.90	10.00
0.5720	0.8660	95.60	10.00
0.6750	0.9090	93.10	10.00
0.7670	0.9410	90.80	10.00
0.8910	0.9730	89.30	10.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.84577	1606.527	197.277
2	7.52890	2069.700	197.600



WILSON PARAMETERS

$$\Lambda_{12} = 3.03456$$

$$\Lambda_{21} = 0.00001$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0120$$

$$T [^{\circ}\text{C}] : 0.47$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG X - Y CURVE

M. HIRATA AND S. OHE

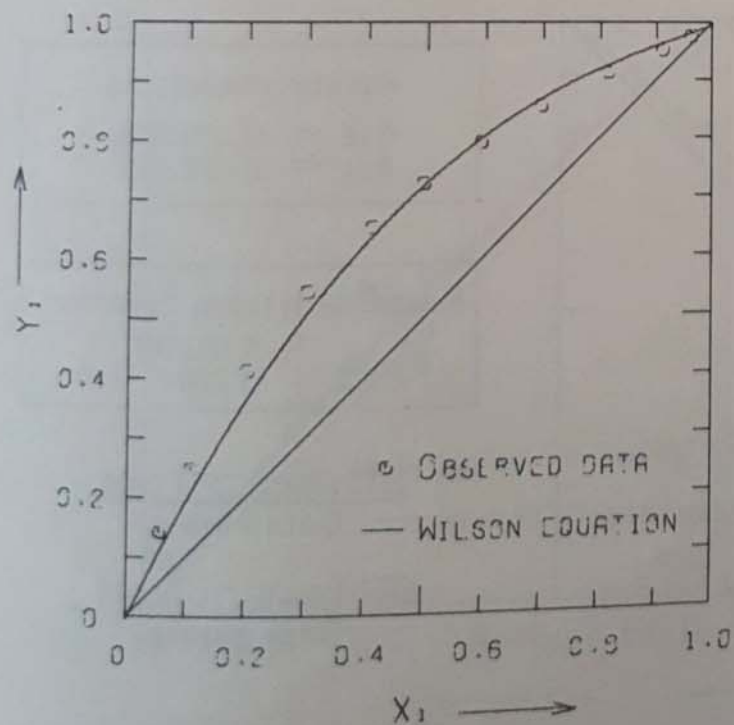
NAPHTHALENE(1)-TETRADECANE(2)

DATA FROM HAYNES S., VAN WINKLE M.: IND. ENG. CHEM. 46, 334 (1954)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.0560	0.1460	198.60	200.00
0.1100	0.2540	195.60	200.00
0.2050	0.4190	190.80	200.00
0.3050	0.5510	186.40	200.00
0.4120	0.6590	182.20	200.00
0.4980	0.7310	179.40	200.00
0.5940	0.7990	176.70	200.00
0.6970	0.8600	173.90	200.00
0.9130	0.9180	171.40	200.00
0.9100	0.9570	169.40	200.00
0.9620	0.9800	168.30	200.00

ANTIZINE CONSTANTS

COMPONENTS	A	B	C
1	6.94577	1606.527	197.277
2	7.52890	2069.700	197.600



WILSON PARAMETERS

$$\Lambda_{12} = 2.53817$$

$$\Lambda_{21} = 0.20126$$

ERROR ON WILSON EQUATION

$$Y_1 : 0.0202$$

$$T [^{\circ}\text{C}] : 0.93$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG X - Y CURVE

M. HIRATA AND S. OHE

BUTENE(1) - FURFURAL(2)

DATA FROM HERTES, T. S., R. P. COLBURN: IND. ENG. CHEM., VOL. 39, P. 787 (1947)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0168	0.9015	93.30	812.00
0.0221	0.9217	93.30	1022.00
0.0411	0.9568	93.30	1805.00
0.0674	0.9731	93.30	2829.00
0.0960	0.9808	93.30	3859.00
0.1318	0.9856	93.30	4914.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.84290	926.100	240.000
2	9.46148	3437.220	360.971

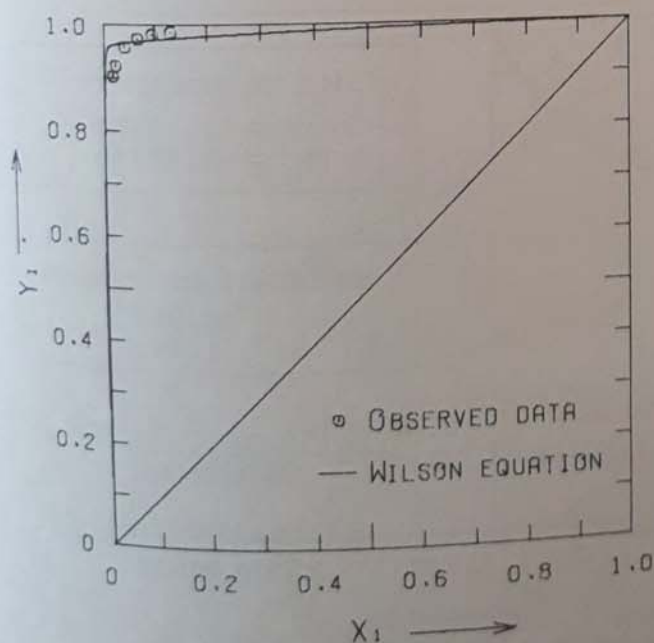


FIG. X - Y CURVE

WILSON PARAMETERS

$$\Lambda_{12} = 0.00740$$

$$\Lambda_{21} = 1.75030$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0356$$

$$T [^{\circ}\text{C}] : 23.33$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

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DATA FROM HANSON, D. O., ET AL.: J. CHEM. ENG. DATA, VOL. 12, P. 319 (1967)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.0950	0.2820	60.00	501.80
0.0980	0.2880	60.00	502.70
0.1970	0.4190	60.00	569.10
0.2820	0.4840	60.00	605.90
0.3950	0.5500	60.00	635.00
0.4790	0.5970	60.00	648.30
0.5560	0.6260	60.00	656.90
0.7160	0.6970	60.00	661.20
0.8030	0.7480	60.00	654.40
0.8720	0.8040	60.00	641.50
0.9160	0.8540	60.00	625.80
0.9610	0.9170	60.00	602.30

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.87776	1171.530	224.366
2	7.03873	1300.840	233.186

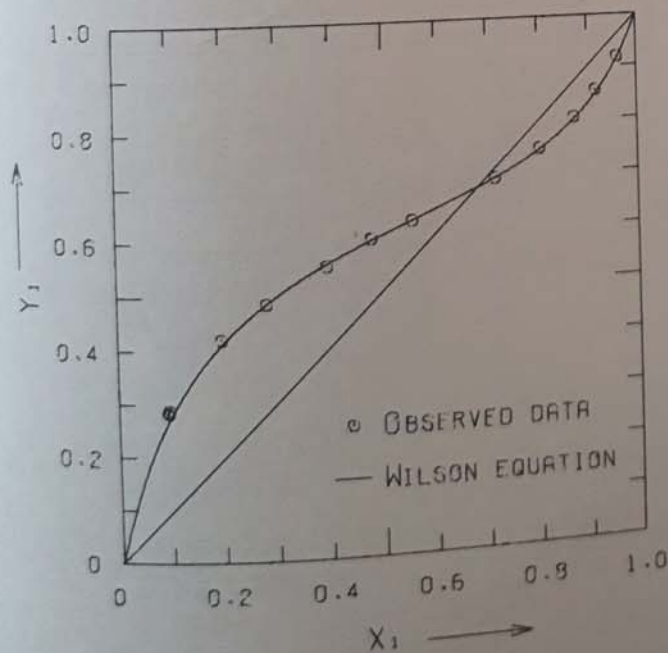


FIG. X - Y CURVE

WILSON PARAMETERS

$$\Lambda_{12} = 0.64871$$

$$\Lambda_{21} = 0.36797$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0056$$

$$T [^{\circ}\text{C}] : 0.10$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

M. HIRATA AND S. OHE

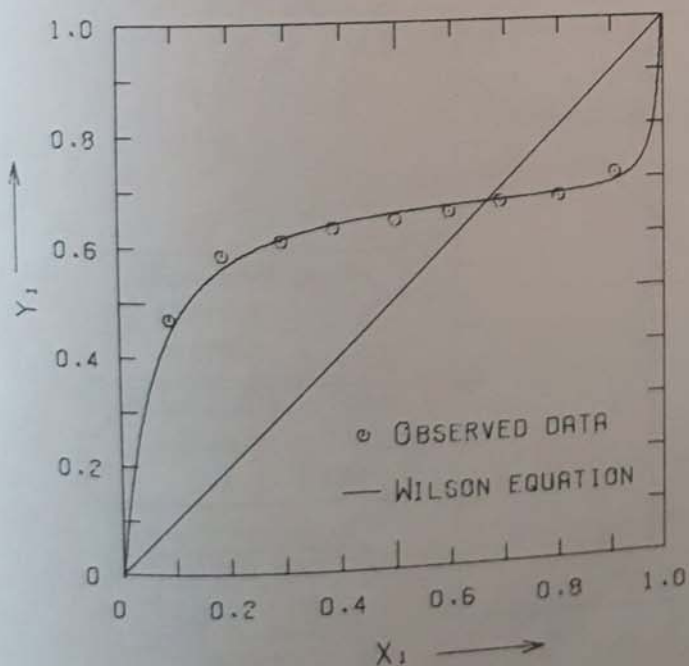
HEXANE(1) - ETHYL ALCOHOL(2)

DATA FROM KUDRYAVTSEVA, L.S. ET AL.: ZH. PRIKL. KHIM. VOL.36. (7) P. 1471 (1963)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.0930	0.4740	65.06	760.00
0.1898	0.5900	61.01	760.00
0.2965	0.6140	59.74	760.00
0.3885	0.6350	59.02	760.00
0.4999	0.6460	58.68	760.00
0.5988	0.6570	58.52	760.00
0.6930	0.6710	58.39	760.00
0.8021	0.6760	58.53	760.00
0.9084	0.7150	59.41	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.87776	1171.530	224.366
2	8.04494	1554.300	222.650



WILSON PARAMETERS

$$\Lambda_{12} = 0.31670$$

$$\Lambda_{21} = 0.05515$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0124$$

$$T [^\circ\text{C}] : 0.22$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

M. HIRATA AND S. OHE

HEXANE(1) - ETHYL ALCOHOL(2)

DATA FROM KUDRYAVTSEVA, L.S., ETAL: ZH. PRIKL. KHIM., VOL. 36, (7), P. 1471 (1963)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.0948	0.5770	35.00	224.40
0.1933	0.6610	35.00	269.30
0.2975	0.7040	35.00	287.10
0.3918	0.7160	35.00	293.70
0.4951	0.7250	35.00	296.50
0.5980	0.7320	35.00	299.00
0.6950	0.7350	35.00	301.00
0.8015	0.7370	35.00	300.40
0.9060	0.7470	35.00	296.40

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.87776	1171.530	224.366
2	8.04494	1554.300	222.650

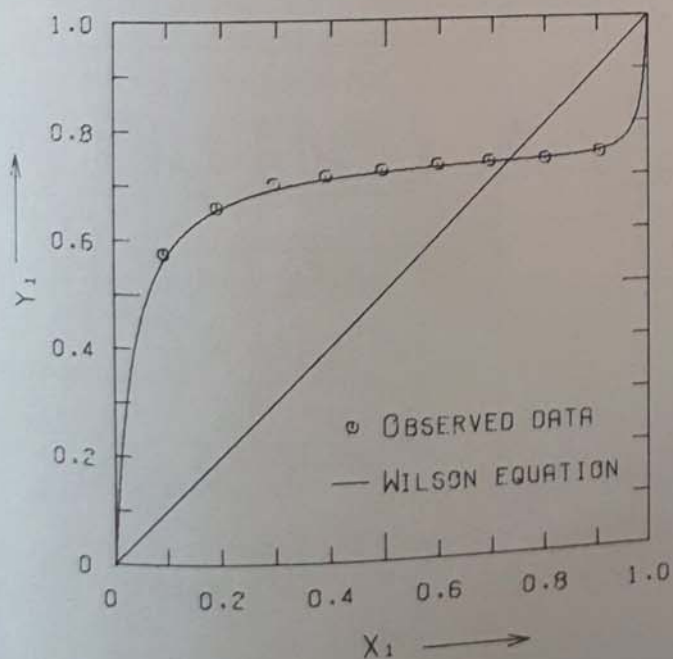


FIG. X - Y CURVE

WILSON PARAMETERS

$$\Lambda_{12} = 0.28167$$

$$\Lambda_{21} = 0.04224$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0053$$

$$T [^{\circ}\text{C}] : 0.18$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

M. HIRATA AND S. OHE

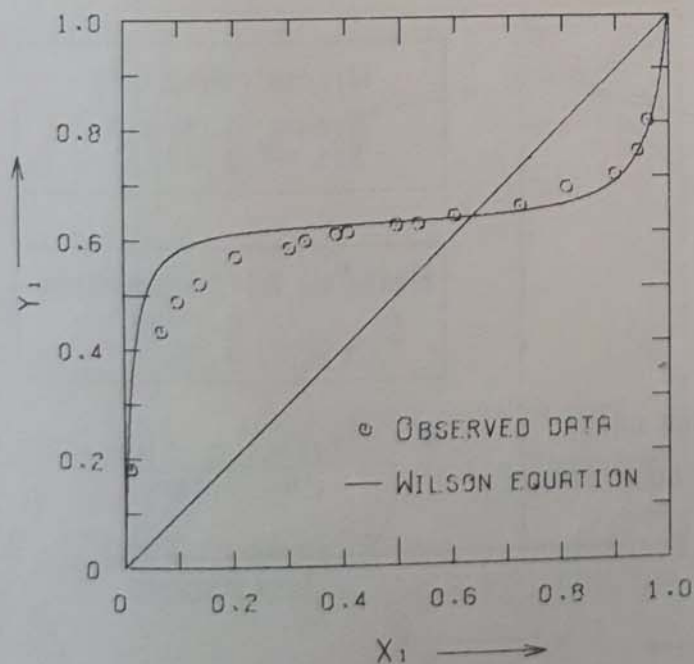
N-HEXANE(1) - ETHYL ALCOHOL(2)

DATA FROM YUAN, K.S., ETAL: J. CHEM. ENG. DATA, VOL. 9, (4), P. 549 (1963)

X_1	Y_1	T [°C]	P [MMHG]	X_1	Y_1	T [°C]	P [MMHG]
0.0110	0.1780	55.00	345.30	0.9430	0.7460	55.00	640.50
0.0700	0.4310	55.00	491.20	0.9610	0.8020	55.00	602.00
0.1000	0.4870	55.00	538.50				
0.1410	0.5200	55.00	583.40				
0.2060	0.5680	55.00	624.00				
0.3030	0.5930	55.00	654.40				
0.3320	0.5950	55.00	660.30				
0.3870	0.6060	55.00	668.40				
0.4090	0.6090	55.00	673.20				
0.4980	0.6210	55.00	674.50				
0.5370	0.6220	55.00	676.50				
0.6030	0.6350	55.00	676.70				
0.7240	0.6500	55.00	674.60				
0.8100	0.6820	55.00	673.50				
0.9000	0.7040	55.00	654.90				

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.87776	1171.530	224.366
2	8.04494	1554.300	222.650



WILSON PARAMETERS

$$\Lambda_{12} = 0.09105$$

$$\Lambda_{21} = 0.12978$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0400$$

$$T [^\circ\text{C}] : 1.27$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

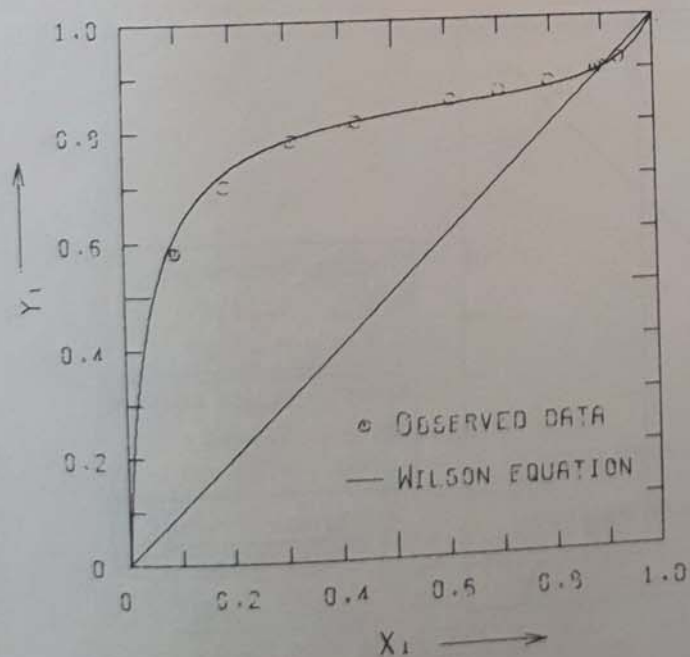
M. HIRATA AND S. OHE

DATA FROM DONALD D. HANSON, ET AL., J. CHEM. ENG. DATA, VOL. 12, NO. 3, P. 319 (1967)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0940	0.5790	60.00	302.40
0.0970	0.5950	60.00	306.20
0.1860	0.7000	60.00	398.80
0.3100	0.7790	60.00	477.50
0.4300	0.8110	60.00	521.90
0.6070	0.8470	60.00	563.90
0.7000	0.8620	60.00	577.90
0.7950	0.8770	60.00	591.50
0.8880	0.8990	60.00	596.20
0.8970	0.9020	60.00	597.00
0.9310	0.9180	60.00	596.30

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.87776	1171.530	224.366
2	7.82863	1482.130	199.970



WILSON PARAMETERS

$$\Lambda_{12} = 0.47709$$

$$\Lambda_{21} = 0.20058$$

ERROR* ON WILSON EQUATION

$$Y_1 = 0.0124$$

$$T [^{\circ}\text{C}] = 0.54$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

M. HIRATA AND S. OHE

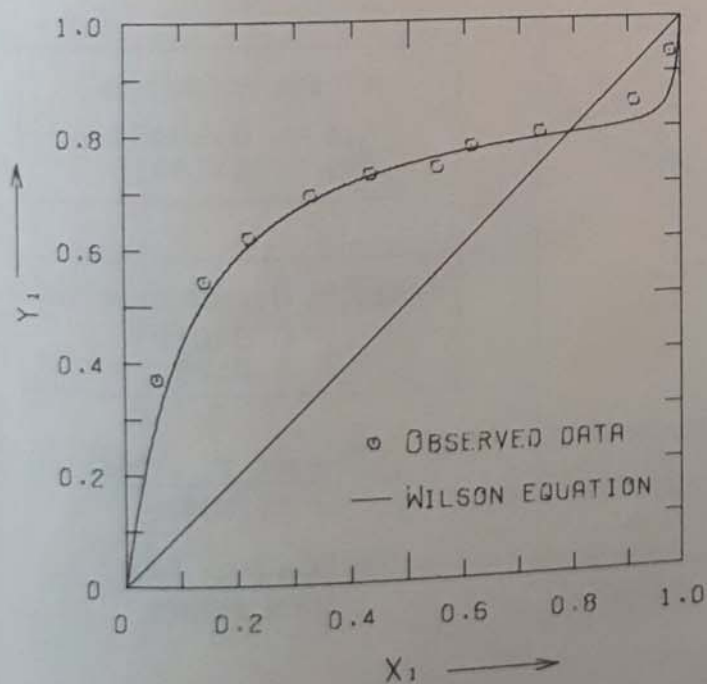
N-HEPTANE(1) - N-BUTYL ALCOHOL(2)

DATA FROM S.V.VIJAYARAGHAVAN, ETAL., J. CHEM. ENG. DATA, VOL. 11, NO. 2, P. 147 (1966)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0570	0.3700	103.80	684.00
0.1420	0.5440	98.20	684.00
0.2210	0.6210	95.20	684.00
0.3290	0.6930	92.20	684.00
0.4340	0.7300	90.20	684.00
0.5520	0.7380	89.50	684.00
0.6140	0.7740	89.00	684.00
0.7380	0.7950	88.80	684.00
0.9110	0.8460	89.30	684.00
0.9800	0.9350	93.40	684.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.90240	1268.115	216.900
2	7.54472	1405.873	183.908



WILSON PARAMETERS

$$\Lambda_{12} = 0.62325$$

$$\Lambda_{21} = 0.03986$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0274$$

$$T [^{\circ}\text{C}] : 0.81$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

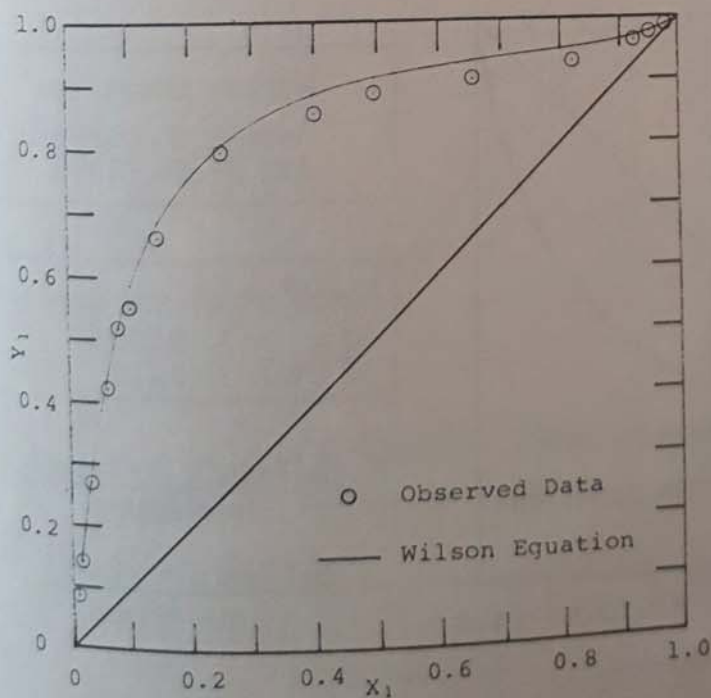
M. HIRATA AND S. OHE

DATA FROM RAO, P. R., ET AL.: J. APPL. CHEM., VOL 18(6), P. 166(1968)

X_1	Y_1	T [°C]	P [mmHg]	X_1	Y_1	T [°C]	P [mmHg]
0.9800	0.9830	98.40	760.00	0.0100	0.0850	154.50	760.00
0.9500	0.9740	98.50	760.00				
0.9250	0.9600	98.70	760.00				
0.8200	0.9300	99.00	760.00				
0.6550	0.9050	100.50	760.00				
0.4950	0.8850	102.80	760.00				
0.4000	0.8550	106.40	760.00				
0.2530	0.7950	113.00	760.00				
0.1500	0.6600	125.00	760.00				
0.1050	0.5500	133.00	760.00				
0.0850	0.5080	135.00	760.00				
0.0650	0.4200	139.30	760.00				
0.0530	0.3400	142.50	760.00				
0.0340	0.2700	145.50	760.00				
0.0170	0.1400	152.00	760.00				

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.90240	1268.115	216.900
2	8.08866	1937.500	215.100



Wilson Parameters

$\Lambda_{12} = 0.99636$

$\Lambda_{21} = 0.12812$

Error* on Wilson Equation

$Y_1 : 0.0198$

$T[^\circ\text{C}] : 1.80$

* $\frac{\sum |Y_{1\text{calc}} - Y_{1\text{obs}}|}{\text{Data Points}}$

Data Points

$\frac{\sum |T_{\text{calc}} - T_{\text{obs}}|}{\text{Data Points}}$

Data Points

FIG. X - Y CURVE

M. HIRATA AND S. OHE

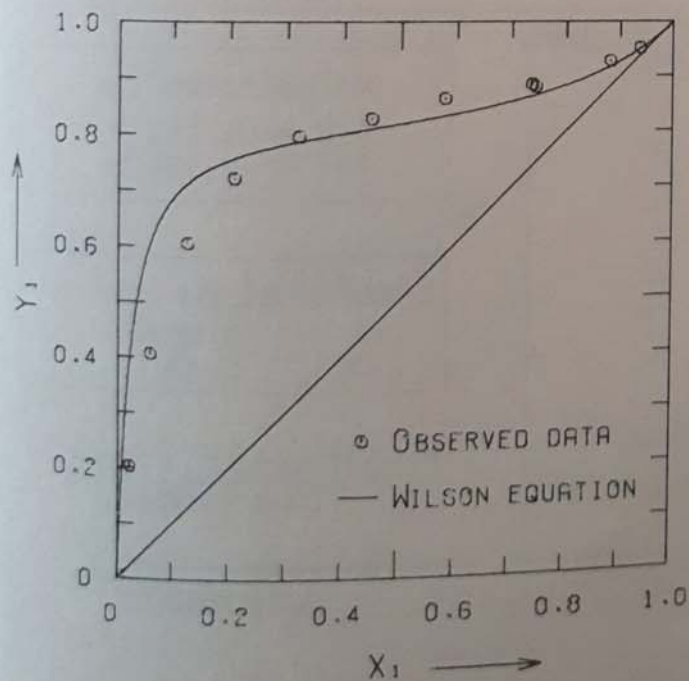
N-OCTANE(1) - BUTYL CELLOSOLVE(2)

DATA FROM PRABHU, P. S. ET AL: J. CHEM. ENG. DATA, VOL. 8, (1), P. 14 (1963)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0220	0.2040	142.00	400.00
0.0600	0.4070	132.50	400.00
0.1280	0.6060	122.70	400.00
0.2100	0.7220	116.00	400.00
0.3220	0.7960	109.30	400.00
0.4500	0.8280	107.04	400.00
0.5800	0.8620	106.00	400.00
0.7380	0.8860	105.00	400.00
0.7440	0.8820	105.00	400.00
0.8820	0.9280	104.50	400.00
0.9380	0.9520	104.30	400.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.92374	1355.126	209.516
2	6.95659	1399.903	172.154



WILSON PARAMETERS

$$\Lambda_{12} = 0.19486$$

$$\Lambda_{21} = 0.45330$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0573$$

$$T [^\circ\text{C}] : 2.93$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

M. HIRATA AND S. OHE

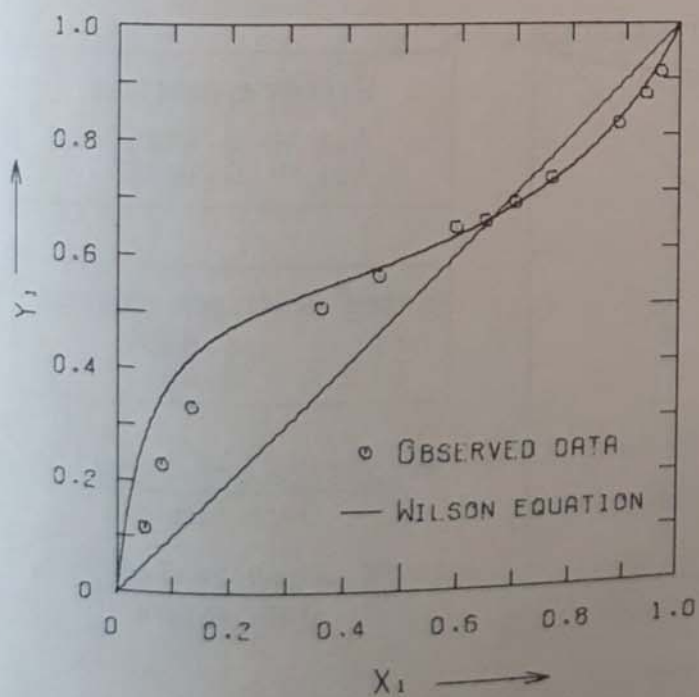
OCTANE(1)-PROPIONIC ACID(2)

DATA FROM JOHNSON R.I., WARD D.H., FURTER W.F., CAN. J. TECH. 34, 514 (1957)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.0510	0.1200	136.80	750.00
0.0820	0.2340	133.20	750.00
0.1350	0.3370	129.20	750.00
0.3610	0.5120	122.60	750.00
0.4610	0.5660	121.90	750.00
0.5950	0.6480	121.40	750.00
0.6490	0.6600	119.80	750.00
0.7010	0.6900	121.80	750.00
0.7660	0.7310	122.00	750.00
0.8880	0.8270	122.90	750.00
0.9380	0.8780	123.70	750.00
0.9670	0.9180	124.80	750.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.92377	1355.126	209.517
2	7.35027	1497.775	194.120



WILSON PARAMETERS

$$\Lambda_{12} = 0.20976$$

$$\Lambda_{21} = 0.67107$$

ERROR* ON WILSON EQUATION

$$Y_1 \quad \pm 0.0406$$

$$T [^{\circ}\text{C}] \quad \pm 1.40$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

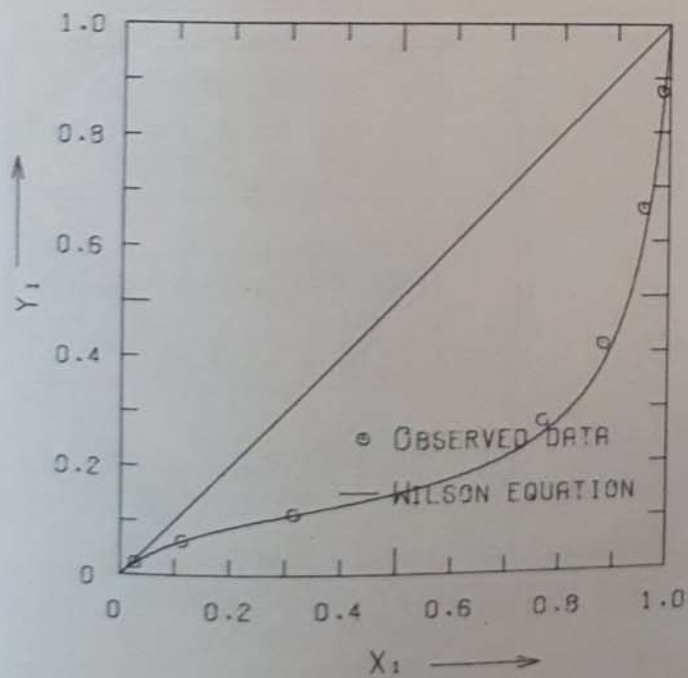
M. HIRATA AND S. OHE

DATA FROM TASSIOS, D., M. VAN WINKLE: J. CHEM. ENG. DATA, VOL. 12, P. 555 (1967)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.9870	0.8750	80.00	83.30
0.9530	0.6590	80.00	109.30
0.8790	0.4150	80.00	159.10
0.7690	0.2770	80.00	217.10
0.3160	0.1110	80.00	341.40
0.1130	0.0610	80.00	372.50
0.0270	0.0210	80.00	381.90

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.26430	1607.120	217.540
2	7.91892	1895.997	275.180



WILSON PARAMETERS

$$\Lambda_{12} = 0.29778$$

$$\Lambda_{21} = 0.72565$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0224$$

$$T [^{\circ}\text{C}] : 0.87$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

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CYCLOPENTANE(1) - ISOPROPYL MERCAPTAN(2)

DATA FROM DENYER, R. L., F. A. FIDLER, R. A. LOWRY: IND. ENG. CHEM. VOL. 41, P. 2727 (1949)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.2660	0.3400	49.48	760.00
0.5140	0.5400	48.15	760.00
0.6170	0.6280	48.02	760.00
0.6820	0.6760	47.94	760.00
0.7370	0.7300	48.05	760.00
0.9400	0.9400	48.94	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.88676	1124.162	231.361
2	6.87734	1113.895	226.157

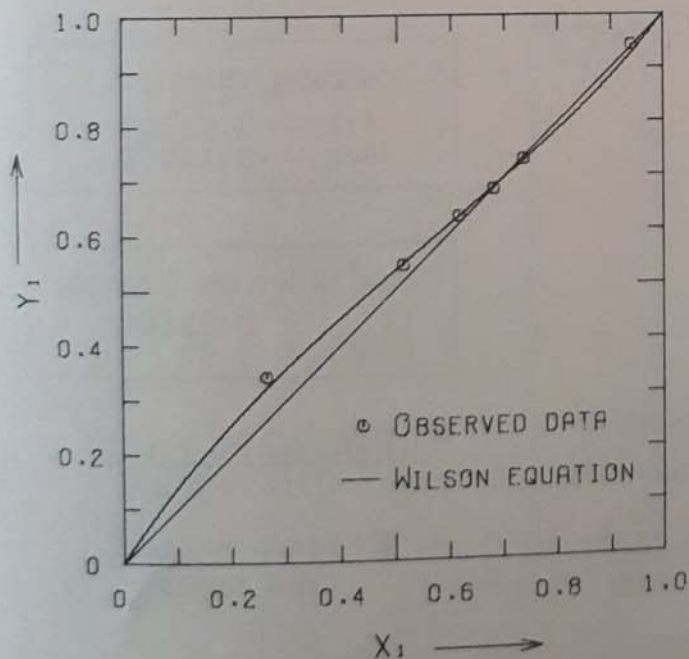


FIG. X - Y CURVE

WILSON PARAMETERS

$$\Lambda_{12} = 1.03339$$

$$\Lambda_{21} = 0.65636$$

ERROR* ON WILSON EQUATION

$$Y_1 \quad \pm \quad 0.0070$$

$$T [^{\circ}\text{C}] \quad \pm \quad 0.07$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

M. HIRATA AND S. OHE

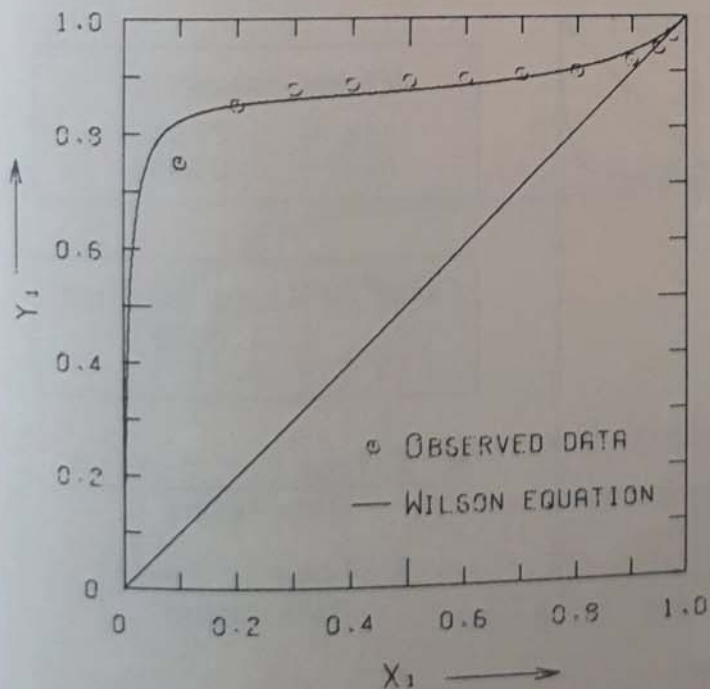
CYCLOHEXANE(1) - ACETIC ANHYDRIDE(2)

DATA FROM JONES, H.E., J. CHEM. ENG. DATA., VOL. 7, (1), P. 13 (1962)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.1000	0.7500	101.50	760.00
0.2000	0.8500	87.50	760.00
0.3000	0.8780	84.00	760.00
0.4000	0.8850	82.70	760.00
0.5000	0.8900	81.80	760.00
0.6000	0.8920	81.30	760.00
0.7000	0.8990	81.00	760.00
0.8000	0.9030	80.60	760.00
0.9000	0.9220	80.40	760.00
0.9500	0.9440	94.40	760.00
0.9750	0.9670	96.70	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.84498	1203.526	222.863
2	7.57627	1704.720	223.246



WILSON PARAMETERS

$$\Lambda_{12} = 0.10385$$

$$\Lambda_{21} = 0.32099$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0180$$

$$T [^{\circ}\text{C}] : 4.98$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

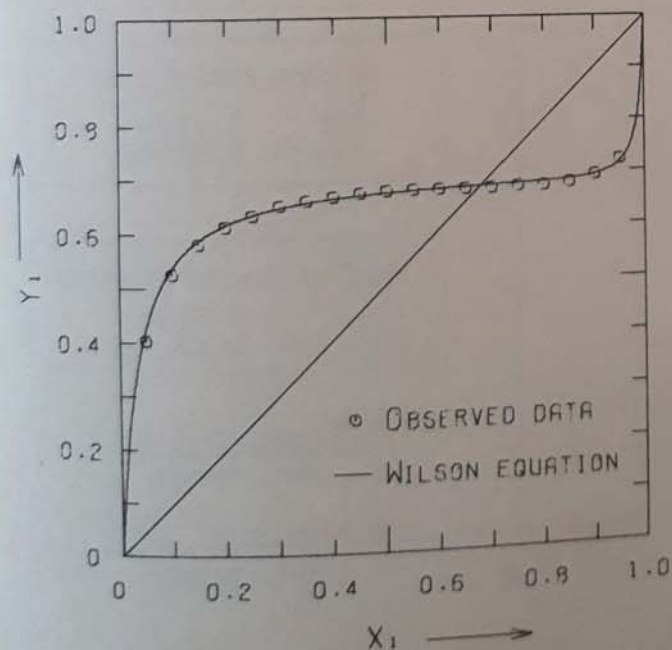
M. HIRATA AND S. OHE

DATA FROM NAGAI J., ISII N.: J. SOC. CHEM. IND. JAPAN 38(1935)

X_1	Y_1	T [°C]	P [MMHG]	X_1	Y_1	T [°C]	P [MMHG]
0.0500	0.4017	20.00	70.95	0.8000	0.6770	20.00	109.60
0.1000	0.5248	20.00	95.75	0.8500	0.6806	20.00	109.30
0.1500	0.5804	20.00	94.25	0.9000	0.6932	20.00	107.90
0.2000	0.6129	20.00	99.85	0.9500	0.7224	20.00	104.50
0.2500	0.6325	20.00	103.40				
0.3000	0.6490	20.00	105.70				
0.3500	0.6576	20.00	107.20				
0.4000	0.6641	20.00	108.10				
0.4500	0.6688	20.00	108.70				
0.5000	0.6724	20.00	109.00				
0.5500	0.6731	20.00	109.20				
0.6000	0.6736	20.00	109.40				
0.6500	0.6739	20.00	109.50				
0.7000	0.6742	20.00	109.60				
0.7500	0.6763	20.00	109.70				

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.84498	1203.526	222.863
2	8.04494	1554.300	222.650



WILSON PARAMETERS

$\Lambda_{12} = 0.23655$

$\Lambda_{21} = 0.04301$

ERROR* ON WILSON EQUATION

$Y_1 : 0.0054$

$T [^{\circ}\text{C}] : 0.11$

* $\frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$

$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$

FIG. X - Y CURVE

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CYCLOHEXANE(1)-ETHYL ALCOHOL(2)

DATA FROM NAGAI J., ISII N., J. SOC. CHEM. IND. JAPAN 39, 86 (1935)

X_1	Y_1	T [°C]	P [mmHg]	X_1	Y_1	T [°C]	P [mmHg]
0.0500	0.3670	30.00	116.90	0.8000	0.6725	30.00	178.00
0.1000	0.4882	30.00	139.50	0.8500	0.6777	30.00	176.90
0.1500	0.5485	30.00	153.50	0.9000	0.6851	30.00	175.00
0.2000	0.5937	30.00	162.40	0.9500	0.7077	30.00	169.70
0.2500	0.6051	30.00	167.90				
0.3000	0.6209	30.00	171.20				
0.3500	0.6327	30.00	174.00				
0.4000	0.6425	30.00	175.70				
0.4500	0.6514	30.00	177.00				
0.5000	0.6578	30.00	178.00				
0.5500	0.6618	30.00	178.60				
0.6000	0.6651	30.00	178.90				
0.6500	0.6661	30.00	179.10				
0.7000	0.6685	30.00	178.90				
0.7500	0.6702	30.00	178.60				

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.84498	1203.526	222.863
2	8.04494	1554.300	222.650

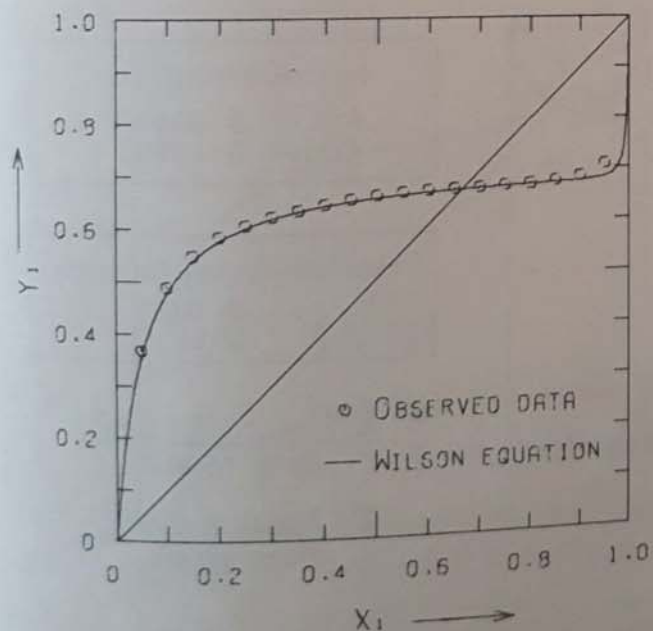


FIG. X - Y CURVE

WILSON PARAMETERS

$$\Lambda_{12} = 0.31218$$

$$\Lambda_{21} = 0.01648$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0059$$

$$T [^{\circ}\text{C}] : 0.15$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

M. HIRATA AND S. OHE

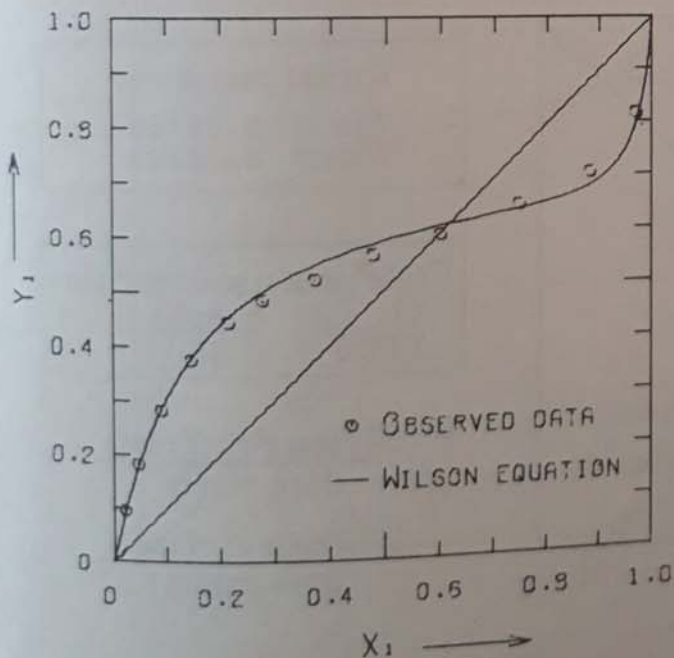
CYCLOHEXANE(1) - ISOPROPYL ALCOHOL(2)

DATA FROM NAGATA J. MEN. FAC. TECHNOL., KANAZAWA UNIV. 3(1), 1(1963)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.0210	0.0930	80.29	760.00
0.0470	0.1800	78.10	760.00
0.0910	0.2790	78.85	760.00
0.1470	0.3730	73.80	760.00
0.2170	0.4420	72.13	760.00
0.2790	0.4810	70.88	760.00
0.3730	0.5190	70.13	760.00
0.4780	0.5610	69.99	760.00
0.6020	0.5970	69.56	760.00
0.7480	0.6490	69.79	760.00
0.8820	0.7040	70.99	760.00
0.9720	0.8150	74.61	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.84498	1203.526	222.863
2	7.75634	1366.142	197.970



WILSON PARAMETERS

$$\Lambda_{12} = 0.54434$$

$$\Lambda_{21} = 0.10625$$

ERROR* ON WILSON EQUATION

$$Y_1 \pm 0.0129$$

$$T [^{\circ}\text{C}] \pm 0.46$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

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ETHYLCYCLOHEXANE(1) - ISOPROPYL ALCOHOL(2)

DATA FROM PRADHU, P. S. ET AL., J. CHEM. ENG. DATA, VOL. 8, (1), P. 14 (1963)

X_1	Y_1	T [°C]	P [MMHG]	X_1	Y_1	T [°C]	P [MMHG]
0.0530	0.0770	66.50	400.00	0.9540	0.4460	85.10	400.00
0.1000	0.1070	66.25	400.00	0.9770	0.5760	92.10	400.00
0.1200	0.1270	66.34	400.00	0.9790	0.5960	92.90	400.00
0.1300	0.1280	66.30	400.00	0.9940	0.7980	101.60	400.00
0.1130	0.1200	66.30	400.00	0.9930	0.7800	101.10	400.00
0.1610	0.1470	66.40	400.00				
0.2390	0.1760	66.50	400.00				
0.2160	0.1720	66.40	400.00				
0.3770	0.2190	67.70	400.00				
0.3490	0.2150	67.50	400.00				
0.5590	0.2320	69.90	400.00				
0.7860	0.2720	70.80	400.00				
0.8900	0.3210	77.50	400.00				
0.9090	0.3360	78.30	400.00				
0.9510	0.4320	94.10	400.00				

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.87041	1384.036	215.128
2	6.66040	813.055	132.930

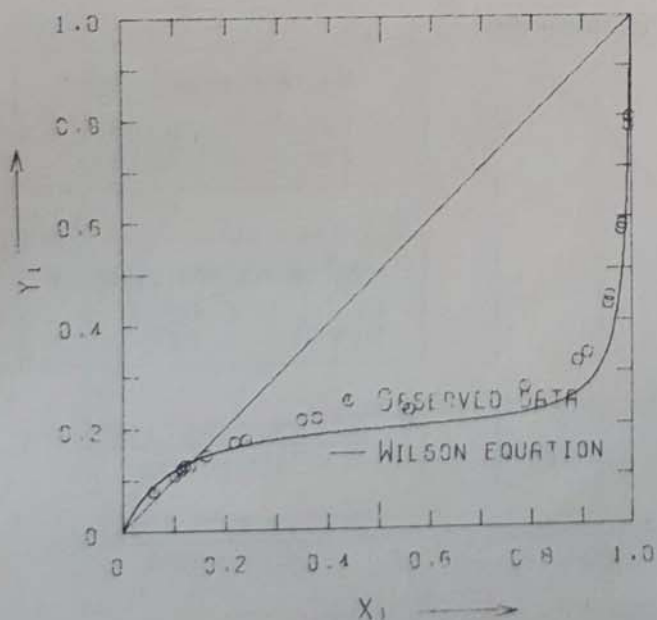


FIG X - Y CURVE

WILSON PARAMETERS

$\Lambda_{12} = 0.24469$

$\Lambda_{21} = 0.15930$

ERROR* ON WILSON EQUATION

$Y_1 : 0.0435$

$T [^{\circ}\text{C}] : 2.28$

* $\frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$

$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$

M. HIRATA AND S. OHE

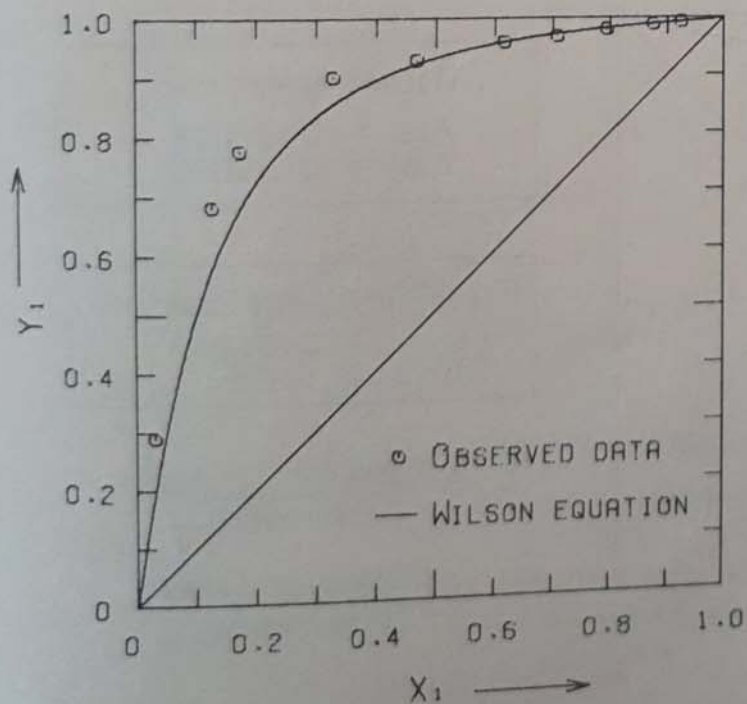
BENZENE(1) - FURFURAL(2)

DATA FROM THORNTON, J. D., F. H. GARNER: J. APPL. CHEM. 1, SUPPL. 165, P. 61 (1951)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.0299	0.2900	154.70	760.00
0.1271	0.6832	130.00	760.00
0.1740	0.7782	121.70	760.00
0.3274	0.9020	105.70	760.00
0.4675	0.9297	100.50	760.00
0.6167	0.9599	94.10	760.00
0.7079	0.9690	90.60	760.00
0.7945	0.9804	87.10	760.00
0.8750	0.9891	84.00	760.00
0.9248	0.9933	82.70	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.90565	1211.033	220.790
2	9.46148	3437.220	360.971



WILSON PARAMETERS

$$\Lambda_{12} = 2.15554$$

$$\Lambda_{21} = 0.21611$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0360$$

$$T [^{\circ}\text{C}] : 2.90$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

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BENZENE(1)-ETHYL ALCOHOL(2)

DATA FROM VINSON C. SMITH, ET AL., J. CHEM. ENG. DATA, VOL. 15, NO. 3, P. 391 (1970)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.1000	0.3970	25.00	89.50
0.2000	0.5300	25.00	106.50
0.3000	0.5940	25.00	115.70
0.4000	0.6320	25.00	120.80
0.5000	0.6580	25.00	123.50
0.6000	0.6720	25.00	124.40
0.7000	0.6880	25.00	124.90
0.8000	0.7000	25.00	124.50
0.9000	0.7400	25.00	121.20

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.90565	1211.033	220.790
2	8.04494	1554.300	222.650

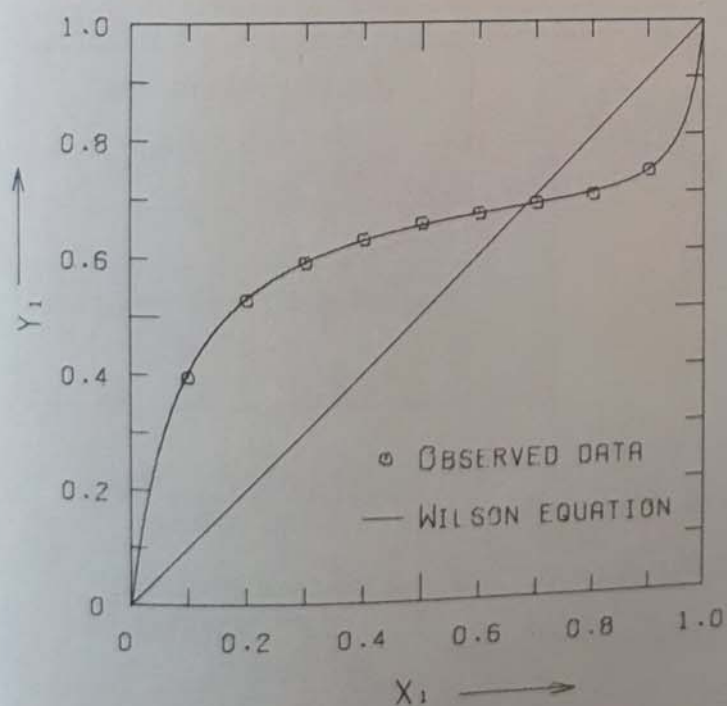


FIG. X - Y CURVE

WILSON PARAMETERS

$$\Lambda_{12} = 0.46589$$

$$\Lambda_{21} = 0.11025$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0034$$

$$T [^\circ\text{C}] : 0.06$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

M. HIRATA AND S. OHE

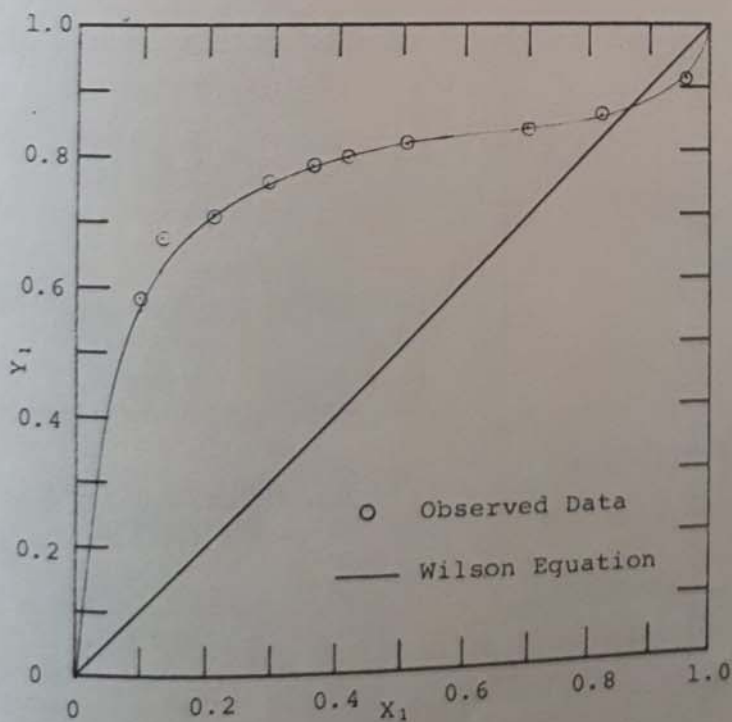
BENZENE(1) - N-PROPANOL(2)*

DATA FROM LEE, STANG, CHIEH: J. PHYS. CHEM., VOL. 35(2), P. 3559 (1931)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0990	0.5940	40.00	102.00
0.1300	0.6770	40.00	114.00
0.2090	0.7060	40.00	134.20
0.2910	0.7600	40.00	156.00
0.3600	0.7850	40.00	169.40
0.4160	0.7950	40.00	175.00
0.5080	0.8130	40.00	183.50
0.7000	0.8370	40.00	193.00
0.8200	0.8540	40.00	196.00
0.9610	0.9160	40.00	191.70

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.90565	1211.033	220.790
2	7.99733	1569.700	209.500



Wilson Parameters

$\Lambda_{12} = 0.58840$

$\Lambda_{21} = 0.10886$

Error* on Wilson Equation

$Y_1 : 0.0094$

$T[°C] : 0.60$

* $\frac{\sum |Y_{1calc} - Y_{1obs}|}{\text{Data Points}}$

$\frac{\sum |T_{calc} - T_{obs}|}{\text{Data Points}}$

FIG X - Y CURVE

M. HIRATA AND S. OHE

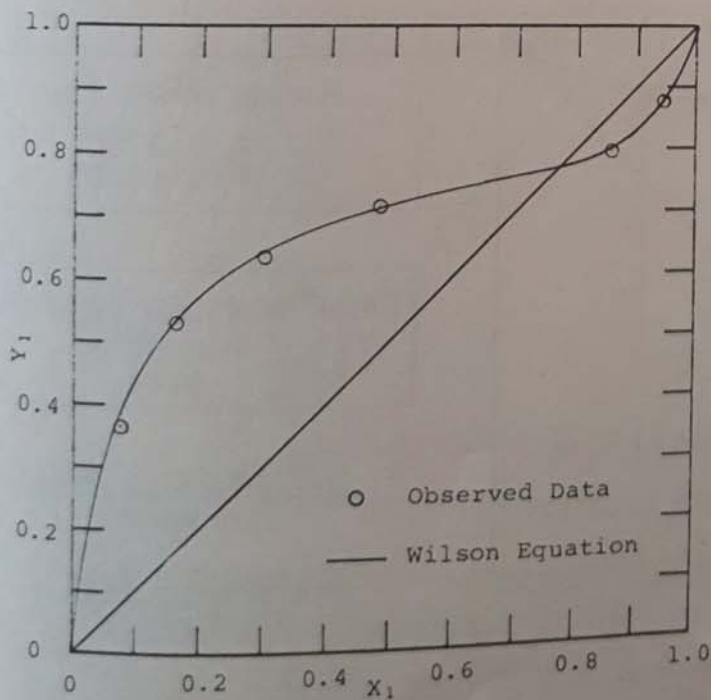
BENZENE(1)-ISOPROPYL ALCOHOL(2)*

DATA FROM OLSEN A.L., WASHBURN E.R.; J. PHYS. CHEM. 41, 457 (1937)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.0760	0.3650	25.00	66.40
0.1640	0.5300	25.00	84.00
0.3000	0.6350	25.00	99.80
0.4790	0.7120	25.00	105.80
0.6380	0.7450	25.00	108.40
0.8540	0.7950	25.00	109.00
0.9410	0.8770	25.00	104.50

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.90565	1211.033	220.790
2	7.75634	1366.142	197.970



Wilson Parameters

$\Lambda_{12} = 0.53599$

$\Lambda_{21} = 0.19692$

Error* on Wilson Equation

$Y_1 : 0.0078$

$T[°C] : 0.49$

* $\frac{\sum |Y_{1calc} - Y_{1obs}|}{\text{Data Points}}$

$\frac{\sum |T_{calc} - T_{obs}|}{\text{Data Points}}$

FIG. X - Y CURVE

M. HIRATA AND S. OHE

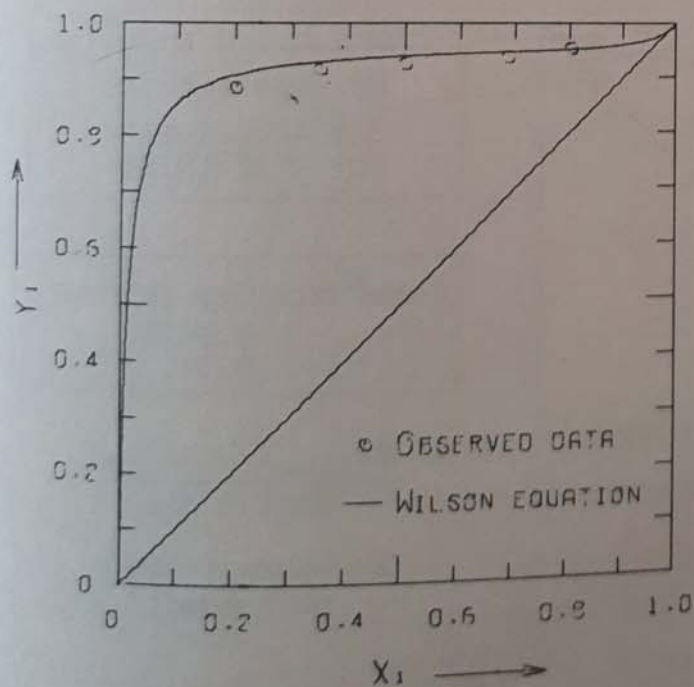
BENZENE(1)-BUTYL ALCOHOL(2)

DATA FROM ALLEN B.D., LINGO G.P., FELSING W.A., J. PHYS. CHEM. 43 425(1939)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.2020	0.8870	25.00	51.60
0.3500	0.9190	25.00	67.40
0.5000	0.9300	25.00	77.90
0.6370	0.9410	25.00	85.80
0.8030	0.9550	25.00	89.30

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.90565	1211.033	220.790
2	7.54472	1405.873	183.908



WILSON PARAMETERS

$$\Lambda_{12} = 0.44784$$

$$\Lambda_{21} = 0.12782$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0166$$

$$T [^\circ\text{C}] : 1.99$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

M. HIRATA AND S. OHE

BENZENE(1) - SEC-BUTYL ALCOHOL(2)

DATA FROM ALLEN, B. B., G. P. LINGO, W. A. FELGING, J. PHYS. CHEM., VOL. 43, P. 425 (1939)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.2030	0.7380	25.00	60.70
0.3540	0.8150	25.00	76.90
0.5000	0.8500	25.00	85.40
0.6470	0.8670	25.00	91.00
0.8030	0.8880	25.00	95.10

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.90565	1211.033	220.790
2	7.82863	1482.130	199.970

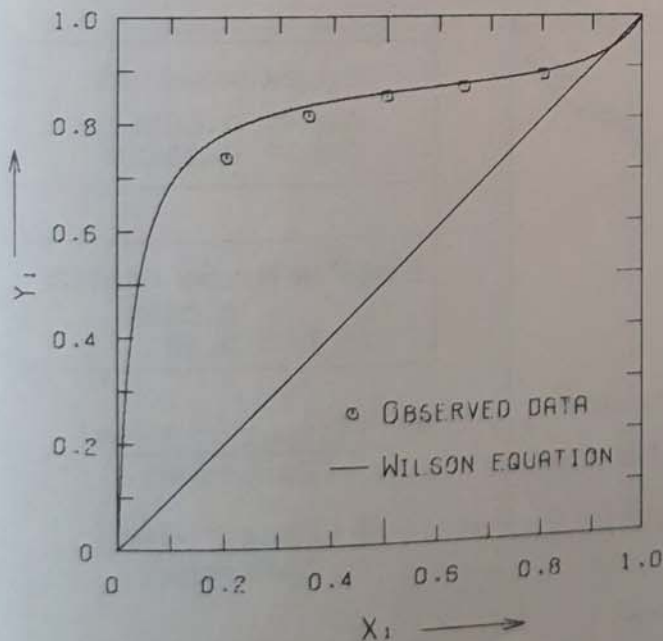


FIG. X - Y CURVE

WILSON PARAMETERS

$$\Lambda_{12} = 0.42524$$

$$\Lambda_{21} = 0.21119$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0201$$

$$T [^{\circ}\text{C}] : 0.98$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

M. HIRATA AND S. OHE

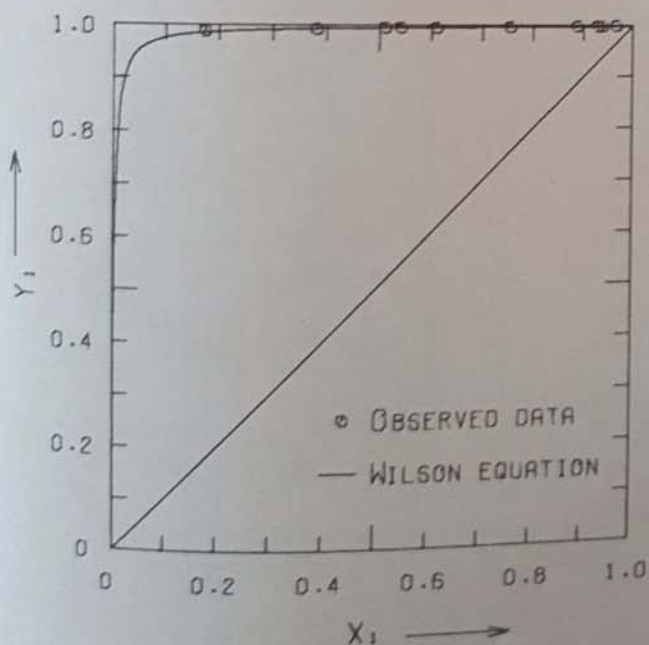
BENZENE(1) - BENZYL ALCOHOL(2)

DATA FROM MARTIN, A. R., C. M. GEORGE: J. CHEM. SOC. VOL. 1933, PART 2, P. 1413.

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.1728	0.9882	70.00	147.80
0.3805	0.9924	70.00	300.70
0.5101	0.9956	70.00	370.10
0.5400	0.9954	70.00	389.10
0.6097	0.9960	70.00	409.40
0.7536	0.9963	70.00	458.60
0.8871	0.9979	70.00	499.30
0.9292	0.9986	70.00	513.90
0.9366	0.9985	70.00	516.40
0.9651	0.9992	70.00	525.10

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.90565	1211.033	220.790
2	7.81844	1950.300	194.360



WILSON PARAMETERS

$$\Lambda_{12} = 1.25153$$

$$\Lambda_{21} = 0.07493$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0010$$

$$T [^{\circ}\text{C}] : 2.12$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

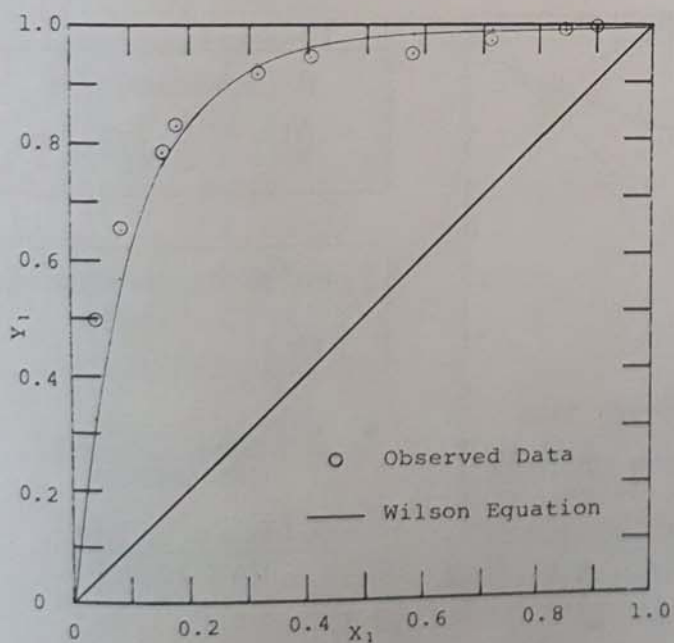
M. HIRATA AND S. OHE

DATA FROM SPVITT, S. A., OTHER, D. F., IND. ENG. CHEM., 44, 2428 (1952)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.0410	0.4530	190.90	760.00
0.0870	0.6500	179.00	760.00
0.1530	0.7800	165.70	760.00
0.1800	0.8280	159.20	760.00
0.3140	0.9150	137.50	760.00
0.4090	0.9410	127.30	760.00
0.5790	0.9500	116.00	760.00
0.7130	0.9760	100.10	760.00
0.8440	0.9900	98.10	760.00
0.9070	0.9930	83.50	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.90565	1211.033	220.730
2	7.53185	1975.300	201.000



Wilson Parameters

$\Lambda_{12} = 2.7624$

$\Lambda_{21} = 0.36874$

Error* on Wilson Equation

$Y_1 : 0.0392$

$T[°C] : 5.32$

* $\frac{\sum |Y_{1,calc} - Y_{1,obs}|}{\text{Data Points}}$

$\frac{\sum |T_{calc} - T_{obs}|}{\text{Data Points}}$

FIG X - Y CURVE

M. HIRATA AND S. OHE

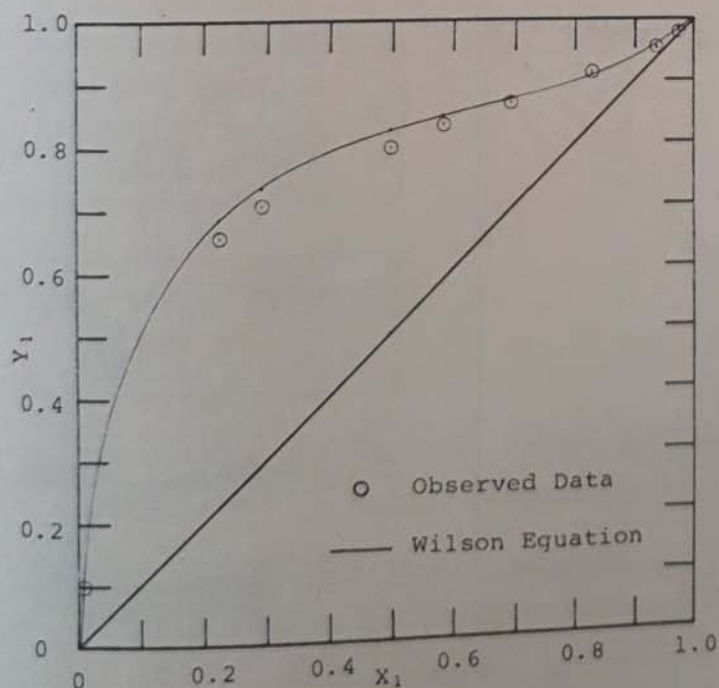
BENZENE(1) - ACETIC ACID(2)*

DATA FROM V. ZAWIDZKI, J.: Z. PHYS. CHEM., VOL. 35, P. 129 (1900)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.0039	0.0431	49.99	59.20
0.0115	0.1090	49.99	68.00
0.2265	0.6568	49.99	175.30
0.2900	0.7071	49.99	189.50
0.4981	0.7985	49.99	224.30
0.5811	0.8337	49.99	236.00
0.6936	0.8678	49.99	245.20
0.8280	0.9143	49.99	259.00
0.9354	0.9594	49.99	264.40
0.9780	0.9812	49.99	265.90

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.90565	1211.033	220.790
2	7.80307	1651.200	225.000



Wilson Parameters

$$\Lambda_{12} = 0.80903$$

$$\Lambda_{21} = 0.31931$$

Error* on Wilson Equation

$$Y_1 : 0.0114$$

$$T[°C] : 0.66$$

$$\frac{\sum |Y_{1calc} - Y_{1obs}|}{\text{Data Points}}$$

$$\frac{\sum |T_{calc} - T_{obs}|}{\text{Data Points}}$$

FIG. X - Y CURVE

M. HIRATA AND S. OHE

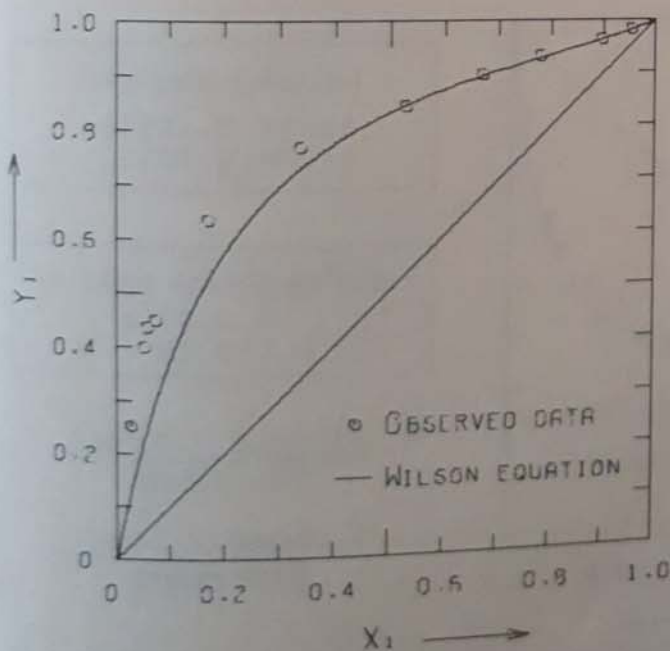
TOLUENE(1)-FURFURAL(2)

DATA FROM THORNTON J.D., GARNER F.H., J. APPL. CHEM., 1, SUPPL. (NO. 1, 674 (1951))

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.0270	0.2507	153.30	760.00
0.0520	0.4002	147.00	760.00
0.0586	0.4374	145.20	760.00
0.0734	0.4500	145.00	760.00
0.1712	0.6372	135.40	760.00
0.3365	0.7682	127.00	760.00
0.5276	0.8426	122.70	760.00
0.6689	0.8998	117.60	760.00
0.7789	0.9331	115.10	760.00
0.8968	0.9640	112.50	760.00
0.9536	0.9830	111.30	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.95334	1343.943	219.377
2	6.48323	1112.311	147.256



WILSON PARAMETERS

$$\Lambda_{12} = 1.31136$$

$$\Lambda_{21} = 0.33939$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0728$$

$$T [^\circ\text{C}] : 3.39$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

M. HIRATA AND S. OHE

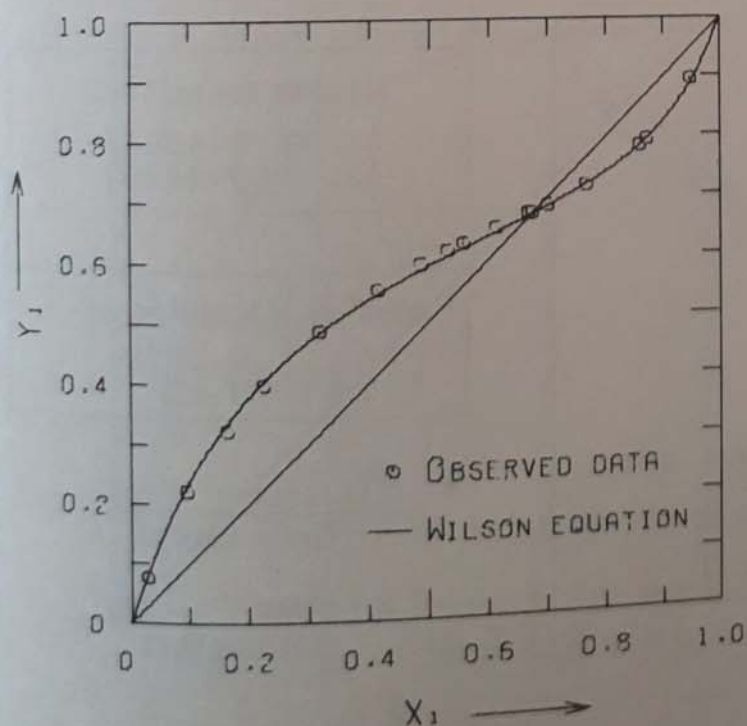
TOLUENE(1)-BUTYL ALCOHOL(2)

DATA FROM MANN R.S., SHEMILT L.W., J. CHEM. ENG. DATA, 8, 189 (1963)

X_1	Y_1	T [°C]	P [mmHg]	X_1	Y_1	T [°C]	P [mmHg]
0.0280	0.0750	116.05	760.00	0.8710	0.7940	106.50	760.00
0.0960	0.2210	112.90	760.00	0.9480	0.8940	108.10	760.00
0.1650	0.3210	110.50	760.00				
0.2270	0.3990	109.00	760.00				
0.3180	0.4870	107.60	760.00				
0.4150	0.5540	106.40	760.00				
0.4870	0.5950	106.00	760.00				
0.5320	0.6170	105.80	760.00				
0.5590	0.6270	105.70	760.00				
0.6140	0.6590	105.60	760.00				
0.6680	0.6750	105.50	760.00				
0.6750	0.6760	105.50	760.00				
0.7010	0.6870	105.50	760.00				
0.7660	0.7200	105.60	760.00				
0.8590	0.7840	105.30	760.00				

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.95334	1343.943	219.377
2	7.54472	1405.873	183.908



WILSON PARAMETERS

$$\Lambda_{12} = 0.73511$$

$$\Lambda_{21} = 0.35091$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0057$$

$$T [^{\circ}\text{C}] : 0.13$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

M. HIRATA AND S. OHE

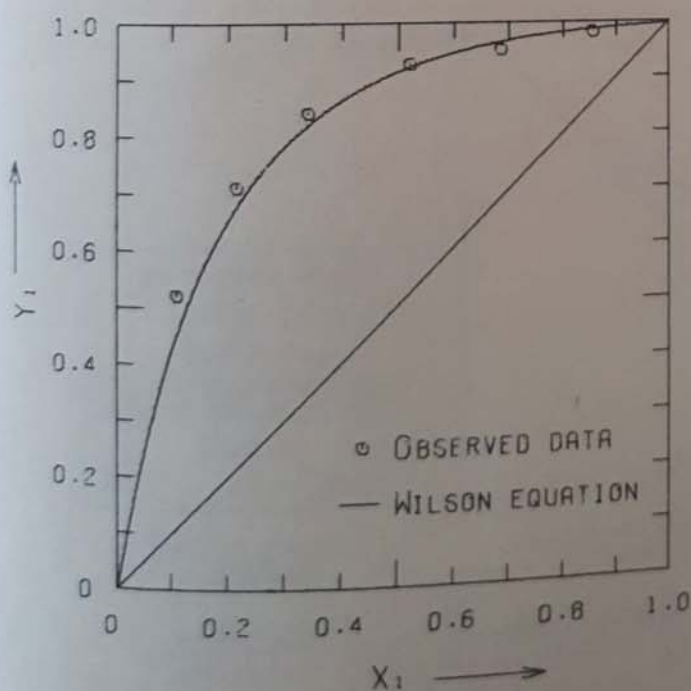
M-XYLENE(1) - METHYL SALICYLATE(2)

DATA FROM JU CHIN CHU, D.P. KHARBANDA, R.F. BROOKS, & S.L. WANG, IND. ENG. CHEM., VOL. 46, P. 754 (1954)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.1100	0.5200	197.00	755.00
0.2150	0.7100	182.00	755.00
0.3400	0.8400	171.00	755.00
0.5200	0.9250	158.00	755.00
0.6850	0.9500	150.00	755.00
0.8550	0.9800	143.00	755.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.00646	1460.183	214.827
2	7.08329	1712.797	187.066



WILSON PARAMETERS

$$\Lambda_{12} = 2.79439$$

$$\Lambda_{21} = 0.01210$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0244$$

$$T [^{\circ}\text{C}] : 2.33$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

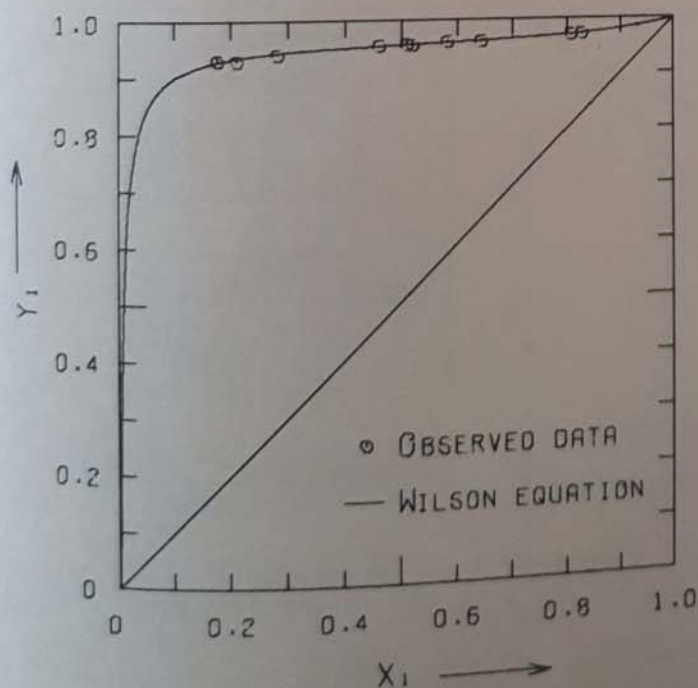
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DATA FROM KORTUEN G., FREIER H.J., CHEM.-ING.-TECHN. 26, 670 (1954)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.1760	0.9290	119.30	1180.00
0.2100	0.9280	119.30	1245.00
0.2810	0.9400	119.30	1394.00
0.4600	0.9530	119.30	1624.00
0.5080	0.9550	119.30	1653.00
0.5180	0.9540	119.30	1657.00
0.5820	0.9590	119.30	1701.00
0.6430	0.9590	119.30	1775.00
0.8070	0.9700	119.30	1861.00
0.8270	0.9710	119.30	1916.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.84498	1203.526	222.863
2	7.24179	1675.300	200.000



WILSON PARAMETERS

$$\Lambda_{12} = 0.33217$$

$$\Lambda_{21} = 0.32710$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0027$$

$$T [^\circ\text{C}] : 0.80$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

M. HIRATA AND S. OHE

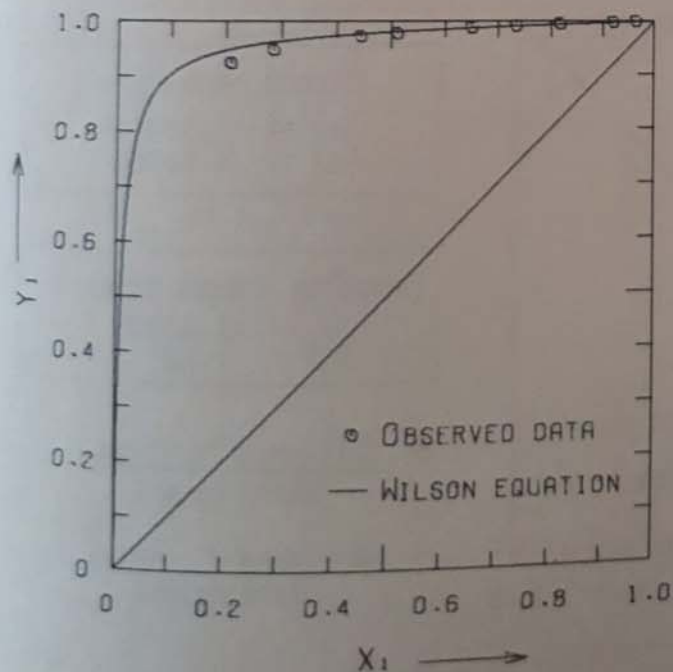
BENZENE(1) - BENZONITRILE(2)

DATA FROM MARTIN, R. R., B. COLLIE, J. CHEM. SOC., VOL. 1932, PART 2, P. 2650.

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.2086	0.9218	70.00	121.00
0.2854	0.9460	70.00	164.80
0.4437	0.9712	70.00	259.70
0.5112	0.9773	70.00	295.70
0.6494	0.9868	70.00	369.30
0.7341	0.9900	70.00	403.20
0.8165	0.9935	70.00	451.30
0.9202	0.9968	70.00	503.60
0.9641	0.9984	70.00	525.90

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.90565	1211.033	220.790
2	6.74631	1436.720	181.000



WILSON PARAMETERS

$\Lambda_{12} = 0.47868$

$\Lambda_{21} = 1.05942$

ERROR* ON WILSON EQUATION

$Y_1 : 0.0083$

$T [^{\circ}\text{C}] : 2.89$

* $\frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$

$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$

FIG. X - Y CURVE

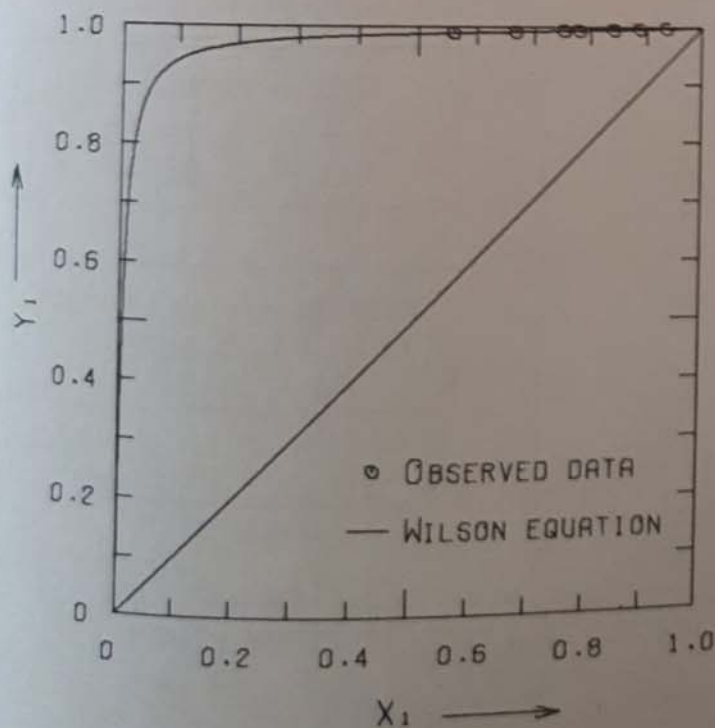
M. HIRATA AND S. OHE

DATA FROM HOSSEINI, S.M. & G. SCHNEIDER: Z. PHYS. CHEM., FRANK., VOL. 3613/41, P. 1371 (1963)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.5590	0.9891	50.00	182.40
0.6650	0.9916	50.00	202.63
0.7510	0.9933	50.00	216.96
0.7784	0.9941	50.00	223.62
0.8400	0.9955	50.00	235.20
0.8859	0.9967	50.00	244.96
0.9340	0.9979	50.00	254.61

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.90565	1211.033	220.790
2	7.24179	1675.300	200.000



WILSON PARAMETERS

$\Lambda_{12} = 0.78822$

$\Lambda_{21} = 0.45925$

ERROR* ON WILSON EQUATION

$Y_1 : 0.0003$

$T [^{\circ}\text{C}] : 0.18$

* $\frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$

$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$

FIG. X - Y CURVE

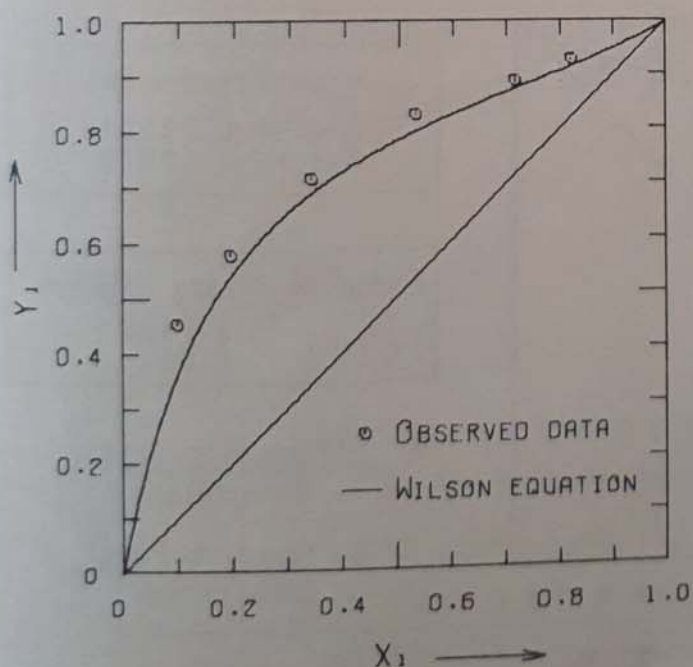
M. HIRATA AND S. OHE

DATA FROM CHU J.C., KHARBANDA B.P., BROOKG R.F., WANG S.L., IND. ENG. CHEM., 46, 754 (1954)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.1000	0.4550	167.00	745.00
0.1950	0.5800	160.00	745.00
0.3400	0.7150	153.00	745.00
0.5300	0.8300	146.00	745.00
0.7150	0.8900	143.00	745.00
0.8200	0.9300	141.00	745.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.00908	1462.266	215.105
2	7.24179	1675.300	200.000



WILSON PARAMETERS

$$\Lambda_{12} = 0.84721$$

$$\Lambda_{21} = 0.56816$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0354$$

$$T [^{\circ}\text{C}] : 1.82$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

M. HIRATA AND S. OHE

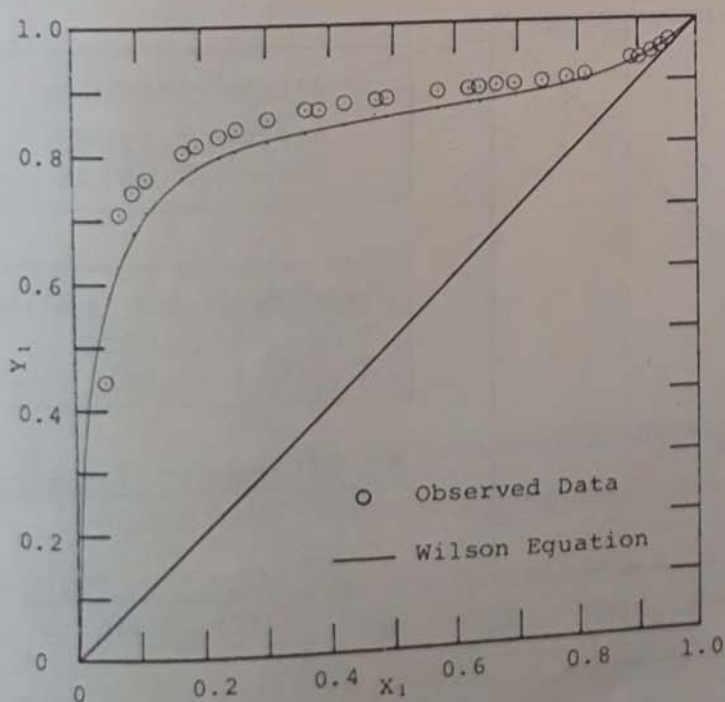
N-HEPTANE(1) - DIMETHYLFORMAMIDE(2)*

DATA FROM QUITZSCH, ET AL: Z. PHYSIK. CHEM. (LEIPZIG), VOL. 240, P. 107 (1969)

X_1	Y_1	T [°C]	P [mmHg]	X_1	Y_1	T [°C]	P [mmHg]
0.0492	0.4420	85.00	204.53	0.6214	0.8926	85.00	471.55
0.0715	0.7080	85.00	235.12	0.6395	0.8947	85.00	473.62
0.0940	0.7411	85.00	258.32	0.6667	0.8975	85.00	476.04
0.1151	0.7624	85.00	275.44	0.6973	0.9002	85.00	479.12
0.1723	0.8023	85.00	319.10	0.7418	0.9018	85.00	482.81
0.1944	0.8130	85.00	336.74	0.7822	0.9067	85.00	485.73
0.2302	0.8284	85.00	359.14	0.8111	0.9096	85.00	487.22
0.2553	0.8383	85.00	374.40	0.8990	0.9328	85.00	496.31
0.3046	0.8521	85.00	400.57	0.9012	0.9333	85.00	496.85
0.3520	0.8650	85.00	418.47	0.9244	0.9462	85.00	498.83
0.3846	0.8682	85.00	424.93	0.9393	0.9549	85.00	499.93
0.4242	0.8749	85.00	434.96	0.9530	0.9617	85.00	500.75
0.4723	0.8785	85.00	345.09				
0.4991	0.8811	85.00	451.00				
0.5722	0.8891	85.00	464.67				

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.90240	1268.115	216.900
2	6.99608	1437.840	199.830



Wilson Parameters

$\Lambda_{12} = 0.38184$

$\Lambda_{21} = 0.32686$

Error* on Wilson Equation

$Y_1 : 0.292$

$T[^\circ\text{C}] : 0.76$

* $\frac{\sum |Y_{1\text{calc}} - Y_{1\text{obs}}|}{\text{Data Points}}$

$\frac{\sum |T_{\text{calc}} - T_{\text{obs}}|}{\text{Data Points}}$

FIG. X - Y CURVE

M. HIRATA AND S. OHE

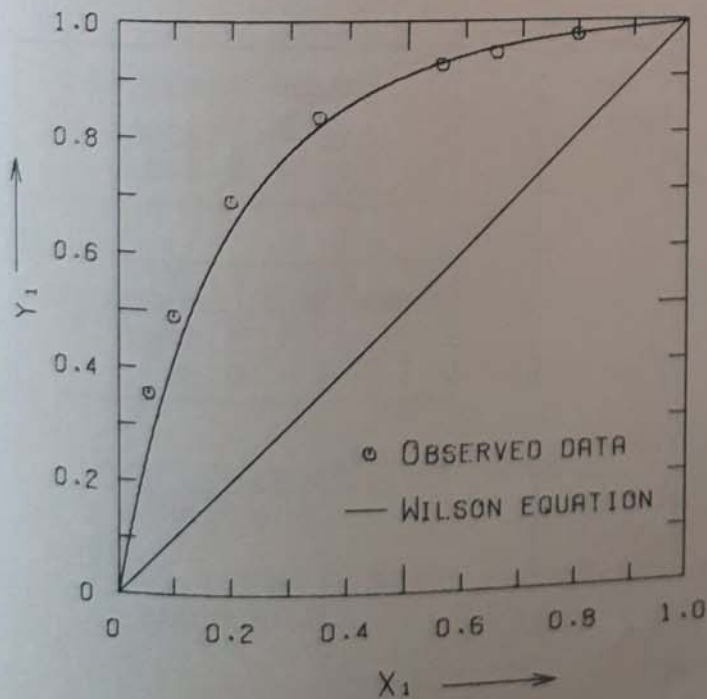
BENZENE(1) - DIMETHYLFORMAMIDE(2)

DATA FROM DELZENNE, A.: CHEM. ENG. SCIENCE, VOL. 2, P. 220 (1953)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.0550	0.3550	140.00	760.00
0.1000	0.4900	131.50	760.00
0.2000	0.6900	119.00	760.00
0.3500	0.8350	106.00	760.00
0.5600	0.9250	95.20	760.00
0.6550	0.9450	91.00	760.00
0.8000	0.9750	85.00	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.90565	1211.033	220.790
2	6.99608	1437.840	199.830



WILSON PARAMETERS

$$\Lambda_{12} = 2.65756$$

$$\Lambda_{21} = 0.04521$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0357$$

$$T [^{\circ}\text{C}] : 1.78$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

M. HIRATA AND S. OHE

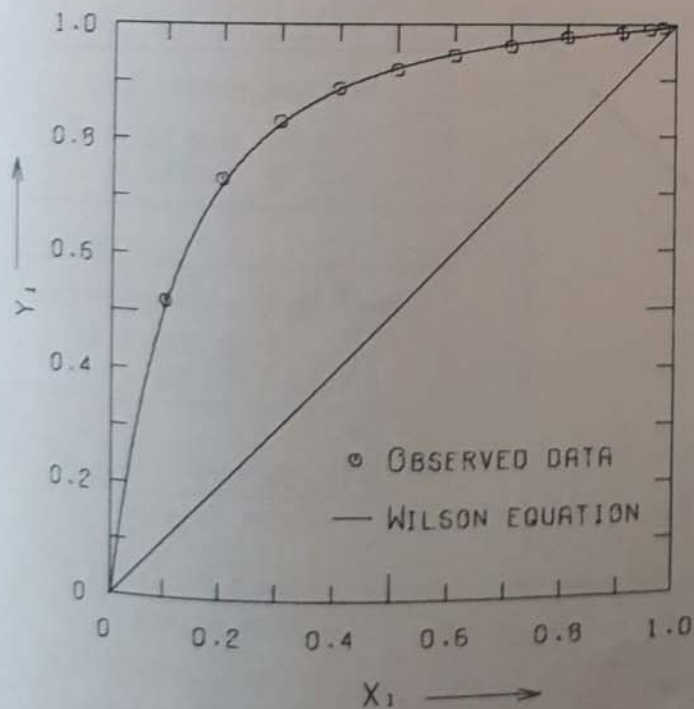
1,3-BUTADIENE(1) - CHLOROPRENE(2)

DATA FROM JONES, H. E.: J. CHEM. ENG. DATA., VOL. 7(1), P. 13(1962)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.1000	0.5200	41.00	760.00
0.2000	0.7320	28.50	760.00
0.3000	0.8330	20.50	760.00
0.4000	0.8890	14.20	760.00
0.5000	0.9220	9.20	760.00
0.6000	0.9470	5.50	760.00
0.7000	0.9630	2.40	760.00
0.8000	0.9780	-0.50	760.00
0.9000	0.9874	-2.80	760.00
0.9500	0.9918	-3.50	760.00
0.9750	0.9947	-3.80	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.85941	935.531	239.554
2	7.52700	1545.000	273.152



WILSON PARAMETERS

$$\Lambda_{12} = 2.13026$$

$$\Lambda_{21} = 0.12369$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0034$$

$$T [^\circ\text{C}] : 0.35$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

M. HIRATA AND S. OHE

N-HEXANE (1) - TETRACHLOROETHYLENE (2)

DATA FROM DONALD D. HANSON, ET AL., J. CHEM. ENG. DATA, VOL. 12, NO. 3, P. 319 (1967)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.1130	0.4970	60.00	170.40
0.1960	0.6380	60.00	217.10
0.3460	0.7710	60.00	292.10
0.4780	0.8400	60.00	350.90
0.6780	0.9130	60.00	434.50
0.8820	0.9710	60.00	521.40

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.87776	1171.530	224.366
2	7.02003	1415.490	221.000

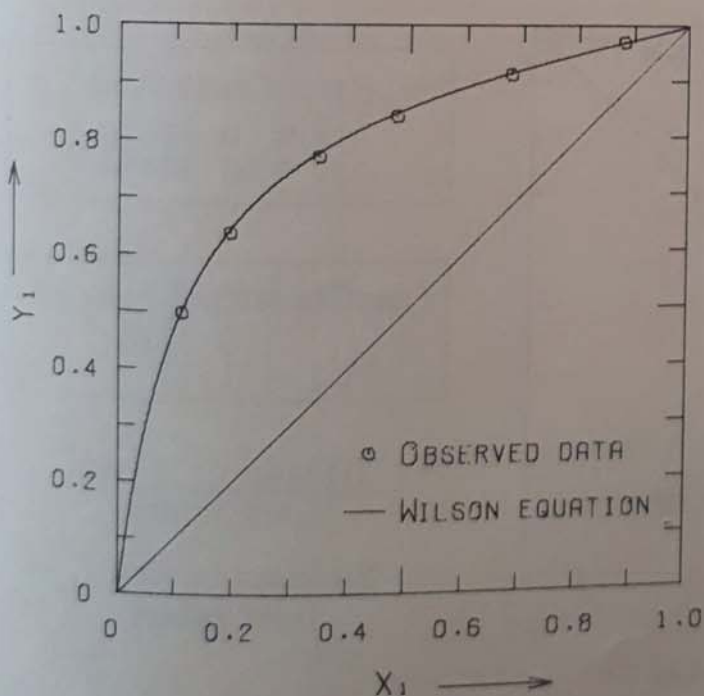


FIG. X - Y CURVE

WILSON PARAMETERS

$$\Lambda_{12} = 0.81830$$

$$\Lambda_{21} = 0.83140$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0057$$

$$T [^{\circ}\text{C}] : 0.36$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

M. HIRATA AND S. OHE

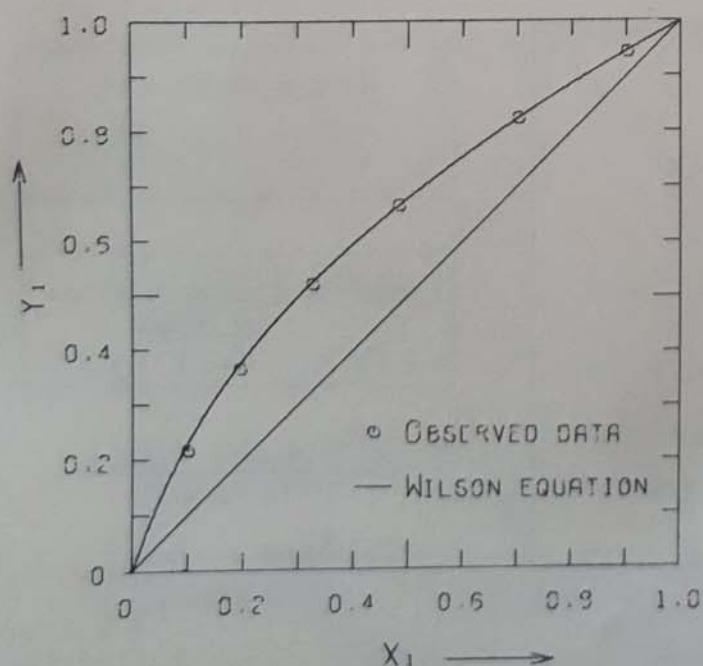
1-HEXENE (1) - TRICHLOROETHYLENE (2)

DATA FROM DONALD O. HANSON, ET AL., J. CHEM. ENG. DATA, VOL. 12, NO. 3, P. 319 (1967)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.1000	0.2160	60.00	358.90
0.1960	0.3660	60.00	401.60
0.3290	0.5240	60.00	453.10
0.4860	0.6670	60.00	510.00
0.7030	0.8250	60.00	582.80
0.9010	0.9440	60.00	648.40

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.86572	1152.971	225.849
2	6.51827	1018.603	192.731



WILSON PARAMETERS

$$\Lambda_{12} = 0.42269$$

$$\Lambda_{21} = 1.53771$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0065$$

$$T [^{\circ}\text{C}] : 0.13$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

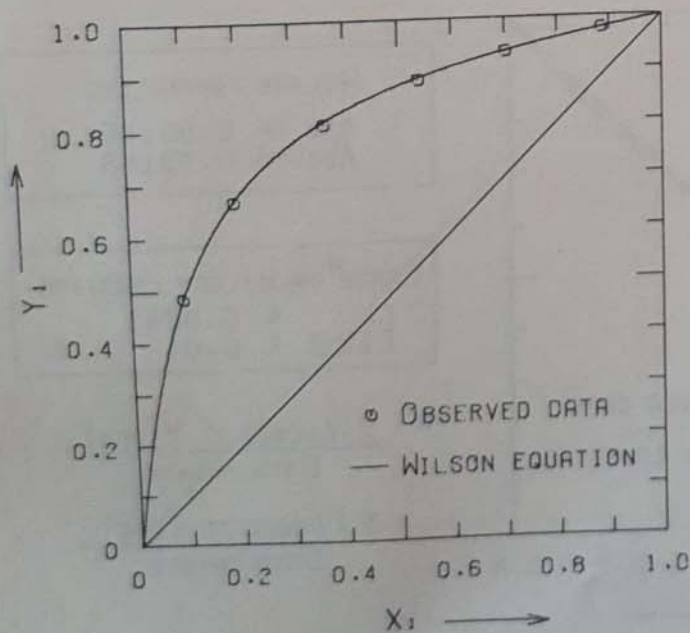
1-HEXENE(1) - TETRACHLOROETHYLENE(2)

DATA FROM DONALD D. HANSON, ET AL., J. CHEM. ENG. DATA, VOL. 12, NO. 3, P. 319 (1967)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.0970	0.4840	60.00	167.50
0.1960	0.6660	60.00	233.60
0.3630	0.8070	60.00	334.30
0.5390	0.8860	60.00	429.70
0.7030	0.9360	60.00	517.50
0.8860	0.9770	60.00	616.30

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.86572	1152.971	225.849
2	7.02003	1415.490	221.000



WILSON PARAMETERS

$$\Lambda_{12} = 0.99711$$

$$\Lambda_{21} = 0.75291$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0034$$

$$T [^{\circ}\text{C}] : 0.28$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

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N-DECANE(1) - CHLOROBENZENE(2)

DATA FROM EDWARDS, J., F. IBANEZ: Z. PHYS. CHEM., FRANKFURT, VOL. 59, P. 48 (1968)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0850	0.4590	50.00	10.00
0.1880	0.6490	50.00	14.00
0.2670	0.7330	50.00	17.00
0.3270	0.7680	50.00	18.30
0.4700	0.8490	50.00	23.00
0.5990	0.8970	50.00	27.00
0.7000	0.9260	50.00	30.00
0.8470	0.9630	50.00	34.00
0.8890	0.9700	50.00	35.00
0.9230	0.9780	50.00	36.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.94504	1413.120	216.000
2	7.31509	1705.600	212.590

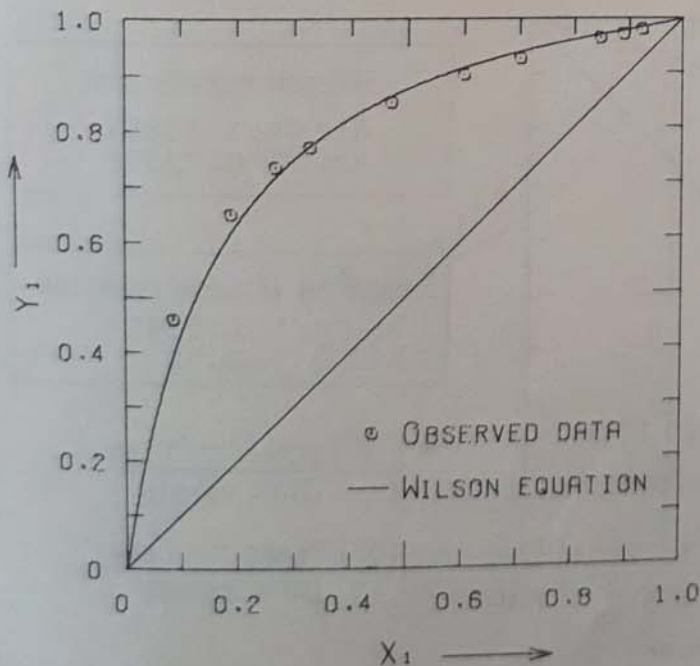


FIG. X - Y CURVE

WILSON PARAMETERS

$$\Lambda_{12} = 2.11568$$

$$\Lambda_{21} = 0.20855$$

ERROR* ON WILSON EQUATION

$$Y_1 = 0.0197$$

$$T [^\circ\text{C}] = 1.55$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

M. HIRATA AND S. OHE

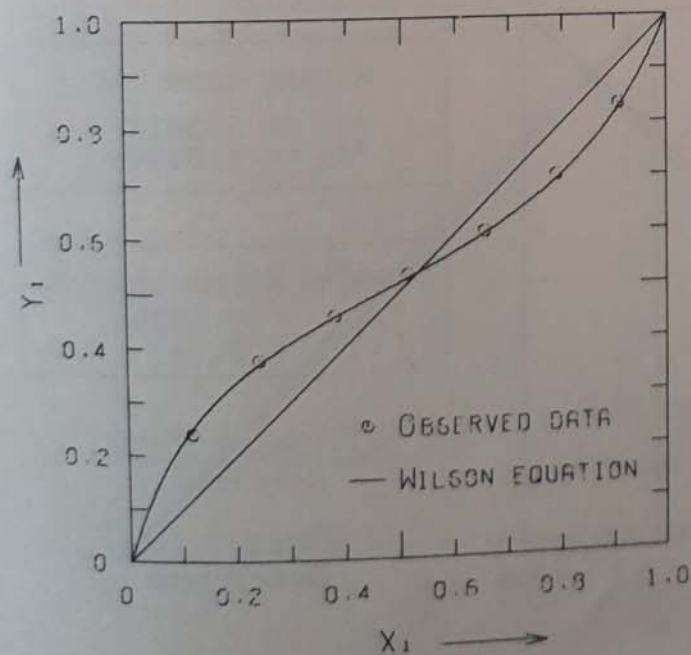
CYCLOHEXANE(1) - 1,2-DICHLOROETHANE(2)

DATA FROM FORDYCE, CH. R., D. R. SIMONSEN: IND. ENG. CHEM. VOL. 41, P. 1041 (1949)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.1190	0.2400	77.50	760.00
0.2420	0.3760	75.40	760.00
0.3800	0.4560	74.50	760.00
0.5150	0.5290	74.10	760.00
0.6550	0.6040	74.40	760.00
0.7890	0.7030	75.20	760.00
0.9080	0.8330	77.00	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.84498	1203.526	222.863
2	7.18431	1358.460	232.200



WILSON PARAMETERS

$$\Lambda_{12} = 0.45572$$

$$\Lambda_{21} = 0.64279$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0057$$

$$T [^{\circ}\text{C}] : 0.20$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

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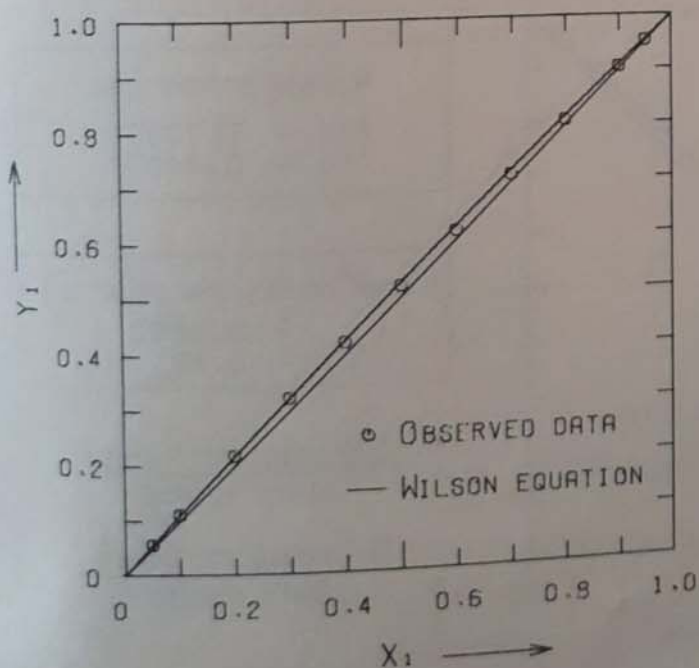
BENZENE(1) - DICHLOROETHANE(2)

DATA FROM SMITH, E. R., H. B. MATHESON: J. RES. NAT. BUR. STAND. VOL. 20, P. 641 (1938)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0500	0.0566	83.32	760.00
0.1000	0.1117	83.14	760.00
0.2000	0.2199	82.79	760.00
0.3000	0.3238	82.45	760.00
0.4000	0.4226	82.10	760.00
0.5000	0.5201	81.70	760.00
0.6000	0.6168	81.43	760.00
0.7000	0.7131	81.09	760.00
0.8000	0.8089	80.76	760.00
0.9000	0.9047	80.42	760.00
0.9500	0.9524	80.27	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.90565	1211.033	220.790
2	7.18431	1358.460	232.200



WILSON PARAMETERS

$$\Lambda_{12} = 1.45587$$

$$\Lambda_{21} = 0.62689$$

ERROR* ON WILSON EQUATION

$$Y_1 \quad : \quad 0.0045$$

$$T [^{\circ}\text{C}] \quad : \quad 0.02$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

M. HIRATA AND S. OHE

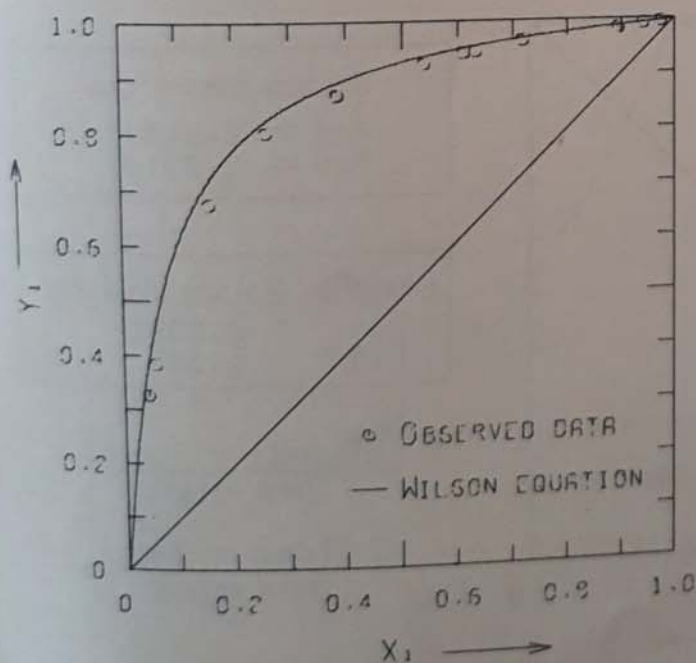
BENZENE(1) - BROMOBENZENE(2)

DATA FROM MARTIN, A. R., B. COLLIE, J. CHEM. SOC., VOL. 1932, PART 2, P. 2658.

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.0435	0.3279	70.00	62.90
0.0591	0.3863	70.00	68.60
0.1576	0.6761	70.00	115.90
0.2593	0.8051	70.00	166.50
0.3835	0.8708	70.00	214.20
0.3856	0.8717	70.00	223.30
0.5385	0.9242	70.00	296.90
0.6097	0.9429	70.00	338.80
0.6310	0.9463	70.00	349.70
0.7161	0.9649	70.00	401.90
0.8939	0.9860	70.00	481.40
0.9396	0.9932	70.00	514.40
0.9737	0.9965	70.00	533.30

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	5.90565	1211.033	220.790
2	6.89339	1440.100	204.000



WILSON PARAMETERS

$$\Lambda_{12} = 1.67635$$

$$\Lambda_{21} = 0.42276$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0246$$

$$T [^{\circ}\text{C}] : 1.32$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

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DATA FROM BHATTACHARYY S.N., R. MUKHERJEE: J. PHYS. CHEM., VOL. 72, P. 561 (1968)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.8269	0.6702	70.00	250.65
0.7552	0.5674	70.00	270.60
0.6841	0.4595	70.00	298.00
0.5824	0.3785	70.00	320.25
0.5067	0.3111	70.00	337.95
0.5052	0.3099	70.00	340.80
0.4730	0.2810	70.00	346.50
0.4397	0.2566	70.00	359.00
0.3622	0.2003	70.00	379.00
0.3049	0.1626	70.00	393.90
0.2518	0.1318	70.00	404.80
0.1109	0.0532	70.00	445.55

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.95464	1344.800	219.482
2	7.18703	1381.828	235.863

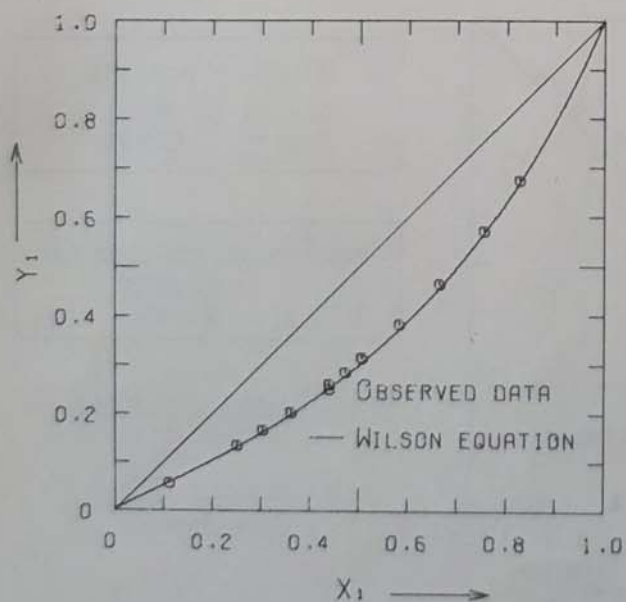


FIG. X - Y CURVE

WILSON PARAMETERS

$\Lambda_{12} = 0.35965$

$\Lambda_{21} = 1.83955$

ERROR* ON WILSON EQUATION

$Y_1 : 0.0048$

$T [^{\circ}\text{C}] : 0.15$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

M. HIRATA AND S. OHE

3-METHYL-1-BUTENE(1) - SULFUR DIOXIDE(2)

DATA FROM BRADY, B. H. G., ET AL.: TRANS. FARADAY SOC., VOL. 64, P. 23 (1968)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0500	0.0800	16.00	2220.00
0.1010	0.1240	16.00	2281.00
0.2040	0.1690	16.00	2281.00
0.3050	0.1910	16.00	2253.00
0.3960	0.2070	16.00	2208.00
0.5020	0.2280	16.00	2140.00
0.6470	0.2710	16.00	1971.00
0.7940	0.3580	16.00	1630.00
0.8990	0.4980	16.00	1245.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.82643	1013.605	236.833
2	7.32776	1022.800	240.000

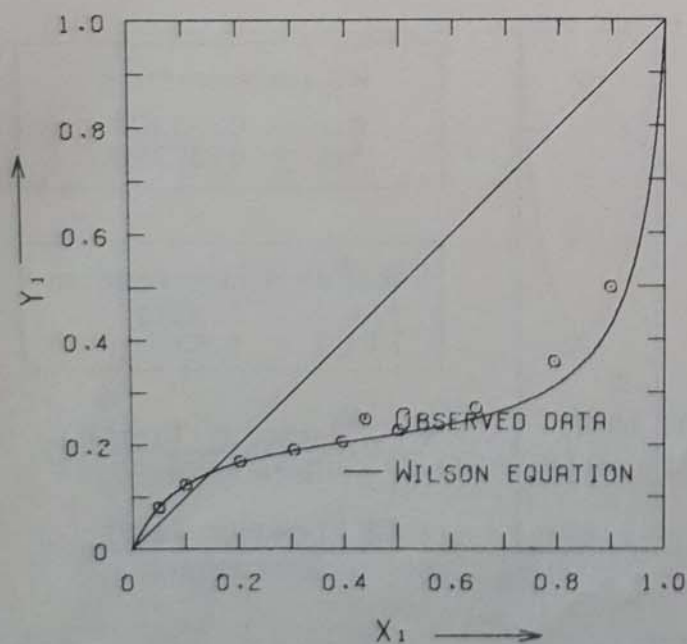


FIG. X - Y CURVE

WILSON PARAMETERS

$$\Lambda_{12} = 0.23425$$

$$\Lambda_{21} = 0.41164$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0163$$

$$T [^{\circ}\text{C}] : 0.87$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

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3-METHYL-1-BUTENE(1) - SULFUR DIOXIDE(2)

DATA FROM BRADY, B. H. G., ET AL: TRANS. FARADAY. SOC. VOL. 64, P. 23 (1968)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0500	0.0630	40.00	4780.00
0.1010	0.1060	40.00	4856.00
0.2040	0.1600	40.00	4830.00
0.3050	0.1930	40.00	4756.00
0.3960	0.2190	40.00	4620.00
0.5020	0.2510	40.00	4398.00
0.6470	0.3070	40.00	3979.00
0.7940	0.4100	40.00	3252.00
0.8990	0.5620	40.00	2502.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.82643	1013.605	236.833
2	7.32776	1022.800	240.000

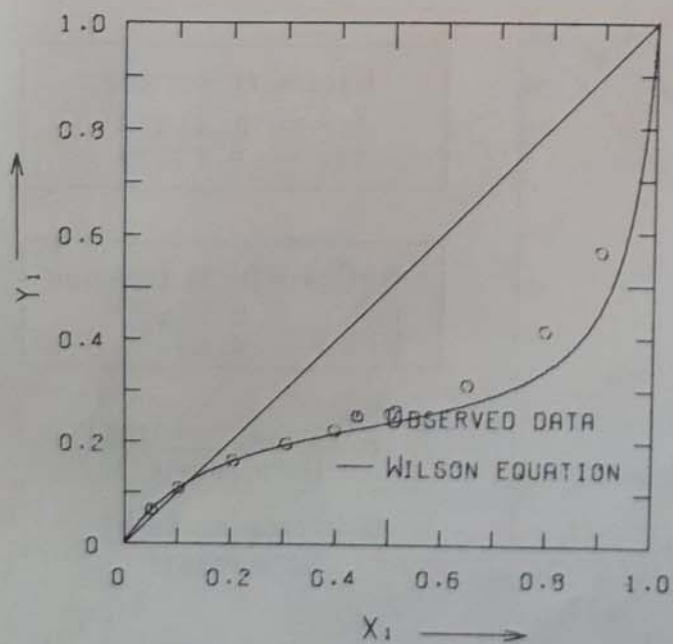


FIG. X - Y CURVE

WILSON PARAMETERS

$$\Lambda_{12} = 0.35922$$

$$\Lambda_{21} = 0.38791$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0280$$

$$T [^{\circ}\text{C}] : 1.53$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

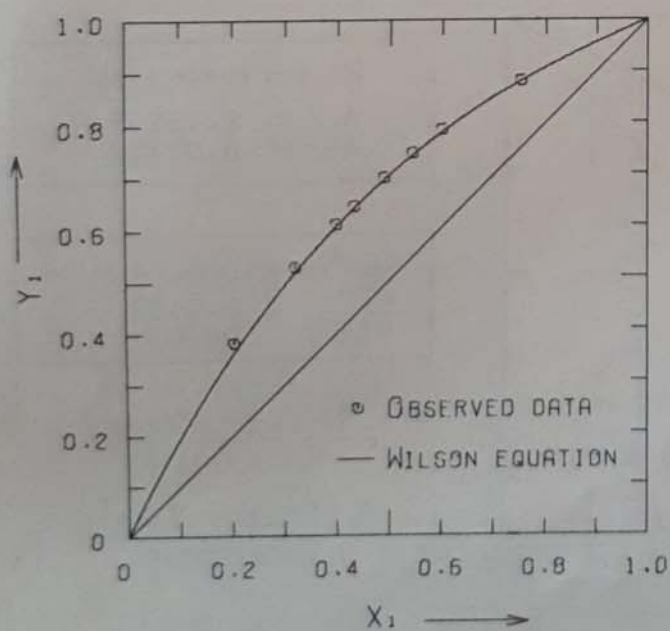
DIISOPROPYL ETHER(1) - N-HEPTANE(2)

DATA FROM S.V.VIJAYARAGHAVAN, ETAL.: J. CHEM. ENG. DATA, VOL. 12, NO. 1, P. 15 (1967)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.2050	0.3800	115.70	1520.00
0.3200	0.5250	111.00	1520.00
0.3980	0.6070	108.20	1520.00
0.4320	0.6410	106.80	1520.00
0.4890	0.6950	105.10	1520.00
0.5440	0.7420	103.20	1520.00
0.6010	0.7870	101.40	1520.00
0.7520	0.8800	98.00	1520.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.83726	1166.920	227.375
2	6.90240	1268.115	216.900



WILSON PARAMETERS

$$\Lambda_{12} = 1.99309$$

$$\Lambda_{21} = 0.34074$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0051$$

$$T [^{\circ}\text{C}] : 0.27$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

M. HIRATA AND S. OHE

ACETONE(1)-BENZENE(2)

DATA FROM GOSAY F. J., BENNET G. W., J. CHEM. EDUC. 7, 1336 (1930)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.0120	0.0530	77.70	732.00
0.0330	0.1360	75.50	732.00
0.0560	0.1920	73.20	732.00
0.0950	0.2630	72.00	732.00
0.1430	0.4200	68.80	732.00
0.3100	0.5640	63.75	732.00
0.4040	0.6500	61.75	732.00
0.4780	0.7190	60.40	732.00
0.5540	0.7580	59.35	732.00
0.6690	0.8140	58.15	732.00
0.7670	0.8670	57.20	732.00
0.8600	0.9240	56.60	732.00
0.9240	0.9590	56.10	732.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.23967	1279.870	237.500
2	6.90565	1211.033	220.790

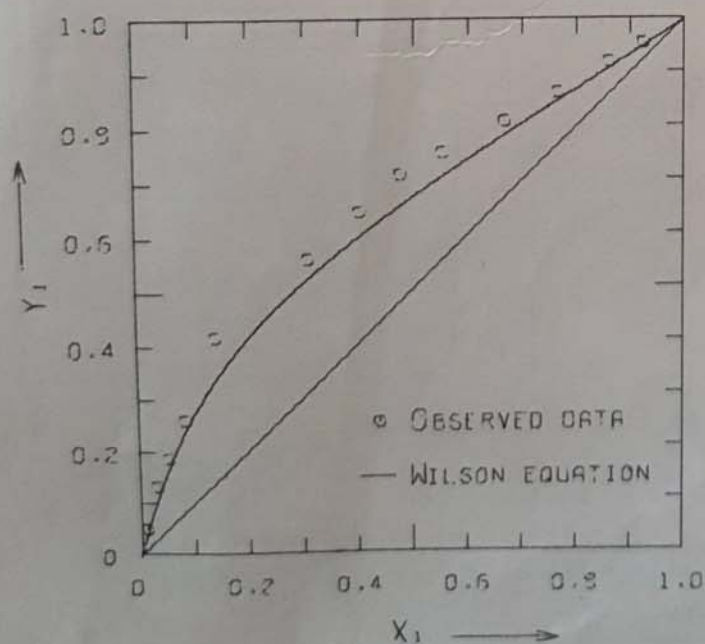


FIG. X - Y CURVE

WILSON PARAMETERS

$$\Lambda_{12} = 0.42109$$

$$\Lambda_{21} = 1.24840$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0309$$

$$T [^{\circ}\text{C}] : 0.89$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

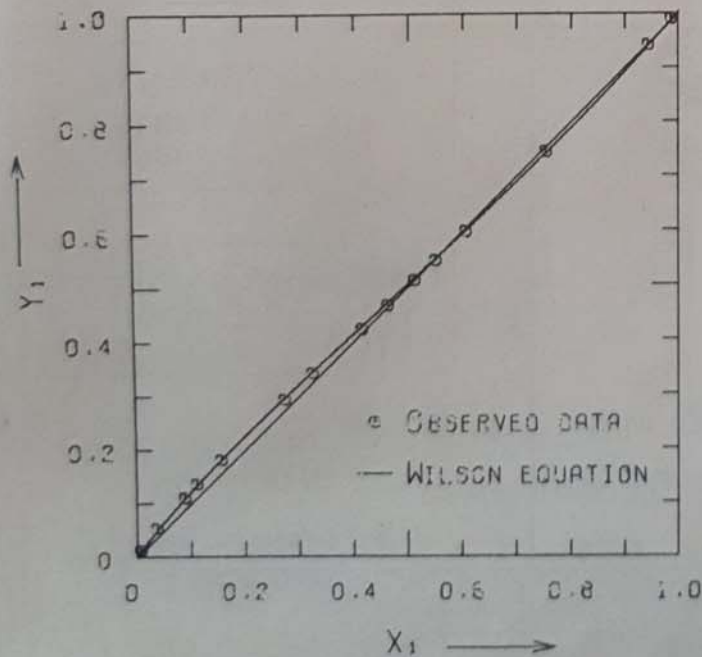
$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

DATA FROM STEINHAUSER, F. H., P. P. WHITE: IND. ENG. CHEM. VOL. 41, P. 2512 (1949)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0060	0.0070	80.20	760.00
0.0370	0.0490	79.85	760.00
0.0880	0.1050	79.45	760.00
0.1120	0.1310	79.25	760.00
0.1570	0.1770	79.05	760.00
0.2740	0.2900	78.45	760.00
0.3260	0.3380	78.55	760.00
0.4160	0.4190	78.35	760.00
0.4630	0.4620	78.35	760.00
0.5110	0.5070	78.33	760.00
0.5500	0.5430	78.30	760.00
0.6060	0.5950	78.33	760.00
0.7530	0.7400	78.55	760.00
0.9430	0.9370	79.25	760.00
0.9860	0.9850	79.40	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.97421	1209.600	216.000
2	6.90565	1211.033	220.790



WILSON PARAMETERS

$\Lambda_{12} = 0.64645$

$\Lambda_{21} = 1.20974$

ERROR* ON WILSON EQUATION

$Y_1 : 0.0025$

$T [^{\circ}\text{C}] : 0.05$

* $\frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$

$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$

FIG. X - Y CURVE

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METHYL ACETATE(1) - CYCLOHEXANE(2)

DATA FROM NAGATA, I.: J. CHEM. ENG. DATA., VOL. 7, (4), P. 461 (1962)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.0330	0.1820	74.30	760.00
0.0850	0.3500	68.40	760.00
0.1420	0.4430	64.90	760.00
0.2830	0.5750	59.70	760.00
0.3130	0.5940	59.00	760.00
0.3730	0.6250	57.90	760.00
0.4780	0.6640	56.80	760.00
0.5070	0.6730	56.70	760.00
0.6160	0.7140	56.00	760.00
0.6880	0.7440	55.80	760.00
0.7220	0.7590	55.70	760.00
0.7810	0.7890	55.50	760.00
0.8350	0.8200	55.55	760.00
0.9400	0.9140	55.80	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.20211	1232.830	228.000
2	6.84498	1203.526	222.863

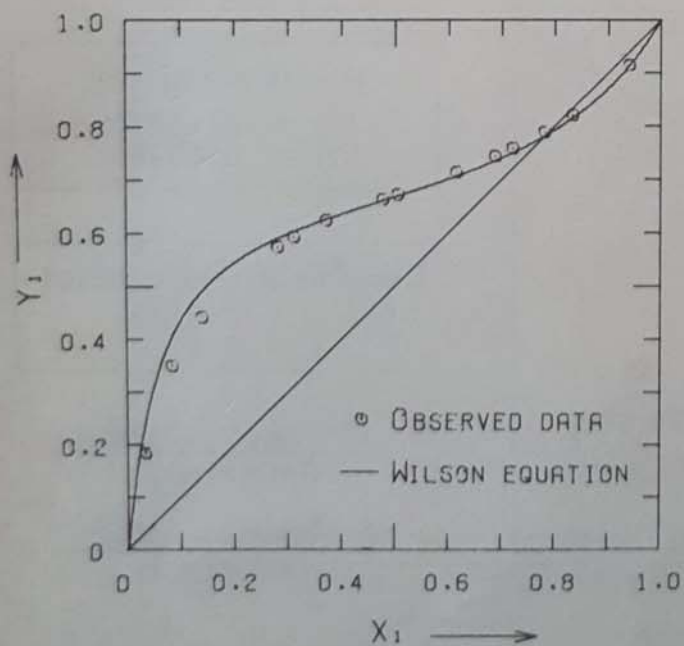


FIG X - Y CURVE

WILSON PARAMETERS

$$\Lambda_{12} = 0.31807$$

$$\Lambda_{21} = 0.52971$$

ERROR* ON WILSON EQUATION

$$Y_1 \quad \pm \quad 0.0164$$

$$T [^{\circ}\text{C}] \quad \pm \quad 0.53$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

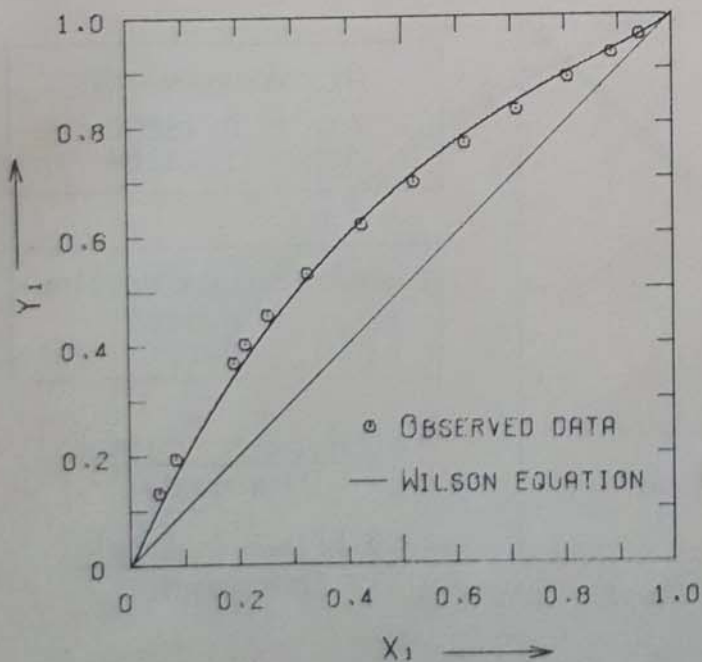
METHYL ACETATE(1) - BENZENE(2)

DATA FROM HUDSON, J.W., M. VAN WINKLE: J. CHEM. ENG. DATA, VOL. 14(3), P. 310(1969)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHg]
0.0520	0.1300	77.81	760.00
0.0840	0.1930	76.76	760.00
0.1920	0.3690	73.12	760.00
0.2140	0.4030	72.40	760.00
0.2550	0.4560	71.17	760.00
0.3280	0.5320	69.28	760.00
0.4270	0.6200	66.87	760.00
0.5220	0.6970	64.81	760.00
0.6160	0.7670	63.03	760.00
0.7110	0.8270	61.31	760.00
0.8060	0.8850	59.75	760.00
0.8870	0.9290	58.58	760.00
0.9390	0.9620	57.78	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.20211	1232.830	228.000
2	6.90565	1211.033	220.790



WILSON PARAMETERS

$$\Lambda_{12} = 2.17324$$

$$\Lambda_{21} = 0.19174$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0156$$

$$T [^{\circ}\text{C}] : 0.28$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

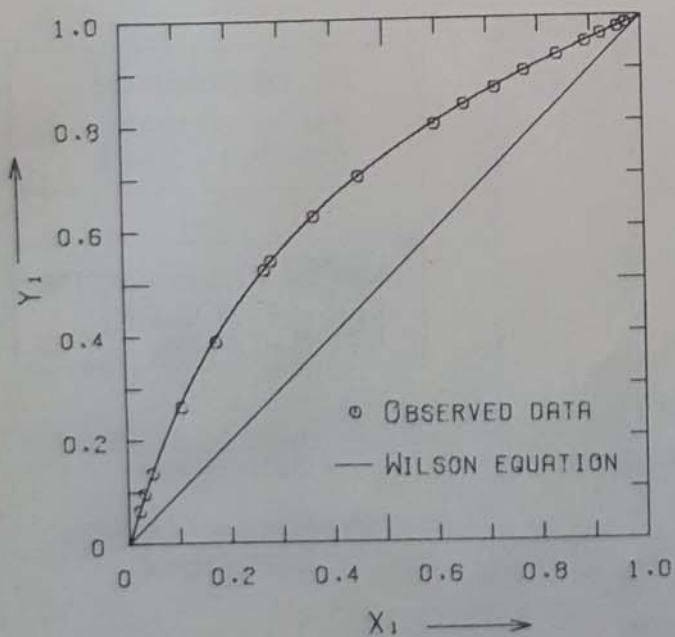
M. HIRATA AND S. OHE

DATA FROM CARR, R. D. & H. W. KROPHOLLER: J. CHEM. ENG. DATA., VOL. 7, (1), P. 26 (1962)

X_1	Y_1	T [°C]	P [mmHg]	X_1	Y_1	T [°C]	P [mmHg]
0.9700	0.9870	77.60	760.00	0.0480	0.1370	106.94	760.00
0.9540	0.9800	77.81	760.00	0.0320	0.0970	107.87	760.00
0.9220	0.9670	78.39	760.00	0.0210	0.0640	108.82	760.00
0.8910	0.9530	78.80	760.00				
0.8350	0.9280	79.91	760.00				
0.7730	0.8990	81.14	760.00				
0.7150	0.8670	82.25	760.00				
0.6560	0.8370	83.55	760.00				
0.5980	0.8000	85.16	760.00				
0.4520	0.7030	89.22	760.00				
0.3650	0.6290	92.09	760.00				
0.2830	0.5450	95.02	760.00				
0.2700	0.5280	95.51	760.00				
0.1750	0.3910	99.80	760.00				
0.1070	0.2650	103.46	760.00				

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.09808	1238.710	217.000
2	6.95464	1344.800	219.482



WILSON PARAMETERS

$$\Lambda_{12} = 0.85981$$

$$\Lambda_{21} = 0.96565$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0025$$

$$T [^{\circ}\text{C}] : 0.17$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

M. HIRATA AND S. OHE

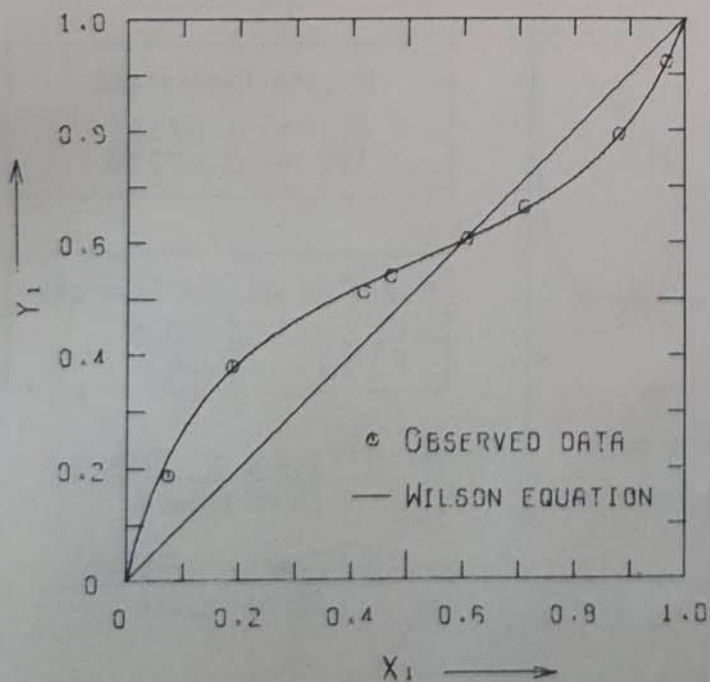
VINYL ACETATE(1) - 2,4-DIMETHYLPENTANE(2)

DATA FROM SWAMY, P. R., ETAL: J. CHEM. ENG. DATA, VOL 10, P. 214 (1965)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0730	0.1870	75.00	760.00
0.1880	0.3810	70.80	760.00
0.4210	0.5130	67.70	760.00
0.4700	0.5410	67.40	760.00
0.6060	0.6060	67.20	760.00
0.7090	0.6620	67.37	760.00
0.8790	0.7920	68.90	760.00
0.9650	0.9220	71.00	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.21010	1296.130	226.655
2	6.83043	1194.370	221.902



WILSON PARAMETERS

$$\Lambda_{12} = 0.51685$$

$$\Lambda_{21} = 0.46701$$

ERROR* ON WILSON EQUATION

$$Y_1 \pm 0.0080$$

$$T [^{\circ}\text{C}] \pm 0.10$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

M. HIRATA AND S. OHE

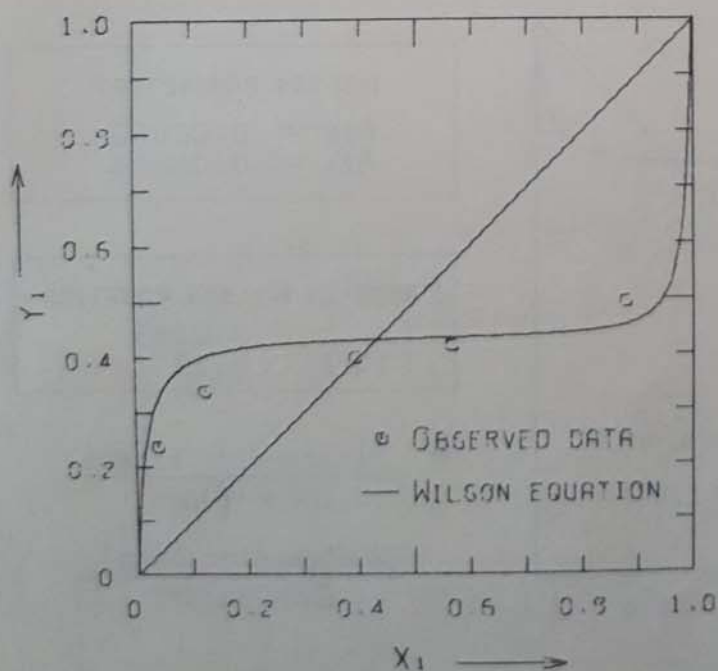
METHYL ALCOHOL(1)- 2-METHYLPENTANE(2)

DATA FROM VILIM O. COLLECTION CZECH. CHEM. COMMUN. 25. 2174 (1961)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.0400	0.2340	54.00	745.00
0.1270	0.3360	47.80	745.00
0.3950	0.3950	44.70	745.00
0.5660	0.4170	44.90	745.00
0.5680	0.4150	44.90	745.00
0.8810	0.4920	48.40	745.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	8.07246	1574.990	238.860
2	6.83910	1135.410	226.572



WILSON PARAMETERS

$$\Lambda_{12} = 0.08914$$

$$\Lambda_{21} = 0.05960$$

ERROR* ON WILSON EQUATION

$$Y_1 = 0.0420$$

$$T [^{\circ}\text{C}] = 1.81$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE.

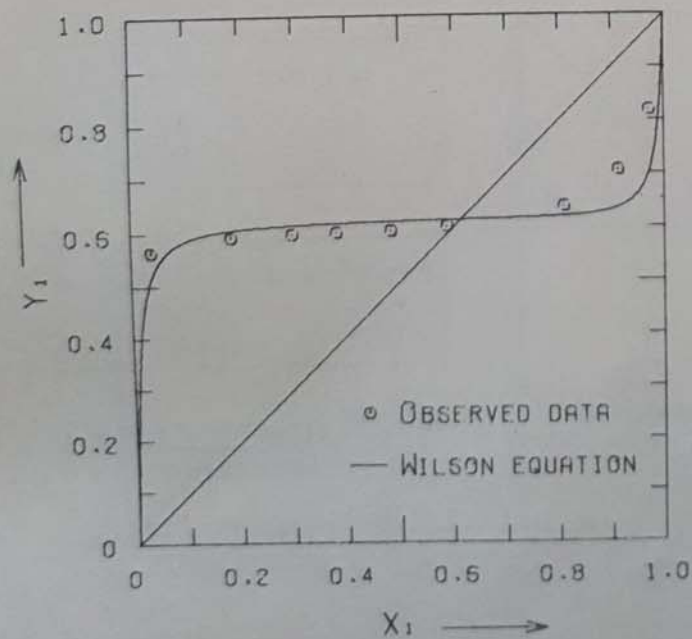
M. HIRATA AND S. OHE

DATA FROM MARINICHEV, A. N., ET AL.: ZH. PRIKL. KHIM., VOL 38, (7), P. 1619 (1965)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0370	0.5640	57.05	760.00
0.1860	0.5900	54.45	760.00
0.3000	0.5940	54.33	760.00
0.3820	0.5950	54.32	760.00
0.4850	0.5970	54.31	760.00
0.5900	0.6040	54.28	760.00
0.8110	0.6390	54.42	760.00
0.9140	0.7060	55.93	760.00
0.9720	0.8190	59.66	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.87863	1473.110	230.000
2	6.84498	1203.526	222.863



WILSON PARAMETERS

$\Lambda_{12} = 0.07144$

$\Lambda_{21} = 0.04773$

ERROR* ON WILSON EQUATION

$Y_1 : 0.0366$

$T [^{\circ}\text{C}] : 1.00$

* $\frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$

$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$

FIG. X - Y CURVE

M. HIRATA AND S. OHE

METHANOL(1) - CYCLOHEXANE(2)

DATA FROM MARINICHEV, A. N., ET AL.: ZH. PRIKL. KHIM., VOL 38, (7), P. 1619 (1965)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0730	0.5550	45.00	495.80
0.2070	0.5900	45.00	519.30
0.6800	0.5980	45.00	518.70
0.8030	0.6130	45.00	510.30
0.9030	0.6580	45.00	486.70

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.87863	1473.110	230.000
2	6.84498	1203.526	222.863

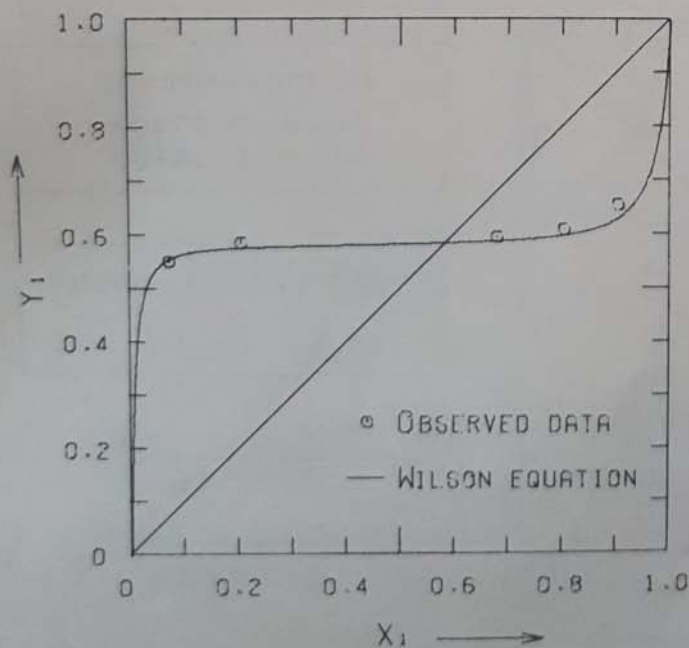


FIG. X - Y CURVE

WILSON PARAMETERS

$$\Lambda_{12} = 0.04511$$

$$\Lambda_{21} = 0.09459$$

ERROR* ON WILSON EQUATION

$$Y_1 = 0.0109$$

$$T [^{\circ}\text{C}] = 0.20$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

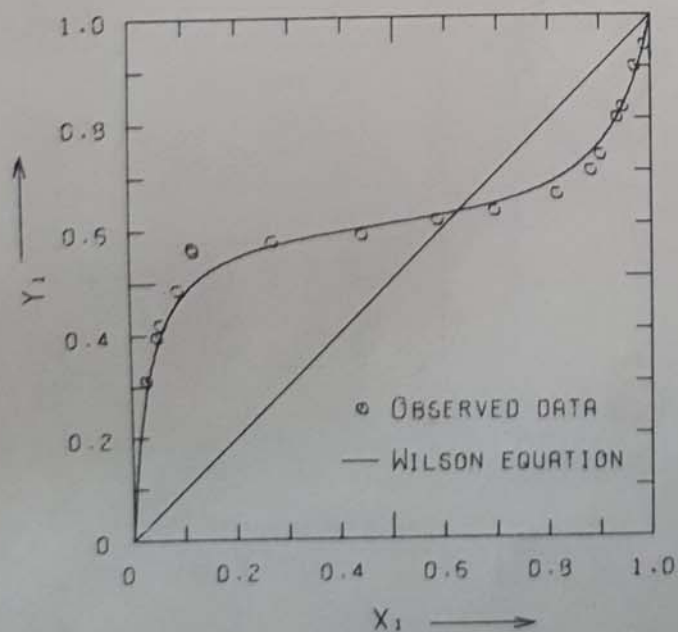
M. HIRATA AND S. OHE

DATA FROM FRITZWEILER R., DIETRICH K.R., ANGEN.CHEM.A.CHEM.FABRIK., NO.4, BERLIN, W55(1933)

X_1	Y_1	T [°C]	P [mmHg]	X_1	Y_1	T [°C]	P [mmHg]
0.0280	0.3100	69.40	760.00	0.9680	0.9000	62.40	760.00
0.0500	0.3950	66.80	760.00	0.9880	0.9420	63.40	760.00
0.0570	0.4200	65.70	760.00				
0.0900	0.4850	61.40	760.00				
0.1180	0.5650	59.00	760.00				
0.1200	0.5600	59.20	760.00				
0.2700	0.5750	58.00	760.00				
0.4400	0.5950	57.80	760.00				
0.5960	0.6100	57.70	760.00				
0.6950	0.6250	57.60	760.00				
0.8170	0.6550	58.10	760.00				
0.8830	0.7000	59.90	760.00				
0.9020	0.7300	59.60	760.00				
0.9340	0.8010	60.40	760.00				
0.9450	0.8220	61.20	760.00				

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.87863	1473.110	230.000
2	6.90565	1211.033	220.790



WILSON PARAMETERS

$\Lambda_{12} = 0.20078$

$\Lambda_{21} = 0.26896$

ERROR* ON WILSON EQUATION

$Y_1 : 0.0219$

$T [^{\circ}\text{C}] : 0.63$

* $\frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$

$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$

FIG. X - Y CURVE

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METHYL ALCOHOL(1)-BENZENE(2)

DATA FROM ISAMU NAGATA, J. CHEM. ENG. DATA, VOL. 14, NO. 4, P. 418 (1969)

X_1	Y_1	T [°C]	P [mmHg]	X_1	Y_1	T [°C]	P [mmHg]
0.0100	0.1280	76.50	760.00	0.9120	0.7950	60.70	760.00
0.0280	0.2630	71.10	760.00	0.9390	0.8310	61.70	760.00
0.0880	0.4550	62.70	760.00	0.9700	0.8960	62.90	760.00
0.1090	0.4750	62.00	760.00				
0.1790	0.5300	59.90	760.00				
0.2260	0.5380	59.30	760.00				
0.3110	0.5540	59.10	760.00				
0.3990	0.5660	58.60	760.00				
0.4380	0.5730	58.40	760.00				
0.5290	0.5970	58.40	760.00				
0.5750	0.6030	58.30	760.00				
0.6340	0.6150	58.40	760.00				
0.7150	0.6430	58.40	760.00				
0.8110	0.6940	58.90	760.00				
0.8660	0.7370	59.70	760.00				

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.87863	1473.110	230.000
2	6.90565	1211.033	220.790

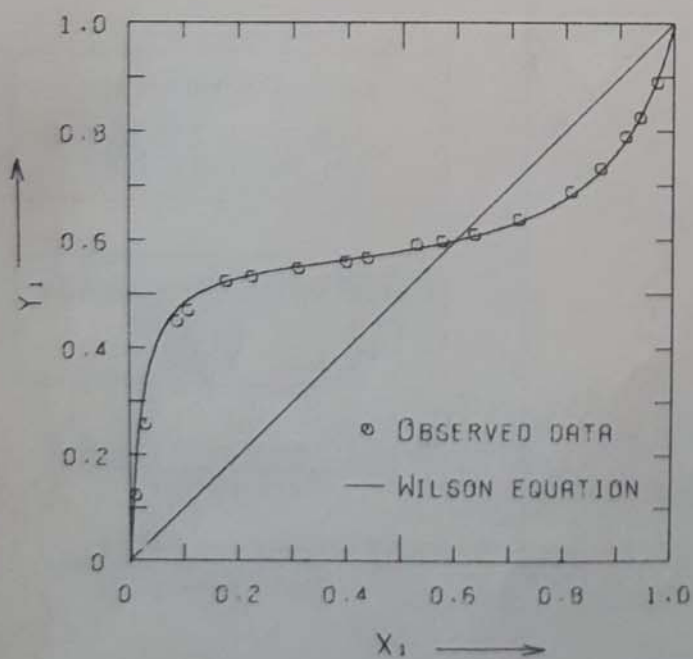


FIG. X - Y CURVE

WILSON PARAMETERS

$$\Lambda_{12} = 0.12633$$

$$\Lambda_{21} = 0.37663$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0123$$

$$T [^{\circ}\text{C}] : 0.43$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

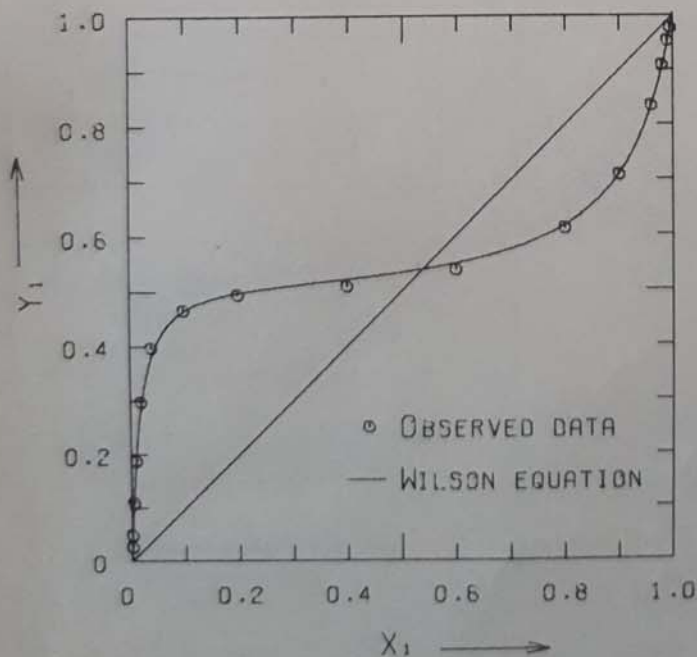
$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

DATA FROM NIINI, A. ANN. ACAD. SCI. FENN. ASS. NO. 8 (1940)

X_1	Y_1	T [°C]	\dot{P} [mmHg]	X_1	Y_1	T [°C]	P [mmHg]
0.0010	0.0230	20.00	76.72	0.9950	0.9740	20.00	99.21
0.0020	0.0450	20.00	78.41				
0.0050	0.1050	20.00	83.36				
0.0100	0.1850	20.00	91.10				
0.0200	0.2940	20.00	104.40				
0.0400	0.3940	20.00	120.10				
0.1000	0.4630	20.00	133.10				
0.2000	0.4920	20.00	138.60				
0.4000	0.5060	20.00	142.05				
0.6000	0.5340	20.00	142.45				
0.8000	0.6090	20.00	136.70				
0.9000	0.7050	20.00	126.50				
0.9600	0.8320	20.00	112.38				
0.9800	0.9060	20.00	105.15				
0.9900	0.9500	20.00	101.25				

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.87863	1473.110	230.000
2	6.90565	1211.033	220.790



WILSON PARAMETERS

$$\Lambda_{12} = 0.08803$$

$$\Lambda_{21} = 0.32565$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0061$$

$$T [^{\circ}\text{C}] : 0.11$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

DATA FROM LEE S.C., J. PHYS. CHEM. 35, 3559 (1931)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.1410	0.5070	40.00	349.00
0.2270	0.5270	40.00	356.60
0.3040	0.5310	40.00	362.50
0.4020	0.5400	40.00	364.20
0.4680	0.5430	40.00	365.60
0.5520	0.5480	40.00	366.00
0.6430	0.5660	40.00	366.20
0.7020	0.5800	40.00	362.50
0.7500	0.5780	40.00	357.50
0.8340	0.6410	40.00	345.20
0.8780	0.6700	40.00	334.00
0.8960	0.7230	40.00	325.20
0.9150	0.7530	40.00	322.50

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.87863	1473.110	230.000
2	6.90565	1211.033	220.790

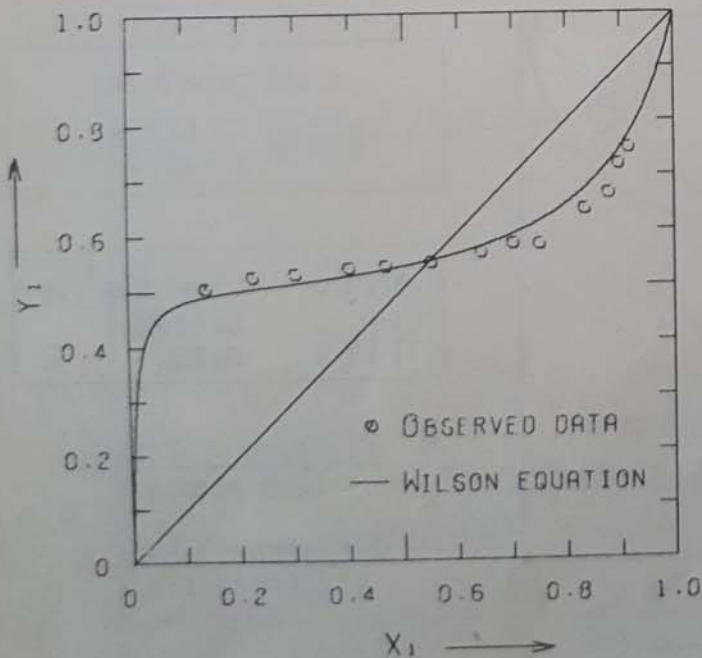


FIG. X - Y CURVE

WILSON PARAMETERS

$$\Lambda_{12} = 0.04870$$

$$\Lambda_{21} = 0.43061$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0224$$

$$T [^{\circ}C] : 0.33$$

$$* \frac{\sum |Y_{1CALC} - Y_{1OBS}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{CALC} - T_{OBS}|}{\text{DATA POINTS}}$$

M. HIRATA AND S. OHE

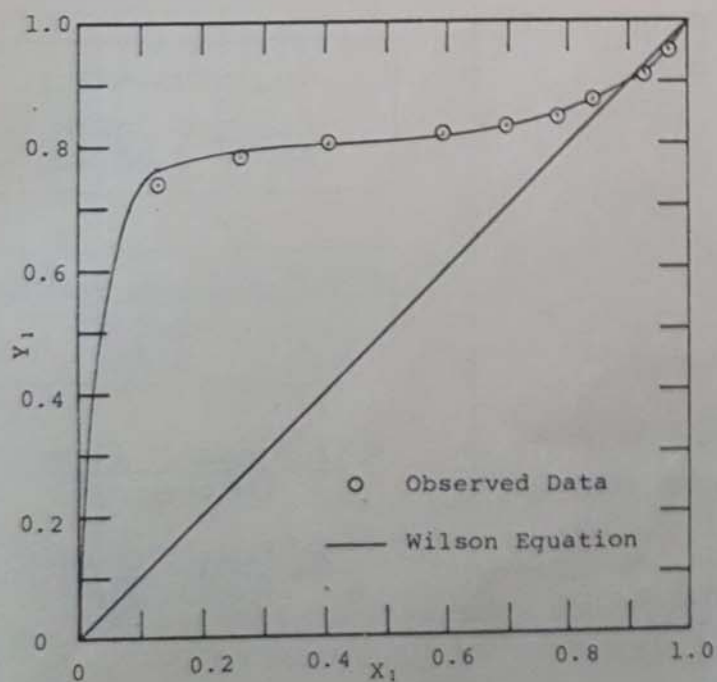
METHYL ALCOHOL(1)-TOLUENE(2)*

DATA FROM BENDICT M., JOHNSON C.A., SOLOMON E., ET AL. (TRANS. AM. INST. CHEM. ENGRS. 41, 371 (1945))

X_1	Y_1	TEMPERATURE [$^{\circ}$ C]	PRESSURE [mmHg]
0.1300	0.7420	70.25	760.00
0.2660	0.7820	66.44	760.00
0.4070	0.8030	65.58	760.00
0.5930	0.8190	64.47	760.00
0.6920	0.8290	64.10	760.00
0.7790	0.8450	63.79	760.00
0.8430	0.8690	63.67	760.00
0.8820	0.8830	63.58	760.00
0.9270	0.9110	63.62	760.00
0.9690	0.9500	63.94	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.87863	1473.110	230.000
2	6.95464	1344.800	219.482



Wilson Parameters

$$\Lambda_{12} = 0.12100$$

$$\Lambda_{21} = 0.28838$$

Error* on Wilson Equation

$$Y_1 : 0.0046$$

$$T[{}^{\circ}\text{C}] : 0.30$$

$$* \frac{\sum |Y_{1\text{calc}} - Y_{1\text{obs}}|}{\text{Data Points}}$$

$$\frac{\sum |T_{\text{calc}} - T_{\text{obs}}|}{\text{Data Points}}$$

FIG. X - Y CURVE

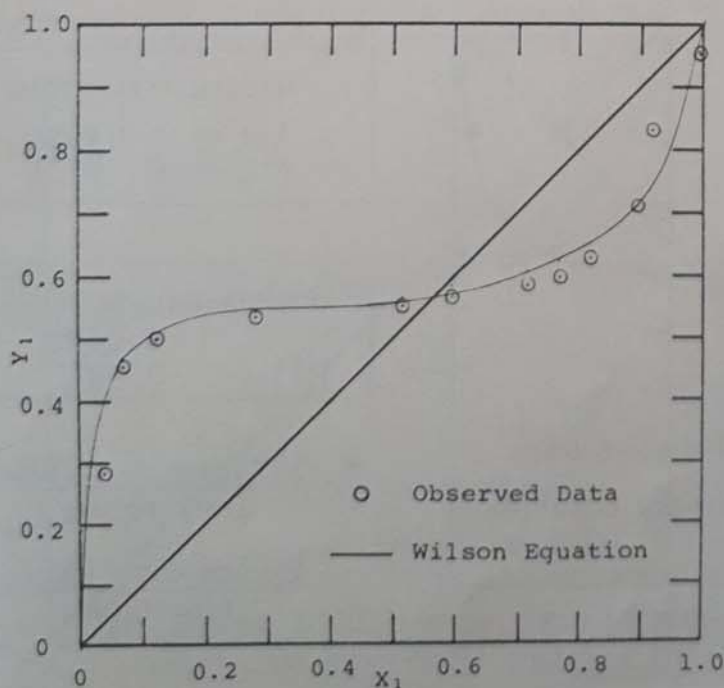
M. HIRATA AND S. OHE

DATA FROM SMITH C.P., ENGEL E.W., J. AM. CHEM. SOC. 51, 2660 (1929)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0400	0.2820	30.00	78.00
0.0684	0.4556	30.00	103.60
0.1236	0.4986	30.00	112.50
0.2803	0.5344	30.00	117.70
0.3342	0.5381	30.00	118.00
0.5151	0.5496	30.00	119.90
0.5934	0.5679	30.00	119.90
0.7174	0.5828	30.00	119.60
0.7687	0.5971	30.00	118.90
0.8154	0.6282	30.00	117.00
0.8550	0.6454	30.00	114.50
0.8902	0.7116	30.00	111.30
0.9173	0.8269	30.00	106.30
0.9545	0.8958	30.00	97.10
0.9913	0.9430	30.00	82.50

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	8.04494	1554.300	222.650
2	6.90240	1268.115	216.900



Wilson Parameters

$\Lambda_{12} = 0.09663$

$\Lambda_{21} = 0.28696$

Error* on Wilson Equation

$Y_1 : 0.0293$

$T[°C] : 0.53$

* $\frac{\sum |Y_{1calc} - Y_{1obs}|}{\text{Data Points}}$

$\frac{\sum |T_{calc} - T_{obs}|}{\text{Data Points}}$

FIG. X - Y CURVE

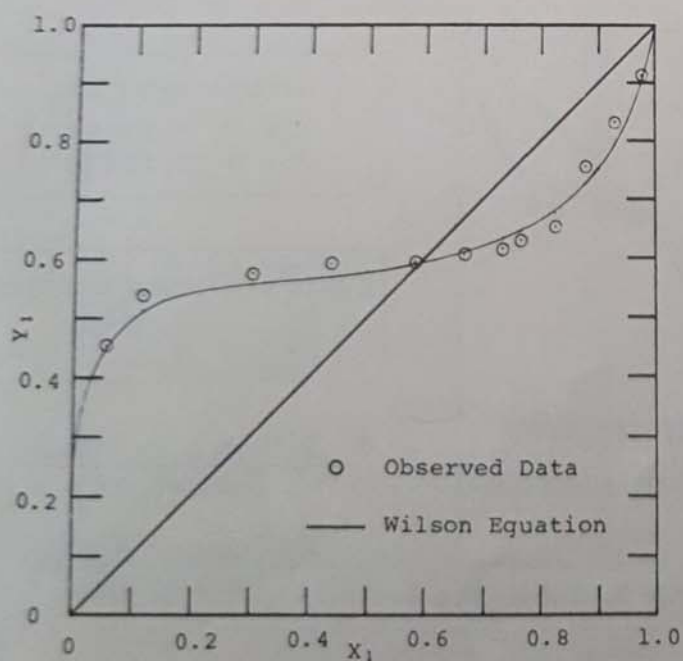
M. HIRATA AND S. OHE

DATA FROM SMYTH, C. P., E. W. ENGEL: J. AM. CHEM. SOC., VOL. 51, P. 2660 (1929)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0514	0.4592	50.00	244.20
0.1180	0.5384	50.00	289.40
0.3022	0.5755	50.00	307.40
0.4392	0.5824	50.00	311.30
0.5962	0.5933	50.00	311.30
0.6646	0.6074	50.00	309.50
0.7327	0.6145	50.00	311.30
0.7720	0.6279	50.00	308.80
0.8230	0.6516	50.00	304.80
0.8788	0.7554	50.00	293.60
0.9274	0.8324	50.00	281.70
0.9769	0.9127	50.00	247.40

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	8.04494	1554.300	222.650
2	6.90240	1268.115	216.900



Wilson Parameters

$\Lambda_{12} = 0.08267$

$\Lambda_{21} = 0.35010$

Error* on Wilson Equation

$Y_1 : 0.0165$

$T[°C] : 1.16$

* $\frac{\sum |Y_{1calc} - Y_{1obs}|}{\text{Data Points}}$

Data Points

$\frac{\sum |T_{calc} - T_{obs}|}{\text{Data Points}}$

Data Points

FIG. X - Y CURVE

M. HIRATA AND S. OHE

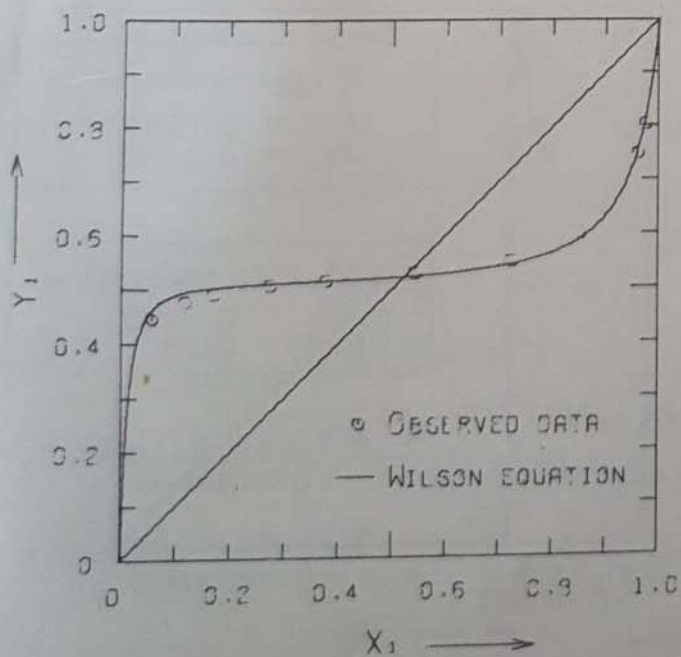
ETHYL ALCOHOL(1)-ISOCCTANE(2)

DATA FROM KRETSCHMER C.B., MORAKOWSKA J., WIEDE R., J. AM. CHEM. SOC. 70, 1785 (1948)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.0565	0.4441	25.00	96.56
0.1182	0.4762	25.00	91.81
0.1700	0.4910	25.00	93.57
0.2748	0.5073	25.00	95.22
0.3773	0.5153	25.00	95.85
0.5416	0.5285	25.00	96.14
0.7225	0.5501	25.00	95.25
0.8511	0.5994	25.00	91.49
0.9603	0.7471	25.00	75.71
0.9757	0.8023	25.00	70.41

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	8.16290	1623.220	228.980
2	6.81189	1257.840	220.735



WILSON PARAMETERS

$$\Lambda_{12} = 0.05461$$

$$\Lambda_{21} = 0.19501$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0091$$

$$T [^{\circ}\text{C}] : 0.16$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG X - Y CURVE

M. HIRATA AND S. OHE

DATA FROM WASHBURN, E. R., B. H. HANDORF, J. AM. CHEM. SOC., VOL. 57, P. 441 (1935)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MM.HG]
0.1030	0.3105	25.00	136.80
0.2050	0.3268	25.00	140.50
0.2987	0.3313	25.00	139.10
0.4016	0.3368	25.00	138.90
0.4983	0.3424	25.00	139.40
0.5941	0.3510	25.00	137.90
0.7098	0.3532	25.00	132.60
0.7948	0.3696	25.00	125.60
0.8992	0.4796	25.00	108.40

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	8.04494	1554.300	222.650
2	6.84498	1203.526	222.863

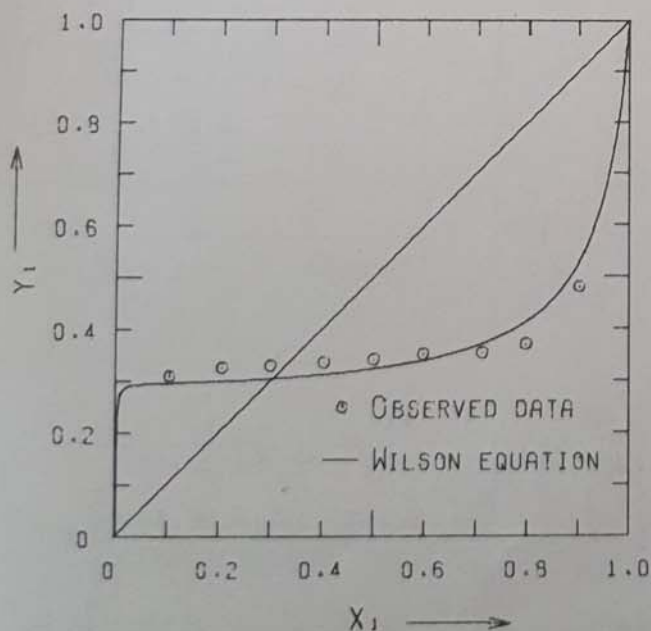


FIG. X - Y CURVE

WILSON PARAMETERS

$$\Lambda_{12} = 0.00561$$

$$\Lambda_{21} = 0.37043$$

ERROR* ON WILSON EQUATION

$$Y_1 \quad \pm 0.0246$$

$$T [^{\circ}\text{C}] \quad \pm 0.36$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

M. HIRATA AND S. OHE

DATA FROM 1611 N. J. J. GOO-CHEM. IND. JAPAN. 39, 653 (1935)

X_1	Y_1	T [°C]	P [mmHg]	X_1	Y_1	T [°C]	P [mmHg]
0.0500	0.3350	0.00	19.67	0.9000	0.5235	0.00	20.64
0.1000	0.4355	0.00	21.09	0.9500	0.5633	0.00	19.83
0.1500	0.4544	0.00	21.70	0.9000	0.6156	0.00	18.60
0.2000	0.4647	0.00	22.10	0.9500	0.7111	0.00	16.65
0.2500	0.4697	0.00	22.31				
0.3000	0.4719	0.00	22.40				
0.3500	0.4719	0.00	22.40				
0.4000	0.4725	0.00	22.37				
0.4500	0.4737	0.00	22.31				
0.5000	0.4750	0.00	22.25				
0.5500	0.4851	0.00	22.13				
0.6000	0.4820	0.00	21.97				
0.6500	0.4869	0.00	21.77				
0.7000	0.4935	0.00	21.59				
0.7500	0.5080	0.00	21.16				

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	8.16290	1623.220	228.980
2	6.82689	1272.864	221.630

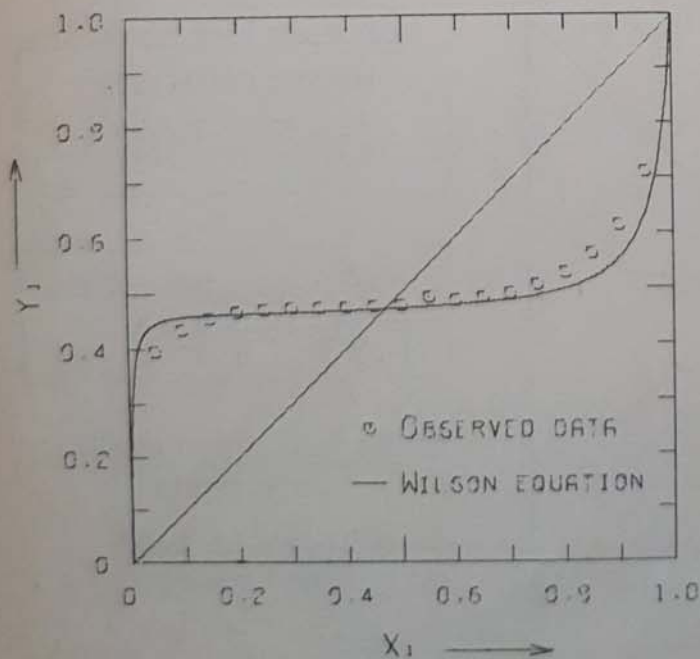


FIG. X - Y CURVE

WILSON PARAMETERS

$$\Lambda_{12} = 0.02364$$

$$\Lambda_{21} = 0.15141$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0205$$

$$T [^{\circ}\text{C}] : 0.41$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

M. HIRATA AND S. OHE

DATA FROM ISII N. U. J. SOC. CHEM. JAPAN. 39, 659, 1935

X_1	Y_1	T [°C]	P [mmHg]	X_1	Y_1	T [°C]	P [mmHg]
0.0500	0.4180	20.00	62.20	0.9000	0.5697	20.00	60.10
0.1000	0.4692	20.00	66.50	0.9500	0.6096	20.00	65.40
0.1500	0.4927	20.00	69.30	0.9000	0.5694	20.00	61.40
0.2000	0.5035	20.00	70.10	0.9500	0.7745	20.00	55.00
0.2500	0.5092	20.00	70.70				
0.3000	0.5098	20.00	71.20				
0.3500	0.5133	20.00	71.30				
0.4000	0.5154	20.00	71.40				
0.4500	0.5154	20.00	71.40				
0.5000	0.5154	20.00	71.40				
0.5500	0.5175	20.00	71.30				
0.6000	0.5210	20.00	71.20				
0.6500	0.5246	20.00	71.10				
0.7000	0.5340	20.00	70.60				
0.7500	0.5491	20.00	69.70				

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	8.16230	1623.220	228.980
2	6.82699	1272.864	221.630

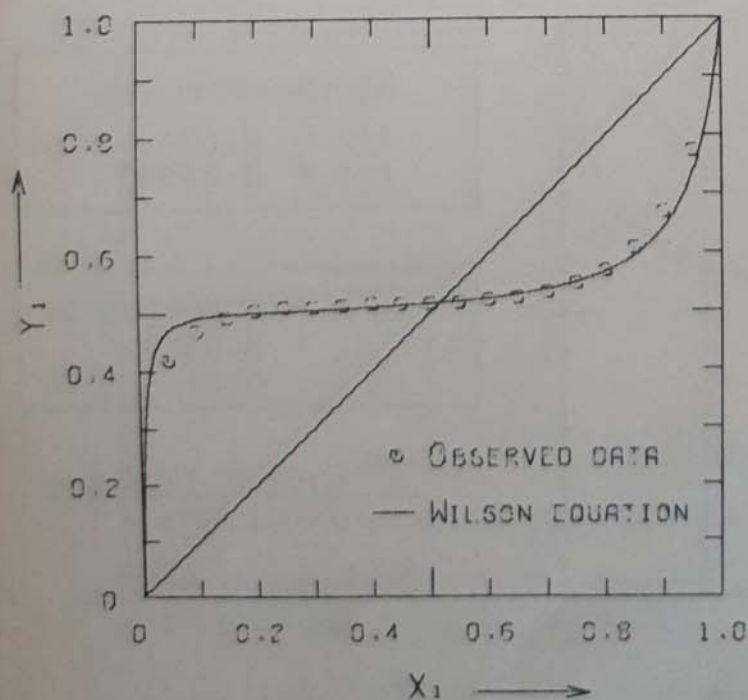


FIG X - Y CURVE

WILSON PARAMETERS

$$\Lambda_{12} = 0.03530$$

$$\Lambda_{21} = 0.22430$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0105$$

$$T [^{\circ}\text{C}] : 0.28$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

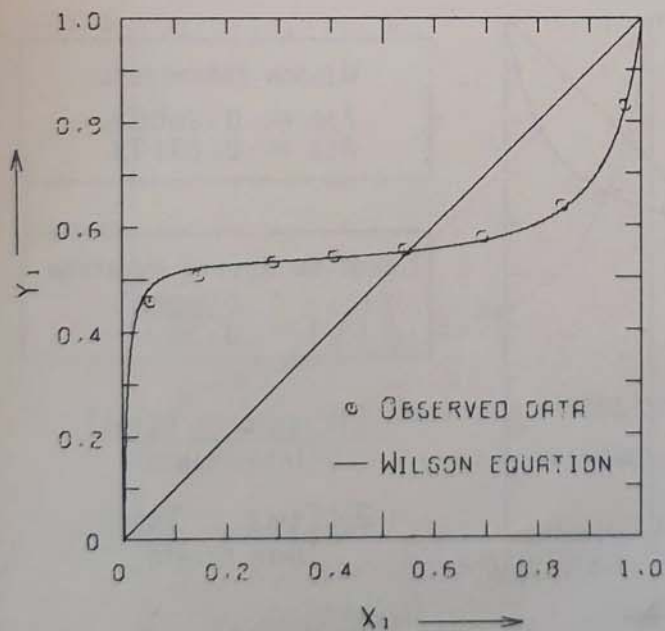
$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

DATA FROM KRETSCHMER, C. B., R. WIEBE: J. AM. CHEM. SOC., VOL. 71, P. 3176 (1949)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0526	0.4645	35.00	135.40
0.1446	0.5118	35.00	146.97
0.2878	0.5362	35.00	151.27
0.4052	0.5471	35.00	152.36
0.5403	0.5575	35.00	152.93
0.6914	0.5817	35.00	152.22
0.8450	0.6423	35.00	145.73
0.9676	0.8369	35.00	120.04

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	8.04494	1554.300	222.650
2	6.92689	1272.864	221.630



WILSON PARAMETERS

$$\Lambda_{12} = 0.04739$$

$$\Lambda_{21} = 0.24504$$

ERROR* ON WILSON EQUATION

$$Y_1 = 0.0092$$

$$T [^{\circ}\text{C}] = 0.19$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

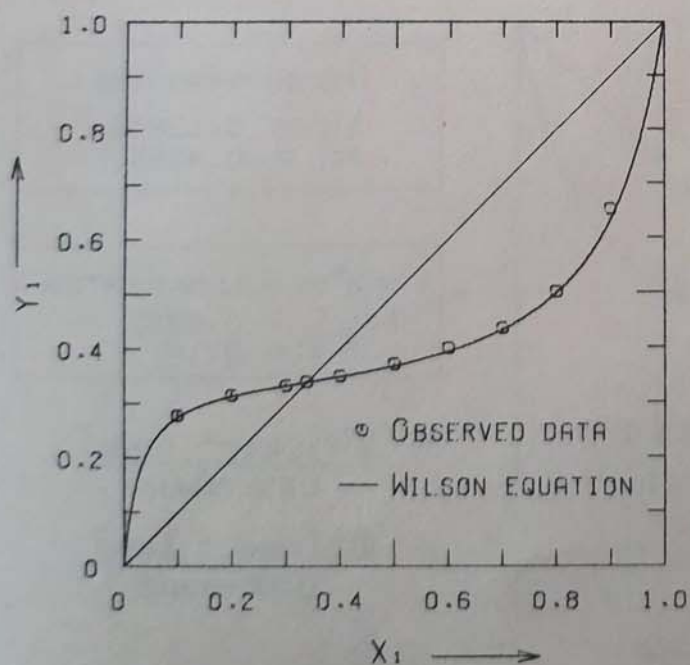
M. HIRATA AND S. OHE

DATA FROM NIELSEN, R.L. & J.H. WEBER: J. CHEM. ENG. DATA, VOL. 4, P. 145 (1959)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.1000	0.2770	33.60	180.00
0.2000	0.3140	32.80	180.00
0.3000	0.3310	32.50	180.00
0.3380	0.3380	32.50	180.00
0.4000	0.3490	32.60	180.00
0.5000	0.3700	32.90	180.00
0.6000	0.3990	33.30	180.00
0.7000	0.4340	34.00	180.00
0.8000	0.5000	35.50	180.00
0.9000	0.6520	39.30	180.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	8.04494	1554.300	222.650
2	6.90565	1211.033	220.790



WILSON PARAMETERS

$$\Lambda_{12} = 0.11585$$

$$\Lambda_{21} = 0.46853$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0040$$

$$T [^{\circ}\text{C}] : 0.15$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

M. HIRATA AND S. OHE

DATA FROM TYRER D.: J. CHEM. SOC. 101, 1104 (1912)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.1585	0.3531	69.54	750.00
0.2977	0.4045	68.20	750.00
0.4208	0.4358	67.76	750.00
0.5367	0.4662	67.97	750.00
0.6290	0.5053	68.41	750.00
0.7178	0.5491	69.00	750.00
0.7982	0.6063	70.26	750.00
0.8715	0.6833	71.86	750.00
0.9385	0.7874	74.40	750.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	8.04494	1554.300	222.650
2	6.90565	1211.033	220.790

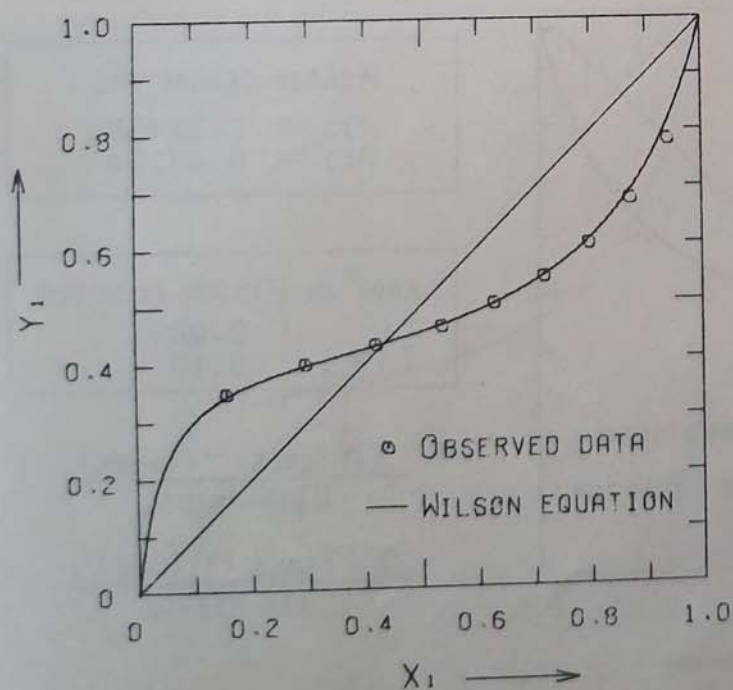


FIG. X - Y CURVE

WILSON PARAMETERS

$\Lambda_{12} = 0.18305$

$\Lambda_{21} = 0.55946$

ERROR* ON WILSON EQUATION

$Y_1 : 0.0073$

$T [^{\circ}\text{C}] : 0.13$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

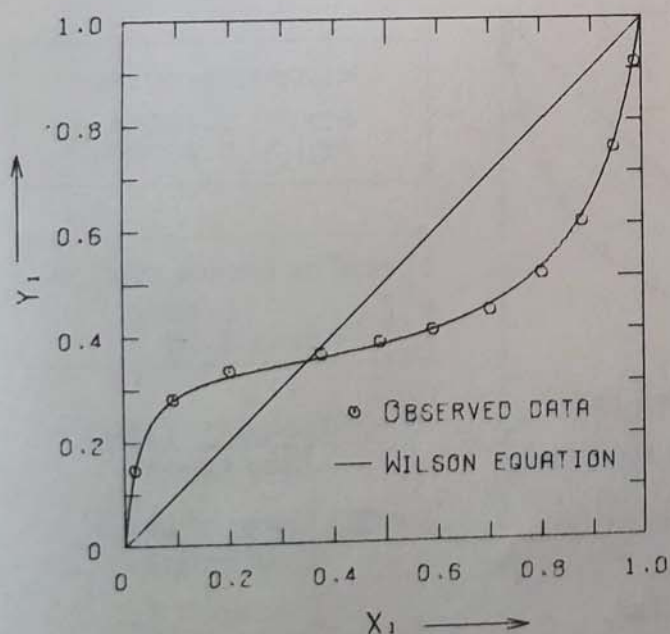
M. HIRATA AND S. OHE

DATA FROM UDVENKO V.V., FATKULINA L.G., ZH. FIZ. KHIM. 26, 719 (1952)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.0200	0.1450	40.00	208.40
0.0950	0.2800	40.00	239.80
0.2040	0.3320	40.00	249.10
0.3780	0.3620	40.00	252.30
0.4900	0.3840	40.00	248.80
0.5920	0.4050	40.00	245.70
0.7020	0.4400	40.00	237.30
0.8020	0.5070	40.00	219.40
0.8800	0.6050	40.00	196.30
0.9430	0.7470	40.00	169.50
0.9870	0.9120	40.00	145.60

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	8.04494	1554.300	222.650
2	6.90565	1211.033	220.790



WILSON PARAMETERS

$\Lambda_{12} = 0.10508$

$\Lambda_{21} = 0.52254$

ERROR* ON WILSON EQUATION

$Y_1 : 0.0072$

$T [^{\circ}\text{C}] : 0.13$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

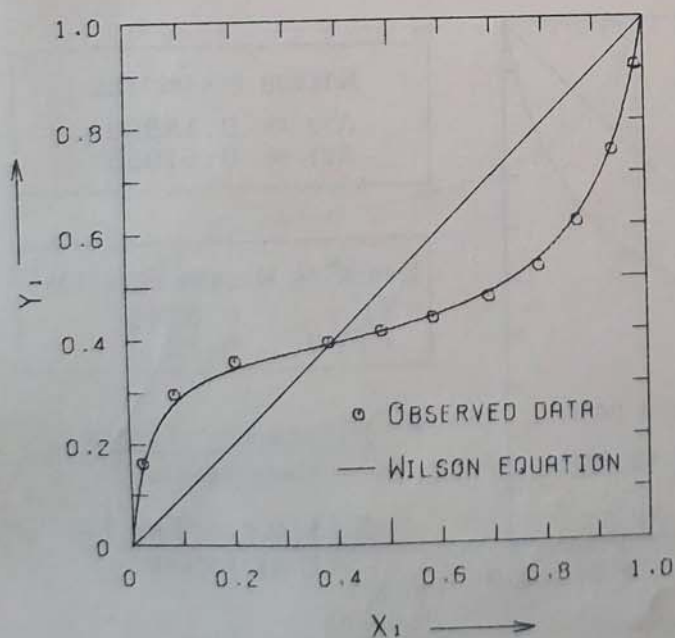
M. HIRATA AND S. OHE

DATA FROM UDOVENKO V.V., FATKULINA L.G.: ZH. FIZ. KHIM. 26, 719 (1952)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0250	0.1650	50.00	314.70
0.0890	0.3000	50.00	358.70
0.2060	0.3600	50.00	378.30
0.3850	0.3920	50.00	384.60
0.4860	0.4110	50.00	383.20
0.5860	0.4340	50.00	378.10
0.6940	0.4700	50.00	366.90
0.7900	0.5260	50.00	344.40
0.8660	0.6100	50.00	316.80
0.9360	0.7450	50.00	276.80
0.9840	0.9090	50.00	239.60

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	8.04494	1554.300	222.650
2	6.90565	1211.033	220.790



WILSON PARAMETERS

$$\Lambda_{12} = 0.14428$$

$$\Lambda_{21} = 0.49834$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0094$$

$$T [^{\circ}\text{C}] : 0.15$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

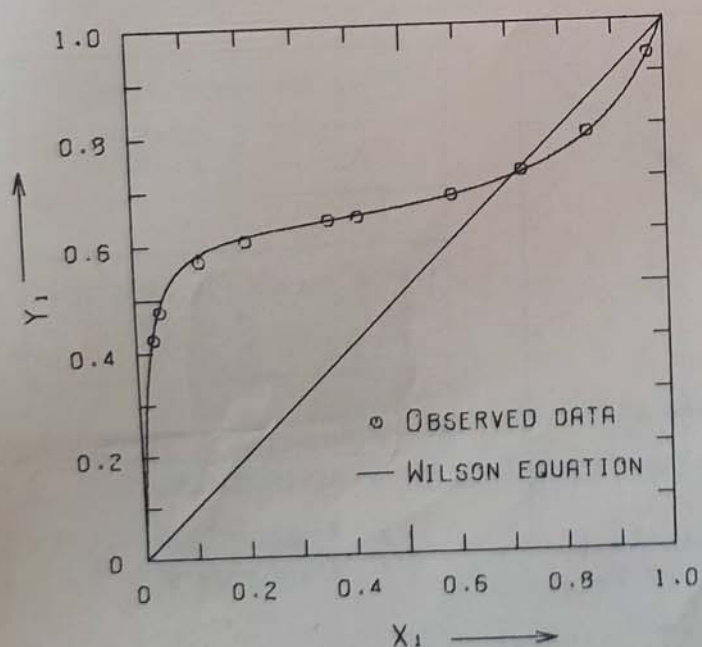
M. HIRATA AND S. OHE

DATA FROM KRETSCHMER C.B., WIEBE R.: J. AM. CHEM. SOC. 71, 1793 (1949)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0330	0.4216	35.00	79.38
0.0468	0.4749	35.00	86.34
0.1214	0.5662	35.00	102.09
0.2079	0.6014	35.00	108.93
0.3620	0.6346	35.00	114.26
0.4160	0.6384	35.00	115.34
0.5930	0.6730	35.00	117.90
0.7263	0.7164	35.00	118.57
0.8519	0.7848	35.00	116.56
0.9701	0.9318	35.00	107.64

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	8.04494	1554.300	222.650
2	6.95464	1344.800	219.482



WILSON PARAMETERS

$\Lambda_{12} = 0.10865$

$\Lambda_{21} = 0.40704$

ERROR* ON WILSON EQUATION

$Y_1 : 0.0059$

$T [^{\circ}\text{C}] : 0.17$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

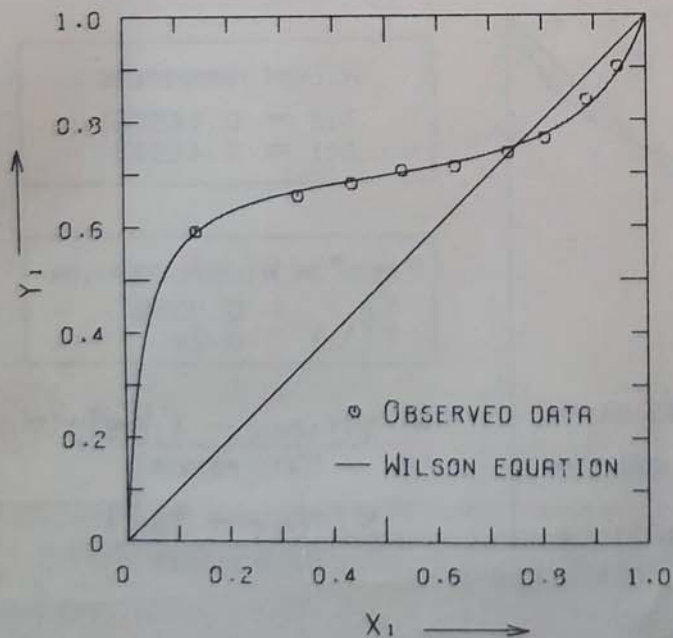
M. HIRATA AND S. OHE

DATA FROM LEHFELDT N.:PHIL.MAG.46.59(1898)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.1380	0.5910	50.00	199.50
0.3340	0.6590	50.00	235.00
0.4370	0.6810	50.00	241.00
0.5330	0.7050	50.00	245.00
0.6340	0.7130	50.00	247.00
0.7360	0.7390	50.00	249.00
0.8060	0.7660	50.00	246.50
0.8850	0.8390	50.00	241.50
0.9460	0.9020	50.00	233.50

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	8.04494	1554.300	222.650
2	6.95464	1344.800	219.482



WILSON PARAMETERS

$\Lambda_{12} = 0.23005$

$\Lambda_{21} = 0.32338$

ERROR* ON WILSON EQUATION

$Y_1 : 0.0079$

$T [^{\circ}\text{C}] : 0.14$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

M.HIRATA AND S.OHE

DATA FROM WRIGHT W.A.: J. PHYS. CHEM. 37, 233 (1933)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.1070	0.6180	60.00	240.00
0.2310	0.6750	60.00	367.00
0.3520	0.6830	60.00	373.00
0.4430	0.6900	60.00	382.00
0.5430	0.7110	60.00	387.00
0.6250	0.7230	60.00	390.00
0.7260	0.7440	60.00	395.00
0.7670	0.7580	60.00	397.00
0.8450	0.8020	60.00	397.00
0.9040	0.8530	60.00	388.00
0.9570	0.9220	60.00	375.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	8.04494	1554.300	222.650
2	6.95464	1344.800	219.482

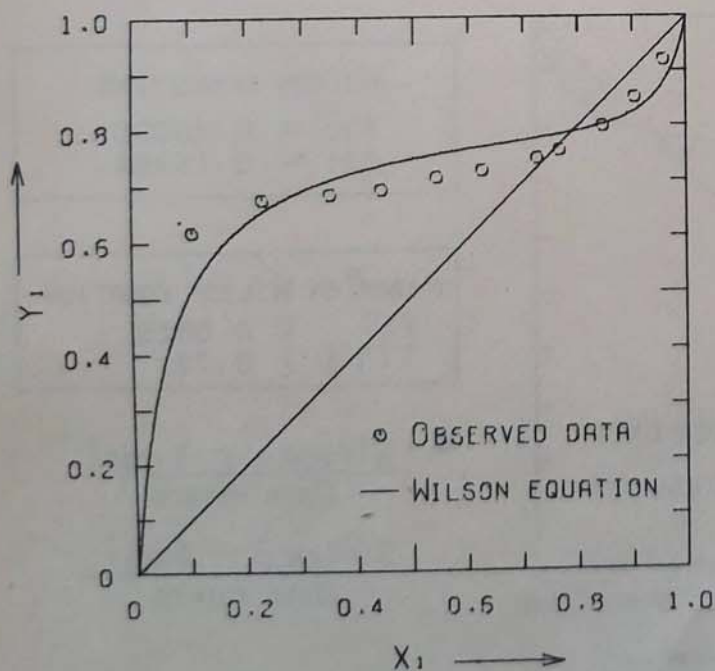


FIG. X - Y CURVE

WILSON PARAMETERS

$$\Lambda_{12} = 0.49002$$

$$\Lambda_{21} = 0.12957$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0375$$

$$T [^{\circ}\text{C}] : 0.74$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

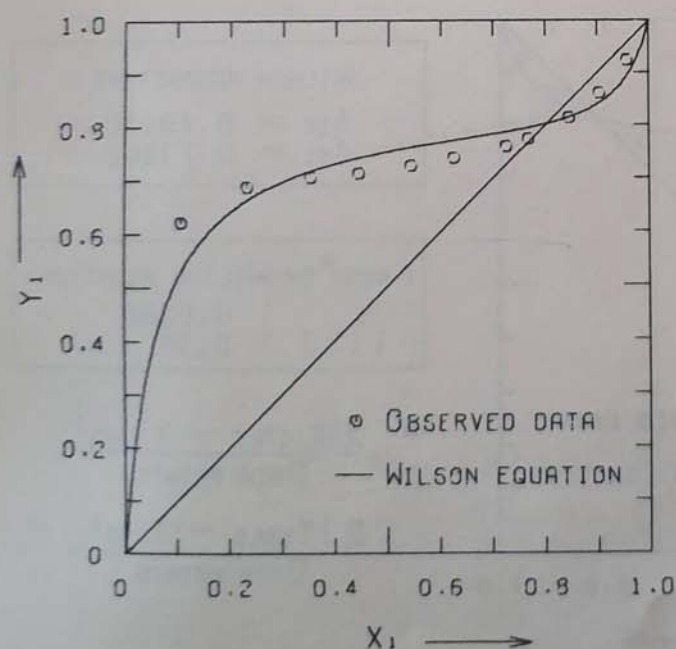
M. HIRATA AND S. OHE

DATA FROM WRIGHT H.A., J. PHYS. CHEM. 37, 233(1933)

X_1	Y_1	TEMPERATURE [°C.]	PRESSURE [mmHg]
0.1070	0.6200	70.00	367.00
0.2310	0.6860	70.00	557.00
0.3520	0.7030	70.00	569.00
0.4430	0.7100	70.00	572.00
0.5430	0.7240	70.00	584.00
0.6250	0.7390	70.00	590.00
0.7260	0.7600	70.00	592.00
0.7670	0.7740	70.00	598.00
0.8450	0.8140	70.00	598.00
0.9040	0.8610	70.00	591.00
0.9570	0.9240	70.00	575.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	8.04494	1554.300	222.650
2	6.95464	1344.800	219.482



WILSON PARAMETERS

$\Lambda_{12} = 0.48119$

$\Lambda_{21} = 0.15702$

ERROR* ON WILSON EQUATION

$Y_1 \quad \epsilon \quad 0.0298$

$T [^{\circ}\text{C.}] \quad \epsilon \quad 0.75$

* $\frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$

$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$

FIG. X - Y CURVE

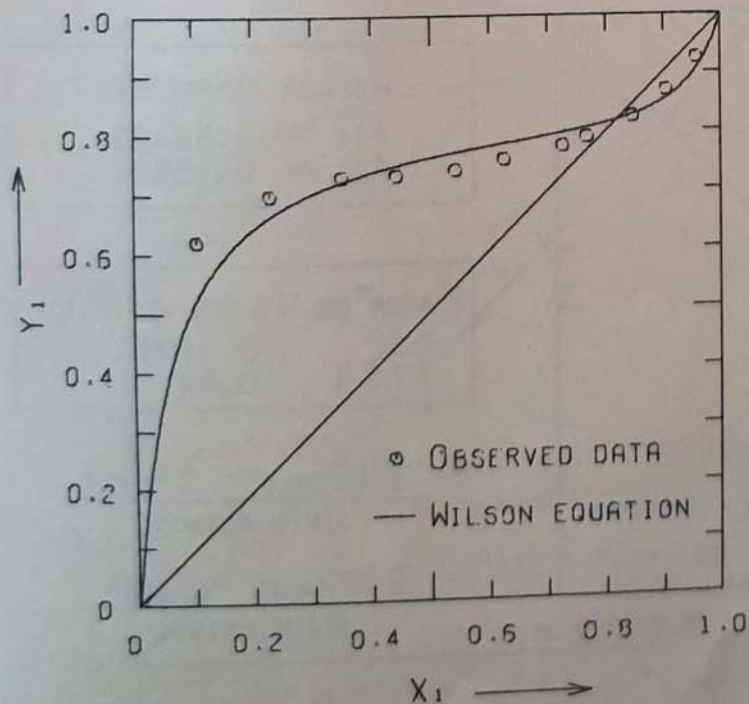
M. HIRATA AND S. OHE

DATA FROM WRIGHT W.A.: J. PHYS. CHEM. 37, 233 (1933)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.1070	0.6210	80.00	537.00
0.2310	0.6990	80.00	818.00
0.3520	0.7290	80.00	832.00
0.4430	0.7300	80.00	844.00
0.5430	0.7380	80.00	856.00
0.6250	0.7550	80.00	864.00
0.7260	0.7770	80.00	874.00
0.7670	0.7910	80.00	877.00
0.8450	0.8250	80.00	880.00
0.9040	0.8700	80.00	868.00
0.9570	0.9260	80.00	848.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	8.04494	1554.300	222.650
2	6.95464	1344.800	219.482



WILSON PARAMETERS

$$\Lambda_{12} = 0.51575$$

$$\Lambda_{21} = 0.16973$$

ERROR* ON WILSON EQUATION

$$Y_1 \quad : \quad 0.0260$$

$$T [^{\circ}\text{C}] \quad : \quad 0.77$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

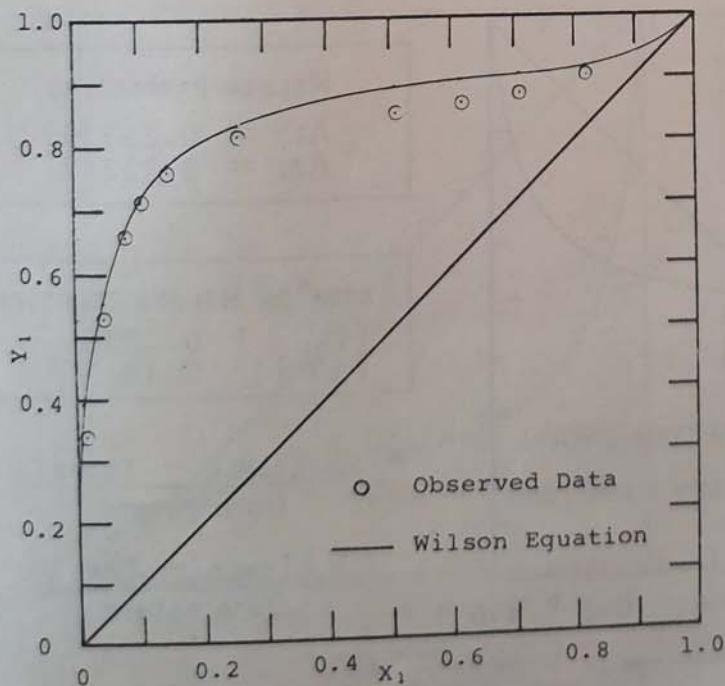
M. HIRATA AND S. OHE

DATA FROM ELLIS S.R.M., SPURR J.M. (BRIT. CHEM. ENG. 6, 93(1961))

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0240	0.3400	120.00	760.00
0.0480	0.5250	110.00	760.00
0.0820	0.6600	100.00	760.00
0.1090	0.7130	95.00	760.00
0.1500	0.7650	90.00	760.00
0.2600	0.8150	85.00	760.00
0.5100	0.8490	82.00	760.00
0.6160	0.8630	80.80	760.00
0.7100	0.8750	80.00	760.00
0.8200	0.9030	79.10	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	8.16290	1623.220	228.980
2	6.95719	1424.255	213.206



Wilson Parameters

$\Lambda_{12} = 0.60581$

$\Lambda_{21} = 0.08711$

Error* on Wilson Equation

$Y_1 : 0.0242$

$T[°C] : 1.55$

* $\frac{\sum |Y_{1calc} - Y_{1obs}|}{\text{Data Points}}$

$\frac{\sum |T_{calc} - T_{obs}|}{\text{Data Points}}$

FIG. X - Y CURVE

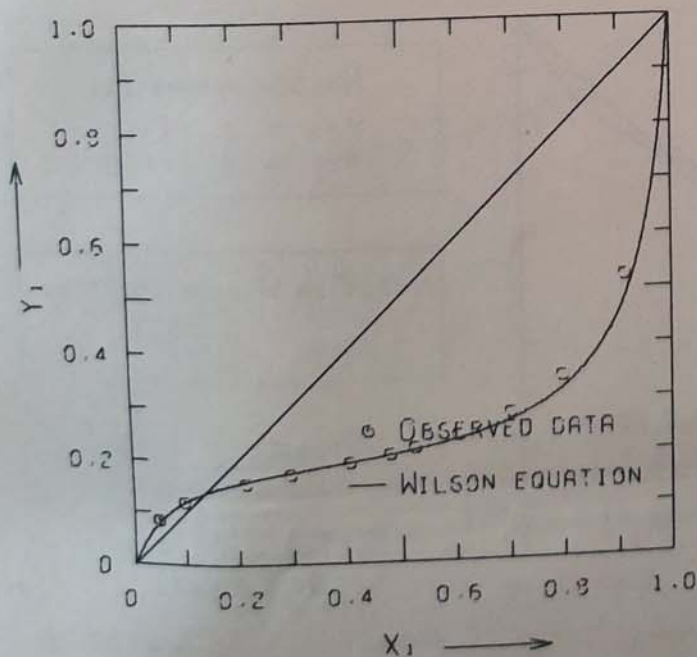
M. HIRATA AND S. OHE

DATA FROM BROWN I., SMITH F., AUSTR. J. CHEM. 12 407 (1959)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0470	0.0843	45.00	235.26
0.0977	0.1194	45.00	238.35
0.2144	0.1560	45.00	237.55
0.2973	0.1728	45.00	234.89
0.4061	0.1935	45.00	229.51
0.4807	0.2080	45.00	224.13
0.5252	0.2185	45.00	220.42
0.6053	0.2402	45.00	211.04
0.7033	0.2790	45.00	194.66
0.7982	0.3437	45.00	170.06
0.9140	0.5252	45.00	122.08

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.99733	1569.700	209.500
2	6.90565	1211.033	220.790



WILSON PARAMETERS

$$\Lambda_{12} = 0.18702$$

$$\Lambda_{21} = 0.52058$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0101$$

$$T [^{\circ}\text{C}] : 0.34$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

M. HIRATA AND S. OHE

DATA FROM MALYUSOV V.A. ET AL.:ZH.FIZ.KHIM.31.699(1957).

X_1	Y_1	T [°C]	P [mmHg]	X_1	Y_1	T [°C]	P [mmHg]
0.0410	0.3450	56.20	50.00	0.5670	0.7540	40.00	50.00
0.0870	0.5360	50.00	50.00	0.6160	0.7670	40.00	50.00
0.1310	0.5940	46.80	50.00	0.6250	0.7770	39.80	50.00
0.1530	0.6200	45.80	50.00	0.6780	0.7880	39.60	50.00
0.1990	0.6660	44.00	50.00	0.7480	0.8200	39.40	50.00
0.2300	0.6950	43.00	50.00	0.8000	0.8330	39.00	50.00
0.2700	0.6970	42.60	50.00	0.8340	0.8610	38.00	50.00
0.2780	0.7050	42.40	50.00	0.8340	0.8930	39.60	50.00
0.3640	0.7250	41.20	50.00	0.9000	0.9000	39.50	50.00
0.3680	0.7270	41.20	50.00	0.9000	0.9333	39.50	50.00
0.4090	0.7450	40.80	50.00	0.9420	0.9380	39.30	50.00
0.4510	0.7400	40.60	50.00	0.9800	0.9780	39.00	50.00
0.4680	0.7540	40.60	50.00				
0.5080	0.7520	40.40	50.00				
0.5140	0.7640	40.40	50.00				

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.85418	1497.910	204.112
2	6.92409	1420.000	206.000

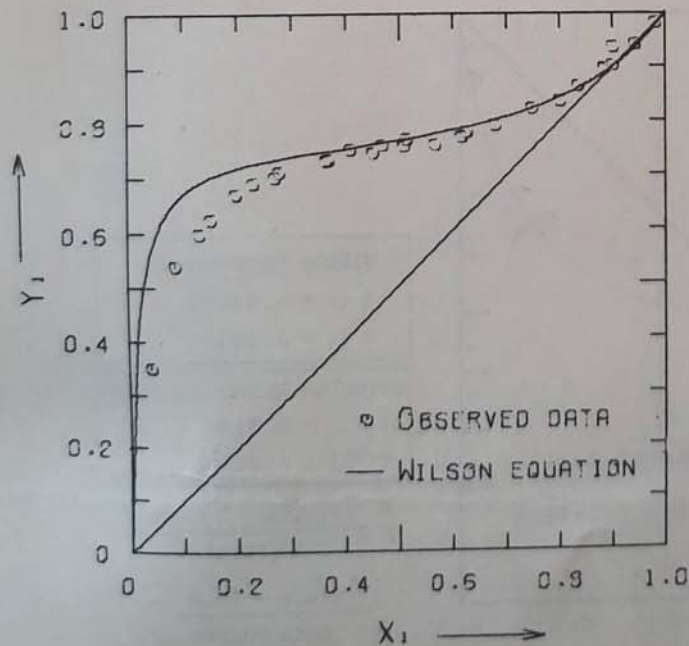


FIG. X - Y CURVE

WILSON PARAMETERS

$\Lambda_{12} = 0.14161$

$\Lambda_{21} = 0.44756$

ERROR* ON WILSON EQUATION

$Y_1 : 0.0316$

$T[°C] : 1.14$

* $\frac{\sum |Y_{1CALC} - Y_{1OBS}|}{\text{DATA POINTS}}$

$\frac{\sum |T_{CALC} - T_{OBS}|}{\text{DATA POINTS}}$

2-PROPANOL(1)-N-HEPTANE(2)

DATA FROM H.C. VAN NESS, ET AL., J. CHEM. ENG. DATA, VOL. 12, NO. 2, P. 217 (1967)

X_1	Y_1	T [°C]	P [mmHg]	X_1	Y_1	T [°C]	P [mmHg]
0.0050	0.0820	60.00	229.10	0.9500	0.8260	60.00	335.93
0.0100	0.1470	60.00	245.78	0.9800	0.9130	60.00	311.31
0.0300	0.2970	60.00	294.64	0.9900	0.9520	60.00	300.92
0.0500	0.3560	60.00	318.61				
0.1000	0.4190	60.00	347.43				
0.1500	0.4520	60.00	362.44				
0.2000	0.4740	60.00	373.32				
0.3000	0.5070	60.00	394.23				
0.4000	0.5340	60.00	391.83				
0.5000	0.5580	60.00	395.30				
0.6000	0.5830	60.00	396.17				
0.7000	0.6140	60.00	393.29				
0.8000	0.6610	60.00	394.11				
0.8500	0.6930	60.00	375.54				
0.9000	0.7410	60.00	361.39				

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.66040	813.055	132.930
2	6.90240	1268.115	216.900

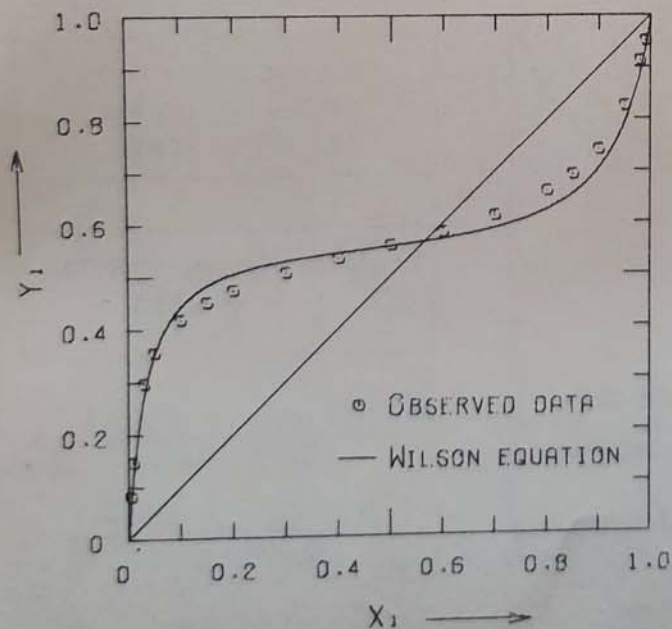


FIG. X - Y CURVE

WILSON PARAMETERS

$$\Lambda_{12} = 0.16554$$

$$\Lambda_{21} = 0.26335$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0200$$

$$T [^{\circ}\text{C}] : 0.46$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

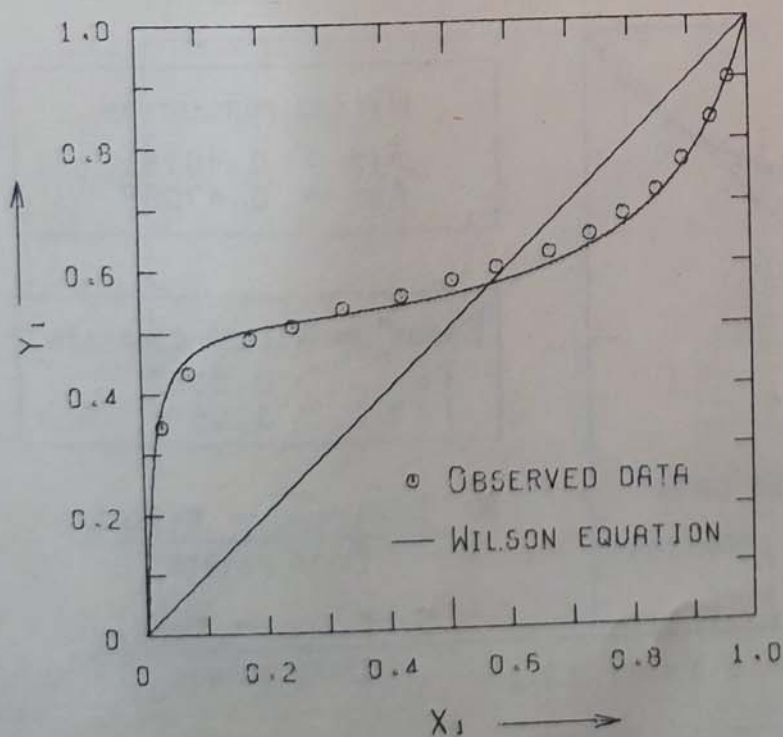
M. HIRATA AND S. OHE

DATA FROM NAGATA, I., J. CHEM. ENG. DATA, VOL. 10, P. 106 (1965)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0300	0.3440	75.40	500.00
0.0770	0.4340	71.00	500.00
0.1800	0.4910	64.80	500.00
0.2500	0.5110	68.00	500.00
0.3310	0.5400	67.00	500.00
0.4270	0.5580	66.80	500.00
0.5090	0.5810	66.70	500.00
0.5810	0.6000	66.60	500.00
0.6680	0.6230	66.50	500.00
0.7350	0.6500	66.50	500.00
0.7880	0.6820	67.00	500.00
0.8430	0.7190	67.50	500.00
0.8870	0.7680	68.10	500.00
0.9350	0.8350	69.20	500.00
0.9650	0.8990	70.30	500.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.66040	813.055	132.930
2	6.81790	1266.954	220.868



WILSON PARAMETERS

$$\Lambda_{12} = 0.09067$$

$$\Lambda_{21} = 0.43978$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0149$$

$$T [^{\circ}\text{C}] : 0.67$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG X - Y CURVE

M. HIRATA AND S. OHE

DATA FROM DENYER, P. L., F. A. FIDLER, P. A. LOWRY, IND. ENG. CHEM. VOL. 41, P. 2727 (1949)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0830	0.1350	67.36	760.00
0.1360	0.1910	66.76	760.00
0.2100	0.2650	65.97	760.00
0.2890	0.3420	65.27	760.00
0.3700	0.4170	64.93	760.00
0.5370	0.5420	64.26	760.00
0.6550	0.6330	64.31	760.00
0.7650	0.7310	64.58	760.00
0.8370	0.7970	65.02	760.00
0.9170	0.8270	65.82	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.91871	1179.210	224.287
2	6.87776	1171.530	224.366

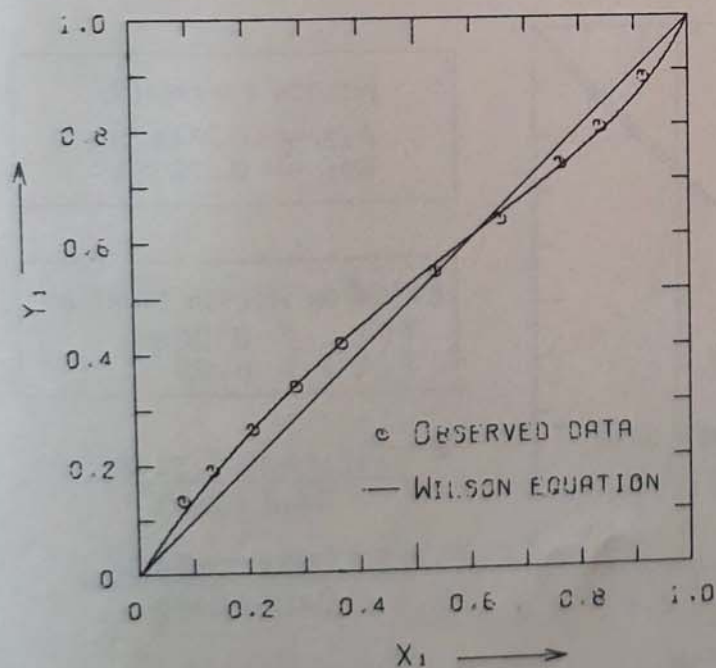


FIG. X - Y CURVE

WILSON PARAMETERS

$$\Lambda_{12} = 1.31096$$

$$\Lambda_{21} = 0.34931$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0090$$

$$T [^{\circ}C] : 0.09$$

$$* \frac{\sum |Y_{1CALC} - Y_{1OBS}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{CALC} - T_{OBS}|}{\text{DATA POINTS}}$$

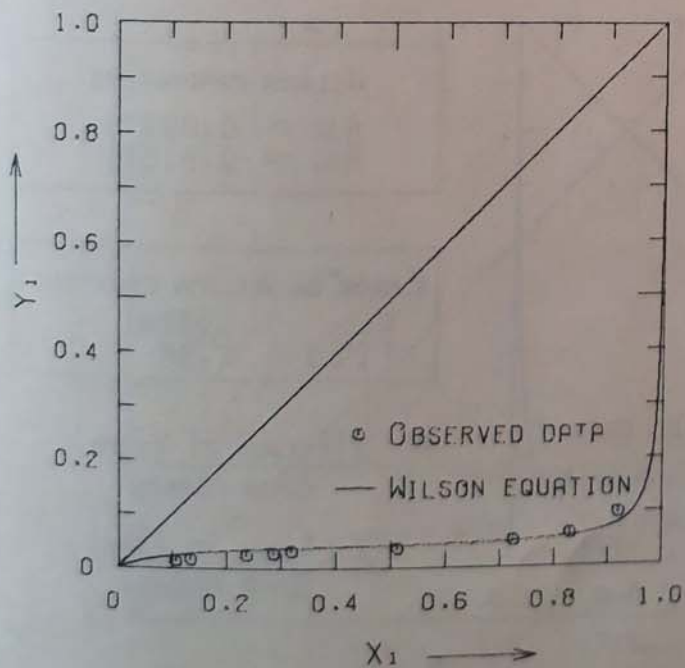
M. HIRATA AND S. OHE

DATA FROM SMIRNOVA, N.A. ET AL: ZH. FIZ. KHIM. VOL 43, P. 1883 (1969)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.1060	0.0130	25.00	
0.1330	0.0160	25.00	149.80
0.2350	0.0240	25.00	149.60
0.2850	0.0280	25.00	146.60
0.3190	0.0310	25.00	144.80
0.5120	0.0360	25.00	142.70
0.7240	0.0500	25.00	136.10
0.8290	0.0610	25.00	115.40
0.9180	0.0990	25.00	96.60
		25.00	62.30

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.65521	1462.060	188.700
2	6.87776	1171.530	224.366



WILSON PARAMETERS

$\Lambda_{12} = 0.23315$

$\Lambda_{21} = 0.22342$

ERROR* ON WILSON EQUATION

$Y_1 : 0.0108$

$T [^{\circ}\text{C}] : 1.62$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

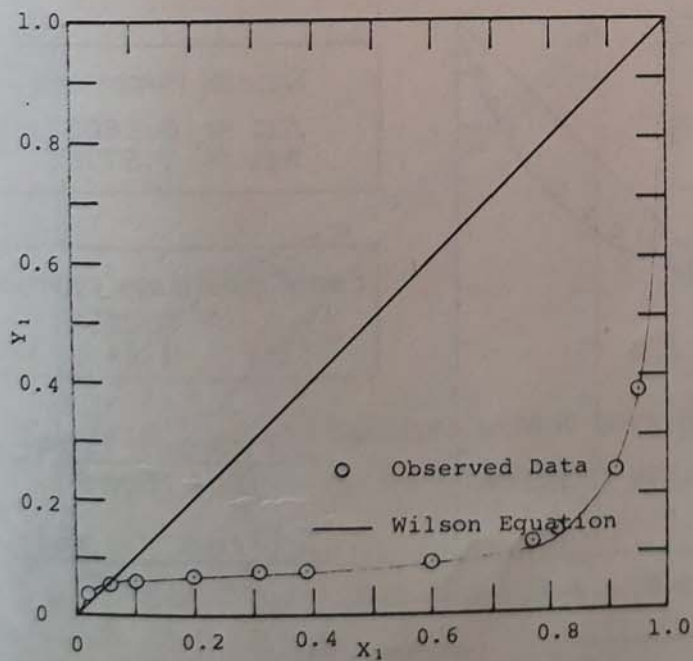
M. HIRATA AND S. OHE

DATA FROM SMIRNOVA, N.A. ET AL.; ZH. FIZ. KHIM. VOL. 43, P. 1893 (1969)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0140	0.0340	45.00	232.40
0.0580	0.0510	45.00	234.30
0.1010	0.0610	45.00	232.30
0.2000	0.0670	45.00	228.90
0.3100	0.0720	45.00	224.00
0.3900	0.0770	45.00	218.90
0.6000	0.0910	45.00	196.00
0.6900	0.1050	45.00	174.50
0.7700	0.1240	45.00	152.10
0.8100	0.1430	45.00	135.40
0.9120	0.2470	45.00	87.00
0.9500	0.3770	45.00	63.90

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.65521	1462.060	188.700
2	6.84498	1203.526	222.863



Wilson Parameters

$\Lambda_{12} = 0.02803$

$\Lambda_{21} = 0.66099$

Error* on Wilson Equation

$Y_1 : 0.0062$

$T[°C] : 0.45$

* $\frac{\sum |Y_{1calc} - Y_{1obs}|}{\text{Data Points}}$

$\frac{\sum |T_{calc} - T_{obs}|}{\text{Data Points}}$

FIG. X - Y CURVE

M. HIRATA AND S. OHE

DATA FROM ELLIS, S. R. M. & M. RAZAVIPOUR: CHEM. ENG. SCI., VOL. 11, P. 99 (1959)

X_1	Y_1	T [°C]	P [MMHG]	X_1	Y_1	T [°C]	P [MMHG]
0.0415	0.1580	131.45	760.00	0.7835	0.7690	115.85	760.00
0.0560	0.2025	129.75	760.00	0.8310	0.8055	115.85	760.00
0.0980	0.2905	126.80	760.00	0.8810	0.8495	116.20	760.00
0.1490	0.3830	123.90	760.00	0.9270	0.9000	116.75	760.00
0.1975	0.4335	121.80	760.00	0.9695	0.9555	117.20	760.00
0.2570	0.4805	120.30	760.00				
0.3170	0.5190	119.05	760.00				
0.3710	0.5500	118.15	760.00				
0.4290	0.5790	117.50	760.00				
0.4765	0.6000	116.95	760.00				
0.5270	0.6210	116.65	760.00				
0.5735	0.6470	116.35	760.00				
0.6190	0.6680	116.05	760.00				
0.6680	0.7005	115.80	760.00				
0.7285	0.7285	115.85	760.00				

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.65521	1462.060	188.700
2	6.95719	1424.255	213.206

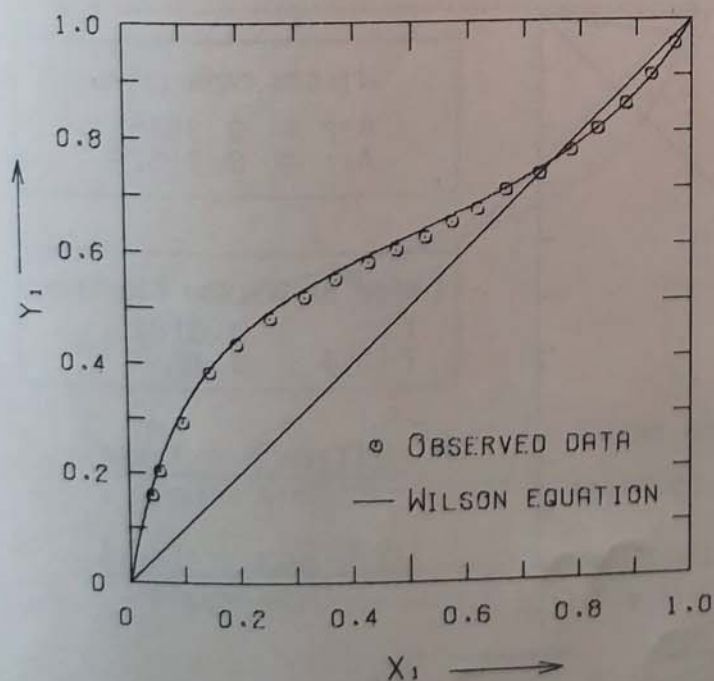


FIG. X - Y CURVE

WILSON PARAMETERS

$$\Lambda_{12} = 0.51310$$

$$\Lambda_{21} = 0.57094$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0104$$

$$T [^{\circ}\text{C}] : 0.28$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

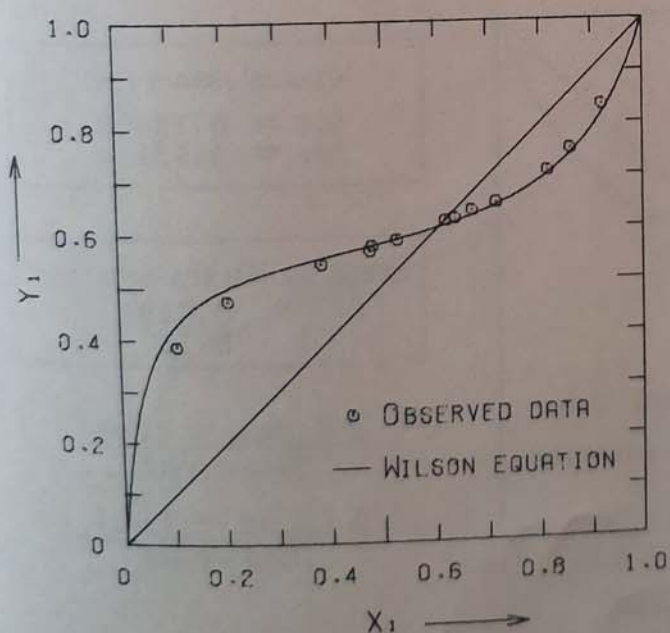
M. HIRATA AND S. OHE

DATA FROM GARBER, YU. N., ETAL: ZH. PRIKL. KHIM., VOL. 41, (2), P. 318 (1968)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.1110	0.3900	59.50	60.00
0.2090	0.4770	56.00	60.00
0.3850	0.5450	55.00	60.00
0.4770	0.5680	54.50	60.00
0.4820	0.5770	54.50	60.00
0.5280	0.5870	54.50	60.00
0.6210	0.6210	54.50	60.00
0.6390	0.6260	54.50	60.00
0.6720	0.6400	54.50	60.00
0.7180	0.6540	54.50	60.00
0.8160	0.7130	55.00	60.00
0.8600	0.7540	55.50	60.00
0.9220	0.8380	57.00	60.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	8.64900	2283.300	273.150
2	6.99891	1474.679	213.686



WILSON PARAMETERS

$$\Lambda_{12} = 0.21403$$

$$\Lambda_{21} = 0.42439$$

ERROR* ON WILSON EQUATION

$$Y_1 \quad 0.0118$$

$$T [^{\circ}\text{C}] \quad 0.23$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG X - Y CURVE

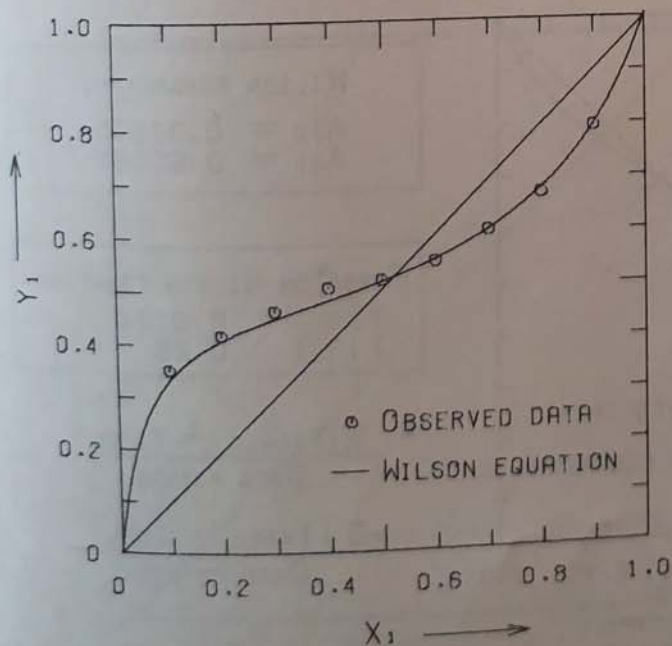
M. HIRATA AND S. OHE

DATA FROM GARBER, YU. N., ETAL: ZH. PRIKL. KHIM. VOL. 41, (2), P. 318 (1968)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.1000	0.3460	55.80	60.00
0.2000	0.4120	54.50	60.00
0.3000	0.4580	54.00	60.00
0.4000	0.5000	53.50	60.00
0.5000	0.5110	53.50	60.00
0.6000	0.5450	53.50	60.00
0.7000	0.6000	54.00	60.00
0.8000	0.6670	54.80	60.00
0.9000	0.7900	56.50	60.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	8.64900	2283.300	273.150
2	6.99052	1453.430	215.307



WILSON PARAMETERS

$\Lambda_{12} = 0.19812$

$\Lambda_{21} = 0.63787$

ERROR* ON WILSON EQUATION

$Y_1 : 0.0095$

$T [^{\circ}\text{C}] : 0.15$

* $\frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$

$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$

FIG. X - Y CURVE

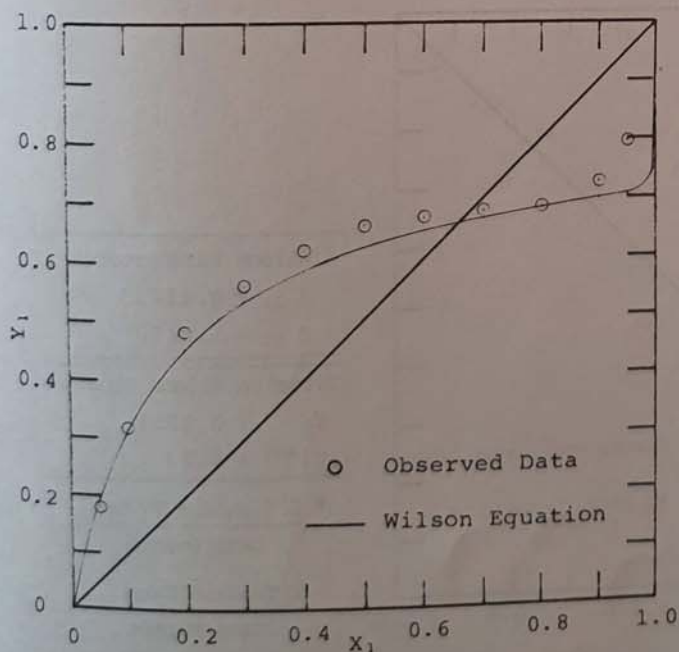
M. HIRATA AND S. OHE

DATA FROM SCHICKTANZ, S.T.: J. RES. BUR. STAND. VOL. 19, P. 123 (1937)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.0500	0.1780	121.30	760.00
0.1000	0.3170	117.75	760.00
0.2000	0.4820	112.70	760.00
0.3000	0.5620	109.60	760.00
0.4000	0.6210	107.25	760.00
0.5000	0.6580	105.70	760.00
0.6000	0.6730	105.15	760.00
0.7000	0.6790	105.10	760.00
0.8000	0.6860	105.25	760.00
0.9000	0.7270	106.20	760.00
0.9500	0.7948	109.05	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.18807	1416.700	211.000
2	6.92374	1355.126	209.517



Wilson Parameters

$\Lambda_{12} = 0.62266$

$\Lambda_{21} = 0.11475$

Error* on Wilson Equation

$Y_1 : 0.0322$

$T[°C] : 1.78$

* $\frac{\sum |Y_{1calc} - Y_{1obs}|}{\text{Data Points}}$

$\frac{\sum |T_{calc} - T_{obs}|}{\text{Data Points}}$

FIG. X - Y CURVE

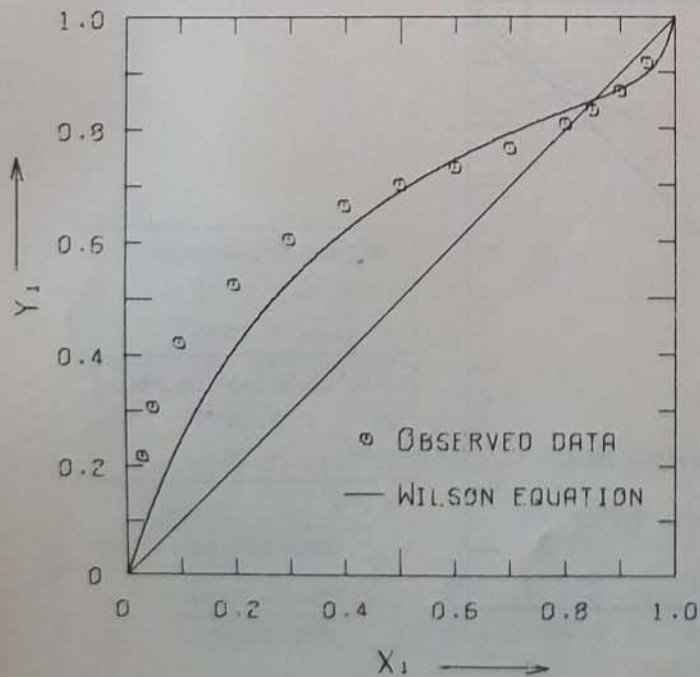
M. HIRATA AND S. OHE

DATA FROM DTMER, D.F.: IND. ENG. CHEM., VOL. 35, P. 614 (1943)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0300	0.2150	135.00	760.00
0.0500	0.3060	132.80	760.00
0.1000	0.4210	128.50	760.00
0.2000	0.5250	123.10	760.00
0.3000	0.6050	120.10	760.00
0.4000	0.6640	118.30	760.00
0.5000	0.7010	117.00	760.00
0.6000	0.7320	116.30	760.00
0.7000	0.7640	115.60	760.00
0.8000	0.8070	115.20	760.00
0.8500	0.8320	115.30	760.00
0.9000	0.8650	115.40	760.00
0.9500	0.9160	116.20	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.18807	1416.700	211.000
2	6.99052	1453.430	215.307



WILSON PARAMETERS

$$\Lambda_{12} = 1.48996$$

$$\Lambda_{21} = 0.06772$$

ERROR* ON WILSON EQUATION

$$Y_1 \quad 0.0631$$

$$T [^{\circ}\text{C}] \quad 1.40$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

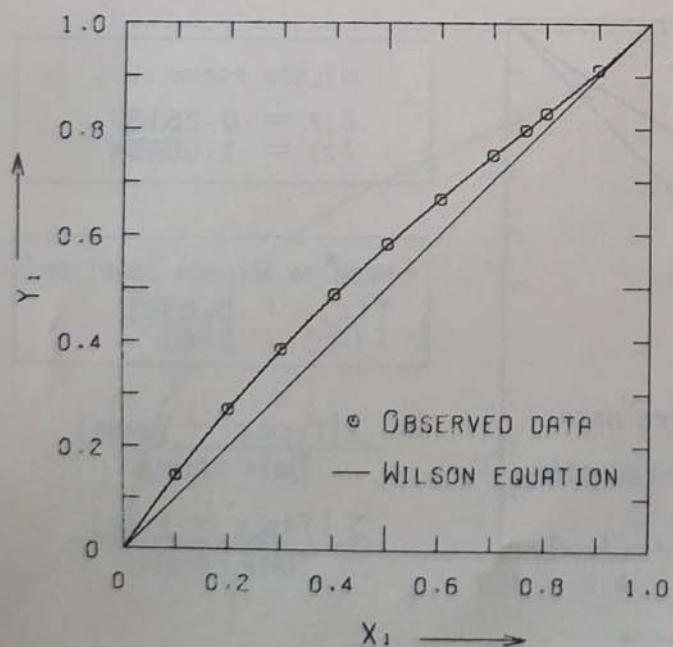
M. HIRATA AND S. OHE

DATA FROM LUMBUHOB, H.A.: ZUR. FIZIC. CHIM. VOL. 14, P. 782 (1940)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.1000	0.1410	35.00	612.90
0.2000	0.2683	35.00	640.40
0.3000	0.3826	35.00	666.50
0.4000	0.4852	35.00	690.50
0.5000	0.5799	35.00	715.00
0.6000	0.6635	35.00	731.70
0.7000	0.7460	35.00	747.30
0.7604	0.7945	35.00	755.40
0.8000	0.8266	35.00	760.30
0.9000	0.9097	35.00	769.60

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.78574	994.195	220.000
2	6.87215	1049.221	220.570



WILSON PARAMETERS

$$\Lambda_{12} = 1.57398$$

$$\Lambda_{21} = 0.41334$$

ERROR* ON WILSON EQUATION

$$Y_1 \quad 0.0009$$

$$T [^{\circ}\text{C}] \quad 0.02$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

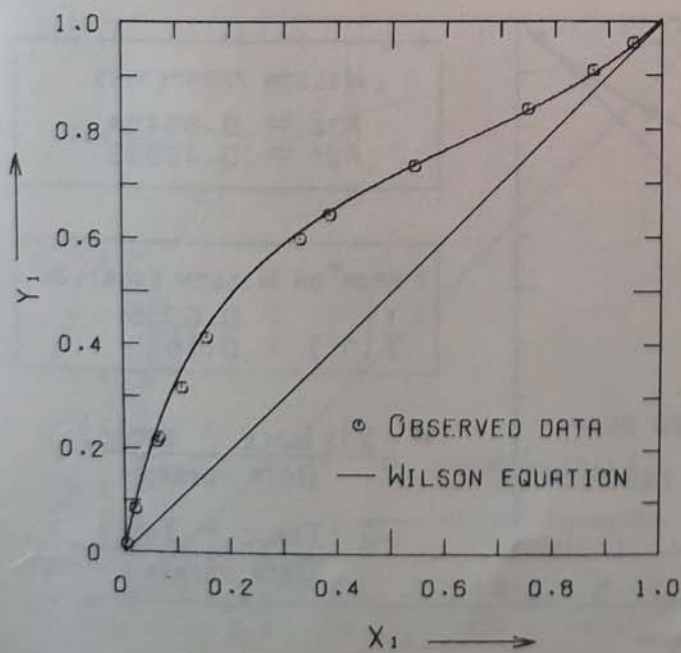
M. HIRATA AND S. OHE

DATA FROM SAMESHIMA, J.: J. AM. CHEM. SOC. VOL. 40, P. 1482 (1918)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0041	0.0098	20.00	185.90
0.0210	0.0784	20.00	196.80
0.0642	0.2090	20.00	221.30
0.0683	0.2168	20.00	222.80
0.1117	0.3129	20.00	247.60
0.1584	0.4089	20.00	271.60
0.3338	0.5951	20.00	334.00
0.3879	0.6389	20.00	351.20
0.5430	0.7283	20.00	387.00
0.7510	0.8332	20.00	420.70
0.8729	0.9041	20.00	435.90
0.9480	0.9557	20.00	441.80

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.78574	994.195	220.000
2	7.02447	1161.000	224.000



WILSON PARAMETERS

$\Lambda_{12} = 0.77589$

$\Lambda_{21} = 0.53081$

ERROR* ON WILSON EQUATION

$Y_1 : 0.0148$

$T [^{\circ}\text{C}] : 0.33$

* $\frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$

$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$

FIG. X - Y CURVE

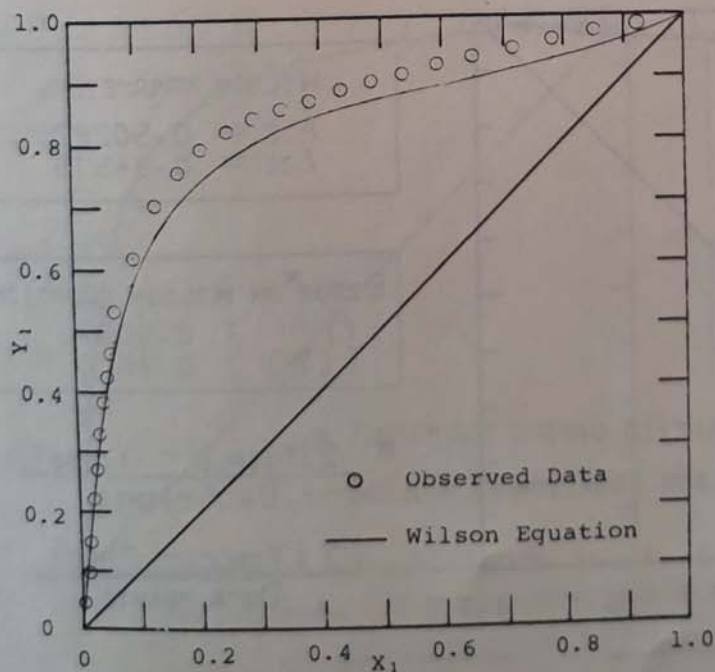
M. HIRATA AND S. OHE

DATA FROM KIREEV V.A., KHACHADUROVA E.M., ZH. PRIKL. KHIM., 7, 495 (1934)

X_1	Y_1	T [°C]	P [mmHg]	X_1	Y_1	T [°C]	P [mmHg]
0.0060	0.0480	76.60	760.00	0.2930	0.0410	47.40	760.00
0.0125	0.0980	75.10	760.00	0.3370	0.0570	45.30	760.00
0.0189	0.1530	73.70	760.00	0.3830	0.0710	44.60	760.00
0.0252	0.2220	72.20	760.00	0.4320	0.0860	43.50	760.00
0.0317	0.2710	70.80	760.00	0.4830	0.0990	42.30	760.00
0.0382	0.3310	69.50	760.00	0.5350	0.1110	41.10	760.00
0.0447	0.3930	68.20	760.00	0.5920	0.1230	40.00	760.00
0.0513	0.4270	66.90	760.00	0.6510	0.1360	39.20	760.00
0.0579	0.4660	65.70	760.00	0.7130	0.1480	39.40	760.00
0.0646	0.5330	64.50	760.00	0.7790	0.1600	37.70	760.00
0.0989	0.6210	59.40	760.00	0.8480	0.1730	37.00	760.00
0.1340	0.7040	55.80	760.00	0.9220	0.1850	35.40	760.00
0.1720	0.7590	53.10	760.00				
0.2100	0.7960	50.60	760.00				
0.2510	0.8230	48.90	760.00				

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.99227	1051.305	227.432
2	9.16290	1623.220	228.980



Wilson Parameters

$\Lambda_{12} = 0.53262$

$\Lambda_{21} = 0.44277$

Error* on Wilson Equation

$Y_1 : 0.0332$

$T[°C] : 0.24$

* $\frac{\sum |Y_{1calc} - Y_{1obs}|}{\text{Data Points}}$

$\frac{\sum |T_{calc} - T_{obs}|}{\text{Data Points}}$

FIG X - Y CURVE

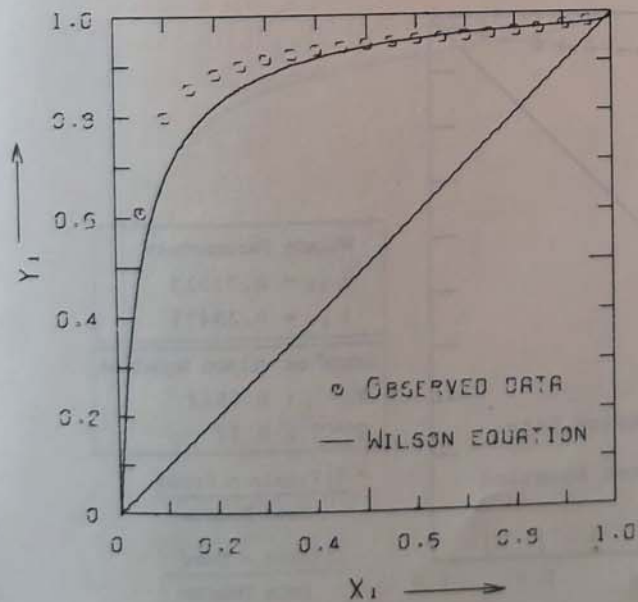
M. HIRATA AND S. OHE

DATA FROM NAGAI J., 1611 N. J. SOC. CHEM. IND. JAPAN 38, B(1935)

X_1	Y_1	T [°C]	P [mmHg]	X_1	Y_1	T [°C]	P [mmHg]
0.0500	0.6116	10.00	59.67	0.9200	0.9667	10.00	265.38
0.1000	0.8034	10.00	93.10	0.9500	0.9720	10.00	272.35
0.1500	0.8590	10.00	121.41	0.9000	0.9783	10.00	278.70
0.2000	0.8866	10.00	142.55	0.9500	0.9851	10.00	285.12
0.2500	0.9039	10.00	161.22				
0.3000	0.9159	10.00	177.03				
0.3500	0.9253	10.00	190.45				
0.4000	0.9323	10.00	202.70				
0.4500	0.9386	10.00	214.81				
0.5000	0.9442	10.00	224.57				
0.5500	0.9487	10.00	232.01				
0.6000	0.9523	10.00	239.40				
0.6500	0.9555	10.00	245.06				
0.7000	0.9585	10.00	251.97				
0.7500	0.9622	10.00	259.00				

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.89227	1051.305	227.432
2	8.16290	1623.220	228.980



WILSON PARAMETERS

$\Lambda_{12} = 1.62469$

$\Lambda_{21} = 0.03110$

ERROR* ON WILSON EQUATION

$Y_1 : 0.0352$

$T [^{\circ}\text{C}] : 2.52$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

M. HIRATA AND S. OHE

DATA FROM MOELLER, W.P., S.W. ENGLUND, T.K. TSUI, D.F. OTTNER: IND. ENG. CHEM., VOL. 49, P. 711 (1957)

X_1	Y_1	T [°C]	P [MMHG]	X_1	Y_1	T [°C]	P [MMHG]
0.0050	0.1105	25.00	66.00	0.7000	0.9390	25.00	462.50
0.0100	0.1985	25.00	73.10	0.9000	0.9550	25.00	485.20
0.0200	0.3305	25.00	96.70	0.9000	0.9760	25.00	509.20
0.0400	0.4950	25.00	112.80	0.9500	0.9990	25.00	522.20
0.0600	0.5940	25.00	137.30				
0.0900	0.6600	25.00	160.10				
0.1000	0.7070	25.00	191.30				
0.1500	0.7815	25.00	229.50				
0.2000	0.8245	25.00	269.90				
0.2500	0.8520	25.00	302.20				
0.3000	0.8700	25.00	330.70				
0.3500	0.8930	25.00	355.40				
0.4000	0.8990	25.00	376.10				
0.5000	0.9110	25.00	410.60				
0.6000	0.9250	25.00	439.90				

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.78574	994.195	220.000
2	8.04494	1554.300	222.650

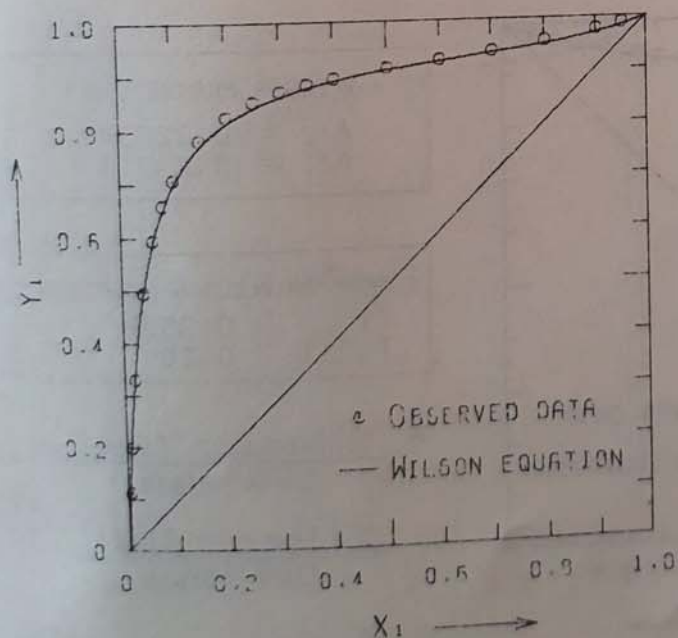


FIG. X - Y CURVE

WILSON PARAMETERS

$$\Lambda_{12} = 0.72377$$

$$\Lambda_{21} = 0.35289$$

ERROR* ON WILSON EQUATION

$$Y_1 = 0.0101$$

$$T [^{\circ}\text{C}] = 0.64$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

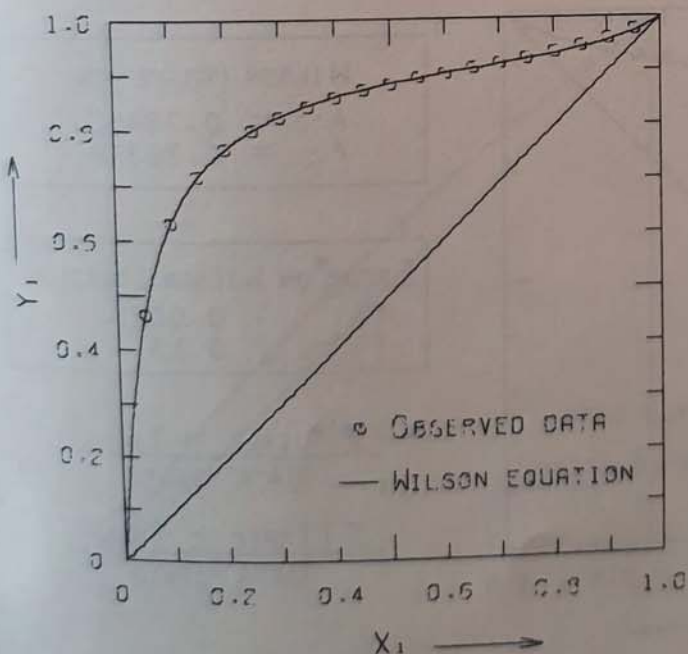
M. HIRATA AND S. OHE

DATA FROM NAGAI J., ISII N.: J. SOC. CHEM. IND. JAPAN 38, B(1935)

X_1	Y_1	T [°C]	P [mmHg]	X_1	Y_1	T [°C]	P [mmHg]
0.0500	0.4618	40.00	299.00	0.9000	0.9357	40.00	946.90
0.1000	0.6303	40.00	330.30	0.9500	0.9466	40.00	966.00
0.1500	0.7150	40.00	408.50				
0.2000	0.7550	40.00	473.20				
0.2500	0.7992	40.00	529.50				
0.3000	0.8234	40.00	577.00				
0.3500	0.8420	40.00	617.60				
0.4000	0.8571	40.00	659.70				
0.4500	0.8706	40.00	697.60				
0.5000	0.8820	40.00	737.50				
0.5500	0.8912	40.00	772.00				
0.6000	0.8998	40.00	754.30				
0.6500	0.9083	40.00	785.20				
0.7000	0.9167	40.00	805.30				
0.7500	0.9257	40.00	826.50				

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.89227	1051.305	227.432
2	8.16290	1623.220	228.980



WILSON PARAMETERS

$$\Lambda_{12} = 0.77045$$

$$\Lambda_{21} = 0.29207$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0018$$

$$T [^{\circ}\text{C}] : 0.14$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG X - Y CURVE

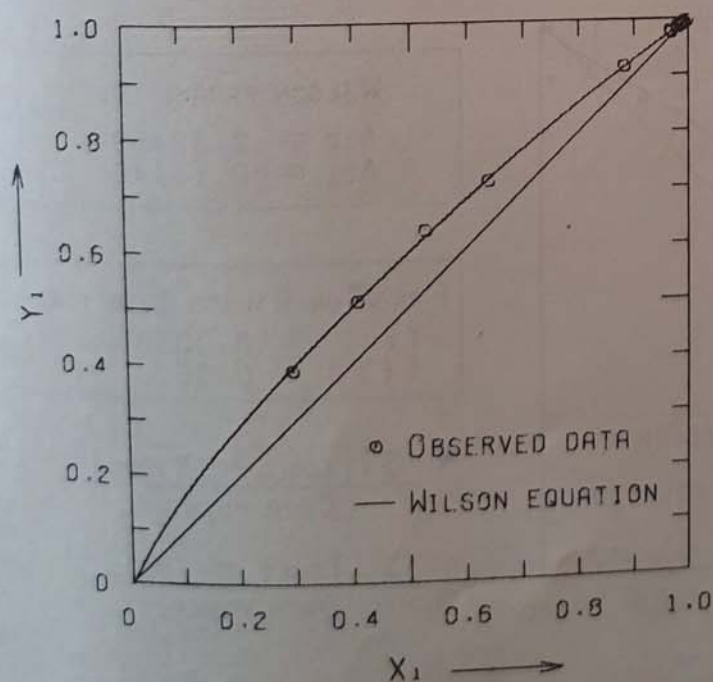
M. HIRATA AND S. OHE

DATA FROM COLES, K.F., F. POPPER: IND. ENG. CHEM., VOL. 42, P. 1434 (1950)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.2950	0.3900	17.30	760.00
0.4100	0.5130	16.00	760.00
0.5280	0.6360	14.60	760.00
0.6400	0.7200	13.50	760.00
0.8830	0.9180	11.60	760.00
0.9666	0.9792	10.70	760.00
0.9675	0.9778	10.70	760.00
0.9794	0.9861	10.60	760.00
0.9852	0.9908	10.60	760.00
0.9877	0.9912	10.60	760.00
0.9895	0.9930	10.60	760.00
0.9912	0.9947	10.60	760.00
0.9917	0.9956	10.40	760.00
0.9965	0.9982	10.40	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.25954	1114.410	244.065
2	6.81089	992.000	230.000



WILSON PARAMETERS

$$\Lambda_{12} = 0.30459$$

$$\Lambda_{21} = 1.89578$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0023$$

$$T [^{\circ}\text{C}] : 0.07$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

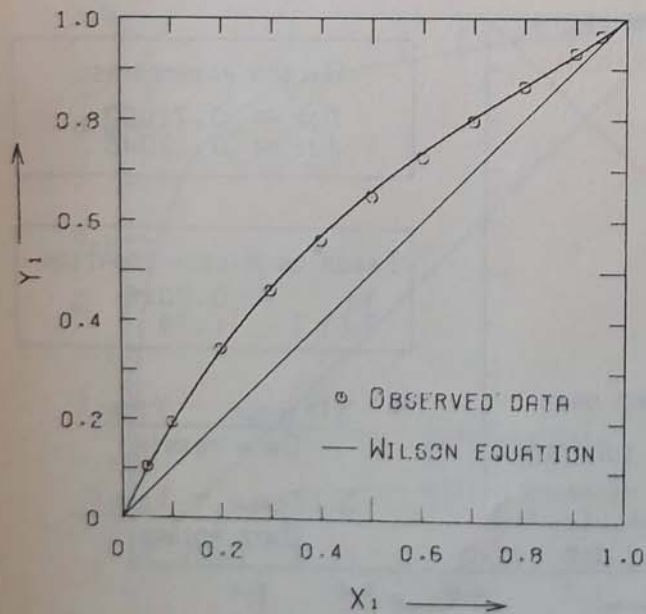
M. HIRATA AND S. OHE

DATA FROM SHNITKO.V.A.ETAL;ZH.PRIKL.KHIM.VOL42.P.2399(1969)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0500	0.1050	80.73	760.00
0.1000	0.1957	79.40	760.00
0.2000	0.3460	77.18	760.00
0.3000	0.4650	75.30	760.00
0.4000	0.5651	73.54	760.00
0.5000	0.6510	71.85	760.00
0.6000	0.7279	70.34	760.00
0.7000	0.7991	69.02	760.00
0.8000	0.8672	67.85	760.00
0.9000	0.9336	66.74	760.00
0.9500	0.9667	66.24	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.99515	1202.290	226.254
2	6.66040	813.055	132.930



WILSON PARAMETERS

$$\Lambda_{12} = 1.35224$$

$$\Lambda_{21} = 0.45485$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0057$$

$$T [^{\circ}\text{C}] : 0.13$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

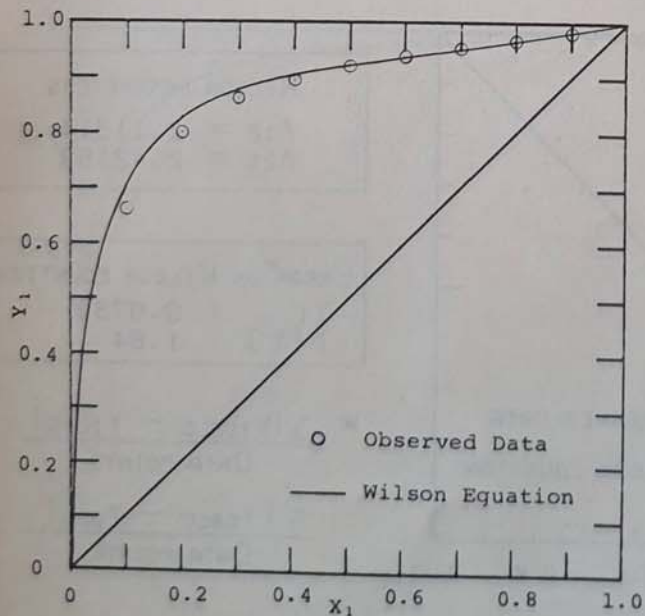
M.HIRATA AND S.OHE

DATA FROM MOLOCHNIKOV, M. L. ET AL; ZH. PRIKL. KHIM. VOL. 43, P. 2346 (1970)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.1000	0.6610	105.80	760.00
0.2000	0.8000	91.40	760.00
0.3000	0.8620	84.60	760.00
0.4000	0.8960	80.00	760.00
0.5000	0.9210	77.40	760.00
0.6000	0.9390	75.40	760.00
0.7000	0.9530	73.50	760.00
0.8000	0.9680	71.70	760.00
0.9000	0.9820	70.10	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.83726	1166.920	227.375
2	7.57627	1704.720	223.246



Wilson Parameters

$$\Lambda_{12} = 0.48359$$

$$\Lambda_{21} = 0.57031$$

Error* on Wilson Equation

$$Y_1 : 0.0111$$

$$T[°C] : 1.30$$

$$* \frac{\sum |Y_{1,calc} - Y_{1,obs}|}{\text{Data Points}}$$

$$\frac{\sum |T_{calc} - T_{obs}|}{\text{Data Points}}$$

$$\frac{\sum |T_{calc} - T_{obs}|}{\text{Data Points}}$$

FIG. X - Y CURVE

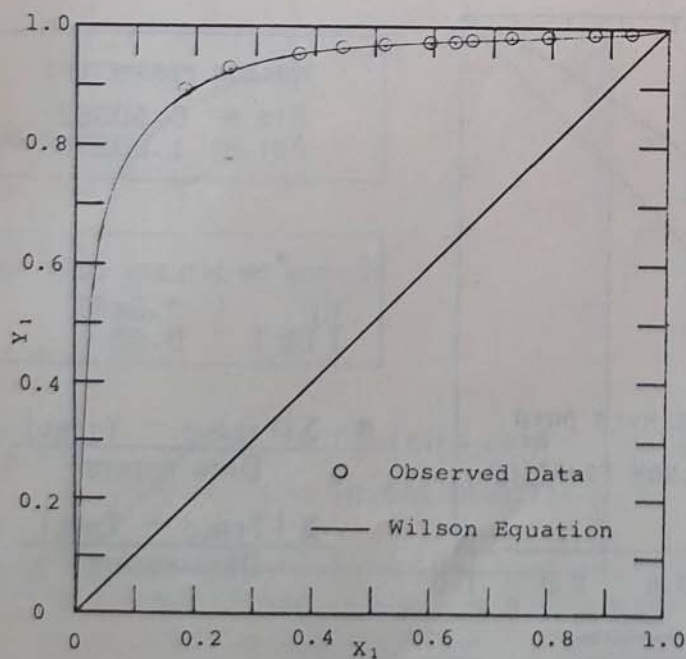
M. HIRATA AND S. OHE

DATA FROM MYLES, M.G. & R.E. WINGARD: IND. ENG. CHEM., VOL. 53, P. 219 (1961)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.1850	0.8900	100.00	760.00
0.2580	0.9230	98.80	760.00
0.3750	0.9510	81.70	760.00
0.4460	0.9660	76.30	760.00
0.5150	0.9690	74.30	760.00
0.5990	0.9770	70.10	760.00
0.6300	0.9780	68.80	760.00
0.6630	0.9800	67.30	760.00
0.7320	0.9820	64.80	760.00
0.7950	0.9840	61.80	760.00
0.8730	0.9870	59.40	760.00
0.9380	0.9920	57.90	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.02447	1161.000	224.000
2	9.46148	3437.220	360.971



Wilson Parameters

$\Lambda_{12} = 0.87773$

$\Lambda_{21} = 0.81250$

Error* on Wilson Equation

$Y_1 : 0.0061$

$T[°C] : 1.08$

$$\frac{\sum |Y_{1calc} - Y_{1obs}|}{\text{Data Points}}$$

$$\frac{\sum |T_{calc} - T_{obs}|}{\text{Data Points}}$$

FIG. X - Y CURVE

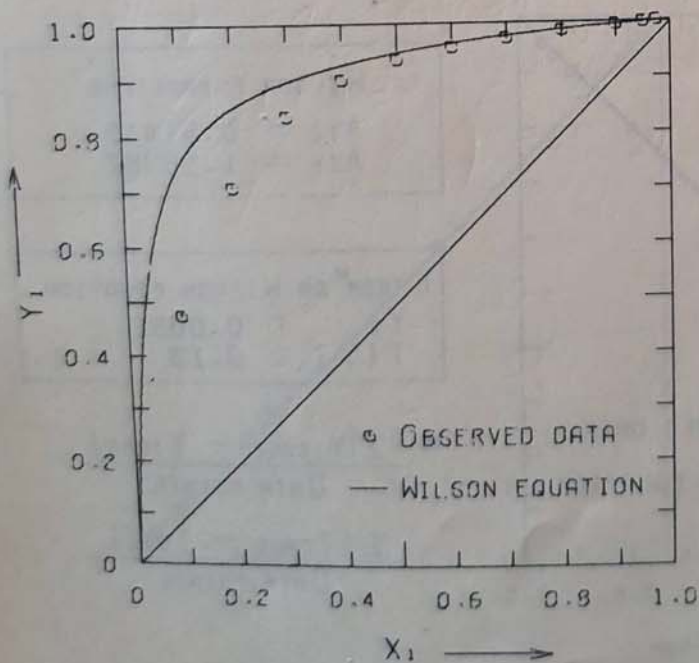
M. HIRATA AND S. OHE

DATA FROM JONES-H.E. J. CHEM. ENG. DATA., VOL. 7, (1), P. 13 (1962)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.1000	0.4700	119.00	760.00
0.2000	0.7050	103.00	760.00
0.3000	0.8320	91.50	760.00
0.4000	0.8960	82.50	760.00
0.5000	0.9320	76.50	760.00
0.6000	0.9530	71.00	760.00
0.7000	0.9690	66.50	760.00
0.8000	0.9810	62.50	760.00
0.9000	0.9910	59.50	760.00
0.9500	0.9960	57.70	760.00
0.9750	0.9980	57.00	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.02447	1161.000	224.000
2	7.57627	1704.720	223.246



WILSON PARAMETERS

$$\Lambda_{12} = 0.23507$$

$$\Lambda_{21} = 1.34557$$

ERROR* ON WILSON EQUATION

$$Y_1 \quad \therefore \quad 0.0494$$

$$T [^{\circ}\text{C}] \quad \therefore \quad 4.75$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

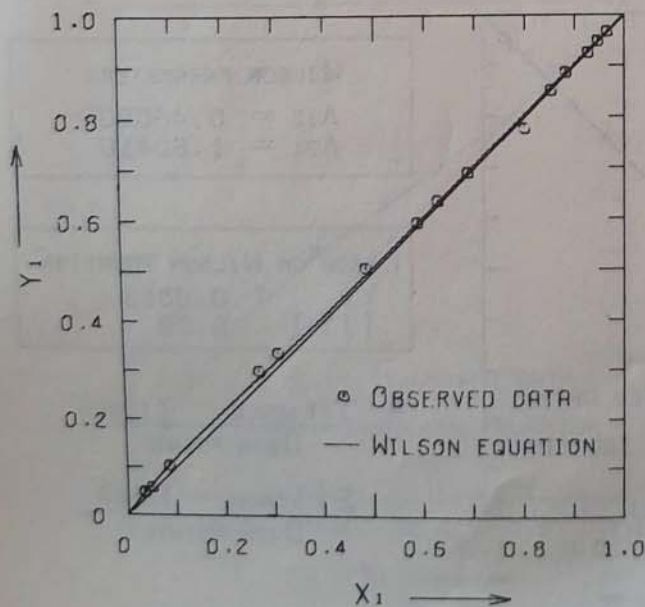
M. HIRATA AND S. OHE

DATA FROM BEKAREK, V. COLLECTION CZECH. CHEM. COMMUN. VOL. 33, P. 2608 (1969)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.0340	0.0440	30.00	276.30
0.0490	0.0540	30.00	268.00
0.0850	0.1000	30.00	270.30
0.2710	0.2970	30.00	276.70
0.3090	0.3340	30.00	278.00
0.4850	0.5030	30.00	280.00
0.5880	0.5920	30.00	283.90
0.6280	0.6340	30.00	283.70
0.6880	0.6880	30.00	282.30
0.7990	0.7750	30.00	282.90
0.8520	0.8480	30.00	282.20
0.8820	0.8850	30.00	282.20
0.9260	0.9230	30.00	281.80
0.9460	0.9460	30.00	281.20
0.9650	0.9640	30.00	281.90

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.02447	1161.000	224.000
2	7.20211	1232.830	228.000



WILSON PARAMETERS

$$\Lambda_{12} = 0.29384$$

$$\Lambda_{21} = 1.95706$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0064$$

$$T [^{\circ}\text{C}] : 0.15$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

M. HIRATA AND S. OHE

ACETONE(1) - METHANOL(2)

DATA FROM HARPER B.G., MOORE J.C. (IND. ENG. CHEM. VOL. 49, P. 411 (1957))

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.0584	0.1175	62.40	752.00
0.0756	0.1532	61.93	752.00
0.1360	0.2515	60.54	752.00
0.1672	0.2950	59.88	752.00
0.2009	0.3531	59.25	752.00
0.2287	0.3610	58.81	752.00
0.3629	0.5009	57.12	752.00
0.3977	0.5260	56.78	752.00
0.5838	0.6531	55.61	752.00
0.6113	0.6662	55.45	752.00
0.7463	0.7593	55.10	752.00
0.9166	0.9075	55.40	752.00
0.9211	0.9134	55.42	752.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.02447	1161.000	224.000
2	7.87863	1473.110	230.000

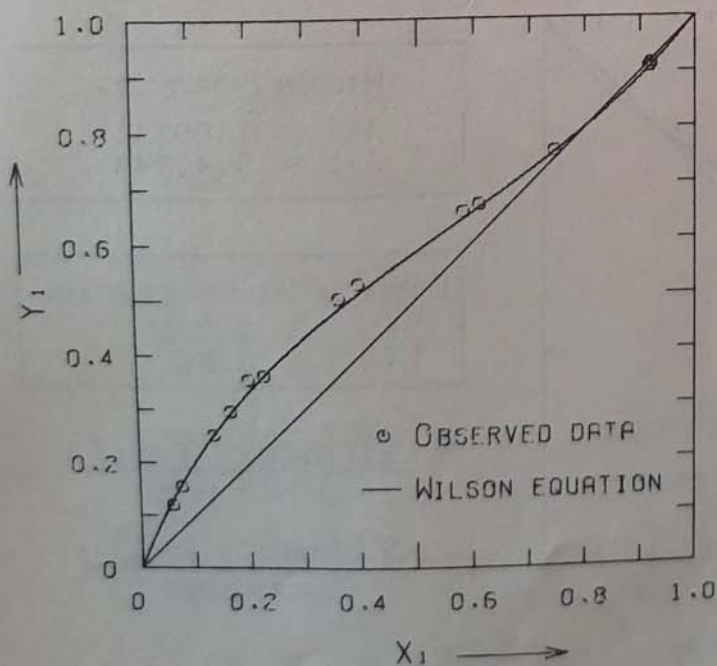


FIG. X - Y CURVE

WILSON PARAMETERS

$$\Lambda_{12} = 0.69347$$

$$\Lambda_{21} = 0.75203$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0075$$

$$T [^{\circ}\text{C}] : 0.09$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

M. HIRATA AND S. OHE

DATA FROM GRISHOLD G., BUFORD C.B.; IND. ENG. CHEM. 41, 2347(1949)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.0600	0.0970	62.80	760.00
0.1500	0.2500	60.90	760.00
0.2950	0.4200	59.60	760.00
0.3980	0.5170	57.20	760.00
0.5250	0.6250	56.30	760.00
0.7320	0.7540	55.80	760.00
0.8000	0.9000	55.70	760.00
0.8920	0.9750	55.90	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.23967	1279.870	237.500
2	9.07246	1574.990	238.960

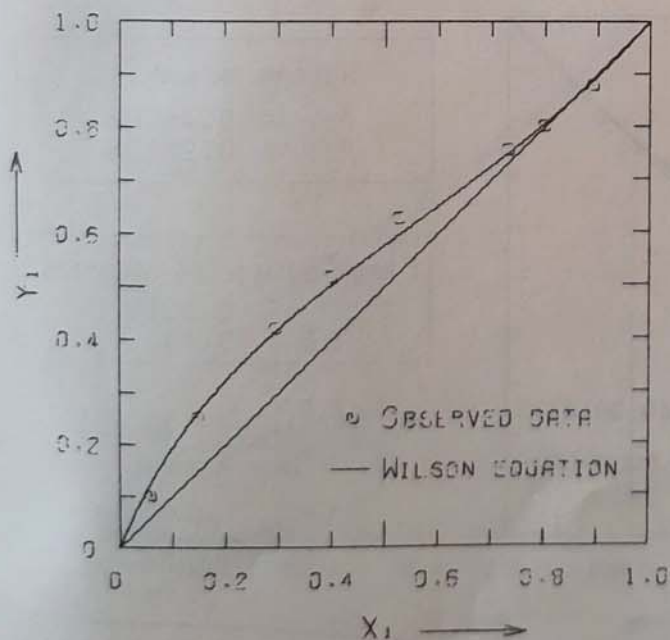


FIG X - Y CURVE

WILSON PARAMETERS

$\Lambda_{12} = 0.59963$

$\Lambda_{21} = 0.91281$

ERROR* ON WILSON EQUATION

$Y_1 : 0.0139$

$T [^{\circ}\text{C}] : 0.16$

* $\frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$

$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$

M. HIRATA AND S. OHE

DATA FROM UCHIDA S., OGAWA S., YAMAGUSHI M., JAPAN SCI. REV. ENG. SCI. (1), NO. 2, 41 (1950)

X_1	Y_1	T [°C]	P [MMHG]	X_1	Y_1	T [°C]	P [MMHG]
0.0200	0.0470	64.00	760.00	0.7500	0.7630	55.40	760.00
0.0500	0.1080	63.00	760.00	0.8000	0.8002	55.40	760.00
0.1000	0.1960	61.60	760.00	0.8010	0.8010	55.40	760.00
0.1500	0.2700	60.60	760.00	0.8500	0.8360	55.40	760.00
0.2000	0.3350	59.50	760.00	0.8700	0.8530	55.50	760.00
0.2500	0.3880	59.70	760.00	0.9000	0.8850	55.60	760.00
0.3000	0.4320	59.10	760.00	0.9500	0.9410	55.80	760.00
0.3500	0.4760	57.40	760.00	0.9800	0.9770	56.00	760.00
0.4000	0.5140	56.90	760.00				
0.4500	0.5490	56.50	760.00				
0.5000	0.5880	56.20	760.00				
0.5500	0.6210	56.00	760.00				
0.6000	0.6550	55.80	760.00				
0.6500	0.6910	55.60	760.00				
0.7000	0.7260	55.50	760.00				

ANToine CONSTANTS

COMPONENTS	A	B	C
1	7.02447	1161.000	224.000
2	7.87863	1473.110	230.000

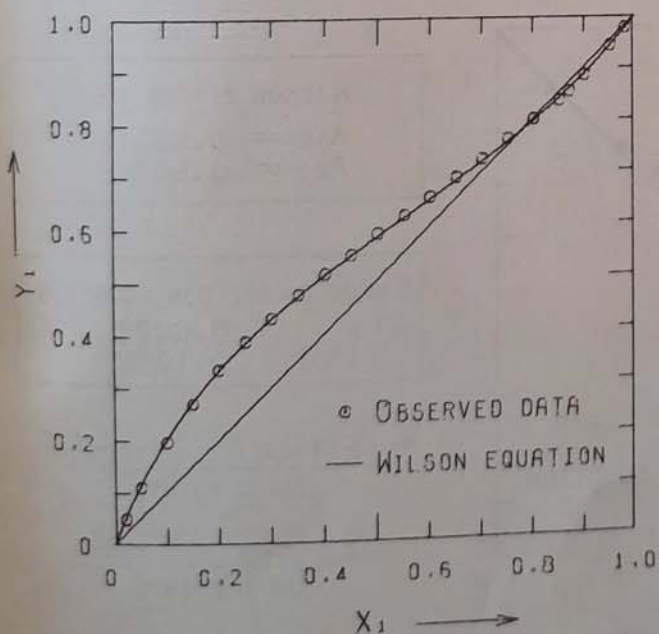


FIG. X - Y CURVE

WILSON PARAMETERS

$\Lambda_{12} = 0.65675$

$\Lambda_{21} = 0.77204$

ERROR* ON WILSON EQUATION

$Y_1 = 0.0034$

$T [^{\circ}\text{C}] = 0.04$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

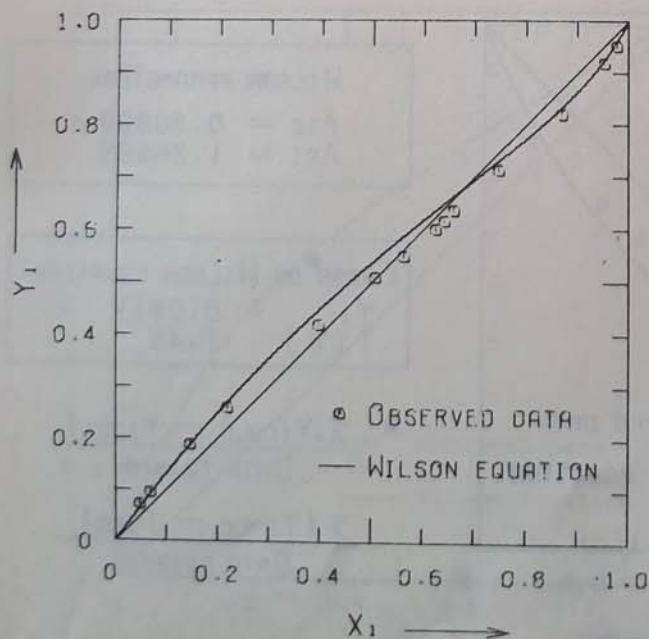
M. HIRATA AND S. OHE

DATA FROM GRISHOLD, J., S. Y. WONG: CHEM. ENG. PROGR. SYMP. SER. NO. 3, VOL. 48, P. 18 (1952)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.0470	0.0700	100.00	2619.70
0.0680	0.0930	100.00	2673.70
0.1460	0.1870	100.00	2340.10
0.2200	0.2580	100.00	2844.70
0.3970	0.4170	100.00	3009.60
0.5070	0.5070	100.00	3020.30
0.5620	0.5470	100.00	3020.30
0.6240	0.5980	100.00	3020.30
0.6410	0.6140	100.00	3009.60
0.6600	0.6350	100.00	3014.90
0.7470	0.7110	100.00	2968.60
0.8700	0.8190	100.00	2891.00
0.9520	0.9170	100.00	2813.50
0.9770	0.9500	100.00	2761.80

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.02447	1161.000	224.000
2	7.87863	1473.110	230.000



WILSON PARAMETERS

$$\Lambda_{12} = 1.54567$$

$$\Lambda_{21} = 0.29088$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0202$$

$$T [^{\circ}\text{C}] : 0.80$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

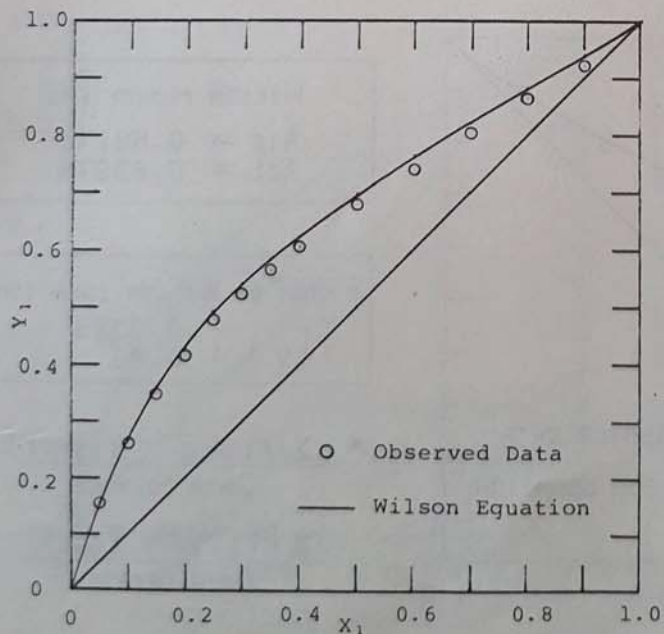
M. HIRATA AND S. OHE

DATA FROM CHU J.C. ET AL.: DISTILLATION EQUILIBRIUM DATA, 1950.

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0500	0.1550	75.40	760.00
0.1000	0.2620	73.00	760.00
0.1500	0.3480	71.00	760.00
0.2000	0.4170	69.00	760.00
0.2500	0.4780	67.30	760.00
0.3000	0.5240	65.90	760.00
0.3500	0.5660	64.70	760.00
0.4000	0.6050	63.60	760.00
0.5000	0.6740	61.80	760.00
0.6000	0.7390	60.40	760.00
0.7000	0.8020	59.10	760.00
0.8000	0.8650	58.00	760.00
0.9000	0.9290	57.00	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.02447	1161.000	224.000
2	8.04494	1554.300	222.650



Wilson Parameters

$\Lambda_{12} = 0.56006$

$\Lambda_{21} = 0.97963$

Error* on Wilson Equation

$Y_1 : 0.0147$

$T[°C] : 0.55$

* $\frac{\sum |Y_{1calc} - Y_{1obs}|}{\text{Data Points}}$

$\frac{\sum |T_{calc} - T_{obs}|}{\text{Data Points}}$

FIG. X - Y CURVE

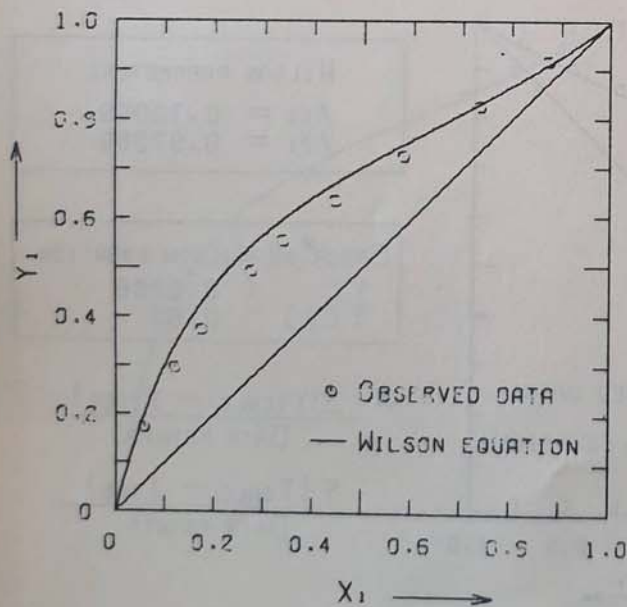
M. HIRATA AND S. OHE

DATA FROM HELLWIG L.R., VAN WINKLE M.: IND. ENG. CHEM. 45:624(1953)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.0580	0.1730	75.10	760.00
0.1210	0.2970	72.20	760.00
0.1750	0.3760	70.10	760.00
0.2760	0.4940	66.70	760.00
0.3390	0.5550	65.20	760.00
0.4440	0.6360	62.90	760.00
0.5900	0.7260	60.70	760.00
0.7360	0.8270	58.70	760.00
0.8750	0.9190	57.20	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.23967	1279.870	237.500
2	8.16290	1623.220	228.980



WILSON PARAMETERS

$$\Lambda_{12} = 0.62514$$

$$\Lambda_{21} = 0.73191$$

ERROR* ON WILSON EQUATION

$$Y_1 = 0.0322$$

$$T [^{\circ}\text{C}] = 0.79$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG X - Y CURVE

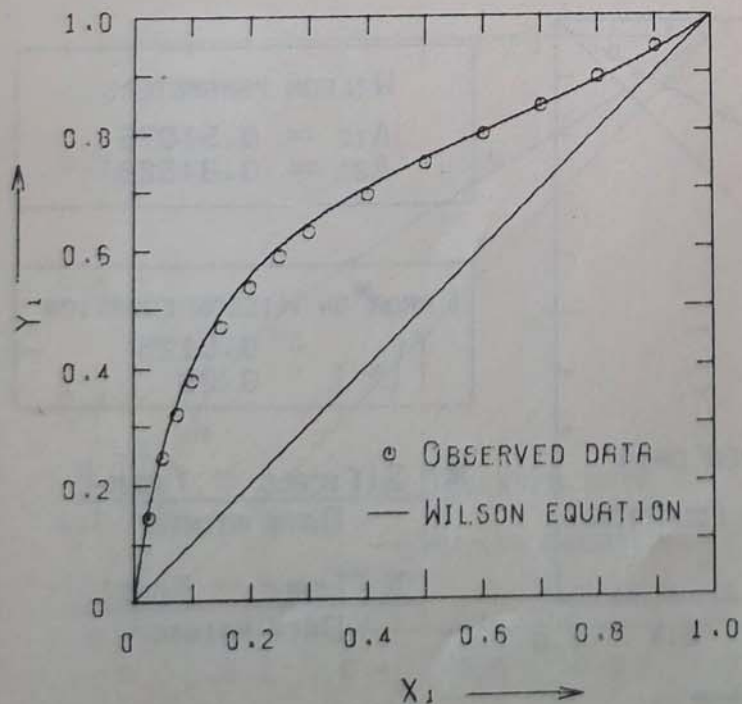
M. HIRATA AND S. OHE

DATA FROM GORDON A.R., HINES W.G. (CAN. J. RES. 24B, 254 (1946))

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0250	0.1435	40.00	152.20
0.0500	0.2460	40.00	168.50
0.0750	0.3205	40.00	183.30
0.1000	0.3795	40.00	197.40
0.1500	0.4700	40.00	223.30
0.2000	0.5380	40.00	244.90
0.2500	0.5900	40.00	263.90
0.3000	0.6310	40.00	280.60
0.4000	0.6940	40.00	309.00
0.5000	0.7470	40.00	334.00
0.6000	0.7950	40.00	355.50
0.7000	0.8430	40.00	375.10
0.8000	0.8930	40.00	393.00
0.9000	0.9450	40.00	409.40

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.02447	1161.000	224.000
2	8.04494	1554.300	222.650



WILSON PARAMETERS

$$\Lambda_{12} = 0.56889$$

$$\Lambda_{21} = 0.72490$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0134$$

$$T [^{\circ}\text{C}] : 0.35$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

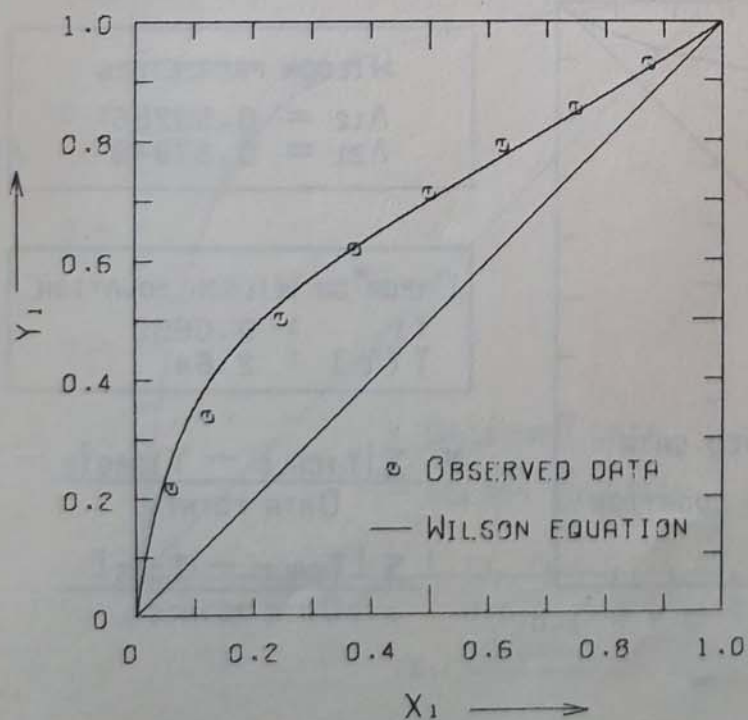
M. HIRATA AND S. OHE

DATA FROM VINICHENKO, I. G. . M. P. SUSAREV: ZH. PRIKL. KHIM., VOL. 33(7), P. 1593(1966)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0620	0.2170	55.00	345.20
0.1250	0.3390	55.00	393.70
0.2500	0.5040	55.00	467.70
0.3750	0.6190	55.00	538.00
0.5000	0.7120	55.00	581.00
0.6250	0.7910	55.00	631.40
0.7500	0.8530	55.00	669.10
0.8750	0.9280	55.00	702.70

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.02447	1161.000	224.000
2	8.04494	1554.300	222.650



WILSON PARAMETERS

$$\Lambda_{12} = 0.30771$$

$$\Lambda_{21} = 1.20101$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0240$$

$$T [^{\circ}\text{C}] : 0.55$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

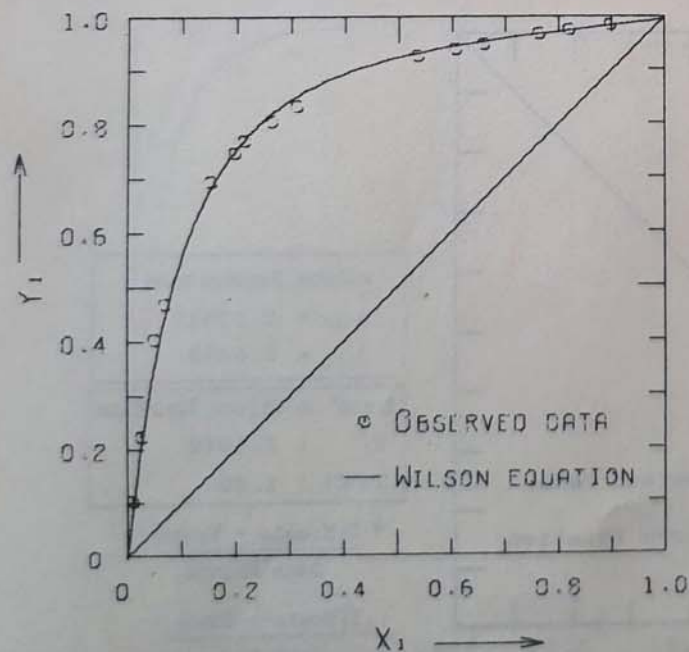
FIG. X - Y CURVE

DATA FROM MICHALSKI H., ET AL., ZESZYTY NAUK. POL. LODZ., NO. 36, 73 (1961)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.0100	0.1050	115.00	746.00
0.0250	0.2250	112.00	746.00
0.0500	0.4050	107.10	746.00
0.0700	0.4720	103.80	746.00
0.1540	0.6980	91.70	746.00
0.1980	0.7500	86.90	746.00
0.2150	0.7730	85.40	746.00
0.2650	0.8090	81.70	746.00
0.3120	0.8370	78.80	746.00
0.5350	0.9300	68.60	746.00
0.6070	0.9430	66.20	746.00
0.6590	0.9510	64.50	746.00
0.7630	0.9720	61.60	746.00
0.8190	0.9780	60.00	746.00
0.8970	0.9880	58.10	746.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.23967	1279.870	237.500
2	7.54472	1405.873	183.909



WILSON PARAMETERS

$$\Lambda_{12} = 1.06382$$

$$\Lambda_{21} = 0.43694$$

ERROR* ON WILSON EQUATION

$$Y_1 \approx 0.0123$$

$$T [^{\circ}\text{C}] \approx 0.44$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

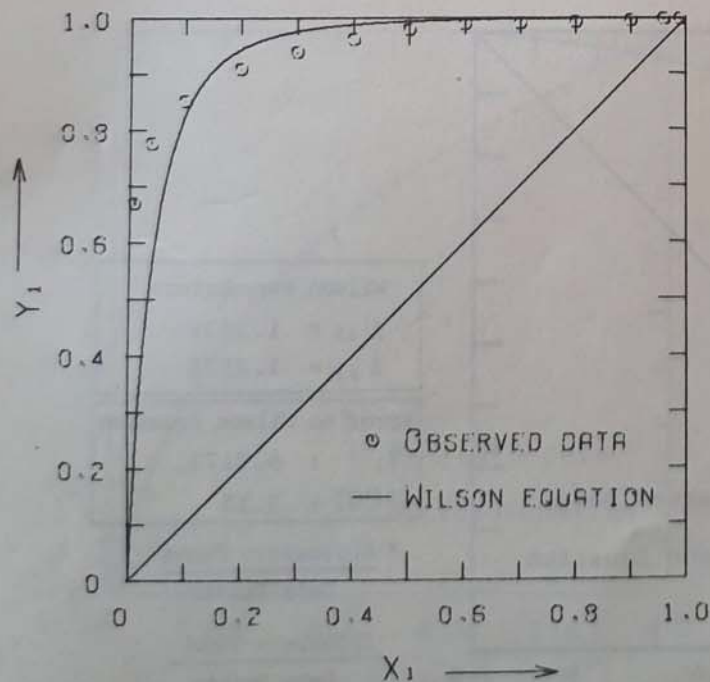
M. HIRATA AND S. OHE

DATA FROM MOTINA, G. L., N. Z. TENTSER, M. E. AEROV.: ZH. PRIKL. KHIM. VOL. 41(5), P. 1048(1968)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.0100	0.6700	151.60	760.00
0.0400	0.7760	140.30	760.00
0.1000	0.8520	128.10	760.00
0.2000	0.9100	114.60	760.00
0.3000	0.9400	104.10	760.00
0.4000	0.9620	95.00	760.00
0.5000	0.9800	86.80	760.00
0.6000	0.9900	79.30	760.00
0.7000	0.9910	72.50	760.00
0.8000	0.9940	66.30	760.00
0.9000	0.9970	60.50	760.00
0.9600	0.9990	57.60	760.00
0.9900	0.9996	56.60	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.02447	1161.000	224.000
2	7.13617	1518.100	175.000



WILSON PARAMETERS

$$\Lambda_{12} = 2.47398$$

$$\Lambda_{21} = 0.00822$$

ERROR* ON WILSON EQUATION

$$Y_1 = 0.0672$$

$$T [^{\circ}\text{C}] = 9.76$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

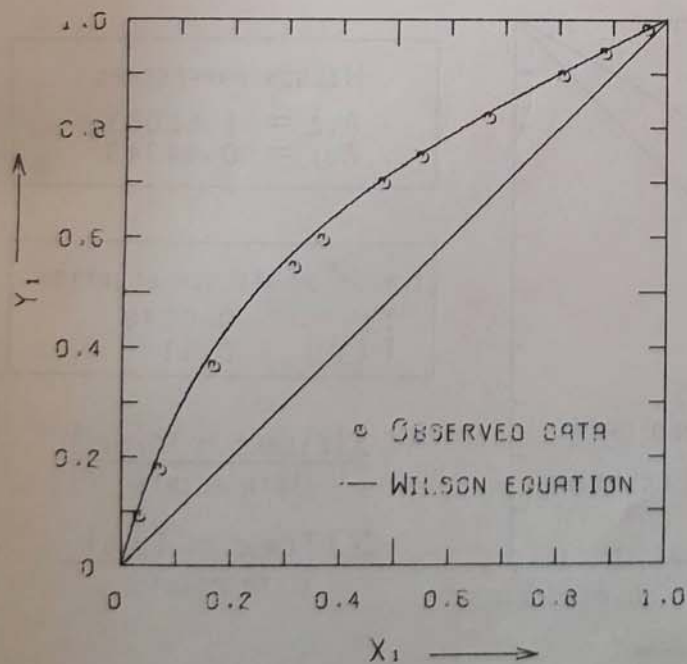
M. HIRATA AND S. OHE

DATA FROM AMICK, E. H., JR., M. A. WEISS, M. S. KIRSCHENBAUM, IND. ENG. CHE., VOL. 49, P. 369 (1957)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHg]
0.0340	0.0820	80.30	374.50
0.0730	0.1750	79.00	374.50
0.1720	0.3650	75.20	374.50
0.3170	0.5460	71.00	374.50
0.3680	0.5960	69.40	374.50
0.4790	0.6980	67.20	374.50
0.5480	0.7460	65.80	374.50
0.6720	0.8170	63.70	374.50
0.8090	0.8940	61.80	374.50
0.8860	0.9360	60.60	374.50
0.9650	0.9800	59.90	374.50

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.97421	1209.600	216.000
2	7.82853	1482.130	199.970



WILSON PARAMETERS

$$\Lambda_{12} = 0.60343$$

$$\Lambda_{21} = 1.00610$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0184$$

$$T [^{\circ}\text{C}] : 0.43$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

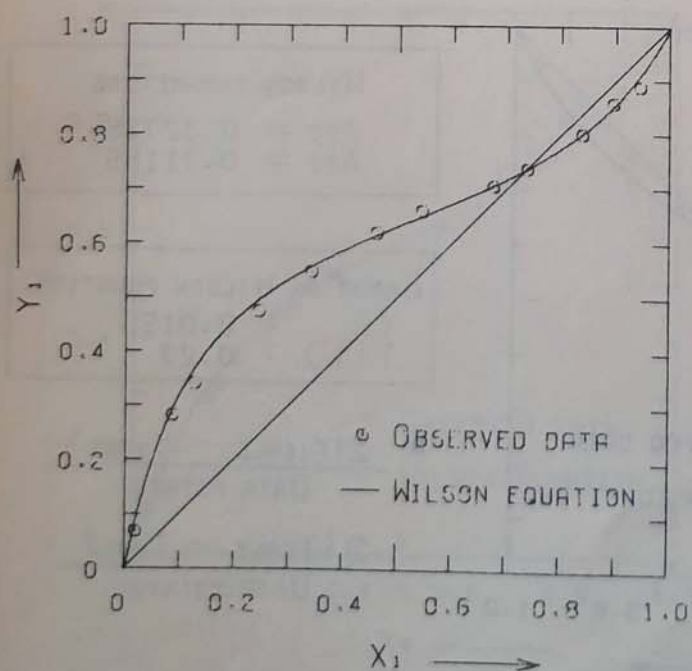
M. HIRATA AND S. OHE

DATA FROM BALASHOV, M. I., ETAL: ZH. FIZ. KHIM., VOL. 41, (5), P. 1210 (1967)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0180	0.0690	32.80	200.00
0.0860	0.2820	28.80	200.00
0.1280	0.3430	27.70	200.00
0.2470	0.4770	25.10	200.00
0.3430	0.5500	23.30	200.00
0.4610	0.6200	22.60	200.00
0.5450	0.6600	22.20	200.00
0.6750	0.7050	21.80	200.00
0.7370	0.7370	21.50	200.00
0.8370	0.8010	21.70	200.00
0.8950	0.8590	22.20	200.00
0.9440	0.8900	22.70	200.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.20211	1232.830	228.000
2	7.87863	1473.110	230.000



WILSON PARAMETERS

$$\Lambda_{12} = 0.48274$$

$$\Lambda_{21} = 0.50375$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0106$$

$$T [^{\circ}\text{C}] : 0.17$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

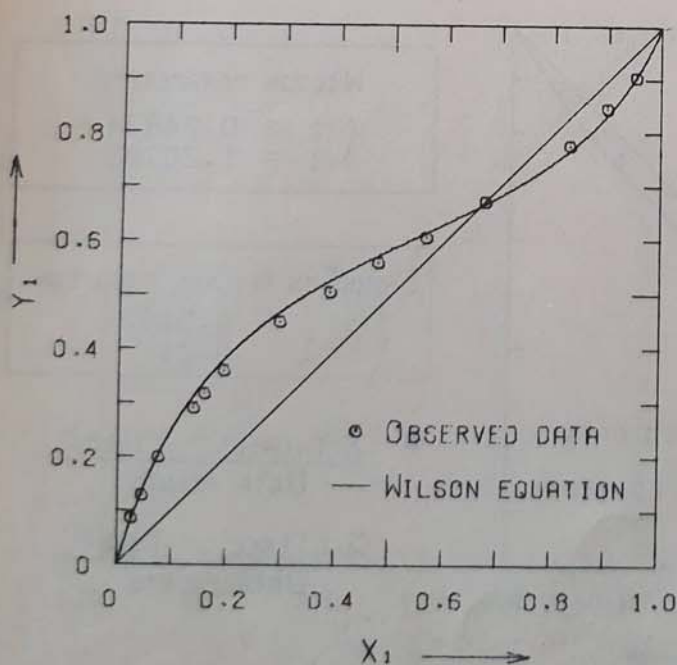
M. HIRATA AND S. OHE

DATA FROM NAGATA, I.: J. CHEM. ENG. DATA, VOL. 14(4), P. 418(1969)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0260	0.0860	63.30	760.00
0.0450	0.1290	62.10	760.00
0.0760	0.2000	60.60	760.00
0.1400	0.2920	58.90	760.00
0.1600	0.3190	58.30	760.00
0.1960	0.3620	57.30	760.00
0.2970	0.4520	56.00	760.00
0.3880	0.5070	54.90	760.00
0.4760	0.5600	54.40	760.00
0.5640	0.6070	54.00	760.00
0.6720	0.6720	53.80	760.00
0.8300	0.7760	53.30	760.00
0.8990	0.8470	55.00	760.00
0.9530	0.9050	55.90	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.20211	1232.830	228.000
2	7.87863	1473.110	230.000



WILSON PARAMETERS

$$\Lambda_{12} = 0.60396$$

$$\Lambda_{21} = 0.47071$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0121$$

$$T [^{\circ}\text{C}] : 0.27$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

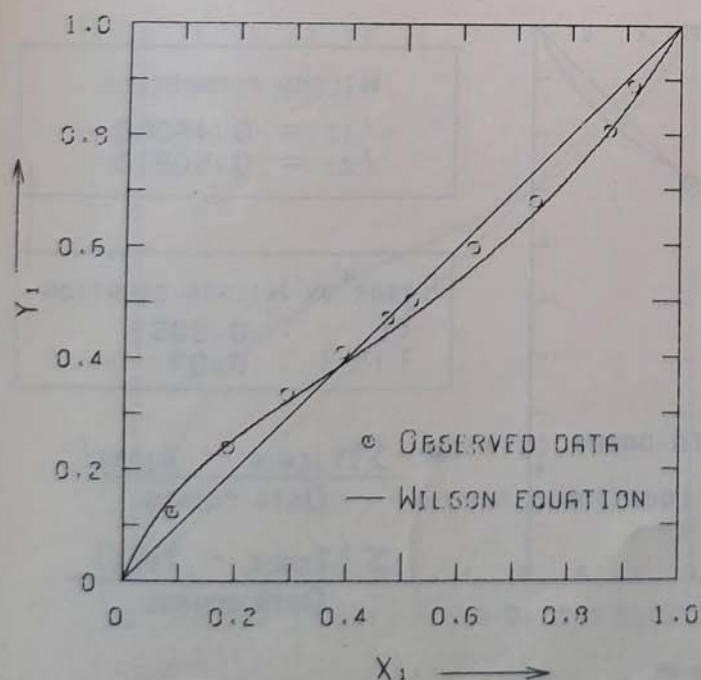
M. HIRATA AND S. OHE

DATA FROM BALASHOV, M. I., ET AL.: ZH. FIZ. KHIM., VOL. 41, (5), P. 1210 (1967)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0980	0.1220	126.00	5907.00
0.1880	0.2400	124.30	5907.00
0.2940	0.3360	123.50	5907.00
0.3920	0.4100	123.20	5907.00
0.4710	0.4710	123.20	5907.00
0.5150	0.5020	123.40	5907.00
0.6250	0.5950	124.10	5907.00
0.7360	0.6780	125.60	5907.00
0.8700	0.8070	128.80	5907.00
0.9130	0.8890	130.20	5907.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.20211	1232.830	228.000
2	7.87863	1473.110	230.000



WILSON PARAMETERS

$$\Lambda_{12} = 0.29177$$

$$\Lambda_{21} = 1.26815$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0196$$

$$T [^{\circ}\text{C}] : 0.36$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

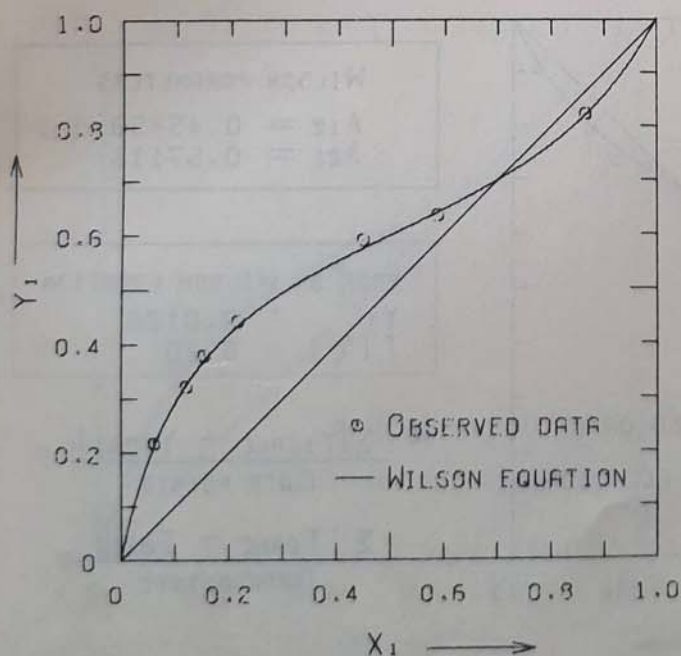
M. HIRATA AND S. OHE

DATA FROM BEKAREK, V.: COLLECTION CZECH, CHEM. COMMUN., VOL 33, P. 2608 (1968)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0610	0.2120	40.00	316.80
0.1540	0.3760	40.00	365.60
0.1210	0.3180	40.00	350.30
0.2170	0.4390	40.00	388.00
0.4490	0.5870	40.00	429.80
0.5870	0.6310	40.00	440.50
0.8650	0.8180	40.00	428.80

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.20211	1232.830	228.000
2	7.87863	1473.110	230.000



WILSON PARAMETERS

$$\Lambda_{12} = 0.48254$$

$$\Lambda_{21} = 0.58559$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0069$$

$$T [^{\circ}\text{C}] : 0.11$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

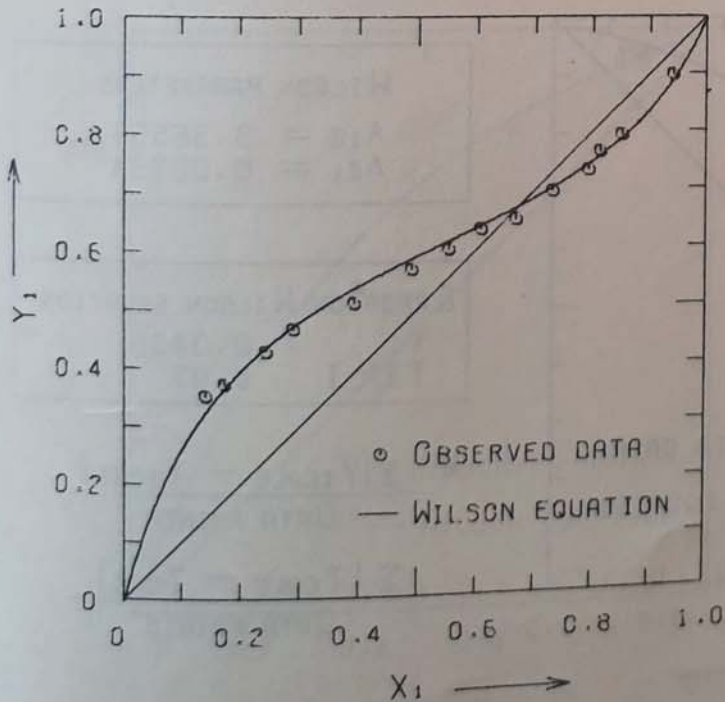
M. HIRATA AND S. OHE

DATA FROM BREDIO, G. R. BAYER: Z. PHYS. CHEM. VOL. 130, P. 15 (1927)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.1420	0.3550	50.00	535.00
0.1740	0.3760	50.00	558.50
0.2450	0.4330	50.00	592.50
0.2910	0.4710	50.00	610.00
0.3940	0.5150	50.00	635.00
0.4910	0.5710	50.00	652.40
0.5540	0.6050	50.00	658.40
0.6080	0.6380	50.00	661.40
0.6690	0.6540	50.00	663.80
0.7320	0.7020	50.00	660.60
0.7940	0.7370	50.00	657.40
0.8140	0.7690	50.00	653.90
0.8520	0.7970	50.00	640.00
0.9420	0.9020	50.00	619.40

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.20211	1232.830	228.000
2	7.87863	1473.110	230.000



WILSON PARAMETERS

$$\Lambda_{12} = 0.62651$$

$$\Lambda_{21} = 0.45094$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0117$$

$$T [^{\circ}C] : 0.06$$

$$* \frac{\sum |Y_{CALC} - Y_{OBS}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{CALC} - T_{OBS}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

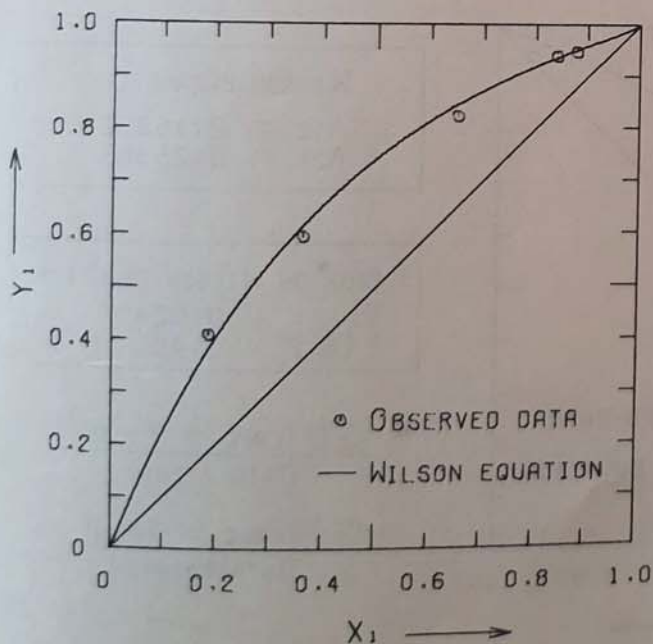
M. HIRATA AND S. OHE

DATA FROM ROSE, A. ET AL: J. CHEM. ENG. DATA, VOL 6, P. 173 (1961)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.1890	0.4110	187.30	40.00
0.3640	0.5980	181.70	40.00
0.6510	0.8250	174.00	40.00
0.8400	0.9390	170.20	40.00
0.8780	0.9470	169.20	40.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.76713	1589.718	140.456
2	7.62230	2283.932	184.813



WILSON PARAMETERS

$$\Lambda_{12} = 2.28910$$

$$\Lambda_{21} = 0.20923$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0154$$

$$T [^{\circ}\text{C}] : 0.28$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

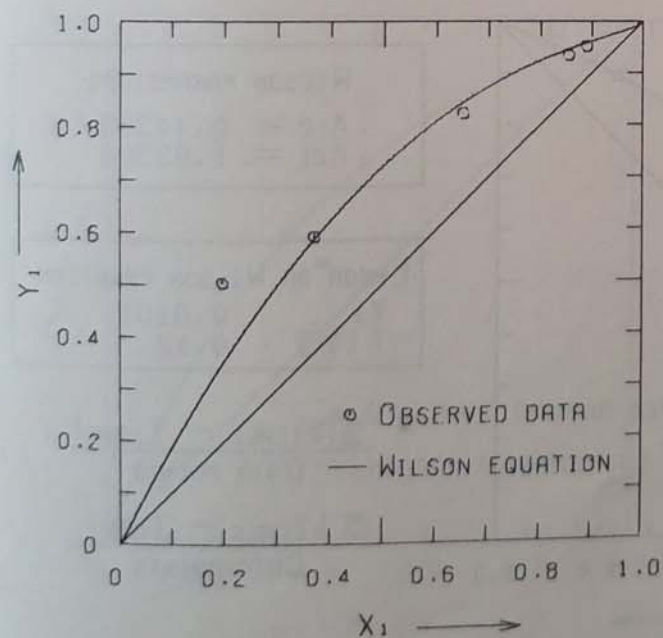
M. HIRATA AND S. OHE

DATA FROM ROSE, R. ET AL.: J. CHEM. ENG. DATA, VOL. 6, P. 173 (1961)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.1960	0.5030	213.80	100.00
0.3700	0.5900	208.30	100.00
0.6510	0.8230	200.50	100.00
0.8540	0.9350	196.00	100.00
0.8890	0.9520	195.30	100.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.76713	1589.718	140.456
2	7.62230	2283.932	184.813



WILSON PARAMETERS

$$\Lambda_{12} = 3.02086$$

$$\Lambda_{21} = 0.07402$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0400$$

$$T [^{\circ}\text{C}] : 0.81$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

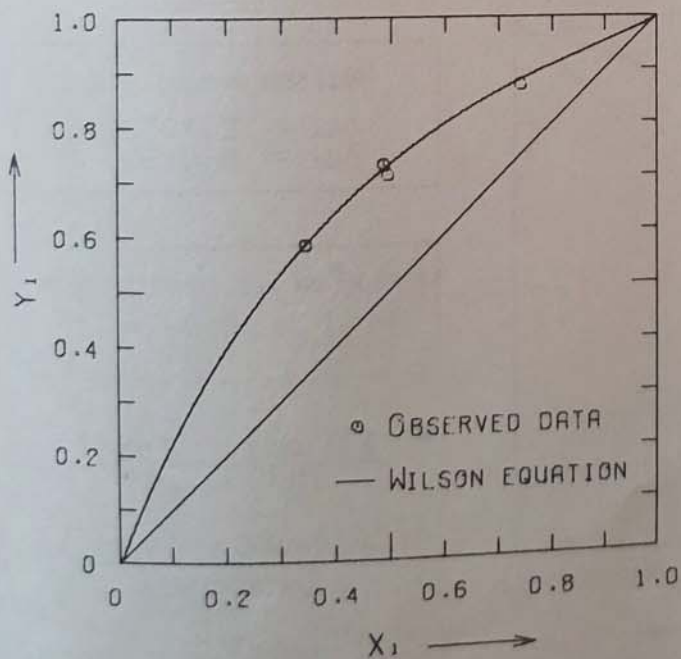
M. HIRATA AND S. OHE

DATA FROM ROSE, R. ET AL. J. CHEM. ENG. DATA, VOL. 6, P. 173 (1961)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.3440	0.5850	208.30	40.00
0.4860	0.7290	204.60	40.00
0.4920	0.7100	204.40	40.00
0.7400	0.8730	198.90	40.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.62230	2283.932	184.813
2	9.59441	4146.426	297.761



WILSON PARAMETERS

$$\Lambda_{12} = 2.11805$$

$$\Lambda_{21} = 0.22695$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0094$$

$$T [^{\circ}\text{C}] : 0.24$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

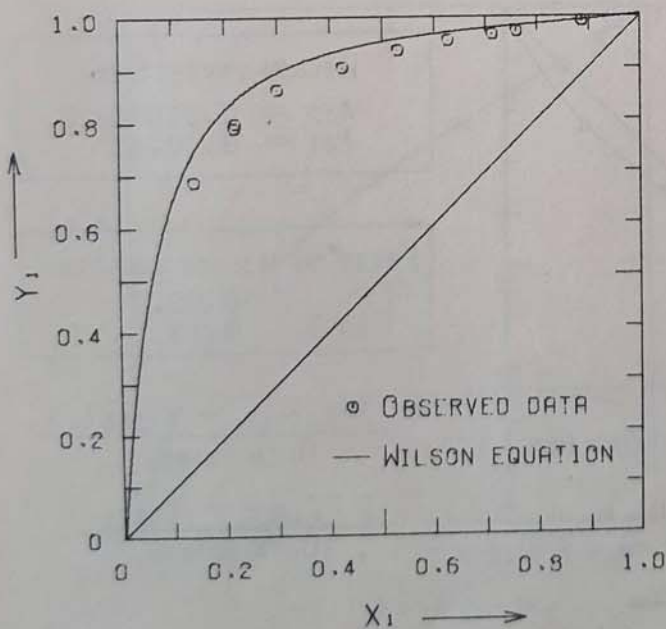
M. HIRATA AND S. OHE

DATA FROM MYLES, M.G. & R.E. WINGARD: IND. ENG. CHEM., VOL. 53, P. 219 (1961)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.8850	0.9860	80.50	760.00
0.7580	0.9670	85.50	760.00
0.7110	0.9610	87.10	760.00
0.6250	0.9500	90.00	760.00
0.5280	0.9310	93.90	760.00
0.4220	0.8980	100.80	760.00
0.2980	0.8560	109.50	760.00
0.2180	0.7920	117.00	760.00
0.2160	0.7840	117.50	760.00
0.1400	0.6810	127.50	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.09808	1238.710	217.000
2	7.40501	1724.035	219.420



WILSON PARAMETERS

$$\Lambda_{12} = 1.30328$$

$$\Lambda_{21} = 0.30787$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0294$$

$$T [^{\circ}\text{C}] : 4.43$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

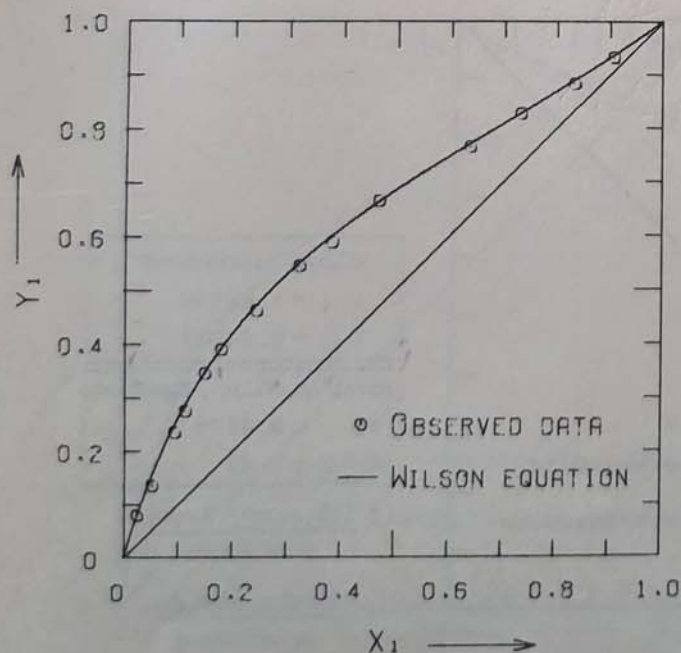
M. HIRATA AND S. OHE

DATA FROM MURTI P.S., VAN WINKLE M.: CHEM. ENG. DATA SERIES, VOL. 3, P. 72 (1958)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.0238	0.0763	96.00	760.00
0.0523	0.1331	94.90	760.00
0.1137	0.2731	91.95	760.00
0.0938	0.2322	93.25	760.00
0.1494	0.3435	90.55	760.00
0.1802	0.3884	89.20	760.00
0.2440	0.4608	87.50	760.00
0.3221	0.5434	85.47	760.00
0.3822	0.5870	84.15	760.00
0.4684	0.6627	82.80	760.00
0.6377	0.7619	80.38	760.00
0.7320	0.8236	79.50	760.00
0.8333	0.8791	78.50	760.00
0.9074	0.9301	78.00	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.09808	1238.710	217.000
2	7.99733	1569.700	209.500



WILSON PARAMETERS

$$\Lambda_{12} = 0.66486$$

$$\Lambda_{21} = 0.81524$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0078$$

$$T [^{\circ}\text{C}] : 0.25$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

M. HIRATA AND S. OHE

DATA FROM MURTI P.S., VAN WINKLE M.: CHEM. ENG. DATA SERIES, VOL. 3, P. 72 (1958)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0480	0.1950	60.00	179.00
0.0638	0.2425	60.00	289.00
0.0905	0.3100	60.00	205.00
0.1175	0.3765	60.00	222.00
0.1596	0.4595	60.00	239.50
0.2189	0.5232	60.00	262.00
0.2770	0.5907	60.00	285.50
0.3625	0.6472	60.00	305.50
0.4158	0.6891	60.00	324.50
0.5284	0.7500	60.00	343.00
0.6262	0.7878	60.00	362.50
0.7023	0.8340	60.00	379.00
0.8140	0.8880	60.00	393.00
0.9157	0.9440	60.00	402.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.09808	1238.710	217.000
2	7.99733	1569.700	209.500

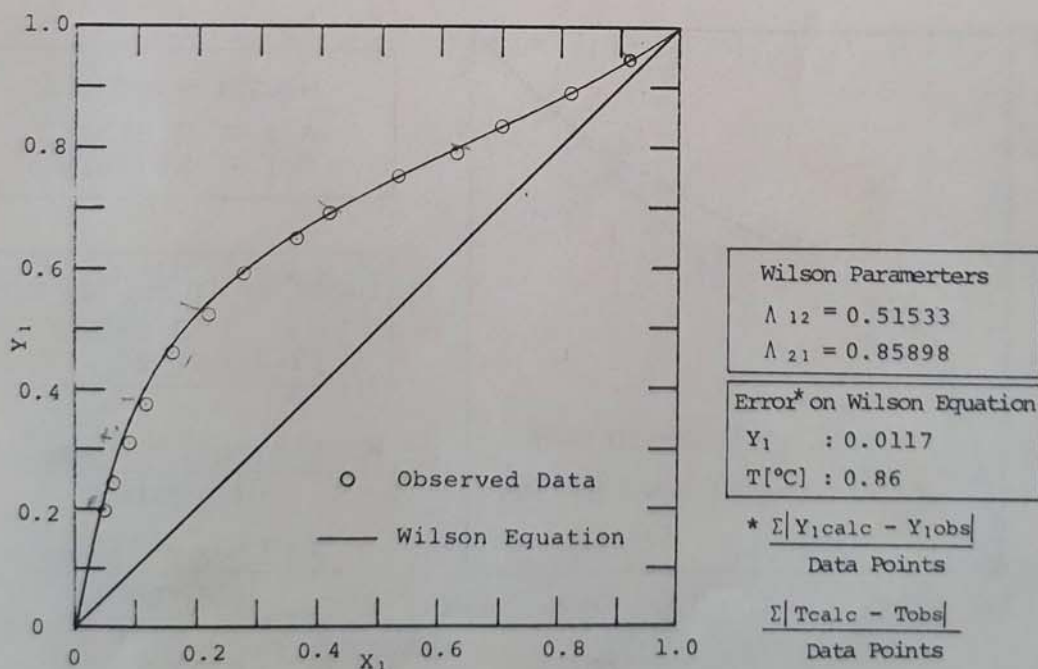


FIG. X - Y CURVE

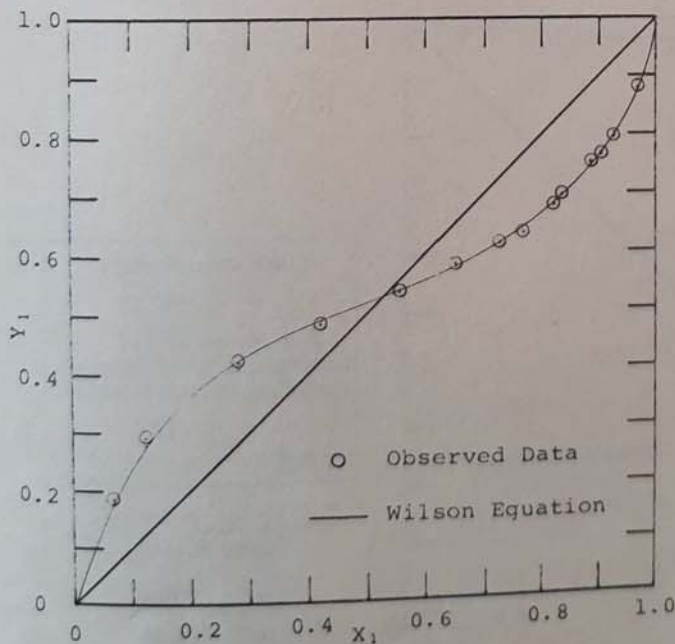
M. HIRATA AND S. OHE

DATA FROM NAKANISHI, K., ETAL: J. CHEM. ENG. DATA, VOL. 12, P. 440 (1967)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.0700	0.1980	62.40	730.00
0.1240	0.2900	60.70	730.00
0.2850	0.4180	58.00	730.00
0.4200	0.4800	57.40	730.00
0.5510	0.5340	57.00	730.00
0.6500	0.5770	57.20	730.00
0.7270	0.6130	57.80	730.00
0.7680	0.6330	58.10	730.00
0.8200	0.6790	58.50	730.00
0.8390	0.6950	58.90	730.00
0.8880	0.7500	60.00	730.00
0.9010	0.7620	60.10	730.00
0.9270	0.7960	60.90	730.00
0.9680	0.8810	62.80	730.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.87863	1473.110	230.000
2	6.83726	1166.920	227.375



Wilson Parameters

$\Lambda_{12} = 0.54736$

$\Lambda_{21} = 0.35937$

Error* on Wilson Equation

$Y_1 : 0.0051$

$T[°C] : 1.09$

* $\frac{\sum |Y_{1calc} - Y_{1obs}|}{\text{Data Points}}$

Data Points

$\frac{\sum |T_{calc} - T_{obs}|}{\text{Data Points}}$

Data Points

FIG. X - Y CURVE

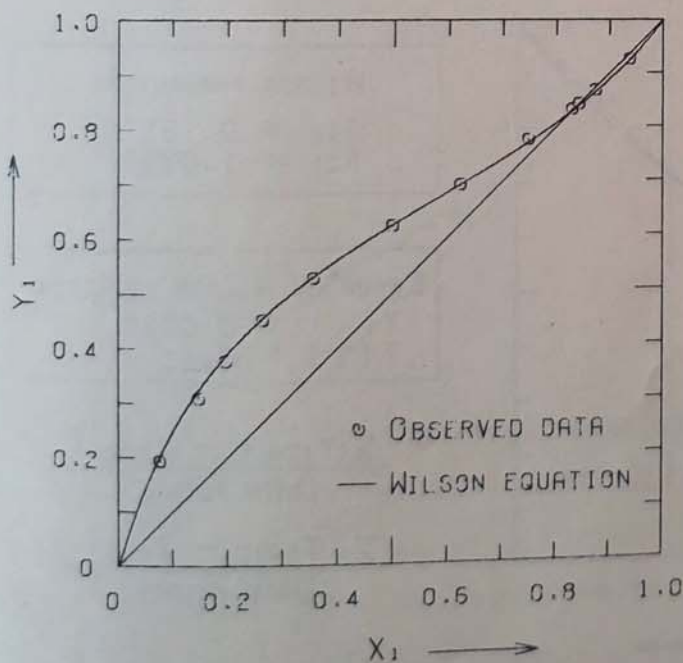
M. HIRATA AND S. OHE

DATA FROM PRIVOTT, W. J., ET AL: J. CHEM. ENG. DATA, VOL. 11, (3), P. 331 (1966)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0760	0.1930	75.30	760.00
0.1470	0.3080	72.20	760.00
0.1970	0.3770	70.70	760.00
0.2650	0.4530	68.80	760.00
0.3560	0.5280	67.50	760.00
0.4980	0.6220	65.90	760.00
0.6220	0.6950	65.10	760.00
0.7470	0.7770	64.40	760.00
0.8290	0.8320	64.30	760.00
0.8410	0.8420	64.30	760.00
0.8730	0.8690	64.30	760.00
0.9360	0.9260	64.40	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.87863	1474.110	230.000
2	6.97421	1209.600	216.000



WILSON PARAMETERS

$$\Lambda_{12} = 0.74636$$

$$\Lambda_{21} = 0.59282$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0049$$

$$T [^{\circ}\text{C}] : 0.14$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

M. HIRATA AND S. OHE

METHYL ALCOHOL(1)-ETHYL ACETATE(2)

DATA FROM KOICHIRO NAKANISHI, ETAL., J. CHEM. ENG. DATA, VOL. 12, NO. 3, P. 440 (1967)

X_1	Y_1	T [°C]	P [MMHG]	X_1	Y_1	T [°C]	P [MMHG]
0.0340	0.1420	73.50	730.00	0.8120	0.7790	62.20	730.00
0.0890	0.2600	70.60	730.00	0.8520	0.8100	62.40	730.00
0.1270	0.3350	68.70	730.00	0.8940	0.8560	62.80	730.00
0.2060	0.4070	66.80	730.00	0.9370	0.9030	63.50	730.00
0.2730	0.4760	65.20	730.00	0.9580	0.9280	63.60	730.00
0.3250	0.5000	64.20	730.00				
0.3480	0.5210	64.10	730.00				
0.3980	0.5470	63.50	730.00				
0.4140	0.5590	63.40	730.00				
0.5050	0.5940	63.10	730.00				
0.5520	0.6360	62.50	730.00				
0.5980	0.6520	62.30	730.00				
0.6020	0.6430	62.60	730.00				
0.6170	0.6450	62.30	730.00				
0.6700	0.6900	62.20	730.00				

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.87863	1473.110	230.000
2	7.09808	1238.710	217.000

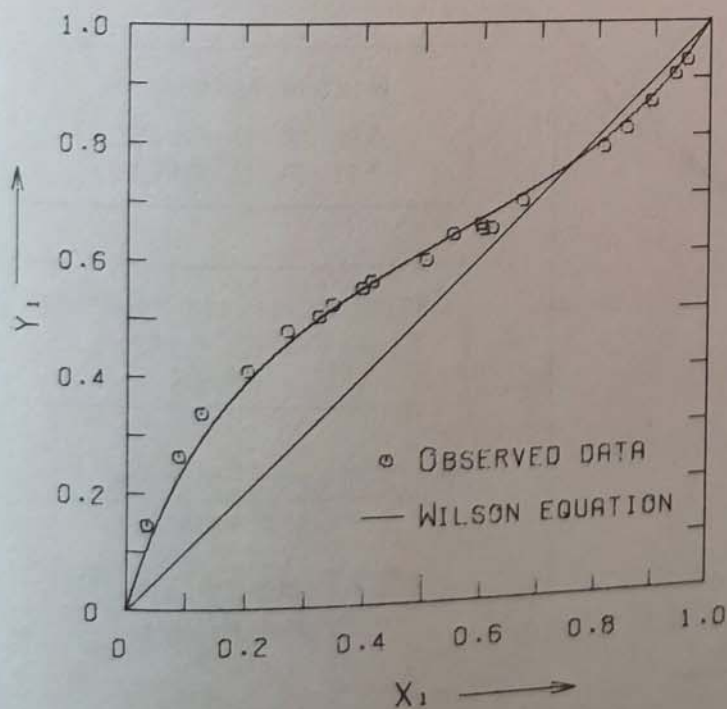


FIG. X - Y CURVE

WILSON PARAMETERS

$$\Lambda_{12} = 0.73176$$

$$\Lambda_{21} = 0.51768$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0151$$

$$T [^{\circ}\text{C}] : 0.22$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

M. HIRATA AND S. OHE

METHYL ALCOHOL(1) - ETHYL ACETATE(2)

DATA FROM NAGATA, I.: J. CHEM. ENG. DATA, VOL. 7, (13), P. 357 (1962)

X_1	Y_1	T [°C]	P [mmHg]	X_1	Y_1	T [°C]	P [mmHg]
0.0280	0.1200	74.40	760.00	0.7480	0.7370	62.40	760.00
0.0370	0.1330	74.00	760.00	0.7930	0.7680	62.40	760.00
0.0730	0.2200	71.50	760.00	0.8220	0.7900	62.50	760.00
0.1230	0.3100	69.30	760.00	0.8930	0.9420	62.80	760.00
0.2110	0.4200	66.40	760.00	0.9610	0.9340	64.00	760.00
0.2360	0.4420	66.00	760.00				
0.2390	0.4400	65.90	760.00				
0.2650	0.4680	65.30	760.00				
0.3620	0.5260	64.00	760.00				
0.4080	0.5580	63.70	760.00				
0.4400	0.5730	63.60	760.00				
0.5330	0.6200	63.10	760.00				
0.5950	0.6470	62.90	760.00				
0.6640	0.6870	62.40	760.00				
0.7080	0.7110	62.40	760.00				

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.87863	1473.110	230.000
2	7.09808	1238.710	217.000

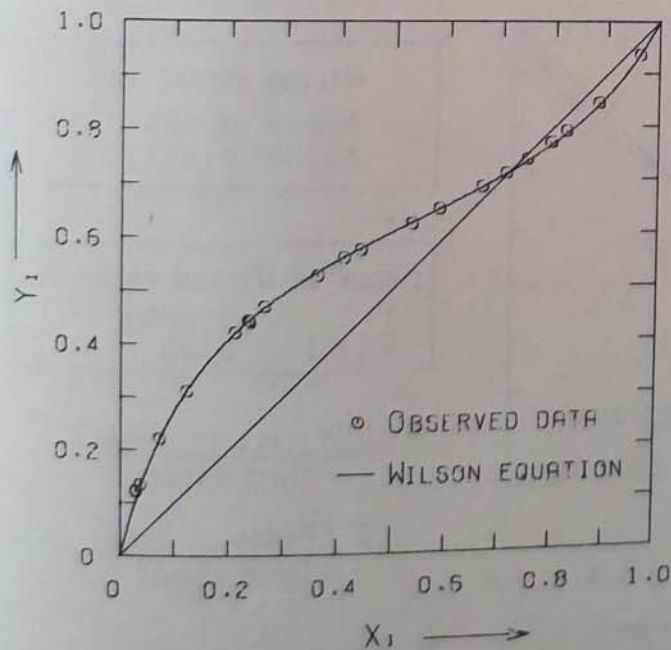


FIG. X - Y CURVE

WILSON PARAMETERS

$\Lambda_{12} = 0.62551$

$\Lambda_{21} = 0.49384$

ERROR* ON WILSON EQUATION

$Y_1 : 0.0033$

$T [^{\circ}\text{C}] : 0.12$

* $\frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$

$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$

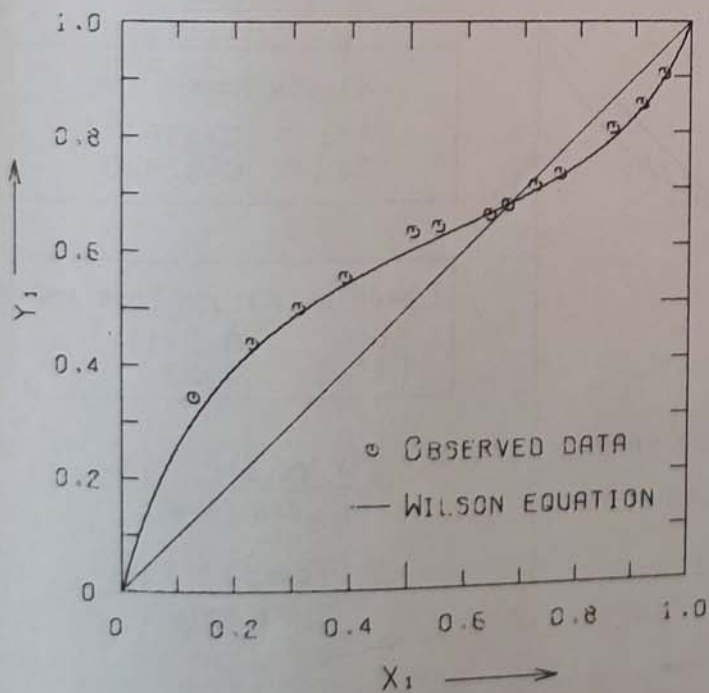
M. HIRATA AND S. OHE

DATA FROM BREDIG, O. R. BAYER, Z. PHYS. CHEM. VOL. 130, P. 15 (1927)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.1290	0.3440	39.76	246.00
0.2320	0.4400	39.76	270.30
0.3110	0.5020	39.76	282.50
0.3920	0.5540	39.76	290.00
0.5070	0.6320	39.76	299.00
0.5520	0.6400	39.76	300.00
0.6410	0.6590	39.76	299.00
0.6730	0.6750	39.76	300.00
0.7210	0.7090	39.76	300.00
0.7660	0.7290	39.76	301.00
0.8600	0.8080	39.76	293.20
0.9110	0.8510	39.76	287.50
0.9510	0.9060	39.76	279.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.87863	1473.110	230.000
2	7.09808	1238.710	217.000



WILSON PARAMETERS

$$\Lambda_{12} = 0.69348$$

$$\Lambda_{21} = 0.37510$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0125$$

$$T [^{\circ}\text{C}] : 0.18$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

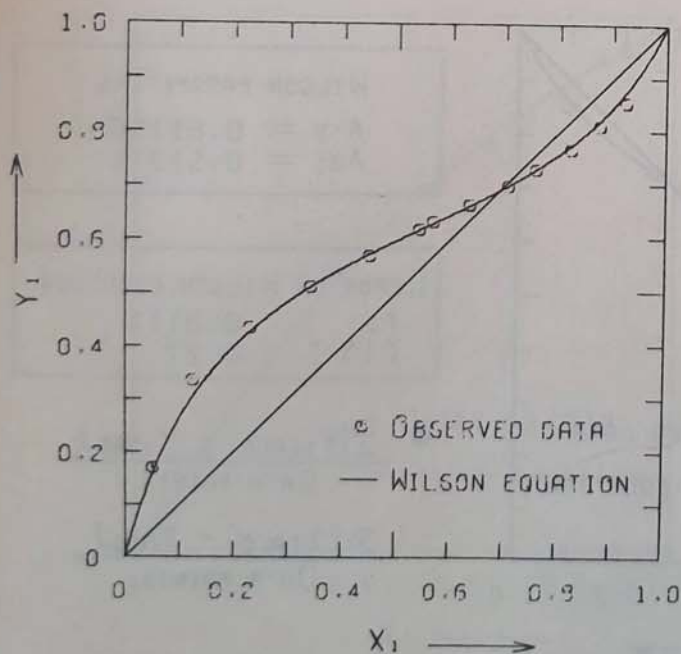
M. HIRATA AND S. CHE

DATA FROM MURTI P.S., VAN WINKLE M., CHEM. ENG. DATA SERIES 3, 72 (1953)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.0525	0.1700	50.00	330.50
0.1260	0.3375	50.00	373.50
0.2315	0.4360	50.00	405.50
0.3435	0.5125	50.00	435.00
0.4500	0.5695	50.00	455.50
0.5425	0.6170	50.00	459.50
0.5690	0.6325	50.00	460.50
0.6350	0.6640	50.00	461.00
0.7060	0.6975	50.00	463.50
0.7590	0.7290	50.00	461.50
0.8215	0.7655	50.00	457.50
0.8755	0.8100	50.00	452.50
0.9250	0.8550	50.00	444.50

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.87863	1473.110	230.000
2	7.09808	1239.710	217.000



WILSON PARAMETERS

$$\Lambda_{12} = 0.62931$$

$$\Lambda_{21} = 0.47008$$

ERROR* ON WILSON EQUATION

$$Y_1 = 0.0077$$

$$T [^{\circ}\text{C}] = 0.13$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

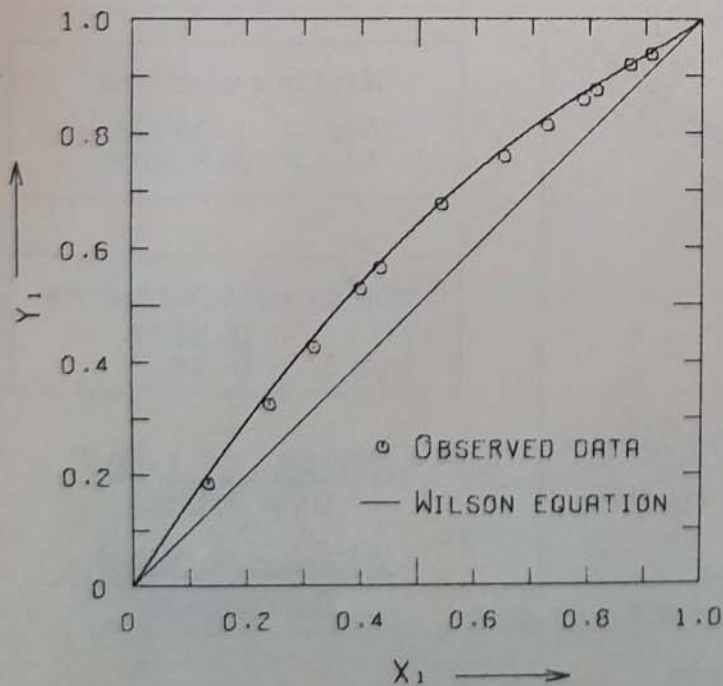
M. HIRATA AND S. OHE

DATA FROM AMER H.H., PAXTON R.R., VAN WINKLE M., IND. ENG. CHEM. 48, 142 (1956).

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.1340	0.1830	76.60	760.00
0.2420	0.3260	75.00	760.00
0.3200	0.4280	73.60	760.00
0.4010	0.5290	72.30	760.00
0.4350	0.5660	71.70	760.00
0.5420	0.6760	70.00	760.00
0.6520	0.7590	68.60	760.00
0.7280	0.8130	67.70	760.00
0.7900	0.8580	66.90	760.00
0.8140	0.8750	66.60	760.00
0.8730	0.9190	65.80	760.00
0.9100	0.9370	65.60	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.87863	1473.110	230.000
2	8.04494	1554.300	222.650



WILSON PARAMETERS

$$\Lambda_{12} = 2.30756$$

$$\Lambda_{21} = 0.20397$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0128$$

$$T [^{\circ}\text{C}] : 0.18$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

M. HIRATA AND S. OHE

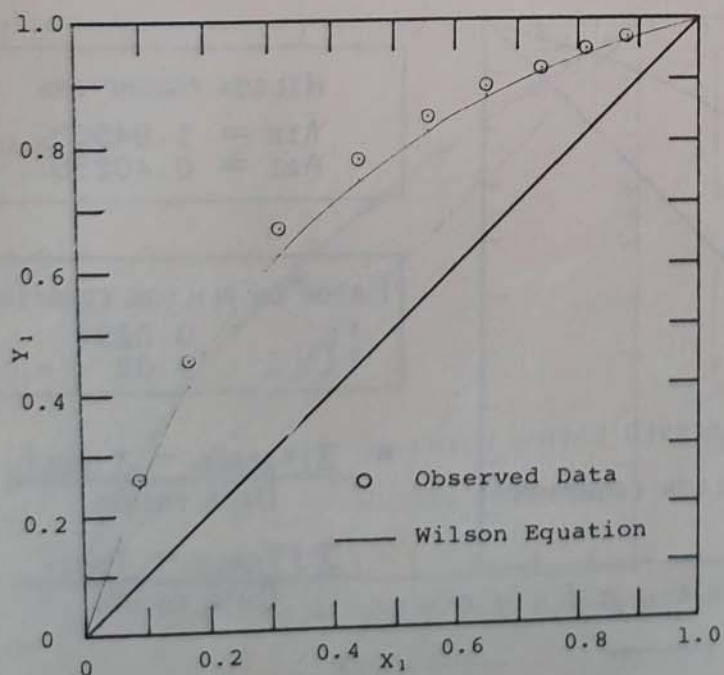
METHYL ALCOHOL(1)-PROPYL ALCOHOL(2)*

DATA FROM HILL N.D., VAN WINKLE M.: IND. ENG. CHEM. 44, 203, 208 (1952)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.0900	0.2600	89.00	760.00
0.1720	0.4550	83.20	760.00
0.3190	0.6680	79.70	760.00
0.4450	0.7770	78.30	760.00
0.5550	0.8420	76.70	760.00
0.6520	0.8890	73.90	760.00
0.7380	0.9210	71.30	760.00
0.8140	0.9510	69.40	760.00
0.8830	0.9710	66.70	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	8.07246	1574.990	238.860
2	7.61924	1375.140	193.000



Wilson Parameters

$\Lambda_{12} = 0.98689$

$\Lambda_{21} = 1.0004$

Error* on Wilson Equation

$Y_1 : 0.0205$

$T[°C] : 1.94$

* $\frac{\sum |Y_{1calc} - Y_{1obs}|}{\text{Data Points}}$

$\frac{\sum |T_{calc} - T_{obs}|}{\text{Data Points}}$

FIG. X - Y CURVE

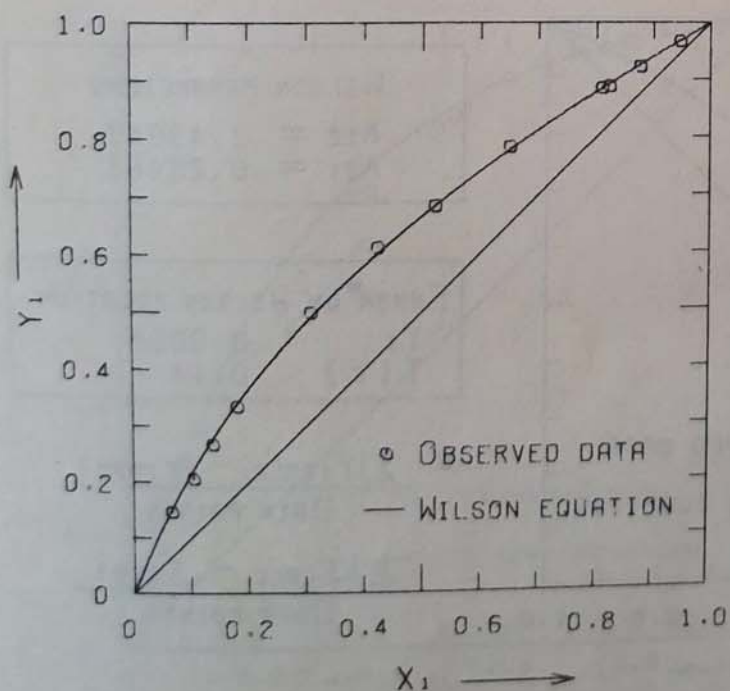
M. HIRATA AND S. OHE

DATA FROM DUNLOP J.G. M.S. THESIS, BROOKLYN POLYTECHN. INST., 1948

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0680	0.1460	79.20	760.00
0.1060	0.2060	78.50	760.00
0.1410	0.2680	78.50	760.00
0.1840	0.3360	76.50	760.00
0.3100	0.5010	74.10	760.00
0.4250	0.6120	72.20	760.00
0.5240	0.6840	70.50	760.00
0.6520	0.7850	68.80	760.00
0.8110	0.8860	67.10	760.00
0.8240	0.8890	66.50	760.00
0.8780	0.9240	65.90	760.00
0.9470	0.9670	65.30	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.87863	1473.110	230.000
2	6.66040	813.055	132.930



WILSON PARAMETERS

$$\Lambda_{12} = 0.56621$$

$$\Lambda_{21} = 1.24972$$

ERROR* ON WILSON EQUATION

$$Y_1 \quad 0.0067$$

$$T [^\circ\text{C}] \quad 0.22$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

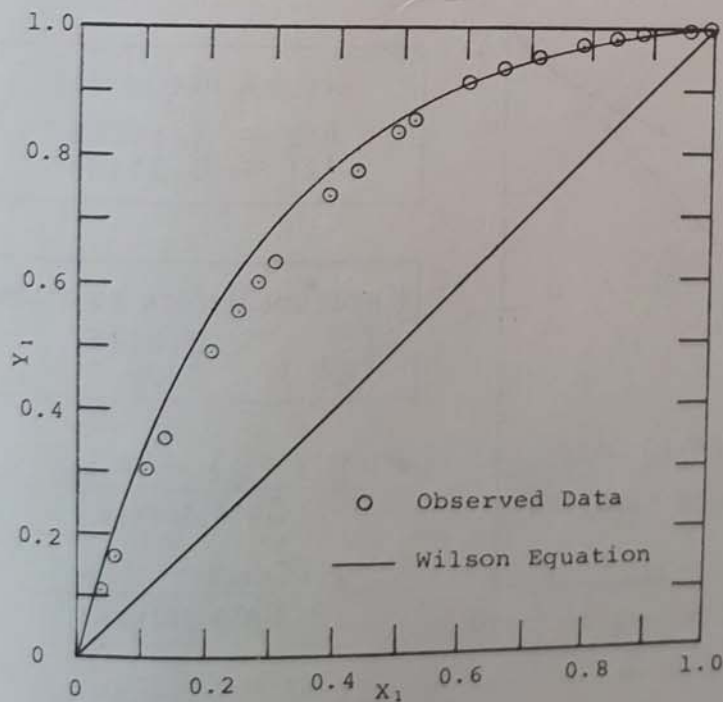
M. HIRATA AND S. OHE

DATA FROM RIUS, A., ET AL.: CHEM. ENG. SCI., VOL 10, P. 105, 289, (1959)

X_1	Y_1	T [°C]	P [mmHg]	X_1	Y_1	T [°C]	P [mmHg]
0.0370	0.1090	112.00	706.00	0.7850	0.9710	69.10	706.00
0.0580	0.1650	109.90	706.00	0.8330	0.9830	67.30	706.00
0.1070	0.3030	105.00	706.00	0.8920	0.9890	65.90	706.00
0.1370	0.3530	102.80	706.00	0.9590	0.9960	63.90	706.00
0.2080	0.4910	97.40	706.00	0.9950	0.9990	63.00	706.00
0.2500	0.5560	94.80	706.00				
0.2800	0.6030	92.70	706.00				
0.3060	0.6300	91.70	706.00				
0.3870	0.7350	86.80	706.00				
0.4270	0.7760	84.70	706.00				
0.4920	0.8310	81.70	706.00				
0.5170	0.8530	79.90	706.00				
0.6010	0.9110	76.00	706.00				
0.6570	0.9340	73.70	706.00				
0.7130	0.9510	71.60	706.00				

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.87863	1473.110	230.000
2	7.18807	1416.700	211.000



Wilson Parameters

$\Lambda_{12} = 0.17538$

$\Lambda_{21} = 0.78280$

Error* on Wilson Equation

$Y_1 : 0.0291$

$T[°C] : 0.19$

* $\frac{\sum |Y_{1calc} - Y_{1obs}|}{\text{Data Points}}$

$\frac{\sum |T_{calc} - T_{obs}|}{\text{Data Points}}$

FIG. X - Y CURVE

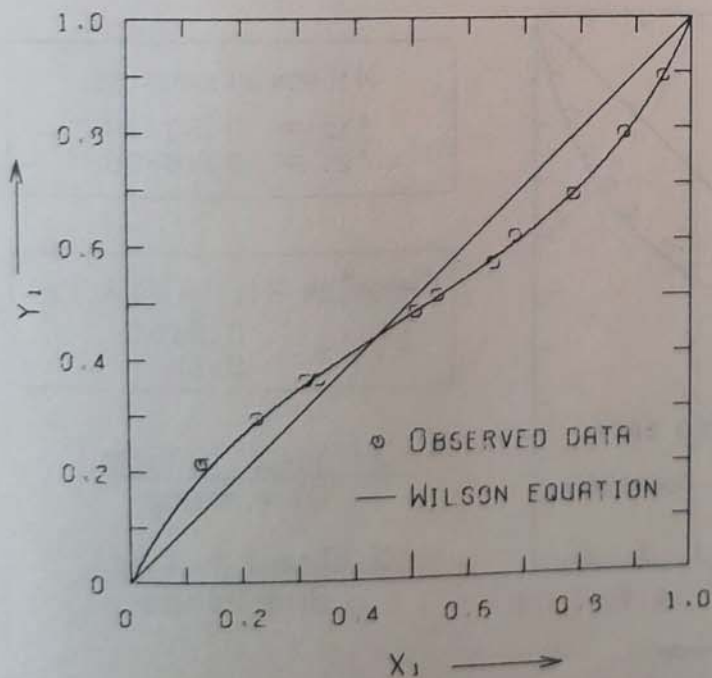
M. HIRATA AND S. OHE

DATA FROM MURTI P.S., VAN WINKLE M., CHEM. ENG. DATA SERIES, VOL. 3, P. 72 (1959)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.1260	0.2146	73.82	760.00
0.1343	0.2146	73.78	760.00
0.2271	0.2960	73.04	760.00
0.3128	0.3634	72.50	760.00
0.3358	0.3643	72.28	760.00
0.5052	0.4803	72.18	760.00
0.5441	0.5074	72.35	760.00
0.6442	0.5618	72.70	760.00
0.6828	0.6092	72.90	760.00
0.7860	0.6819	74.14	760.00
0.8774	0.7908	75.50	760.00
0.9482	0.8924	76.70	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	8.04494	1554.300	222.650
2	7.09808	1238.710	217.000



WILSON PARAMETERS

$\Lambda_{12} = 0.66736$

$\Lambda_{21} = 0.62367$

ERROR* ON WILSON EQUATION

$Y_1 \leq 0.0073$

$T [^\circ\text{C}] \leq 0.12$

* $\frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$

$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$

FIG. X - Y CURVE

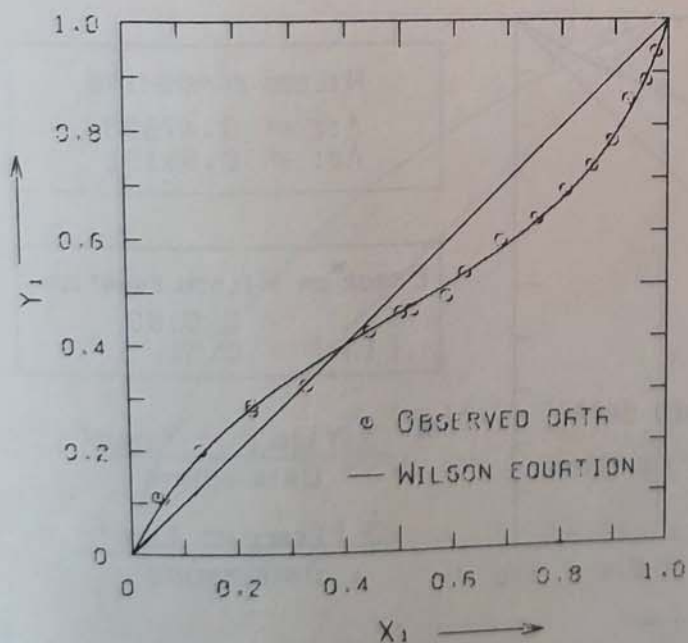
M. HIRATA AND S. OHE

DATA FROM MURTI P.S., VAN WINKLE M. CHEM. ENG. DATA SERIES, VOL. 3, P. 72 (1953)

X_1	Y_1	T [°C]	P [MMHG]	X_1	Y_1	T [°C]	P [MMHG]
0.0505	0.1107	60.00	444.00	0.9940	0.7730	60.00	411.00
0.0595	0.1100	60.00	444.50	0.9247	0.9491	60.00	399.00
0.1319	0.2023	60.00	464.00	0.9760	0.9393	60.00	361.50
0.2286	0.2801	60.00	478.00	0.9565	0.9249	60.00	375.00
0.2286	0.2899	60.00	478.50				
0.3279	0.3257	60.00	484.50				
0.4437	0.4244	60.00	485.00				
0.5011	0.4578	60.00	481.00				
0.5229	0.4625	60.00	479.50				
0.5960	0.4865	60.00	474.00				
0.6200	0.5234	60.00	473.00				
0.6970	0.5990	60.00	466.00				
0.7541	0.6295	60.00	454.00				
0.9064	0.6900	60.00	444.50				
0.9553	0.7260	60.00	421.50				

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	8.04494	1554.300	222.650
2	7.09808	1239.710	217.000



WILSON PARAMETERS

$$\Lambda_{12} = 0.65906$$

$$\Lambda_{21} = 0.55013$$

ERROR* ON WILSON EQUATION

$$Y_1 = 0.0098$$

$$T [^{\circ}\text{C}] = 0.14$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

M. HIRATA AND S. OHE

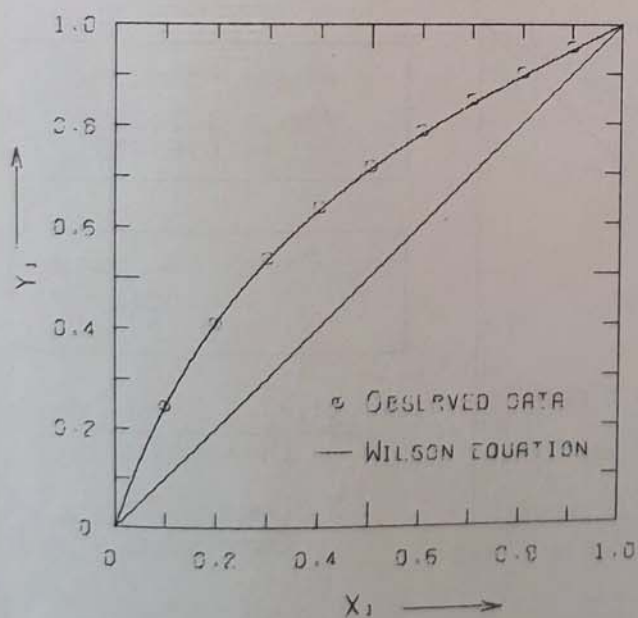
417 • ETHYL ALCOHOL (1)-PROPYL ALCOHOL (2)

DATA FROM GONVALINKO V.V., PRID T6.B. ZH. FIZ. KHIM. 22.1:135 (1948)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.1000	0.2420	50.00	100.00
0.2000	0.4090	50.00	123.60
0.3000	0.5360	50.00	139.10
0.4000	0.6360	50.00	153.70
0.5000	0.7160	50.00	167.40
0.6000	0.7850	50.00	179.00
0.7000	0.8470	50.00	190.20
0.8000	0.9010	50.00	200.60
0.9000	0.9520	50.00	211.90

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	8.16290	1623.220	228.980
2	7.85418	1497.910	204.112



WILSON PARAMETERS
 $\Lambda_{12} = 1.12910$
 $\Lambda_{21} = 0.69003$

ERROR* ON WILSON EQUATION
 $Y_1 : 0.0042$
 $T [°C] : 0.11$

$$* \frac{\sum |Y_{1CALC} - Y_{1OBS}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{CALC} - T_{OBS}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

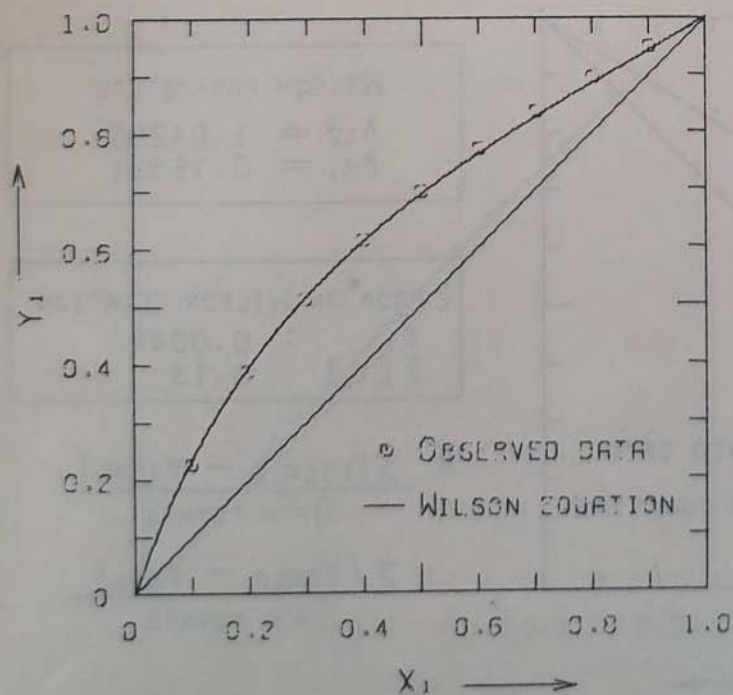
M. HIRATA AND S. OHE

DATA FROM ODOVENKO V.V., FEED TS.B. ZH.FIZ.KHIM.22,1135(1948)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.1000	0.2230	70.00	286.50
0.2000	0.3970	70.00	324.10
0.3000	0.5110	70.00	360.10
0.4000	0.6130	70.00	392.50
0.5000	0.6950	70.00	424.20
0.6000	0.7590	70.00	451.60
0.7000	0.8330	70.00	476.50
0.8000	0.8920	70.00	501.00
0.9000	0.9470	70.00	526.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	8.16290	1623.220	228.980
2	7.85418	1497.910	204.112



WILSON PARAMETERS

$$\Lambda_{12} = 1.06305$$

$$\Lambda_{21} = 0.69655$$

ERROR* ON WILSON EQUATION

$$Y_1 \quad \% \quad 0.0063$$

$$T [^\circ\text{C}] \quad \% \quad 0.12$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

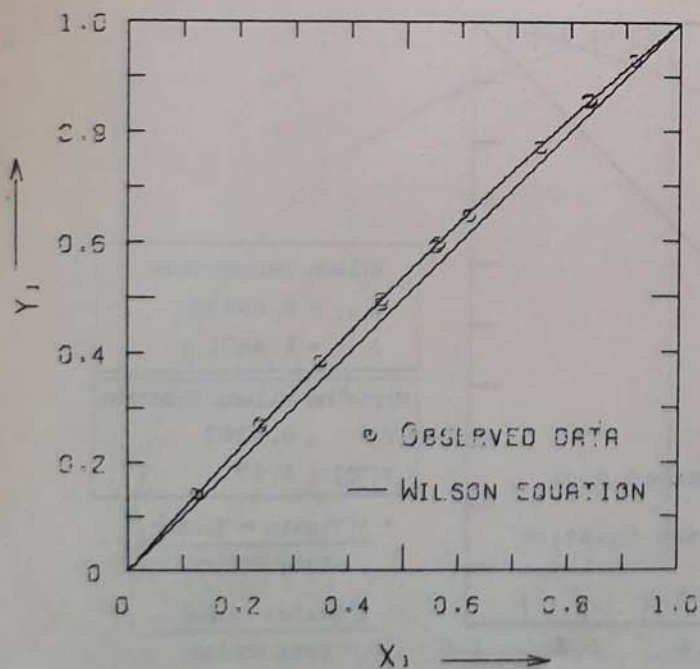
FIG X - Y CURVE

DATA FROM BALLARD L.H., VAN NINKLE M., IND. ENG. CHEM. 44, 2450 (1952)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.1240	0.1410	91.90	760.00
0.2400	0.2665	91.40	760.00
0.2425	0.2730	91.30	760.00
0.3480	0.3845	91.00	760.00
0.4555	0.4850	90.50	760.00
0.4570	0.4955	90.50	760.00
0.5520	0.5895	90.20	760.00
0.5530	0.5970	90.10	760.00
0.6135	0.6460	79.90	760.00
0.7425	0.7700	79.40	760.00
0.8295	0.8545	79.10	760.00
0.8335	0.8590	79.10	760.00
0.9150	0.9295	78.90	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	8.16290	1623.220	228.980
2	7.75634	1356.142	197.970



WILSON PARAMETERS

$\Lambda_{12} = 0.61855$

$\Lambda_{21} = 1.50043$

ERROR* ON WILSON EQUATION

$Y_1 = 0.0024$

$T [^{\circ}\text{C}] = 0.05$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG X - Y CURVE

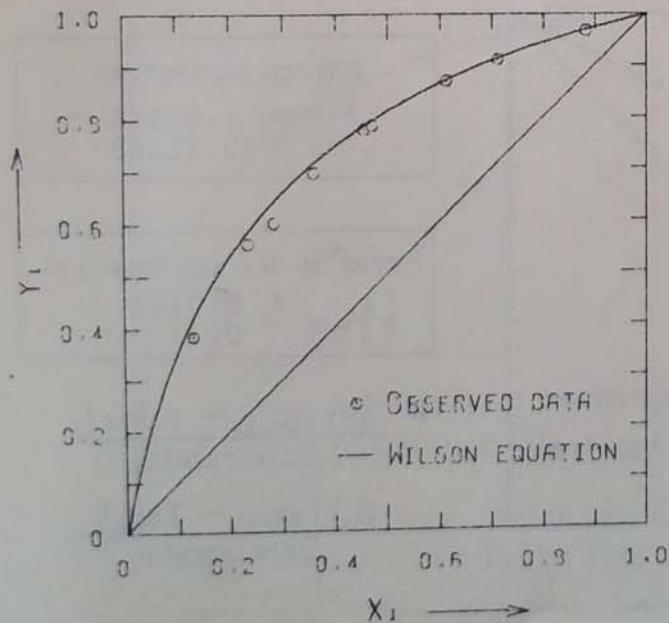
M. HIRATA AND S. OHE

DATA FROM HELLWIG, L. R., N. VAN WINKLE: IND. ENG. CHEM., VOL. 45, P. 524 (1953)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.1230	0.3840	107.60	760.00
0.2330	0.5630	102.10	760.00
0.2820	0.6020	99.60	760.00
0.3570	0.6960	95.80	760.00
0.4530	0.7790	92.90	760.00
0.4680	0.7860	92.40	760.00
0.6100	0.8710	87.70	760.00
0.7090	0.9120	84.80	760.00
0.8800	0.9680	80.80	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	8.04494	1554.300	222.650
2	7.65521	1462.060	188.700



WILSON PARAMETERS

$$\Lambda_{12} = 0.42305$$

$$\Lambda_{21} = 1.59046$$

ERROR* ON WILSON EQUATION

$$Y_1 = 0.0157$$

$$T [^{\circ}\text{C}] = 0.60$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG X - Y CURVE

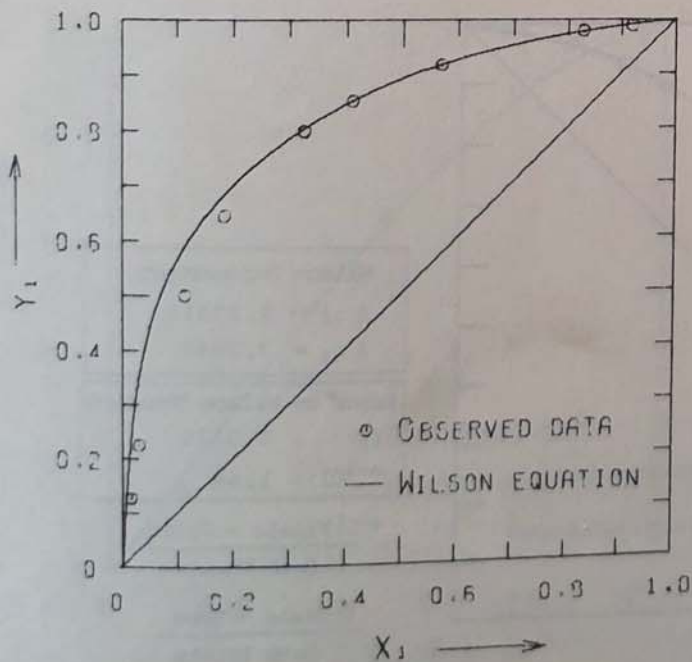
M. HIRATA AND S. OHE

DATA FROM HELLWIG, L.R., M. VAN WINKLE, IND. ENG. CHEM. VOL. 45, P. 624 (1953)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0152	0.1250	132.40	760.00
0.0283	0.2240	130.20	760.00
0.1120	0.4990	119.50	760.00
0.1830	0.6440	112.30	760.00
0.3240	0.7980	102.60	760.00
0.3250	0.7970	101.80	760.00
0.4100	0.8520	97.60	760.00
0.5680	0.9160	90.60	760.00
0.8260	0.9780	82.30	760.00
0.9170	0.9880	80.30	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	8.04494	1554.300	222.650
2	7.14843	1300.460	166.610



WILSON PARAMETERS

$$\Lambda_{12} = 0.10176$$

$$\Lambda_{21} = 2.13872$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0358$$

$$T [^{\circ}\text{C}] : 1.43$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

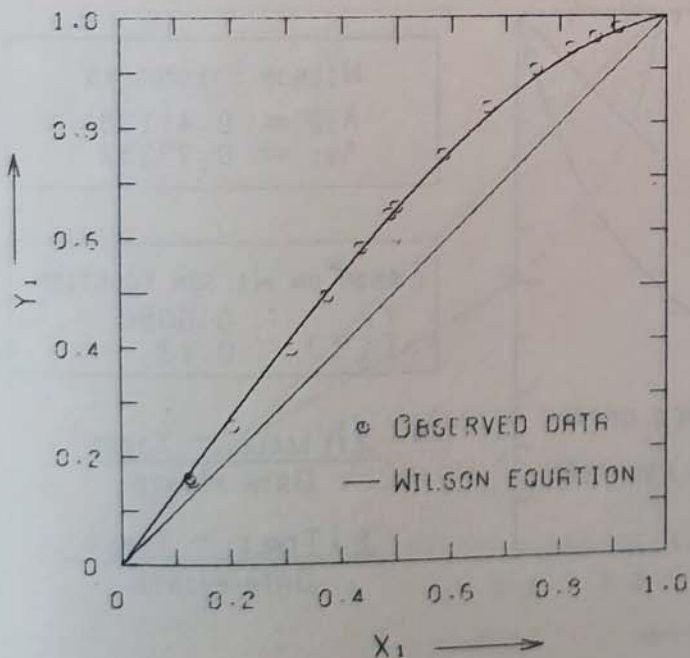
M. HIRATA AND S. OHE

DATA FROM RIUS, R., ET AL.: CHEM. ENG. SCI., VOL. 10, P. 105 (1958)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.1260	0.1590	114.10	706.00
0.1320	0.1540	114.10	706.00
0.2050	0.2560	113.30	706.00
0.3120	0.3970	111.30	706.00
0.3770	0.4930	109.90	706.00
0.4370	0.5780	108.50	706.00
0.4880	0.6380	107.80	706.00
0.5000	0.6510	107.20	706.00
0.5860	0.7450	105.50	706.00
0.6690	0.8310	103.10	706.00
0.7570	0.9000	101.00	706.00
0.8230	0.9400	99.20	706.00
0.8680	0.9600	98.40	706.00
0.9080	0.9760	97.30	706.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.99733	1569.700	209.500
2	7.18907	1416.700	211.000



WILSON PARAMETERS

$$\Lambda_{12} = 3.01487$$

$$\Lambda_{21} = 0.31998$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0113$$

$$T [^{\circ}\text{C}] : 0.25$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

M. HIRATA AND S. OHE

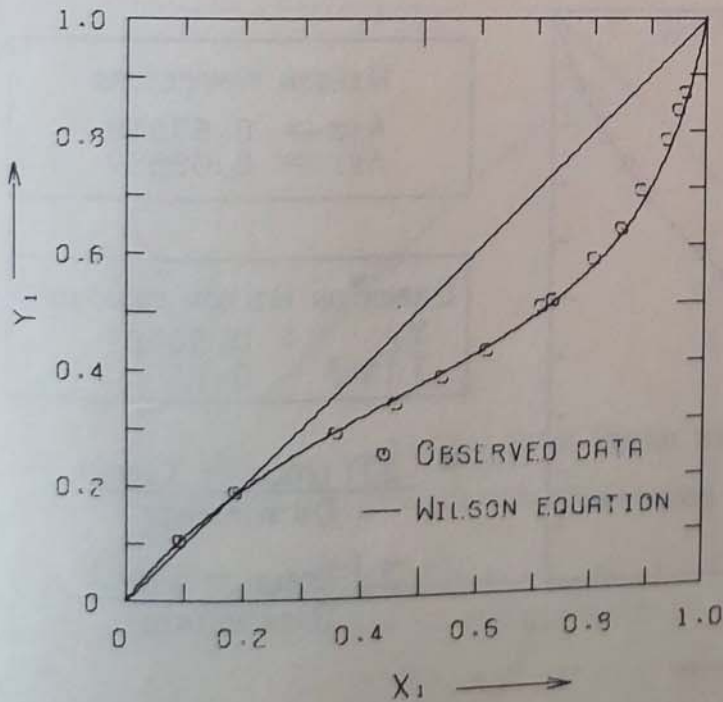
ISOPROPYL ALCOHOL(1)-ETHYL ACETATE(2)

DATA FROM MURTI P.G., VAN WINKLE M.: CHEM. ENG. DATA SERIC 6 3.72(1958).

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0915	0.1014	40.00	192.00
0.1860	0.1950	40.00	194.00
0.3595	0.2880	40.00	191.00
0.4600	0.3350	40.00	183.50
0.5385	0.3775	40.00	178.00
0.6150	0.4220	40.00	174.00
0.7100	0.4960	40.00	164.00
0.7300	0.5050	40.00	161.50
0.8010	0.5770	40.00	152.50
0.8500	0.6270	40.00	148.50
0.8845	0.6935	40.00	137.00
0.9300	0.7825	40.00	126.00
0.9500	0.8340	40.00	120.50
0.9620	0.8653	40.00	118.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.75634	1366.142	197.970
2	7.10233	1245.239	217.911



WILSON PARAMETERS

$\Lambda_{12} = 0.75252$

$\Lambda_{21} = 0.44976$

ERROR* ON WILSON EQUATION

$Y_1 : 0.0120$

$T [^{\circ}\text{C}] : 0.22$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

M. HIRATA AND S. OHE

DATA FROM BALLARD L.H., VAN WINKLE M.: IND. ENG. CHEM. 44, 2450 (1952)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.0575	0.1100	96.10	760.00
0.0610	0.1110	95.90	760.00
0.1455	0.2325	94.20	760.00
0.2285	0.3510	92.80	760.00
0.3095	0.4435	91.40	760.00
0.3125	0.4500	91.40	760.00
0.4200	0.5545	90.00	760.00
0.4355	0.5725	89.70	760.00
0.5190	0.6600	88.50	760.00
0.6310	0.7480	87.00	760.00
0.7305	0.8225	85.80	760.00
0.7675	0.8495	85.30	760.00
0.8585	0.9175	84.10	760.00
0.9100	0.9525	83.40	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.75634	1366.142	197.970
2	7.85418	1497.910	204.112

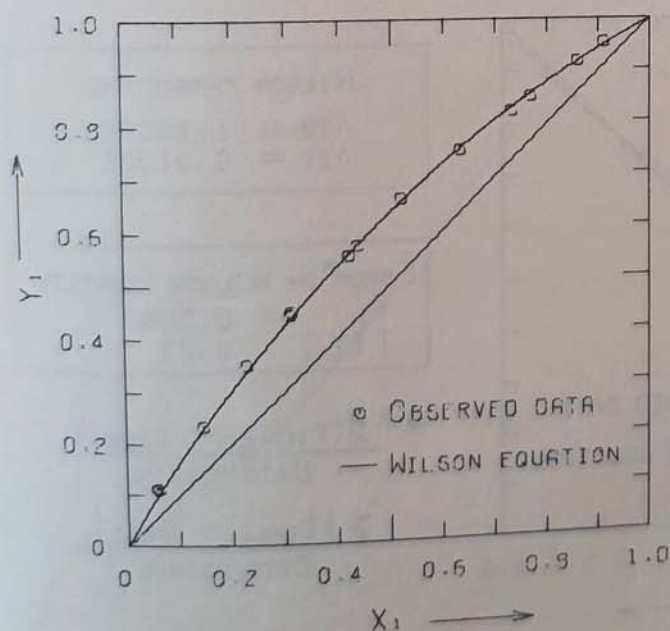


FIG. X - Y CURVE

WILSON PARAMETERS

$$\Lambda_{12} = 0.37446$$

$$\Lambda_{21} = 1.94531$$

ERROR* ON WILSON EQUATION

$$Y_1 = \pm 0.0061$$

$$T [^{\circ}\text{C}] = 0.12$$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

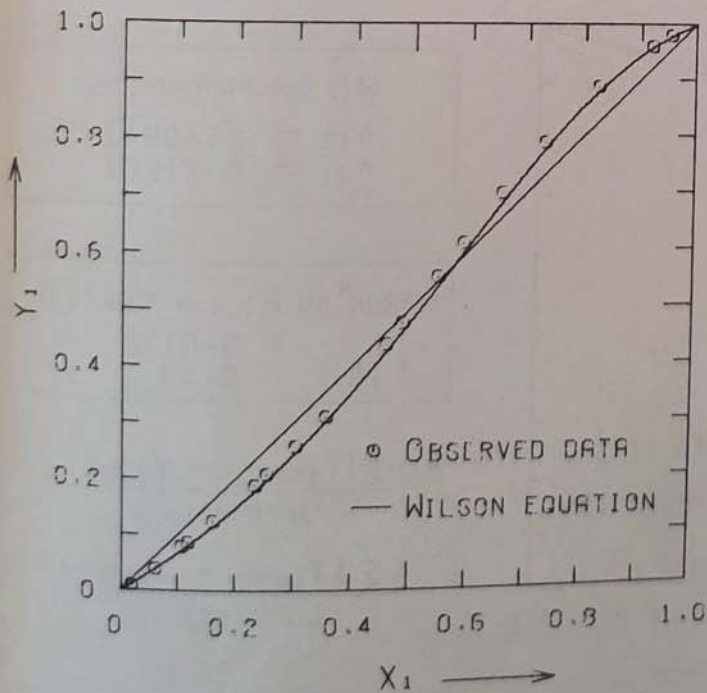
M. HIRATA AND S. OHE

DATA FROM RIUS, A. ET AL., CHEM. ENG. SCI., VOL. 10, P. 105 (1959)

X_1	Y_1	T [°C]	P [mmHg]	X_1	Y_1	T [°C]	P [mmHg]
0.0130	0.0090	115.70	706.00	0.9240	0.9590	118.20	706.00
0.0600	0.0390	116.30	706.00	0.9200	0.9600	117.20	706.00
0.1050	0.0730	116.90	706.00	0.9540	0.9800	116.60	706.00
0.1170	0.0850	117.00	706.00				
0.1610	0.1240	117.70	706.00				
0.2340	0.1990	118.60	706.00				
0.2540	0.2090	118.90	706.00				
0.3040	0.2590	119.50	706.00				
0.3550	0.3110	119.80	706.00				
0.4590	0.4390	120.30	706.00				
0.4850	0.4750	120.30	706.00				
0.5450	0.5550	120.30	706.00				
0.5900	0.6140	120.10	706.00				
0.6570	0.7020	119.80	706.00				
0.7310	0.7900	119.40	706.00				

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.65521	1462.060	198.700
2	7.19807	1416.700	211.000



WILSON PARAMETERS

$$\Lambda_{12} = 3.73466$$

$$\Lambda_{21} = 0.16589$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0085$$

$$T [^{\circ}\text{C}] : 0.23$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

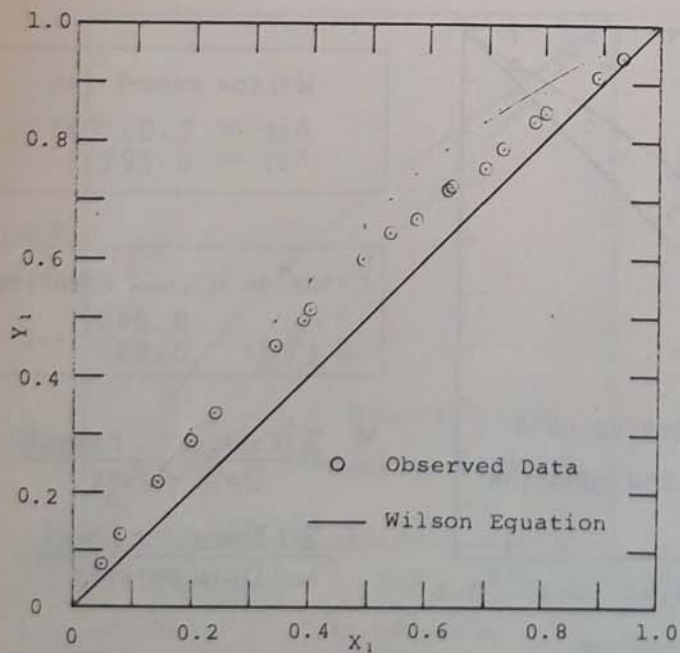
M. HIRATA AND S. OHE

DATA FROM HUNSMANN, W.: CHEM. ING. TECHN. VOL. 39, P. 1142 (1967)

X_1	Y_1	T [°C]	P [mmHg]	X_1	Y_1	T [°C]	P [mmHg]
0.0430	0.0730	61.38	100.00	0.7810	0.8330	46.59	100.00
0.0770	0.1260	60.39	100.00	0.8500	0.8830	45.92	100.00
0.1420	0.2170	58.43	100.00	0.8010	0.8460	45.65	100.00
0.2020	0.2840	57.16	100.00	0.8860	0.9130	45.19	100.00
0.2380	0.3370	55.00	100.00	0.9340	0.9430	44.52	100.00
0.3390	0.4500	53.18	100.00				
0.3870	0.4930	52.97	100.00				
0.4030	0.5130	52.19	100.00				
0.4890	0.5970	50.90	100.00				
0.5330	0.6390	49.57	100.00				
0.5780	0.6640	49.20	100.00				
0.6290	0.7160	48.69	100.00				
0.6400	0.7190	47.75	100.00				
0.6940	0.7540	47.68	100.00				
0.7250	0.7850	47.08	100.00				

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.94459	1295.260	218.000
2	7.80307	1651.200	225.000



Wilson Parameters

$\Lambda_{12} = 1.0612$

$\Lambda_{21} = 1.100$

Error* on Wilson Equation

$Y_1 : 0.0466$

$T[°C] : 1.12$

* $\frac{\sum |Y_{1calc} - Y_{1obs}|}{\text{Data Points}}$

Data Points

$\frac{\sum |T_{calc} - T_{obs}|}{\text{Data Points}}$

Data Points

FIG. X - Y CURVE

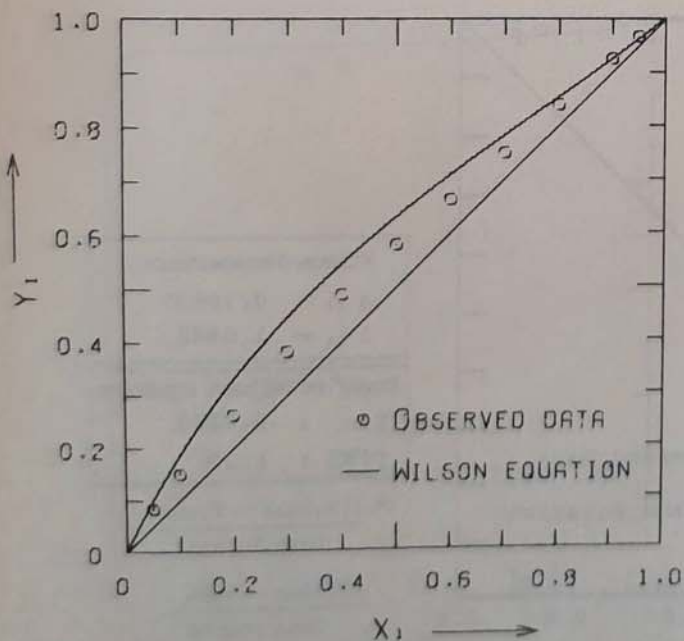
M. HIRATA AND S. OHE

DATA FROM ALPERT, N., PH. J. ELVING, IND. ENG. CHEM., VOL. 41, P. 2864 (1949).

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.0500	0.0800	116.00	760.00
0.1000	0.1460	114.90	760.00
0.2000	0.2600	112.80	760.00
0.3000	0.3800	110.70	760.00
0.4000	0.4850	108.80	760.00
0.5000	0.5760	107.00	760.00
0.6000	0.6600	105.40	760.00
0.7000	0.7460	103.90	760.00
0.8000	0.8360	102.50	760.00
0.9000	0.9220	101.40	760.00
0.9500	0.9640	101.00	760.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.94459	1295.260	218.000
2	7.18807	1416.700	211.000



WILSON PARAMETERS

$$\Lambda_{12} = 0.97324$$

$$\Lambda_{21} = 0.75595$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0373$$

$$T [^{\circ}\text{C}] : 0.52$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

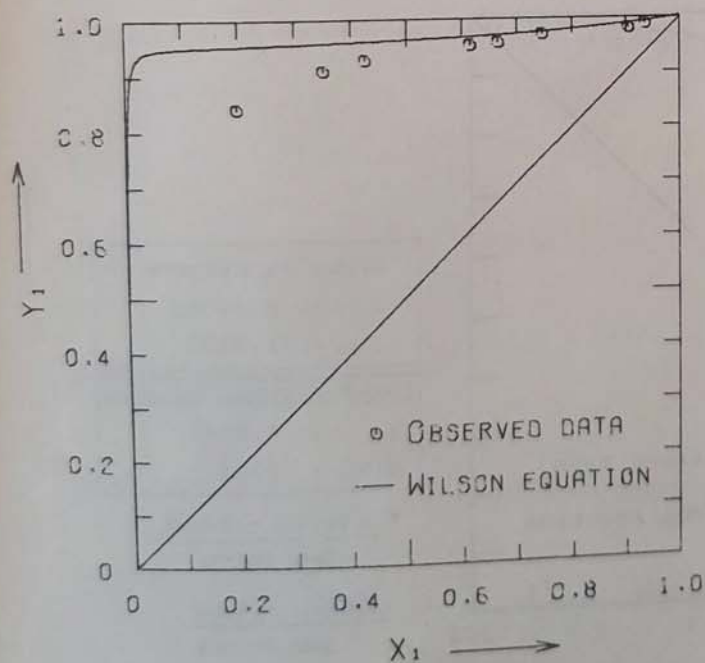
M. HIRATA AND S. OHE

DATA FROM BOEKERS, A. J. W. A. SCHELLER: J. CHEM. ENG. DATA, VOL. 13, P. 480 (1962)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHg]
0.1980	0.8380	75.00	81.50
0.3520	0.9060	75.00	141.60
0.4260	0.9240	75.00	172.90
0.6150	0.9500	75.00	226.70
0.6660	0.9540	75.00	237.20
0.7470	0.9690	75.00	259.70
0.9050	0.9790	75.00	294.90
0.9360	0.9860	75.00	304.40

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	6.94459	1295.260	218.000
2	5.41163	591.146	59.867



WILSON PARAMETERS

$$\Lambda_{12} = 0.03469$$

$$\Lambda_{21} = 0.55693$$

ERROR* ON WILSON EQUATION

$$Y_1 : 0.0406$$

$$T [^{\circ}\text{C}] : 7.02$$

$$* \frac{\sum |Y_{1\text{CALC}} - Y_{1\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

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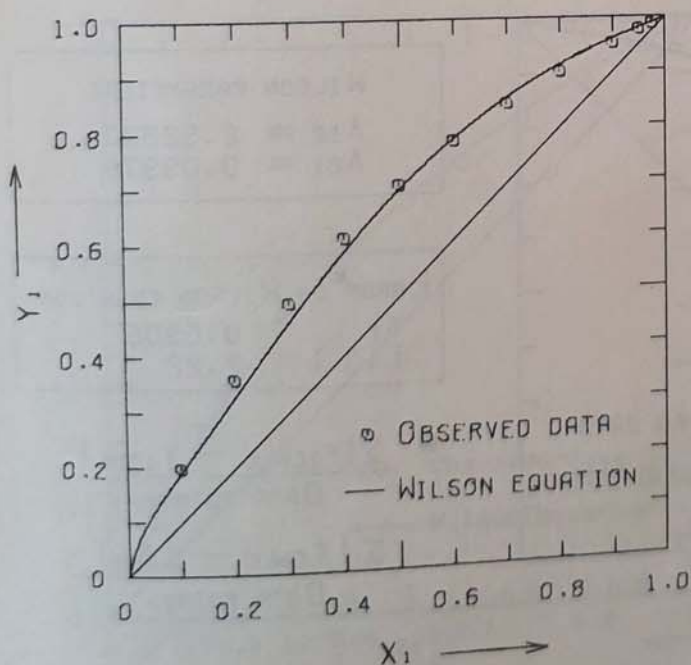
ACETIC ACID(1) - ACETIC ANHYDRIDE(2)

DATA FROM JONES, H. E.: J. CHEM. ENG. DATA., VOL. 7, (1), P. 13 (1962)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.1000	0.1990	79.30	100.00
0.2000	0.3600	76.90	100.00
0.3000	0.4950	74.80	100.00
0.4000	0.6100	72.90	100.00
0.5000	0.7030	71.10	100.00
0.6000	0.7800	69.30	100.00
0.7000	0.8450	67.60	100.00
0.8000	0.9020	65.90	100.00
0.9000	0.9530	64.20	100.00
0.9500	0.9780	63.40	100.00
0.9750	0.9890	63.00	100.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.18807	1416.700	211.000
2	7.57627	1704.720	223.246



WILSON PARAMETERS

$\Lambda_{12} = 0.05949$

$\Lambda_{21} = 3.04448$

ERROR* ON WILSON EQUATION

$Y_1 : 0.0135$

$T [^\circ\text{C}] : 0.41$

$$* \frac{\sum |Y_{\text{CALC}} - Y_{\text{OBS}}|}{\text{DATA POINTS}}$$

$$\frac{\sum |T_{\text{CALC}} - T_{\text{OBS}}|}{\text{DATA POINTS}}$$

FIG. X - Y CURVE

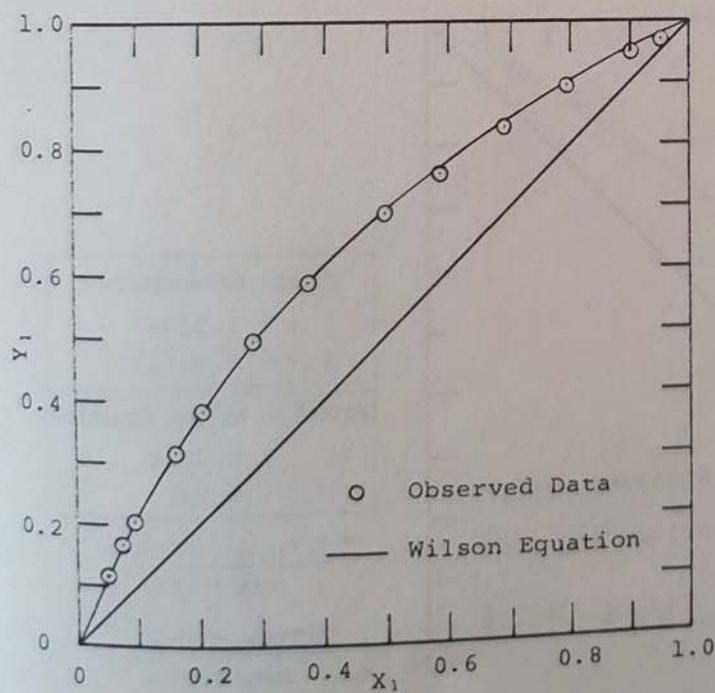
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DATA FROM SOKOLOV, N.M., N.N. SEVRYUGOVA, N.M. ZHAVORONIKOV: ZH. FIZ. KHIM., VOL. 39, P. 1008 (1965)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [mmHg]
0.0490	0.1170	37.20	200.00
0.0750	0.1640	36.30	200.00
0.0950	0.2040	35.80	200.00
0.1610	0.3180	34.60	200.00
0.2070	0.3870	32.90	200.00
0.2890	0.4940	31.20	200.00
0.3760	0.5890	29.60	200.00
0.4980	0.6940	26.20	200.00
0.5840	0.7560	25.00	200.00
0.6900	0.8300	22.40	200.00
0.7950	0.8930	20.60	200.00
0.9000	0.9500	18.90	200.00
0.9520	0.9770	18.10	200.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.03855	1232.530	222.470
2	7.04297	1193.060	234.134



Wilson Parameters

$\Lambda_{12} = 0.11851$

$\Lambda_{21} = 0.76171$

Error* on Wilson Equation

$Y_1 : 0.0053$

$T[°C] : 1.00$

* $\frac{\sum |Y_{1calc} - Y_{1obs}|}{\text{Data Points}}$

$\frac{\sum |T_{calc} - T_{obs}|}{\text{Data Points}}$

FIG. X - Y CURVE

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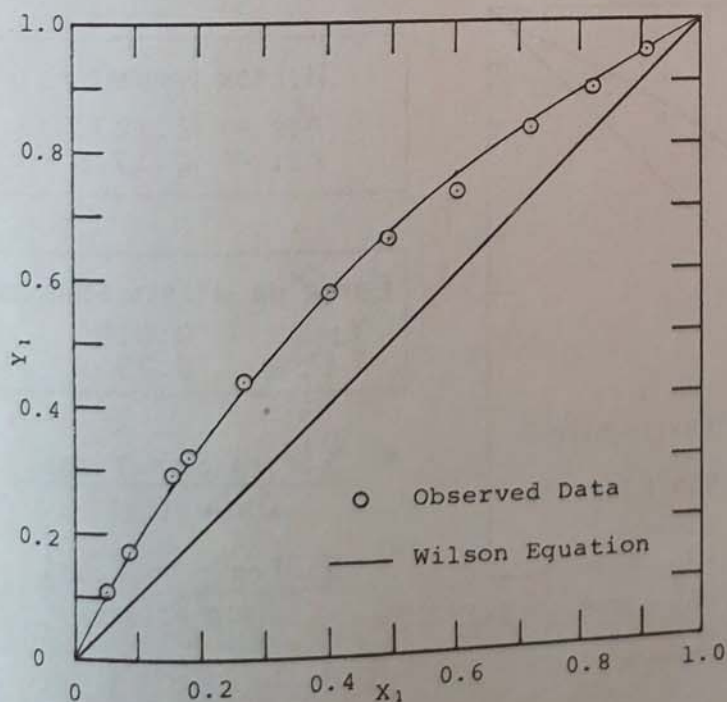
ACROLEIN(1) - ACRYLONITRILE(2)*

DATA FROM SOKOLOV.N.M.,N.N. SEVRYUGOVA.N.M.ZHAVORONIKOV:ZH.FIZ.KHIM., VOL.39, P.1008(1965)

X_1	Y_1	TEMPERATURE [°C]	PRESSURE [MMHG]
0.0520	0.1060	69.20	600.00
0.0890	0.1730	67.80	600.00
0.1580	0.2900	66.10	600.00
0.1810	0.3190	65.20	600.00
0.2700	0.4430	62.50	600.00
0.4020	0.5810	59.00	600.00
0.4960	0.6600	55.90	600.00
0.6030	0.7320	53.40	600.00
0.7200	0.8270	50.60	600.00
0.8220	0.8980	48.90	600.00
0.9080	0.9460	46.80	600.00

ANTOINE CONSTANTS

COMPONENTS	A	B	C
1	7.03855	1232.530	222.470
2	7.04297	1193.060	234.134



Wilson Parameters

$\Lambda_{12} = 0.99453$

$\Lambda_{21} = 0.99971$

Error* on Wilson Equation

$Y_1 : 0.0117$

$T[°C] : 2.11$

* $\frac{\sum |Y_{1,calc} - Y_{1,obs}|}{\text{Data Points}}$

$\frac{\sum |T_{calc} - T_{obs}|}{\text{Data Points}}$

FIG. X - Y CURVE

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