

Perspectives on European Chemical Engineering

Professor Richard Darton, EFCE President Berlin, 25 September 2011



The European Federation of Chemical Engineering

A non-profit association, formed:1953

Today: 39 member societies represent 100,000 chemical engineers in Europe, from Ireland to Russia.



Newest members: Turkey and Israel.

Corresponding societies in Brazil, Canada, India, Japan, Nigeria, South Africa and USA.

Objective: to promote co-operation in Europe between non-profit-making professional scientific and technical societies for the general advancement of chemical engineering and as a means of furthering the development of chemical engineering...



What does EFCE do?

A network including 20 working parties and 6 Sections embracing 1000 experts from academia and industry covering:

- Food, Product Design
- Education
- Safety & Loss Prevention, Environment and Sustainability
- Thermodynamics, Reaction Engineering, Separations and more...

Supporting awards, meetings, student mobility, standardisation, sharing/specifying best practice, publications. We aim to help <u>all</u> member societies and <u>their</u> members address issues in

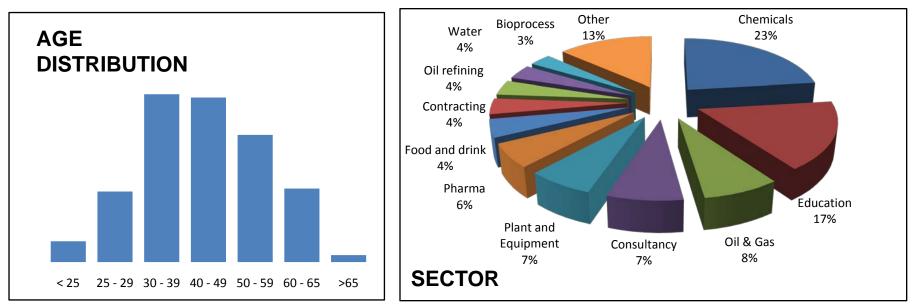
Technology, business, education and regulation

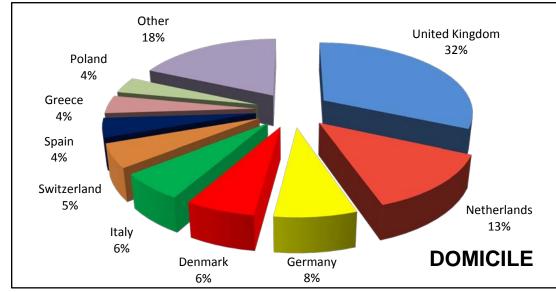




Appendix 1 (continued)

The EFCE 'Perspectives' Survey





1797 Responses in 35 European Countries

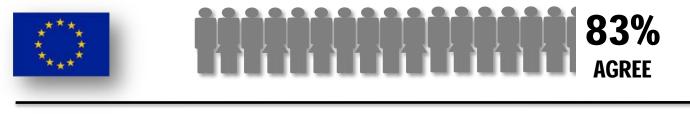


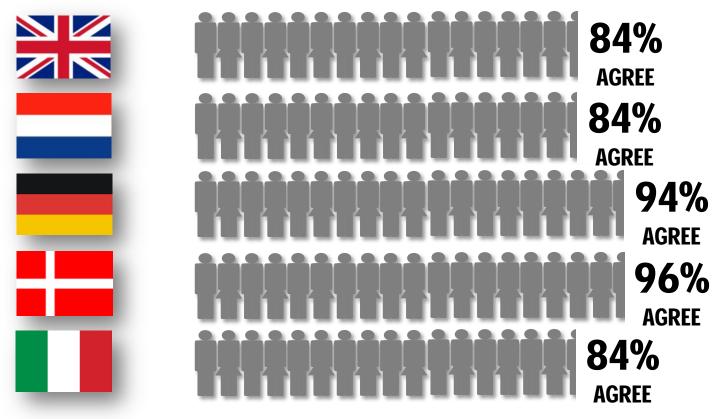
Perspectives on European Chemical Engineering the EFCE survey

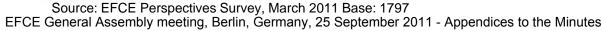
Career Satisfaction



Chemical Engineering is the right career for me...











Industry Support



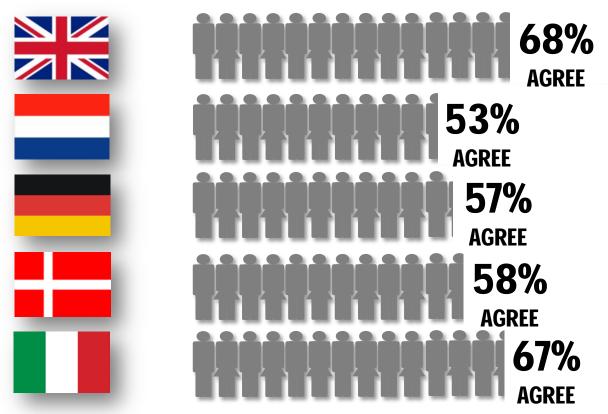
Appendix 1 (continued)

I was helped by industry during my education and training...

60%

AGREE

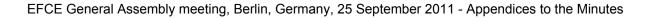








Prospects and Mobility

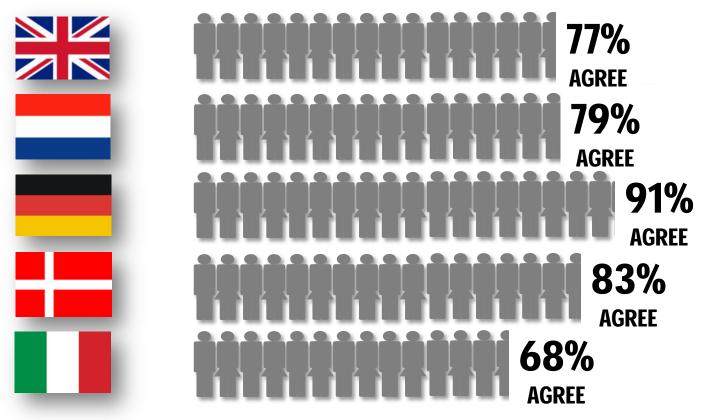


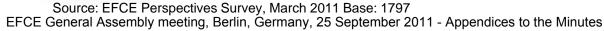


There are good opportunities for chemical engineers in my country...





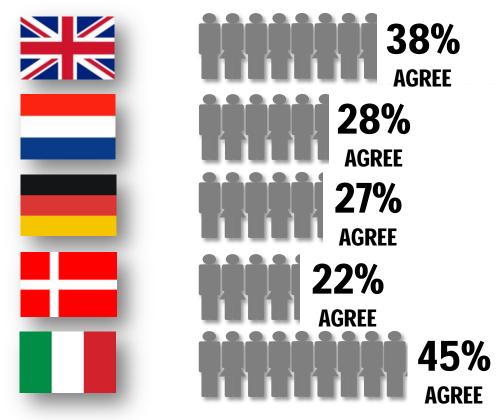






I may be working in another country in five years time..."





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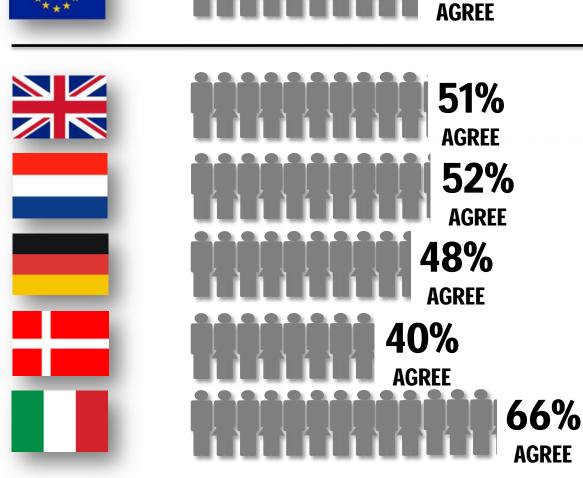
Ethical Standards



Ethics

"My education and training gave me a strong understanding of ethical standards and behaviours..."

49%

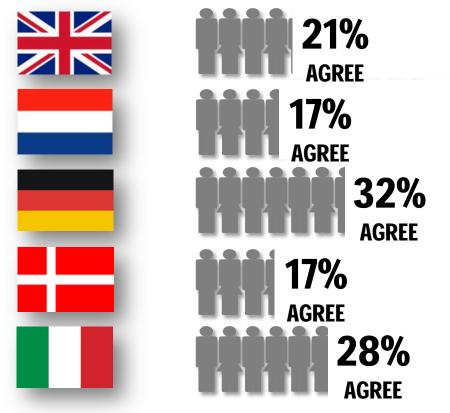




Ethics

"I require training to help me deal with ethical issues..."

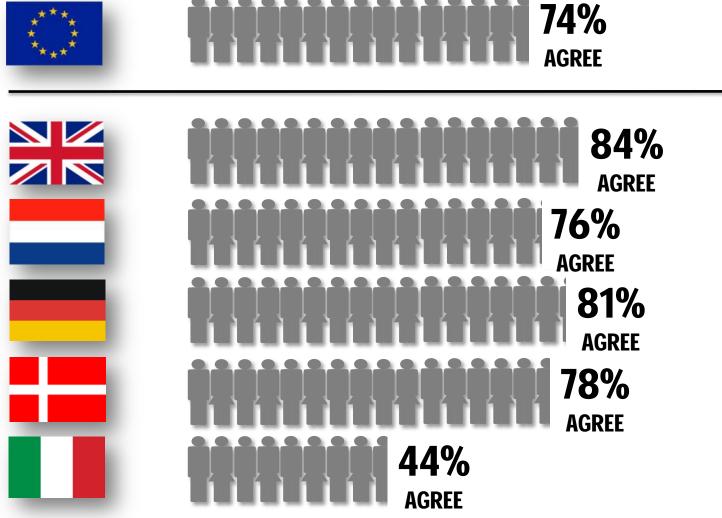




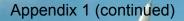


Ethics

"I am confident that my management has a genuine commitment to ethical standards..."







Energy & Climate Change

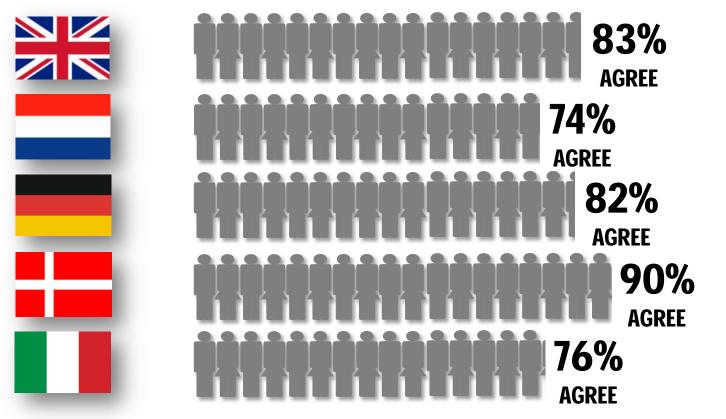


Appendix 1 (continued)

Energy & Climate Change

"Climate change is a big challenge for the future of humanity..."

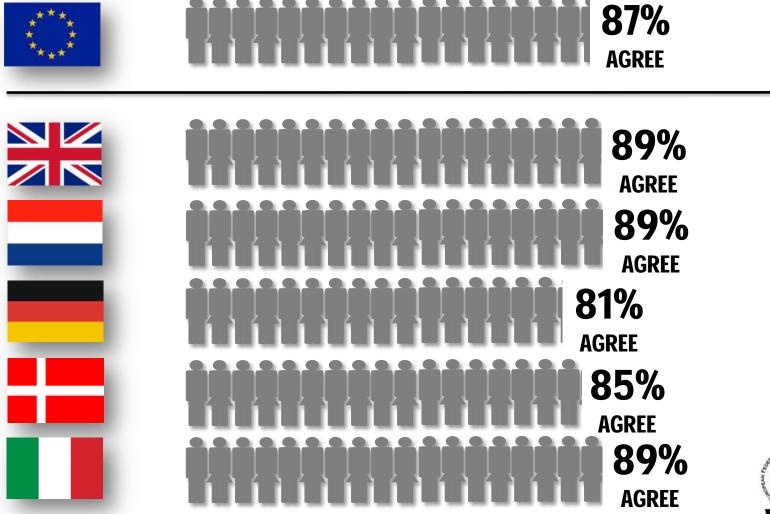


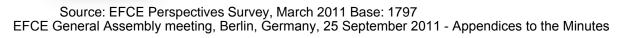




Energy & Climate Change

"My country must do more to reduce its reliance on fossil fuels..."

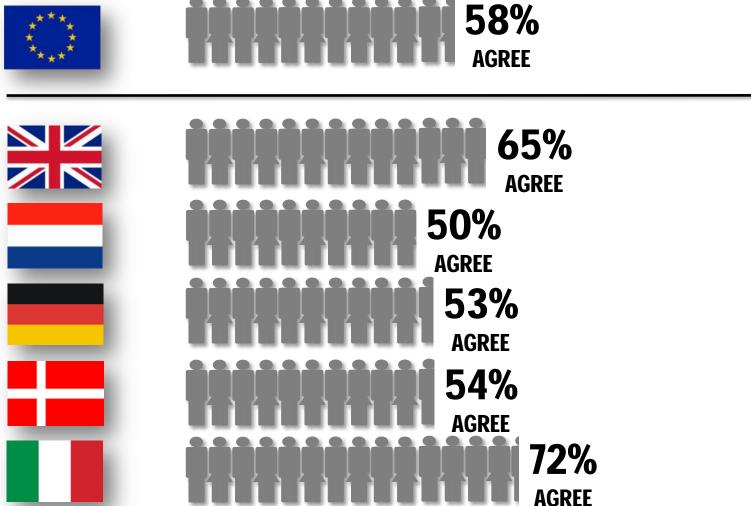




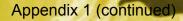


Energy & Climate Change

"I need more factual information to understand energy and climate issues..."







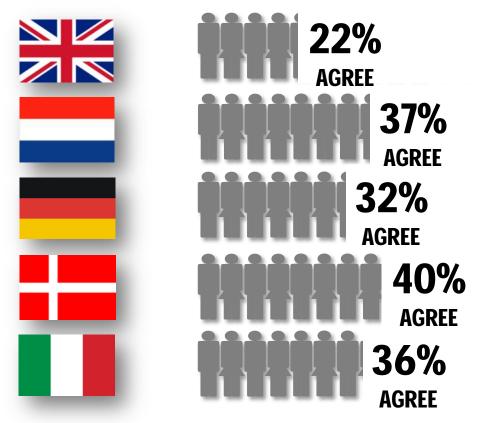
Biological Engineering



Biological Engineering

"Bioscience is important in my current role..."



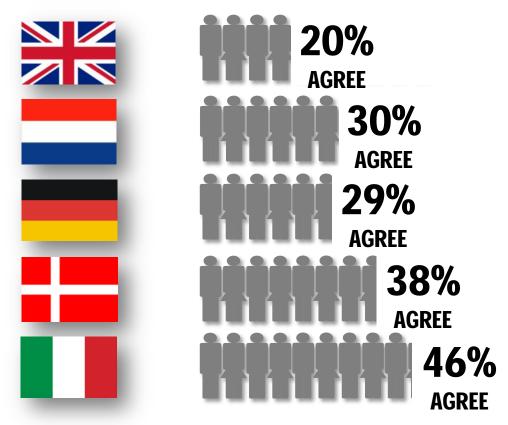


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Biological Engineering

"My future lies in bioprocess engineering..."









From survey to strategy

- Biofutures: to ensure that "bio" is part of the programme
- Ethics and professional standards: raising awareness
- Energy, climate change and the low carbon economy
- Innovation, employment and mobility

Delivering the strategy

- Strategy, planning and *delivery* is focus for your Board
- EFCE as a portal for knowledge and networking (website/e)
- Supporting Member Societies and their members
- Engage more with industry and policy makers eg around employment and mobility issues, major challenges





Perspectives on European Chemical Engineering

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 e: afurlong@icheme.org

 EFCE General Assembly meeting, Berlin, Germany, 25 September 2011 - Appendices to the Minutes



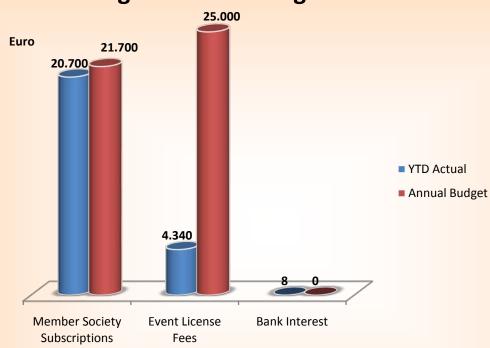
2010 EFCE Year End Financial Report

Revenue Account as at 31 December 2010

						Annua
						Budge
	Notes	2010		2009		2010
		€	€	€	€	
NCOME						
Licence fee for EFCE Events			15,530		11,550	14,200
Member Society Subscriptions	(A)		21,700		21,450	21,70
Bank Interest			0		407	500
Total			37,230		33,407	36,400
			37,230		33,407	30,400
EXPENDITURE						
EFCE Newsletter & Journal News Pages		(4,193)		(4,050)		(3,000
Bank charges		(730)		(280)		(350
Excellence Awards		(11,000)		(3,915)		(14,000
Officer's Expenses		(3,334)		(11,780)		(10,000
Sundries		(413)		0		(2,000
Student Mobility Awards		0		(8,481)		
Working Party Grants		(3,904)		(300)		(13,400
Provision for bad debt		0		0		(1,500
Poster Prizes		(1,000)		0		(1,000
Delegate Travel Support		(6,010)		0		(6,000
EFCE Roadmap Project		0		0		(10,000
Perspectives Project		(9,100)		0		(10,000
Dieter Behrens Medal Winner Travel Grant	_	(321)		0		(1,000
Total			(40,007)		(28,806)	(72,250
Net Surplus to Reserves			(2,777)		4,601	(35,850

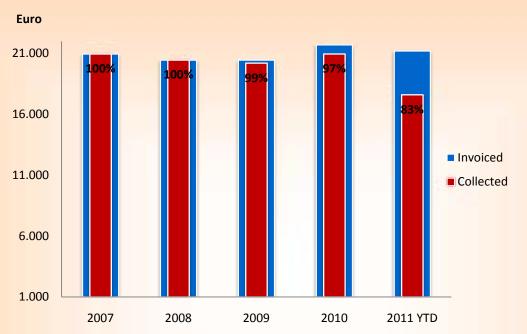


EFCE Finances as at 31 August 2011



1. Income Against 2011 Budget

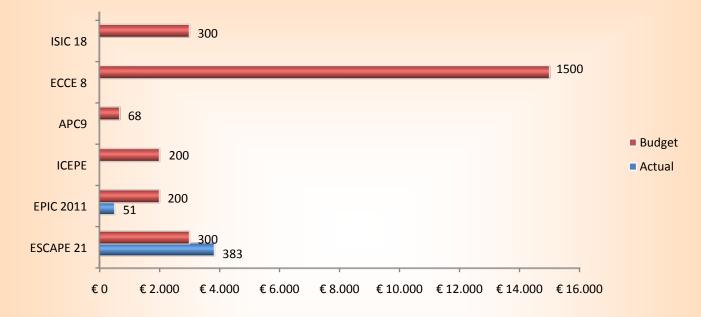
➢ Member society subscriptions includes €4,100 subscription debtors



2. Member Society Income

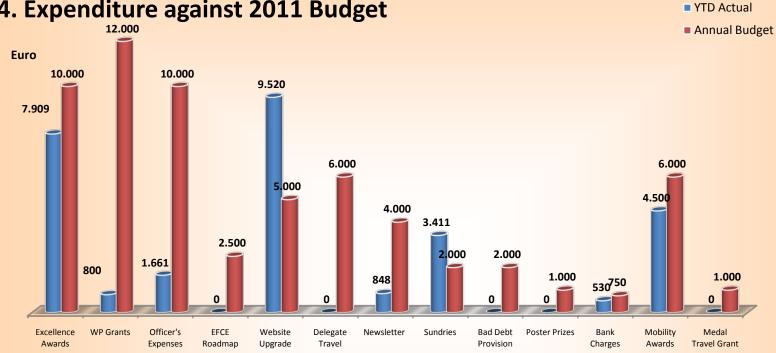
83% of the income budgeted for 2011 has been collected

- 3 member societies have more than one year's subscription fee outstanding:
 - ≻Mendeleev
 - Russian Engineering Academy
 - Ukrainian Association

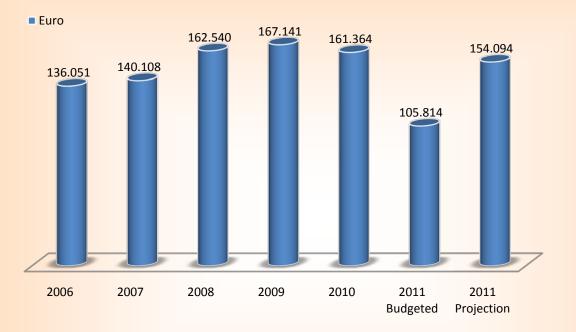


3. Event License Fee Income - Events to Date

➤ Two EFCE branded conferences have taken place with an income of €4,340 against a budget of €5,000.
 ➤ Actual and budgeted delegate numbers are shown above



4. Expenditure against 2011 Budget



5.Closing Reserve Fund Balance

2011 Budgeted balance assumes all expenditure budgeted has been spent
 2011 Projection balance assumes that not all expenditure budgeted in 2011 will be spent

Appendix 2 (continued)

Revenue Account

For the Period to 31 August 2011

		2011 €	2010 €	Annual Budget €
Income				
	Subscription Income 2010	0	22,700	0
	Subscription Income 2011	20,700	0	21,700
	License Fee for Events	4,340	15,530	25,000
	Accrued Income	0	0	0
	Bank Interest	8	0	0
	Total	25,048	38,230	46,700
Expendit	ure			
	Officer's Expense	(1,661)	(3,334)	(10,000)
	Working Party Grants	(800)	(3,904)	(12,000)
	Excellence Awards	(7,909)	(11,000)	(10,000)
	Delegate Travel support	0	(6,010)	(6,000)
	Poster Prizes	0	(1,000)	(1,000)
	Behrens Medal Travel Grant	0	(321)	0
	Perspectives Project	(9,520)	(9,100)	(5,000)
	e-Newsletter / PR Group Costs	(848)	(4,193)	(4,000)
	Student Mobility Awards	(4,500)	0	(6,000)
	EFCE Roadmap Project	0	0	(2,500)
	Jacques Villermaux Medal Travel Grant	0	0	(1,000)
	Special Projects	0	0	(40,000)
	Bank Charges	(531)	(656)	(750)
	Sundries	(3,410)	(412)	(2,000)
	Bad Debt Provision	0	0	(2,000)
	Total	(29,179)	(39,932)	(102,250)
	Net Surplus to Reserves	(4,132)	(1,702)	(55,550)

Balance Sheet As at 31 August 2011

	2011 €	2010 €
Current Assets		-
Sales Control	7,930	23,774
Bank - Current Account	31,013	53,973
Bank - Deposit Account	118,365	118,357
Accrued Income	0	(21,200)
Current Liabilities	157,307	174,904
Purchase Control	0	0
Goods Received not Invoiced	0	(13,465)
Capital Employed	0	(13,465)
Opening Reserves as at 01 January 2011	161,439	161,439
Net surplus / (Deficit) for the period	(4,132)	
Closing Reserves As at 31 August 2011	157,307	

Notes to the Accounts

(A) Sales Control / Subscription Debtors

Subscription	Society	Amount
Year		€
2009	Mendeleev	250
2010	Mendeleev	250
	Russian Engineering	250
	Ukrainian Association	250
2011	Bulgarian Society	100
	Mendeleev	250
	Russian Academy	500
	Israel Society	500
	Chambre Technique de Grece	500
	Turkish Chamber	500
	Ukranian Association	250
	Romianan Society	250
	Russian Engineering	250
	Total	4,100
Event Debtor	CERTH	3,830
	Grand Total	7,930



EFCE General Assembly Berlin, 25 September 2011



Report of the Scientific Vice President

Dr. Hermann J. Feise

BASF SE GC / Chemical & Process Engineering TT Carl-Bosch-Strasse 38 67056 Ludwigshafen



Report of the Scientific Vice President

- Scientific Activities of the EFCE Working Parties and Sections
 - Statistics
 - Working Parties and Section Details
 - Best practice examples

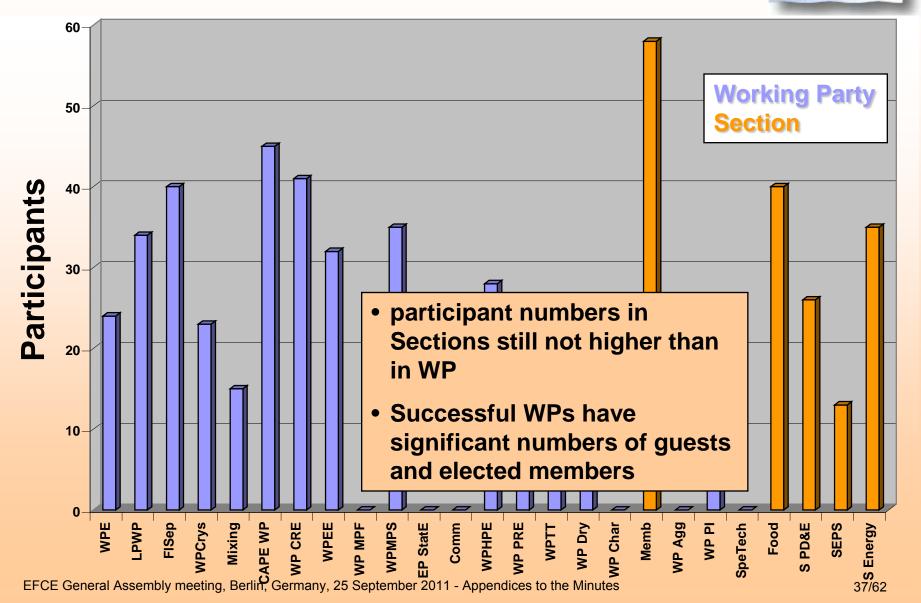
Focus Themes

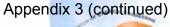
- Visibility of the EFCE
 - Excellence Awards
 - Student Mobility Awards
- Activities

Appendix 3 (continued)

EFCE

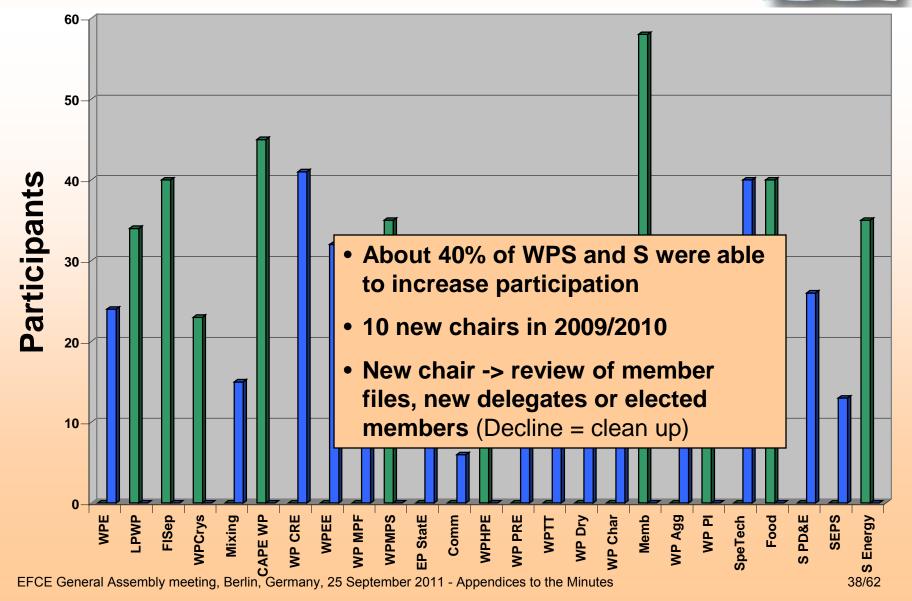
Participants in Working Parties & Sections





EFCE

Participants in Working Parties & Sections



Working Parties and Section Details



- Started since last General Assembly
 - Section on Process Engineering for Sustainable Energy
 - Chair: Dr. Jullian, F
- To be re started
 - Working Party Characterization of Particulate Systems
 - · Chair of the preparatory committee: Dr. Schäfer, D
 - Presentation and decision: Executive Board 24. Sept 2011
 - SepTech: Section on Separation Technology
 - Resignation of Chair (Prof. Coca) in Aug 2011
 - Discussion and decision: Executive Board 24. Sept 2011
 - WP Comminution and Classification
 - Chair: Prof. Heiskanen, FIN
 - No activity since 2009
 - Crisis meeting in ECCE8

Best Case Examples



- European Workshop on Food Engineering and Technology
 - Annual Workshop (since 2007, Berlin)
 - Presentations by 15 to 18 selected PhD students
 - European national food science / engineering organizations select and recommend one candidate each
 - Julius Maggi Prize; 2500€ (industrial sponsor)
 - Fluctuating interest from industry

EFCE Summer Schools

- High Pressure Technology: until 2010 ERASMUS Mundus grant; 2011 industrial sponsorship; new grant has been received
- European Summer School Electrochemical Engineering
- International School of Crystallization

Best Case Examples

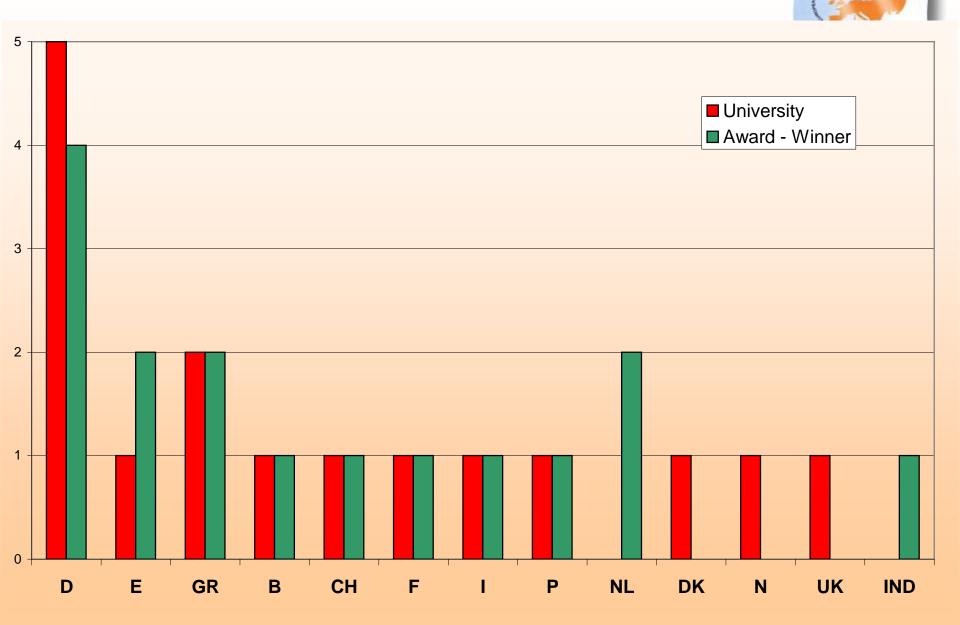
- 2010 Young investigator event:
 - Poster compet~ion, ECCE7 CÒISA
 - Prague, Czech Republic, August 29, 2010
 - Three Working Parties
 - WP Chemical Reaction Engineering
 - WP Multiphase Ôã æFlow
 - WP Process Intensification
 - 27 posters in competition
 - Prize Party
 - Will be repeated during ECCE8, Berlin



Appendix 3 (continued)

Focus Theme: Visibility of the EFCE

- EFCE Task Group recommended to the GA to expand the EFCE Excellence Award scheme in 2007
- Activity (2008 2012)
 - CAPE (3)
 - Thermodynamics, Crystallization, Membranes (2)
 - Mixing, Process Intensification, Chemical Reaction Engineering, Mechanics of Particulate Solids, Drying, Electrochemical Engineering, Fluid Separations, Product Design (1)
 - 10 WP and Sections have awarded EFCE Excellence Awards



43/62

Appendix 3 (continued)

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Focus Theme: Visibility of the EFCE

- EFCE Task Group recommended to the GA to expand the EFCE Excellence Award scheme in 2007
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 - 10 WP and Sections have awarded EFCE Excellence Awards

Other Award Schemes

- Karl Wagner Medal (WP Electrochemical Engineering)
- Julius Maggi Prize (S Food)
- Helmut Krämer Award (Static Electricity)
- Long Term Achievement Awards (CAPE, Mixing)
- International Fellow Award, Young Scientist Award (Static Electricity)
- Recent Innovative Contribution Award (CAPE)

Focus Theme: Visibility of the EFCE



- Student Mobility Award
 - 2005: ECCE-5, Glasgow
 - Tobias Kraus; D: TU Munich, D; Cambridge, MA, USA; Neuchatel, CH

Learnings:

- The award goes to students with a lot of international exposure
- Big countries (D, E, F) tend to be better represented than smaller countries
- The number of applications goes down, the quality goes up
- Many applications from the same university

Actions (Options)

- Direct communications to universities
- Distribution through WP Education members
- Special awards requiring fewer stays abroad
 - Uwe Zang, D: TU Darmstadt, D; UCBE, USA; U British Columbia, Vancouver, CAN

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Activities



- New chairpersons in 10 WP & Sections
 - No new chair for WP Comminution and Classification
- WP & S activities
 - WP 4: EFCE Recommendation for Chemical Engineering Education in a Bologna Three Cycle Degree System (up-date): learning outcomes for third cycle education, incorporate developments in the accreditation of engineering programs (August 2010)
 - WP 5: "Process Safety Pays", education package with video for senior management on process safety
 - WP 13: CHoPS conference 2013 in Friedrichshafen, Germany
 - WP 16: Marie Curie Initial Training Network "Resource and energy efficient products and processes by CO2 »
 - S 22: Erasmus Mundus Doctorate in Membrane Engineering

LinkedIN

- EFCE group stared in 2010
- eds. Matt Stalker, Hermann Feise; 14 members
- So far only few EFCE press releases promoted

Appendix 4



EUROPEAN FEDERATION

of

CHEMICAL ENGINEERING

Working Parties and Working Party Chairs

Sections and Section Chairs

(February 2012)

Working Party on Education

Dr. Martin J. Pitt The University of Sheffield Department of Chemical and Process Engineering Mappin Street Sheffield S1 3JD United Kingdom

Tel: 0044-114 222 7513 Fax: 0044-114 222 7501 E-mail: m.j.pitt@sheffield.ac.uk

Working Party on Computer Aided Process Engineering

Interim Chair: Prof. Dr. Jiri Klemes University of Pannonia Marie Curie Chair of Excellence P.O. Box 158 8200 Veszprém Hungary

Tel: 0036-88 421 664 E-mail: klemes@cpi.uni-pannon.hu

Working Party on Loss Prevention and Safety Promotion

Ir. Eddy De Rademaeker Prevention Management International BVBA Waterstraat 63 Tel: 0032-3 321 3222 2970 Schilde Fax: 0032-3 366 3534 Belgium E-mail: pmi.edr@skynet.be

Working Party on Chemical Reaction Engineering

incl. Chemical Engineering in the Application of Catalysis

Prof. dr. ir. Guy B. Marin Universiteit Gent Laboratory for Chemical Technology Krijgslaan 281 Tel: 0032-9 264 45 17 9000 Gent Fax: 0032-9 264 49 99 Belgium E-mail: guy.marin@UGent.be

Working Party on Fluid Separations

Dr. Eva Sorensen		
University College London		
Dept. of Chemical Engineering		
Torrington Place	Tel:	0044-207 679 38 02
London WC1E 7JE	Fax:	0044-207 383 23 48
United Kingdom	E-mail:	e.sorensen@ucl.ac.uk

Working Party on Electrochemical Engineering

Prof. Dr. Manuel Andrés Rodrigo Universidad Castilla La Mancha Chemical Engineering Dept. Faculty of Chemistry		
Campus Universitario s/n	Tel:	0034-90 2204100
13071 Ciudad Real Spain	Fax: E-mail [.]	0034-90 2204130 manuel.rodrigo@uclm.es
opani		manaol.roango@aoim.co

Working Party on Crystallization

Dr. Béatrice Biscans		
Université de Toulouse		
CNRS-Laboratoire de Génie Chimique		
UMR 5503		
4, Allée Emile Monso, BP 84234	Tel:	0033-5 34 32 36 38
31432 Toulouse Cedex 4	Fax:	0033-5 34 32 36 97
France	E-mail:	Beatrice.Biscans@ensiacet.fr

Working Party on Multiphase Fluid Flow

Prof. Dr. Alfredo Soldati		
Universitè degli Studi de Udine		
Departimento di Energetica		
e Macchine		
Via delle scienze 208	Tel:	0039-0432 55 80 20
33100 Udine	Fax:	0039-0432 55 80 27
Italy	E-mail:	soldati@uniud.it

Working Party on Mixing

Prof. Dr. Joel Bertrand		
CNRS - Campus Gérard Mégie		
3, rue Michel-Ange	Tel:	0033-1 4496 5189
75794 Paris Cedex 16	Fax:	0033-1 4496 4965
France	E-mail:	joel.bertrand@cnrs-dir.fr

Working Party on Mechanics of Particulate Solids

Prof. Dr. Massimo Poletto University of Salerno via Ponte Don Melillo 84084 Fisciano (SA) Italy

Tel:	0039-089 964 132
Fax:	0039-089 964 057
E-mail:	mpoletto@unisa.it

Working Party on Static Electricity in Industry

Prof. Dr. Istvan BertaBudapest University of Technology and EconomicsDepartment of Electrical Power EngineeringMüegyetem rkp. 3-9Tel:0036-1 463 27 791111 BudapestFax:HungaryE-mail:berta@shock.hu and/or berta.istvan@vet.bme.hu

Working Party on Drying

ra.fr
r

Working Party on Comminution and Classification

Prof. DrIng. Arno Kwade TU Braunschweig iPAT		
Volkmaroder Str. 5	Tel:	0049-531 391 9613
38104 Braunschweig	Fax:	0049-531 391 9633
Germany	E-mail:	a.kwade@tu-braunschweig.de

Working Party on Characterisation of Particulate Systems

Dr. Michael Schäfer BASF SE GCP /TP - L 543 67056 Ludwigshafen Germany

Tel:0049-621 60 792 64Fax:0049-621 60 66 79264E-mail:michael.schaefer@basf.com

Working Party on High Pressure Technology

Prof. Dr.-Ing. Eberhard Schlücker University Erlangen Nuremberg Institute of Process Machinery and Systems Technology Cauerstr. 4 91058 Erlangen Germany

Tel:0049-9131 85 29450Fax:0049-9131 85 29449E-mail:sl@ipat.uni-erlangen.de

Working Party on Polymer Reaction Engineering

Prof. Dr. Timothy McKenna CNRS C2P2/LCPP UMR 5265 43 Blvd du 11 Novembre 1918 Bat. F308, BP 2077 69616 Villeurbanne cedex France

Tel: 0033-4-7243 1766 Fax: 0033-4-7243 1768 E-mail: mckenna@cpe.fr or timothy.mckenna@lcpp.cpe.fr

Working Party on Agglomeration

Prof. Dr. Agba D. Salman University of Sheffield Dept. of Chemical and Process Engineering Mappin Street Sheffield S1 3JD United Kingdom

Tel:0044-114 222 75 60Fax:0044-114 222 75 01E-mail:a.d.salman@sheffield.ac.uk

Working Party on Process Intensification

Prof. Dr. Ilkka Turunen		
Lappeenranta University		
of Technology		
Dept. of Chemical Technology		
Skinnarilankatu 34	Tel:	00358-40 569 2450
53850 Lappeenranta	Fax:	00358-40 621 2199
Finland	E-mail:	ilkka.turunen@lut.fi

Working Party on Thermodynamics and Transport Properties

Dr. Ioannis G. Economou National Research Center for Physical Sciences "Demokritos" Institute of Physical Chemistry		
Molecular Modelling of		
Materials Laboratory	Tel:	0030-1 650 3963
153 10 Agia Paraskevi Attikis	Fax:	0030-1 651 1766
Greece	E-mail:	economou@chem.demokritos.gr

Section on Product Design and Engineering

Prof. Dr.-Ing. Ulrich Bröckel FH Trier Umwelt-Campus Birkenfeld P.O. Box 1380 55761 Birkenfeld Germany

Tel:0049-6782 17 1503Fax:0049-6782 17 1265E-mail:u.broeckel@umwelt-campus.de

Section on Food

Prof. Dr.-Ing. Dietrich Knorr TU Berlin Innovative Food Science & Technologies (IFSET) Königin-Luise-Str. 22 14195 Berlin Germany

Tel: 0049-30 314 71250 Fax: 0049-30 832 7663 E-mail: dietrich.knorr@tu-berlin.de

Section on Environmental Protection and Sustainability

Prof. Dr. Angel Irabien Universidad de Cantabria Ingenieria Quimica y Quimica		
Inorganica Avd. de los Castros S/N	Tel [.]	0034-94 220 1597
39005 Santander Spain	Fax:	0034-94 220 1591 irabienj@unican.es

Section on Membrane Engineering

Prof. Dr. Enrico Drioli		
Universita di Calabria		
Research Institute on Membrane		
Technology ITM-CNR		
Via P. Bucci, Cubo 17/C	Tel:	0039-0984 49 20 39
87030 Arcavacata di Rende	Fax:	0039-0984 40 21 03
Italy	E-mail:	e.drioli@itm.cnr.it

Section on Process Engineering for Sustainable Energy

Dr. Sophie Jullian IFP Energies Nouvelles		
Directrice Scientifique		
1 & 4 Av de Bois Préau	Tel:	0033-4 78 02 27 91
92852 Rueil Malmaison Cédex	Fax:	0033-4 78 02 21 41
France	E-mail:	sophie.jullian@ifpen.fr

Curriculum Vitae

Andreas Schreiner

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Nationality	german
WORK EXPE	RIENCE AND QUALIFICATIONS
2006-present	Novartis Pharma, Pharmaceutical & Analytical Department, Switzerland
	Project leader
	Responsibilities:
	 Leading pharmaceutical development projects.
	• Heading the network for Science & Technology.
	 Scientific expert for solids processing and purification processes
2002-2006	DSM Nutritional Products, Department of Process Technology, Switzerland
	Lab head / Piloting manager
	Responsibilities:
	 Development of processes for manufacturing and purification of fine chemicals.
	 Optimisation of existing processes, particularly solids processing
	• Scale up from lab to pilot scale and supporting the production
	campaigns/launches.
2000-2002	Department of Chemical Engineering, University College London, U.K. Research fellow, DFG Scholarship
	Studies on processes for manufacturing of nanoparticles.
1997-2000	Department of Chemical Engineering, University Erlangen-Nürnberg, Germany
1	PhD study
	Research on crystallization phenomena of organic melts.
1992-1997	Department of Chemical Engineering, University Erlangen-Nürnberg, Germany
	Engineering degree
	Study of the subjects: reaction engineering, particle technology, thermal and mechanic separation processes, thermodynamics, fluid dynamics and environmental engineering.

EXTERNAL NETWORKS

Appointed member of the ProcessNet committee "Mechanical Solid / Liquid Separation"

Member of SGVC, Organisation of Process Technology Seminars

Member of VDI, Dechema

Veröffentlichungen

Konferenzen (Vorträge / Poster)

- Schreiner, A., König, A. (1998): Methodik zur Ermittlung kinetischer Daten von organischen Schmelzen bei der Suspensionskristallisation, Poster, GVC-Fachausschuß Kristallisation, März, Aachen.
- 2 Herthan, T., Schreiner, A., König, A. (1998): Untersuchungen zum Reinigungspotential von organischen Schmelzen bei der Suspensionskristallisation, Seminarvortrag, November, Universität Erlangen.
- 3 Schreiner, A., König, A. (1999): Berechnung des Kristallisationsverhaltens der batchweisen Suspensionskristallisation von organischen Schmelzen, Vortrag, GVC-Fachausschuß Kristallisation, März, Berlin.
- 4 König, A., Herthan, T., Schreiner, A. (1999): Zum Einfluß der fest/flüssig-Trennung auf das Reinigungspotential bei der Suspensionskristallisation, Vortrag, GVC-Fachausschuß Kristallisation, März, Berlin.
- 5 Schreiner, A., König, A. (1999): Unterkühlungsverhalten von organischen Schmelzen bei der Suspensionskristallisation, Poster, Dechema-Jahrestagung, April, Wiesbaden.
- König, A., Schreiner, A. (1999): *Purification Potential of Melt Crystallization*, Vortrag,
 2nd Workshop on Industrial Crystallization, September, Bradford.
- 7 Schreiner, A., König, A. (1999): Estimation of Crystallization Kinetics of Melts from Batch Cooling Experiments, Poster, 14th International Symposium on Industrial Crystallization, September, Cambridge.
- 8 König, A., Herthan, T., Schreiner, A. (1999): Purification by Melt Crystallisation of Naphthalene/Biphenyl-Mixtures, Poster, 14th International Symposium on Industrial Crystallization, September, Cambridge.
- Schreiner, A., König, A. (1999): *Purification Potential of Melt Crystallization*, Vortrag,
 7th International Workshop on Industrial Crystallization, September, Halle.
- 10 König, A., Schreiner, A. (2001): *Bestimmung der Kristallisationskinetik in organischen Schmelzen*, Vortrag, 52. Berg- und Hüttenmännischer Tag, Juni, Freiberg.
- 11 Schreiner, A., Jones, A. G. (2001): Influence of Fluiddynamic Conditions on the Crystallization Kinetics of Calcium Oxalate, Poster, 3rd European Congress of Chemical Engineering, Juni, Nürnberg.
- 12 Schreiner, A. (2001): *Reactive Crystallization and Computational Fluid Dynamic Modeling*, Seminarvortrag, April, University College London.

54/62

- 13 Schreiner, A., Jones, A. G. (2001): Precipitation of CaCO₃ in the Segmented Flow Tubular Reactor (SFTR), Poster, 8th International Workshop on Industrial Crystallization, September, Delft.
- 14 Donnet, M., Bowen, P., Jongen, N., Lemaître, J., Hofmann, H., Schreiner, A., Jones, A.G., Schenk, R., Hofmann, C. (2002): Scale-up from a Millilitre Batch Reactor to Continuous Production Using the Segmented Flow Tubular Reactor. Example of Calcium Carbonate Precipitation, Vortrag, GVC-Fachausschuß Kristallisation, März, Karlsruhe.
- 15 Schreiner, A. (2004): *Anti-Solvent Precipitation of a Metastable Crystalline Product*, Swiss Symposium on Crystallization and Precipitation (SSCP), Zurich.
- 16 Schreiner, A. (2005): Prozessentwicklung von Feststoffoperationen aus Sicht der chemischen Industrie, Kristallisationsseminar, Mettler Toledo, Greifensee (invited lecture).
- Schreiner, A. (2007): *Methodologie der Fest/Flüssig-Tren*nung, Filtrationsseminar, DrM,
 Brienz (invited lecture).
- 18 Schreiner, A. (2007): *Application of Lasentec in the Pharmaceutical Industry*, PAT Seminar, Mettler Toledo, Basel (invited lecture).
- 19 Schreiner, A. (2008): Untersuchungen zur Massstabsverkleinerung von Filtrationsprozessen, Vortrag, ProcessNet Fachausschuss Mechanische Fest/Flüssigtrennung, Februar, Würzburg.
- 20 Schreiner, A. (2008): *Miniaturisation of Filtration Processes A Necessity for the Pharmaceutical Industry*, Vortrag, 10th World Filtration Congress, April, Leipzig.

Schriftliche Veröffentlichungen

- 1 Schreiner, A., König, A. (1998): Unterkühlungsverhalten von organischen Schmelzen bei der Suspensionskristallisation, Frankfurt, Max-Buchner Forschungsbericht.
- 2 Schreiner, A., König, A. (1999): *Kristallisationsverhalten von organischen Schmelzen bei der Suspensionskristallisation*, Frankfurt, Max-Buchner Forschungsbericht.
- 3 Schreiner, A., König, A. (2000): Berechnungen zum Kristallisationsverhalten von organischen Schmelzen bei der Suspensionskristallisation, Frankfurt, Max-Buchner Forschungsbericht.
- 4 Schreiner, A. (2000): Kristallisationsverhalten von organischen Schmelzen bei der Suspensionskristallisation, Dissertation, Erlangen.
- 5 Schreiner, A., König, A. (2001): Bestimmung der Kristallisationskinetik von organischen Schmelzen bei der Suspensionskristallisation, Chem. Ing. Tech., 73, No. 1-2, 44-50.
- 6 Schreiner, A., Jones, A. G. (2001): Influence of Fluiddynamic Conditions on the Crystallization Kinetics of Calcium Oxalate, Chem. Ing. Tech., 73, No. 6, 710.
- Schreiner, A., König, A. (2001): Purification Potential of Melt Crystallization, Powder Technol., 121, 88-92.
- 8 Schreiner, A., König, A. (2002): *Influence of Impurities on Nucleation and Growth Rates* of Organic Melts, Chem. Eng. Technol., 25, No. 2, 181-187.
- 9 Jermann, S., Schreiner, A., Schneeberger, R. (2008): Untersuchungen zur Massstabsverkleinerung von Filtrationsprozessen, Chem. Ing. Tech., 80, No. 5, 621-628.



European Federation of Chemical Engineering

Executive Board

Term of office: 01.01.2011 - 31.12.2014

Elected members from academia:

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Dr. Eva Sorensen University College London Dept. of Chemical Engineering Torrington Place London WC1E 7JE United Kingdom	Tel: Fax: Email:			
Elected members from industry:				
DiplIng. Konstantinos Kremalis G.P.C.E. Greek Pollution Control Engineering Company 140 Harilaou Trikoupi Str. 11472 Athens Greece	Fax:	0030-210 64 70 400 0030-210 64 70 950 kkrem@tee.gr		
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Co-opted members:				
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Application for membership in the

European Federation of Chemical Engineering

То

The EFCE Executive Board

SKR herby apply for a membership in EFCE (European Federation of Chemical Engineering). SKR is a non-profit technical society in Sweden with about 1000 members. The society is open only for Chemical engineers. SKR = Sveriges Kemiingenjörers Riksförening (Swedish Association for Chemical Engineers).

SKR is run by a board consisting of six board-members from industry and academia with Dr Göran Svensson as the present chairman. It main activities are to arrange events where chemical engineers can meet and learn. In principle the activities are arranged in the east (Stockholm area), west (Göteborg area) and south (Skåne area).

Since IVA, for unclear reasons, decided to leave EFCE there has been a lot of activity in Sweden to find another organization which could be a member in EFCE. The board of SKR agreed that SKR is the best body for this. SKR has even been a member in the past.

As a country with a large and important chemical industry we of course must have a member in EFCE and take an active part in the Working Parties and Sections. I hope that this application will be accepted so that Sweden can continue to take part in the EFCE activities.

Göteborg 22/9 2011

Best Regards,

Göran Svensson (Chairman of SKR)

E-mail: gorans@gorans.se, phone INT + 31 7060452

Rules for Honorary Membership of the EFCE



AWARD

- The purpose of Honorary Membership is to recognise outstanding leadership of European chemical and process engineering by an individual. The contribution to be recognised will be international in scope and its significance will not be restricted to a particular technical or scientific group.
- 2. Honorary Membership is awarded whenever the Executive Board of the EFCE shall so determine. The recipient will be presented with a certificate of Honorary Membership by the President of the EFCE at an appropriate international meeting.
- 3. The award is sponsored by EFCE. The certificate is donated by DECHEMA. Necessary travel and accommodation expenses are borne by EFCE.
- 4. A citation describing the leadership contribution and its significance will be agreed by the Executive Board, and published following the presentation.

DESIGNATION OF AWARD RECIPIENT

- 5. The recipient of the award is designated by the Executive Board.
- 6. Any member society of EFCE, Executive Board member or Chair of an EFCE Working Party or Section can nominate a candidate for Honorary Membership.
- 7. Nominations must be made in writing to the EFCE office responsible for all administrative affairs related to Honorary Membership and should include a short CV of the nominee and reasons for the nomination. Written proposals must be received by the EFCE office at least one month prior to an Executive Board meeting.
- 8. Serving members of the Executive Board are not eligible for nomination.
- 9. The decision of the Executive Board to make an award to a particular candidate is confirmed by vote at a Board meeting at least 3 months prior to the international meeting at which Honorary Membership is to be presented. The award must be supported by a majority of Executive Board members present at the Board meeting and eligible to vote, voting in favour.

ADMINISTRATION

10. The Frankfurt Office is responsible for all administrative affairs related to Honorary Membership.

Agreed by EFCE Executive Board at its meeting at Berlin, 24 September 2011.

EFCE Forum, Berlin, 25 September 2011

ECCE9, The Hague, Shaping a sustainable future





9TH EUROPEAN CONGRESS OF CHEMICAL ENGINEERING





The theme will be Shaping a Sustainable Future: Partnership of Academia, Industry and Society

The ambition is to make ECCE9 the most comprehensive congress in the 60 year history of the EFCE, encompassing all industrial branches, academic disciplines and society stakeholders related to process technology and chemical engineering. WORLD FORUM THE HAGUE THE NETHERLANDS

