EFCE Information

In this first newsletter of 2011 we would like to take the opportunity to provide readers with an up-to-date list of members of the EFCE Executive Board and a list of the EFCE Working Parties and Sections and their Chairmen.

EFCE Executive Board

An executive board of chemical engineers from industry and academia oversee the activities of EFCE, which range from world renowned congress to technical meetings on specific topics.

EFCE officers and General Secretaries:

Dr Wridzer Bakker
(EFCE Executive Vice-President)
AkzoNobel Industrial Chemicals B.V., The Netherlands

Dr David Brown (General Secretary)
The Institution of Chemical Engineers (IChemE), UK

Professor Richard C. Darton
(EFCE President)
University of Oxford, UK

Jean-Pierre Dal Pont
(General Secretary)
SFGP - Société Francaise de Génie des Procédés, France

Dr.-Ing. Hermann J. Feise
(Scientific Vice-President)
BASF SE, Germany

Dr. Willi Meier (General Secretary)
DECHEMA e.V., Germany

Elected members from academia:

Prof. Dr.-Ing. Vladimir Bales
Slovak Technical University, Slovakia

Prof. Jiří Drahoš
Academy of Sciences of the Czech Republic, Czech Republic

Prof. Dr. Rafiqul Gani
Technical University of Denmark, Denmark

Prof. Dr. Angel Irabien
Universidad de Cantabria, Spain

Prof. Bozenna Kawalec-Pietrenko
Politechnika Gdanska, Poland

Dr. Eva Sorensen
University College London, UK

Elected members from industry:

Dr. Andreas Walter Knell
Novartis Pharma AG, Switzerland

Dipl.-Ing. Konstantinos Kremalis
G.P.C.E., Greek Pollution Control, Greece

Dr. Robert Elliott Low
INEOS Fluor Ltd., UK

Mr. Francois Nicol
VEOLIA Environnement, France

Dr. Jochen Rudolph
BASF SE, Germany

EFCE working parties and sections

The EFCE has working parties and sections covering all areas of chemical engineering. A list of the parties and their chairmen is given below:

Working Parties

Education – Dr Martin J. Pitt
The University of Sheffield, UK

Computer Aided Process Engineering – Professor Andrzej Kraslawski
Lappeenranta University of Technology, Finland

Loss Prevention and Safety Promotion – Ir. Eddy De Rademaeker
Prevention Management International, Belgium

Chemical Reaction Engineering (including Chemical Engineering in the Application of Catalysis) – Prof. dr.ir. Jaap C. Schouten
Eindhoven University of Technology, The Netherlands

Fluid Separations – Dr Eva Sørensen
University College London, UK

Electrochemical Engineering – Professor Manuel Andrés Rodrigo
Universidad Castilla La Mancha, Spain

Crystallization – Dr Béatrice Biscans
Université de Toulouse, France

Multiphase Fluid Flow – Professor Philipp Rudolf von Rohr
ETH Zürich, Switzerland

Mixing – Dr Joel Bertrand
CNRS - Campus Gérard Mégie, France

Mechanics of Particulate Solids – Professor Massimo Poletto
University of Salerno, Italy

Static Electricity in Industry – Professor Istvan Berta
Budapest University of Technology and Economics, Hungary

Drying – Professor Patrick Perré
AgroParisTech – ENGREF, France

Comminution and Classification – Professor Kari Heiskanen
Aalto University, Finland

Characterisation of Particulate Systems N.N.

High Pressure Technology – Prof. Dr.-Ing. Eberhard Schlücker
University Erlangen Nuremberg, Germany

Polymer Reaction Engineering – Professor Timothy McKenna
Queen's University, Canada and LCPP-CNRS/ESCPE-Lyon, France

Agglomeration – Professor Agba D. Salman
University of Sheffield, UK

Process Intensification – Professor Ilkka Turunen
Lappeenranta University, Finland

Thermodynamics and Transport Properties – Dr. Ioannis G. Economou
National Research Center for Physical Sciences "Demokritos", Greece

Sections

Separation Technology (SepTech) – Professor José Coca
University of Oviedo, Spain

Product Design and Engineering – Prof. Dr.-Ing. Ulrich Bröckel
Umwelt-Campus Birkenfeld, Germany

Food – Prof. Dr. Dipl.-Ing. Dietrich Knorr
TU Berlin, Germany

Environmental Protection and Sustainability – Professor Angel Irabien
Universidad de Cantabria, Spain

Membrane Engineering – Professor Enrico Drioli
Universita di Calabria, Italy

Process Engineering for Sustainable Energy – Dr Sophie Jullian
IFP Energies Nouvelles – Lyon, France

EUROPEAN FEDERATION OF CHEMICAL ENGINEERING
EUROPÄISCHE FÖDERATION FÜR CHEMIE-INGENIEUR-WESEN
FEDERATION EUROPEENNE DU GENIE CHIMIQUE

EFCE News and Events JANUARY 2011

Meeting report

19th International Congress of Chemical and Process Engineering CHISA 2010 and 7th European Congress of Chemical Engineering ECCE-7

28 August – 1 September 2010, Prague, Czech Republic

Like all the CHISA and ECCE Congresses before, this exceptional joint event covered a range of important topics and offered many interdisciplinary links. The congress addressed the full spectrum of chemical and process engineering practice, including current trends and future needs. The logistics of the program, which included the satellite PRES 2010 conference as well as the standard sessions and specialized symposia, enabled the interested people to listen also to the presentations, which are close to their fields of research yet outside their everyday horizons. The congress was attended by nearly 1300 participants from 65 countries; with students comprising almost 30% of all participants.

In addition to the general topics (reaction engineering, catalysis and kinetics, separation processes and equipment, phase equilibrium and fluid properties, fluid flow and multiphase systems, computer aided process engineering, heat transfer processes and equipment, particulate solids, and chemical engineering education), a further eleven specialized events were organized on environmental engineering, electrochemical engineering, safety in chemical industry, supercritical fluid applications, thermodynamics and transport properties, food processing and technology, micro- and mesoporous materials, progress in chemical technology and biotechnology, process intensification and miniaturization, electromembrane processes and integrated membrane systems, and EU Projects F3 Factory, COPIRIDE and PILLS.

A total of four congress plenary and 48 keynote lectures were presented together with more than 1600 oral and poster contributions. Congress proceedings were issued on a fully searchable CD-ROM and supported by printed books of abstracts. Congress plenary lectures were presented by: Lutz Maedler (University of Bremen, Germany) – Nanostructured materials through combustion synthesis, Philippe Tanguy (Total SA, France) – Environmental footprint of energy production: process engineering challenges, Keith Waldron (Institute of Food Research, Norwich, UK) – Moving towards a sustainable food chain through the total exploitation of agri food chain co-products and biomass, and René van Sloten (European Chemical Industry Council, CEFIC) –Framework conditions for a competitive chemical industry in Europe.

Several EFCE meetings were held within the congress, including a meeting of the executive board, followed by a very successful EFCE discussion forum, and meetings of the Working Parties on Education, Chemical Reaction Engineering, Process Intensification, and Mixing. During the festive congress opening several awards and honorary memberships were awarded. Last but not least, the congress also offered a traditionally rich social program: the concert of the Prague Symphony Orchestra with the A. Dvořák's Symphony No. 9 „From the New World", belonged undoubtedly to its highlights.

The next CHISA Congress will take place in Prague at the end of August 2012.

Jiří Drahoš
Congress Chair

Environmental Protection and Sustainability Section

Aims and Future Plans

Background

Environmental Protection and Sustainability (EP&S) are key elements in chemical engineering. The section EP&S of EFCE was created at ECCE-6 in 2007 with Professor B. Kawalek-Pietrenko chairing the section until ECCE-7 (2010).

The section is the core element in EFCE on the topics related to environmental protection and sustainability. The objective is to promote cooperation in Europe between academics and professionals stimulating real progress in the link between chemical engineering and environmental protection and sustainability.

It provides a platform for technical views and opinions and supports chemical engineers within EFCE member societies in the long-life education and training in environmental protection and sustainability.

It establishes contacts with decision makers and opinion formers in the topic and supports common goals and the advance of the chemical engineering views on environmental protection and sustainability.

Aims

The globalization, climate change mitigation and EU environmental regulations of recent years, call for the development of environmental friendly and more sustainable processes and products. Natural resources sustainability evaluation and environmental burdens assessment taking into account a life cycle thinking are the main methodologies and instruments.

Sustainable production (processes) and consumption (products) policies play a leading role at a global (United Nations) and local (EU) level, where the UN division in sustainable production and consumption and the EU integrated prevention pollution control and integrated product policy introduce new considerations.

The EP&S section of EFCE aims to:

- Promote the technical development of the environmental protection and sustainability issues in the academic and professional chemical engineering communities.
- Promote knowledge based eco-innovation – environmentally driven innovation taking into account economic constraints and social development in the chemical and process industries and chemical engineers long-life learning.
- Educate and disseminate "sustainable production (processes) and consumption (products)" based on the exchange of knowledge.
- Stimulate collaborative R&D projects among European chemical engineering societies, academics, administrations and industries in a global scenario.
- Collaborate with other European organizations, mainly the European Technology Platforms (Sustainable Chemistry, Zero CO_2, etc), the European Joint Research Centers, CEFIC and European Trade Unions in EP&S.
- Collaboration with Sustainability initiatives from the European process and related industries and European and non-european non-profit societies such as: AIIChemE, EuChemMS, EPSC, EPC and AIChE, APCChE, IACCE and WCEC).
- Intensive collaboration with EFCE Working Parties and Sections, mainly Loss Prevention and Safety Promotion and the Process Engineering for Sustainable Energy respectively.

Section Tasks and Future Plans

The members of the section participate as experts on the following topics:

Natural Resources Sustainability (Materials, Energy, Water, Land)

- Sustainability indicators
- Case studies
- Life cycle thinking

Environmental Burdens

- Air including climate change and environmental technologies
- Water including environmental management and technologies
- Wastes including waste management and technologies.

The future plans of the section are the elaboration of a strategic plan for 2011–2014 and a year activity programme with input from the following task groups:

- Task group on natural resources sustainability
- Task group on environmental burdens sustainability
- Task group on global students and sustainability education – coordinator

The 2011–2014 strategic plan is expected to be available in March 2011 after discussion among the section members and EFCE executive board. It will be reviewed in the section meeting, which will take place during ECCE-8 in September 2011 in Berlin.

The chemical engineering community interested in the topic are kindly invited to become involved with the Section – **http://www.efce.info/Sections/Environmental+Protection+and+Sustainability.htm**

Angel Irabien
Section Chairman

A new perspective on the role of EFCE

EFCE President, Professor Richard Darton, has launched a major review of the federation's future direction with a Europe wide electronic consultation that will run throughout January 2011.

Darton is keen to define a clear strategy and direction for EFCE, which represents more than 100,000 chemical and process engineers across the length and breadth of Europe, including Israel and Turkey. The views of process engineers in 40 member societies are being gathered via a short electronic questionnaire which examines attitudes and opinions on key topics including climate change, biotechnology and professional ethics. The survey also explores future needs and expectations around training and international mobility.

Richard Darton said: "Europe has changed dramatically since EFCE was formed in 1953. We have witnessed the treaties of Rome and Maastricht, the fall of the Iron Curtain and a major expansion of the European Union, which now embraces 500 million inhabitants. At the same time, the technical; landscape has changed too. Population growth, climate change, globalization and the pressing need for sustainable development presents new challenges for chemical engineers."

He went on to say: "It is essential that the organizations which qualify and represent chemical engineers maintain a strong understanding of the needs and expectations of their members. The findings of our survey will be used to help EFCE and its member societies prioritise and target activities in order to support chemical and process engineers in Europe."

The survey, which is open to all chemical, biochemical and process engineers in Europe, can be found at **http://www.surveymonkey.com/s/EFCEQuestionnaire**. The survey will remain live until 31 January 2011. The findings will be published in Brussels on 30 March 2011 and the President of the European Parliament, Professor Jerzy Buzek, has been invited to respond.

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