

Trustees Annual Report 2018

European Federation of Chemical Engineering
Europäische Föderation für Chemie-Ingenieur-Wesen
Fédération Européenne de Génie Chimique

Contents

EFCE Strategy	4
Trustees 2017/18.....	6
Public Benefit Statement.....	7
Objectives and activities	7
Key achievements during 2018	8
Working Parties and Sections.....	9
Events	11
Awards	13
2019 and beyond	14
Administrative Report	15
EFCE involvement in EU funding instruments.....	15
Communication and engagement.....	16
Election of new Board of Trustees.....	17
Financial Report	18

The European Federation of Chemical Engineering will...

1. Serve the European Chemical Engineering Community

By providing a platform for views and opinions and identifying opportunities for its voice to be heard

2. Support Chemical Engineers within EFCE Member Societies

- Working Parties and Sections
- Conferences and Seminars
- Newsletters, Website and e-bulletins

3. Support the Education and Training of Chemical Engineers within Europe

- Active Education Working Party
- EFCE Journals
- Input Into Development of Curricula
- Training

4. Influence Decision Makers and Opinion Formers on Matters of Importance to Chemical Engineers

- By Helping to Shape European Policy
- Promoting Public Understanding of Science
- Contributing to European R&D Programmes
- Fostering Academic/Industry Links

5. Initiate Collaborations in Support of Common Goals and for the Advancement of Science and Technology

- Proactive Horizon Scanning and Topic Spotting
- Bringing People Together via Respected European Technical Networks

EFCE will help European society to meet its needs through highlighting the role of Chemical Engineering in delivering sustainable processes and products.

Trustees 2018

EFCE President

Dr.-Ing. Hermann J. Feise
BASF SE
hermann.feise@basf.com

Executive Vice-President

Mr. Giorgio Veronesi
Techint E&C
giorgio.veronesi@techint.com

Scientific Vice-President

Prof. David Bogle
University College London, Department of Chemical Engineering
docschoolhead@ucl.ac.uk

Prof. Adisa Azapagic

University of Manchester, School of Chemical Engineering and Analytical Science
adisa.azapagic@manchester.ac.uk

Prof. Jerzy Baldyga

Warsaw University of Technology, Faculty of Chemical and Process Engineering
jerzy.baldyga@pw.edu.pl

Prof. Michael Considine

ChemRisk Ltd.
mike.considine@live.co.uk

Prof. Ferenc Friedler

Pazmany Peter Catholic University, International Center for Process Systems Engineering and Sustainability
friedler.ferenc@ppke.hu

Dr. François Giger

Paris
francois.giger@mines.org

Dr. Ir. Antoon ten Kate

Nouryon RD&I
antoon.tenkate@nouryon.com

Associate Prof. Petr Kluson

Academy of Sciences of the Czech Republic, Institute of Chemical Process Fundamentals
kluson@icpf.cas.cz

Prof. Flavio Manenti

Politecnico di Milano, Centre for Sustainable Process Engineering Research (SuPER)
flavio.manenti@polimi.it

Prof. Willi Meier

DECHEMA e.V.
willi.meier@dechema.de

Prof. Carlos Manuel Negro Alvarez

Complutense University of Madrid, Rectorado de la Universidad Complutense
cnegro@ucm.es

Mr. François Nicol

Veolia Recherche & Innovation
francois.nicol@veolia.com

Mr. Jon Prichard

The Institution of Chemical Engineers
jprichard@icheme.org

Dr. Patrick M. Piccione

F. Hoffmann-La Roche AG, Formulation and Process
patrick.piccione@roche.com

Dr. Bent Sarup

Alfa Laval Copenhagen A/S
bent.sarup@alfalaval.com

Dr. Michael Wilk

Merck KGaA, Senior Vice President Site Operations, Engineering & Maintenance
michael.wilk@merckgroup.com



Public Benefit Statement

The charity trustees confirm that they have complied with their duty to have due regard to the guidance on public benefit published by the commission in exercising their powers or duties.

Objectives and activities

The objectives of the European Federation of Chemical Engineering, as stated in its Constitution, are "for the benefit of the public to promote co-operation in Europe and elsewhere between non-profit making professional scientific and technical societies which share amongst their aims the general advancement of science and education of the public in chemical engineering and the encouragement of the development of chemical engineering."

By enabling like-minded societies in Europe to co-operate, EFCE encourages progress in chemical engineering by facilitating the exchange of information and opinion in meetings, congresses and journals, support leading researchers and emerging talent through medals and prizes, and enabling industrialists and academics from across Europe to discuss topics of common concern.

EFCE is a Charitable Incorporated Organisation with voting members other than its charity trustees. It has an 'Association' model constitution, dated 9 December 2014.

Key achievements during 2018

EFCE exists for the benefit of the public, to promote cooperation in Europe and elsewhere between non-profit making professional scientific and technical societies which share among their aims the general advancement of science and education of the public in chemical engineering and the encouragement of the development of chemical engineering.

By enabling like-minded societies in Europe to cooperate, EFCE encourages progress in chemical engineering by facilitating the exchange of information and opinion in meetings, congresses and journals, supporting leading researchers and emerging talent through medals and prizes, and enabling industrialists and academics from across Europe to discuss topics of common concern.

Europe faces a number of Grand Challenges, for example ensuring prosperity through new chemical products, sustainability of our industry, new approaches and medicines for a healthy society, where Chemical Engineers have a vital role to play. One of our objectives is to bring together members of Working Parties and Sections to explore ways they may tackle the Grand Challenges confronting society. To this end EFCE organises conferences and has introduced a forum on New Technologies in Chemical Engineering. It will also seek to garner the priorities of member societies to explore ways in which the community can better work together on common objectives.

2018 has seen a strengthened links with industry bodies, such as CEFIC, the European Chemical Industry Association, and A-SPIRE, a public private partnership between the European Commission and five industry sector bodies to identify strategic research challenges, to develop a stronger voice at European Government level and in supporting members in influencing national industry, research and skills policies. The EFCE Scientific Vice President has been elected to the Board of SusChem. SusChem is a platform that brings together industry, academia, policy makers and the wider society and was launched in 2004 as a European Commission supported initiative to revitalise and inspire European chemistry and industrial biotechnology research, development and innovation.

Some recent work has also been undertaken to explore the system that produces Chemical Engineering graduates in Europe. Bringing together some statistics of age profiles and staff student ratios will help to build a picture of best practice to help Universities across EFCE member countries argue for more academic recruitment where necessary to maintain a strong discipline basis for Chemical Engineering.

Working Parties and Sections

EFCE has 20 Working Parties and five Sections, whose activities span organising conferences, promoting and judging awards, and running summer courses for PhD students. The Working Parties and Sections are at the heart of EFCE's activities. They involve 413 volunteers from across Europe who are experts in their fields. Of these, 18% are industrial delegates.

Working Parties conduct their business throughout the year. Typically, they will have one face to face meeting per year at a suitable European location, in which all members of the Working Party that are able participate.

Each EFCE Member Society has the right to nominate two of its members to each EFCE Working Party. Member societies receive an annual report on how many delegates it currently has across EFCE Working Parties. The ability to join a working party and network with colleagues from across Europe is a key benefit that EFCE societies can make available to their members and greatly appreciated by the delegates. We encourage all member societies to use this benefit to its full extent. If you would like to find out more about the Working Groups or participate in their activities, please contact your national chemical engineering society or speak to the EFCE secretariat who will be able to advise you.

EFCE Sections cover broader and more cross-cutting topic areas than Working Parties. Anyone with relevant expertise or interest in the topic area is free to join a section, irrespective of whether they are a member of an EFCE member society. If you are interested in joining an EFCE Section, please contact the EFCE membership secretariat via ines.honndorf@dechema.de

Working Parties

Agglomeration

Contact: Stefan Heinrich, Hamburg/DE
stefan.heinrich@tuhh.de

Characterisation of Particulate Systems

Chair: Martin Morgeneyer, Lyon/FR
martin.morgeneyer@utc.fr

Chemical Reaction Engineering

Chair: Kai-Olaf Hinrichsen, Garching/DE
olaf.hinrichsen@ch.tum.de

Comminution and Classification

Chair: Arno Kwade, Braunschweig/DE
a.kwade@tu-bs.de

Computer Aided Process Engineering

Chair: Flavio Manenti, Milano/IT
flavio.manenti@polimi.it

Crystallization

Chair: Marco Mazzotti, Zurich/CH
marco.mazzotti@ipe.mavt.ethz.ch

Drying

Chair: Angélique Leonard, Liège/BE
a.leonard@ulg.ac.be

Education

Chair: Eric Schaer, Nancy/FR
eric.schaer@univ-lorraine.fr

Electrochemical Engineering

Chair: Manuel A. Rodrigo, Ciudad Real/ES
manuel.rodrigo@uclm.es

Fluid Separations

Chair: Elisabetta Brunazzi, Pisa/IT
(until 15 Sep. 2018)
elisabetta.brunazzi@unipi.it

Harry Kooijman, Amsterdam/NL
(from 16 Sep. 2018)
Harry.Kooijman@shell.com
kooijman@clarkson.edu

High Pressure Technology

Chair: Eberhard Schlücker, Erlangen/DE
sl@ipat.uni-erlangen.de

Loss Prevention and Safety Promotion

Chair: Bruno Fabiano, Genoa/IT
brown@unige.it

Mechanics of Particulate Solids

Chair: Alvaro Ramirez Gomez, Madrid/ES
alvaro.ramirez@upm.es

Mixing

Chair: Jerzy Baldyga, Warszawa/PL
jerzy.baldyga@pw.edu.pl

Multiphase Fluid Flow

Chair: Michael Schlüter, Hamburg/DE
michael.schlueter@tuhh.de

Polymer Reaction Engineering

Chair: Markus Busch, Darmstadt/DE
markus.busch@pre.tu-darmstadt.de

Process Intensification

Chair: Tom Van Gerven, Leuven/BE
tom.vangerven@kuleuven.be

Quality by Design

Chair: Christoph Herwig, Wien/AT
christoph.herwig@tuwien.ac.at

Static Electricity in Industry

Chair: Petro Llovera Segovia, Paterna/ES
pedro.llovera@ite.es

Thermodynamics and Transport Properties

Chair: Jean-Charles de Hemptinne, Rueil
Malmaison/FR
jean-charles.de-hemptinne@ifpen.fr

Sections

Energy

Co-chairs: Fabrizio Bezzo, Padova/IT
fabrizio.bezzo@unipd.it

Francois Maréchal, Sion/CH
francois.marechal@epfl.ch

Food

Chair: Dietrich Knorr, Berlin/DE
(until Oct. 2018)
dietrich.knorr@tu-berlin.de

Chair: Ing. Volker Heinz, Quakenbrueck/DE
(from Nov. 2018)
v.heinz@dil-ev.de

Membrane Engineering

Chair: Enrico Drioli, Arcavacata di Rende/IT
e.drioli@itm.cnr.it

Product Design and Engineering

Chair: Stefan Kaufmann, Hamburg/DE
stefan.kaufmann@beiersdorf.com

Sustainability

Chair: Adisa Azapagic, Manchester/UK
adisa.azapagic@manchester.ac.uk

Events

2018 saw the introduction of a new style of event, the European Forum on New Technologies on Chemical Engineering. These are one day events and two were held in 2018. The first was on 3D Printing in Chemical Engineering and was held in Paris in March. The second was on Digitalization and was held in Frankfurt in September. The events are specialised events but aim to bring together members from a range of Working Parties and Sections and their constituencies to explore the potential and challenges in exploiting new technological developments that cut across much or all of Chemical Engineering. The events have been very successful and EFCE plans to continue this format.

At the time of writing, preparations are well under way for ECCE 12, the next event in the European Conference in Chemical Engineering series. It is being organised by EFCE's Italian member organisation, AIDIC and will take place in Firenze, Italy, in September 2019. It will incorporate the 5th European Congress of Applied Biotechnology, organised by EFCE's sister organisation, the European Society of Biochemical Engineering Sciences (ESBES). The event has open sessions as well as a number of mini-symposia.

EFCE's Working Parties, Sections and member societies organise their own specialised conferences and events at regular intervals. EFCE Events during 2018 include:

- 6th International Conference on Population Balance Modelling – PBM2018, Ghent, Belgium, 7–9 May 2018 (EFCE Event No. 749)
- ISCRE 25 – 25th International Symposium on Chemical Reaction Engineering, Florence, Italy, 20–23 May 2018 (EFCE Event No. 743)
- 28th European Symposium on Computer Aided Process Engineering – ESCAPE-28, Graz, Austria, 10–13 June 2018 (EFCE Event No. 745)
- International Conference & parallel exhibition area "Corrosion Prevention Balkans", Plovdiv, Bulgaria, 28–29 June 2018 (EFCE Event No. 756)
- CHISA and PRES 2018, Prague, Czech Republic, 25–29 August 2018 (EFCE Event No. 752)
- 1st European Forum on New Technologies – Chemical Engineering and 3D Printing, Paris, France, 7 September 2018 (EFCE Event No. 755)
- 16th European Conference on Mixing, Toulouse, France, 9–12 September 2018 (EFCE Event No. 746)
- Distillation & Absorption 2018, Florence, Italy, 16–19 September 2018 (EFCE Event No. 737)
- International Sustainable Production and Consumption Conference, Manchester, United Kingdom, 4–5 October 2018 (EFCE Event No. 754)
- XXIII International Conference on Chemical Reactors – CHEMREACTOR – 23, Ghent, Belgium, 5–9 November 2018 (EFCE Event No. 748)

Events

Furthermore, in 2018 the EFCE Working Parties and Sections organised several events for students and young researchers, which include:

- 12th European PhD Workshop on Food Engineering and Technology, Freising-Weihenstephan, Germany, 17–18 April 2018
- 8th European Summer School on Electrochemical Engineering – ESSEE2018, Toulouse, France, 27–31 August 2018
- 7th PhD-Student Workshop on Polymer Reaction Engineering, Prague, Czech Republic, 31 August – 2 September 2018

Awards

Excellence Awards

EFCE Excellence Awards recognise PhD theses or publications of young researchers published in preceding years which demonstrate the most outstanding contribution to research or the practice in the scientific fields of the EFCE Working Parties and Sections.

Awards typically comprise a certificate, a cash award of €1500, and a €500 travel grant to attend the meeting at which the award will be presented.

In 2018, EFCE gave the following awards:

- Dr. Jesús Esteban Serrano received the 2018 Excellence Award in Chemical Reaction Engineering
- Dr. Abaynesh Yihdego Gebreyohannes has been awarded the EFCE-EMS Joint Excellence Award in Membrane Engineering 2018
- Dr Mirko Skiborowski has won the 2018 Excellence Award for an Outstanding PhD Thesis on Computer Aided Process Engineering (CAPE)
- Dr. Leila Moura received the 2018 EFCE Excellence Award in Fluid Separations
- Dr. Federico Alberini has been awarded the 2018 EFCE Young Researcher Award in Mixing

Other Awards

- Prof. Jiri Drahos was awarded an Honorary Membership to recognise his longstanding contribution to the work and vision of EFCE. Moreover, the award honoured his contribution to the development of multiphase chemical reactors, education and training across Europe through his commitment to the Federation, the development of the discipline, and to international friendship and understanding.
- Professor Georgios M. Kontogeorgis was named as the laureate of the 2018 Distinguished Lecture in Thermodynamics and Transport Properties
- The Lifetime Recognition Award in Mixing was presented to Professor Michael Yianneskis.
- The Personal Recognition Award in Mixing 2018 was awarded to Professor Dr.-Ing. Pavel Ditl,
- The Working Party on Multiphase Fluid Flow presented a poster award to Maria Zednikova



2019 and beyond

EFCE will continue to consolidate its place as a voice for European Chemical Engineering, and particularly for the teaching and research base within Europe. A-SPIRE and SusChem will be important vehicles for growing the influence by involving more of the Working Party and Section membership in consultations and inputs to research and education roadmaps. The work programmes for the European Commission Framework Programmes benefit from technical advice and input from EFCE Working Party and Section members who are the experts in their fields.

The audit of national numbers in Chemical Engineering graduates and student/staff ratios will be completed leading to a discussion with the community as to how best to encourage greater investment by Universities and National Governments. Lessons can be shared as to how a successful case can be made. There are significant differences in the way such decisions are made across Europe.

2019 will see the start of preparations for the next in the ECCE series to be held in 2021 in Berlin, Germany.

Administrative Report

2018 was the fourth year of EFCE as a Charitable Incorporated Organisation. The Executive Board Spring meeting was held in Frankfurt and the Autumn meeting was held in Prague on occasion of the CHISA conference. The Management Committee met first in person in Frankfurt in February and then continued its monthly meetings via videoconference. On the eve of the Executive Board meetings, the Management Committee met again in person in order to prepare for the boards.

During the year, the documentation of EFCE was reorganized in Policies and Procedures, incorporating all documents developed earlier and adding documents as required. For instance the procedures relevant to monitoring and expediting of EFCE invoices and to budget monitoring and forecasting were developed, discussed and implemented.

Through its membership of SPIRE, EFCE is exploring how to have a greater influence with the EU and in particular how to become more engaged with their research activities.

In 2018, a strategy for improving EFCE online presence was developed and approved by the charity trustees. It includes the introduction of a new responsive EFCE website, a single sign-on facility for EFCE members and a personalised area for the community.. The development of the new website layout, including a user-friendly structure, harmonised Working Party and Section pages, special features for Events and News, and special focus on mobility and connectivity requirements, is scheduled for early 2019. The new EFCE website is due to go live in June 2019.

Details about the economic and financial performance of the CIO are provided later in the Financial Report.

EFCE involvement in EU funding instruments

Following from discussions about greater involvement in EU funding instruments, Prof Flavio Manenti has submitted an application using a new financial mode with EFCE as a formal partner. It is awaiting results from the evaluation process.

Communication and engagement

The restructuring of services of the EFCE has improved communication among the member societies, Working Parties and Sections. We actively use media such as LinkedIn, Facebook, and Twitter, to reach a wider audience and share news of EFCE activities. The membership of EFCE's LinkedIn group has again seen a steady increase in members in 2018.

EFCE and ESBES, the European Society of Biochemical Engineering Sciences, have agreed to co-operate and use their best endeavours to ensure that the joint conferences provide a high-quality and representative international forum for experts from academia and industry. This agreement, signed on 29 November 2018, acknowledges the successful cooperation starting in 2011 with the organisation of the first joint congress ECCE8/ECAB1 in Berlin.

EFCE continues to participate in SPIRE, a public-private partnership set up within the EU's Horizon 2020 programme tasked with stimulating greater resource and energy efficiency in the process industries, and EFCE's members are warmly invited to contribute to SPIRE activities on behalf of the Federation.

EFCE publicises its activities with four issues of its e-newsletter were published in 2018 (<https://efce.info/EFCEnewsletter.html>). In addition, pdf versions are published on EFCE's social media pages. There were 15 press releases (<https://efce.info/News.html>), mainly dedicated to the various EFCE awards.

EFCE's social media pages can be found as follows:

- EFCE LinkedIn Group: http://bit.ly/EFCE_LinkedIn
- Twitter: https://twitter.com/EFCE_Comms
- Facebook: <https://www.facebook.com/theEFCE>
- YouTube: <https://www.youtube.com/channel/UCxuvfbb5ST3DMHLAWZ6326w>



Election of new Board of Trustees

Three new honorary officers started a two year term in January 2018. They are: Dr Hermann J. Feise (Germany), who was elected as the new President, Giorgio Veronesi (Italy) started his term as Executive Vice-President and Professor David Bogle (UK), as Scientific Vice-President.

At the same time, elections to the Board of Trustees resulted in seven further new trustees being appointed, all on a two-year term. They are: Adisa Azapagic (UK), Antoon ten Kate (Netherlands), Ferenc Friedler (Hungary), Laure Helard (France), Michael Wilk (Germany), Patrick Piccione (Switzerland) and Petr Kluson (Czech Republic), along with Mike Considine (UK), previously Executive VP. Unfortunately, Laure Helard resigned shortly after the election due to a change in circumstances. François Giger (France) was co-opted to the Board of Trustees in spring 2018.

François Nicol, the new president of the French member society, the Société Française de Génie des Procédés (SFGP), took up the post as the nominated charity trustee representing the French Secretariat. The role had previously been filled by Jean-Pierre DalPont, the previous president of SFGP.

In August 2018, Jon Prichard, CEO of the Institution of Chemical Engineers (IChemE), took over the role as nominated charity trustee for the UK Secretariat from Claudia Flavell-While. Ms Flavell-While will continue to support the work of EFCE through the UK secretariat.

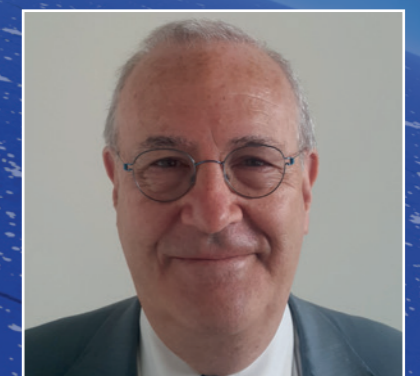
We would like to express our sincere thanks and gratitude to the Past President, Rafiqul Gani (Denmark), and Past Scientific VP, Jean-Marc Le Lann (France), and to the retiring trustees: Bülent Atamer (Turkey), Wridzer Bakker (Netherlands), Jiří Drahoš (Czech Republic), Andreas Schreiner (Switzerland), Eva Sorensen (UK), Bruno Zelić (Croatia), Jean-Pierre DalPont and Emilia Kondili (Greece).



Hermann Feise
President



David Bogle
Scientific Vice-President



Giorgio Veronesi
Executive Vice-President

Financial Report

from the period of 1 January 2018 to 31 December 2018

	2018	2017
	Unrestricted fund	Total funds
INCOME FROM Charitable activities		
Charitable activities	68,098	72,548
Investment income	8	81
CHARITABLE ACTIVITIES TOTAL	68,106	72,629
EXPENDITURE ON Charitable activities		
Resources expended	700	1,011
Charitable activities	55,549	59,930
Other	2,242	2,320
TOTAL	58,491	63,261
NET INCOME	9,615	9,368
RECONCILIATION OF FUNDS		
Total funds brought forward	94,986	85,618
TOTAL FUNDS CARRIED FORWARD	104,601	85,618

	2018	2017
	Unrestricted fund	Total funds
CURRENT ASSETS		
Debtors	29,353	42,644
Cash at bank	93,051	67,636
TOTAL	122,404	110,280
CREDITORS		
Amounts falling due within one year	17,803	15,294
NET CURRENT ASSETS	104,601	94,986
TOTAL ASSETS LESS CURRENT LIABILITIES	104,601	94,986
NET ASSETS	104,601	94,986
FUNDS		
Unrestricted funds	104,601	94,986
TOTAL FUNDS	104,601	94,986

This financial report is an extract of the Unaudited Financial Statements for the year ended 31 December 2018, which have been independently examined by Magma Audit LLP, Rugby, UK. The full report is available on the EFCE website.



EFCE General Secretariat

UK Secretariat (Finance & Principal Office)

IChemE
Davis Building
165-189 Railway Terrace
Rugby
Warwickshire
CV21 3HQ
UK

German Secretariat (Membership and Administrative Support)

DECHEMA
Theodor-Heuss-Allee 25
60486 Frankfurt am Main
Germany

French Secretariat (Scientific Support)

SFGP
28, Rue Saint-Dominique
75007 Paris
France

Charity Registration No 1159541