



EFCE

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

NEWS AND EVENTS APRIL 2023

# EFCE SpotLight Talks

by the Working Parties  
and Sections

from  
24 May  
to  
5 June  
2023

8 Webinars



EFCE

European Federation of Chemical Engineering

## Welcome to the 5th Spotlight Talks Series!

Entering the third year of EFCE Spotlight Talks highlights these as one of the most significant and visible activities of the EFCE Working Parties and Sections. These talks are now seen by the community of practicing (bio)chemical and process engineers as an important means for sharing and disseminating the latest knowledge in chemical engineering science. Given that in September 2023 we will have an opportunity to meet face to face in Berlin at the ECCE/ECAB conference, this year we are only running the spring series of Spotlight Talks.

This series runs from **24 May to 5 June** and showcases eight webinars involving the following Working Parties and Sections:

Characterization of Particulate Systems, Chemical Engineering as Applied to Medicine, Crystallization, Early Career Chemical Engineers, High Pressure Technology, Multi-phase Fluid Flow, Quality by Design, Static Electricity in Industry, Thermodynamics and Transport Properties.

Whatever your area of interest, you are sure to find interesting information on the latest chemical engineering science innovations.

Many thanks to all presenters and we hope you'll all enjoy the webinars.

Register now free of charge at [https://efce.info/Spotlight\\_Talks.html](https://efce.info/Spotlight_Talks.html)

Dear Readers,

Welcome you to spring 2023 issue of EFCE News! This issue contains information about upcoming EFCE events, awards, and journal news.

If you have any comments/suggestions, please contact us.

With kind regards

Giorgio Veronesi  
EFCE President

### In this issue:

- EFCE Spotlight Talks 2023
- ECCE14 & ECAB7 News
- EFCE presents Thermodynamics and Transport Properties Award to Dr. Andrés Piña-Martinez
- EFCE Award – Calls for nominations in the field of Crystallization
- Working Party and Section News in brief: Polymer Reaction Engineering
- News about the official EFCE Journals
- EFCE Events in 2023

# Programme

Date	Topic
<b>24 May 2023</b> 14:00 - 15:30 CEST	<b>Successful implementation of quality by design along the product life cycle – industrial use cases</b> <i>Working Party on Quality by Design</i>
<b>25 May 2023</b> 14:00 - 16:30 CEST	<b>The adventurous journey of a reacting species on its ride through a multiphase reactor – new insights with Lagrangian analysis</b> <i>Working Party on Multiphase Fluid Flow</i>
<b>26 May 2023</b> 14:00 - 17:30 CEST	<b>Technology to improve conventional chemical engineering processes</b> <i>Working Party on High Pressure Technology</i>
<b>30 May 2023</b> 14:00 - 16:00 CEST	<b>Chemical engineering as applied to medicine: current challenges and opportunities</b> <i>Section on Chemical Engineering as Applied to Medicine</i>
<b>31 May 2023</b> 9:00 - 11:00 CEST	<b>Static electricity in industry: flexible intermediate bulk containers, comfort and smart materials</b> <i>Working Party on Static Electricity</i>
<b>31 May 2023</b> 14:00 - 16:45 CEST	<b>Opening chemical engineering to the power of open science</b> <i>Early Career Chemical Engineers Section</i>
<b>1 June 2023</b> 9:00 - 12:00 CEST	<b>Innovative characterization techniques for particulate and crystallization processes</b> <i>Working Parties on Crystallization and on Characterization of Particulate Systems</i>
<b>5 June 2023</b> 15:00 - 17:00 CEST	<b>A view on the future of applied thermodynamics</b> <i>Working Party on Thermodynamics and Transport Properties</i>



# 14th European Congress of Chemical Engineering and 7th European Congress of Applied Biotechnology

**Berlin, Germany, 17-21 September 2023**

***Motto: Chemical and Biochemical Engineering – Acting Together***

ECCE & ECAB is the **largest European conference** for chemical engineering and biotechnology. Organised by DECHEMA e.V. in cooperation with the European Federation of Chemical Engineering (EFCE) and the European Society of Biochemical Engineering Sciences (ESBES), the congress combines the thematic and specialization scopes of both disciplines and is dedicated to current issues such as environmental challenges, a circular economy and sustainable production. In up to 13 parallel sessions, the latest scientific findings and industrial applications will be presented.

## **The call for posters is still open!**

The deadline for oral presentations has expired, but you can still submit poster abstracts until **31 May 2023**

For the list of topics see <https://ecce-ecab2023.eu/topics>

## **Plenary lectures:**

- *Catalysis for a better world*  
Prof. Benjamin List, Director of the Max Planck Institute for Coal Research and Nobel Laureate in Chemistry, Mülheim an der Ruhr/DE
- *(Bio)chemical engineers of the 21st century - Are we preparing them well for their professional future?*

Prof. Jarka Glassey, Newcastle University, Newcastle upon Tyne/UK

- *Process Engineering in Food: Food security and Nutrition for all*  
Dr. Christoph Hartmann, Head of Academic Alliances & Expertise Development, Société des Produits Nestlé S.A., Vevey/CH
- *Affinity Proteins for Biotechnological and Medical Purpose*  
Prof. Sophia Hober, KTH Royal Institute of Technology, Stockholm/S
- Plenary Lecture of the Early Career Chemical Engineers  
*A systems engineering approach for novel and sustainable value chains in life sciences*  
Dr. Maria Papathanasiou, Imperial College London/UK
- *We change the world and the world changes us: the Anthropocene through the lenses of evolution*  
Prof. Telmo Pievani, University of Padua/I

## **Exhibition and Sponsorship:**

If you are a manufacturer of equipment for chemical and biotechnological engineering, a solution provider for laboratories and process engineering, if you offer services for research, development and education, or are looking to connect to professionals and young scientists

in your field - this is a great opportunity to **enhance your visibility and create relevant leads** as an exhibitor.

More than 2,500 participants from academia and industry are expected to attend the congress. This gives you a direct access to a significant international audience. The exhibition is an integral part of ECCE & ECAB 2023 and offers you attractive opportunities to present your technologies, products, and services. In this way, you can easily **get in touch with decision-makers** from research and industry and **inspire young scientists** for your company.

There are several exhibition options to suit different requirements and budgets. You can find more information online at [https://ecce-ecab2023.eu/sponsoring\\_exhibition](https://ecce-ecab2023.eu/sponsoring_exhibition).

We would be pleased if you participate in this major event as an exhibitor. If you have any questions, you can contact Chereén from DECHEMA e.V. via e-mail: [chereen.semrau@dechema.de](mailto:chereen.semrau@dechema.de)

**Sponsors** (as of 4 April 2023): BASF SE (Gold Sponsor)

**Exhibitors** (as of 4 April 2023): Berghof Products + Instruments GmbH; DyssolTEC; Fink Chem + Tec GmbH GmbH; Fraunhofer Chemistry Alliance; Hamilton; HNP Mikrosysteme GmbH; Integrated Lab Solutions (ILS); Kreienbaum Neoscience GmbH; Kuhner Shaker GmbH; Scientific Bioprocessing, Inc. (SBI); SOPAT GmbH.

**Youth Activities:**

- Science Slam
- ChemCar competition
- ChemPlant competition (in German, only)

**More information at:** [https://ecce-ecab2023.eu/Youth\\_Activities.html](https://ecce-ecab2023.eu/Youth_Activities.html)

**Register NOW! Deadline for early bird registration: 15 June 2023**

**Please find more updated information on the conference website at** <https://ecce-ecab2023.eu/>

## EFCE Awards – Call for nominations

**The following call is still open:**

### **EFCE Excellence Award in Crystallization 2023**

This triennial award has been instituted to recognise a PhD thesis or paper(s) of a scientist in an early stage of his/her career, who has made excellent contributions to the understanding or the industrial application of crystallization. It will be presented at the 22nd International Symposium on Industrial Crystallization – ISIC 2023 (Conference website: <https://www.isic2023.com/> ) to be held in Glasgow, UK, from 5 to 8 September 2023.

**Closing date for nominations: 30 May 2023**

For further information about the nomination procedure, eligibility, supporting documentation, and the online submission form, please visit the EFCE website at: <http://www.efce.info/ExcellenceAwardCrystallization.html>





## EFCE presents Thermodynamics and Transport Properties Award to Dr. Andrés Piña-Martinez for his study of cubic and SAFT-type equations for industrial energy conversion applications



**Dr. Andrés Piña-Martinez** has been named this year's winner of the EFCE Excellence Award in Thermodynamics and Transport Properties for an outstanding PhD thesis in "Cubic and higher order equations of state for fluid mixtures: Development, parameterization and validation through industrial energy conversion applications".

His thesis, performed at Université de Lorraine, France, under the supervision of Professor

Jean-Noël Jaubert, aimed at developing a methodology to determine the most appropriate working fluid for energy conversion machines with complex architecture that simultaneously produce cooling, heating and electric power. The use of such energy systems, which can be powered by renewable energy sources, should make it possible to achieve the objectives set by the European Union in terms of industry decarbonisation, and thus achieve carbon neutrality by 2050.

The thesis included a comprehensive assessment of the accuracy of various equations of state (EoS) and different mixing rules for the calculation of phase equilibria and other properties of binary fluid mixtures. Dr. Piña-Martinez investigated several mixing rules that nicely integrate activity coefficient models (including Wilson, UNIQUAC and NRTL) within the cubic EoS. This work resulted in a large comprehensive set of cubic EoS with various mixing rules. Dr. Piña-Martinez developed all the necessary algorithms, codes and optimization techniques to perform the needed calculations. Based on his work, important conclusions were reached regarding the accuracy of the models and specific recommendations were developed for the use of these models for different classes of chemical mixtures. All the results obtained from the study of cubic and SAFT-type equations of state (EoS) could be used in the future in energy-related applications and in computer-aided process design.

The judging committee of EFCE's Thermodynamics and Transport Properties Working Party ([https://efce.info/wp\\_ttp](https://efce.info/wp_ttp)) selected Andrés Piña-Martinez for the Award based on the innovative approach to cubic equations of state, the extremely wide assessment of equation of state models and their modifications and the application of these models to energy technology applications, together with a high quality of the related publications.

Nominating him for the Award Jean-Noël Jaubert wrote: "Andrés Piña-Martinez demonstrated he was a researcher brimming with ideas and tireless. The motivation he has shown and his outstanding abilities make him a scientist with a great future." He also emphasized the excellent preparation and presentation of the doctoral thesis.

**The Excellence Award** consists of a cash prize of €1500 plus the opportunity to attend the International Conference on Properties and Phase Equilibria for Product and Process Design PPEPPD 2023 in Tarragona, Spain, on 21-25 May 2023 (conference website: <https://ppeppd.org/ppeppd2023/>), where the award will be presented. The Award lecture is scheduled for 23 May 2023.

**The Excellence Award is generously sponsored by Bayer AG.**

*Bayer is a Life Science company with a more than 150-year history and core competencies in the areas of health care and agriculture. With innovative products, Bayer contributes to finding solutions to some of the major challenges of our time. A growing and aging world population requires an adequate supply of food and improved medical care. With life expectancy continuing to rise, Bayer improves quality of life for a growing population by focusing our research and development activities on preventing, alleviating and treating diseases. Bayer is also making an important contribution to providing a reliable supply of high-quality food, feed and plant-based raw materials. See [www.bayer.com](http://www.bayer.com)*



## Working Party and Section News in Brief

### 11th PhD-Student Workshop on Polymer Reaction Engineering

The EFCE Working Party on Polymer Reaction Engineering is pleased to announce its 11th PhD-Student Workshop which will take place on **8-10 September 2023 in Potsdam, Germany**.

It will be held as direct follow-up event to the 14th International Meeting on Polymer Reaction Engineering (PRE) on 5-10 September 2023 (conference website: <https://dechema.de/en/PRE2023.html>).

The workshop is specifically designed for PhD students seeking contact with fellow students and the polymer industry. They are encouraged to present their PhD topic to a professional audience and at the same time meet industry representatives and potential employers in person.

**Registration fee: 100 € for PhD students**

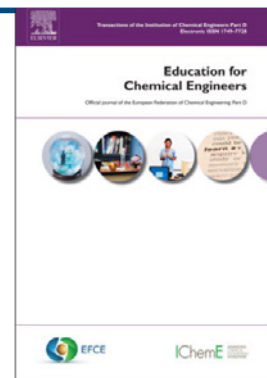
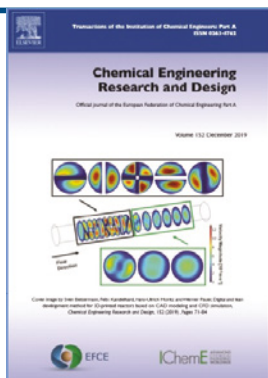
**The call for abstracts is open. Deadline for abstract submission: 4 June 2023**

**Registration deadline: 2 July 2023**

**For further information, the abstract submission guidelines and registration form, visit the website [https://www.chemie.tu-darmstadt.de/busch/forschung\\_akbusch/wppre/formular.en.jsp](https://www.chemie.tu-darmstadt.de/busch/forschung_akbusch/wppre/formular.en.jsp)**



Working Party on  
**Polymer Reaction Engineering**



## News about the official EFCE journals

For the latest updates on published papers, freely available content and editor and author interviews please follow the journals on Twitter:

### **Chemical Engineering Research and Design**

<https://twitter.com/ChemEngResDes>

### **Digital Chemical Engineering**

<https://twitter.com/DChEJournal>

### **Carbon Capture Science & Technology**

<https://twitter.com/CCSTJournal>

### **Education for Chemical Engineers**

<https://twitter.com/ECEJournal>

### **Process Safety and Environmental Protection**

<https://twitter.com/PSEPJournal>

### **Food and Bioproducts Processing**

<https://twitter.com/FBPJournal>

### **Sustainable Production and Consumption**

<https://twitter.com/SustProdCons>

### **Read journal papers for free**

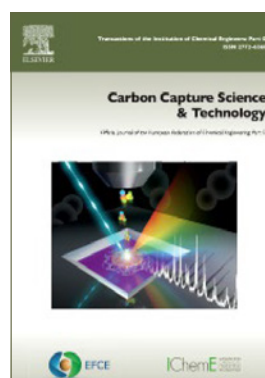
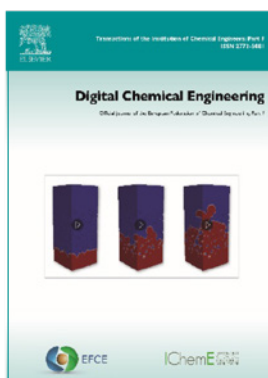
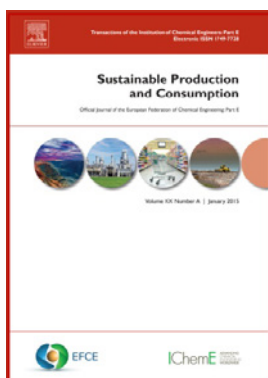
The following articles / issues are set for free access periods. In addition to these, articles that are published via the open access route in the journal are also freely available to all. These are identified in ScienceDirect by a green dot. It is possible sign up to an RSS alert specifically to inform when a new open access article is published in the journal – see individual journal pages to set this up.

### **Chemical Engineering Research and Design**

<https://www.sciencedirect.com/journal/chemical-engineering-research-and-design>

Freely available content:

- January 2023 issue (Volume 189)  
<https://www.sciencedirect.com/journal/chemical-engineering-research-and-design/vol/189/suppl/C>
- Women in Chemical Engineering  
<https://www.sciencedirect.com/journal/chemical-engineering-research-and-design/special-issue/100DXCW7KVH>
- Chemical Engineering in Latin American: Challenges and Opportunities  
<https://www.sciencedirect.com/journal/chemical-engineering-research-and-design/special-issue/10PCGTWCLR1>





- 100 years of IChemE  
<https://www.sciencedirect.com/journal/chemical-engineering-research-and-design/special-issue/10QRQR0JV67>

### **Process Safety and Environmental Protection**

<https://www.sciencedirect.com/journal/process-safety-and-environmental-protection>

Freely available content:

- January 2023 issue (volume 169)  
<https://www.sciencedirect.com/journal/process-safety-and-environmental-protection/vol/169/suppl/C>
- Aqueous Emerging Pollutants and Treatment  
<https://www.sciencedirect.com/journal/process-safety-and-environmental-protection/special-issue/10V8TN67W17>

### **Food and Bioproducts Processing**

<https://www.sciencedirect.com/journal/food-and-bioproducts-processing>

Freely available content:

- January 2023 issue (Volume 137)  
<https://www.sciencedirect.com/journal/food-and-bioproducts-processing/vol/137/suppl/C>
- Fouling and Cleaning in Food Processing 2022  
<https://www.sciencedirect.com/journal/food-and-bioproducts-processing/special-issue/104185R62Q6>

### **Education for Chemical Engineers**

<https://www.sciencedirect.com/journal/education-for-chemical-engineers>

Freely available content:

- January 2023 issue (Volume 42)  
<https://www.sciencedirect.com/journal/education-for-chemical-engineers/vol/42/suppl/C>

### **Sustainable Production and Consumption**

<https://www.sciencedirect.com/journal/sustainable-production-and-consumption>

Freely available content:

- January 2023 issue (Volume 35)

<https://www.sciencedirect.com/journal/sustainable-production-and-consumption/vol/35/suppl/C>

### **Digital Chemical Engineering**

**Gold Open Access – APC (Author Processing Charge) fully waived on all submissions received before 29 May 2023**

Freely available content:

- **NEW** All content freely available at:  
<https://www.sciencedirect.com/journal/digital-chemical-engineering>
- Special Issue - Process Systems Engineering Brazil - PSE-BR – 2022  
<https://www.sciencedirect.com/journal/digital-chemical-engineering/special-issue/10CH29DRG47>
- Special Issue - Modeling, Control and Monitoring of Process Systems in the Era of Big Data  
<https://www.sciencedirect.com/journal/digital-chemical-engineering/special-issue/10B8F6PFXLX>
- Special Issue - Machine Learning for Chemical Processes  
<https://www.sciencedirect.com/journal/digital-chemical-engineering/special-issue/10JTPTKD9LS>

### **Carbon Capture Science & Technology**

**Gold Open Access – APC (Author Processing Charge) fully waived on all submissions received before 30 June 2023**

Freely available content:

- **NEW** All content freely available at:  
<https://www.sciencedirect.com/journal/carbon-capture-science-and-technology>
- **NEW** Special Issue - IChemE CCST Awards  
<https://www.sciencedirect.com/journal/carbon-capture-science-and-technology/special-issue/10ZFJF44RD7>



## Invitation to submit papers

We have a number of special issues planned that are currently open for submission. Submissions from all welcome! If you require any further information then please contact Managing Editor Catherine Cliffe [ccliffe@icheme.org](mailto:ccliffe@icheme.org)

Details as follows:

### ***Chemical Engineering Research and Design***

<https://www.sciencedirect.com/journal/chemical-engineering-research-and-design/about/call-for-papers>

Special Issue: Heterogeneous Catalysts for Sustainable Energy Production and Environmental Applications (Manuscript submission deadline **31 May 2023**)

### ***Process Safety and Environmental Protection***

<https://www.sciencedirect.com/journal/process-safety-and-environmental-protection/about/call-for-papers>

**NEW** Special Issue: Progress and Critical Challenges in Biogas and Biohydrogen Production Processes (Manuscript submission deadline **15 February 2024**)

### ***Education for Chemical Engineers***

<https://www.sciencedirect.com/journal/education-for-chemical-engineers/about/call-for-papers>

Special issue: Accreditation (Manuscript submission deadline **31 May 2023**)

### ***Sustainable Production and Consumption***

<https://www.sciencedirect.com/journal/sustainable-production-and-consumption/about/call-for-papers>

Special issue: Responding to the climate emergency: metrics and tools for rational action (Manuscript submission deadline **31 July 2023**)

### ***Digital Chemical Engineering***

<https://www.sciencedirect.com/journal/digital-chemical-engineering/about/call-for-papers>

Special issue: Ethics and Responsible Technology (Manuscript submission deadline **15 May 2023**)

Special issue: AI for intelligent decision making of process and energy systems (Manuscript submission deadline **15 May 2023**)

### ***Carbon Capture Science & Technology***

<https://www.sciencedirect.com/journal/carbon-capture-science-and-technology/about/call-for-papers>

Special issue: Accounts of Carbon Capture Research (Manuscript submission deadline **30 April 2023**)

Special issue: Biomass-related Carbon Capture (Manuscript submission deadline **31 March 2023**)

# EFCE Events in 2023

## Organised by or on behalf of EFCE

An extended list of events is available at <http://www.efce.info/events.html>

### 15th Mediterranean Congress of Chemical Engineering - MECCE

*Barcelona, Spain, 29 May – 2 June 2023 (EFCE Event No. 788)*

The MECCE is organised by the SEQUI (SOCIEDAD ESPAÑOLA DE QUIMICA INDUSTRIAL E INGENIERIA QUIMICA) in conjunction with Expoquimia 2023 (<http://www.expoquimia.com/en/home>).

The congress unites science and industry, being a unique bridge for the scientific and business communities to come together in an incomparable setting.

Innovations, solutions, discussions, and challenges will make up this edition of the chemical engineering congress.

**Topics:** The topic matrix is available at <https://www.mecce.org/index.php/programme/program>

**Plenary speakers:** Prof. Dr. Elazer R. Edelman, MIT, Institute of Medical Engineering and Science, USA; Prof. Dr. Javier García, University of Alicante (UA), Spain; Prof. Dr. Alec Groysman, Honor President of Israeli Association of Chemical Engineers and Chemists, Israel; Prof. Dr. Angel Irabien, UC, Santander, Spain; Prof. Dr. Lourdes Vega, RICH Center, Khalifa University, Abu Dhabi, United Arab Emirates.

**Register NOW! Deadline for early-bird registration: 25 April 2023**

**Website:** <https://www.mecce.org>

### 8th European Process Intensification Conference – EPIC 8

*Warsaw, Poland, 31 May – 2 June 2023 (EFCE Event No. 795)*

EPIC2023 is organised by Warsaw University of Technology, Faculty of Chemical and Process Engineering in cooperation with the EFCE Working Party on Process Intensification.

The Conference will present an excellent opportunity to learn about recent implementations of PI in industry, the latest advances in research, and new developments at technology providers. Furthermore, discussions on the state of the art

and future perspectives of process intensification will keep you updated on future trends.

**Topics:** Batch to Continuous and Flow Chemistry-Based Processes; Microreactors and microfluidics; Intensified Activation, Mass and Heat Transfer; PI in Electricity- and Solar Energy-Based Manufacturing; Multifunctional Reactors and Hybrid Separations; Intensified Reactors for Energy and Environmental Applications; PI in Solids Processing; PI in Manufacturing of Advanced Materials; Advanced Materials for Process Intensification; Novel Process and Equipment Concepts; Dynamics and Control of Intensified Processes; PI and Digitalization; PI in Retrofitting; New Industrial Applications.

**Plenary speakers:** Prof. Prodromos Dapoutidis, University of Minnesota; USA; Dr. Manfred Nagel, Evonik Industries AG, Germany; Prof. Enrico Tronconi, Politecnico di Milano, Italy; Prof. Tom Van Gerven, KU Leuven, Belgium; Prof. Mirko Skiborowski, Hamburg University of Technology, Germany.

**For the industry:** (1) Industrial “Share Experiences” session; Partnership opportunities through various sponsorship and exhibition packages (see [Invitation to Partnership – EPIC2023](#))

The 2023 EFCE Excellence Award in Process Intensification will be presented during EPIC 8.

**Register NOW!**

**Website:** <https://epic2023.pw.edu.pl>

### 11th World Congress of Chemical Engineering - WCCE11

*Buenos Aires, Argentina, 4–8 June 2023*

**Motto: The global chemical engineering working for a better future world**

WCCE11 is organized by the Argentinian Association of Chemical Engineers and is promoted and supported by the World Chemical Engineering Council (WCEC) and the Inter-American Confederation of Chemical Engineering.

This Congress will take place in conjunction with the XXX INTERAMERICAN CONGRESS OF CHEMICAL

ENGINEERING, the 2nd IBEROAMERICAN CONGRESS OF CHEMICAL ENGINEERING (CIBIQ 2023), and the ARGENTINIAN CONGRESS OF CHEMICAL ENGINEERING (CAIQ 2023).

The Congress aims to provide a platform for researchers, engineers, academicians, and industrial professionals to present their research results and development activities in Chemical Engineering. At the same time, it is a great opportunity for all the delegates to exchange new ideas and application experiences, establish business and research connections and find global partners for future cooperation.

**Topics:** Chemical Engineering Science; Chemical Reaction Engineering and Catalysis; Process Systems Engineering; Biotechnology, Bio-economy, Bio-industry; Food Engineering ; Renewable and Non-renewable Energy; Materials and Nanotechnology; Process Industries, Innovative Processes and Process Intensification; Industry 4.0 Smart factory, Big data; Education in Chemical Engineering; Process Safety; Sustainability and Environment; Business and Project management. There will also be various co-located Joint Events and a Special Event on Process Systems Engineering (PSE) Methods and Tools.

**Register NOW!**

**Website:** <https://www.wcce11.org/>

### **33rd European Symposium on Computer-Aided Process Engineering (ESCAPE-33)** **Athens, Greece, 18-21 June 2023** **(EFCE Event No. 794)**

The ESCAPE-33 event is organized under the auspices of the [European Federation of Chemical Engineering](#), its [CAPE Working Party \(CAPE-WP\)](#), the [Technical Chamber of Greece](#), the Pan Hellenic Association of Chemical Engineers, and the [National Technical University of Athens](#). ESCAPE-33 will host free training sessions in data modelling, simulation and commercial optimization software for conference participants.

**Topics:** Modelling and optimization for multi-scale integration; Control, scheduling, and operability at the process and enterprise-level; Safe and sustainable products by design; Green and sustainable processes for the circular economy; Systems methods in industrial biotechnology and biomedical applications; Multi-scale energy systems engineering (organized by the EFCE energy section); Sustainable supply chains and

ecosystems; Education and knowledge transfer.

**Programme:** The scientific program will include plenary and invited presentations, as well as oral and poster presentations, and a Special Session to honour the legacy of late Prof. Christodoulos Floudas. The program will also include special sessions and additional workshops in thematic areas of systems engineering applications for Industrial Biotechnology, data models and AI applications (embedded models, deep learning, multi-scale integration).

**Awards:** Special awards and winners are reserved for the best papers and posters of the conference. Each award consists of certificate and cash prizes.

**Register NOW!**

**Website:** <https://escape33-ath.gr/>

### **13th European Symposium on Electrochemical Engineering – 13thESEE2023** **Toulouse, France, 26–29 June 2023** **(EFCE Event No. 793).**

The 13th ESEE 2023 is organised by the Universite de Toulouse III Paul Sabatier, Laboratoire de Génie Chimique in cooperation with the EFCE Working Party on Electrochemical Engineering.

The scientific programme will focus on Electrochemical Engineering as the key enabling overcoming current societal problematics: ENERGY - ENVIRONMENT - LIFE...

**Topics:** New' Challenges: Societal -Economic -Environmental Impacts, recycling and valorization, life cycle assessment ...; Reduced scale and 3-D electrochemical Engineering; Energy conversion and storage; Electrochemical degradation of wastes-pollution abatement, Water treatment electrochemistry, CO2 electromanagement,...; All areas of electrosyntheses, photoelectrochemistry.; Electro-separations; Electrodeposition-Electro-crystallization-Electrochemical machining and applications; Design modelling and simulation of electrochemical devices; New materials for electrochemical reactors and peripherals; Corrosion and Biocorrosion engineering; Industrial problematics - Speakers from industry highly solicited.

**Special Issue:** Following the symposium, a Special Issue is planned at the journal *Electrochimica Acta*. The issue is expected to

contain 20-25 papers, selected between oral and/or poster presentations given during the symposium. Researchers are invited to indicate (during their registration or later/before the end of the symposium) if they wish to submit an extended manuscript as publication in the special issue.

**Sponsors:** Université Toulouse III – Paul Sabatier; EURODIA ED Technologies; La Société Chimique de France

**Award:** The 2023 Carl Wagner Medal of Excellence in Electrochemical Engineering will be presented during the Symposium.

**Register NOW! Deadline for early bird registration: 5 May 2023**

**Website:** <https://13thesee2023.sciencesconf.org/>

## **17th European Conference on Mixing** **Porto, Portugal, 2–5 July 2023** **(EFCE Event No. 773)**

Mixing 17 is organised by the University of Porto on behalf of the EFCE Working Party on Mixing.

Mixing is at the heart of most chemical processes, and it is generally the cornerstone when moving from lab to industrial processes. The widespread of CFD, and advanced fluid mechanics experimental techniques led to great evolutions on this field of chemical engineering over the last decades. The European Conferences on Mixing have been a privileged forum attracting academics and industrialists from all over the world to discuss progress on mixing technology, research, and applications in the process industries. Mixing 17 will run under the unifying theme **“Mixing as a solution for fundamental problems of modern societies”**.

**Topics:** Mixing in Turbulent Flows; Mixing in Laminar Flows; Mixing in Multiphase Flows; Mixing and Complex Rheology; Mixing Reactive Systems and Product Development; Mixing Equipment and Technology; Mixing Modelling, Simulation and Theory; Mixing in Biotechnology Applications.

**Special Issue:** Following Mixing17, selected contributions will be given the opportunity to submit a full paper to Chemical Engineering Research & Design journal (Elsevier) for publication in a special issue dedicated to the conference.

**Award:** The 2023 Young Researcher Award in

Mixing and the 2023 Alvin and Helen Nienow Lifetime Recognition Award in Mixing are planned to be presented during the Symposium.

**Register NOW!**

**Website:** <http://mixing17.eu>

## **8th European Drying Conference – EuroDrying `2023** **Łódź, Poland, 5–7 July 2023 (EFCE Event No. 791)**

The Lodz University of Technology, Poznan University of Technology and EFCE Working Party on Drying are proud to invite you to the 8th European Drying Conference in Łódź, Poland.

Welcome to the fascinating city of four cultures in which technology is intertwined with culture and modernity with history. In Łódź, the city of manufacturers, everyone will find something for themselves.

**Topics:** Fundamentals, modelling and simulation; Physical properties and product quality; Industrial processes and equipment; Measurement and process control; Environmental issues; Process intensification; Drying of gases and liquids; Drying of powdered solids; Drying of biomass for energy applications; Drying of food and agricultural materials; Drying of biological and pharmaceutical materials; Drying of chemicals and polymers; Drying of wood, pulp and paper and forest products.

Conference participants will have the opportunity to publish selected papers in Special Issue of Drying Technology journal.

**Register NOW! Last day of registration: 10 June 2023**

**Website:** <https://www.eurodrying2023.p.lodz.pl/>

## **ECCE14 & ECAB8 - 14th European Congress of Chemical Engineering & 7th European Congress of Applied Biotechnology** **Berlin, Germany,** **17-21 September 2023** **(EFCE Event No. 782)**

*Chemical and Biochemical Engineering Acting Together* is the general theme reflecting that today's global challenges demand the joint efforts



of the chemical and biochemical engineering communities. ECCE&ECAB2023 will showcase cutting-edge solutions: sustainable processes and products, new materials, solutions for energy storage, novel therapeutics and other most urgently needed innovations.

**Topics:** A Green Deal – a common task for chemical and biochemical engineers (A1. Climate and energy / A2. Sustainability and circular (bio) economy / A3. Water / A4. Food in the focus / A5. Wastes); B Chemical and Biochemical Engineering in Medicine (B1. Bioprocess Engineering: Technologies for new drugs, vaccines, disinfectants and diagnostics / B2. Healthcare and Hygiene / B3. Pharmaceuticals and diagnostics / B4. New materials for medicine); C Acting Together - Biochemical and Chemical Engineering Integration (C1. Advanced technologies in bioproduction.../C2....and biomass processing / C3. Biomaterials, biochemicals and bioproducts); D Matter in Motion (D1. Continuous processes / D2. Process intensification and miniaturisation / D3. Mixing); E Faster and More Selective (E1. Reaction engineering and reaction kinetics / E2. Homogeneous, heterogenous and enzymatic catalysis / E3. Catalytic processes and technologies / E4. Catalytic and biocatalytic reactors ); F Solid Matter (F1. Advanced functional materials / F2. Biomaterials (see C3) / F3. Thin films and nanomaterials / F4. Polymers / F5. Characterisation of solids); G Tools and Toolkits for Chemical and biochemical reactors (G1. Transport phenomena, separation / G2. Thermodynamics and diffusion / G4. Electrochemistry and photo-electrochemistry / G5. Computations); H Digital transformation (H1. Digital transformation); I Education / Early career programme (I1 Education of (bio-) chemical engineers / I2. Motivating high school students for STEM courses).

**Detailed topics list:** <https://ecce-ecab2023.eu/topics>

**The call for posters is open. Deadline for abstracts submission: 31 May 2023**

**Register NOW! Deadline for early bird registration: 15 June 2023**

**Website:** <https://ecce-ecab2023.eu/>

**2nd International Conference on ENERGY, ENVIRONMENT & DIGITAL TRANSITION – E2DT**  
**Palermo, Italy, 22-25 October 2023 (EFCE Event No. 797)**

The conference aims to bringing together researchers, engineers, executives, representatives of the institutions to map the transition towards net zero carbon and fully renewable energy, driven by the recognition that global CO<sub>2</sub> emissions must be drastically reduced to keep global warming below the 1.5 °C target.

The objective is to provide up-to-date evidence on positive and negative environmental effects of the energy transition and on new technologies to drive/accelerate it.

**Topics:** I – Energy and other resources from the sea; II – Methanol as energy vector; III – Hydrogen: production, storage and utilization; IV – Carbon capture and storage technology; V - Production of chemicals, fuels and energy from biomass and waste; VI – How industry is adapting to the new challenges; VII – Sustainability in hard to abate sectors; VIII – Sustainable energy production and storage; IX – Applications of digitalization to energy transition; X – Energy transition and risk management.

The full set of final selected papers will be published into Chemical Engineering Transactions Journal, indexed by SCOPUS and SCHOLAR

**Register NOW! Deadline for early bird registration: 15 July 2023**

**Website:** <https://www.aidic.it/e2dt2023>

## Contact

Follow us on social media:



[facebook.com/theEFCE](https://facebook.com/theEFCE)



[bit.ly/EFCE\\_LinkedIn](https://bit.ly/EFCE_LinkedIn)



[@EFCE\\_Comms](https://twitter.com/EFCE_Comms)



[www.youtube.com/channel/UCxuvfbb5ST3DMHLAwZ6326w](https://www.youtube.com/channel/UCxuvfbb5ST3DMHLAwZ6326w)



**Ines Honndorf,**  
e-mail: [ines.honndorf@dechema.de](mailto:ines.honndorf@dechema.de)



**Claudia Flavell-While,**  
e-mail: [claudia@icheme.org](mailto:claudia@icheme.org)

Every effort is made to ensure the factual accuracy of the content of this e-newsletter, but EFCE cannot accept any responsibility for errors.