Call for papers

Twelve years after the first ECCE & ECAB conference, the European Federation of Chemical Engineering (EFCE) and the European Society of Biochemical Engineering and Sciences (ESBES) are bringing the joint event back to Berlin. Experts from academia and industry will again exchange latest results from R&D in all fields of biotechnology, process engineering, and related disciplines. 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.

The Organizing Committee invites you to submit abstracts of lectures and posters to the following topics (please find the detailed topics list on https://ecce-ecab2023.eu/topics):

Dear Readers,

Welcome to the October 2022 issue of EFCE News! This issue contains much information about EFCE activities and events. If you have any comments/suggestions, please contact us.

With kind regards

Giorgio Veronesi
EFCE President

In this issue:

- ECCE14 & ECAB7 – Call for Papers
- EFCE FORUM on Energy, Environment and Digital Transition
- 4th European Forum on New Technologies – Chemical Engineering as applied to Medicine
- EFCE Spotlight Talks November 2022 – save the date
- 2023 EFCE Student Mobility Award announced
- E2DT Conference
- News about the official EFCE Journals
- EFCE Events in 2022/2023
4th European Forum on New Technologies – Chemical Engineering as applied to Medicine

5 December 2022, Paris, France
Organised by SFGP on behalf of EFCE

Attend EFCE’s fourth European Forum on New Technologies in the series and learn how Chemical Engineers are bringing their skill set to physiology and medicine. Experts in the field will show us some current approaches and toolkits.

Topics

A - Physiology and chemical engineering – the obvious link

B - Chemical Engineering in the specific challenges of medicine

C – Advancements of medical technologies and products via Chemical Engineering approach

In addition in conjunction with the Forum, EFCE will launch its new Section on Chemical Engineering as Applied to Medicine.

The detailed programme is now available!

Registration: https://my.weezevent.com/chemical-engineering-as-applied-in-medicine
Website: https://efce.info/4th+European+Forum+on+New+Technologies.html
2023 EFCE Student Mobility Award Announced

The European Federation of Chemical Engineering (EFCE) is pleased to announce its prestigious Student Mobility Award.

The objective of the award is to promote mobility among European chemical engineering students. The award is presented every two years to the best European students of chemical engineering who have spent one or more semesters studying abroad.

The EFCE Student Mobility Award 2023 will consist of three prizes:
1st Prize: EUR 2,000;  2nd Prize: EUR 1,500;  3rd Prize: EUR 1,000.

The prizes will be awarded during the 14th European Congress of Chemical Engineering (ECCE14), held in conjunction with the 7th European Congress of Applied Biotechnology (ECAB7) (website: http://www.ecce-ecab2023.eu/) in Berlin, Germany, from 17 to 21 September 2023. The Student Mobility Award also includes an invitation to the Congress and a travel grant of up to EUR 500.

The 2023 EFCE Student Mobility Award is generously sponsored by BASF SE.

All students who are citizens of a European country in which EFCE is represented can apply for the EFCE Student Mobility Award if they have successfully studied for at least one semester (≥ 30 ECTU) in first or second cycle (e.g. bachelor, master) study programmes in chemical engineering in each of two or more different countries.

All documents should be submitted in English no later than 2 years after graduation.

Deadline for submission of applications: 1 March 2023.

For details on the application procedure, supporting documentation and download of the application form, please visit the EFCE website at: https://www.efce.info/Student_Mobility_Award.html

Be inspired! Watch the video at https://youtu.be/Jyq3sh9foXY

About BASF
At BASF, we create chemistry for a sustainable future. BASF combines economic success with environmental protection and social responsibility. By 2030 we target a reduction of our greenhouse gas emissions by 25 percent compared with 2018 and net zero emissions globally by 2050. Around 111,000 employees in the BASF Group contribute to the success of our customers in nearly all sectors and almost every country in the world. Our portfolio comprises six segments: Chemicals, Materials, Industrial Solutions, Surface Technologies, Nutrition & Care and Agricultural Solutions. BASF generated sales of €78.6 billion in 2021. Further information at www.basf.com.
E2DT Conference in Milan – October 23 to 26, 2022

The Energy, Environment and Digital Transition - E2DT Conference, organized by AIDIC, the Italian Association of Chemical Engineering, as an EFCE event, will be held at the Starhotel ROSA GRAND MILANO between October 23 and 26 on themes that are of great interest to the entire society and not only to the scientific world.

This is the first international scientific event organized by AIDIC on these issues, to which the association has been dedicating much attention for quite some time.

The relevance of climate change, now evident for all, and of the energy crisis, made even more impactful, in particular in Europe, after the attack on Ukraine by Russia and the related sanctions, have generated a new focus in the civil society on these topics, that in the past were of interest almost exclusively to the technicians of the sector.

The purpose of the E2DT conference is to bring together researchers, engineers, managers, entrepreneurs, representatives of institutions, and to present the results of the latest research and experience in the energy and environment sectors and on the implications they have on our society, highlighting their positive and negative aspects.

This will allow participants to have a picture as complete and balanced as possible, without preconceived views.

The energy and environmental transition, that is the passage of the production of energy from fossil fuels to renewable resources, will take place in the context of legislative changes, that can significantly influence the lines of development of our societies. It is therefore important that correct and impartial technical-scientific information are made available to the competent authorities, so that such legislative changes are not the result of unilateral views.

Digitalization is also an important element in this transition framework, as it provides the possibility of a very significant acceleration of all transformation processes. Energy systems will be more and more connected, intelligent, efficient and equipped with self-learning possibilities, with significant implications on industrial activities and on the way of working, and consequently on society.

The Plenary Speakers

The congress program includes four plenary sessions with speakers of great interest:

- **Prof. Flavio Manenti**, Full Professor of Chemical Plants at the Politecnico di Milano, who will open the congress on 24 October morning with a presentation on “Circular processes in the era of transition”.

- **Dr Jane Atkinson**, CBE, Executive Director Engineering and Automation of Bilfinger UK Ltd, who will speak on October 25 morning on “The UK's view on achieving a sustainable future”. In her position, Dr. Atkinson is responsible for the design, fabrication, major projects, automation and digitization of a leading UK's flagship companies;

- **Prof. Paul Sharing**, Full Professor of Chemical Engineering at University College London (UCL), who on October 25 afternoon will talk about “Designing the best electric batteries from basic elements to construction”.

- **Prof. Jarka Glassey**, Full Professor of Newcastle University and Executive VP of EFCE, who on October 26 morning will speak on “Preparing the next generation of chemical engineers for the transition to a circular economy with zero net impact”.

The final programme is now available at: https://www.aidic.it/e2dt/page.php?pipe=testoprogramme.

The Parallel Events
On October 25 morning, a parallel event organized by EFCE will be held the presence of all three EFCE Officers, the Scientific Vice President, Petr Kluson, the Executive Vice President, Jarka Glassey, and myself, as EFCE President. The President of the English Institution IChemE, David Bogle, former Scientific Vice President of EFCE for the last two terms, and the EFCE Board Members Elisabetta Brunazzi and Maurizio Rovaglio will participate as well. The event will be opened by a lecture by Hermann Feise of BASF, former EFCE President, and after coffee break it will be followed by a debate with all participants on the issue of energy transition and on the important aspects related to it, such as ethics and education. (details see above)

On October 26 afternoon, after the conclusion of the congress, two AIDIC Round Tables will be held, one on “Energy transition and sustainable mobility” and the other on “Materials for the energy transition”; which will take place in Italian, and will focus on the particular situation of the energy and environmental transition in the country. We have foreseen the participation of key figures of the Italian industry, associations and institutions, as well as representatives of national and regional institutions.

In parallel to the E2DT, the AIDIC Youth Working Group is organizing various events designed for young researchers and scholars: a “Pub Quiz”, which will allow participants to do networking outside the congress venue, a “Meet your Idol” breakfast, where they will listen to hear and question the EFCE Officers and David Bogle, and finally a guided tour of the Silla 2 waste-to-energy plant, located in the western suburbs of Milan.

Giorgio Veronesi, President of EFCE

EFCE Forum on Energy, Environment and Digital Transition

Milan, Italy, Tuesday 25 October 2022, Room Aida-B

On occasion of the E2DT conference organized by AIDIC in Milan (website: https://www.aidic.it/e2dt/), EFCE presents a Forum on the subjects related to the conference topic: Energy, Environment and Digital Transition. The Forum is open to participants to E2DT.

Participation of members of AIDIC and other EFCE member societies not registered for E2DT is subject to registration at e2dt@aidic.it, considering that the seats are limited.

FIRST PART – Principal Lecture
9.40 to 10:40

The Principal Lecture will be delivered by Dr. Hermann J. Feise, the former President of EFCE, and the current Chair of the EFCE Working Party on Education.

This session is introduced and chaired by Giorgio Veronesi, President of EFCE, and Petr Kluson, Scientific Vice-President of EFCE.

H. J. Feise, J. Unger (BASF, Ludwigshafen, DE): Is a climate friendly chemical industry possible?

SECOND PART – Round Table Discussion
11.20 to 12.40

Giorgio Veronesi, President of EFCE, will moderate this part.

In particular, the subjects treated will be Ethics, Education, Digital tools, Energy vectors, Critical materials for renewable energies, etc. Among others, Jarka Glassey, Executive VP of EFCE, Petr Kluson, Scientific VP of EFCE, David Bogle, President of IChemE, Hermann J. Feise, Chair of the EFCE Education Working Party, and Elisabetta Brunazzi and Maurizio Rovaglio, members of the EFCE Board of Trustees, will take part.

JOIN US!
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

Carbon Capture Science & Technology (CCST) and Digital Chemical Engineering (DChE) are celebrating their first anniversary!

These two new gold open access journals have enjoyed a successful first year of publication. In this article, published in The Chemical Engineer, the Editors-in-Chief discuss some of the papers that have been published https://www.thechemicalengineer.com/features/one-year-on/

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 2022 issue (Volume 177)
  https://www.sciencedirect.com/journal/chemical-engineering-research-and-design/vol/177/suppl/C

- NEW Machine Learning in Hydrogen Production
  https://www.sciencedirect.com/journal/chemical-engineering-research-and-design/special-issue/103ZMRVDFJQ

- NEW Women in Chemical Engineering
  https://www.sciencedirect.com/journal/chemical-engineering-research-and-design/special-issue/100DXCW7KVK
**Process Safety and Environmental Protection**


Freely available content:

- January 2022 issue (Volume 157)  

- **NEW** Safety and Risk Analysis in Digitalized Process Operations  

- Process Safety on Utilization of Emerging Energy  

**Food and Bioproducts Processing**


Freely available content:

- January 2022 issue (Volume 131)  

**Education for Chemical Engineers**

[https://www.sciencedirect.com/journal/education-for-chemical-engineers](https://www.sciencedirect.com/journal/education-for-chemical-engineers)

Freely available content:

- January 2022 issue (Volume 38)  

**Sustainable Production and Consumption**


Freely available content:

- January 2022 issue (Volume 29)  

**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:  

**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:  

- **NEW Special issue** - New Trends in Membrane Technology for Carbon Capture  
  [https://www.sciencedirect.com/journal/carbon-capture-science-and-technology/special-issue/10Z5B4DNVN1](https://www.sciencedirect.com/journal/carbon-capture-science-and-technology/special-issue/10Z5B4DNVN1)

**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**

**Special Issue**: Enabling Technologies for Biopharmaceutical Process Development and Manufacturing (Manuscript submission deadline 30 October 2022)  

**Special Issue**: Novel emerging reactive-based technologies in Unit Operations for process intensification (Manuscript submission deadline 30 November 2022)  
[https://www.journals.elsevier.com/chem-]
**Process Safety and Environmental Protection**

**Special Issue:** Physics-based machine learning application to process safety (Manuscript submission deadline **31 October 2022**)


**Special issue:** Resilience Assessment and Management (Manuscript submission deadline **20 November 2022**)


**Special issue:** Advanced Techniques in Leachate Management (Manuscript submission deadline **31 December 2022**)


**Sustainable Production and Consumption**

**New Special issue:** The Road to Net-Zero: Transition Challenges and Solutions (Manuscript submission deadline **31 December 2022**)


**Digital Chemical Engineering**

**New Special issue:** AI for intelligent decision making of process and energy systems (Manuscript submission deadline **28 February 2023**)


**Special issue:** Autonomy, Safety, and Security for Cyber-Physical Systems in the Process Industries (Manuscript submission deadline **30 November 2022**)


**Carbon Capture Science & Technology**

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


**Special issue:** CCST2022 (Manuscript submission deadline **30 October 2022**)

Events organised by or on behalf of EFCE in 2022/23

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

Energy, Environment & Digital Transition E2.DT including EFCE Forum on Energy, Environment and Digital Transition Milano, Italy, 23–26 October 2022 (EFCE Event No. 781)

For details see above.
Register now!
Website: https://www.aidic.it/e2dt

4th European Forum on New Technologies – Chemical Engineering as applied to Medicine Paris, France, 5 December 2022 (EFCE Event No. 781)

For details see above.
Register now!
Website: https://efce.info/4th+European+Forum+on+New+Technologies.html


The biannual event, organised by the Faculty of Technology Zvornik, traditionally combines great scientific content with stimulating lectures, networking opportunities and rich social programme. The purpose of the event is to discuss the current issues of the processing industry in a comprehensive and multidisciplinary manner, concerning sustainable development and environment protection.

An outstanding line up of invited speakers will be assembled to present their latest research. This Congress aims to promote a constructive discussion of the current trends and achievements in the process industry.

The congress seeks to provide a platform for researchers, scholars, PhD students and engineers working in the field of chemical engineering and technology, food engineering, environmental engineering, materials, chemistry, and biochemistry, which would allow a discussion of fundamental and applied research and facilitate international communication and collaboration between academia and industry.

Topics: Chemical and Electrochemical Engineering; Food Engineering and Biotechnology; Environmental Engineering; Materials and Material Characterization; Nanotechnology; Inorganic Chemistry and Technology; Organic Chemistry and Technology, Polymers; Plasma Technology; Energy Efficiency and Renewable Energy Sources; Textile Engineering; Corrosion and Protection of Materials and Thermal Power Plants; Metallurgy; Management in the Process Industry; General Sections.

The call for papers is open. Deadline: 31 January 2023
Website: https://eem.tfzv.ues.rs.ba/

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.expquoquimia.com/en/home

This 2023 congress is presented as a great opportunity to implement the entire 2030 Agenda from science and its power of transfer.

In addition, the special times in which we are involved mean that society, companies, and professionals need to obtain more real answers to the challenges we face in terms of digitalization, energy, decarbonization, circularity, new materials, and new surfaces. Considering, of course, all Chemical Engineering topics like Unit Operations and Separation Processes, Chemical Reaction Engineering, Process Systems Engineering, Product Engineering, Applied Biotechnology, Safety, Health and Environment, or Chemical Engineering Solutions to Global
Societal Challenges. An edition where the scientific community will dress up to offer and to share its knowledge in essential and critical industrial sectors.

The great differential value of this congress is that it 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. A historic congress that will set the guidelines for the industrial processes of the future.

The topic matrix is available at: https://www.mecce.org/index.php/programme

**The call for papers is open. Deadline for abstract submission: 31 January 2023**

Website: [https://www.mecce.org](https://www.mecce.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.

The conference is prepared to celebrate a new CAPE Award in Process Systems Engineering.

ESCAPE-33 is organizing a Special Session in memory of Prof Chris Floudas.

**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.

The call for papers for oral presentations is closed but new submission of abstracts for posters will still be possible.

**Deadline for Full Paper Submission (accepted abstracts only): 15 November 2022**

**Register now! Deadline for early bird registration: 23 March 2023**

Website: [https://escape33-ath.gr/](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.

This symposium expects: to enable to you to share the advances of research in the field of the electrochemical engineering and the electrochemistry; to strongly promote fascinating discussions and fruitful exchanges on any electrochemical field, to stimulate the required synergy for the generation of multilateral research collaborations, between academic and/or industrial researchers, junior and/or senior, on any research and/or research and development related to electrochemistry and/or electrochemical processes. 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.; Electroseparations; Electrodeposition-Electrocrytallization-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.

**The call for papers is open. Deadline for abstract submission: 31 March 2023**

Contributions from PhD students are strongly encouraged.
17th European Conference on Mixing, Porto, Portugal, 2–5 July 2023 (EFCE Event No. 773)

The Mixing Conference is organised by the University of Porto on behalf of the EFCE Working Party on Mixing. The physical conference in Porto, Portugal is postponed to 2023.

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

**The call for papers is open. Deadline for abstract submission: 21 December 2022**

The abstract submission tool will be available soon. The abstract template is available for download.

**Website:** [https://13thesee2023.sciencesconf.org/](https://13thesee2023.sciencesconf.org/)

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.

**The call for papers is open. Deadline for abstract submission: 10 December 2022**

**Website:** [http://mixing17.eu](http://mixing17.eu)

ECCE14 & ECAB7 - 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.

**The call for papers is open. Deadline for submission of abstracts for oral presentations: 15 January**

**Further information, see above**

**Website:** [https://ecce-ecab2023.eu/](https://ecce-ecab2023.eu/)

Contact

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- 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)

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