

ECCE13 & ECAB21

Engineering the Future

virtual event

20 - 23 September 2021

<https://ecce-ecab2021.eu>

ECCE13 & ECAB6 – Preliminary programme and recent news!

Virtual Event, 20–23 September 2021 (EFCE Event No. 767)

Motto: Engineering the Future

“The more choice, the more agony” says a German proverb. We prefer the English equivalent – we really were spoilt for choice compiling the programme of the 13th European Congress of Chemical Engineering and 6th European Congress of Applied biotechnology, but it was a pleasure rather than agony. And we are happy about the outcome – a congress programme that accommodates every aspect of our disciplines and guides the way to “Engineering the future”.

Now it is your turn to be spoilt for choice when you start compiling your very personal schedule from 20-23 September 2021. **Register now** and take your time exploring the programme at your leisure with another German proverb on your mind: “Anticipation is the greatest joy”!

Preliminary Programme is online!

The preliminary [lecture programme](#) is now available. Please note that there may still be changes. You can scroll through the overview of sessions or search by keyword or speaker; registered users can also compile their personal schedule – highly recommended in view of the

Welcome to the Summer 2021 issue of the EFCE News. If you have any comments on the newsletter please get in touch.

We wish you a pleasant summertime and look forward to seeing you at virtual ECCE13&ECAB6 in September!

With kind regards

Hermann Feise
EFCE President

In this issue:

- ECCE13 & ECAB6 – preliminary programme and recent news!
- Dr. Matthias Kraume & Dr. Alberto Brucato jointly win 2021 Nienow Lifetime Recognition Award in Mixing
- Dr. Lena Hohl and Dr. Francesco Maluta win 2021 Young Researcher Award in Mixing
- Ashwin Kumar Rajagopalan named as the winner of the 2020-21 Excellence Award in Crystallization for the characterisation of processes where both crystal size and shape count
- EFCE Awards 2022 – calls for nominations: Process Safety and Crystallization
- Working Party News in brief
- Official journal of the EFCE: Part F - IChemE launches new Digitalisation journal
- News about the official EFCE Journals
- EFCE Events in 2021/22

big number of excellent presentations and sessions! To get a first impression, have a look at [the keynote and tandem lectures](#); it reflects the breadth, width and outstanding quality of the scientific programme of ECCE & ECAB 2021.

Note this list of prestigious **plenary speaker** at <https://ecce-ecab2021.eu/Programme+and+Speakers/Plenary+Speakers.html>

Submit your poster until 20 August!

You still have a chance to be an active part of ECCE & ECAB! Submit your last-minute poster until **20 August 2021** and discuss your research with experts and peers from Europe and all over the world. Detailed information on what is required is available on the event website at: <https://ecce-ecab2021.eu/Posters.html>

kjVI Youth Programme for students and PhD students

Would you like to find out what working life in chemical engineering and related fields can offer you and what possible career paths look like?

The kjVI Youth Programme will take place this year as part of the ECCE&ECAB digital European conference. From 20 to 23 September 2021, you can expect an exciting and inspiring programme that you can experience from anywhere in the world and completely free of charge.

With **diverse lectures, interactive discussion rounds**, a quiz show and this year's **ChemCar Finale**, we offer a sociable opportunity to gain valuable information on starting a career and exciting insights into different career paths. You can find more information on our poster at this link: https://www.dropbox.com/s/76tgbrb277tcgoq/kjVI_Werbung%20ECCE.pdf?dl=0.

Follow the kjVI on their instagram channel [kjvi_vdi](#) and join the event on LinkedIn.

In addition to the kjVI Youth Programme, the conference offers another opportunity to get in touch with academic and industry representatives.

<https://ecce-ecab2021.eu/Programme+and+Speakers/kjVI+Youth+Programme.html>

Thank you to the ECCE&ECAB sponsors!

Platinum sponsor: BASF SE; Silver Sponsors: Nestle Research and Development, Beiersdorf AG

Join the sponsors and exhibitors

Are you asking yourself what degree of visibility you can achieve by being a sponsor at ECCE & ECAB? A short video explains the opportunities and shows why you should join as a sponsor or exhibitor to reach out to the scientific community.

See: <https://ecce-ecab2021.eu/sponsoring>

Or <https://ecce-ecab2021.eu/Exhibitionoptions.html>

For the list of exhibitors, see: <https://ecce-ecab2021.eu/Exhibitors.html>

Satellite Session

In addition to the topical programme you are invited to join numerous Satellite Sessions, several being organised by EFCE's Working Parties and Sections. Join the Satellite Session "[Future Directions in Product Design and Engineering](#)" and others!

The full listing is provided at: <https://ecce-ecab2021.eu/Topics.html>

Website: <http://ecce-ecab2021.eu/>

Twitter: #ecceecab21

Dr. Matthias Kraume & Dr. Alberto Brucato jointly win 2021 Nienow Lifetime Recognition Award in Mixing

Dr. Matthias Kraume & Dr. Alberto Brucato have won the European Federation of Chemical Engineering's 2021 Nienow Lifetime Recognition Award in Mixing due to their outstanding contributions to mixing research and practice.



Dr. Matthias Kraume's contribution to mixing research was the first to show the very slow homogenisation of the liquid phase in the presence of solid particles. Matthias also authored deeply insightful studies into liquid-liquid dispersion processes including complex dispersions in

the presence of surfactants. More recently he has integrated his mixing expertise with that of biochemical engineers in other institutions, especially for stem cell culture and fermentations of complex rheology. In addition to his decade working in industry, his endorsement for the Lifetime Recognition Award from two industrialists, one from Europe's leading mixer manufacturer and the other from a major international company producing chemicals, highlights the strong impact of his work.

Dr. Wolfgang Last, head of R&D at EKATO and Dr. Joachim Ritter, Dr. Kraume's first PhD student commented, "His contribution to mixing research and practice is truly outstanding throughout his career, which can also be seen by the enormous list of publications. Furthermore, he is extremely recognized by his students and PhD-fellows".



Dr. Alberto Brucato has specialised in CFD, particularly for multi-phase flow, from his earliest work on the development of the Inner-Outer Technique and its application to particle distribution. His work included an experimental study to quantify the enhanced

drag coefficient found in turbulent stirred tanks, which is now available in standard CFD software packages as the 'Brucato Correction'. Alberto has developed two other experimental methods, one for measuring the proportion of particles suspended and the other for determining kLa. He was the most cited author in 2006-2009 in Chemical Engineering Research and Design, official journal of the European Federation of Chemical Engineering. Recently, Dr. Brucato has been collaborating with biochemical engineers with regards to cell culture.

Professor Harry van den Akker, Bernal Professor of Fluid Mechanics at the University of Limerick commented, "One of his most cited contributions relates to a new model for particle drag coefficients in turbulent fluids which these days is one of the options in commercial CFD software".

The Nienow Lifetime Recognition Award in Mixing sponsored by Alvin and Helen Nienow consists of a cash prize of €1000, a plaque and certificate, plus the opportunity to attend a special event organised by the EFCE Working Party on Mixing (https://efce.info/WP_Mixing.html), where the award was presented to Dr. Kraume and Dr. Brucato. The event took place as an online conference over two half-days on 29th June (afternoon) and 30th June (morning) 2021.

The Award is generously sponsored by **Alvin and Helen Nienow**.

About Alvin and Helen Nienow

Professor Alvin W Nienow, DSc, FIChemE, FREng was a member of the Organizing Committee of the First European Mixing Conference in 1974. Since that time, he has been on the Organizing or Scientific Committee and contributed technically to the Conference series and to mixing research and practice as such. He was also a winner of the 2nd LRA in 2003 when it was sponsored by Ekato. He and his wife Helen count many people in Europe and world-wide working in mixing as their friends. Alvin and Helen are sponsoring this prize starting from the 2021 edition in recognition of the contribution that mixing in general and the European mixing community in particular has made to enhance the quality of their lives.

Dr. Lena Hohl and Dr. Francesco Maluta win 2021 Young Researcher Award in Mixing

Two exceptional PhD theses jointly earn prestigious EFCE award

Dr. Lena Hohl and **Dr. Francesco Maluta** have won the European Federation of Chemical Engineering's 2021 Young Researcher Award in Mixing for outstanding PhD theses. Dr. Hohl's thesis covered "*Dispersion and phase separation in liquid multiphase systems: Influence of three phase conditions on drop size distributions*". Dr. Maluta's thesis encompassed "*CFD models for the simulation of chemical and process equipment*".



Dr. Hohl's PhD supervisor, Professor Matthias Kraume, commented: "The challenges of her work arose from the difficult phase behaviour of microemulsion systems. Therefore, the identification of the continuous and the dispersed phases was

a tricky task. Lena developed an appropriate method to determine the phases accurately." Professor Kraume added, "Lena developed a mathematical simulation that successfully described the phase separation of the two-phase systems. She analyzed in more detail how the changing droplet sizes during the phase separation influence the separation process. From the corresponding results, she developed a modification of the Henschke model with improved description accuracy. Finally, the knowledge obtained was combined to describe the separation of three-phase systems. Here, too, there was overall good agreement between the calculations and the measured separation processes".



Dr. Maluta's Master's co-supervisor, Professor Giuseppina Montante commented, "During his PhD, Francesco has given a valuable and enthusiastic contribution to the experimental and computational research of the group and after three years brilliantly

defended his PhD, obtaining the maximum possible score from the committee". She added, "Francesco has mainly based his modelling activity on the adoption of RANS Two Fluid Model methodologies as applied to solid-liquid mixing of dense suspensions, gas-liquid model bioreactors and liquid-liquid systems, implementing new models in commercial and open source finite volume CFD software. The validation required by the intrinsic limitations of these modelling approaches, particularly in the field of turbulent multiphase systems, has also pushed Francesco to contribute to the experimental activity of our laboratory, by gaining expertise also in the adoption of the PIV and ERT techniques and providing a valuable contribution also on data analysis".

The judging committee of EFCE's Mixing Working Party was highly complementary of Dr. Hohl's and Dr. Maluta's work and their impact in advancing the knowledge of their respective specialisations. The committee was particularly complimentary of Dr. Hohl's support of mixing research and application in Berlin and the wider German chemical engineering community. The committee also lauded Dr. Maluta's ability to bring his modelling and CFD skills to Canada and France.

The Young Researcher Award sponsored by EKATO consists of a cash prize of €1500 plus the opportunity to attend a special event organised by the EFCE Working Party on Mixing (https://efce.info/WP_Mixing.html), where the award was presented to Dr. Hohl and Dr. Maluta. The event took place as an online conference over two half-days on 29th June (afternoon) and 30th June (morning) 2021.

Commendations must be given to the nominees for this year's award as they were all truly excellent. The runners-up are Dr. Margarida de Brito from the University of Porto and Dr. Jasmine Sarmaras from University College London.

EKATO The Award is generously sponsored by **EKATO**.

About EKATO

In the past 85 years EKATO has developed to world market leader in stirring and mixing technology for all process-oriented industries. The EKATO GROUP companies offer optimized mixing technology, from modular, robust and rapidly available industrial agitators over individual solutions for reactor agitators in sophisticated mixing process up to complete process plants including automation.

EKATO has been family-owned since its founding in 1933 and is represented worldwide with subsidiaries in Europe, Asia, Australia, South America, South Africa and the USA as well as a network of trading partners. At the state-of-the-art research and development centre in Schopfheim, EKATO offers engineering services from process development to process optimization to make customer processes and mixing procedures more reliable and efficient.

Ashwin Kumar Rajagopalan named as the winner of the 2020-21 Excellence Award in Crystallization for the characterisation of processes where both crystal size and shape count



Dr. Ashwin Kumar Rajagopalan is the winner of the 2020-21 Excellence Award in Crystallization of the European Federation of Chemical Engineering (EFCE). His excellent thesis on "A Dual Projection System to Characterize Crystallization

Processes: Design and Applications" completed at the ETH Zurich, Switzerland, under the supervision of Professor Marco Mazzotti, was unanimously selected by the jury as the best submission.

Ashwin Kumar Rajagopalan research focused on the monitoring and characterization of crystal size and shape distribution as produced in industrially relevant crystallization processes. This included process modeling, monitoring and control, as well as experimental implementation and scale-up. His contribution is considered to become a valuable step in applying crystallization process modeling more consistently during the development and scale-up of the production of for instance new pharmaceutical drugs.

The award jury of the Working Party on Crystallization stated: "It is rare to find a PhD thesis which covers the whole span of fundamental research to practical application. The work is and will be a very important

contribution to the control of morphology in crystallization processes."

Dr. Ashwin Kumar Rajagopalan obtained his Bachelor of Technology in Chemical Engineering degree from the National Institute of Technology, Tiruchirappali, India and his M.Sc. in Chemical Engineering from the University of Alberta, Canada. Following the successful completion of his PhD thesis at ETH Zurich, in May 2020 he was appointed SNSF Early Postdoc. Mobility Fellow at the Multifunctional Nanomaterials Group, Imperial College London, UK. Starting in the Autumn Semester 2021, Dr. Rajagopalan is Lecturer in Chemical Engineering, in the Department of Chemical Engineering and Analytical Science of the University of Manchester, UK.

Nominating him for the Award, Professor Mazzotti wrote: "Ashwin Kumar Rajagopalan has been an outstanding PhD student. He has done novel, outstanding work, reported in an outstanding dissertation, and published in scientific papers that are having an impact in the crystallization community. He has an incredible drive for research, and a very strong motivation to work very hard and to tackle difficult projects ..."

The award will be presented to Dr. Rajagopalan on Thursday, 2 September 2021 at the 21st International Symposium on Industrial Crystallization (ISIC-21) which will be held as a virtual conference on 30 August to 2 September 2021.



loss prevention 2022

EFCE Awards 2022 – Calls for nominations

EFCE calls for nominations in Process Safety

The European Federation of Chemical Engineering and its Working Party on Loss Prevention and Safety Promotion in the Process Industries call for nominations for two Awards in the field of Process Safety: **The 2022 Excellence Award in Process Safety** and the **2nd Lifetime Recognition LPS Award**.

The call for nominations is open for the **2022 Excellence Award in Process Safety** to be awarded at the 17th International Symposium on Loss Prevention and Safety Promotion in the Process Industries - Loss Prevention 2022 which will be held in Prague, Czech Republic on 5-8 June 2022 (website: www.lossprevention2022.org/).

The triennial Excellence Award in Process Safety recognises a PhD thesis published in the preceding three-year period, which demonstrates an outstanding contribution to research and/or practice in the field. It consists of a certificate, a cash prize of EUR 1,500, and a travel grant (not exceeding EUR 500) to attend the Loss Prevention Symposium, where the award will be presented.

Nominations may be submitted by PhD supervisors at a PhD-awarding institution in an EFCE member country or Members of a national or regional member association of EFCE. The nominated PhD thesis must address a topic relevant to the field of Process Safety and must have been accepted, defended and the degree awarded between January 2019 and December 2021.

Further information about the nomination procedure, eligibility, and supporting documentation and the online submission form can be obtained from the EFCE website at <https://www.efce.info/ExcellenceAwardProcessSafety.html>

Secondly, the call for nominations is open for the 2nd edition of the Lifetime Recognition LPS (Loss

Prevention Symposium) Award. The Award was established in 2018 in recognition of outstanding contribution to safety and loss prevention research and practice to a senior researcher, academic or industrial engineer belonging to one of the EFCE member countries throughout his/her career.

The 2022 Lifetime Recognition LPS Award will be presented at Loss Prevention 2022 in Prague, Czech Republic, in June 2022.

The award which is sponsored by the local organiser of Loss Prevention Symposium consists of a plaque or trophy, an EFCE certificate and an invitation to the Loss Prevention Symposium where the award is officially presented to the winner.

Further information about the nomination procedure, eligibility, and supporting documentation and the online submission form can be obtained from the EFCE website at <https://www.efce.info/LifetimeRecognitionLPSAward.html>

The closing date for nomination for both awards is **30 November 2021**.

Excellence Award 2022 – call for nominations

EFCE Excellence Award in Fluid Separations 2022

Closing date for nominations: **7 March 2022**

The Excellence Award is generously sponsored by Evonik

Further information: <http://www.efce.info/ExcellenceAwardFluidSeparations.html>

Working Party News in Brief

Change of Chairmanship



Professor Maria Cocera Alonso, Universidad de Valladolid, Spain, is the new Chair of the Working Party on High Pressure Technology. She succeeds Professor Eberhard Schlücker, who has resigned from his position after eleven years in office.

Obituary Professor Pio Forzatti



Professor Pio Forzatti passed away on July 13th at the age of 73. Professor Emeritus at Politecnico di Milano, Italy, where he founded the Laboratory of Catalysis and Catalytic Processes, he was an active member of the Working Party on Chemical Reaction

Engineering of EFCE. Pio was internationally recognized for his scientific and technical contributions to the applications of Catalysis and Chemical Reaction Engineering for energy conversion and environmental protection.

New WPE logo



The EFCE Working Party on Education in a fresh new look: see its new Logo

Official journal of the European Federation of Chemical Engineering: Part F

IChemE launches new digitalisation journal



The Institution of Chemical Engineers (IChemE) has launched a new journal, *Digital Chemical Engineering*, to provide a platform for publishing new interdisciplinary research across the domains of chemical engineering and digital sciences and technologies.

The emerging digital transformation in the chemical industry brings new challenges and opportunities, and is fundamentally changing the way of future chemical engineering research, innovation, education and enterprise. Published in

partnership with Elsevier, this new journal seeks to extend the boundaries of traditional chemical engineering and welcomes papers at the interface between chemical engineering and digitalisation-related disciplines.

The journal will be free to access and for the first year the Author Processing Charge (APC) will be waived, highlighting a commitment to ensure maximum exposure for authors.

In producing the journal, two Editors-in-Chief work together across the continents to provide a forum for researchers to disseminate results and exchange ideas. Professor Jin Xuan is the Head of Department of Chemical Engineering at Loughborough University, UK and Professor Jinfeng Liu works in the Faculty of Engineering at the University of Alberta, Canada.

Professor Jin Xuan said: "I am absolutely honoured and thrilled to take the Editor-in-Chief role jointly with Professor Jinfeng Liu. Together with our authors, reviewers and editors, we are looking forward to developing this much needed new journal for the chemical engineering community. The digital transformation in the chemical engineering domain is offering immense opportunities for research, innovation and practice. We want *Digital Chemical Engineering* to become an inclusive platform to capture the emerging, exciting research during this great transformation."

Professor Jinfeng Liu added: "It is a great honour for me to serve as the Editor-in-Chief jointly with Professor Jin Xuan. Our goal, together with our Editorial Board, is to develop *Digital Chemical Engineering* as an international leading platform for researchers and practitioners to disseminate novel research results and to exchange ideas on the emerging digital transformation in the chemical industry."

Digitalisation has been identified as a priority topic by IChemE's Learned Society Committee (LSC). Formed in 2019 with responsibility for the strategic direction of the institution's technical priorities, the LSC collaborated with IChemE's

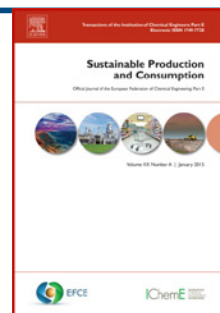
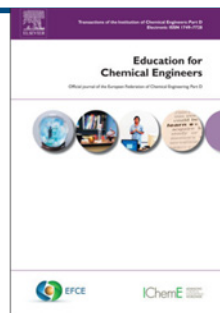
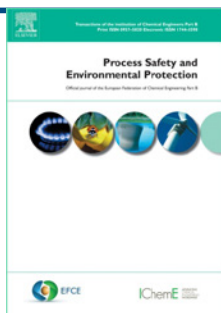
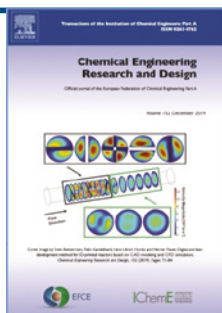
volunteer special interest groups to develop three topics on which to prioritise activity within the learned society; Responsible Production, Major Hazards Management, and Digitalisation.

IChemE Vice President Learned Society, Alexandra Meldrum, said: "As a vibrant learned society, IChemE is keen to establish how digital technologies, as enabled by systems thinking, engineering, and science, affect chemical engineering professionals. We are working to ensure members are aware of the impacts and prepared for change. This new journal will give members and engineers across the world access to expert and specialist knowledge on this important topic and I look forward to reading the wide range of papers within it."

Authors are encouraged to submit papers for review ahead of publication in the journal as well as for two Special Issues: Modelling, Control and Monitoring of Process Systems in the Era of Big Data, and Machine Learning for Chemical Processes.

To view *Digital Chemical Engineering* visit the journal's homepage on the Elsevier website. For the latest news follow the journal on Twitter at <https://twitter.com/DChEJournal>





News about the official EFCE journals

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 to 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.

NEW – 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>

Chemical Engineering Research and Design

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

Freely available content:

- Special Issue on Machine Learning in Process Control and Systems Engineering
<https://www.sciencedirect.com/journal/chemical-engineering-research-and-design/special-issue/10KQX9TBLMZ>
- Special Issue on 60 Years of the Loeb-Sourirajan Membrane: From Fundamental Research to Industrial Application
<https://www.sciencedirect.com/journal/chemical-engineering-research-and-design/special-issue/10C25KFJTCK>
- January 2021 issue (Volume 165)
<https://www.sciencedirect.com/journal/chemical-engineering-research-and-design/vol/165/suppl/C>

Process Safety and Environmental Protection

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

Freely available content:

- January 2021 issue (Volume 145)
<https://www.sciencedirect.com/journal/process-safety-and-environmental-protection/vol/145/suppl/C>

Food and Bioproducts Processing

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

Freely available content:

- Digitalisation of Food and Beverage Manufacturing
<https://www.sciencedirect.com/journal/food-and-bioproducts-processing/special-issue/106BTW64R60>
- January 2021 issue (Volume 125) <https://www.sciencedirect.com/journal/food-and-bioproducts-processing/vol/125/suppl/C>

Education for Chemical Engineers

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

Freely available content:

- January 2021 issue (Volume 35)
<https://www.sciencedirect.com/journal/education-for-chemical-engineers/vol/34/suppl/C>
- **NEW Special Issue** - Digitalisation in Chemical Engineering Education and Training <https://www.sciencedirect.com/journal/education-for-chemical-engineers/special-issue/10D130KPRKZ>

Sustainable Production and Consumption

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

Freely available content:

- January 2021 issue (Volume 25)

<https://www.sciencedirect.com/journal/sustainable-production-and-consumption/vol/25/suppl/C>

- **NEW Special Issue** - Circular economy and sustainability: The role of technology, producers, consumers and policy
<https://www.sciencedirect.com/journal/sustainable-production-and-consumption/special-issue/10KMBLJ8KVL>

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

Details as follows:

Chemical Engineering Research and Design

Special Issue: Machine Learning in Hydrogen Production (Manuscript submission deadline **31 December 2021**)

<https://www.journals.elsevier.com/chemical-engineering-research-and-design/call-for-papers/special-issue-machine-learning-in-hydrogen-production>

Special Issue: Development and Application of Membranes for Challenging Environments (Manuscript submission deadline **31 December 2021**)

<https://www.journals.elsevier.com/chemical-engineering-research-and-design/call-for-papers/development-and-application-of-membranes>

Process Safety and Environmental Protection

Special issue: Safety and Risk Analysis in Digitalized Process Operations (Manuscript submission deadline **31 October 2021**)

<https://www.journals.elsevier.com/process-safety-and-environmental-protection/call-for-papers/special-issue-safety-and-risk-analysis-in-digitalized-proces>

Special issue: Recent Advances in Thermochemical Transformation of Biomass to Bio-oil, Biochar and Syngas and its Upgrading Methods (Manuscript submission deadline **15 December 2021**)

<https://www.journals.elsevier.com/process-safety-and-environmental-protection/call-for-papers/special-issue-recent-advances-in-thermochemical-transformati>

Special issue: Process Safety on Utilization of Emerging Energy (Manuscript submission deadline **31 December 2021**)

<https://www.journals.elsevier.com/process-safety-and-environmental-protection/call-for-papers/special-issue-process-safety-on-utilization-of-emerging-energy>

Special issue: Resilience Assessment and Management (Manuscript submission deadline **31 March 2022**)

<https://www.journals.elsevier.com/process-safety-and-environmental-protection/call-for-papers/special-issue-resilience-assessment-and-management>

Sustainable Production and Consumption

Special issue: Trends in Biodiversity for Bioeconomy (Manuscript submission deadline **30 December 2021**)

<https://www.journals.elsevier.com/sustainable-production-and-consumption/call-for-papers/special-issue-on-trends-in-biodiversity-for-bioeconomy>

Digital Chemical Engineering

Special issue: Modeling, Control and Monitoring of Process Systems in the Era of Big Data (Manuscript submission deadline **31 October 2021**)

<https://www.journals.elsevier.com/digital-chemical-engineering/call-for-papers/special-issue-on-modeling-control-and-monitoring-of-process-systems-in-the-era-of-big-data>

Special issue: Machine Learning for Chemical Processes (Manuscript submission deadline **30 November 2021**)

<https://www.journals.elsevier.com/digital-chemical-engineering/call-for-papers/special-issue-on-machine-learning-for-chemical-processes>

Carbon Capture Science & Technology

Special issue: New Trends in Membrane Technology for Carbon Capture (Manuscript submission deadline **15 November 2021**)

<https://www.journals.elsevier.com/carbon-capture-science-and-technology/call-for-papers/special-issue-on-new-trends-in-membrane-technology-for-carbon-capture>

Special issue: Solid Sorbents for Carbon Capture (Manuscript submission deadline **30 November 2021**)

<https://www.journals.elsevier.com/carbon-capture-science-and-technology/call-for-papers/special-issue-on-solid-sorbents-for-carbon-capture>

Events organised by or on behalf of EFCE in 2021/22

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

21st International Symposium on Industrial Crystallization-ISIC 21

Online, 30 August–2 September 2021
(EFCE Event No. 751)

The symposium is organised under the auspices of the EFCE's Working Party on Crystallization. The 21st ISIC provides a meeting and a discussion forum for scientists and engineers from academia and industry as well as suppliers of crystallization and related analytical equipment. The conference program will include lectures and poster sessions. A concomitant exhibition and introductory tutorials will complete the event.

Main Topics: Fundamentals of crystallization; Crystallization and precipitation in fine chemical, specialty & life-science industries; Developments in large scale industrial crystallization; Contributions of crystallization to sustainability; Integrated process design: Crystallization in the industrial process chain.

Plenary and Evening speakers: Prof. Beatrice Biscans, France; Prof. Richard Braatz, USA; Prof. Helmut Cölfen, Germany; Prof. Juanma Garcia-Ruiz, Spain; Dr. Daniel Green, USA; Dipl.-Ing. Christian Melches, Germany.

During the Symposium, the prestigious Excellence Award in Crystallization will be presented to Dr. Ashwin Kumar Rajagopalan.

Watch out for the two **tutorials** on Monday, 30 August 2021, and Thursday, 2 September 2021.

Sponsors: Sulzer Chemtec AG, Winterthur/CH, GEA Messo GmbH, Duisburg/D; BASF SE, Ludwigshafen/D

Programme: The tentative programme is available at: https://dechema.de/en/ISIC_tentative_programme/_/1_Progr_ISIC%202021_web.pdf

Register NOW!

Website: https://dechema.de/en/ISIC_2021

XXIV International Conference on Chemical Reactors – CHEMREACTOR-24

Online, 12–17 September 2021
(EFCE Event No. 769)

The XXIV International Conference on Chemical Reactors – CHEMREACTOR-24 is organised by the Boreskov Institute of Catalysis, Russia jointly with the world famous Politecnico di Milano, Italy.

Main topics: Advances in Chemical Reactor Fundamentals; Chemical Reaction Engineering and Reactor Design – Novel Experimental Approaches, Modeling, Scale-Up and Optimisation; Chemical Reactors and Technologies for Targeted Applications; Advanced Processing of Conventional and Unconventional Hydrocarbon Feedstocks.

Plenary speakers: Prof. Guy Marin; Prof. Annemie Bogaerts; Prof. Ib Chorkendorff; Prof. Fausto Gallucci; Prof. Freek Kapteijn; Dr. Carlo Pereo.

Programme: The preliminary programme is available at: http://conf.nsc.ru/CR-24/en/cr-24_Prelim

Register now!

Website: <http://conf.nsc.ru/CR-24/en/>

14th Mediterranean Congress of Chemical Engineering–MeCCE14
Face-to-Face event, Barcelona, Spain, 14–17 September 2021
(EFCE Event No. 768)

In conjunction with with EXPOQUIMIA

Business program: Access to the seminar about "How to move from academic research into innovation. Opportunity to participate in mentoring meetings. Full access to Expoquimia Exhibition Area.

Student program: Guided Tour to Expoquimia Exhibition / Access to seminars about Circular economy and Digitalization and opportunity to present your final project degree at the Tech transfer area.

Register now!

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

ECCE13 & ECAB6– 13th European Congress of Chemical Engineering & 6th European Congress on Applied Biotechnology

**Online, 20–23 September 2021
(EFCE Event No. 767)**

Motto: Engineering the Future

See "Register for ECCE13 & ECAB6" above

Website: <http://ecce-ecab2021.eu/>

Twitter: #eccecab21

Electrostatics 2022 Wroclaw, Poland, New date: 28 March – 1 April 2022 (EFCE Event No. 774)

Electrostatics 2021 has become Electrostatics 2022. The Conference is organised by the Wroclaw University of Science and Technology in co-operation with the EFCE Working Party on Static Electricity in Industry.

Electrostatics 2022 provides a unique interdisciplinary forum for discussion about the electrostatic phenomena and its industrial applications. Fundamentals, hazards, applications, measuring techniques, standards and other related topics are within the scope of the conference.

Topics:

1. Applications and Industry; 2. ESD; 3. Fundamentals; 4. Hazards; 5. Liquids; 6. Solid and Powders; 7. Gases; 8. Measuring Techniques; 9. Standards; 10. History of Electrostatics.

Invited lecture: Dr. Poupak Mehrani, University of Ottawa, Canada. Extended deadline for full paper submission: 31 August 2021

Website: <http://www.electrostatics2021.pwr.edu.pl/wp/>

ACHEMA 2022

**Frankfurt am Main, Germany,
4-8 April 2022 (EFCE Event No. 775)**

Feel the heartbeat of our industry! The process industry is the innovation driver of the world economy and the pacemaker for numerous industrial sectors

Practically all global value chains profit in one way or another from the achievements of chemistry, biotechnology and process engineering. ACHEMA is the central arena of the process industry. Nowhere is the heartbeat of our industry

faster, more intense, up-to-date, innovative and international than here.

Take this opportunity to forge new contacts, to build up business relations and find solutions for your current projects!

Digital Hub - Venue for digital players at the heart of ACHEMA: <https://www.achema.de/en/the-achema/digital-hub>

ACHEMA Congress – from research to application: The call for papers is open. Deadline for abstract submission: **13 September 2021**

Website: <https://www.achema.de/en/>

ESCAPE-32 – 32nd European Symposium on Computer Aided Process Engineering Toulouse, France, 12-15 June 2022 (EFCE Event No. 778)

ESCAPE-32 is organised by INP Toulouse in co-operation with the EFCE Working Party on Computer Aided Process Engineering.

The ESCAPE-32 event is organized under the auspices of the EFCE Working Party on Computer Aided Process Engineering (CAPE-WP), Institut National Polytechnique de Toulouse (Toulouse INP) and Société Française de Génie des Procédés (SFGP)

Topics: Modelling and Simulation, Product/Process Synthesis and Design, Large Scale Design and Planning/Scheduling, On Line Model Based Applications and Control, Concepts, Methods and Tools, Digitalization and Artificial Intelligence, CAPE Applications Addressing Societal Challenges, Education in CAPE and Knowledge Transfer.

The call for papers is open. Deadline for abstract submission: **1 September 2021**

Website: <https://escape32.inp-toulouse.fr/en/index.html>

Save the date!

**Energy, Environment & Digital
Transition**

**Milano, Italy, 16-19 October 2022
(EFCE Event No. 781)**

The event is organised by the Italian EFCE Member Society AIDIC.

Website: coming soon

Save the date!

17th European Conference on Mixing (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.**

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

17th International Symposium on Loss Prevention and Safety Promotion in the Process Industries – Loss Prevention 2022 Prague, Czech Republic, 5–8 June 2022 (EFCE Event No. 765)

The 17th International Symposium on Loss Prevention and Safety Promotion in the Process Industries and accompanying exhibition is organised by the Faculty of Safety Engineering - VSB Technical University of Ostrava and the EFCE Working Party on Loss Prevention.

Topics: The topic matrix is available at: <https://www.lossprevention2022.org/topics/>

Website: <http://www.lossprevention2022.org>

Distillation & Absorption 2022 Toulouse, France, 18–21 September 2022 (EFCE Event No. 780)

Distillation & Absorption 2022 will showcase the newest and best in distillation & absorption technology and will cover a broad range of fundamental and applied aspects. The conference series is the main international forum for research, development, standards and applications related to this domain, and will bring together industry, academic researchers and students to share and discuss the latest developments in the field. The conference is supported by the Société Française de Génie des Procédés (SFGP) working closely with the EFCE Working Party on Fluid Separation (<http://efce.info/Fluid+Separations.html>).

Topics: Basic data; Modelling, Simulation, IA methods (hybrid modelling, digital twin,...); Hybrid and Multifunctional Processes (modularity, flexibility, intensification,...); Equipment design, technology and innovation (additive manufacturing, centrifugal separation,...); Control, Process operation and

troubleshooting; Energy and sustainability in separation processes (efficiency, renewable energy, new concepts, CO₂ capture,...); Biobased separation processes; Mobile/On-board separation processes (embedded processes in cars, ships, aircrafts, satellites); CO₂ capture.

The call or papers is open. You can send your one page abstract (300 words) until **30 September 2021.**

Selected contributions will be published in a special issue of *CHERD* as a long version.

Associated with the conference, a call for nominations for the 2022 EFCE EXCELLENCE Award in Fluid Separations is open starting now. The award is sponsored by the EFCE and Evonik company.

Website: www.da2022.org

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