



EFCE presents 2020 distinguished lecture in thermodynamics to Gabriele Sadowski

The 2020 Distinguished Lecture in Thermodynamics and Transport Properties has been awarded to Professor Gabriele Sadowski, TU Dortmund, Germany.

The Federation's Working Party on Thermodynamic and Transport Properties selected Gabriele Sadowski for her internationally recognised work related to advances of the statistical associating fluid theory (SAFT). The perturbed chain SAFT (PC-SAFT) approach, published in 2001 with Prof Joachim Groß, has had a vast impact in the capability to model complex fluids and is widely used all over the world, nowadays even in pharmaceutical industry.

Gabriele Sadowski received a Diploma in Chemistry (1987) and a PhD in Physical Chemistry (1991) from the Technische Hochschule Leuna-Merseburg, Germany. From 1992 to 2000 she was Assistant Professor and Group Leader for polymer thermodynamics at the Department of Process Engineering, TU Berlin, Germany. Since 2001, she is full Professor at TU Dortmund University, teaching fundamentals of thermodynamics, phase equilibrium thermodynamics, polymer thermodynamics, and biothermodynamics. At the same time she was appointed Director of Laboratory for Thermodynamics of its Department of Chemical and Biochemical Engineering. In 2016, she was appointed Vice President for Research at TU Dortmund.

Her research focuses on thermodynamic modelling and simulation, polymer thermodynamics, thermodynamics of pharmaceutical systems, reaction thermodynamics, and crystallization. After the development of PC-SAFT, she continued extending the application of the very successful approach to very difficult systems, including polymers and electrolytes. More recently, Professor Sadowski has focused her efforts to address challenges in pharmaceutical systems. She has applied and extended the PC-SAFT approach to demonstrate the ability of the

method to predict the solubility of active pharmaceutical ingredients, in a variety of environments, accounting for pH changes and formulations on amorphous templates. These developments illustrated not only that the model is highly successful and flexible, but also that it constitutes an approach which can have a widespread application in a wide range of systems of practical relevance in chemical, material, environmental and biochemical engineering.

Professor Sadowski has published more than 230 papers in high-impact peer-reviewed journals; these papers have been cited more than 8000 times.

Her commissions of trust and memberships include: Membership of the Board of DECHEMA (since 2011) and membership of several German ProcessNet working parties;



Welcome to the spring 2020 issue of the EFCE News. If you have any comments on the newsletter please get in touch.

Hermann Feise
EFCE President

In this issue:

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membership of the Scientific Board of the Leibniz Institute for Interactive Materials (since 2014); and, since 2015, Associate Editor of Journal of Chemical and Engineering Data. Furthermore, she has been a member of the Working Party on Thermodynamics and Transport Properties of the EFCE from 2007 to 2017

Gabriele Sadowski has received several awards for her research including the Arnold Eucken Award of the German Society of Process and Chemical Engineering (1999), the Gottfried Wilhelm Leibniz Award of the German Science Foundation (2011).

The award jury stated: "In terms of her scientific contribution she is a clear leader in our field, and more importantly, she is a great supporter of our community, a great teacher and mentor to younger scientist."

Gabriele Sadowski is invited to deliver the 2020 Distinguished Lecture in Thermodynamics and Transport Properties at the 31th Symposium on Applied Thermodynamics

(ESAT) in Paris, France. The conference has been re-scheduled to takes place on 4-7 July 2021.



ELSEVIER

The award is generously sponsored by Elsevier B.V., Amsterdam, The Netherlands.

Who's Who

The Working Party on Thermodynamics and Transport Properties welcomes its new Vice-Chairs

At their last meeting in Frankfurt, Germany, on 14 February 2020, the Working Party on Thermodynamics and Transport Properties elected two new Vice-Chairs:

- Academic Vice-Chair: Prof. Sabine Enders, Karlsruhe Institute of Technology, Karlsruhe, Germany
- Industrial Vice-Chair: Dr. Susanna Kuitunen, Neste Engineering Solutions Oy, Porvoo, Finland

They succeed the industrial Vice-Chair, Prof. Ralf Dohrn, and the academic Vice-Chair Prof. Georgios Kontogeorgis who have resigned from their positions after six years in office.

EFCE welcomes its new Institutional Member

The Federation announces that the Faculty of Technology Zvornik, University of East Sarajevo, Bosnia and Herzegovina, has been accepted as a new EFCE Institutional Member.

The decision was taken by the EFCE Executive Board at its recent online meeting on 17 April 2020.

Founded in the academic year 1993/1994, the Faculty offers study programmes in Chemical Engineering and Technology and in Biology. Furthermore, the Faculty of Technology organises an international congress named "Engineering, Environment and Materials in

Process Industry", which is held every two years. The VII International Congress is scheduled for 11-13 March 2021. Further information about the Faculty can be found at: <https://www.tfzv.ues.rs.ba/english/>

The Faculty is joining 14 Institutional Members of the EFCE from all over the world, including the Faculty of Chemical Technology, Kaunas University of Technology, Lithuania, which was confirmed as a new Institutional Member in May 2019.

EFCE looks forward to a fruitful and mutually beneficial cooperation in the future.

Working Party and Section News

Membrane operations at ECCE12 and ECAB5, 15th–19th September 2019, Florence (Italy)

A. Criscuoli and E. Drioli, Istituto per la Tecnologia delle Membrane (ITM-CNR) Italy

The 12th European Congress of Chemical Engineering (ECCE12) and the 5th European Congress of Applied Biotechnology (ECAB5) took place in the beautiful environment of Fortezza da Basso, Florence (Italy), from 15th to 19th September 2019. The common theme of the Congresses was "Bridging Science with

Technology: a Renaissance in Science", covering many fields of interest for Chemical Engineering and Applied Biotechnology. In particular, 18 and 17 topics were treated by ECCE12 and ECAB5, respectively, as listed in Table 1. Moreover, three Symposia, a Workshop on Crystallisation and two project sessions were also organised.

ECCE12	ECAB5
1. Sustainable processes	1. Advanced and innovative technology in industrial bio-production, bio-separation, and bio-detection (biosensors)
2. Particle technology	2. Bioenergy, biofuels&renewables, bioresources, biorefinery and biomaterials (bio-active compounds, biofuels, fine chemicals)
3. Production, properties and technology of new materials	3. Biocatalysis (future microbes and enzymes)
4. Nanotechnology	4. Novel processing (e.G. Microbial fuel cells), downstream processing
5. Separation technology and heat & mass transfer	5. From small to large (nano-biotechnology, scaleup/ scale down, large-scale production)
6. Thermodynamics and interfacial phenomena	6. Systems biotechnology and metabolic engineering
7. Fluid mechanics and transport phenomena	7. Protein and enzyme stability
8. Multiphase systems	8. Environmental biotechnology
9. Membrane engineering: energy from salinity gradients, hybrid artificial organs	9. Biofilms in industry and biomedicine
10. Industrial electrochemistry	10. Chemical product design and bioproducts
11. Process system engineering	11. Bioeconomy
12. Chemical reaction engineering	12. Bioreactor performance
13. Biomass	13. Downstream processing
14. Food engineering	14. Food bioprocesses
15. Energy and chemical engineering	15. Microalgae bioengineering
16. Environment, safety & quality	16. Modelling, monitoring, measurement & control
17. Quality assurance, control & management systems	17. Regenerative medicine manufacturing
18. Knowledge, education & training	

Table 1: Topics treated by ECCE 12 and ECAB5

In this scenario, membrane operations were well represented among the different topics, with both oral and poster contributions, covering the 12% of the total presentations. More in details, 105 and 22 contributions were submitted to ECCE12 and ECAB5, respectively. Figure 1 shows the distribution among ECCE12 topics of the presentations (both oral and poster) dealing with membranes. It also includes those under ECAB5. It is interesting to notice that the highest number of contributions (35) was under the "Separation technology and heat & mass transfer" topic, followed by "Membrane engineering" (28), the remaining 42 presentations being spread among other topics. Overall, membranes covered almost all the topics, confirming their important role in both Chemical Engineering and Applied Biotechnology research and development.

An indication of the increasing interest in membrane operations was the organisation of a specific session on Membrane Engineering that took place over three days and included 14 oral presentations. Worthy to mention is also the plenary lecture given by Prof. Ortiz (Spain), completely focused on membrane processes.

In this context, the Institute on Membrane Technology (ITM-CNR) actively contributed to the dissemination of the potentialities of membrane operations in the topics: "Sustainable Processes", "Separation Technology and Heat & Mass Transfer", "Membrane Engineering: energy from salinity gradients, hybrid artificial organs", "Thermodynamics and interfacial phenomena", "ECAB5: Extraction & Crystallization" and "Symposium 3: Crystallization fundamentals and industrial processes".

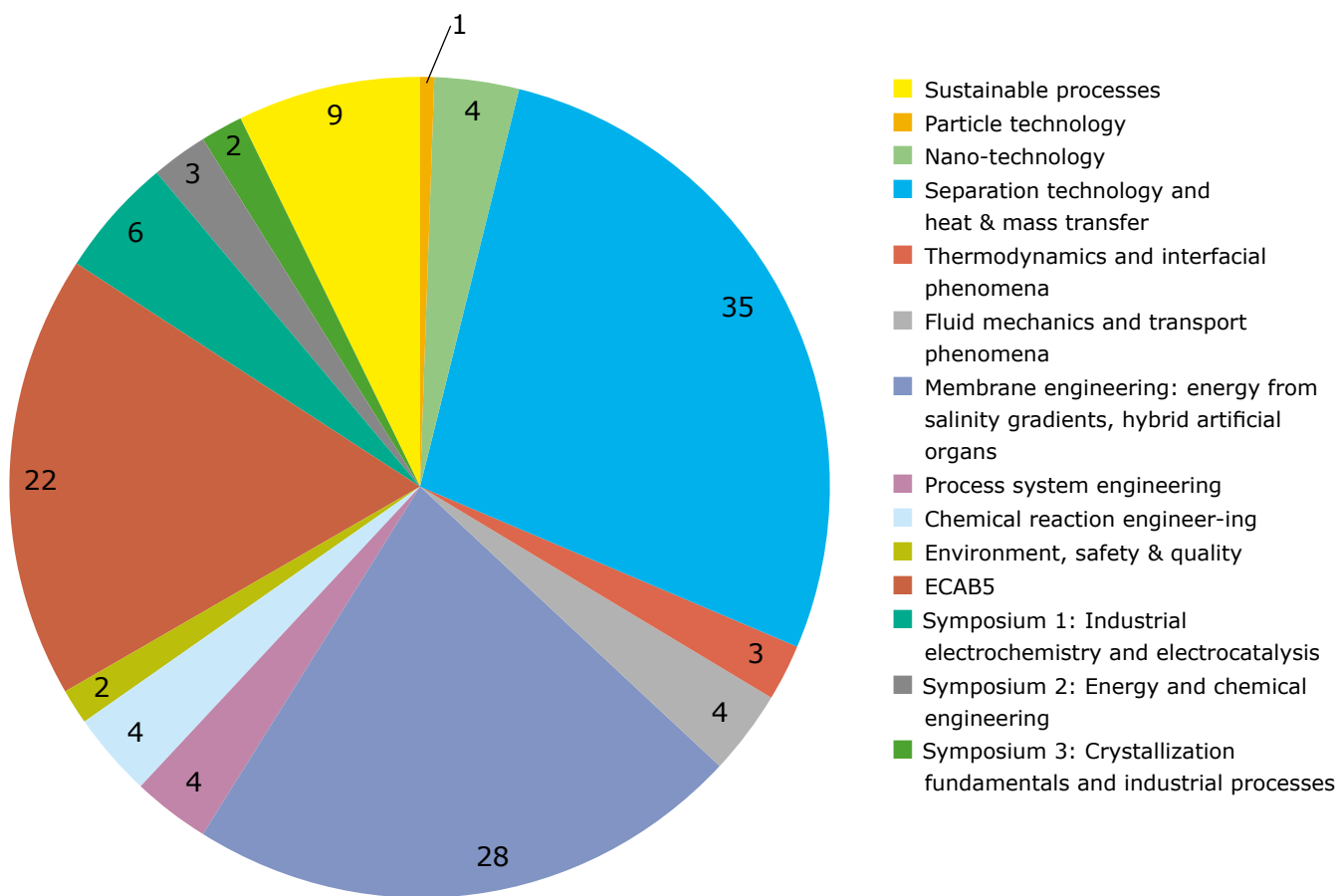


Figure 1: Distribution among topics of presentations dealing with membranes

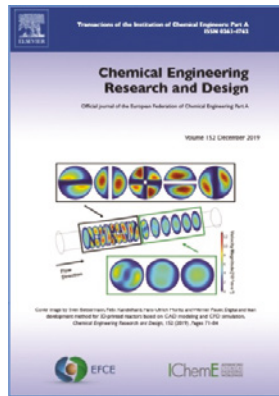
News about the official EFCE journals

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 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:

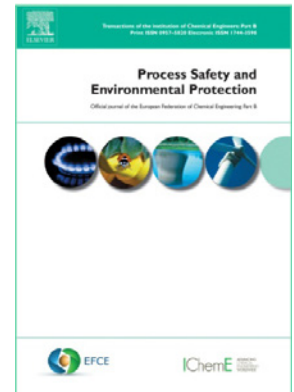
- January 2020 issue (Volume 153) (Available for free until the end of 2020) <https://www.sciencedirect.com/journal/chemical-engineering-research-and-design/vol/153/suppl/C>
- Nature-Inspired Chemical Engineering Special Issue (Available for free until 7 June 2020) <https://www.sciencedirect.com/journal/chemical-engineering-research-and-design/special-issue/10NC3WLKHZH>
- Best cover winner - 'Digital and lean development method for 3D-printed reactors based on CAD modeling and CFD simulation, Sven Bettermann, Felix Kandelhard, Hans-Ulrich Moritz and Werner Pauer' (Available free until 6 September 2020) <https://www.sciencedirect.com/science/article/pii/S0263876219304411>
- Climate Change special issue (content from all IChemE journals brought together in this special collection) (Available for free until the end of 2020) <https://www.sciencedirect.com/journal/chemical-engineering-research-and-design/special-issue/10PKDRV23KV>

Process Safety and Environmental Protection

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

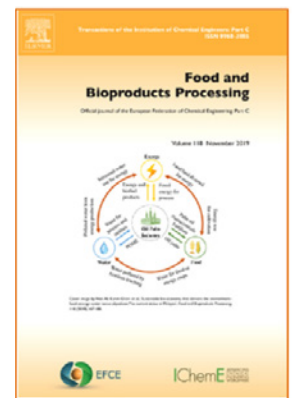
Freely available content:

- January 2020 issue (Volume 133) (Available for free until the end of 2020) <https://www.sciencedirect.com/journal/process-safety-and-environmental-protection/vol/133/suppl/C>



Food and Bioproducts Processing

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



Freely available content:

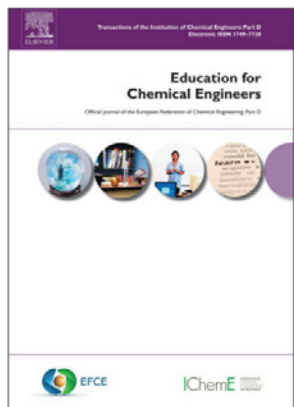
- January 2020 issue (Volume 119) (Available for free until the end of 2020) <https://www.sciencedirect.com/journal/food-and-bioproducts-processing/vol/119/suppl/C>
- 2019 Junior Moulton Medal Winner – Oliver Peck 'On-line quantification of thickness and strength of single and mixed species biofilm grown under controlled laminar flow conditions' (Available for free until 4 June 2020) <https://www.sciencedirect.com/science/article/pii/S0960308518303778>

Education for Chemical Engineers

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

Freely available content:

- January 2020 issue (Volume 30) (Available for free until the end of 2020) <https://www.sciencedirect.com/journal/education-for-chemical-engineers/vol/30/suppl/C>

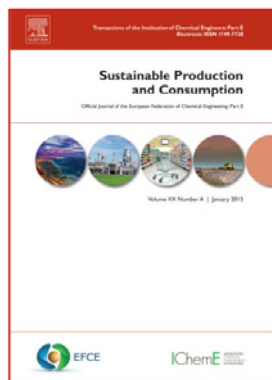


Sustainable Production and Consumption

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

Freely available content:

- January 2020 issue (Volume 21) (Available for free until the end of 2020)
<https://www.sciencedirect.com/journal/sustainable-production-and-consumption/vol/21/suppl/C>
- 2019 Hutchison Medal Winner - 'Centralized and distributed food manufacture: A modelling platform for technological, environmental and economic assessment at different production scales, Iberto Almea Ruiz, Peter Fryer, Estefania Lopez-Quiroga and Serafim Ba-kalis' (Available for free until 4 June 2020)
<https://www.sciencedirect.com/science/article/pii/S2352550918303968>



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: 60 Years of the Loeb-Sourirajan Membrane (Manuscript submission deadline **31 August 2020**) – <https://www.journals.elsevier.com/chemical-engineering-research-and-design/call-for-papers/special-issue-60-years-of-the-loeb-sourirajan-membrane>

Process Safety and Environmental Protection

Special Issue: Advanced Oxidation Technologies for Environmental Protection (Manuscript submission deadline **31 May 2020**) – <https://www.journals.elsevier.com/process-safety-and-environmental-protection/call-for-papers/advanced-oxidation-technologies-environmental-protection>

Special Issue: Data-Driven Risk Analysis (Manuscript submission deadline **31 August 2020**) – <https://www.journals.elsevier.com/process-safety-and-environmental-protection/call-for-papers/special-issue-on-data-driven-risk-analysis>

Special Issue: Catalysis Engineering for Environmental Applications (Manuscript submission deadline **30 June 2020**) – <https://www.journals.elsevier.com/process-safety-and-environmental-protection/call-for-papers/catalysis-engineering-for-environmental-applications>

Special Issue: Novel Technologies and Methods for Plastics Recycling (Manuscript submission deadline **31 August 2020**) – <https://www.journals.elsevier.com/process-safety-and-environmental-protection/call-for-papers/novel-technologies-and-methods-for-plastics-recycling>

Food and Bioproducts Processing

Special Issue: Digitalisation of Food and Beverage Manufacturing (Manuscript submission deadline **31 October 2020**) – <https://www.journals.elsevier.com/food-and-bioproducts-processing/call-for-papers/special-issue-digitalisation-of-food-and-beverage-manufacturing>

Education for Chemical Engineers

Special Issue: Process Safety in Chemical Engineering Education and Training (Manuscript submission deadline **31 August 2020**) – <https://www.journals.elsevier.com/education-for-chemical-engineers/call-for-papers/process-safety-in-chemical-engineering-education-and-training>

Special Issue: Digitalisation in Chemical Engineering Education and Training (Manuscript submission deadline **31 July 2020**) – <https://www.journals.elsevier.com/education-for-chemical-engineers/call-for-papers/digitalisation-in-chemical-engineering-education-and-training>

Sustainable Production and Consumption Special Issue: Circular economy and sustainability (Manuscript submission deadline **31 August 2020**) – <https://www.journals.elsevier.com/sustainable-production-and-consumption/call-for-papers/special-issue-on-circular-economy-and-sustainability>

Events organised by or on behalf of EFCE in 2020/22

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

European Symposium on Computer Aided Process Engineering - ESCAPE30 Milan, Italy, New date: 30 August – 2 September 2020 (EFCE Event No. 764)

ESCAPE-30 is organised by the Italian EFCE Member Society AIDIC in collaboration with the EFCE Working Party on Computer Aided Process Engineering. The Symposium attracts scientists from many different countries providing a platform for discussing the latest progress in the field of Computer Aided Process Engineering, following both a scientific and technological interdisciplinary approach.

Topics: Modelling and Simulation; Synthesis and Design; Process control and operations; CAPE in Sustainable Energy Applications; Bioresources, Bioprocesses and Biomedical Systems; Internet of Things; Concepts, Methods and Tools; Education in CAPE and Knowledge Transfer.

Plenary speakers: Dr. Francesco Rossi; Ana Paula Barbosa-Póvoa.

Register NOW!

Website: <http://www.escape30.it>

XXIV International Conference on Chemical Reactors – CHEMREACTOR-24 Milan, Italy, 30 August – 4 September 2020 (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 Perego.

Register NOW!

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

14th Mediterranean Congress of Chemical Engineering Barcelona, Spain, New date: 1-4 December 2020 (EFCE Event No. 768)

The event is organised by SEQUI (Sociedad Espanola de Quimica Industrial e Ingenieria Quimica) in the frame of EXPOQUIMIA. The Congress will focus on the dissemination of the most recent advances and results related to Chemical Engineering Science.

Topics: Separation Technologies; Chemical Reactors; Processes Systems Engineering; Sustainable Development and Environmental Engineering; Food and Biochemical Engineering; Process and Product Engineering.

Plenary speakers: Renato Rota, Politecnico di Milano; Jorge Ruiz Royo, CEO Arandipur SL; Wayne Sim, 3esi and Aucerna.

Register NOW!

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

CHISA 2020 - 24th International Congress of Chemical and Process Engineering Prague, Czech Republic, planned to be postponed to January 2021 – dates to be confirmed (EFCE Event No. 772)

The Czech Society of Chemical Engineering (CSCHE) invites you to the upcoming CHISA in the very beautiful city of Prague.

The modified CHISA structure and logistics of the program should enable the interested people to listen also to the presentations, which are close to their fields of research, however outside their everyday horizons. A special care will be paid to selection of both the plenary lectures and plenary keynote lectures (as a newly introduced form of presentation), which will be granted by special Congress awards.

Topics: I. We Think Global; II. Energy First; III. Continuous Processing and Miniaturisation, Mixing; IV. Industry 4.0; V. Advanced Functional Materials, Structures and Components; VI. The Green Square; VII. The Essentials; VIII. Hand in

Hand; VIII. The Wiley-VCH Poster Session. For details see: <https://2020.chisa.cz/scientific-program/#main-topics>

Call for Posters: Posters may be accepted up to the beginning of the Congress, however only contributions received before 31 May 2020 will be included in the final programme.

Plenary and Keynote Plenary speakers:

Enrico Drioli, Univ. Calabria, IT; Timothy Noël, Eindhoven University of Technology, NL; David Bogle, University College London, UK; Edwin Zondervan, Bremen Univ., DE; Julian Thiele, Leibniz Institute of Polymer Research Dresden, DE.

Website: <https://2020.chisa.cz/>

12th European Symposium on Electrochemical Engineering – ESEE 2021

Leeuwarden, The Netherlands, New date: 13-17 June 2021 (EFCE Event No. 766)

The 12th European Symposium on Electrochemical Engineering - ESEE 2021 is organised by the EFCE Working Party on Electrochemical Engineering in cooperation with Wetsus.

The scope of ESEE is "Electrochemistry for electrification and energy transition toward a sustainable future", which captures the aim of the organisers to showcase scientific advances in physical, chemical and biochemical routes towards a future where electrochemical engineering is part of a sustainable society, closing resource cycles and contributing to zero-pollution mobility and manufacturing.

Topics: Electrocatalysis and electrochemical technologies; Safe water and air; Corrosion science for durable materials; Water electrolysis and fuel cells; Novel energy storage devices, batteries, and electrochemical capacitors; Bioelectrochemistry for energy conversion and resource recovery; Green capture and conversion of CO₂; Electrochemical recovery of raw materials; Advanced membranes and electrodes for selective ion removal; General session.

Invited speakers: Matthias Wessling; Menachem Elimelech; Martin Z Bazant; Elif Karatay; Geoff Kelsall; Matthew Suss; Manuel Andres Rodrigo; Xiao Su.

On the occasion of the ESEE2021 the EFCE Working Party will present its prestigious Carl

Wagner Medal of Excellence in Electrochemical Engineering.

Website: <http://www.electrochemical-engineering.eu/2021/>

Electrostatics 2021

Wroclaw, Poland, 21-24 June 2021 (EFCE Event No. 774)

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

The Conference 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.

This conference is an excellent opportunity for researchers and users working in many scientific and technical areas where electrostatics is a real concern or challenge to review progress and discuss future trends. Besides, the interdisciplinary composition of the conference gives the best opportunity to get inspired by solutions in other fields and promote relationships for innovation and breakthroughs.

Topics:

1. Applications and Industry: Electrostatic precipitation, Separation and Sorting, Powder Coating, Displays and Printing Technology, Biological Applications, Electrostatic manipulation of particles, droplets and biological cells, electrophoresis, dielectrophoresis and electrorotation, MEMS, Electrofluidisation, Aeronautics, Space & Automobile, Electrostatic handling in Industry, High Voltage electrostatic related measurements, problems and applications, HVDC;

2. ESD: Static Electricity control in electronics industry, Factory level ESD considerations, EMI due to ESD, Corona and Gas Discharge, Dielectric breakdown, Cleanroom electrostatics, ESD waveforms;

3. Fundamentals: Modelling, Contact, frictional, induction, conduction and corona charging, Atmospheric electricity, Adhesion, Charged particle physics;

4. Hazards: Static elimination, Ignition tests, Risk assessment, Electrostatics hazards and problems in industry, Lightning protection;

5. Liquids: Double layer charging, Electrostatic atomization, Electrohydrodynamics, Corona

generated secondary electrohydrodynamic flow. Boundary layer control. Electrohydrodynamic pumping, Electro-rheology, Electrospinning and electrospraying, DC and AC Electroosmosis. Electrowetting, Applications including materials processing, thermal management, and flow control;

6. Solid and Powders: Electrostatic dissipative materials, Textiles, Electrets, Charging of powders and solids, Charge injection and space charge in dielectrics, Nanomaterials, Nanofibers, Aerosols, Packaging;

7. Gases: Corona and dielectric barrier discharges. Electrical breakdown. Applications of plasma technologies, including environmental remediation of gas and liquid streams. Electrostatic discharges from charged surfaces - fundamentals, prevention, safety issues. Electrostatic phenomena in atmospheres, including lightning;

8. Measuring Techniques: Electrostatic instrumentation, Electrostatic sensors, Novel measurement methods;

9. Standards: New standards, Research for new standards methods and procedures, Round-Robin tests;

10. History of Electrostatics

The call for papers is open. A template for abstract submission can be found at:

<http://www.electrostatics2021.pwr.edu.pl/wp/index.php/authors/template/>

Deadline for abstract submission:

31 May 2020

Once abstracts accepted, full papers will go through a peer review process. Thanks to the fruitful collaboration with the Journal of Electrostatics, finally accepted papers will be published in a Special Issue of the Journal of Electrostatics. Paper presentation in the conference without publishing in the Journal of Electrostatics will also be allowed.

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

1st International Symposium on Industrial Crystallization-ISIC 21 Potsdam, Germany. New date: 30 August – 2 September 2021 (EFCE Event No. 751)

The symposium is organised under the auspices of the EFCE's Working Party on Crystallization and, has become the premier international conference in the field of industrial crystallization.

The 21st ISIC provides a meeting and a discussion forum for scientists and engineers from academia

Save the date!

17th European Conference on Mixing Porto, Portugal, 27-30 June 2021 (EFCE Event No. 773)

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

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

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.

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

ECCE13 & ECAB6 - 13th European Congress of Chemical Engineering & 6th European Congress on Applied Biotechnology Berlin, Germany, 19-23 September 2021 (EFCE Event No. 767)

Motto: Engineering the Future

At ECCE 13 & ECAB 6, scientists from industry, university and research institutions from Europe and beyond will meet in Berlin to discuss the latest research and industrial applications in all fields of chemistry, process engineering, biotechnology and related fields.

Features of ECCE 13 & ECAB 6:

- The highlight event for the European chemical engineering and biotechnology community
- Cross-linking disciplines and organisations to span the bridge from R&D to the industrial practice

- High-profile international keynote and plenary speakers
- Special offerings for students and young scientists
- Industry exhibition and plenty of networking opportunities

ECCE 13 & ECAB 6 is organised by DECHEMA under the auspices of EFCE and ESBES.

Topics:

Controlling complexity: Modelling, Measurement & Process Control (digitalisation, AI, process modelling, molecular modelling, automation, smart (bio)sensors, process control, CAPE/PSE, plant safety, containments, ...);

Engineering processes, products, ...: Chemical & Bioprocesses (bioreactors, integrated continuous bio-manufacturing, single-use reactors, scale-up, process intensification, particle technology, fluid process engineering, multiphase systems, process and plant design, modular production, materials for 3D printing, product design, new materials, ...); Separation technologies/ downstream processing (membranes, fluid separations, adsorption, crystallization, chromatography...); Chemical and Biocatalysis (catalyst characterization, heterogenous catalysis, enzyme technology, protein engineering, cell-free systems, chemo-enzymatic syntheses, microbial fuel cells & electrosyntheses, ...);

... And life: Biological Production Systems (systems biology, metabolic engineering, synthetic biology, cell culture technology, biofilms, ...);

Finding new routes: Sustainable production, low carbon & circular (bio)economy, clean water and energy (H₂ Economy, H₂ technologies, C1 feedstocks, plant/algae biotechnology, food production, biorefineries, recycling/waste utilisation, bio-leaching, electrochemical processes, process electrification, power-to-x, (waste)water technologies, bio-based products (fuels, polymers, chemicals), ...);

Preparing for the future: Novel ways of education and training (Curriculum Development & Transformation, e-Learning & e-Assessment, Teaching Engineering, Design, Safety & Sustainability, CHARMING

Sponsorship: Be part and support ECCE 13 & ECAB 6. Further information:

<http://ecce-ecab2021.eu/sponsoring.html>

The call for papers will open in August 2020.

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

Twitter: #eccecab21

Save the date!

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.

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

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www.youtube.com/channel/UCxuvfbb5ST3DMHLAwZ6326w

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