

ECCE12 & ECAB5 Call for Abstracts



AIDIC is pleased to announce the ECCE12 & ECAB5 Call for abstracts. **The abstract submission is now open.** Website: <http://www.ecce12-ecab5.org/>. The deadline is **15 January 2019**.

The European Federation of Chemical Engineering (EFCE) promotes a series of biannual events, known as ECCE Congress: "EUROPEAN CONGRESS OF CHEMICAL ENGINEERING". The European Society of Biochemical Engineering Sciences (ESBES) promotes a series of biannual events, known as ECAB Congress: "EUROPEAN CONGRESS OF APPLIED BIOTECHNOLOGY".

AIDIC is pleased to invite you to participate to next year events, ECCE12 and ECAB5, to be held in **Florence, Italy, from 15 to 19 of September 2019**, organized by AIDIC under the auspices of EFCE and ESBES.

The Congresses will take place in an ideal context in place and time: Firenze Fiera Congress and Exhibition Center. Florence is the perfect setting for the congresses, home of several ancient cultures has always represented the essence of art, culture and progress In Italy and in the World. The joint Congresses ECCE12 and ECAB 5 and the associated events stand under the common theme of ***Bridging Science with Technology: a Renaissance in Science***. The emphasis of these joint congresses will be on stimulating discussions on bridging the gap between Science and Technology in relevant areas of application: current status, emerging problems and future vistas.

The Scientific Program will bring innovative solutions to respond to major challenges of our society. Plenary, Keynote, Invited and Contributed lectures will bring you up to date in all topics of modern Chemical and Biochemical Engineering to

address Solutions to Global Challenges.

The Organizers would be very pleased to receive your personal scientific contribution and would appreciate your help in disseminating ECCE12/ ECAB5 call for abstracts.

For any further information or assistance you may contact this Secretariat: **ecce12_ecab5@aidic.it**

Welcome to the third 2018 issue of the EFCE News. If you have any comments on the newsletter please get in touch.

Hermann Feise
EFCE President

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EFCE Award Winners

Skiborowski wins Cape phd prize – Work on long-standing separations problem scoops excellence award



Dr Mirko Skiborowski, research group leader at TU Dortmund, Germany, has won the European Federation of Chemical Engineering's 2018 Excellence Award for an outstanding PhD thesis in Computer-Aided Process Engineering (CAPE) for his

work on a particularly complex separations process.

His thesis dealt with optimisation-based methods for the conceptual design of hybrid processes for the separation of non-ideal, multi-component liquid mixtures. His former PhD supervisor, Professor Wolfgang Marquardt, commented: "This is a long-standing problem in process systems engineering with various solution attempts in the last three decades. The synthesis problem is extremely difficult to solve because of the complexity of the optimization model which is strongly nonlinear, comprises a very large number of equations, and which involves a significant number of integer decisions in addition to the design degrees of freedom of a separation process with fixed structure." He further explained: "The key contribution of Mirko's thesis is the development of a general solution strategy for an optimization based conceptual design of hybrid separation processes and its validation with an impressive number of case studies of industrial significance."

The judging committee of EFCE's CAPE Working Party was highly complementary of the scientific quality of Skiborowski's work, which comprises a comprehensive review of the state of the art, the recognition and the integration of the contributions of major researchers in the field in order to propose an enhanced and comprehensive method and the validation of the proposed method by solving real problems of process design for the separation of azeotropic mixtures.

Skiborowski said he was very honoured to receive the award. The Excellence Award consists of a cash prize of €1500 plus a travel grant of up to €500 to attend the 28th European Symposium on Computer-Aided Process Engineering (ESCAPE-28), where the award was presented. ESCAPE-28 took place in Graz, Austria, from 10-13 June 2018.

The award is kindly sponsored by Process Systems Enterprise Ltd.



Waste water valorisation wins Membrane Engineering award. Researcher to receive EFCE/EMS prize at Euromembrane Conference



Abaynesh Yihdego Gebreyohannes has been awarded the 2018 Excellence Award in Membrane Engineering, which is jointly awarded by the Section on Membrane Engineering of the European Federation of Chemical Engineering (EFCE) and the European Membrane Society (EMS).

The Award recognizes an outstanding PhD thesis in the field of membrane engineering. The judges praised Gebreyohannes' work on Integrated membrane process for valorization of waste water for its breadth and scientific impact which provides a better insight into the processes around waste water valorization.

The PhD work covered a broad area, including hydrodynamic and kinetic characterization of bioreactors, study of fouling phenomena, membrane preparation (including the use of magnetic/super-paramagnetic properties) and characterization, bio-hybridization for tackling fouling, the study of forward osmosis and the recovery of high added value compounds from wastewater.

Gebreyohannes is a postdoctoral researcher at KU Leuven in Belgium. An Ethiopian national, she completed her PhD under the Erasmus Mundus Doctorate in Membrane Engineering (EUDIME) programme, which saw her study at the University of Calabria, Italy, KU Leuven, Belgium and University of Paul Sabatier, Toulouse III, France.

She received a €1500 prize and paid-for travel to receive the award, which was presented at the Euromembrane 2018 Conference in Valencia, Spain from 9 to 13 July 2018.

Kontogeorgis selected for the 2018 Distinguished Lecture in Thermodynamics

Professor Georgios M. Kontogeorgis of the Technical University of Denmark (DTU) has been named as the laureate of the 2018 Distinguished Lecture in Thermodynamics and Transport Properties.



The Federation's Working Party on Thermodynamic and Transport Properties nominated him for his outstanding contributions to the generation, application and dissemination of knowledge and the technical advancement of the field through industrial co-operation.

Georgios Kontogeorgis received a M.Sc. degree in Chemical Engineering (1991) from the Technical University of Athens and a PhD (1995) from the Technical University of Denmark (DTU). He is full professor in Chemical and Biochemical Engineering Thermodynamics at DTU since 2011, and he has an adjunct professorship at the Xian Jiaotong University, China. Since July 2014 he chairs the Center for Energy Resources Engineering (CERE-DTU) and, since 2017, he is the Leader of the KT Consortium, an industry-academia collaboration where members are provided networking opportunities and state-of-the-art methods and tools for chemical and biochemical engineering.

He is the vice-chairman of the Working Party on Thermodynamics and Transport Properties of the EFCE, and a member of the international steering committee of the European Symposium of Applied Thermodynamics - ESAT.

His research and teaching interests are in the fields of applied thermodynamics, environmental engineering, colloids & interfaces, product design and biotechnology. He has developed theoretical models with the capacity to correlate and predict physical equilibria in complex systems and has been successful in modelling complex compounds such as polymers, pharmaceuticals, electrolytes, surfactants, and supercritical fluids, as well as complex systems such as associating fluids. In particular, the development of the CPA (Cubic-Plus-Association) model has to be highlighted. It is a model able to address gaps of the traditional thermodynamic models, representing a powerful tool for industry. This model has been very useful in understanding how hydrogen bonding can be implemented in a rigorous thermodynamic framework originating from statistical mechanics.

It has been applied in the generation of knowledge directly related to industrial challenges, as in modelling gas processing, hydrates and biofuels production.

Professor Georgios Kontogeorgis has published 220 peer-reviewed articles in international journals and gave over 250 conference presentations and many plenary/keynote talks at universities and companies around the world.

He has supervised about 50 PhD students

and post-doctoral researchers, several of whom have received significant awards. He is also the author of four books, several chapters in edited books and author of education publications. Prof. Kontogeorgis is associate editor of the Journal of Natural Gas Science and Engineering and editor of the journal Fluid Phase Equilibria. Moreover, he collaborates actively with researchers of all around the world.

Georgios Kontogeorgis has received several awards for his research including the Empirikion Award (Greece) in 1999 and the Dana Lim award (Denmark) in 2002.

On learning of his forthcoming recognition, Prof. Kontogeorgis said: "I am deeply honoured by this selection and grateful for this both to EFCE/WP and of course also to the selection committee."

Georgios Kontogeorgis delivered the 2018 Distinguished Lecture in Thermodynamics and Transport Properties at the 30th Symposium on Applied Thermodynamics (ESAT) in Prague, Czech Republic. The conference took place on 10-13 June 2018.

The award is kindly sponsored by IFP Energies nouvelles (IFPEN).



Young Researcher Award recognises outstanding mixing research of Non-Newtonian fluids



Dr. Federico Alberini has been awarded the **2018 EFCE Young Researcher Award in Mixing**. The Award was conferred upon him for his excellent PhD thesis "Blending of Non-Newtonian Fluids in Static Mixers: Assessment Via Optical Methods."

The judges praised the thesis for being both innovative and useful, providing an important next step in the understanding of static mixers in an area where no-one else was willing to work. They also noted that Alberini had written 14 outstanding journal papers, participated in several mixing conferences including the European Conference of Mixing series, NAMF and ISMIP, and the industrial significance of his scientific activity was recognised. Overall, the award jury stated that Federico Alberini fulfils all of the evaluation criteria, being fully dedicated to the field of mixing, and that he is

the worthy award winner.

Federico Alberini obtained his Bachelor and Masters' degree in Chemical Engineering from the University of Pisa, Italy, and completed his PhD in Chemical Engineering at the University of Birmingham, United Kingdom, under the supervision of Professor Mark Simmons. Currently, Federico Alberini holds the position of Lecturer/Assistant Professor at the University of Birmingham, School of Chemical Engineering. His research interests include fluid dynamic studies using Particle Image Velocimetry (PIV), Planar Laser Induced Fluorescence and Positron Emission Particle Tracking, Rheology Analysis, and Image processing.

Nominating Federico Alberini for the award, Mark Simmons stated: "In a short time, he has built himself a strong publications track record and I believe he is on a high trajectory to becoming an international leading academic in the fields of mixing of fluids and mixtures with complex rheology."

The prize, supported by Bayer AG, consists of a certificate and €1500 cash prize, a travel grant and an invitation by the conference organiser to attend the 16th European Conference on Mixing in Toulouse, France, where the prize has been awarded during the conference dinner on 11 September 2018.

Furthermore, the award jury gave special recognition to the runners-up, **Dr. Antonio Buffo**, Assistant professor (RTD A) at the Department of Applied Science and Technology of Politecnico di Torino, Italy, for his outstanding research as shown by his PhD thesis "Multivariate population balance for turbulent gas-liquid flows", numerous publications in top rated journals and conference contributions, the industrial relevance of his work, and his continuing activity, which overall ranked him second best based on all criteria.

Yianneskis and DITL honoured with mixing awards



The Working Party on Mixing of the European Federation of Chemical Engineering (EFCE) has announced **Professor Michael Yianneskis**, Emeritus Professor of Fluid Mechanics at King's College London and Honorary Professor at University

College London, United Kingdom, as this year's winner of the triennial **2018 EFCE Lifetime Recognition Award in Mixing**.

The award has been presented in recognition for his outstanding contribution to the advancement of mixing science, together with recognition of the importance of mixing in the European chemical engineering community and appreciation of its industrial significance.

The award jury especially recognised his experimental work which has greatly increased fundamental understanding of turbulent flow in stirred vessels with many scientific papers of significant impact. They also noted his commitment to the mixing community in the UK and in Europe through his contribution to the EFCE Working Party on Mixing, his chairmanship of the Fluid Mixing Process Special Interest Group of IChemE and his role as (co-)organiser and chair of several international mixing symposia and the 13th European Conference on Mixing in London, UK, in 2009.

Professor Yianneskis received his Master and PhD degrees from Imperial College London, United Kingdom. In 1985 he joined the King's College London, United Kingdom, as a lecturer and was appointed professor in Fluid Mechanics in 1996. From 2004 to 2009 he held the position of Head of the School (Dean) of Physical Sciences and Engineering at King's College London. Yianneskis has also been a member of several industrial/governmental advisory panels and research organisations.

Professor Yianneskis said: "I am extremely honoured by the EFCE Lifetime Recognition Award in Mixing 2018 and I am delighted to accept your invitation to the presentation of the award on 11 September 2018 in Toulouse.

I wish to thank all members of the selection committee, as well as everyone involved in the nomination and selection process. I am also indebted to my colleagues and all my ex-students who have been instrumental in helping to improve the understanding of fluid mixing processes."

The Lifetime Recognition Award in Mixing, which is generously sponsored by Unilever, comprised of a €1,500 cash prize and certificate. It was presented to Professor Yianneskis during the conference dinner at the 16th European Conference on Mixing, held in Toulouse, France, from 9–12 September 2018.



At the same time, the EFCE Working Party on Mixing also presented the **EFCE Personal Recognition Award in Mixing 2018** to **Professor Dr.-Ing. Pavel Diti**, Czech Technical University, Prague, Czech Republic, to give public recognition to his outstanding service and contribution to the EFCE Working Party on Mixing, both as a member and Chairman (1985 to 2003) of the Working Party.

Calls for Nominations

2019 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 2019 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 12th European Congress of Chemical Engineering – ECCE12 (congress website: www.ecce12-ecab5.org), held in conjunction with the 5th European Congress of Applied Biotechnology (ECAB5) in Florence, Italy, from 15 to 19 September 2019. The Student Mobility Award also includes an invitation to the Congress and a travel grant of up to EUR 500.

The 2019 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 study programmes in chemical engineering in each of two or more different countries. For details on the application procedure, supporting documentation and download of the application form, please visit the EFCE website at:

www.efce.info/Student_Mobility_Award.html

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

All documents should be submitted in English no later than 2 years after graduation. The deadline for submission of applications is **1 March 2019**.

About BASF: At BASF, we create chemistry for a sustainable future. We combine economic success with environmental protection and social responsibility. The more than 115,000 employees in the BASF Group work on contributing to the success of our customers in nearly all sectors and almost every country in the world. Our portfolio is organized into five segments: Chemicals, Performance Products, Functional Materials & Solutions, Agricultural Solutions and Oil & Gas. BASF generated sales of €64.5 billion in 2017. BASF shares are traded on the stock exchanges in Frankfurt (BAS), London (BFA) and Zurich (BAS). Further information at www.basf.com



Working Party on Multiphase Fluid Flow presents poster award to Maria Zednikova

The EFCE Working Party on Multiphase Fluid Flow has named **Dr. Ing. Maria Zednikova**, Institute of Chemical Process Fundamentals of the CAS, Prague, Czech Republic, as the winner of the Poster Award 2018. The winning poster, "Experiments on bubble breakup induced by collision with vortex ring" (by M. Zednikova, P. Stanovsky, T. Travnickova, J. Vejrazka), was presented at the poster competition on fluid flow and multiphase systems at CHISA 2018 this August.

The award jury commented that Zednikova's group had presented outstanding work that shows a novel experimental method to study the impact of flow structures on particle break-up.

"The jury was especially impressed by Maria's detailed and inspiring explanations during the discussion at the poster", said Prof. Michael Schlüter, Chair of the Working Party on Multiphase Fluid Flow.

EFCE congratulates Maria Zednikova and co-authors for their great success. The Poster Award carries prize money of EUR 300.



Calls for Nominations

EFCE Excellence Award in Mechanics of Particulate Solids 2019

Following the successful calls for nominations in 2009, 2012 and 2015, the European Federation of Chemical Engineering (EFCE) is pleased to issue a fourth invitation call for nominations for the **Excellence Award in Mechanics of Particulate Solids**. This triennial award aims to recognise a PhD thesis or associated paper(s) of a researcher or engineer, which demonstrate(s) an outstanding contribution to research and/or practice in Mechanics of Particulate Solids.

This year, the award is sponsored by Jenike & Johanson Inc., a leading supplier of powder and bulk solids handling, processing, and storage technology.

The award will be made at the International Congress on Particle Technology, PARTEC 2019, to be held in Nuremberg, Germany, from 9 to 11 April 2019. It consists of a certificate, a cash prize worth €1500, plus a travel grant and free registration to the conference. The winner will be invited to give a presentation following the award ceremony.

Nominations may be submitted by any PhD supervisor at a PhD-awarding institution in an EFCE member country or by a member of an EFCE member society. The nominated PhD thesis or paper(s) must address a topic relevant to the field of Mechanics of Particulate Solids. Only PhD theses or paper(s) published between November 2015 and November 2018 are eligible for nomination.

Closing date for nominations: 30 November 2018.

Further information about the nomination procedure, eligibility, supporting documentation, etc., can be obtained from the EFCE website at: www.efce.info/ExcellenceAwardMPS.html.

EFCE calls for nominations in Process Safety

The European Federation of Chemical Engineering (EFCE) presents its triennial Excellence Award in Process Safety to recognise a PhD thesis published in the preceding three-year period, which demonstrates an outstanding contribution to research and/or practice in the field.

The Excellence Award, sponsored by Aspen Oss B.V. and supported by TU Delft, 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 are now accepted for the 2019 Excellence Award in Process Safety to be awarded at the 16th International Symposium on Loss Prevention and Safety Promotion in the Process Industries - Loss Prevention 2019 which will be held in Delft, The Netherlands on 16-19 June 2019.

They 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 within three calendar years preceding the closing date of nominations.

The closing date for nomination is 31 October 2018.

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

2019 EFCE Excellence Award in Product Design and Engineering – Call for Nominations

The European Federation of Chemical Engineering (EFCE) is pleased to announce the **2019 Excellence Award in Product Design and Engineering**. Launched in 2010 by the EFCE Section on Product Design and Engineering, the award aims to recognise the PhD thesis or peer-reviewed papers of a young researcher which demonstrate(s) the most outstanding contribution to research and/or practice in the field. The previous award winners are Assistant Prof. Arab Belkadi, Dr. Miguel André Abreu Teixeira, and Dr.-Ing Patrick Froberg.



About Jenike & Johanson Inc.

Jenike & Johanson Inc. is a leading supplier of powder and bulk solids

handling, processing, and storage technology. Over the past 55 years, the company has tested over 13,000 unique powders and bulk solids and worked on more than 7,500 projects, giving their team the broadest real-world and in-depth experience in the industry to address a wide variety of bulk material handling and engineering needs.

The award comprises a certificate and a cash prize of EUR 1,500. It will be presented to the winner at the 7th European Symposium on Product Design and Engineering held in conjunction with the 12th European Congress of Chemical Engineering (ECCE12) in Florence, Italy, on 15 to 19 September 2019.

A travel grant of up to EUR 500 and a fee waiver to attend are also included.

Nominations may be submitted by any PhD supervisor at a PhD-awarding institution in an EFCE Member Country or by a member of an EFCE Member Society. The PhD thesis or papers nominated must address a topic relevant to the field of product design and engineering.

Only PhD theses and papers published between 1 January 2017 and 31 December 2018 are eligible for nomination.

A nominated PhD thesis must have been completed and published and the PhD degree examined and awarded.

The deadline for nominations is 1 March 2019.

For further information about the nomination procedure, eligibility and supporting documentation, please refer to the EFCE website:

www.efce.info/ExcellenceAwardProductDesign.html

The Excellence Award is generously sponsored by Beiersdorf AG.

Beiersdorf **About Beiersdorf AG**

Beiersdorf AG is a leading provider of innovative, high-quality skin care products and has over 135 years of experience in this market segment. The Hamburg-based company has about 19,000 employees worldwide and is listed on the DAX, the German benchmark equities index. Beiersdorf generated sales of €7.1 billion in financial year 2017. Its product portfolio comprises strong, international leading skin and body care brands including NIVEA – the world's No. 1 skin care brand – Eucerin, Hansaplast/ Elastoplast, and La Prairie. Millions of people around the world choose the Beiersdorf brands every day for its innovative, high-quality products. Further renowned brands such as Labello, Florena, 8x4, Hidrofugal, atrix, Aquaphor, SLEK, and Maestro round off the extensive portfolio. Beiersdorf's wholly owned affiliate tesa SE, another globally leading manufacturer in its field, supplies self-adhesive products and system solutions to industry, craft businesses, and consumers.*

See <http://www.beiersdorf.com/>

** Source: Euromonitor International Limited; NIVEA by umbrella brand name in the categories Body Care, Face Care and Hand Care; in retail value terms, 2017.*

EFCE event report: 16th European Conference on Mixing – Mixing16

The 16th European Conference on Mixing (Mixing16) was held from the 9th to 12th September 2018 at Les Abattoirs – Museum of Modern & Contemporary Art in Toulouse France. More than 180 participants from 33 countries around the world gathered in this unique location enabling a conference with outstanding scientific quality and a very friendly atmosphere on core mixing operations in batch, semi-batch and continuous flows, as well as in novel equipment types. The presence of industry was significant: more a third of the conference participants were from the private sector and 11 companies sponsored the event.

The scientific program was rich and comprised 10 technical sessions on single phase mixing, solid-liquid, liquid-liquid and gas-liquid mixing, advanced measurement techniques, micromixing, optimisation and scale-up, bioreactors and mixing high viscosity products. For all themes, it was interesting to note that the use of numerical simulation tools was

preponderant. There were keynote lectures from five internationally renowned mixing experts and 48 oral presentations. Dr. Richard Grenville, Director of Mixing Technology at Philadelphia Mixing Solutions, gave the first keynote lecture at Mixing16 providing an excellent introduction to industrial mixing problems, with insight on mixing issues in industrial oil storage tanks and engineering solutions. There were equally excellent contributions on solid-liquid mixing. Professor Giuseppina Montante, University of Bologna, gave the second keynote lecture on mixing of dilute and dense suspensions, providing fundamental knowledge on the challenges of studying such systems. The final keynote lecture, given by Professor François Bertrand, Ecole Polytechnique de Montréal, provided a very complete vision on experimental and numerical tools for better understanding solid-liquid mixing. These keynotes and the associated technical session perfectly integrated the history of solid-mixing since the works of

Zweitering. Significant scientific advances have been made in recent years on the understanding of liquid-liquid mixing phenomena using experimental techniques, as was very well illustrated by the keynote lecture given by Professor Matthias Kraume, Technical University of Berlin, and with modelling approaches and new simulation tools, as described in numerous technical presentations. Dr. Andreas Ducci provided the participants with an excellent vision in his keynote lecture on the flow and mixing dynamics in different bioreactor platforms, which paved the way for several noteworthy presentations on bioreactors. There were a significant number of papers dedicated to mixing products with high viscosity and complex rheology. The dominant use of numerical simulations for studying mixing phenomena in such systems is evidently a result of the difficulty of performing pertinent experimental measurements with complex fluids. In addition to the presentations in the lecture hall during the day, the participants enjoyed informal scientific discussions during the outdoor poster session in balmy late summer weather on the Monday evening, where approximately 80 posters were presented.

On the evening of the 11th of September, the participants enjoyed a cruise along the famous Canal du Midi that took them to Mas des Canelles for the traditional gala dinner where the EFCE Working Party on Mixing awards are also presented. The 2018 winner of the Young Researcher Award in Mixing was Dr. Federico Alberini, University of Birmingham for his work on the use of advanced experimental techniques to improve mixing of complex fluids; the runner-up was Dr. Antonio Buffo, University of Torino. The 2018 Lifetime Recognition Award in Mixing was presented to Professor Michael Yianneskis, University College London, for his outstanding contribution to mixing science. Professor Pavel Ditzl, Czech Technical University, was also recognised for his outstanding service and contribution to the EFCE Working Party



Evening outdoor poster session at Mixing16



Mixing16 conference sessions in the auditorium at Les Abattoirs, museum of modern and contemporary art, Toulouse France

on Mixing. During the awards ceremony, PhD student Giuseppe Forte (Johnson Matthey) was also recognized as the winner of the 2018 IChemE Fluid Mixing Processes Student Award for his work on the measurement of gas-liquid holdup using Electrical Resistance Tomography. Finally, a tribute to Dr. Ivan Fort was made on the occasion of his 80th birthday and for his lifetime commitment to the European mixing community.

It is also customary to present the organizer of the next European Conference on Mixing at the gala dinner and to hand over the conference totem. It was decided that the 17th European Conference on Mixing will be held in Porto, Portugal. The bid to organize the 2021 edition of the conference series was proposed by Professor José Carlos Lopes, the Portuguese delegate to the EFCE Working Party on Mixing.

In conclusion, Mixing16 was a real success! The European mixing community is extremely strong and attracts people from all over the world, which enables the scientific quality of the conference to rise every time. The increasing – and almost systematic – use of numerical tools of diverse types for the fundamental understanding of mixing processes and their analysis is a particularly notable observation made at Mixing16. Considering this, it would be of great interest to have plenary lecture at a congress in the near future that would present a review these different tools and their performance for various chemical engineering applications.

Finally, Joelle Aubin, Conference Chair, and the Organizing Committee – Martine Poux, Jérôme Morchain & Alain Liné, would like to thank the all of the participants, the Keynote presenters, the Scientific Committee and the sponsors of the conference for their contribution and involvement in the 16th European Conference on Mixing. Without you, Mixing16 wouldn't have been what it was!

Events organised by or on behalf of EFCE in 2019/21

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

XXIII International Conference on Chemical Reactors - CHEMREACTOR-23 **Ghent, Belgium, 5-9 November 2018** **(EFCE Event No. 748)**

Traditionally, the CHEMREACTOR conference program focuses on the fundamental aspects and practical application of the catalytic processes and chemical reactors, as well as to the development of the novel highly-efficient technologies. It has been held in different countries and cities where there are major research centers, whose activities are related to the development of innovative chemical engineering.

Plenary speakers: Prof. Jens Kehlet Nørskov, Stanford University, USA (A Professor Mikhail Slin'ko Honorary Lecture); Professor Vemuri Balakotaiah, University of Houston, USA; Prof. Dionisios G. Vlachos, University of Delaware, USA; Prof. Kai Sundmacher, Max Planck Institute for Dynamics of Complex Technical Systems, Magdeburg, Germany.

The preliminary scientific programme is available at: <http://conf.nsc.ru/files/styles/419507/Prelim%20Scientific%20Program.pdf>

Register now!

<http://www.chemreactor23.org>

17th European Meeting on Supercritical Fluids and 7th European Meeting on High Pressure Technology

High Pressure Process Technology
Cuidad Real, Spain, 8-11 April 2019
(EFCE Event No. 759)

23rd Polish Conference of Chemical & Process Engineering **Jachranka-Warszawa, Poland, 2-5 June 2019 (EFCE Event No. 753)**

Theme: *Scientific and industrial progress for sustainable processes and products*

The long tradition of the Polish Conference of

Chemical and Process Engineering - PCC&PE conferences dates back to 1957 when the first meeting was held in Osieczna. The current 23rd edition of this conference, organised by the Faculty of Chemical and Process Engineering of the Warsaw University of Technology under auspices of the Committee of Chemical & Process Engineering of the Polish Academy of Sciences, will be held in Jachranka, the small resort located close to Warsaw on the shore of the artificial lake – Zalew Zegrzyński.

The Conference topics will cover both the latest methodological developments as well as the many emerging applications to crucial technologies for energy conversion, environmental protection and sustainable chemicals production.

Topics: Advances in Chemical Engineering Fundamentals; Chemical reaction engineering – Novel Experimental Approach, Modelling and Optimization; Product Design and Novel materials application; Bioengineering and Biotechnology; Environmental & Sustainable Chemical Engineering; Chemical Industry 4.0.

The call for papers is open. Deadline for abstract submission 30 November 2018

Website: <http://ichip2019.pl>

Loss Prevention 2019 - 16th International Symposium on Loss Prevention and Safety Promotion in the Process Industries and accompanying exhibition **Delft, The Netherlands, 16-19 June 2019 (EFCE Event No. 750)**

Loss Prevention 2019 is organised by the EFCE Working Party on Loss Prevention, has returned to the Delft University of Technology in the Netherlands.

Topics: Risk assessment and safety management; Human and organisational factors of risk and safety; Process safety engineering and technological innovations; Fires, explosions, and toxic releases; Simulation and modelling for safer processes; Physical security and cyber security in process plants; Learning from accidents and process safety education; Communication of risk and process

safety information; Leadership, risk governance, and regulatory issues.

To foster new ideas, the fourth EFCE Excellence Award in Process Safety for outstanding PhD research work will be presented at this conference.

Silver Sponsors: OCI Nitrogen, DSM, LDE Centre for Safety and Security

Register now! Deadline for early registration: 1 April 2019

Website: www.lossprevention2019.org

29th European Symposium on Computer Aided Process Engineering - ESCAPE29 **Eindhoven, The Netherlands, 16-19 June 2019 (EFCE Event No. 758)**

ESCAPE-29 is organised under the auspices of European Federation of Chemical Engineering, Nederland Procestechologie (NPT), and Process Systems Engineering NL (PSE-NL).

ESCAPE-29 aims to bring together researchers and practitioners of computer-aided process engineering (CAPE) community, and provide a forum to present and evaluate emerging research methods and concepts, and to learn from industrial case studies. The boundaries of CAPE have expanded and the research interests cover a wide range of interdisciplinary problems related to the current needs of the modern society and industry.

The CAPE/PSE community is faced with an increasingly important incentive and commitment to contribute actively to the solving of many of the world's problems such as environmental and societal issues, population growth, and limited resources. Hence the main feature of this event would be its orientation towards sustainable development, covering a large range of scales from molecule to enterprise. In view of this commitment, and due to the actuality of the proposed orientation, it is anticipated that this conference would attract a significant number of people from academia, research institutions, and industrial organizations. Presentations given by a number of distinguished European and other world-renowned plenary and keynote speakers would offer a cutting-edge to the symposium.

Themes: Process-product synthesis, design and integration; Methods, models and computational tools for PSE; Process control and operations; CAPE/PSE in sustainable development and food industry; CAPE/PSE in energy transition; CAPE/PSE in hi-tech micro/nano-devices and processes; ducation in CAPE/

PSE & knowledge transfer.

Sponsors: Shell, BASF, Corbion.

Date to note for authors: Deadline for paper submission: 15 November 2018.

Register now! Deadline for early registration: 4 March 2019

Website: <http://escape29.nl/>

3rd ANQUE-ICCE International Congress of Chemical Engineering Santander, Spain, 19-21 June 2019 (EFCE Event No. 757)

Theme: Building Bridges in Chemical Engineering

ANQUE-ICCE 3 will be organised by ANQUE, the Spanish National Association of Chemists and Chemical Engineers, in collaboration with AQUIQÁN, the Association of Chemistry and Chemical Engineering of Cantabria. This international congress aims to be a reference in the field of chemical engineering and chemistry applied to the industry. All key areas for chemical engineers will be included in the program, providing ample opportunities to exchange up-to-date information and extend professional and personal networks.

The congress motto is also an invitation to establish and strengthen connections among Iberoamerican colleagues, incorporating the specific event "1er Congreso Iberoamericano de Ingeniería Química". We are also very pleased to present the "ICCE Student Conference", which is scheduled for 17-18 June 2019 as a unique opportunity to join together chemical engineering students, with a variety of activities and competitions that will be useful for their training.

General ICCE3 Topics: Knowledge, Education & Training; Unit Operations & Separation Processes; Chemical Reaction Engineering; Process Systems Engineering; Product Engineering & Advanced Materials; Applied Biotechnology; 7Environmental & Sustainable Chemical Engineering.

Symposia: Lignocellulosic wastes valorization; Bioeconomy: renewable resources for energy and chemicals production; Sustainable Development Goals: a challenge for Chemical Engineering.

Workshops: Mitigation of the environmental impact of fluorinated gases; Renewable Hydrogen Energy World.

Abstract submission will open soon.

Website: <https://anque.es/congresos/>

ECCE12/ECAB5 – 12th European Congress of Chemical Engineering & 5th European Congress on Applied Biotechnology

Florence, Italy, 15-19 September 2019 (EFCE Event No. 744)

**The abstract submission is now open.
Deadline: 15 January 2019.**

Website: <http://www.ecce12-ecab5.org/>

- details see above

21st International Symposium on Industrial Crystallization-ISIC 21 *Potsdam, Germany, 8-11 September 2020 (EFCE Event No. 751)*

Crystallization occurs in many natural physical, biological, and chemical systems, and is exploited in numerous applications, ranging from novel environmental and purification technologies to the production of bulk and fine chemicals, as agrochemicals, pharmaceuticals, food ingredients and pigments. Active research is done on a broad range of subjects from fundamentals to industrial applications resulting in new findings, innovative processes and products.

The ISIC meetings, taking place every three years, aim to provide a broad overview of the current science and technology of crystallization and, to bring together scientists and engineers of various disciplines, both academic and industrial, from all over the world to meet and exchange ideas. The symposium, initiated by Jaroslav Nývlt in 1960, is organized under the auspices of the EFCE's Working Party on Crystallization since 1978 and, has become the premier international conference in the field of industrial crystallization.

Key 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.

The call for papers will open in September 2019.

www.dechema.de/ISIC_21

Save the date!

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

Berlin, Germany, 19-23 September 2021 (EFCE Event)

Save the date!

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