

**CALL FOR PAPERS**

You MISSED the DEADLINE catch the last chance:  
[www.EFCF.com/AC](http://www.EFCF.com/AC) Author Center - Become immediately a **New Author**  
and inform [imperial@efcf.com](mailto:imperial@efcf.com) when you submit.

# 12<sup>th</sup> European SOFC & SOE Forum

20<sup>th</sup> Conference in Series with Exhibition

5–8 July 2016

Kultur- und Kongresszentrum Lucerne, Switzerland

Chairman of the Conference

**Prof Nigel Brandon**

Imperial College London

Featuring

- **SOFC & SOE Science, Technology and Application, including REACTORS & SEPARATORS based on Solid Oxide Membranes**
- **EXHIBITION: Suppliers & Solid Oxide Technologies**
- **TUTORIAL on Fuel Cell & Hydrogen**

Organised by the European Fuel Cell Forum  
[forum@efcf.com](mailto:forum@efcf.com) · [www.EFCF.com](http://www.EFCF.com)



# CALL FOR PAPERS

## 12<sup>th</sup> European SOFC & SOE Forum 2016

Solid Oxide Fuel Cells and Electrolysers, including Reactors and Separators based on Solid Oxide Membranes

Chairman  
**Prof Nigel Brandon**  
Imperial College London

### Scope of the Forum

The 12<sup>th</sup> EUROPEAN SOFC & SOE FORUM 2016 will address issues of science, engineering, materials, systems, applications and markets for all types of Solid Oxide Fuel Cell and Solid Oxide Electrolysis technologies as well as for Reactors and Separators based on Solid Oxide Membranes. The Forum continues the strong tradition as one of the leading international meetings on **Solid Oxide science, technology and implementation**. The meeting aims at a fruitful dialogue between researchers, engineers and manufacturers, between hardware developers and potential users, between academia, industry and electric power and gas utilities as well as process industry. Business opportunities will be identified for manufacturers, commerce, consultants, affected industry, operators and investors. Although a Europe-bound event, participants are invited from all continents. About 500 participants and 30 exhibitors are expected. The European Fuel Cell Forum is a leading international meeting place providing an excellent opportunity to present recent technical progress, to establish new contacts by networking, and to exchange scientific, technical and industrial information.

A Scientific Advisory Committee (SAC) has been formed to evaluate and structure the technical programme. This panel exercises full scientific independence in all technical matters. All papers presented as lectures or posters will be collated in electronic proceedings, which will be distributed to all participants at the time of registration. Various scientific publication possibilities are offered (see [www.EFCF.com/PP](http://www.EFCF.com/PP)). Also, all participants will receive a Conference Agenda containing the abstracts of all orals and posters as well as essential conference information. The 12<sup>th</sup> EUROPEAN SOFC FORUM 2016 is open to all high temperature fuel cell and electrolysis technologies, including industrial solid oxide membrane reactors and separators.

### Technical Programme

The three day technical conference will feature parallel lectures of invited and contributed papers and posters. Care will be taken by the Scientific Advisory Committee to ensure that all presentations are of a high quality. The conference will focus on **solid oxide fuel cells and electrolysers**, with the addition of a new category addressing **reactors and separators based on solid oxide membranes**. The technical programme will range from fundamental science and new materials, through cell, stack, and system development, to the latest results from commercial deployment.

**The Motto is: Solid Oxide Fuel Cells, Electrolysers and Reactors: From development to delivery.**

- State-of-the-art and novel materials: Anodes, cathodes, electrolytes, interconnects, seals
- State of the art and novel manufacturing processes
- Understanding lifetime at the level: Material, cell, stack, system & product
- Advanced characterisation tools and techniques
- Cell, stack & system modelling & optimisation, including model validation
- Cell and stack design and characterisation
- Development and design of systems and balance of plant components: Fuel processor, heat exchanger, blower, control,...
- Science and engineering of reactors and separators based on solid oxide membranes
- Product presentation, demonstration, product ideas and focus markets
- Market penetration and commercial status
- Role and value of solid oxide technology in current and future markets

### Forum Events

[www.EFCF.com/Events](http://www.EFCF.com/Events)

5 July 2016	11:00–16:00 10:00–17:00	Exhibition & poster set-up, 16:00 Opening of Exhibition and Registration, 18:00 "Welcome Reception" Fuel Cell Tutorial
6 July 2016	09:00–18:00  18:30	International and Industrial* Overviews – Keynotes – Oral and Poster Sessions, Exhibition *Among the presenters: Boing, Ceres Power, Convion, Hexis, SOLIDpower, Sunfire/Staxera, Versa Power/FC Energy, ... "Swiss Surprise" (optional, individual registration)
7 July 2016	09:00–18:00 19:30	Keynotes – Oral and Poster Sessions, Exhibition "Dinner on the Lake" traditional steamboat excursion
8 July 2016	09:00–17:00	Oral and Poster Sessions – Plenary Keynotes, Exhibition, Schoenbein Medal Award, Closing Ceremony

### Exhibition

[www.EFCF.com/Exhibition](http://www.EFCF.com/Exhibition) registration on [www.EFCF.com/ByB](http://www.EFCF.com/ByB)

Adjacent to the auditorium a technical exhibition will be held, to offer industry, suppliers, test equipment providers and research laboratories the opportunity for presenting their latest accomplishments and products in and for the called technologies and related areas. Exhibitors from all parts of the world are invited to participate. Besides fuel cell, electrolyser and reactor developers, who show systems, related hardware and applications, suppliers present new materials, stack and system components, control devices, production technology, qualification and test benches and diagnosis tools as well as research results etc. Find the preliminary list of exhibitors and Book your Booth on-line on [www.EFCF.com/ByB](http://www.EFCF.com/ByB).

## Organisation

[www.EFCF.com/Conference](http://www.EFCF.com/Conference)

The 12<sup>th</sup> EUROPEAN SOFC & SOE FORUM 2016 is organized by the European Fuel Cell Forum in Lucerne, which handles all administrative issues. The Scientific Organizing and Advisory Committee and its Chairman Prof. Nigel Brandon of Imperial College London are responsible for the scientific programme. Please find the details on [www.EFCF.com/Conference](http://www.EFCF.com/Conference).



## Venue

[www.EFCF.com/Lucerne](http://www.EFCF.com/Lucerne)

The 12<sup>th</sup> EUROPEAN SOFC & SOE FORUM will be held at the Culture and Convention Centre Lucerne (KKL) in conjunction with the Solid Oxide and Supplier EXHIBITION and a FUEL CELL and HYDROGEN TUTORIAL. The KKL conference center is of fascinating architecture and located on the waterfront of the Lake Lucerne, one minute from the railroad station and within easy walking distance from most hotels.

## Call for Papers

[www.EFCF.com/AC](http://www.EFCF.com/AC)

Members of academic institutions, research organizations and industry are invited to submit papers for presentation at the 12<sup>th</sup> EUROPEAN SOFC & SOE FORUM 2016. Technical papers dealing with above topics with emphasis on fundamentals, materials, systems and applications may be submitted **via Author Center by 30 November 2015**. The submission procedure is:

1. Download Abstract Template + Instructions from [www.EFCF.com/Download](http://www.EFCF.com/Download)
2. Follow the instructions and upload your one-page abstract at [www.EFCF.com/Upload](http://www.EFCF.com/Upload)  
Prior fill in your contact data as an author in the Author Center.
3. Get notification about acceptance in **February 2016** and submit then the **full-length manuscripts by 30 April 2016**.

**MISSED the DEADLINE catch the last chance**  
[www.EFCF.com/AC](http://www.EFCF.com/AC) Author Center  
Become immediately a **New Author** and  
inform [imperial@efcf.com](mailto:imperial@efcf.com) when you submit.  
**Note: Evaluation for oral presentation has already started.**

For questions, please check [www.EFCF.com/FAQ](http://www.EFCF.com/FAQ) or email to [IMPERIAL@efcf.com](mailto:IMPERIAL@efcf.com). The 12<sup>th</sup> EUROPEAN SOFC FORUM 2016 cannot provide financial support to authors of papers. Presenting authors should register for the Forum and pay the appropriate registration fee by 30 April 2016. Afterwards late registration charge applies. If you wish to present your products, please register for the EXHIBITION.

## Publication Policy

[www.EFCF.com/PP](http://www.EFCF.com/PP) and [www.EFCF.com/LIB](http://www.EFCF.com/LIB)

All oral and poster presentations are published in Electronic Proceedings distributed to the participants. The manuscript abstract is printed in the "Conference Agenda". Late abstracts cannot be considered for oral presentation.

As in previous years a limited number of contributions will be invited to be included in a Special Issue in the Journal "Fuel Cells – From Fundamentals to Systems" published by Wiley-VCH. The other contributions will be published as open accessible on-line publication on the EFCF website ([www.EFCF.com/LIB](http://www.EFCF.com/LIB)) with ISBN 978-3-905592-21-4. Authors who do not wish to be included in the web publication, e.g. due to publication elsewhere, can opt out.

Their extended abstract will then be only available on the USB stick that is not an officially recognised publication i.e. the publication opportunities remain free for the authors. Final Announcement, programme and registration details are distributed by letter post and announced on [www.EFCF.com/FA](http://www.EFCF.com/FA) in March 2016.

## Time Schedule

- 30 November 2015: Deadline for submission of abstracts. Send abstracts via website on [EFCF.com/UPLOAD](http://EFCF.com/UPLOAD). All abstract will be evaluated by the Scientific Advisory Committee and selected for oral or poster presentation. Authors are personally informed in February 2016. Late abstracts cannot be considered for oral presentation.
- 15 March 2016: Final Announcement with comprehensive oral and poster programme, exhibitors and registration.
- 30 April 2016: Deadline for early bird registration privileges and blocking of convenient hotels.

## Forum Fee

[www.EFCF.com/Fee](http://www.EFCF.com/Fee)

- |  |             |                                  |
|--|-------------|----------------------------------|
| • Students, trainees and unemployed persons etc. with valid identification | 700 CHF     | 8% VAT included where applicable |
| • Members of government, universities, consultants etc.                    | 1400 CHF    | 8% VAT included where applicable |
| • Members of industry and commerce (700 CHF donation for student support)  | 2000 CHF    | 8% VAT included where applicable |
| • Fuel Cell Tutorial   | 500 CHF     | 8% VAT included where applicable |
| • Late charge for registration after 01 May 2016/On-Site registration      | 100/250 CHF | 8% VAT included where applicable |

One Swiss Franc ("CHF") is valued at about 0.95 EURO or 1.06 US Dollar (June 2015). The fees include access to conference and exhibition, Conference Agenda, USB stick with Proceedings of the 12<sup>th</sup> EUROPEAN SOFC FORUM 2016, business lunches, refreshments, **Welcome Reception** on Tuesday with wine and beer, and **Dinner on the Lake** (paddle wheel steamer) on Thursday. Optional: **Swiss Surprise** on Wednesday (120 CHF per person). After the conference access to the allowed presentation and ISBN proceedings also of the former years is possible.

## Conference Chairman

# Nigel Brandon

## Imperial College London



Prof Dr **Nigel Brandon** OBE FREng holds the BG Chair in Sustainable Gas at Imperial College London. He is Director of the Sustainable Gas Institute and the UK SUPERGEN Hydrogen and Fuel Cells Hub, and Co-Director of the UK SUPERGEN Energy Storage Hub. Nigel holds a first degree in Minerals Engineering (1981) and a PhD in electrochemical engineering (1984), both from Imperial College London.

After research positions with both BP (1984–1992), and Rolls-Royce (1992–1998) where he was an inventor of the Integrated Planar Solid Oxide Fuel Cell, he joined Imperial College as a Senior Lecturer in electrochemical engineering in 1998. In 2001 he co-founded the fuel cell company Ceres Power, acting as CEO to 2003, CTO to 2006 and Chief Scientist to 2009. Prof Dr Nigel Brandon was appointed to the Shell Chair in Sustainable Development in Energy in 2005 and the BG Chair in Sustainable Gas in 2014. From 2007 to 2011, he acted as the UK focal point with China in energy and climate change. Awarded the Royal Academy of Engineering Silver Medal in 2007, he also received the ASME Francis Bacon Medal in 2014, for his contribution to fuel cell science, engineering and technology. Prof Dr Nigel Brandon leads a research group focussed on the science, engineering and technology of electrochemical devices for energy applications, with a particular focus on solid oxide fuel cells and electrolyzers. He holds 15 patents and published over 170 journal papers.

## Scientific Advisory Committee

[www.EFCF.com/SAC](http://www.EFCF.com/SAC)

Dr. Ainara Aguadero, ICL, UK  
Prof. Joongmyeon Bae, KAIST, Korea  
Dr. Rajendra Basu, CSIR, India  
Prof. Viola Birss, Univ Calgary, Canada  
Dr. Brian Borglum, Fuel cell energy, Canada  
Prof. Nigel P. Brandon, Imperial College, United Kingdom (Chair)  
Dr. Rob Braun, Colorado School of Mines, USA  
Dr. Dan Brett, UCL, UK  
Ms Annabelle Brisse, European Inst. for Energy Res. (EIFER), Germany  
Dr. Qiong Cai, Univ Surrey, UK  
Dr. Mark Cassidy, Univ St. Andrews, UK  
Prof. Jong Shik Chung, POSTEC, Korea  
Prof. Paola Costamagna, Univ Genoa, Italy  
Dr. Rich Goettler, LGFCS, USA  
Prof. Min-Fang Han, Tsinghua University, China  
Prof. Anke Hagen, Risoe Nat. Lab./DTU, Denmark  
Mr John Bøglid Hansen, Haldor Topsøe A/S, Denmark  
Prof. John Irvine, Univ St. Andrews, UK  
Dr. Ellen Ivers-Tiffée, Universität Karlsruhe, Germany  
Dr. Jari Kiviahio, VTT Technical Research Center of Finland, Finland  
Prof. Florence Lefebvre-Joud, CEA, Hydrogen and Fuel Cell Program, France  
Dr. Dario Montinaro, SOFCpower S.r.l., Italy  
Dr. Subhashish Mukerjee, Ceres Power, UK  
Prof. Kazunari Sasaki, Univ Kyushu, Japan  
Prof. Prabhaker Singh, Univ Connecticut, USA  
Prof. Stephen Skinner, ICL, UK  
Prof. Robert Steinberger-Wilckens, Univ Birmingham, UK  
Prof. Detlef Stolten, Forschungszentrum Jülich GmbH, Germany  
Dr. Pei-Chen Su, NTU, Singapore

## Scientific Organising Committee

[www.EFCF.com/SOC](http://www.EFCF.com/SOC)

Dr. Paul Boldrin, ICL, UK  
Prof. Nigel P. Brandon, Imperial College, United Kingdom (Chair)  
Dr. Richard Dawson, Univ Lancaster, UK  
Dr. Jung-Sik Kim, Univ Loughborough, UK  
Dr. Zeynep Kurban, ICL, UK  
Dr. Mardit Matian, SOLIDpower/Htceramix, CH  
Dr. Enrique Ruiz Trejo, ICL, UK  
Dr. Paul Shearing, UCL, UK  
Dr. Farid Tariq, ICL, UK  
Dr. Vladimir Yufit, ICL, UK

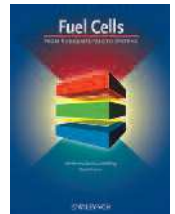
## International Board of Advisors

[www.EFCF.com/IBoA](http://www.EFCF.com/IBoA)

## 12<sup>th</sup> European SOFC & SOE Forum 5–8 July 2016, Lucerne, Switzerland

- This high-level international fuel cell event offers an honest presentation of the state-of-the-art technology in beautiful Switzerland
- About 300 technical contributions with full length manuscripts on USB-stick Proceedings
- Superb conference facilities with excellent services
- Excellent food and refreshments
- Unique networking events: "Welcome Reception", "Swiss Surprise", and "Dinner on the Lake"
- Pleasant walking from hotels to conference centre

International Exhibition of fuel cell products and components.



Organised by the

## EUROPEAN FUEL CELL FORUM

Olivier Bucheli & Michael Spirig  
Obgardihalde 2, CH-6043 Luzern-Adligenswil, Switzerland  
Tel: +41-44-586-5644, Fax: +41-43-508-0622  
[forum@efcf.com](mailto:forum@efcf.com) • [www.EFCF.com](http://www.EFCF.com)



Official Carrier