‘SolidOxideFuelCells,ElectrolyzersandReactors: From Development to Delivery – EFCF2016”

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In the framework of the annual conference series, organized by the European Fuel Cell Forum (www.efcf.com), EFCF2016 covered the 12th European Solid Oxide Fuel Cell & Solid Oxide Electrolyzer Forum chaired by Prof. Nigel Brandon, Imperial College, United Kingdom. It was held in Lucerne, Switzerland from July 5–8th 2016. 460 participants representing 33 countries from 6 continents enjoyed both the beautiful location and the intensive discussions. The conference was notable for the clear advances demonstrated in both the science and technology of solid oxide materials, devices, systems and products, and for the wide range of potential applications that were discussed for these technologies in low carbon energy systems.

This year the focus was on solid oxide fuel cells and electrolyzers, together with the first time addition of a new category addressing reactors and separators based on solid oxide membranes. As in previous years, the EFCF Forum continued its strong tradition as a leading international meeting. Also it is to be acknowledged that the EFCF Forum enabled a fruitful dialogue between researchers, engineers and manufacturers, between hardware developers and potential users, and between academia, industry and decision makers.

This special issue comprises papers selected from the large number of presentations given at the conference. The papers presented in this special issue reflect the broad palette of research and demonstration topics, with papers ranging from novel fabrication processes, advanced understanding the factors influencing the performance and in particular lifetime of materials and devices, stack and system engineering, and product development.

We hope you take as much value from reading the papers as much as we have in collating them.