



H2FC European Infrastructure is an Integrating Activity funded by the European Commission under FP7 Capacities Programme. Grant agreement No. FP7-284522

## Workshop 2013

## INTEGRATING NUMERICAL AND EXPERIMENTAL APPROACHES FOR THE DESIGN OF NEXT GENERATION FUEL CELLS

# ENEA Rome Headquarters Rome, Italy • 10<sup>th</sup> December 2013

#### Scope of the event

Europe is at the forefront of the development of fuel cells, thanks to the combined efforts of leading institutes, universities and forward-looking entrepreneurs. This has lead to a rapid increase in the demonstration and deployment of fuel cell systems of all sizes and application areas. The first stage of development is becoming a reality and policymakers and investors are working towards industrial take-up of the technology.

Meanwhile, the momentum gathered in the last years cannot disregard the needs for continuous innovation, in order to ensure lasting excellence and competitiveness. It is already crucial to look ahead and prepare for the next generation of fuel cell applications which must drastically improve the technology, by radically improving performance, reliability and cost-effectiveness, in order to inaugurate an era where fuel cells will share the energy market equally and easily with competing technologies.

Significant achievements in terms of the understanding of the technology have been brought about, thanks to the evolution of diagnostic tools, experimental techniques and modelling capabilities, but still the worlds of the 'experimentalists' and 'modellers' are too often disjointed and operate not fully aware of each other. To overcome the scientific challenges between current and next-generation fuel cells, a joint approach is absolutely vital, where the experts of each 'world' plan and operate their activities beforehand, in parallel, and in synergy.

This workshop aims to facilitate this process, which is fully in line with the efforts towards harmonisation and alignment of capacities, infrastructures and programmes of the European Union and EERA, for the creation of critical mass and world-class expertise. The workshop is also beneficial to the mapping and upgrade of European infrastructures on fuel cells and hydrogen. Leading scientists will be invited to present the utmost state-of-the-art in experimental and numerical methods and give their views on the possibilities for their integration. Participants are invited to actively take part in the discussions and a lively debate will be ensured.

### **Confirmed speakers**

Top experts from CEA (France), Forschungszentrum Jülich (Germany), German Aerospace Center, VTT (Finland), University of Genoa (Italy) and other leading European research instutions.

#### What does it cost?

Participation to the workshop is free of charge, but registration is mandatory. Register at http://h2fc.eu/approachesworkshop The number of attendants is strictly limited.

