INVITATION TO ICCMR11

The Organizing Committee of the ICCMR11 - 11th International Conference on Catalysis in Membrane Reactors, has the pleasure to invite you to come to Porto (Portugal), to participate in this important scientific meeting, from July 7th to July 11th, 2013.

The ICCMR conference series started in 1994, in Lyon-France, and continued as a biannual event organized at different locations around the globe (Moscow 1996, Copenhagen 1998, Zaragoza 2000, Dalian 2002, Lahnstein 2004, Cetraro 2005, Kolkata 2007, Lyon 2009 and Saint-Petersburg 2011). This time, ICCMR11 has landed at the worldwide known “Port Wine” city, Porto, and we are sure that the event will live up to your expectations.

The ICCMR11 meeting aims to cover all the aspects related with membrane reactors, bringing together scientists from academic research, applied research and industry working in the membranes, catalysis and process engineering fields. We strongly believe that all the participants will have ample opportunities to meet each other and exchange ideas.

The scientific program will feature four motivating plenary lectures by distinguished researchers, keynote lectures, oral presentations and poster sessions. The oral sessions will be organized according to the participation in the different topics, each one introduced by a specific keynote lecture.

To promote posters contributions, and encourage submissions, a specific organization is devoted to favour this type of scientific communication. A flash presentation will be organized and a continuous poster session will allow discussions throughout the conference. A number of awards will be attributed to the best student contributions, for students under 30 years old.

As usual in the ICCMR conference series, selected papers will be published in a special issue of Catalysis Today.

Finally, we are strongly committed to complement the scientific program with an appealing social programme, either for the delegates or for the accompanying persons, to provide you with a taste of the genuine Portuguese hospitality and make your stay in Porto a remarkable experience.

SCOPE

The ICCMR conference series provide events with a strong interdisciplinary character: the combination of membranes, catalysis and reactor engineering, in the perspective of process intensification. All these subjects are widely covered in different specific scientific meetings, but the ICCMR conferences are the only ones covering them as an overlapping interdisciplinary field.

Our society is nowadays experiencing a great transformation, creating new paradigms. Membrane reactors are very likely to play an important role in the new arising technologies aimed at chemically intensified processes, energy conversion and storage, efficient use of industrial water and energy, future bio-based economy, etc.

It is our goal for this 11th edition of the ICCMR to offer an overview of the most advanced studies and recent trends in the field of the membrane reactors, highlighting the multidisciplinary approaches and the emerging areas; for example, engineering of catalysts and membranes at the nanoscale and microchannel reactors. Special attention will be also paid to new approaches to the modelling of membrane mass transport and to system integration.

The event aims at bringing together scientists from academic research, applied research and industry, working in membrane, catalysis and process engineering fields, with common or complementary R&D interests. It intends to stimulate contacts, to highlight recent developments and to create an interdisciplinary forum for discussion, so that to allow the germination of new ideas and concepts, based on the presence together of experts from different fields. Especially young researchers are encouraged to participate and to interact closely with senior scientists. It deserves really to be a strong milestone on the way to “Integration for Innovation without Fragmentation”, the motto of the EU Framework Programme Horizon 2020 and the related SPIRE-Porto Roadmap.
1. Membrane reactors and chemical catalysis.
   a) Applications in synthesis.
   b) Environmental applications.
   c) Energy applications.

2. Ion-conducting membrane reactors.
   a) Mixed ionic and electronic conducting membranes.
   b) Pure ion conducting membrane reactors: fuel cells, electrolyser and electrochemical synthesis.

3. Photocatalytic and photoelectrochemical membrane reactors.
   a) For water and waste water treatment.
   b) For air and gas applications.
   c) Sensors.

4. Membrane reactors and biocatalysis.
   a) Membrane bioreactors - Enzymatic and microbial systems for water, food and biotechnological applications.
   b) Microbial hydrogen production - Energy applications.
   c) Microbial and enzymatic fuel-cells - Sensors and Biomedical applications.
   d) Biofouling - Monitoring and control of membrane bioreactors.

5. New design and concepts.
   a) Membrane and catalyst design.
   b) Reactor design (Contactors, Extractors and Distributors).
   c) Emerging applications.