ICHS2013 International Conference on Hydrogen Safety

September 9-11, 2013 - Brussels - Belgium

International Conference on Hydrogen Safety (ICHS)

"Progress in safety of hydrogen technologies and infrastructure: enabling the transition to zero carbon energy"

Invites you to the ICHS2013

With the endorsement of:

New Energy World JU – fuel cells & hydrogen for sustainability

U.S. DEPARTMENT OF ENERGY

IPHE – International Partnership for the Hydrogen Economy

HIA – HYDROGEN IMPLEMENTING AGREEMENT

Organizing Institutions:

hySafe – INTERNATIONAL ASSOCIATION FOR HYDROGEN SAFETY

European Commission

In Collaboration with:

H2FC European Infrastructure Project

ICHS 2013 CONFERENCE – SCOPE

The 5th International Conference on Hydrogen Safety (ICHS 2013) will be held in Brussels, Belgium on September 9-11, 2013 under the auspices of the International Association for Hydrogen Safety (IA HySafe). The conference will be hosted by the Joint Research Centre (Institute for Energy and Transport) of the European Commission and it will improve the public awareness and trust in hydrogen technologies by communicating a better understanding of both the hazards and risks associated with hydrogen and their management. The first four conferences in 2005, 2007, 2009 and 2011 succeeded in attracting the most relevant experts from all over the world, by providing an open platform for the presentation and discussion of new findings, information and data on hydrogen safety – from basic research to applied development and to standardization and regulatory issues.

As we are approaching the beginning of the commercialization phase of hydrogen fuel cell vehicles in 2015, ICHS 2013 will focus on progress in safety of hydrogen technologies and infrastructure, as crucial/essential means to enable the transition to a zero carbon energy system. Therefore, the conference seeks papers in a wide range of hydrogen safety topics like (but not limited to) Regulations Codes and Standards, safety in H2 infrastructure, safety solutions for the implemetation of H2 technologies, hydrogen and hydrogen blends behavior, physical effects, consequence analysis, incidents, accidents and near misses, hydrogen effects on materials and components, safety of energy storage, risk management, fuel cells related safety issues. All contributions to ICHS 2013 will be evaluated exclusively in the light of their scientific content and relevance to hydrogen safety.

ICHS 2013 CONFERENCE – STRUCTURE

ICHS 2013 will include thematic plenary sessions, topical lectures, and parallel oral and poster sessions. The conference seeks to facilitate (enable/strengthen) the near term introduction of hydrogen technologies in the market place.

CONFERENCE ORGANIZING COMMITTEE

Marc Steen, Marco Carcassi, Andrei Tchouvelev, Daniele Baraldi, Pietro Moretto, Iñaki Azkarate, Jay Keller, Olaf Jedicke, Thomas Jordan, Bill Hoagland, Darren McGarry, Carine Nieuweling.

CONFERENCE SCIENTIFIC COMMITTEE

Iñaki Azkarate, Daniele Baraldi, Herve Barthelemy, Luc Bauwens, Pierre Benard, Gilles Bernard-Michel, Dag Bjerketvedt, Marco Carcassi, Daniel Dedrick, Sergey Dorofeev, Javier Garcia, Oliver Gentilhomme, Stuart Hawksworth, Armin Keßler, Jay Keller, William Hoagland, Olaf Jedicke, Thomas Jordan, John Khalil, Alexei Kotchourko, Jeff LaChance, Frank Markert, Ad Matthijsen, Daniele Melideo, Prankul Middha, Vladimir Molkov, Angelo Moreno, Pietro Moretto, Ernst-Arndt Reinecke, Ulrich Schmidtchen, Marc Steen, Andrei Tchouvelev, Andrzej Teodoreczyk, Franck Verbecke, Steven Weiner, Jennifer Wen, Alexandros Venetsanos, Jinyang Zheng, Geoff Chamberlain.

ICHS 2013 THEMES AND TOPICS

Regulations Codes and Standard (RCS)
- Pre-normative research (needs, approaches, incorporation of QRA)
- Post normative experience (case studies)
- Comparison/compatibility with other fuels

Safety in H2 infrastructure
- Production,
- Distribution,
- Storage
- Use

Safety solutions and implementation of H2 technologies
- Deploying technologies (market opportunities, case studies, early market experience)
- Education, training, lessons learned and best practices

Hydrogen and hydrogen blends behavior
- Release, dispersion,
- Ignition and auto-ignition,
- Combustion: deflagration, detonation, transitional effects

Physical effects , consequence analysis
- Thermal, overpressure, missile effects
- General human and environmental effects

Incidents, accidents and near misses

Hydrogen effects on materials and components
- Embrittlement
- Permeation/blistering

Safety of energy storage
- H2 solid-storage materials
- High pressure, liquid and cryogenic tanks
- Batteries

Risk management
- Mitigation (active, passive, sensors, safety distances)
- Risk assessment (cost-benefit analysis, safety perception, acceptance and harm criteria, uncertainties, decision making)
- Risk-informed safety engineering
- Insurance experience and perspectives

Fuel cells related safety issues

CONTRIBUTED PAPERS

Conference attendees who wish to present a paper are required to submit a short abstract (100 words). When submitting the abstract/paper, authors can express a preference for the presenting their work in an oral session or in the poster session or no preference. Authors whose abstract has been accepted will be asked to submit a full paper which will be peer-reviewed. The evaluation will be forwarded to the Authors by e-mail. All accepted papers (oral and poster) will be published with exactly the same format in the proceedings of the conference. Abstract submission instructions are available on the Conference website: **www.ICHS2013.com**.

Key deadlines for contributed papers are detailed below.

- Conference website open for abstracts submission: **July 1, 2012**
- Abstracts deadline: **December 31, 2012**
- Abstracts acceptance notification: **January 31, 2013**
- Full papers submission: **March 31, 2013**
- Paper acceptance notification: **June 4, 2013**
- Submission of papers final versions and payment of conference fees: **July 1, 2013**
- ICHS Conference: September **9-11, 2013**

CONFERENCE LANGUAGE

The conference language is English. No translation will be provided.

REGISTRATION / INFORMATION FORM

Registration will be accepted only in electronic form on the conference website.
Website: **www.ICHS2013.com**.

Conference Location

European Commission
Charlemagne Building
170, Rue de la Loi - 1049 Bruxelles

Conference Info

For more information, contact:
Dania Del Corso
email: ichs@hysafe.org

Conference Website: **www.ICHS2013.com**
(Available July 1, 2012)

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