

ICHS 2011 International Conference on Hydrogen Safety

September 12-14, 2011
San Francisco, California-USA

ICHS 2011 CONFERENCE – SCOPE

The 4th International Conference on Hydrogen Safety (ICHS 2011) will be held in San Francisco, California on September 12-14, 2011 under the auspices of the International Association for Hydrogen Safety (IA-HySafe). The conference will be hosted by Sandia National Laboratories and will improve public awareness and trust in hydrogen technologies by communicating a better understanding of both the hazards and risks associated with hydrogen and their management. Since ICHS 2011 will focus on safety issues and measures to encourage more extensive use of hydrogen-based technologies, its contents will be different from other hydrogen conferences.

As we enter the second decade of the 21st century, ICHS 2011 will focus on the improvement, knowledge, and understanding of hydrogen safety to overcome barriers to the wide spread use of hydrogen as an energy carrier. Therefore, this conference seeks papers focused on the following three major themes 1) International Progress on Enabling Opportunities, 2) Latest Advances in Hydrogen Safety R&D and 3) Risk Management of Hydrogen Technologies. All contributions to be included in ICHS 2011 will be evaluated exclusively in the light of their scientific content and relevance to hydrogen safety.

ICHS 2011 CONFERENCE – STRUCTURE

ICHS 2011 will include thematic plenary sessions, topical lectures, and parallel oral and poster sessions of contributed papers. Each day, the Conference will start with a plenary session on themes that are particularly relevant for the safe and widespread hydrogen use in society. The conference seeks to enable the near term introduction of hydrogen technologies in the market place.

With the endorsement of:



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ICHS 2011 THEMES AND TOPICS

Theme 1: International Progress on Enabling Opportunities

- Removing commercialization barriers
 - Knowledge gaps (R&D, Engineering)
 - Regulations, Codes & Standards (RC&S)
 - Education, safety learning, training
 - Success stories
- Deploying technologies (market opportunities)
- Early market experience
- Global collaboration

Theme 2: Latest Advances in Hydrogen Safety R&D – Experiments, modeling and validation

- Hydrogen and hydrogen blends behavior (release, dispersion, ignition and auto-ignition, combustion: deflagration, detonation, transitional effects, etc.)
- Physical effects (thermal, overpressure, missile effects, etc.)
- Impacts on humans and the environment
- Structural materials (e.g., hydrogen embrittlement)
- Storage materials (e.g., hydrogen uptake and release)
- Production, distribution, and utilization (Systems engineering)
- Sensors
- Mitigation (active, passive)

Theme 3: Risk Management of Hydrogen Technologies

- Risk-informed safety engineering
 - Incorporation into RC&S
 - Methods to reduce safety distances
- Case studies on the safety aspect of operations: incidents and near misses including human behavior, permitting, component and system design,
- Risk and safety perception
- Risk acceptance and harm criteria
- Risk assessment uncertainty
- Risk reduction and cost-benefit analysis
- Insurance experience and perspectives

www.ICHS2011.com

CONTRIBUTED PAPERS

Conference attendees who wish to present a paper are required to submit a short abstract (100 words). 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 or poster) will be published in the proceedings of the conference. Submission instructions will be available on the Conference website Sept.1, 2010:

www.ICHS2011.com

Key deadlines for contributed papers are detailed below.

- Conference website open to accept abstracts: **September 1st, 2010**
- Abstracts deadline: **December 31st, 2010**
- Abstracts acceptance notification: **January 31st, 2011**
- Full papers submission: **March 31st, 2011**
- Paper acceptance notification: **June 1st, 2011**
- Submission of papers final versions and payment of conference fees: **July 1st, 2011**
- ICHS 2011 Conference: **September 12-14, 2011**

Hyatt at Fisherman's Wharf

555 North Point Street

San Francisco, California, USA 94133

Tel: +1 415 563 1234

Fax: +1 415 486 4444

<http://fishermanswharf.hyatt.com>



CONFERENCE INFO

www.ICHS2011.com

*Website Not Available until September 1, 2010

For more information, please contact:
Lynde Farhat: lfarhat@sandia.gov

CONFERENCE LANGUAGE

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

