

Pre-Registration

...please fax back to:

+49 (0) 201.172.1779

Yes, I am interested in participating as a

- Speaker
(deadline for abstracts: September 30, 2005,
200 words, identify conference topics,
send by e-mail to contact@H2CONGRESS.de)
- Participant
- Sponsor
- Exhibitor
- Yes, I am interested in getting further information
about the conference

Name

Department

Company or Institution

Address

ZIP Postal Code, City

Country

Phone

Fax

E-Mail



Date:

February 15 – 16, 2006

Time:

Wednesday 9 a.m. to 6 p.m.
Thursday 9 a.m. to 5 p.m.

Place:

Messe Essen
Fair Hall 1 and CCE West
Norbertstraße, Essen
North Rhine-Westphalia, Germany

Conference Organisation:

Senior Chairman:

Carl-Jochen Winter,
International Association for Hydrogen Energy

Conference:

Bernd Höhle,lein,
Kompetenznetzwerk Brennstoffzelle und Wasserstoff, NRW

Johannes Töpler,
Deutscher Wasserstoff- und Brennstoffzellen-Verband

Jürgen Garcke,
Weiterbildungszentrum Ulm

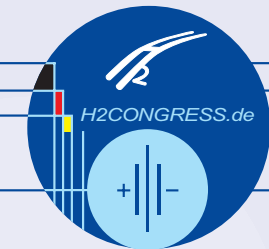
Organisation:

Frank-Michael Baumann,
Landesinitiative Zukunftsenergien NRW

Conference Address:

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Third International German Hydrogen Energy Congress 2006



February 15 – 16, 2006
Essen/Germany

Preliminary Information
and Call for Papers

www.H2CONGRESS.de



Third International German Hydrogen Energy Congress 2006

Conference Topics

Based on the European commitment of the TECHNOLOGY PLATFORM and the international Commitment of the INTERNATIONAL PARTNERSHIP FOR HYDROGEN ENERGY as well as the experience and progress achieved by the year 2006 including first results from the European sixth framework program and national/regional initiatives, the third International German Hydrogen Energy Congress 2006 in Essen is planned to evaluate improvements and to answer questions with regard to

- identifying potential technical barriers
- solving technological problems
- developing innovative devices for hydrogen supply and usage with fuel cells
- initiating the transition towards the hydrogen-oriented energy economy
- defining the political and social framework
- finding niches and early markets
- analysing socio-economic aspects
- motivating stakeholders, and coordinating worldwide hydrogen energy activities.

Members of scientific institutions, industry, business and public institutions are invited to submit papers on the following topics:

1. Hydrogen production technologies

- 1.1 Hydrogen from fossil fuels with CO₂ management
- 1.2 Hydrogen from biomass
- 1.3 Water electrolysis
- 1.4 Other processes (photo-biological, thermo-chemical)

2. Hydrogen storage and distribution

- 2.1 Storage developments
- 2.2 Filling and fuelling stations
- 2.3 Distribution networks

3. Stationary applications

- 3.1 Low temperature fuel cells
- 3.2 High temperature fuel cells
- 3.3 Systems components
- 3.4 Material research



4. Mobile applications

- 4.1 FC powered vehicles
- 4.2 ICE powered vehicles
- 4.3 On-Board auxiliary power units

5. Small portable applications

- 5.1 PEFC or DMFC applications
- 5.2 Systems components and integration

6. Strategic and socio-economic analyses

- 6.1 Assessment of technologies and hydrogen supply
- 6.2 Market actions, market diffusion mechanisms, financing
- 6.3 Bridging technologies
- 6.4 Education and social acceptance

7. Cross-cutting topics

- 7.1 Early and niche markets
- 7.2 Safety standards and regulations
- 7.3 Policy frameworks
- 7.4 Coordination and networking

8. International, national and regional initiatives and cooperations



Conference Horizon

The Hydrogen-Oriented Energy Economy:

Why, When, and How Much Hydrogen?

Strategic Challenges

Energy sustainability as a basis for better quality of life can be accomplished by:

- providing CO₂-lean energy carriers at affordable prices,
- ensuring the security of energy supply,
- establishing hydrogen as an energy hub, complementing electric power – both made out of a variety of primary energies,
- bridging the gap between research / demonstration / early markets and mass market introduction of hydrogen energy and fuel cells from 2010 onwards,
- intensifying the use of hydrogen in future energy supply systems,
- gathering operating experience in order to improve the systems involved,

- gaining acceptance for new energy systems
- performing systems analyses and assessments guiding the transition, and
- securing hydrogen energy safety through legally binding international codes and standards.

Market Introduction Tasks

In addition to the technology progress achieved by R&D, major market introduction tasks are influenced by a number of parameters:

- identifying customer requirements ,
- identifying investment requirements,
- creating incentives for motivating suppliers, users, industrial companies, and politics,
- shaping the transition towards a hydrogen-oriented energy economy in terms of technology requirements, benefits, investors and costs,
- gaining the commitment in the transition process of all major private and public stakeholders,
- clarifying intellectual property rights and human resources,
- introducing regulatory matters and legal issues,
- building market introduction clusters via coordination and networking, and
- performing technological benchmarking compared with conventional technologies.

The Third International German Hydrogen Energy Congress 2006 in Essen will include:

- Plenary lectures
- Parallel sessions
- Poster display
- Technical tours
- Tutorials

