

ACADEMIA  
ROMÂNĂ



Encouraged by: **The European Commission**

## EUROPEAN CONFERENCE

on

**APPLICATION, INTEGRATION, CONTROL,  
MODELLING, TESTING, and INTELLIGENT CONTROL  
and INTELLIGENT MODELLING, OF  
FUEL CELLS and H<sub>2</sub> APPLICATIONS and  
THEIR ECONOMIC / ENVIRONMENT  
CONSEQUENCES:**

# H<sub>2</sub> FUEL CELLS MILLENNIUM CONVERGENCE

September 21, 22, 2007, Bucharest, ROMANIA,  
ACADEMIA ROMÂNĂ, AULA MAGNA, calea Victoriei 125

ACADEMIA ROMÂNĂ, and IPA SA, Bucharest.

Founded, or organized or encouraged, or in part supported by

**ROMANIAN  
ACADEMY**

**HFP**

**IPA SA**

**EUROPEAN HYDROGEN  
& FC PLATFORM**

**RESEARCH ENTITY**

Calea Victoriei 125, Bucharest

[www.academiaromana.ro](http://www.academiaromana.ro)

[www.hfpeurope.org](http://www.hfpeurope.org)

Calea Floreasca 169, Bucharest

[www.ipa.ro](http://www.ipa.ro)

supported by

**MED-ANCS**

**MINISTRY OF EDUCATION and RESEARCH, ROMANIA**

achieved also with the participation of the

**EUROPEAN HYDROGEN ASSOCIATION.**

**The Institute for Energy Research - Fuel Cells, Forschungszentrum Jülich, Germany,**

**ASE**

ACADEMY for ECONOMIC STUDIES

[www.acad.ro](http://www.acad.ro)

**ICI**

NATIONAL INSTITUTE FOR R&D IN INFORMATICS

[www.ici.ro](http://www.ici.ro)

**POLITEHNICA UNIVERSITY**

UPB, Bucharest

**ICSI Research Institute,**

Râmnicu Vâlcea

**ECOLOGY UNIVERSITY**

UE-Bucharest

and with the encouragements and participation of:

- ROMANIAN ACADEMY,
- HFP – European Hydrogen and Fuel Cells Platform, Europe,
- MED-ANCS, MINISTRY OF EDUCATION and RESEARCH, ROMANIA,
- EUROPEAN HYDROGEN ASSOCIATION
- The INSTITUTE FOR ENERGY RESEARCH - FUEL CELLS, Forschungszentrum Jülich, Germany,
- IPA SA, Bucharest,
- ICSI, Râmnicu Vâlcea, and Hydrogen Platform from ICSI Râmnicu Vâlcea,
- ICEMENERG, Bucharest,

- ICI, Bucharest,
- Faculty of Electronics and IT&C Technology of UNIVERSITY “POLITEHNICA “ Bucharest,
- Faculty of Automation Engineering & Computers of UNIVERSITY “POLITEHNICA” Bucharest,
- Faculty of Energy of of UNIVERSITY “POLITEHNICA “ Bucharest,
- Ecology University, Bucharest,
- University Ovidiu, Constanta,
- ICPE, Bucharest,
- ICPE – Advanced Researches, Bucharest
- Chamber of Commerce, Industry and Agriculture, Giurgiu,
- and many initiatives and projects. The creation of Consortia and Projects **BROKERAGES.** The Project H2FC Integrator.

PROPOSED ORGANIZING COMMITTEE:

**FIRST HONORIFIC CONFERENCE CHAIRS**

**Detlef STOLTEN**

Univ. Prof. Dr. ,  
Director of the Institute  
for Energy Research-Fuel Cells.  
Jülich, Germany

**Florin FILIP**

Vice-President of Romanian Academy,  
  
**Marieke REIJALT**  
Executive Director , European Hydrogen Association

**Florian UDRESCU**

Principal Scientist, General Manager IPA SA  
  
**John F. ELTER,**  
PhD, CTO, PlugPower, USA

**HONORIFIC CONFERENCE CHAIRS:**

**Gleb DRĂGAN**  
Academician, Romanian Academy

**Wolfgang WINKLER,**  
University Professor Dr., Hamburg University, Germany

**Ioan DUMITRACHE,**  
Univ. Professor Dr. , Member Corresp. of Romanian Academy

**Cristian PREDESCU,**  
Univ. Prof. Dr. Ing. , Politehnica University Bucharest

**Rosalie ZOBEL , Ph.D**  
Director of the IST Programme. European Commission

**Mihai CARAMIHAI,** First Research Scientist,  
Univ. Professor Dr. Ing. , POLITEHNICA University Bucharest

**Ulrich SCHMIDTCHEN**  
German Hydrogen and Fuel Cell Association (DWW)

**Silviu Dorian CHELARU,**  
IPA SA, Electrolyzers Trends

**Prof. Dr. Fiz. Wilhelm KAPPEL**  
Director General, ICPE, Advanced Researches

**Paul PENCIOIU,**  
Principal Research Scientist,  
Scientific Director of ICPE,

**Mariana ILIESCU**  
Principal Research Scientist,  
ICSI Râmnicu Vâlcea

**Ing. Elena ENESCU**  
Vice -Director , ICPE Advanced Researches

**Dan Alexandru STOICHESCU**  
Univ. Professor Dr. , UPB, Bucharest

**Eden MAMUT,**  
Univ. Prof. Dr. , Ovidiu University Constanța

**Dan TEODOREANU,**  
Ph.D., Principal Research Scientist , ICPE, Bucharest,

**Mihai CULCER,**  
Ph.D. , Principal Research Scientist,  
ICSI Râmnicu Vâlcea

SCIENTIFIC CHAIR

Gabriel VLADUT, Principal Research Scientist, SC IPA SA

**CONFERENCE FOUNDER and CHAIR:**

**Gheorghe Mincu SÂNDULESCU,**  
University Prof., Dr. Eng., First Research Scientist, IPA SA , Bucharest,  
Director for Advanced Researches,  
Member Corresp. of the European Academy of Sciences,

**HONORIFIC CONFERENCE CHAIRS:**

**Ecaterina ANDRONESCU**  
Univ. Prof. Dr. Ing. UPB Bucharest

**Ion Gh. ROSCA, Univ. Prof. Dr.,**  
RECTOR of ASE, Bucharest

**Anton ANTON,**  
University Professor Dr. Eng., MED-ANCS, Romania

**Stephan PASCALL**  
Adviser, European Commission

**Mircea DUȚU**  
Univ. Prof. Dr, RECTOR of UE-B, Bucharest,

**Dumitru MIRON, University Prof.. Dr. ,**  
ASE, Academy of Economic Studies

**Ioan ȘTEFĂNESCU**  
University Professor Dr.  
Director of ICSI Râmnicu Vâlcea

**Mariana BISTRAN**  
Principal Research Scientist, IPA SA, Conference Co-Fonder

**Vasile STANCIU,**  
Ph. D., Principal Research Scientist,  
ICSI Râmnicu Vâlcea

**Dr. -Ing. Rolf BLATTNER,**  
Forschungszentrum Karlsruhe GmbH

**Peter LOFFLER**  
EU Commission, IEEA

**Camelia CAMAȘOIU**  
Univ. Professor Dr. , Prorector of UE-B

**Radu DOBRESCU, Univ. Prof. Dr. Eng.**  
POLITEHNICA University Bucharest

**Ciprian ALEXANDRU**  
Teaching Staff, UE-B, Bucharest

**Jochen STRAUB**  
Ballard Inc. Canada

**Iulia MIHAIL,**  
Director, MED-ANCS, Romania

ORGANIZATORIC CHAIR

Sorin BABAN , SC IPA SA

**CONFERENCE FOUNDER and CHAIR:**

**Florin FILIP,**  
Vice-president  
**ROMANIAN ACADEMY**

## CONFERENCE GOALS

- To provide a forum for the presentation, discussion, dissemination and generation of new and favourable ideas in the fields of the  
**APPLICATION, INTEGRATION, CONTROL, MODELLING, TESTING  
and  
INTELLIGENT CONTROL and INTELLIGENT MODELLING  
OF THE FUEL CELLS AND OF THE H2 APPLICATIONS.**
- To add steps in advance in the fields of hydrogen and fuel cells researches, studies, developments and successful integration,
- To add scientific contributions in the speeding the accomplishment of successes in above, very important scientific and technical fields
- To contribute at the European sustainable growing of the fuel cells and H2 applications and developments,
- To encourage European Research, especially inside the frames of the European Commission, in the fields of the **APPLICATION, INTEGRATION, CONTROL, MODELLING, TESTING and INTELLIGENT CONTROL and INTELLIGENT MODELLING OF FUEL CELLS.**
- To contribute at the generation of the efficient consortia and proposals of projects, in the Conference's fields. To contribute at ERA activities and results in the Fuel cells applications and developments.
- To add contributions and the speeding of the implementation of the Hydrogen Economy.
- To add important influences at the dissemination, awareness creation and correct information of and responses from the stakeholders and end-users.

### Conference Language

*The official language of the event is English.*

### Conference Location

The conference will be held in Bucharest, the city that was mentioned, in the year 1459, in the official papers of Vlad Tepes Voivode (*named also Dracula*) and where the very important, country Voivode (*Voievod*) Dracula, was referred to as an efficient trade developer, a good commerce man and an interesting commercial rules analyst.

Bucharest is at *half distance between the Carpathians and the Black Sea*, and offers splendid sightseeing opportunities and climate. September is one of the most pleasant and beautiful months of the year in Bucharest.

### Conference Venue

Academia Română, AULA MAGNA, Calea Victoriei 125, Bucharest. Registration Desk at the entry of AULA MAGNA Hall.

### Important aspects and dates:

- Submission of Papers:      dead - line      1 September 2007

- **All received in due time and accepted papers will be automatically typed, in the preprints, without any obligations from the part of the Conference organizers,**
- **Papers should be sent by e-mail to: H2\_FC\_MILLEN\_CONV@ipa.ro**  
**Head: Monica Visu.**

### **Conference Proceedings:**

The Conference Proceedings will include, without any obligations from the organizers part, and without other information to the elaborators of papers, the accepted papers. Each paper is necessary to not surpass 10 pages (A4).

### **Registration fee**

**\* Registration: Euro 200 (free registration for students and teachers, based on relevant documents/ student card).**

- Transport to Bucharest and accommodation *are not included in the conference fee.* ,
- *The fee (referring only to paid registration), includes the possibilities of participation at the all sections and at scientific and at the social activities of the Conference, the bag with preprints and possible annexes, refreshments and entry at Meetings Cocktails.*

### **Preliminary Leaflet**

**[http://www.ipa.ro/H2\\_FUEL\\_CELLS\\_MILLENIUM\\_CONVERGENCE](http://www.ipa.ro/H2_FUEL_CELLS_MILLENIUM_CONVERGENCE)**

#### **Notes:**

- 1.The firms symbols and names, for instance Microsoft ® , are object of registration of the respective firms or entities.
2. The words combination: **H2\_FUEL\_CELLS\_MILENIUM\_CONVERGENCE** ... is object of registration of IPA SA Bucharest and of Romanian Academy.
3. The presentation of the symbols of EU Commission do not imply any obligations from the part of these entities, nor does involve any responsibility on their part.
- 4.The indicated projects, presented in this leaflet, are achieved with the support from the European Commission or of MEdC Romania.
5. The content of cited projects, or of materials, or of this leaflet does not necessarily reflect the position of the European Community, nor does involve any responsibility on their part, nor from the organisers part, nor from other part or entity. .

**Edited and printed by**

**IPA SA PUBLISHING HOUSE**

**of IPA SA Bucharest**