



30 June, 2008.

Dear Forum Participant

I take this opportunity to thank you for your participation in the inaugural **International Hydrogen and Fuel Cells Education Forum** an integral part of the 17th World Hydrogen Energy Conference, Brisbane, Australia (WHEC2008). The forum was held at the Southbank Institute of Technology, Brisbane, Australia (15-19 June, 2008) a gathering of 65 participants, including 40 secondary school students and 12 teachers from Australia, New Zealand and the United States. The forum was an outstanding success and provided students, in particular, with a memorable and rewarding educational experience.

The forum provided an ideal network opportunity for all participants with an interest in the development and refinement of hydrogen and fuel cell (H&FC) education programmes for implementation at the upper secondary school level. I hope that the forum series will stimulate greater focus and attention to the delivery of improved H&FC education initiatives and prompt greater collaboration and exchange between schools and government education departments from around the world.

The forum series was launched on the morning Monday 16 June, 2008 and was attended by representatives of the International Association for Hydrogen Energy (Prof. T. Nejat Veziroglu and Ayfer Veziroglu), the Australian Institute of Energy (Murray Meaton and Dr Andrew Dicks), the Government of Queensland (Robert McAllister and Michael Berry) and members of the WHEC2010 organising committee (Prof. Dr. Jurgen Garcke and Prof. Johannes Topler).

The forum was split into two parts; a series of lectures and workshops run over two days lead by MC, Dr Katrina Lyon, Murdoch University (Western Australia). Students engaged in 8 hours of practical activities and experiments coordinated by Brad Evans, Blue Cell Energy and volunteers from the University of Queensland. The forum featured the following lectures:

1. Hydrogen Production (delivered by Jeffrey Serfass, National Hydrogen Association)
2. Hydrogen Distribution and Storage (Dr Attilio Pigneri, Massey University)
3. H&FC Utilisation: Stationary Applications (Bob Rose, US Fuel Cell Council)
4. H&FC Utilisation: Mobile Applications – Part I (Prof. Dr. Jorge Wellnitz, University of Applied Science at Ingolstadt)
5. H&FC Education Professional Development (Luigi Bonadio, Luigi Bonadio & Associates)
6. H&FC Education Teaching Methods (Dr Katrina Lyon, Murdoch University)
7. Engineering Design (Luigi Bonadio, Luigi Bonadio & Associates)
8. H&FC Utilisation: Mobile Applications - Part II (Prof. Dr. Jorge Wellnitz, University of Applied Science at Ingolstadt)

These lectures provided a theoretical basis to assist students in their understanding of the relevant scientific fundamentals and the basic design and operation of H&FC technologies for emerging transport and power generation markets. Participants raised many questions and discussed core issues with our world-class presenters and engaged in some fruitful discussions.

As part of the teacher workshop, presentations covering school H&FC education initiatives were delivered by Claire Garnham, (Melbourne Grammar School), Dr. Antoine Durandet (All Saints Anglican School), Mary-Rose de Valladares (MRS Enterprises) and Laura Baumgartner (Robinswood High School). Teachers expressed and shared their views on lesson preparation and addressed key pedagogical issues for improved H&FC Education programme delivery.

Participants also i) engaged in a joint workshop with break-out sessions to consider and present their vision of the role of H&FC technologies in the year 2050, ii) featured in a children's television programme, iii) attended WHEC2008 technical sessions, iv) received a H&FC technology demonstration by Dr Claus Fischer at the WHEC2008 Heliocentris exhibition booth and v) visited other exhibition booths to gauge recent H&FC industry developments. On the final day of the forum, our New Zealand and the US guests visited the Australia Zoo and Caloundra Beach on the Sunshine Coast, Queensland.


The forum concept would not have been realised without the cooperation of many organisations including sponsors and their forum representatives, including; Dr Claus Fischer (Heliocentris), Dr David Brockway (CSIRO Energy Technology), Jennifer Gannon (Ergon Energy), Arno Evers (Arno Evers FAIR-PR) and Philippa Blunden (New Zealand Ministry of Economic Development). I also acknowledge the support of Christy Cooper (US Department of Energy), Dr Barbara Nagle (University of California – Berkeley), Angela Christie (Institution of Professional Engineers, New Zealand), Angela Gary (Southbank Institute of Technology), Michelle McGoff (Luigi Bonadio & Associates) and ICMS staff lead by Barrie Markey.

I had great pleasure in chairing the Student Awards Ceremony where the efforts of students, teachers, forum contributors and volunteers were acknowledged with the presentation of certificates, plaques and gifts. The student group communicated their learning experience during the ceremony. The Tapan Bose Award for Excellence in H&FC Education was awarded to Dr Antoine Durandet from the All Saints Anglican School (Gold Coast, Australia). The forum ended with a presentation on future initiatives delivered by Prof. Dr. Jurgen Garche who will be leading the next education forum at WHEC2010, in Germany.

All forum participants will receive a CD including forum participant contact details, powerpoint presentations, photographs, fact sheets and some other reference documents. I also extend my best wishes to all teachers in the further development and implementation of their H&FC education programmes. Please do not hesitate to contact me for any assistance.

On behalf of Dr Andrew Dicks, Chairman and the balance of the WHEC2008 Organising Committee of, I thank you for your time, commitment and efforts in making the inaugural forum a huge success.

Yours sincerely



Luigi Bonadio

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Secretary, 17th World Hydrogen Energy Conference
Principal and Senior Consultant, Luigi Bonadio & Associates



Participants at the forum launch: including in Front Row (L to R): Prof. Dr. Jurgen Garche, Brad Evans, Murray Meaton, Dr Andrew Dicks, Robert McAllister, Prof. T. Nejat Veziroglu, Dr Katrina Lyon and Luigi Bonadio.