



**COST ACTION MP1103 – FIRST SCIENTIFIC MEETING
ROME, 13-15 FEBRUARY 2012
ENEA, Lungotevere Thaon di Revel, 76, Rome**

PROGRAMME

Monday, February 13th

Plenary session

Chairman: Luca Pasquini

- 14:00 **Welcome Address**
Giovanni Lelli, ENEA Commissioner
- 14:10 **COST Action MP1103: “Nanostructured Materials for Solid State Hydrogen Storage”**
Amelia Montone, *ENEA, Italy*
- 14:30 **Current status and perspectives of hydrogen storage research**
Andreas Züttel, EMPA – Dubendorf, Switzerland
- 15:00 **Overview of North American activities on hydrogen storage**
Robert Varin, University of Waterloo, Canada
- 15:30 **Coffee Break**

Chairman: Andreas Züttel

- 16:00 **COST Action MP1004: “Pan-European Network on Hybrid Energy Storage Solutions” – Presentation and possible joint initiatives**
Dalik Sojref, WTTC Berlin, Germany
- 16:30 **Metal hydrides: a solution for intermediate and mass energy storage**
Daniel Fruchart, Institut Néel & McPhy Energy, France
- 17:00 **Fuel Cells and Hydrogen Initiatives in Europe**
Angelo Moreno, *ENEA, Italy*

Kick Off Meeting of Early Stage Researchers Think Tank

Chairman: Jasmina Grbovic Novakovic

- 17:30 Discussion among Early Stage Researchers involved in COST Action MP1103



Tuesday, February 14th

Working Groups' Kick Off Meetings

WG1: Synthesis of novel materials with optimized properties

Chairman: Fermin Cuevas

- 08:30 Fermin Cuevas: *Working group topics and organisation*
- 08:40 Michael Hirscher: *Short overview on porous and scaffold systems*
- 08:55 Yaroslav Filinchuk: *Porous borohydrides - the way towards hybrid hydrides*
- 09:10 Bernard Dam: *Metal hydride thin films as model systems to analyse the effect of interface energy, stress and nucleation on the (de-)hydrogenation process*
- 09:25 Kondo-Francois Aguey-Zinsou (or substitute): *Nanoparticles and core-shell structures*
- 09:40 Short presentations of Working Group Members with 3-5 slides (per institution including discussion - no more than 5 minutes each) about facilities and central activities/interests in synthesis techniques
- 10:50 Discussion:
- Task cross-links, new synthesis techniques & future needs
 - Road Map
- 11:15 ***Coffee Break***

WG2: High resolution and high sensitivity characterization

Chairman: Sara Bals

- 11:30 S. Bals: *Advanced microscopy for advanced materials*
- 11:45 M. Enachescu: *Scanning Polarization Force Microscopy*
- 12:00 A. Montone: *Microstructural evolution of MgH₂ during H₂ absorption-desorption cycles*
- 12:15 Short presentations of Working Group Members with 3-5 slides
M. Hirscher
A. Revesz
V. Paidar
D. Blanchard
- 12:30 Discussion and definition of tasks
- 13:00 ***Lunch offered by the Conference Organization***

- 14.30 B. Hauback: *Studies of complex hydrides with neutron and X-ray scattering at IFE*
- 14.45 L. Pasquini, T.R. Jensen: *Structure and Hydrogen Sorption in Mg-Pd Nanoparticles Studied by In-Situ X-ray Diffraction and Absorption*
- 15.00 Short presentations of Working Group Members with 3-5 slides
Y. Andersson
S. Heun
K.-F. Aguey-Zinsou
- 15.15 Discussion and definition of tasks
- 15:45 **Coffee break**

Parallel sessions WG3 – WG 4

WG 3: Characterization of hydrogen storage properties both at the laboratory level and at the scale of prototype tanks

Chairman: Martin Dornheim

- 16:00 Martin Dornheim: *Introductory remarks*
- 16:10 Pietro Moretto: *Results of Round Robin Tests performed in the frame of the European NessHy Project*
- 16:30 Short presentations of Working Group Members with 3-5 slides (per institution including discussion not more than 5 Minutes) about central activities/interests in the field, facilities and plans & needs
- 18:30 Discussion:
- Common interests & central focuses of activities
 - Road Map

WG4: Computational modeling of processes relevant to SSHS

Chairman: Tejs Vegge

- 16:00 Tejs Vegge: *Introductory remarks*
- 16:10 Short presentations by Working Group Members with 3-5 slides (per institution including discussion - no more than 7 minutes each) about central activities/interests in the field, facilities and plans & needs
- 18:00 Discussion:
- Computational methods and techniques
 - Resources and training initiatives
 - Coupling to experimental activities
 - Road map (selection of authors)



Wednesday, February 15th

Management Committee Meeting

Chairman: Amelia Montone

09:00 Discussion (agenda will be sent)

13:00 ***Lunch offered by the Conference Organization***

14:30 End of meeting

