



NIS Colloquium

Nanostructured Materials for H₂ Production and Purification

Torino, Venerdì 9 Marzo 2007

Dipartimento di Chimica I.F.M. – Aula Avogadro – Via Pietro Giuria 7

PROGRAMME

- 10.15-10.30 **Colloquium opening: Adriano Zecchina**
Chair 1: Gianmario Martra
- 10.30-11.15 **Maria Flytzani-Stephanopoulos** – Tufts University, Medford, Massachusetts, USA
Nanoscale gold-ceria catalysts for total removal of CO from reformat gas streams for fuel cell applications
- 11.15-12.00 **Gianfranco Pacchioni** – Università degli Studi Milano-Bicocca, Milano, Italy
Charge state of Au atoms and clusters supported on oxides from CO frequency shifts: confirmations and surprises
- 12.00-12.30 **Jan Kaspar** – Università degli Studi di Trieste, Trieste, Italy
Selective CO oxidation for H₂ clean-up
- 12.30-14.00 **Lunch**
Chair 2: Jan Kaspar
- 14.00-14.30 **Claudio Minero** – Università degli Studi di Torino – NIS Centre of Excellence, Torino, Italy
The role of charge separation and surface speciation for photocatalytic hydrogen production
- 14.30-15.00 **Siglinda Perathoner** – Università degli Studi di Messina, Messina, Italy
Catalysts and Devices for H₂ production by water photo-splitting
- 15.00-15.30 **Vito Specchia** – I Facoltà di Ingegneria, Politecnico di Torino, Torino, Italy
Catalytic materials for H₂ gas purification: from powdered to microstructured catalysts
- 15.30-16.00 Coffee break
Chair 3: Anna Chiorino
- 16.00-16.30 **Francesco Pinna** – Università Cà Foscari di Venezia, Venezia, Italy
Active sites determination in highly dispersed gold catalysts
- 16.30-16.50 **Maela Manzoli** – Università degli Studi di Torino – NIS Centre of Excellence, Torino, Italy
Gold clusters and nanoparticles on Au/doped-ceria catalysts for the preferential CO oxidation in H₂-rich gas mixtures
- 16.50-17.10 **Floriana Vindigni** – Università degli Studi di Torino – NIS Centre of Excellence, Torino, Italy
Characterisation of nanosized gold catalysts supported on mixed ceria-titania and ceria-zirconia oxides for the water gas shift reaction