



Nanostructured Interfaces and Surfaces

NIS Colloquium

Advances in CO₂ capture and reactivity with new materials

Torino, 15 Novembre 2013

Aula Magna – Dipartimento di Scienze della Vita e Biologia dei Sistemi

Via Accademia Albertina 13

Local organizers: V. Crocellà, G. Ricchiardi, B. Civalleri

PROGRAM

- 9.00 – 9.10** **Gabriele Ricchiardi** - NIS Università di Torino
Introduction to the Colloquium
- Chair: Fabrizio Cavani** - Università di Bologna
- 9.10 – 9.50** **Guido Saracco** - Politecnico di Torino
CO₂ as raw material in energy related processes
- 9.50 – 10.30** **Sofia Calero** - Universidad Pablo de Olavide, Seville
On the search of porous materials for CO₂ capture and separation using molecular simulations
- 10.30 – 11.00** *Coffee Break*
- 11.00 – 11.20** **Angiolina Comotti** - Università di Milano-Bicocca
Hybrid materials for CO₂ storage and purification
- 11.20 – 11.40** **Lorenzo Canti** - Università del Piemonte Orientale
CO₂ adsorption on PAF
- 11.40 – 12.00** **Giuseppe Milano** – Università di Salerno
Molecular simulations of CO₂ sorption in polymeric materials
- 12.00 – 12.20** **Jenny G. Vitillo** – Università degli Studi dell'Insubria
Enhancing CCS performances of microporous materials by basic oxide coating
- 12.20 – 12.40** **Giorgio Gatti** – Università del Piemonte Orientale
Porous Aromatic Framework materials with high CO₂ capacity capture: a preliminary study
- 12.40 – 13.00** **Jayashree Ethiraj** – NIS Università di Torino
CO₂ adsorption on MOFs
- Lunch*
- Chair: Alessandra Quadrelli** - Lyon (CPE)
- 14.30 – 15.05** **Antonella Angelini** – Università di Bari
Synthesis of organic carbonate from CO₂ and Urea
- 15.05 – 15.40** **Chloé Thieuleux** – Lyon (CPE)
Well-defined Nickel-silicide colloid for more efficient CO₂ dry reforming catalysts
- 15.40 – 16.00** **Fabrizio Cavani** – Università di Bologna
Catalytic synthesis and use of organic carbonates
- 16.00 – 16.30** *Coffee Break*
- 16.30 – 16.50** **Valentina Crocellà** – NIS Università di Torino
FTIR study of carbon dioxide and alcohols on porous materials: the role of alcoholate formation and stability
- 16.50 – 17.10** **Maria Botavina** – NIS Università di Torino
CO₂ as mild oxidant in selective oxidative dehydrogenation of light alkanes. The case of propane on Cr/SiO₂
- 17.10 – 17.30** **Barbara Onida** – Politecnico di Torino
Effects of silanols on the reactivity of -(CH₂)₃NH₂ groups with CO₂ in ordered mesoporous organosilicas
- 17.30 – 17.50** **Torstein Fjermestad** – NIS Università di Torino
Update PRIN: Modeling of CO₂ and alcohols on basic catalysts
- 17.50 – 18.00** **Conclusion**

Registration is requested: please send an e-mail to valentina.crocella@unito.it