

International Workshop on **CO₂ and Fluids in Nanoscience** International Center for Condensed Matter Physics (ICCM), University of Brasilia (UnB), Brasilia-DF, Brazil December 7-10 2010

The workshop will focus on physical phenomena in porous materials. The workshop is also aimed to MSc and PhD candidates in experimental and/or computational basic physics. The workshop is addressed to studies on how the adsorption/absorption rate of CO₂ and other greenhouse fluids depend on the flow properties, and how it is influenced by the physical processes caused by the presence of for example clay materials. The workshop will aim at discussing the combinations of simulations and theory. The experimental talks will focus on table-top type experiments, neutron- and synchrotron X-ray scattering, synchrotron X-ray imaging, electron microscopy and others. Topics of interest for submission include, but are not limited to: - CO₂ and Fluids in Nanoporous media and on Surfaces - nanomaterials for applications to environmental effects - CO₂ on porous media and surfaces - nanomaterials for environmental trapping and storage of green house fluids - adsorption on nanomaterials - simulation on environmental chemistry - complex fluids and flow and structures - materials for energy storage.

Invited speakers include (*confirmed):

- Ivar Giaver* (1973 Nobel Prize in Physics (Rensselaer Polytechnic Institute, Troy, NY, USA)
- Vladimir Alvarado* (University of Wyoming, USA)
- José Andrade (UFC, Brazil)
- Arnaldo Naves de Brito* (UnB, Brazil)
- Marcio da Silveira Carvalho (PUC-Rio, Brazil)
- Mario Engelsberg* (UFPE, Brazil)
- Eirik Grude Flekkøy (University Of Oslo, Norway)
- Kenneth D. Knudsen* (Inst. for Energy Technology - IFE, Norway)
- Yves Meheust* (Univ. Rennes France)
- João Batista Lopes Martins* (UnB, Brazil)
- Kleber Carlos Mundim* (UnB, Brazil)
- Knut Jørgen Måløy* (University Of Oslo, Norway)
- Fernando Oliveira* (UnB, Brazil)
- Paulo Sergio de Mello Vieira Rocha* (Petrobras, Brazil)
- Jean Schmittbuhl (Univ. Strasbourg France)
- Arne T. Skjeltorp* (Inst. for Energy Technology - IFE, Norway)
- Renaud Toussaint* (Univ. Strasbourg France)



This is not the final program, changes could be made.

Scientific committee:

- Jon Otto Fossum (Chair), NTNU/Norway
- João B. L. Martins, UnB/Brazil
- Geraldo José da Silva - UnB/Brazil
- Adriana Pereira Ibaldo, UnB/Brazil
- Kleber Carlos Mundim, UnB/Brazil
- Elton A. S. de Castro, UEG/Brazil
- José Alves Dias, UnB/Brazil
- Arnaldo Naves de Brito, UnB/Brazil
- Silvia Claudia Loureiro Dias, UnB/Brazil

Local committee:

- João B. L. Martins (Local Chair), UnB/Brazil
- José Alves Dias, UnB/Brazil
- Arnaldo Naves de Brito, UnB/Brazil
- Geraldo Magela e Silva, UnB/Brazil
- Silvia Claudia Loureiro Dias, UnB/Brazil
- Adriana Pereira Ibaldo, UnB/Brazil

Registration deadline is November 15, 2010
For further practical information, see: www.seedmol.unb.br/CO2