

**Subject: Workshop on Functionalization of Nanoporous Materials
for Energy and Environmental Applications**

The workshop on "Functionalization of Nanoporous Materials for Energy and Environmental Applications" will be held at Argonne National Laboratory on Friday May 7. The purpose of this workshop is to provide a means of communicating among participants our research in the area of nanoporous materials and in developing the full proposal for the Synthesis and Processing Center to BES-Materials Science.

We invite you to give a talk (25 minutes plus discussion) on your work in the area of nanoporous materials. Please send a title for your talk to Larry Curtiss (curtiss@anl.gov). A copy of the original preproposal is included with some figures added. This document will be sent out in a workshop invitation to other national labs.

The workshop will be scheduled from 8:30AM to 5:00 PM on Friday May 7th at the Argonne GuestHouse. Details on reserving lodging will be sent out in a few days.

We look forward to seeing you at the workshop.

Larry Curtiss(curtiss@anl.gov), Mike Pellin, and Hau Wang

Materials Science Division

Argonne National Laboratory

Dear CSP Laboratory Representatives,

Enclosed is the schedule for our CSP planning workshop for functionalized nanoporous materials to be held at Argonne on May 7.

Thank you for considering our white paper on this CSP topic. We are looking forward to an exciting workshop.

Sincerely,

Larry Curtiss, Hau Wang, Michael Pellin

DOE CESP Proposal Planning Workshop: Functionalization of Nanoporous Materials

May 7, 2004 Argonne National Laboratory Guest House Conference Room A

Workshop Schedule

- 8:00-8:30 Continental Breakfast
- 8:30-8:40 Welcome
George Crabtree, Division Director, Material Science Division, ANL
- 8:40-8:50 Welcome
Eric Issacs, Division Director, Center for Nanoscale Materials, ANL
- 8:45-9:05 Overview of the Proposed Center of Excellence for Synthesis and Processing
Larry Curtiss ANL

Discussion Leader: Hau Wang

- 9:05 - 9:30 Controlled Synthesis of Tailored Nanopores for Catalysis
Sheng Dai ORNL
- 9:30- 9:55 Functionalization of Nanoporous Materials by Atomic Layer Deposition
Michael Pellin ANL
- 9:55-10:20 Hierarchical Porous Material by Self Assembly
Jun Liu SNL
- 10:20-10:45 Break
- 10:45-11:10 Modern Approaches to Synthesis of Catalytic Materials
Harold Kung NWU
- 10:10- 11:35 Nanoporous Materials for High Energy Density Science
Alex Hamsa LLNL
- 11:35-12:00 Can We Synthesize Ultra-Uniform Catalysts?
Peter Stair NWU
- 12:00-1:15 Lunch (Argonne Guest House Restaurant)

Discussion Leader: Michael Pellin

- 1:15- 1:40 Highly Ordered Nanoporous Membranes for Template Synthesis
H. Wang ANL
- 1:40-2:05 Effect of Titanium Substitution on the Structure of V_2O_5 Catalysts for Propane Ammonoxidation
Gerry Zajac BP
- 2:05-2:30 Cellulose Template Synthesis of Nanostructured Materials
Yongsoo Shin PNNL
- 2:30-2:45 Break

- 2:45- 3:10 Simulation of Self Assembly of Optically Active Layers
Frans Trouw LANL
- 3:10-3:45 Computational Studies of Catalytic Reaction Mechanisms in Nanoporous Materials
Larry Curtiss ANL
- 3:45-5:00 Proposal Planning Discussion (Reviewers Comments, Theme, Outline of
Proposal, Management, Written Input, Schedule)
- 6:00 Dinner