

CCMC IAB MEETING — 19-21 March 2002

Agenda

Tuesday, 19 March — Optional LANL Facilities Tour

Wednesday, 20 March 2002 — Technical Reviews and Discussions

7:30 AM Registration and Continental Breakfast

8:00 AM Welcome — Abhaya Datye

8:15 AM UNM Research Welcome — John McIver

8:20 AM Evaluator Remarks — James Buckmelter

8:25 AM NSF Remarks — Alex Schwarzkopf

Vapor Phase Synthesis

8:30 AM Synthesis of Mesoporous Oxide Powders — Abhaya Datye

8:50 AM Aerosol Synthesis of Complex Oxide Powders — Tim Ward

9:10 AM Plasma Torch Production of Novel Materials — Jonathan Phillips

Structural Ceramics

9:30 AM Overview of Structural Ceramics — Dale Niesz

9:50 AM Break

Sol-Gel Science and Technology

10:10 AM Understanding Self-Assembly of Porous and Composite Nanostructures — C Jeffrey Brinker, Frank van Swol,

10:35 AM Synthesis and Properties of Porous Films and Particles — C Jeffrey Brinker, Hongyou Fan,

10:55 AM Nanocomposite Materials — C Jeffrey Brinker, Nanguo Liu, Yi Yang

New Project Proposal

11:15 AM Etching Low K Films — Sang Han

11:25 AM Two Minute Student Poster Presentations

12:15 PM Lunch and Informal Discussions

Powder Processing

- 1:00 PM Overview of Powder Processing Thrust Area – Dale Niesz
- 1:20 PM Distortions from Anisotropic Sintering of Ceramic Parts: Observations, Models, and Method of Avoiding – W. Roger Cannon

Electronic Ceramics

Powder Synthesis and Polymer Composites

- 1:40 PM Aerosol Assisted Synthesis of Spherical Morphology BN – Bob Paine
- 2:00 PM High Solids Loadings of AlN in Polymers – W. Roger Cannon
- 2:20 PM Atomic Layer Deposition on Particles: Surface Chemistry and Engineering – Steve George
- 2:40 PM Atomic Layer Deposition (ALD) Engineering Development – Al Weimer
- 3:00 PM Conformal Plasma Coating of Particles for Polymer Composites – Don Weinkauf
- 3:20 PM Break

Multifunctional and Electroactive Materials

- 3:40 PM Integration of Ordered nanoporous Anodic Aluminum Oxide into Microfabrication Processes — Gabriel Lopez
- 4:00 PM Non-Platinum Electrocatalysts for Direct Methanol Fuel Cells — Plamen Atanassov
- 4:20 PM Amorphous Electroactive Materials – Xu
- 5:00 PM Reception and Poster Judging
- 7:00 PM Dinner

Thursday, 21 March — IAB Business Meeting — Faculty and IAB Members

- 8:00 AM Continental Breakfast
- 8:30 PM Technical Direction Discussion
- 10:00 PM Strategic Planning Session
- 11:30 PM Executive Session — IAB Members Only
- 12:00 PM Adjourn