

CENTER FOR DIELECTRIC STUDIES
Fall 2002 Meeting
University of Missouri-Rolla
University Center – East (UCE)
October 30–31, 2002

Preliminary Program

Wednesday, October 30, 2002

- 7:30-8:00 AM Registration and Continental Breakfast – Miner Lounge (UCE)
- 8:00-8:15 Welcome to UMR – Centennial Hall (UCE)
 H. Anderson / W. Huebner (UMR)
- 8:15–8:30 Status of CDS
 C. Randall (PSU)
- 8:30 Session I – MLCCs and Dielectrics in Extreme Environments (*Michael Lanagan*)**
- 8:30-9:00 Capacitor Requirements for the Next Generation Computers
 L. Mosley (Intel)
- 9:00-9:30 Ceramic Capacitors in High-Speed Digital and Power Electronics
 Applications - Technology Challenges
 J.L. Drewniak (UMR)
- 9:30-10:00 High-Temperature Dielectric Materials and Characterization
 C. Randall (PSU)
- 10:00-10:15 Break
- 10:15–10:45 The Importance of Ceramics in Pulsed Power Applications
 E. Schamiloglu (UNM)
- 10:45–11:15 Mitigation of High-Frequency EMI in Power Electronic Based Propulsion
 Drives
 S.D. Pekarek (UMR)

11:15–11:45 Comparative Investigation on Capacitor Performance for Inverter Technology
M. Lanagan (PSU)

11:45–12:15 Pulsed Power Applications of Dielectric Materials
W.C. Nunnally (UMC)

12:15–1:30 Lunch

1:30 Session II – LTCC and Integrated Passive Components (*Harlan Anderson*)

1:30–2:00 Interfacial Interaction in Multilayer Inhomogeneous Materials Systems
A. Shaikh (Ferro-Vista)

2:00–2:30 Chemical Solution Deposition of High Dielectric Constant Thin Films
R.W. Schwartz (UMR)

2:30–3:00 In-Via Embedded Components Made by Electro-Phoretic Deposition
G. Barak (CEREL)

3:00–3:30 Break

3:30–4:00 The Enabling Benefits of a Self Constrained LTCC Tape System
J.T. Hochheimer (Hereaus)

4:00–4:30 Glass Research Programs at UMR: Dielectric Spectroscopy, Glass/Metal Interactions
R. Brow (UMR)

4:30–5:00 Impedance Spectroscopy of Dielectric and Fuel Cell Materials
H. Anderson and C. Randall (UMR-PSU)

5:00 Poster Session (Refreshments) – Miner Lounge (UCE)

7:00 Dinner – Zeno’s Motel & Steakhouse

Thursday, October 31, 2002

7:30–8:00 AM Continental Breakfast

8:00 Session III – Electroceramic Powder Processing (*Fatih Dogan*)

8:30–9:00 Recent Developments in Dielectric Powder Synthesis and Material Properties
F. Dogan (UMR)

9:00–9:30 Synthesis of Metal Nanowires and Metal Cluster-Aerogel Nanocomposites
with Photolysis and Wet Chemistry Techniques
M. Bertino (UMR)

9:30–10:00 Electrochemical Processing of Films
J. A. Switzer (UMR)

10:00–10:30 Break

10:30 Industrial Advisory Board Meeting (Members only) – Mark Twain Room

