AGENDA

Wednesday, June 28, 2023:

7:30 AM – 5:00 PM Registration (Mezzanine)
7:30 AM – 8:30 AM Breakfast (Hannover II & III)

8:30 AM – MEETING BEGINS (Oak Forest A)

8:30 – 9:00 AM Welcome and Introductions Greg Parsons/ Susan Trolier-McKinstry

9:00 AM – 12:15 PM SESSION I (Oak Forest A)

9:00 – 9:20 I-1 Determining Relationship between Burn-in Conditions and Wear-out in BME X7R MLCCs CDP_2022_3 (Randall) Pedram Yousefian (Penn State)
9:20 – 9:25 Q&A for I-1
9:45 – 9:50 Q&A for I-2
9:50 – 10:10 I-3 Defect Kinetics in Lead Free Ferroelectrics CDP_2021_3 (Randall) Clive Randall (Penn State)
10:10 – 10:15 Q&A for I-3
10:15 – 10:35 Coffee break (Mezzanine)
10:35 – 10:55 I-4 Thermal Characterization CDP_2021_5 (Choi/Trolier-McKinstry) Kyuhwe Kang (Penn State)
10:55 – 11:00 Q&A for I-4
11:00 – 11:20 I-5 Acoustic Characterization of Damage in Multilayer Ceramic Capacitors CDP_2022_4 (Arguelles/Trolier-McKinstry) Haley Jones (Penn State)
11:20 – 11:25 Q&A for I-5
11:25 – 11:45 I-6 Designing Highly Reliable Dielectrics with Cold Sintering CDP_2022_2 (Randall) Jake DeChiara (Penn State)
11:45 – 11:50 Q&A for I-6
11:50 – 12:10 I-7 Through Thickness Variations of Degradation Phenomena in Piezoelectric and Ferroelectric Ceramics CDP_2022_8 (Balke/Jones) Huimin Qiao (NC State)
12:10 – 12:15  Q&A for I-7
12:15 – 1:30  Lunch (Hannover II & III)

1:30 – 5:00 PM  SESSION II (Oak Forest A)

1:30 – 1:50  II-1 Advancing Solid State Reaction Science through In-Situ Diffraction and Processing Control CDP_2022_5 (Jones/Forrester)  Jacob Jones (NC State)

1:50 – 1:55  Q&A for II-1

1:55 – 2:15  II-2 Designing Novel Dielectric Composites with High Thermal Conductivity CDP_2021_4 (Randall/Foley)  Javier Mena Garcia (Penn State)

2:15 – 2:20  Q&A for II-2

2:20 – 2:40  II-3 Dielectric Response of Polymers at High Electric Field CDP_2022_7 (Lanagan/Meddeb)  Amira Meddeb (Penn State)

2:40 – 2:45  Q&A for II-3

2:45 – 3:10  Coffee Break (Mezzanine)

3:10 – 3:30  II-4 Beyond 5G – Electromagnetic Property Characterization at THz Frequencies CDP_2022_6 (Lanagan)  Rocio Rodriguez (Penn State)

3:30 – 3:35  Q&A for II-4

3:35 – 3:55  II-5 Ferroelectric and Piezoelectric Opportunities CDP_2022_9 (Maria)  Jon-Paul Maria (Penn State)

3:55 – 4:00  Q&A for II-5

4:00 – 4:20  II-6 Wet Oxide Thin Film Formation Technology and its Applications  Toshihiro Doi (Mitsubishi Materials Corp)

4:20 – 4:25  Q&A for II-6

4:25 – 4:55  II-7 Electromechanical Reliability in PiezoMEMS CDP_2021_1 (Akkopru-Akgun/Trolier-McKinstry)  Betul Akkopru-Akgun (Penn State)

4:55 – 5:00  Q&A for II-7

5:00 – 7:00  Poster Session/Reception  (Hannover I)

Evening  Dinner on your own
Thursday, June 29, 2023:

8:00 AM - 5:00 PM  Registration  
(Mezzanine)

8:00 – 9:20 AM  Breakfast (Regular meeting)  
(Hannover II)

8:00 – 9:20 AM  Student/CDP Member Breakfast  
(Hannover III)

9:20 – 11:50 AM  SESSION III (Oak Forest A)

9:20 – 9:25  Welcome  
Greg Parsons

9:25 – 9:45  III-1  Effective Moisture Protection for Bulk and Thin Film Piezoelectric Actuators  
CDP_2022_1 (Trolier-Mckinstry)  
Anthony Diaz-Huemme  
(Penn State)

9:45 – 9:50  Q&A for III-1

9:50 – 10:10  III-2  Pb and Bi Free, High Permittivity Quasi-linear Dielectrics for Giant Energy Density Capacitors  
Ian Reaney  
(University of Sheffield)

10:10 – 10:15  Q&A for III-2

10:15 – 10:35  III-3  Wide-Band Tunable Microwave Absorbing/Sheilding Ceramic Composites for High-Temperature Applications  
Cheryl Xu  
(NC State)

10:35 – 10:40  Q&A for III-3

10:40 – 11:00  Coffee break (Mezzanine)

11:00 – 11:20  III-4  Complex Dielectrics by Atomic Layer Deposition  
CDP_2022_10 (Parsons/Jones)  
Nick Carroll  
(NC State)

11:20 – 11:25  Q&A for III-4

11:25 – 11:45  III-5  The Price of Science  
Jon-Paul Maria  
(Penn State)

11:45 – 11:50  Q&A for III-5

11:50  CLOSE OF TECHNICAL MEETING

11:50 AM – 1:00 PM  Lunch (Regular meeting)  
Hannover III

11:50 AM – 1:00 PM  IAB Lunch  
CDP member company private lunch meeting)  
Hannover II

Industrial Advisory Board Meeting  
(Industry Members and CDP Faculty Only)

1:00 – 3:30 PM  Closed IAB meeting  
Governor’s Ballroom