

# NMAVS Symposium Schedule of Events

## Gran Quivera Meeting Room

**TUESDAY, JUNE 4, 2019**

8:00 **UPLOAD OF MORNING PRESENTATIONS**

8:15 **SEAN SMITH**, Welcome

### **SESSION 1: ANALYTICAL AND CHARACTERIZATION SCIENCE**

8:20 **INVITED SPEAKER: BAYRAM SAPAROV**, University of Oklahoma, *Exploring Luminescence in Multinary Halides*

9:00 **ESTHER FREDERICK**, Sandia National Laboratories, *Molecular Doping of Si(100) using Soft Lithography*

9:20 **CHERRELLE THOMAS**, Sandia National Laboratories, *Investigation of Surface Passivation on Thermal Stability of Cesium Lead Iodide (CsPbI<sub>3</sub>) Nanocrystals via In Situ GISAXS and GIWAXS*

9:40 **BRIAN RUMMEL**, University of New Mexico, *2D Raman Imaging and Characterization of Surface Acoustic Waves on GaAs Substrates*

10:00 **BREAK – REFRESHMENTS IN ANASAZI BALLROOM**

### **SESSION 2: ADVANCED PROCESSING SCIENCE**

10:15 **PETER DICKENS**, Sandia National Laboratories, *Epitaxial gate oxides for enhancement mode GaN and AlGaN power electronics*

10:35 **DANIEL WARD**, Sandia National Laboratories, *Fabrication and Measurement of Gated, Atomically-Precise Tunnel-Junctions and Single Electron Islands*

10:55 **LEONID MIROSHNIK**, University of New Mexico, *3D Quantum Structure Formation in Compound Semiconductors by Selective Strain-Induced Interdiffusion*

11:15 **ANDRE CHAVEZ**, University of New Mexico/ Osazda Energy LLC, *Development of Low-Cost, Crack-Tolerant Metallization Using Screen Printing*

11:35 **LUNCH IN ANASAZI BALLROOM**

**VENDOR SHOW IN ANASAZI BALLROOM**

**POSTER SESSION IN ANASAZI BALLROOM**

1. **PETER DICKENS**, Sandia National Laboratories, *Structural and electrical properties of epitaxial MgO on 4H-SiC*
2. **DANIEL DRURY**, Sandia National Laboratories, *Ultra-Low Thermal Conductivity of Polyhedral Oligomeric Silsesquioxanes (POSS)*
3. **LORENZA FRIEDRICH**, Sandia National Laboratories, *Graphene-Oxide-Semiconductor Junctions for Photodetection*
4. **BARBARA KAZANOWSKA**, University of Florida, *Acid-Based Crystallographic Chemical Wet Etching of GaN Nanostructures*
5. **CHERRELLE THOMAS**, Sandia National Laboratories, *Ion Induced Secondary Electron Emission from Solid Metal Surfaces*

**SESSION 3: LIGHT MATER INTERACTIONS**

1:15 **UPLOAD OF AFTERNOON PRESENTATIONS**

1:30 **INVITED SPEAKER: RAKTIM SARMA**, Sandia National Laboratories, *Hybrid Metasurfaces: From Ultrathin Optoelectronic Devices to Nonlinear Optics*

2:10 **SEUNG HO LEE**, University of New Mexico, *Modeling of Optical Scattering in White Beetle Scales*

2:30 **BOKYUNG PARK**, University of New Mexico, *Biomimetic Electrospun Polyethylene Fabrics for Effective Radiative Cooling Under Sunlight*

2:50 **SARA DIGREGORIO**, Sandia National Laboratories, *Infrared Absorption Oscillator Strength Factors in SiNx Thin Films*

3:10 **BREAK FOR JURY DECISIONS**

3:30 **ANNOUNCEMENT OF AWARDS**

3:40 **ADJOURN**