

# NMAVS Symposium Schedule of Events

## Gran Quivera Meeting Room

**TUESDAY, MAY 22, 2018**

8:00 **UPLOAD OF MORNING PRESENTATIONS**

8:15 **LINNEA ISTA**, Welcome

### **SESSION 1**

8:20 **CAROLA EMMINGER**, New Mexico State University, *Analysis of Critical Points in the Dielectric Function of Ge between 10 and 738 K*

8:40 **JOHN MANGUM**, Colorado School of Mines, *Investigating Metastable TiO<sub>2</sub> Polymorph Formation via TEM in-situ Crystallization*

9:00 **DEEPAK KUNWAR**, University of New Mexico, *Achieving High Surface Concentrations of Thermally Stable, Single Atom Pt on Ceria*

9:20 **BREAK – REFRESHMENTS IN ANASAZI BALLROOM**

### **SESSION 2**

9:30 **INVITED SPEAKER: HEATHER CANAVAN**, University of New Mexico, *From Bedside Back to Bench: Combining Human Centered Design with Biointerfacial Research*

10:10 **CARMEN VELASCO**, University of New Mexico, *Speciation and Reactivity of Organic Matter in Uranium Mine Wastes from Laguna- New Mexico: An application of surface sciences in environmental systems*

10:30 **MICHAEL DZARA**, Colorado School of Mines, *Determining Oxygen Adsorption Behavior of Nitrogen-Functionalized Carbon with In Situ Spectroscopy*

10:50 **BRIAN RUMMEL**, University of New Mexico, *Characterization and Imaging of Surface Acoustic Waves on GaAs with Raman Spectroscopy*

11:10 **CRAIG STEWART**, Sandia National Laboratories, *Optimization of Structural Support in Graphene Oxide Desalination Membranes*

11:30

**LUNCH IN ANASAZI BALLROOM**

**VENDOR SHOW IN ANASAZI BALLROOM**

**POSTER SESSION IN ANASAZI BALLROOM**

1. **CESY ZAMARRIPA**, New Mexico State University, *Temperature dependent ellipsometry and thermal stability of  $Ge_2Sb_2Te_5:C$  phase change memory alloys*
2. **DARNELL CUYLEAR**, University of New Mexico, *Encapsulation of Poly(Ethylene Glycol) for Alternative G.I. Preparation*
3. **SARAH ZACCARINE**, Colorado School of Mines, *Characterization of extended surface catalysts for optimization of performance in polymer electrolyte membrane fuel cells*
4. **ALLYSON YORK**, Colorado School of Mines, *Carbon-Coated Magnesium Oxide Catalysts for 2-Pentanone Condensation to Aviation Fuel Products*
5. **PHUONG NGUYEN**, University of New Mexico, *The cytotoxicity of commercial poly (N-isopropyl acrylamide)*
6. **KIMBERLY TODDY**, University of New Mexico, *Nanopillar Analysis for the Manipulation of Indium Gallium Arsenide Quantum Well Compositions using Stress Transfer*
7. **PABLO PARADIS**, New Mexico State University, *Mid-infrared optical constants of InAsSb alloys and bulk GaSb*
8. **ARNAB GHOSH**, University of New Mexico, *Role of Pore Structure on the Durability of Platinum Diesel Oxidation Catalysts*
9. **SARUN ATIGANYANUN**, University of New Mexico, *Control of Randomness in Microsphere-Based Photonic Crystals Assembled by Langmuir-Blodgett Process*
10. **ANDREA MARTINEZ**, Sandia National Laboratories, *DC Breakdown of Glass Microballoon Filled Epoxy*
11. **JACOB YOUNG**, Technetics Group, *Advanced Metal Sealing Solutions for Critical Industry Applications*
12. **CAYLA NELSON**, University of New Mexico, *Use of CNT-silver metal matrix composite thin films to enhance mechanical properties of photovoltaic cells*

### SESSION 3

- 1:00 **UPLOAD OF AFTERNOON PRESENTATIONS**
- 1:20 **GIOVANNI ESTEVES**, Sandia National Laboratories, *Suppressing Secondary Grain Growth in  $Sc_{0.125}Al_{0.875}N$  Using a CMOS Compatible Electrode*
- 1:40 **ALYSSA BEIERLE**, New Mexico Institute of Mining and Technology, *Enhancement of Photocatalytic Reduction Reaction on  $TiO_2$  Under Solar Light Using Alternative Plasmonic Titanium Nitride Nanoparticles*
- 2:00 **SARUN ATIGANYANUN**, University of New Mexico, *Effective Radiative Cooling under Direct Sunlight Achieved by Disordered Microsphere-Based Coatings*
- 2:20 **HANQING PAN**, New Mexico Institute of Mining and Technology, *Zinc and Iron Oxide Nanostructures for the Reduction of Bicarbonate to Solar Fuels*
- 2:40 **SEUNGHO LEE**, University of New Mexico, *Characterizing autocorrelation function of photonic glasses from 2D images*
- 3:00 **BREAK – REFRESHMENTS IN ANASAZI BALLROOM**

### SESSION 4

- 3:10 **NATALIE SEITZMAN**, Colorado School of Mines, *Operando X-ray Micro-tomography Investigation of Lithium Metal Behavior In  $\beta$ - $Li_3PS_4$  Solid Electrolyte*
- 3:30 **KEENIYA-GAMALAGE-GEHAN DE SILVA**, New Mexico Institute of Mining and Technology, *Influence of optical and electronic properties of plasmonic bimetallic nanoparticles towards their catalytic efficiency*
- 3:50 **PABITRA CHOUDHURY**, New Mexico Institute of Mining and Technology, *Computational Screening and Characterization of Single-Atom Active Site for Methane to Methanol Conversion Process*
- 4:10 **NUWANJULA SAMARASINGHA**, New Mexico State University, *Phonon and exciton absorption in the optical properties of ZnO films*
- 4:30 **FARZIN ABADIZAMAN**, New Mexico State University, *Anomaly in the Optical Constants of Ni near the Curie Temperature*
- 4:50 **BREAK FOR JURY DECISIONS**
- 5:00 **ANNOUNCEMENT OF AWARDS**
- 5:10 **ADJOURN**

**Student Chapter gathering at 6pm  
Bow & Arrow Brewery  
608 McKnight Ave NW  
All are welcome to attend!**