

2022 AVS Prairie Chapter Symposium

University of Notre Dame Conference Center (McKenna Hall) Auditorium

215 McKenna Hall

- 8:30 Registration (Reyes Family Boardroom Pre-Function Area)
and Breakfast (205/206/207 McKenna Hall)
9:25 Opening: **Alex Kandel**, *University of Notre Dame*
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Session 1 Moderator: Alex Kandel, University of Notre Dame

- Neha Mehra**, *University of Notre Dame*, “Interrogation of Single-Site, Oxide-Supported Metal Ions for Ethylene Oligomerization By Density Functional Theory and Microkinetic Modeling”
9:30
Nileema Sharma, *University of Notre Dame*, “Molecular Quantum Simulator”
9:50
Kevin DePope, *Loyola University*, “Using Surface Reactions of TPBi and Propylene Oxide to Reduce Metal Penetration and Metal-Induced Photoluminescence Quenching”
10:10

Coffee Break: 10:30 – 10:50 (Reyes Family Boardroom Pre-Function Area)

Session 2 Moderator: Sarah Pate, University of Notre Dame

- Jason Kawasaki**, *University of Wisconsin, Madison*, “Mechanisms and Applications for Remote Epitaxy of III-V Semiconductors and Heusler Compounds”
10:50
Siyng Yu, *University of Illinois, Urbana-Champaign*, “Control over Particle Size and Uniformity of Pt-based Intermetallic Nanoparticles in Thermal Treatment”
11:30
Jason Gross, *University of Illinois, Chicago*, “The Competition between Formation of Black Silicon Nanostructures vs. Craters during Subnanosecond Laser Ablation in Atmosphere”
11:50

Lunch ((205/206/207 McKenna Hall)) and Poster Session (216 McKenna Hall): 12:10–2:00
Chapter Business Meeting, Room 202 (Open to All AVS Members)

Session 3 Moderator: Ayanna Culmer-Gilbert, Indiana University

- Shelley Claridge**, *Purdue University*, “To Flatland and Back Again: Monolayers as a Foundation for Nanostructured Material Design”
2:00
Emily Smith, *Iowa State University*, “Single Particle Imaging of Cell Membrane Proteins and Confined Viscous Liquids”
2:40
Adam Jaffe, *University of Notre Dame*, “Hybrid Bronzes: Organic-Inorganic Metal Oxides with Tunable Structural and Electronic Properties”
3:20

Coffee Break: 3:40–4:00 (Reyes Family Boardroom Pre-Function Area)

Session 4 Moderator: Adam Jaffe, University of Notre Dame

- Michael Trenary**, *University of Illinois, Chicago*, “Infrared Spectroscopy as a Surface Science Technique”
4:00
Sarah Pate, *University of Notre Dame*, “Elucidating the Role of Water in Amine-Facilitated CO₂ Transport via Operando Transmission FTIR Spectroscopy”
4:40
Ayanna M. Culmer-Gilbert, *Indiana University*, “Ligand-coordinated, Supported Pd Catalysts for Selective Hydrogenation: Investigating the Effects of Ligand Functionalization on Activity and Loading”
5:00
Allison H. Squires, *University of Chicago*, “Photoswitchable Fluorophores for Liquid Media-Based Detection of Radiation”
5:20

Reception: 6:00–8:00 (Reading Room, Jordan Hall of Science)
