



*Live poster presentations for the following presenters will take place on  
Tuesday, December 8 from 4:30-5:30 pm ET.*

## **Shivani Kozarekar, National Renewable Energy Laboratory**

- [Molecular Dynamics Simulations of Polyvinyl Chloride for the Accurate Prediction of Novel Biobased Polymer Properties](#)
- [Watch Shivani's video presentation.](#)

## **Alex Nutkiewicz, Stanford University**

- [A Hybrid Modelling Approach to Characterize the Impact of Urban Context on Building Energy Retrofits](#)
- [Watch Alex's video presentation.](#)

[Join the live discussion with Shivani and Alex via Zoom.](#)



## **Julie Cook, Texas A&M University**

- [A Decision-Making Tool for the Optimal Selection and Allocation of Renewable Energy Generation and Storage Systems](#)
- [Watch Julie's video presentation.](#)

## **Mei Luo, Illinois Institute of Technology**

- [Calendar-life vs. Cycle-life Aging for Silicon Anode](#)
- [Watch Mei's video presentation.](#)

## **Elisabeth McClure, National Renewable Energy Laboratory**

- [Pathway Towards Low-Cost, High-Efficiency Solar Cells by Dynamic Hydride Vapor Phase Epitaxy](#)
- [Watch Elisabeth's video presentation.](#)

[Join the live discussion with Julie, Mei and Elisabeth via Zoom.](#)



## **Sarah Khanniche, MIT**

- [Accelerating the Clean Energy Revolution with Accelerated Nanomaterial Discovery](#)
- [Watch Sarah's video presentation.](#)

## **Caitlin Seed, North Carolina State University**

- [Tribotronic Control and Energy Storage Attributes of Metal-oxide Nanofluid Interfaces](#)
- [Watch Caitlin's video presentation.](#)

[Join the live discussion with Sarah and Caitlin via Zoom.](#)

## **Sivaranjani Seetharaman, Texas A&M University**

- [A Privacy-Preserving Framework for Demand Response from Residential Thermal Loads](#)
- [Watch Sivaranjani's video presentation.](#)

## **Veenasri Vallem, North Carolina State University**

- [New Approach for Oceanic Energy Harvesting](#)
- [Watch Veenasri's video presentation.](#)

[Join the live discussion with Sivaranjani and Veenasri via Zoom.](#)



## **Elizabeth Abraham, Texas A&M University at Qatar**

- [Analysis of P3HT Photodegradation](#)
- [Watch Elizabeth's video presentation.](#)

## **Remy Dhingra, Yale College**

- [Championing Mini-Grids to Shrink Nigeria's Energy Access Deficit](#)
- [Watch Remy's video presentation.](#)

[Join the live discussion with Elizabeth and Remy via Zoom.](#)



## **Tessa Fong, Boise State University**

- [Erosion Experimentation in Solar Power Systems](#)
- [Watch Tessa's video presentation.](#)

## **Justine Lee, Stanford University**

- [No One Size Fits All: Multiple Pathways to Success for Clean- and Hardtech Startups](#)
- [Watch Justine's video presentation.](#)

[Join the live discussion with Tessa and Justine via Zoom.](#)



## **Kelly Smith, Tufts University**

- [Offshore Wind Grid Integration Mapping in the Northeast U.S.](#)
- [Watch Kelly's video presentation.](#)

## **Natasha Stamler, MIT**

- [Weatherproofing of New York City Public Housing for Energy Savings](#)
- [Watch Natasha's video presentation.](#)

## **Chelsea Wilson, North Carolina A&T State University**

- [Development of a Novel Oscillating Water Column Using Computational and Experimental Methods](#)
- [Watch Chelsea's video presentation.](#)

[Join the live discussion with Kelly, Natasha, and Chelsea via Zoom.](#)

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*Live poster presentations for the following presenters will take place on  
Wednesday, December 9 from 11:00 am-12:00 pm ET.*

## **Maha Haji, MIT**

- [Development of a Platform for Expanding AUV exploration to Longer ranges \(PEARL\)](#)
- [Watch Maha's video presentation.](#)

## **Utkarsha Agwan, UC Berkeley**

- [Electric Truck Charging Infrastructure: Investments and Impacts](#)
- [Watch Utkarsha's video presentation.](#)

[Join the live discussion with Maha and Utkarsha via Zoom.](#)



## **Yogita Akhare, Prairie View A&M University**

- [Novel Model Predictive Control for Fault Analysis of Electrical Machine Drives](#)
- [Watch Yogita's video presentation.](#)

## **Polina Brodsky, The Ohio State University**

- [Modeling Lithium Plating to Achieve Fast Charging of Lithium ion Batteries](#)
- [Watch Polina's video presentation.](#)

[Join the live discussion with Yogita and Polina via Zoom.](#)



## **Katherine Elbert, University of Pennsylvania**

- [Designing Nanocrystal Surfaces for Accessing Metamaterials](#)
- [Watch Katherine's video presentation.](#)

## **Kelsy Green, University of Michigan–Ann Arbor**

- [Radiation Tolerant Materials for Advanced Nuclear Reactors](#)
- [Watch Kelsy's video presentation.](#)

[Join the live discussion with Katherine and Kelsy via Zoom.](#)



## **Nora Hennessy, Stanford University**

- [Carbon Emissions and Exposure to PM2.5 Due to Electricity Imports in the U.S.](#)
- [Watch Nora's video presentation.](#)

## **Tasmin Hossain, North Carolina State University**

- [Cellulosic Biofuel Supply Chain: A Nationwide Analysis](#)
- [Watch Tasmin's video presentation.](#)

[Join the live discussion with Nora and Tasmin via Zoom.](#)

## **Golnaz Isapour, MIT**

- [Towards Power-free Sensors: Scalable Manufacture of Mechanochromic Materials based on Modular Assembly of Photonic Hydrogel Microspheres](#)
- [Watch Golnaz's video presentation.](#)

## **Ashini Jayasinghe, Florida State University**

- [Synthesizing Stable Actinide Intermetallic Materials for Nuclear Waste Storage](#)
- [Watch Ashini's video presentation.](#)

[Join the live discussion with Golnaz and Ashini via Zoom.](#)



## **Laura Mundt, SLAC National Accelerator Laboratory**

- [Stability in Metal Halide Perovskite Solar Cells – A Matter of Mixing](#)
- [Watch Laura's video presentation.](#)

## **Sepideh Kianbakht, Colorado School of Mines**

- [Shutdown Controller Design for SUMR Wind Turbine](#)
- [Watch Sepideh's video presentation.](#)

[Join the live discussion with Laura and Sepideh via Zoom.](#)



## **Alison Knasin, University of Pennsylvania**

- [Structural and Reactivity Studies of a Synthetic Model System for a Rare-Earth Containing Enzyme](#)
- [Watch Alison's video presentation.](#)

## **Jennifer Lee, Harvard University**

- [Designing Nanocatalysts for Renewable Energy Applications](#)
- [Watch Jennifer's video presentation.](#)

[Join the live discussion with Alison and Jennifer via Zoom.](#)



## **Chloe Lerin, Oak Ridge National Laboratory**

- [Heavy-Duty Natural Gas Engines, Using Pre-Chambers to Enable Clean and Efficient Internal Combustion Engines](#)
- [Watch Chloe's Video Presentation.](#)

## **Zhiye Li, Stanford University**

- [Introduce New Structural Material to Reduce the Environmental Impacts of Buildings: Composites Derived from Fossil Fuels](#)
- [Watch Zhiye's video presentation.](#)

[Join the live discussion with Chloe and Zhiye via Zoom.](#)