

DuraMAT Fall Workshop

27-28 October 2026

National Museum of Nuclear Science and History
601 Eubank Blvd SE, Albuquerque, NM 87123

Tuesday, October 27

0800 – 0810 Welcome and Purpose, Cliff Hansen (SNL)

0810 – 0945 Technologies

- Todd Karin (PVEL) - Stress tests for N-type modules
- Dana Kern / Peter Hacke (NLR) - **STOKED!** Spectral Tuning and Optimized Kinetics by Energy Downshifting in PV Packaging
- Dennice Roberts (NLR) - Let's Not R-EPE-at Our Mistakes
- Kevin Strong - EPIC-PV: Efficient Production of Ion-ExChanged glasses for PV reliability

945 – 1000 Break

1000 – 1200 Risks from the Environment

- James Hartley (SNL) - A computationally derived framework for predicting probability of PV module glass breakage by hail impact
- Ethan Young (NLR) - A Fast, Accurate Prediction for System-Wide Damage Due to Dynamic Wind Loading
- Dirk Jordan (NLR) - Multiple Hail Impact Testing
- Tracy Becker (UC Berkeley) - From dynamic system-level behavior to glass fracture, recent progress on field verification
- James Peng, (FM Global) – Overview of hail impact research

1200 – 1300 Lunch and Networking

1300 – 1445 AI, Data and Modeling

- Baojie Li (LBL) - Mapping PV degradation mechanisms and field performance by leveraging large language models
- Anubhav Jain (LBL) - An Autonomous Assistant for End-to-End Degradation Analysis
- Farhan Rahman - Electrical-Thermal Modeling of Photovoltaic Module Connectors to Enable Thermo-Mechanical Coupling and Failure Mode Indication
- Robert White (NLR) – DuraMAT Data Infrastructure

1445 – 1500 Break

1500 – 1700 Free to visit the Museum

1800 Social Meet-up: Sawmill Market, 1909 Bellamah Ave NW, Albuquerque, NM 87104

Wednesday, October 28

0800 – 0945 Effects on Module Performance and Longevity

- Jen Braid (SNL) - Reflective Measurement of Stresses in PV Modules
- Martin Springer (NLR) - Effect of Cell Cracks on Module Power Loss and Degradation: Modern Module Architectures
- Rebecca Wai (NLR) - Accelerated Stress Testing to Deconvolute Simultaneous-But-Distinct Degradation Pathways under UV Illumination
- Rajiv Daxini (NLR) – Pvdeg: Python tools to calculate photovoltaic degradation responses and parameters

0945 – 1000 Break

1000 – 1115 Technologies

- Dirk Jordan (NLR) - 50-Year Module Report
- Jarett Zuboy (NLR) and Norman Jost (SNL) - Weathering the Storm: The Rise and Reliability of Market-Specific PV in the United States (Tech Scouting 3.0)
- Elizabeth Palmiotti (NLR) - The Future of the Photovoltaic Glass Market: A Comparative Study of Rolled Patterned and Float Glass Technologies

1115 – 1130 Closing remarks

1130 – 1215 Lunch

1230 – 1330 Industry Advisory Board Meeting

1430 – 1530 ARRAY Technologies New Manufacturing Facility Tour

ARRAY Technologies – Atrisco Facility, 701 Atrisco Vista Blvd NW, Albuquerque, NM 87120, U.S.A.

RSVP required no later than 15 October 2026, to Cliff Hansen at cwhanse@sandia.gov

Please carpool. Long pants and closed-toed shoes are required.