

DuraMAT Fall Workshop
27--28 October 2026
National Museum of Nuclear Science and History
601 Eubank Blvd SE, Albuquerque, NM 87123

Tuesday, 27 October 2026 (0830--1500)

0830--0900 Arrive and badge pickup

0900--0905 Welcome and Purpose

0905--1030 Technologies

- 0905--0930 **Todd Karin** (PVEL) -- Stress tests for N-type modules
- 0930--0950 **Dana Kern** (NLR) -- STOKED! Spectral Tuning and Optimized Kinetics by Energy Downshifting in PV Packaging
- 0950--1010 **Dennice Roberts** (NLR) -- Let's Not R-EPE-at Our Mistakes
- 1010--1030 **Kevin Strong** -- EPIC-PV: Efficient Production of Ion-ExChanged glasses for PV reliability

1030--1050 Break

1050--1220 Risks from the Environment -- Hail

- 1050--1110 **James Hartley** (SNL) -- A computationally derived framework for predicting probability of PV module glass breakage by hail impact
- 1110--1130 **Dirk Jordan** (NLR) -- Multiple Hail Impact Testing
- 1130--1150 **Tracy Becker** (UC Berkeley) -- From dynamic system-level behavior to glass fracture, recent progress on field verification
- 1150--1210 **James Peng** (FM Global) -- Overview of hail impact research
- 1210--1220 Hail panel and discussion

1220--1315 Lunch and Networking

1315--1500 AI, Data and Modeling

- 1315--1335 **Ethan Young** (NLR) -- A Fast, Accurate Prediction for System-Wide Damage Due to Dynamic Wind Loading
- 1335--1355 **Baojie Li** (LBL) -- Mapping PV degradation mechanisms and field performance by leveraging large language models
- 1355--1415 **Anubhav Jain** (LBL) -- An Autonomous Assistant for End-to-End Degradation Analysis
- 1415--1435 **Farhan Rahman** -- Electrical-Thermal Modeling of Photovoltaic Module Connectors to Enable Thermo-Mechanical Coupling and Failure Mode Indication
- 1435--1455 **Robert White** (NLR) -- DuraMAT Data Infrastructure

1500--1700 Free to visit the Museum

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

Wednesday, 28 October 2026 (0830--1330)

0830--0950 Effects on Module Performance and Longevity

- 0830--0850 **Jen Braid** (SNL) -- Reflective Measurement of Stresses in PV Modules
- 0850--0910 **Martin Springer** (NLR) -- Effect of Cell Cracks on Module Power Loss and Degradation: Modern Module Architectures
- 0910--0930 **Rebecca Wai** (NLR) -- Accelerated Stress Testing to Deconvolute Simultaneous-But-Distinct Degradation Pathways under UV Illumination
- 0930--0950 **Rajiv Daxini** (NLR) -- Pvdeg: Python tools to calculate photovoltaic degradation responses and parameters

0950--1010 Break

1020--1120 Technologies

- 1020--1040 **Dirk Jordan** (NLR) -- 50-Year Module Report
- 1040--1100 **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)
- 1100--1120 **Elizabeth Palmiotti** (NLR) -- The Future of the Photovoltaic Glass Market: A Comparative Study of Rolled Patterned and Float Glass Technologies

1120--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.