MDS-Rely

MARCH 2026 NEWSLETTER

Advancing materials reliability through data-driven collaboration between academia, industry, and government

2026 Spring Meeting on April 15th: Pioneering the Next Five Years

Other Highlights

Laser-Induced Graphene for Transparent EMI Shielding

AI-Enabled Informatics for Rapid Polymer Composite Innovation Seminar by Shrish Patel at Eaton

This issue highlights our seminar on AI-enabled informatics for rapid polymer composite innovation approaching on Friday, March 27th as well as our upcoming Spring Meeting on April 15th.

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Featured Announcements

Spring Meeting 2026 on April 15, 2026 in Pittsburgh

Our Spring Meeting will be on Wednesday, April 15th, 2026 in Pittsburgh at Mill 19.

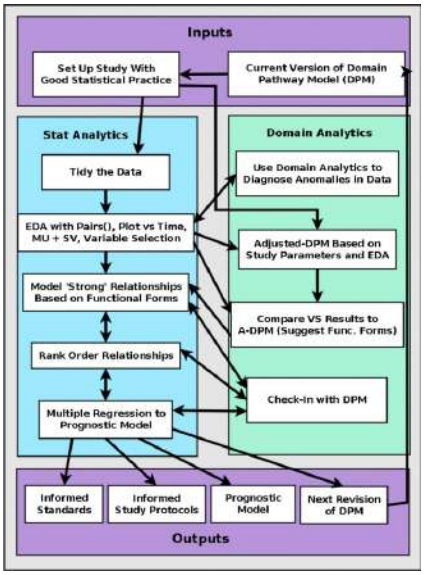
The theme will be “Pioneering the Next Five Years” and the Lunch Keynote will be on “Amplifying Human Genius: How Data Intelligence is Supercharging R&D” by Li Luan, Global Technical Director at PPG. Join us for tours, research presentations and discussions.

For more details, please visit the meeting webpage (link here).

Register here!

Center Software Scoop: netSEM

Network structural equation modeling (netSEM) is a data-driven modeling technique developed at the Solar Durability and Lifetime Extension (SDLE) Research Center, with a public version available as an R package on CRAN. netSEM selects the optimal relationship between different variables based on statistical significance (e.g., adjusted R-squared value, rank order models using Akaike Information Criterion or AIC, and Bayesian Information Criterion or BIC). Learn more about the software here.

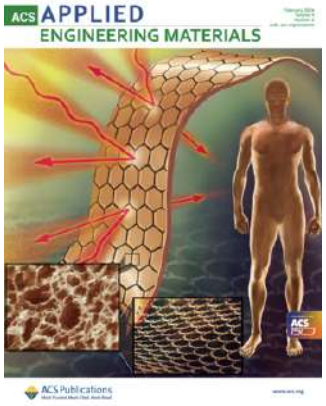


Pitt Engineering News Article: Designing Transparent Armor

Using a technique inspired by kirigami, the Japanese art of paper-cutting, researchers at the University of Pittsburgh used a single laser to carbonize and cut polymer films, patterning laser-induced graphene (LIG) into very intricate honeycomb designs to develop a shield against harmful invisible waves.

The recent work, “Combining Laser-Induced Graphene with Kirigami for Transparent Flexible Electromagnetic Interface Shielding,” by Mostafa Bedeway and Paul W. Leu’s research groups has recently been published and featured on the cover of ACS Applied Engineering Materials and in Pitt Engineering News!

Check out the article here!



Member Engagement Opportunities

March Seminar: AI-Enabled Informatics for Rapid Polymer Composite Innovation

Friday, March 27th, 2026 (12-1 PM EST)

Join MDS-Rely on Friday, March 27th from 12-1 PM for “AI-Enabled Informatics for Rapid Polymer Composite Innovation” by Shrish Patel!

In this talk, Shrish Patel will explain how an AI-enabled informatics framework can create a streamlined, data-driven workflow, reducing manual experimentation and rapidly identifying high-performance composite formulations.

Shrish Patel is the Lead Polymer Composite Engineer at Eaton Corporation. Before joining Eaton, he earned his PhD in Materials Science and Engineering at Stony Brook University, where his work led to an R&D 100 Award, earning support from NSF SBIR and DOE programs. At Eaton, Shrish develops composite solutions for aerospace, electrical and energy applications with a focus on lightweighting, sustainability and efficient materials development.

Register here!

Ongoing and Completed Research Projects

Our Project summary document provides detailed summaries of the ongoing and completed research projects. Some senior design projects are also highlighted. Please check it out here.

Biweekly Research Project Meetings

Stay connected through our biweekly Zoom meetings for research updates and discussion. Contact the lead professor if you can't attend. Check the Center Calendar for meeting dates and times.

Project Title	Lead(s)	Schedule
Effects of Aerosol Jet Printing Parameters on the Lifetime Performance of Additively-Manufactured Flexible Circuits	Prof. Janet Gbur (CWRU)	Mar 4, 18 — every other **Wed 8:00–9:00 AM**
Enhancing Battery Degradation Analysis and Thermal Runaway Prediction	Prof. Satish Iyengar (Pitt)	Mar 4, 18, 25 — every **Wed 1–1:30 PM**
Quantitative Characterization of Chemical Interaction of Solutes with Defects for Predicting Intergranular Corrosion	Prof. Hyeji Im (CWRU)	Mar 4, 18 — every other **Wed 2:30 - 3:00 PM**

Job Openings and Opportunities

LLNL Summer Internship Opportunities

Summer openings for LLNL are still open! Use this page, and then search the following positions by the REF number if interested:

- Materials Science Division Graduate Intern - Summer 2026 (REF7589H)
- Materials Science Division Undergraduate Intern - Summer 2026 (REF7588P)
- Computational Chemistry Materials Science (CCMS) Graduate Intern - Summer 2026 (REF7593N)

If you or any of your students are interested in a specific area of research, please let Roger Qiu (qiu2@llnl.gov) know and he will try to connect you/them to the appropriate PIs.

Member Job Openings

Explore current openings and internships from MDS-Rely member organizations.

- Eaton Careers
- LLNL Internships
- NETL Opportunities
- Parker Hannifin Jobs
- U.S. Army DEVCOM Student and Intern Opportunities
- NIST Jobs

- NNL Careers
- PPG Careers

Submit News

Fill out a news form here!

Submit Job Openings

*For MDS-Rely members only

Fill out a job opening form here!

Interested in partnering with Case Western, Pitt, or CMU Professors?

Please contact Dr. Laura Bruckman or Dr. Paul Leu for more information!

CONNECT WITH US!

Our mailing address is:
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