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## FEATURED ANNOUNCEMENTS

Joke of the Month!



## **Congratulations to Laura Bruckman on Winning Her DOE Grant!**

Laura Bruckman | Research Assistant Professor | Case Western Reserve University

A special congratulations to Laura Bruckman on winning a DOE grant for her project titled "Accelerating Cycles of Learning of Advanced Silicon Architectures: Cell Processing Approaches and their Effect on Degradation Mechanisms"!

Laura's project consisted of developing a process that can rapidly predict the performance and durability of new materials for silicon P) cells without having to fully optimize the new device first. This saves research time and effort by identifying which new silicon PV cell designs have the best potential to achieve both high efficiency and long operational lifetimes.

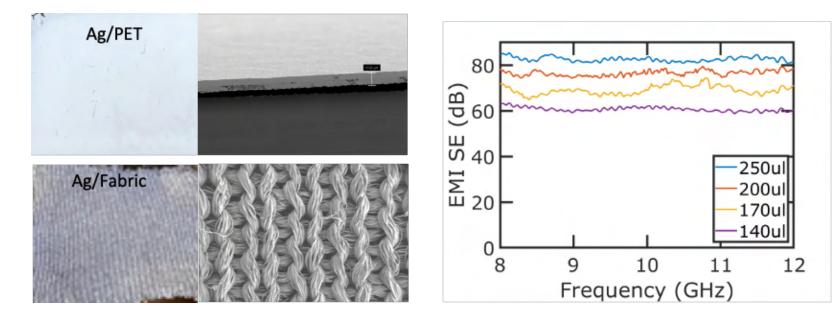


## **FACULTY FEATURED PROJECTS**

## Image Machine Learning of Printed Metal Films for EMI Shielding

Professors Paul Leu, Roger French, and Satish Iyengar I University of Pittsburgh I Case Western Reserve University | MDS-Rely Research Center

Professors Paul Leu, Roger French, and Satish Iyengar's project "Machine Learning of Printed Metal Films for EMI Shielding" focused on new approaches for creating electromagnetic interference (EMI) shielding. They are developing new machine learning methods to design new types of EMI shielding and using Electronink's reactive, particle-free inks to create high conductivity metal on different surfaces such as plastics and textiles. This project targets applications such as flexible electronics, smart medical devices, and wearable heaters, wearable electronics, or e-textiles.



The team is coating Electroninks' reactive silver inks a variety of flexible substrates such as PET and fabric for high performance EMI shielding



# **MDS-RELY MEMBER SPOTLIGHTS**

## **NEW MEMBER SPOTLIGHT: NETL**



Shelley Martin I Public Affairs and Strategic Outreach I National Energy Technology Laboratory

The National Energy Technology Laboratory (NETL) is a new member of the MDS-Rely team. As a U.S. Department of Energy national laboratory, NETL drives innovation and delivers technological solutions for an environmentally sustainable and prosperous energy future.

David Alman, of NETL's MEM Directorate, said NETL researchers design, manufacture and test novel materials for improved properties in energy-related applications.

"We are well-versed in integrating materials science domain knowledge, experimental information, and computational sciences to address materials challenges. And we do it in a way that saves time, money and materials. Working with MDS-Rely will give us a chance to share those abilities and experiences for a wider audience, and to be informed of MDS-Rely's and capabilities of cutting edge research."

**Read Full Article** 

## SMALL BUSINESS MEMBER SPOTLIGHT: ELECTRONINKS

Ashni Pabley I Public Relations I Electroninks

Electroninks has been a member of MDS-Rely since the center's founding in July 2021. Its inks

are used in the "Machine Learning for EMI shielding" project to create light-weight electromagnetic interference shielding on complex and flexible substrates such as plastics and textiles for e-textiles and wearable electronics.

# electroninks

Dr. Melbs Lemieux says,

"This center has helped us find opportunities for applying to STTRs, recruiting graduate students, and connecting with other members interested in our inks."

**Read Full Article** 

## LATEST NEWS

## **INSTITUTE FOR ENTREPRENEURIAL EXCELLENCE WEBINAR** July 13, 2022

Thank you to all that attended to make this webinar successful!

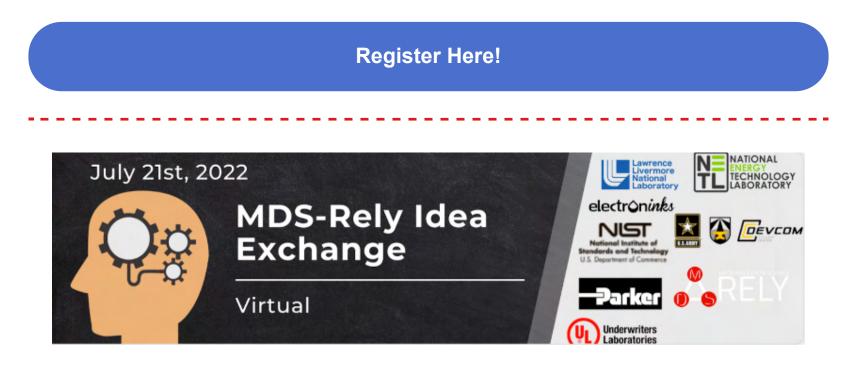
This webinar introduced participants to the MDS-Rely Center and benefits for potential members, with over 20 attendees present. This included education and training opportunities, access to professors and students, direction of academic research impact, software access, access to research facilities and results, and various networking opportunities.



**UPCOMING EVENTS** 

We cordially invite you to attend our Fall MOS-Rely Center Meeting on August 30-31, in-person on the Case Western Reserve Campus. Attend faculty project pitches, a poster session, and network with PItt and Case faculty and graduate students.

Center members will have an opportunity to vote on projects. Please get in touch with us now if you are interested in creating a project with faculty. Find more information about the Fall 2022 meeting here.



Date: THIS Thursday, July 21st 4:00PM-5:30PM

Abstract: MDS-Rely/interested members will hold a virtual ideation exchange event to facilitate conversations between faculty, industry, and government labs that will lead to white papers for the August 30th-31st Fall Meeting.

Find more information and RSVP here!

Presenting the 8th Annual **CWRU-Tohoku Data Science in Engineering** and Life Sciences Symposium

August 8th and 9th | Cleveland, Ohio

Date: August 8-9 Venue: Tinkham Veale University Center

Abstract: This symposium is jointly hosted by the School of Medicine and the School of Engineering and is part of the ongoing educational and research collaboration between Tohoku University and Case Western Reserve University.

The agenda will provide a broad, exciting look at advances in data science at CWRU and Tohoku University, including AI and machine learning, materials data science, reliability and degradation, and cybersecurity. Find more information Find more information here.



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**Register Here!** 

## **Submit News!**

Submit Job Openings! \*For MDS-Rely members only

Fill out a news form here!

Fill out a job opening form here!

## Interested in partnering with Case Western or Pitt **Professors?**

Please contact Dr. Roger French or Dr. Paul Leu for more information!

# **CONNECT WITH US!**



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