



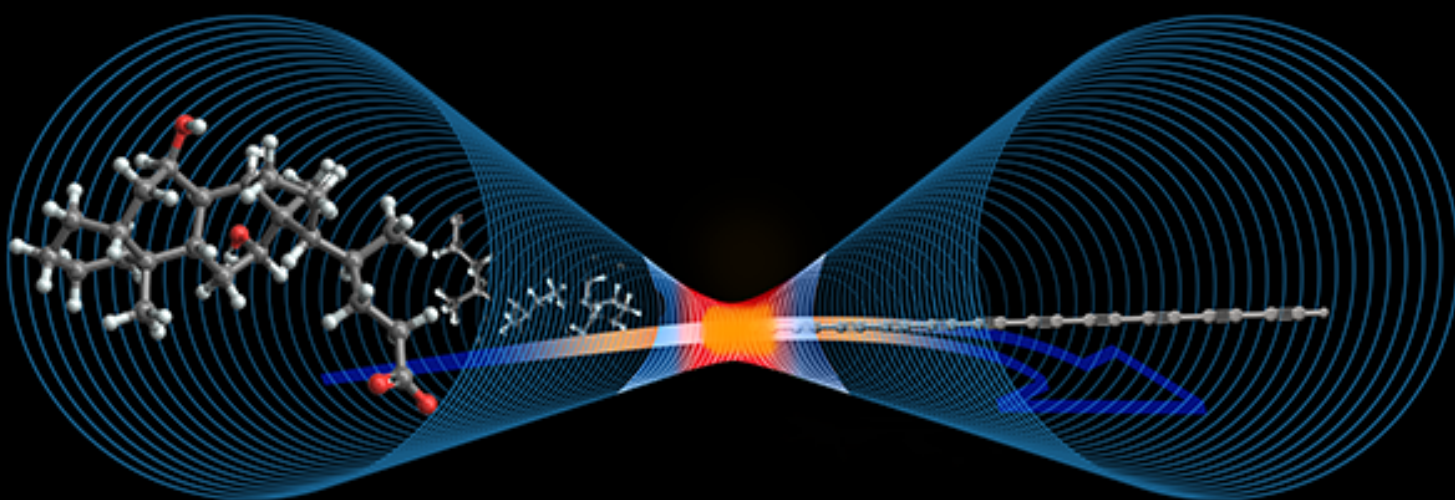
PennState
Materials Research
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E-materials

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FEATURED STORY



STABILITY SOLUTION BRINGS

unique form of carbon closer to practical application

LEAD: PROFESSOR SLAVA ROTKIN

Carbyne, a one-dimensional chain of carbon atoms, is incredibly strong for being so thin, making it an intriguing possibility for use in next-generation electronics, but its extreme instability causing it to bend and snap on itself made it nearly impossible to produce at all, let alone produce enough of it for advanced studies. Now, an international team of researchers, including from Penn State, may have a solution.

[READ THE ARTICLE](#)

Winners of the 2025 Elevator Pitch Competition

Jo Laura

*Graduate Student,
Chemistry*



"Beyond Silicon: Building the Future with 2D Semiconductors"

Antara Verma

*Graduate Student,
Biomedical Engineering*



"Transport of Inhaled Nanoplastics into the Brain by Kinesin"

Aditya Sapre

*Graduate Student,
Chemical Engineering*



"Whispering Molecules: How Enzymes Steer Each Other in Cascades"

CONSOLATION PRIZE WINNERS

Adebowale Odumuwagun

Graduate Student, Materials Science and Engineering

"Modulus on Demand: Additive Manufacturing of Functionally Graded Ti Alloys for Bio-implants"

Avanthi Abesingha

Graduate Student, Chemistry

"The Magic of Molecular Surgery: Precision Atom Editing"

Emdadul Haque Chowdhury

Graduate Student, Mechanical Engineering

"Fighting Cancer with Smart Heat"

DETAILS OF THE COMPETITION

AI Week spotlights student, faculty research on artificial intelligence



Penn State's AI Week showcased the latest research on artificial intelligence (AI) systems and tools, with a specific focus on their applications across K-12 and higher education.

The annual event, most recently held April 14 through April 17, highlighted Penn State faculty and student research and excellence through panels, research showcases, immersive workshops and a poster session.

[Read More](#)



INDUSTRY SPOTLIGHT

MRI powers optical network innovation through collaboration with Infinera/Nokia

When optical networking company Infinera was acquired by telecommunications giant Nokia in early 2025, it was hailed as a strategic move that would solidify Nokia's leadership in data transport technology. But behind this \$2.3 billion deal lies a story of innovation that's been quietly unfolding in central Pennsylvania, thanks to a long-standing partnership between Infinera and Penn State's Materials Research Institute (MRI).

[Read More About This Collaboration](#)

This article will be featured in our next Focus on Materials magazine this June!



SAVE THE DATE!!



Materials Day 2025

October 28

October 28, 2025

We're thrilled to announce that **Materials Day 2025** is set for **Tuesday, October 28** at the **Millennium Science Complex (MSC)**—and this year, we're changing things up!

Join fellow **industry leaders, researchers, students, and faculty** for a dynamic day of discovery, collaboration, and innovation. This year's refreshed format is designed to spark new ideas and connections through engaging, hands-on experiences.

What's in store:

- **Interactive poster sessions** happening throughout the day—meet graduate students and faculty members representing many research groups from across Penn State and dive into emerging

materials science breakthroughs.

- **Guided and self-guided tours** of the MSC—see our cutting-edge facilities up close with live demonstrations!
- **Plenty of networking opportunities**—reconnect with colleagues and meet new potential collaborators from across disciplines, **like in past Materials Day events, with a few new twists.**

**CLICK THE CALENDAR ICON
TO ADD TO YOUR CALENDAR:**



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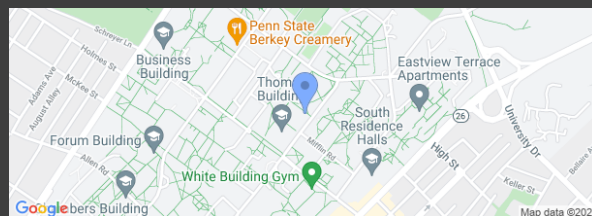
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Our mailing address is:
Penn State Materials Research Institute
N-315 Millennium Science Complex
University Park, PA 16802