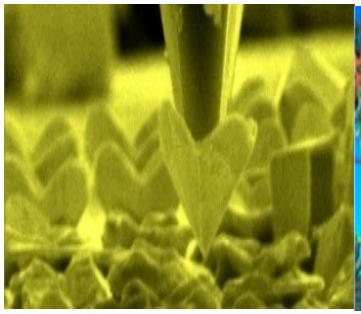
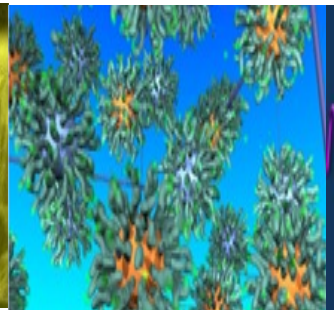
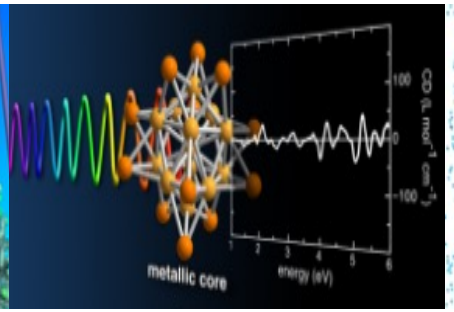

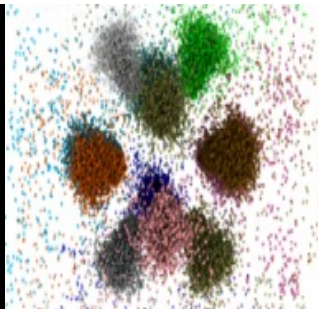
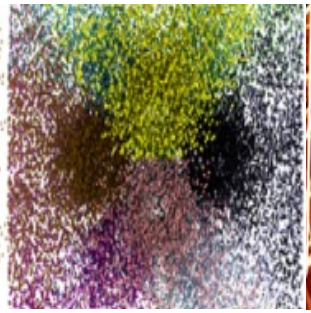


"The NU-MRSEC draws faculty from seven departments across two schools at Northwestern, and has a strong track record of transitioning its fundamental materials discoveries to successful commercial outcomes. Overall, the Center provides access and training to more than 175 different instruments to both on-campus and external user including 600 members of the Northwestern community and 125 external institutions."

DIRECTOR MARK C. HERSAM

Northwestern

MRSEC
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Providing physical and intellectual infrastructure for the **convergence** *of world-class* **transdisciplinary** ***research*****,** ***education*** *and* ***outreach*** *to* ***address grand challenges*** *in materials science and engineering*

About

The **Northwestern University MRSEC** advances world-class materials research, education, and outreach via active interdisciplinary collaborations within the Center and with external partners in academia, industry, national laboratories, and museums, both domestically and abroad. Northwestern University, home to the first Graduate Department of Materials Science in 1958, has cultivated a culture of interdisciplinary collaboration among faculty across different departments. The broader impacts of the NU-MRSEC are enabled by extensive commercialization, shared facilities, education, and outreach programs that bring the latest developments in materials science and engineering to the marketplace, local community, and students at all levels in a manner that promotes cultural, gender, racial, and ethnic diversity and inclusion.

Research

The intellectual merit of the NU-MRSEC resides primarily within its interdisciplinary research groups (IRGs) and seed-funded projects that promote dynamic evolution of Center research foci.

IRG-1: **Reconfigurable Responses in Mixed-Dimensional Heterojunctions** explores nanoelectronic materials systems that simultaneously process and store information to provide functionality exhibited by more complex biological systems such as neural networks.

IRG-2: **Functional Heteroanionic Materials via the Science of Synthesis** brings together experts in bulk crystal and thin-film synthesis, computational design of materials, and advanced characterization to expand a relatively unexplored class of materials with unconventional combinations of properties such as high electrical conductivity and low thermal conductivity.

mrsec.northwestern.edu/research/

Education and Outreach

Education: the Center seeks to expand interest in science and engineering by implementing innovative outreach infrastructure and programs designed to inform the public about current research trends and inspire talented and diverse students as future scientists.
mrsec.northwestern.edu/education/

Industry: the Center provides the physical and intellectual infrastructure to nucleate collaborative opportunities in materials research both on and off the Northwestern campus, in addition to transitioning its diverse research portfolio into new commercial opportunities.
mrsec.northwestern.edu/industry/

International collaborations enhance the research goals of the Center and helps train visionary and globally competitive U.S. materials researchers with direct experience with international R&D infrastructures and practices.
mrsec.northwestern.edu/international/