GUEST LECTURE

James A. Warren

DIRECTOR OF THE MATERIALS GENOME PROGRAM, MATERIAL MEASUREMENT LABORATORY, NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY

The Materials Genome Initiative, Artificial Intelligence, and the next 10 Years

The US Materials Genome Initiative has just begun its second decade. With a goal of accelerating the discovery, design, development, and deployment of new materials into manufactured products, the MGI is focused on the creation of a materials innovation infrastructure. My institution, the National Institute of Standards and Technology (NIST), has framed its support for the MGI around the need for a data infrastructure that enables the rapid discovery of existing data and models, the tools to assess and improve the quality of those data, and finally the development of new methods and metrologies based on that data. In partnership with agencies across the government, academia, and industry, these approaches are now yielding significant advances. Of particular note is the potential for machine learning and artificial intelligence applications upon these troves of data, which is now being borne out, and the vast consequent opportunities for new discoveries. Additionally, and in light of the many changes in how materials R&D is done, the MGI is on the cusp of releasing a new strategic plan, charting a plan for for next 10 years of an evolving materials innovation infrastructure, which I will preview in this lecture.

JOHNS HOPKINS
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Thursday December 9th 9am - 10:30am

Mudd Hall, Rm 26 and on Zoom
(see event page for details)