



# Mara honored with a Young Researcher award

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The *International Journal of Plasticity* has selected **Nathan Mara** of the Laboratory's Center for Integrated Nanotechnologies and the National Security Education Center's Institute for Materials Science for a Young Researcher award. The award honors his contributions to the field of plasticity, especially modeling plastic deformation and the mechanics of metals and nanocomposites. Mara received the award at the 2017 International Symposium on Plasticity and its Current Applications.

## Mara's achievements

Mara is the CINT nanoscale electronics and mechanics thrust leader and co-deputy director of the Lab's Institute for Materials Science. CINT is a Nanoscale Science Research Center managed under the aegis of the DOE Office of Science and jointly operated by Los Alamos and Sandia as a national user facility.

Mara examines the relationship between microstructure and mechanical behavior across length scales from the atomic to bulk. He investigates manufacturing bulk nanocomposite material for structural applications in extreme environments. This work combines materials synthesis, mechanical testing, and materials characterization techniques using microstructural analysis tools at CINT and the larger Laboratory.

Mara has a doctorate in materials science and engineering from the University of California, Davis. He joined Los Alamos as a Director's Postdoctoral Fellow and became a staff scientist in 2008. Mara chaired the Nanomechanical Materials Behavior Committee of The Minerals, Metals, and Materials Society (TMS) and received the 2012 TMS Young Leaders Professional Development Award. He won the Laboratory Distinguished Mentor Performance Award for his dedication to undergraduate and graduate student education at Los Alamos.

Mara's work supports the Laboratory's Energy Security and Global Security mission areas and the Materials for the Future science pillar via development of lightweight structural materials with enhanced performance under extreme environments, advanced structural materials for use in nuclear reactor applications, and new test methodologies for the mechanical behavior of materials across length scales.

## About the Award

The *International Journal of Plasticity* reports original research on all aspects of plastic deformation, damage and fracture behavior of isotropic as well as anisotropic solids. The journal selects Young Researcher Award recipients based on a combination of publication citations, service to the journal and overall quality of research, and impact on the deformation plasticity field.

**Los Alamos National Laboratory**

**[www.lanl.gov](http://www.lanl.gov)**

**(505) 667-7000**

**Los Alamos, NM**

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