



CINT Call for User Proposals

Fall 2021

The Center for Integrated Nanotechnologies (CINT) is a Department of Energy, Office of Science Nanoscale Science Research Center (NSRC) jointly operated by Los Alamos and Sandia national laboratories. As a national user facility, CINT provides approved users access to its staff and capabilities for nanoscale science research at no fee for non-proprietary research. Proprietary research may be conducted under a full-cost recovery agreement.

Who can be a CINT user – Individuals and teams from industry, academia, and government institutions are invited to submit proposals to conduct research at CINT. Foreign national users can work at CINT if their visit is planned with sufficient lead-time.



What is available – CINT offers world-leading capabilities to create, characterize, and model nanoscale materials in increasingly complex integrated environments. Our comprehensive suite of capabilities includes the technical expertise, instrumentation and software necessary to address important nanoscience integration problems and obtain high-impact research results. Prospective users should visit the capabilities page on the CINT website (<http://cint.lanl.gov/capabilities/index.php>) for a brief description of our currently available capabilities. To view a list of capabilities at CINT and all five of the NSRCs, please visit the NSRC Portal (<https://nsrcportal.sandia.gov/>).

How to apply – Access to the CINT Core and Gateway facilities is obtained by submitting a CINT user proposal. These proposals are a concise statement of research that you desire to perform with us at CINT. For more information visit our online step-by-step guide to prepare your CINT user proposal (<https://cint.lanl.gov/becoming-user/call-for-proposals.php>).

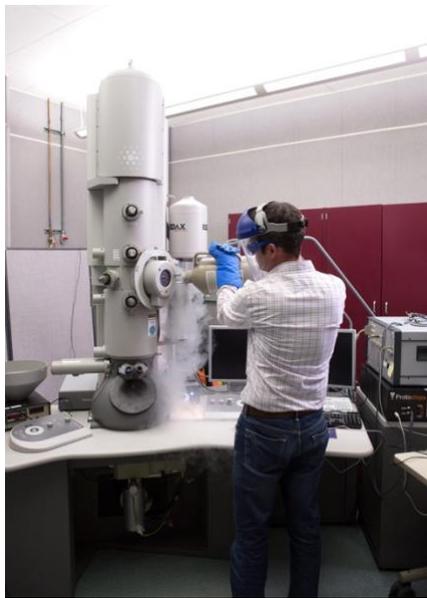
Proposal Template – Proposal submissions are required to use our proposal template (<https://cint.lanl.gov/becoming-user/call-for-proposals.php>). Proposals submitted that do not follow the approved template will not be considered for review. CINT user proposals are evaluated by external reviewers based on six specific proposal elements. All CINT user proposals are expected to explicitly contain the following six elements within the 2-page limit:

1. What are the main scientific questions being addressed in this user project, including the connection to nanoscience? (*Suggested length: 200 words*)

2. Briefly describe the state of research in this area and how your work is advancing the field. (*Suggested length: 150 words*)
3. What is the expected impact of this user project? (*Suggested length: 150 words*)
4. What specific work will be performed at the user's institution in preparation for, or in support of, the proposed CINT work? (*e.g. sample preparation, complementary characterization, calculations*)
5. What specific tasks will be performed by the user in conjunction with CINT? For each task, include task duration, expected task outcome, requested instrument(s), and CINT staff engagement. (*This should be the longest and most detailed section.*)
6. Key references.

Proposal Selection – Proposals will be internally screened for safety/feasibility and prioritized by an external review panel based upon scientific merit and suitability for CINT. Approved proposals will have an 18-month duration. An executed user agreement between CINT and the user institution(s) must be in place prior to starting the approved project. For no-fee access, the project results must be published in peer-reviewed technical publications and include the CINT Acknowledgement statement (available at: <http://cint.lanl.gov/publications/index.php>).

Leveraged Capabilities – In addition to CINT capabilities, prospective users may also request access to a variety of world-class leveraged capabilities hosted at Los Alamos and Sandia National Laboratories. These capabilities include selected ion beam assisted synthesis and characterization techniques, modeling and simulation tools using high performance computing and joint proposals with the National High Field Magnet Laboratory.



Scientific expertise at CINT – A distinguishing characteristic of the DOE/SC nanoscience user facilities is the availability of scientific expertise along with hardware/software techniques that enables nanoscience researchers to understand, predict, and realize unprecedented functionalities in materials. CINT expertise is available in these four scientific thrust areas:

- Quantum Materials Systems
- In-situ Characterization and Nanomechanics
- Nanophotonics and Optical Nanomaterials
- Soft, Biological, and Composite Nanomaterials

User proposal submissions:
<https://cint.sandia.gov/>

Submissions accepted:
September 1-30, 2021

