A Core Facility for Academic, Industry and Government Researchers
The Joint School of Nanoscience and Nanoengineering (JSNN) is a flagship research facility located at Gateway University Research Park’s South Campus. JSNN was established as an academic collaboration between North Carolina Agricultural and Technical State University (NCA&T) and The University of North Carolina at Greensboro (UNCG).

JSNN currently has six technical focus areas including: Nanomaterials, Nanometrology, Nanoelectronics & Nanobioelectronics, Nanobiology & Nanomedicine, Computational Nanotechnology and Nanoenergy & Environment.

Nanomanufacturing Innovation Consortium (NIC)

Nanomanufacturing Innovation Consortium (NIC) was established to enable 24/7, shared-user, fee-based access to the JSNN’s state-of-the-art research and education facility to academic, industry and government users. NIC is fast-becoming a leader in transformative nanomanufacturing research, discovery and education enterprise addressing the diverse needs of its consortium members.

Gateway University Research Park administers the NIC program on behalf of JSNN.

Facilities

- Over 100K sq. ft. of cleanroom, laboratory, office and meeting space
- Advanced nano-, micro-, chem-, bio-, computational labs, valued in excess of $80 million
- Over 100 state-of-the-art fabrication, synthesis, characterization, test, microscopy and modeling tools

Technical Expertise and Capability

- Nanoelectronics & Bioelectronics Cleanrooms
- Nanomaterial synthesis incl. scale-up
- Cell, Tissue & Molecular Biology
- Biosafety Level 3 Laboratory
- Advanced Microscopy Suite
- Analytical Instrumentation Suite
- Gateway Material Test Center
- Computational and 3D Visualization
- Energy & Hydroponics Laboratories

Support and Services

- 24/7 affordable access for academic, industry and government users
- Extensive safety and equipment training; online tool scheduler
- Intellectual property protection via direct user control of project
- Expert consulting, project and data analysis assistance
Southeastern Nanotechnology Infrastructure Corridor (SENIC)

The Joint School of Nanoscience and Nanoengineering (JSNN), in partnership with Georgia Tech’s Institute of Electronics and Nanotechnology (IEN) is a member of National Nanotechnology Coordinated Infrastructure (NNCI), supported by the National Science Foundation (ECCS-1542174). The NNCI is an integrated network of user facilities serving the needs of nanoscale science, engineering and technology. NNCI is a research facilitator providing state-of-the-art equipment, resources, staff expertise, and training to enable nanoscale research. These user facilities are open to researchers from academia, industry and government. To learn more, please visit www.nnci.net

JSNN partnership with Georgia Tech’s IEN to form the Southeastern Nanotechnology Infrastructure Corridor (SENIC) site within NNCI. SENIC provides the most modern facilities and complete collection of top-down and bottom-up research tools in the southeastern US. More information can be found at senic.gatech.edu.

How to become a user/member of JSNN’s Nanomanufacturing Innovation Consortium (NIC)

1. Contact @ jsnntools@ncat.uncg.edu or Shyam Aravamudhan, Deputy Director, JSNN-SENIC site at saravamu@ncat.edu or 336-285-2856.
2. Define (on your own) or work with our research staff on project goals and equipment/process needs. Both on-site (you do the work) and remote (we do the work) services available.
3. Complete consultation/instrument request form- jsnn.ncat.uncg.edu/user/consultation/
4. Set up the NIC partnership agreement with JSNN and Gateway.
5. Attend orientation, safety and equipment trainings; Begin work