

# GE Global Research

## Materials Characterization Researcher Niskayuna, NY

The Materials Characterization Organization at the GE Global Research Center (GRC) is a world class global team of scientists whose research contributes to understanding the fundamental mechanisms behind the composition-structure-processing-property relationships in complex material systems for all GE products and services. An in depth understanding of the fundamental material mechanisms allows GE to invent new materials with engineered properties that help the GE business solve the world's most important challenges in energy, healthcare, water, transportation, environment, and security.

### RESPONSIBILITIES:

As part of a team, you will:

- Partner with the multidisciplinary teams at GE Global Research and the GE Businesses to determine the best analysis methods to elucidate structure, chemistry, composition, surface characteristics, and physical properties of a wide material set consisting of metals, ceramics, polymers, composites, semiconductors, and biomaterials.
- Conduct research using advanced analysis equipment and methods which will enable and accelerate the development of GE technologies.
- Serve as a primary GE resource and subject matter expert in one or more materials characterization capabilities.
- Develop partnerships with external research facilities (universities, government labs) to utilize advanced characterization techniques.
- Deliver effective presentations, reports, and publications to Global Research leadership, the GE businesses, government agencies, professional societies, and peer-reviewed journals.
- Contribute to written proposals for internal and external funding.
- Contribute to patent disclosures and provide technical input in the patent application process.
- Troubleshoot and maintain analytical equipment to ensure optimal performance.

### BASIC QUALIFICATIONS:

- Doctorate in chemistry, material science, or related discipline.
- At least 3 years of research experience with an analytical technique (ICP-XXX, XRD, XRF, Auger, XPS, SIMS, SEM, TEM, u-probe, FIB, NMR, XX-MS, TGA, DMA, etc.), including extensive training and lab experience in applications of at least one of the techniques.
- Demonstrated ability to develop novel methods for a variety of materials/chemicals.
- Strong analytical, experimental, failure analysis, and problem solving skills.
- Knowledge of instrumentation and advanced data manipulations, reductions, and visualizations.
- Must be willing to work out of an office located in Niskayuna, NY.
- Must be willing to take a drug test and submit to a background investigation as part of the selection process.
- Must be 18 years or older.

**You must submit your application for employment against job number 1429784 on the Careers page at [www.ge.com/research](http://www.ge.com/research) to be considered for this position.**

**This position will be accessible on the GE Careers website beginning Monday, September 12.  
Please be sure to clearly indicate your current University when submitting your resume for consideration.**



EQUAL OPPORTUNITY EMPLOYER