

Post-doctoral research position
Application of ultrafast lasers to advanced manufacturing, processing and imaging

Rochester Institute of Technology
Chester F. Carlson Center for Imaging Science
Advanced Optical Fabrication, Instrumentation, and Metrology Laboratory

The Advanced Optical Fabrication, Instrumentation, and Metrology Laboratory (AOFIM) in the Chester F. Carlson Center for Imaging Science at the Rochester Institute of Technology (RIT), is soliciting applications for a one-year post-doctoral research position focused on the application of ultrafast lasers to advanced manufacturing, processing and imaging. During the course of this work, the successful applicant will have the opportunity to work with our collaborators in academics and industries.

Duties and responsibilities:

- Perform theoretical and experimental research in one or a combination of the following: laser material processing, laser polishing, laser forming, ultrafast laser writing, laser texturing, laser-matter interaction, lasers for additive manufacturing, adaptive optics, imaging, and optical metrology, particularly with ultrafast laser systems.
- Perform independent scientific investigations in assigned research area.
- Write and submit research papers to reputable scientific journals.
- Present original research results at conferences.
- Install, operate and maintain advanced laser systems.
- Assist in PhD student supervision.

Minimum requirements:

- PhD in Optics, Physics, Material Science, Industrial Engineering, Electrical Engineering or in relevant fields.
- General optics and lasers laboratory experience.
- Effective writing skills for publication of articles in scientific journals.
- Strong publication record.
- Ability to work independently and in collaboration with other researchers and students.
- Effective communication skills.
- Strong optical engineering background.
- Ability to program in Matlab, C++, or an equivalent language. Ability to perform optical modeling using any of the commercial software packages (ZEMAX/OSLO/CODE V/ FRED) is a plus.

Applicants are encouraged to visit the RIT website (www.rit.edu) and the Center for Imaging Science website (<http://www.cis.rit.edu/>) to get a better understanding of the research and collaboration environment.

Applications should be submitted online via <http://careers.rit.edu/staff>, using 1195BR for key word search. A cover letter, a personal research statement (maximum of three pages) including references to previous laser application or optical engineering work, and a curriculum vitae must be included. Questions should be submitted directly to Dr. Jie Qiao (qiao@cis.rit.edu).

Salary: Commensurate with education and experience (+ benefits)

Deadline: Applications review begins immediately and will continue until a candidate is selected.

Starting Date: As soon as possible

Duration: 12 months, with possible extension depending on performance and fund availability.