

Candidates for postdoctoral research fellow (PD) positions are sought to carry out research in time domain thermal reflectance (TDTR) and modulated photothermal radiometry. This position will be in Fiber Optics and Integrated Photonics Research Lab (FLAIR) and is funded by grants from NASA and DOD. Although the position will primarily support the FLAIR group, collaboration on thermal conductivity will be strongly encouraged through research exchanges with scientists and engineers at Oregon State University and local industries such as HP and Intel.

**Educational and Technical Qualifications:**

- Ph.D. in chemistry, physics, electrical engineering, or a related field.
- Strong experimental background in the operation, optimization, characterization, development, and maintenance of ultrafast lasers.
- Expertise in thermal conductivity and thermal modeling will review more favorably.
- Excellent scientific writing and communication skills as exemplified by a strong publication record.
- Team player with an excellent work ethic, meticulous attention to detail, and high intrinsic self-motivation to learn and work in the lab.

**Required Basic Qualifications:**

- Ability to acquire accurate, reproducible data.
- A critical eye toward consistency and reproducibility.
- Excellent project and time management skills.
- Strong interpersonal skills.
- Advocate for safety and ethics in the workplace.

The PD's primary research will set up TDTR and use the existing MPTR to study the thermal conductivity of novel 2D materials and their interface. They will model the laser heat dynamics of laser interaction with different materials. The project is a collaboration between OSU FLAIR Lab, Subbaraman lab, DOD, and NASA. In the collaborative effort, the PD will be part of a multidisciplinary team consisting of engineers, physicists, chemists, and computational groups.

In addition to conducting research, the PD will be expected to develop a broad understanding of the FLAIR group's research to enable supervision and mentoring of graduate and undergraduate students. The approximate expected division of labor is 60% research, 30% advising and mentoring, and 10% proposal/reporting activities. The /PD is also expected to be an active and supportive member of the FLAIR group, maintaining a high level of communication with its members, as well as to publish results in a timely manner and present at one or more professional conferences annually.

The duration of the project is approximately 2 years with the possibility of an extension. Approved annual salary ranges are ~\$50,000-\$55,000 for the Postdoctoral Fellow.

**If you are interested in this position:** Please submit a letter of application indicating your interest in and a summary of your qualifications for this position. Attach a CV that includes employment history (including dates of employment) and three professional references with contact information. Application materials should be emailed to **Kandadan@oregonstate.edu** with the subject **“Postdoctoral Fellow application”** depending upon qualifications and the position being applied for.

Review of applications will begin July 10, 2023, and will continue until finalists are identified. Applications received after that point may be considered if the position is not filled from the initial finalist pool.

**Oregon State University** is located at the heart of Oregon's Willamette Valley and close to Portland's Silicon Forest, with numerous collaboration opportunities. **The School of Electrical Engineering and Computer Science** has 66 tenured/tenure-track faculty members and 490 graduate students (212 Ph.D. students). Among the faculty, we have two National Academy of Engineering members, 23 professional society (IEEE and ACM) Fellows, and 27 Young Investigator/CAREER Award recipients. Among our several areas of distinction is a widely recognized program in usability engineering aimed at eliminating gender bias in software and promoting inclusive technology. We launched new Master and Ph.D. degrees in Artificial Intelligence in the fall of 2021. Many faculty members of the School of EECS are also active participants in the recently established Collaborative Robotics and Intelligent Systems Institute and the Pervasive Personalized Intelligence Center. The School of EECS boasts of a highly-ranked online postbacc program in computer science which has become a national model and has recently started the online BS, MEng and MS programs in computer science. The future of EECS includes a planned 150,000-square-foot Jen-Hsun and Lori Huang Collaborative Innovation Complex as well as over \$200 million in planned public and private investments in facilities, equipment, faculty hiring, and programs. The complex will harness one of the nation's most powerful supercomputers designed to solve the world's most challenging computational problems, a state-of-the-art clean room, and other specialized research facilities purposely designed to facilitate team-based research. Through this effort, engineering faculty will participate in nationally ranked programs in ocean, earth and climate science to help propel Oregon State's mission to pursue groundbreaking solutions for the betterment of humanity, the environment and the economy.

OSU is located in **Corvallis**, one of the nation's most livable small towns, bike friendly, with a riverfront pedestrian area, shopping, restaurants, and easy driving distance from Portland, long strolls on the Pacific coast, and exhilarating hikes amid snow-capped peaks in Cascade mountain range. **Corvallis has been ranked #1 on a list of "Best Places for Work-Life Balance,"** and is within easy reach of Portland, Eugene, the Cascade mountain range, and the Oregon Coast. Oregon State's strong institutional commitment to diversity and multiculturalism provides a welcoming atmosphere with unique professional opportunities for leaders from underrepresented groups. We are an Affirmative Action/Equal Opportunity employer and particularly encourage applications from members of historically underrepresented racial/ethnic groups, women, individuals with disabilities, veterans, LGBTQ community members, and others who share our vision of an inclusive community.