

Postgrad Position Available at CU DENVER NIST PREP Program

NIST Organization (Div/Group): [Sources and Detectors Group](#)

This position is part of the National Institute of Standards (NIST) Professional Research Experience (PREP) program. NIST recognizes that its research staff may wish to collaborate with researchers at academic institutions on specific projects of mutual interest, thus requires that such institutions must be the recipient of a PREP award. The PREP program requires staff from a wide range of backgrounds to work on scientific research in many areas. Employees in this position will perform technical work that underpins the scientific research of the collaboration.

Level of Appointment: [Postgrad](#)

An individual holding a master's degree from an accredited U.S. academic institution who is engaged in temporary mentored research and/or scholarly training to acquire the skills necessary to pursue a career path of their choice. **Additionally, these individuals are not allowed to enroll in a degree seeking program at any university/college in the United States or abroad during their time participating in this category.**

NIST ADVISOR: [Paul Williams](#)

NIST ADVISOR EMAIL: paul.williams@nist.gov

TITLE OF PREP POSITION: [High power laser applications advanced researcher](#)

SUMMARY OF THE POSITION:

Individual will work with scientists in the High-Power Laser Applications project on advanced optics projects for precision laboratory measurements of laser beam power, energy, and spatial profile. The individual will be perform a diverse set of duties including general laboratory support, support for laser optical measurements, and technical support for the development of high power laser measurements.

KEY RESPONSIBILITIES:

- Support laboratory experiments through purchasing, basic assembly, aligning optics, general physics laboratory activities.
- Write LabView or Python code for data acquisition and analysis.
- Safe alignment and operation of laser optical systems.
- Operate experiment and analyze data.

REQUIREMENTS:

- Ability to handle a diverse set of duties and learn new skills.
- Ability to use hand tools for simple construction projects.
- Ability to work in laboratory environment .
- Dedication to safe operation of laboratory equipment.

PREFERENCES: Basic knowledge of CAD drawing, 3D printing, machining skills, soldering, and alignment of laser optics.

SALARY DETERMINATION: \$60,000-\$85,000

Based on candidate's education and experience. The candidate is equivalent to ZIP-III NIST grade level.

LENGTH OF TERM:

Start date: 2025-01-13

End Date: 2026-01-12

HOW TO APPLY: For possible consideration and to apply to this position, qualified candidates should send a current CV, including contact information for three references and a publication list to Hamid Fardi (hamid.fardi@ucdenver.edu).

CU DENVER PREP POSTING: <https://engineering.ucdenver.edu/research/prep-research-program>