

Postbac Position Available at CU DENVER NIST PREP Program

NIST Organization (Div/Group): [Fiber Sources and Applications 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: [Postbac](#)

An individual holding a bachelor's degree and/or 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.

Key responsibilities will include but are not limited to:

Individual will support a group of about 15 scientists working on advanced optics projects for precision laboratory measurements and sensing over open-air paths. The individual will be expected to manage a diverse set of duties as required by the group including both technical work and general laboratory support.

- General laboratory support including managing repair of laboratory equipment and maintaining inventory of basic laboratory supplies, optical components, fiber optic components, and computer issues.
- Field experiment support including logistics, maintenance and upgrades to mobile van laboratory, field site preparations.
- Safety assistance including hazard reviews, upkeep of safety database.
- Electronics work including cable construction, repairs of custom electronics, ordering of parts
- Construction of electro-optical laboratory and field systems, including basic machining work
- Fabrication of fiber-optic based systems including fusion splicing of fiber optic components, polishing of damaged fiber connectors

Required Qualifications:

- Bachelors degree or equivalent in Physics, astrophysics or engineering
- Ability to use handheld tools for simple construction projects
- Ability to solder (wires, simple circuits)
- Ability to work standing for multiple hours

Other skills of interest include

- Machining skills
- Programming ability in Python
- Experience in electronics including soldering of surface mounts
- Previous use of a fusion splicer for fiber optic components
- Micro-controller programming experience

Salary Range Determination: [\\$45,000-\\$55,000](#)**NIST Grade Equivalent:** [ZP-II](#)

Based on candidate's education and experience, the candidate is equivalent to a NIST grade level as indicated above.

Length of Term:[Start date: 2024-08-31](#)[End Date: 2025-10-01](#)

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](https://engineering.ucdenver.edu/research/prep-research-program)