

**Opportunity Title:** Post Doctoral Researcher in Materials Characterization at AFIT

**Opportunity Reference Code:** AFIT-2021-0085

**Organization** U.S. Department of Defense (DOD)

**Reference Code** AFIT-2021-0085

**How to Apply** Click on *Apply* at the bottom of the opportunity to start your application.

**Description** The Air Force Institute of Technology is offering a postdoctoral fellowship at Wright Patterson Air Force Base.

**What will I be doing?**

As an ORISE participant, you will join a community of scientists and researchers under experimental research in nuclear stockpile stewardship, nuclear security, and nuclear physics. This opportunity is sponsored by the Defense Threat Reduction Agency. Current activities include data acquisition using scanning electron and atomic force microscopy, Raman, cathodoluminescence spectroscopy, photoemission spectroscopy, thermogravimetric analysis, and digital radiography to characterize materials for nuclear detection, nuclear survivability, and novel applications in a nuclear environment.

Research activities will be performed at AFIT and in collaborator facilities throughout the DOD and DOE partner universities.

**Why should I apply?**

Under the guidance of a mentor, you will gain hands-on experience to complement your education and support your academic and professional goals. Along the way, you will engage in activities and research in several areas. These include, but are not limited to:

- Gaining broad experience in relevant nuclear technologies and engineering
- Executing experimental campaigns
- Applying computational analysis techniques, developing analysis tools and analyzing and interpreting data
- Developing manuscripts
- Communicating research at relevant scientific meetings
- Conducting research with AFIT's experienced, professional faculty
- Interacting with students, government (Military and National Laboratory) sponsors, and civilian university collaborators

**Where will I be located?** Dayton, Ohio

**What is the anticipated start date?**

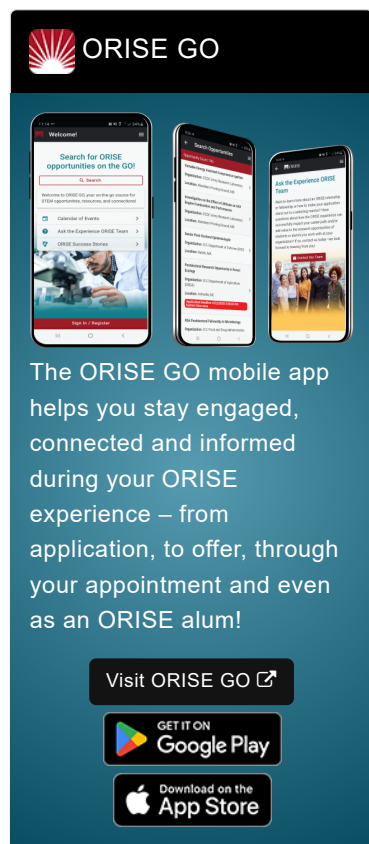
Exact start dates will be determined at the time of selection and in coordination with the selected candidate. Applications are reviewed on an ongoing basis and internships or fellowships will be filled as qualified candidates are identified.

**What is the appointment length?**

Appointments are initially for one year with the option to extend the appointment for up to four additional years, contingent upon project needs and funding availability.

**What are the benefits?**

You will receive a stipend to be determined by AFIT. Stipends are typically based on a participant's academic standing, discipline, experience, and research facility location. Other benefits may



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include the following:

- Health Insurance Supplement (*Participants are eligible to purchase health insurance through ORISE*)
- Relocation Allowance
- Training and Travel Allowance

#### About AFIT

The [Air Force Institute of Technology](#), or AFIT, located at Wright-Patterson Air Force Base, Ohio, is the Air Force's graduate school of engineering and management as well as its institution for technical professional continuing education. A component of Air University and Air Education and Training Command, AFIT is committed to providing defense-focused graduate and professional continuing education and research to sustain the technological supremacy of America's air, space and cyber forces.

This opportunity is offered through the [NEAT Center](#), which is positioned at the Air Force Institute of Technology.

#### About ORISE

This program, administered by Oak Ridge Associated Universities (ORAU) through its contract with the U.S. Department of Energy (DOE) to manage the Oak Ridge Institute for Science and Education (ORISE), was established through an interagency agreement between DOE and DoD. Participants do not enter into an employee/employer relationship with ORISE, ORAU, DoD or any other office or agency. Instead, you will be affiliated with ORISE for the administration of the appointment through the ORISE appointment letter and Terms of Appointment. Proof of health insurance is required for participation in this program. Health insurance can be obtained through ORISE. For more information, visit the [ORISE Research Participation Program at the U.S. Department of Defense](#).

**Qualifications** The qualified candidate will have a Doctoral degree, which must have been received within 5 years of the appointment start date.

U.S. military veterans who have been honorably discharged (or who have been medically discharged because of a service-connected disability) and who received a Doctoral degree within ten years of the desired start date are also eligible.

Highly competitive applicants will have education and/or experience in one or more of the following:

- Experience with high vacuum systems
- Experience with spectroscopy systems, analysis and interpretation of results
- Experience working with graduate students

#### Application Requirements

A complete application consists of:

- Zintellect Profile
- Educational and Employment History
- Essay Questions (goals, experiences, and skills relevant to the opportunity)

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- Resume (PDF)
- Transcripts/Academic Records - For this opportunity, an unofficial transcript or copy of the student academic records printed by the applicant or by academic advisors from internal institution systems may be submitted. [Click here for detailed information about acceptable transcripts.](#)
- 1 Recommendation

If you have questions, send an email to [AIRFORCE@orise.orau.gov](mailto:AIRFORCE@orise.orau.gov). Please list the reference code of this opportunity AFIT-2021-0085 in the subject line of the email. Please understand that ORISE does not review applications or select applicants; selections are made by the sponsoring agency identified on this opportunity. All application materials should be submitted via the "Apply" button at the bottom of this opportunity listing. Please do not send application materials to the email address above.

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- Eligibility Requirements**

- **Citizenship:** U.S. Citizen Only
  - **Degree:** Doctoral Degree received within the last 60 month(s).
  - **Discipline(s):**
    - **Chemistry and Materials Sciences** ([11](#) )
    - **Earth and Geosciences** ([3](#) )
    - **Engineering** ([14](#) )
    - **Physics** ([12](#) )
    - **Science & Engineering-related** ([1](#) )
  - **Veteran Status:** Veterans Preference, degree received within the last 120 month(s).