Opportunity Title: AFIT Faculty Fellowship in Applied Physics Research
Opportunity Reference Code: AFIT-2026-0014-F

Organization U.S. Department of Defense (DOD)

Reference Code AFIT-2026-0014-F

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

Description

Description

The Air Force Institute of Technology is offering a Faculty Fellowship in Applied Physics Research at Wright Patterson Air Force Base.

What will I be doing?

As an ORISE participant, you will engage with AFIT Graduate School of Engineering and Management Faculty in Physics-related research topics, which may include designing and testing of optical systems, investigation of shock formation and transmission, or utilizing machine learning to solve radiation transport problems. Computer packages such as ABAQUS, LS-DYNA, DAKOTA, MCNP, Python etc. are utilized for data generation, post-processing and response analysis. Opportunities exist to develop skills and experience in new and efficient methods needed to solve complex defense-related projects. Examples include using optical theory to design and build a prototype system, generating and analyzing the shock-induced effects on structures, and identifying the isotopes responsible for creating a measured radiation spectrum.

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:

- Expand skills and experience by discovering and implementing efficient approaches for solving physics-focused problems in optical, shock, or radiation transport areas
- Participate in modeling and simulations using relevant software
- Gain further experience in planning and/or conducting physical experiments for validation and performance evaluation
- Develop and share knowledge of state-of-the-art methods through presentations and discussions with scientists and engineers

Where will I be located?

Dayton, Ohio

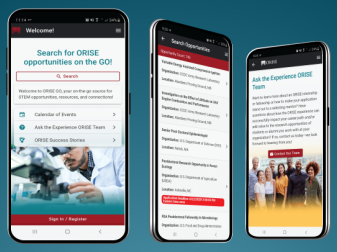
What is the anticipated start date?

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 fellowships will be filled as qualified candidates are identified.

What is the appointment length?

Faculty appointments are generally for 10-12 weeks during the summer, but appointments during the academic year are also available. Appointments may be extended depending on funding availability, project assignment, program rules, and availability of the participant.

OAK RIDGE INSTITUTE FOR SCIENCE AND EDUCATION
ORISE GO



The ORISE GO mobile app helps you stay engaged, connected and informed during your ORISE experience – from application, to offer, through your appointment and even as an ORISE alum!

Visit ORISE GO
GET IT ON Google Play
Download on the App Store

Opportunity Title: AFIT Faculty Fellowship in Applied Physics Research
Opportunity Reference Code: AFIT-2026-0014-F

What are the provisions?

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

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 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 be current faculty at an accredited 4-year university or 2-year college.

Application Requirements

A complete application consists of:

- Zintellect Profile
- Educational and Employment History
- Essay Questions (goals, experiences, and skills relevant to the opportunity)
- Resume (PDF)
- One Recommendation. We encourage you to contact your recommender(s) as soon as you start your application to ensure they are able to complete the recommendation form and to let them know to expect a message from Zintellect. Recommenders will be asked to rate your scientific capabilities, personal characteristics, and describe how they know you. You can always log back in to your Zintellect account and check the status of your application.

If you have questions, send an email to AIRFORCE@orise.orau.gov. Please list the reference code of this opportunity [AFIT-2026-0014-F] 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"

Opportunity Title: AFIT Faculty Fellowship in Applied Physics Research
Opportunity Reference Code: AFIT-2026-0014-F

button at the bottom of this opportunity listing. Please do not send application materials to the email address above.

Connect with ORISE...on the GO! Download the new ORISE GO mobile app in the Apple App Store or Google Play Store to help you stay engaged, connected, and informed during your ORISE experience and beyond!

Point of Contact Leslie

Eligibility Requirements

- **Citizenship:** U.S. Citizen Only
- **Degree:** Doctoral Degree.
- **Discipline(s):**
  - **Chemistry and Materials Sciences** (12)
  - **Computer, Information, and Data Sciences** (17)
  - **Earth and Geosciences** (21)
  - **Engineering** (29)
  - **Mathematics and Statistics** (11)
  - **Physics** (16)
  - **Science & Engineering-related** (2)