

Opportunity Title: Next Generation Smoke and Obscuration Development - Post-Doctoral Research Fellowship

Opportunity Reference Code: DEVCOM-CBC-2026-0003

Organization U.S. Department of Defense (DOD)

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

Description The Department of Defense (DoD) is offering a STEM-focused research fellowship at the U.S. Army Combat Capabilities Development Chemical and Biological Center (DEVCOM CBC).

What will I be doing?

Under the guidance of a mentor, you will participate in development of novel materials which play a crucial role in protecting the US warfighter. This research addresses a critical need for improved protection of the US warfighter by developing materials that effectively interrupt line-of-sight across the visible, infrared (IR), and millimeter wave spectrum. Current obscurant technologies suffer from limitations in obscuring performance, compatibility with explosive dissemination systems, and atmospheric stability.

Why should I apply?

As an ORISE participant, you will have the opportunity to expand your knowledge and experience by investigating the materials synthesis and deployment of advance obscurant materials using a range of spectroscopy and analytical techniques, aerosol generation and analysis. A strong background is needed in materials chemistry and demonstrated experience in materials characterization. This research offers a unique opportunity to contribute to a critical defense technology and collaborate with a multidisciplinary team.

Anticipated learning objectives for this opportunity include, but are not limited to:

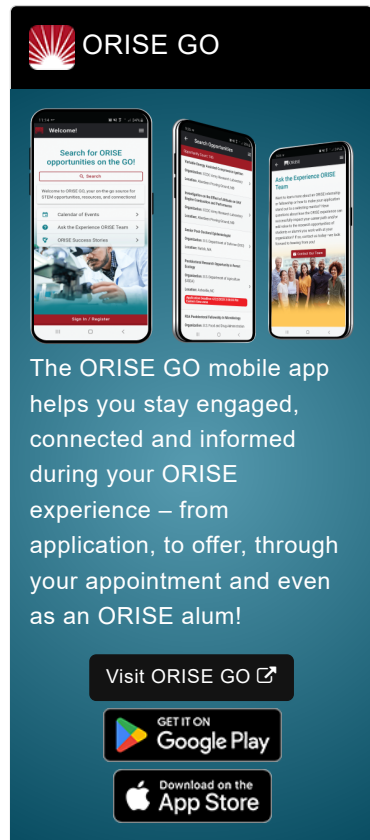
- 1. Understanding Material Development:** Gain knowledge of the principles and processes involved in the synthesis and characterization of novel materials designed for obscurant applications.
- 2. Aerosol Generation and Analytical Techniques:** Acquire hands-on experience in aerosol generation techniques and the analysis of aerosol characteristics related to material deployment. Develop proficiency in using various spectroscopy and analytical techniques to analyze material properties and performance.
- 3. Collaboration in a Multidisciplinary Team:** Enhance teamwork and communication skills by engaging with professionals from diverse scientific and engineering backgrounds.
- 4. Evaluation of Obscuration Technologies:** Learn to assess the limitations and performance metrics of current obscurant technologies, particularly in terms of obscuring effectiveness, compatibility with dissemination systems, and atmospheric stability.
- 5. Application to Defense Technologies:** Understand the significance of advanced obscurant materials in enhancing the protection of U.S. warfighters.

Where will I be located?

Aberdeen Proving Ground, Maryland


What is the anticipated start date?


DEVCOM-CBC is ready to make appointments immediately. 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.




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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 provisions?

You will receive a stipend to be determined by DEVCOM-CBC. Stipends are typically based on a 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 DEVCOM-CBC

The U.S. Army Combat Capabilities Development Command - Chemical Biological Center (DEVCOM-CBC) is the primary Department of Defense technical organization for nonmedical chemical and biological defense. (DEVCOM-CBC) activities at the Edgewood portion of Aberdeen Proving Ground, Maryland, provide an extraordinary capability against emerging biological and chemical threats by merging intelligence assessments with its world-renowned chemistry, biology, physiology and engineering expertise at every stage of the acquisition life cycle. We provide a unique blend of distinguished scientists and engineers for the research and development of innovative technological solutions to solve chemical and biological defense threats to our nation—both abroad and on the homeland.

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 applicant is a U.S. Citizen who has received a Ph.D. in chemistry, chemical engineering, physics, mechanical engineering, or a discipline directly related to the described work. Degree must have been received within 60 months of the appointment start date.

Highly qualified applicants will have prior hands-on laboratory experience.

Candidates must pass a background check in order to access U.S. Army facilities.

Application Requirements

A complete application consists of:

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- Zintellect Profile
- Educational and Employment History
- Essay Questions (goals, experiences, and skills relevant to the opportunity)
- Resume (PDF)
- Transcripts/Academic Records - Please upload a copy of a transcript for your current or most recent degree program that meets the disciplinary qualifications of the opportunity. [Click here for detailed information about acceptable transcripts.](#)
- Two Recommendation. We encourage you to contact your recommenders 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 ARMY-RDECOM@orise.orau.gov. Please list the reference code of this opportunity [DEVCOM-CBC-2026-0003] 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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Stipend \$7,300.00 – \$7,500.00 Monthly

Point of Contact [Richard](#)

- Eligibility Requirements**
- **Citizenship:** U.S. Citizen Only
 - **Degree:** Doctoral Degree received within the last 60 month(s).
 - **Discipline(s):**
 - **Chemistry and Materials Sciences** ([12](#))
 - **Engineering** ([29](#))
 - **Physics** ([16](#))
 - **Age:** Must be 18 years of age