

Opportunity Title: LQC National Quantum Fellowship Opportunity Reference Code: NSA-LPS-LQC-2025-0001

Organization U.S. Department of Defense (DOD)

Reference Code NSA-LPS-LQC-2025-0001

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

Application Deadline 4/2/2025 1:00:00 PM Eastern Time Zone

Description The Laboratory for Physical Sciences Qubit Collaboratory (LQC) is a national Quantum Information Science Research Center hosted at the Laboratory for Physical Sciences (LPS) at the University of Maryland, College Park. The LQC pursues disruptive qubit research, innovative workforce development programs, and deep, collaborative partnerships to tackle some of the hardest open problems in quantum information science and technology. Fostering the next generation of Quantum Information Scientists is a top priority for the LQC.

What will I be doing and why should I apply?

The LQC National Quantum Fellowship is designed to support talented U.S. citizen graduate students within the field of quantum information science and technology (QIST). By stimulating U.S. graduate student participation in QIST-based research, the LQC National Quantum Fellowship addresses one aspect of the LQC's mission of fostering the development of a highly skilled and knowledgeable QIST workforce for the nation in support of the National Quantum Initiative. With a preference to superconducting and semiconducting approaches, research topics must be connected to advancing qubit device creation or implementation and may be experimental or theoretical in nature. While the emphasis is on quantum computing, proposals for quantum sensing and networking will also be considered. All fellows are afforded the opportunity to visit and collaborate directly with the LQC, its personnel, and make use of the state-of-the-art equipment onsite. In addition, all fellows are expected to present a poster or oral presentation at the annual LQC Program Review (LQCPR) in College Park, MD.



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Where will I be located?

Location varies.

Anticipated Start Date

Exact start dates will be determined at the time of selection and in coordination with the selected candidate.

What is the appointment length?

This appointment is a 12-month research appointment, with the intention to extend the appointment annually for up to 3 years. Appointments may be extended depending on funding availability, project assignment, program rules, and availability of the participant.

What are the provisions?

Participants will receive a stipend to be determined by NSA-LPS-LQC. 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



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• Training and Travel Allowance

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 <u>ORISE Research Participation Program at the U.S.</u> <u>Department of Defense</u>.

Qualifications Eligible recipients of the LQC National Quantum Fellowship are U.S. citizen graduate students who either will work or are working on quantum computing related research at a U.S. academic institution. Applicants in physics, materials science, electrical engineering, or other discipline relevant to quantum information science (QIS) are encouraged.

Candidates should provide transcripts, a letter of research intent, and up to 3 letters of recommendation.

- Proposal letter of research intent must outline the research activities that the candidate will
 undertake during the three-year length of the fellowship and be written by the candidate.
 Proposals should also include the direction and where your research is going.
- Proposal must include a letter of support from the mentor highlighting the candidate's qualifications and specify how the fellowship will augment existing research or expand the group's activities in a new direction.
- If applicable, an additional letter of recommendation supporting the candidate's qualifications and aptitude to conduct QIS focused research from a key partner or stakeholder is encouraged.

Applications will be evaluated on the strength of the research proposal, research impact, student academic achievements, and leadership potential.

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)
- 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. <u>Click here</u> for detailed information about acceptable transcripts.
- Minimum of One Recommendation. Your application will be considered incomplete and will not be reviewed until a minimum of one recommendation is submitted. We encourage you to



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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 STEM-WORKFORCE@orise.orau.gov. Please list the reference code of this opportunity [NSA-LPS-LQC-2025-0001] 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.

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

Point of Contact Richard

Eligibility Requirements

• Citizenship: U.S. Citizen Only

- Degree: Currently pursuing a Doctoral Degree.
- Minimum Overall GPA: 3.50
- Discipline(s):
 - Chemistry and Materials Sciences (3.)
 - Engineering (<u>3</u>)
 - Physics (<u>5</u>)