DOE Office of Science Graduate Student Research (SCGSR) Program

The SCGSR Program provides supplemental awards to outstanding graduate students to spend 3 to 12 months conducting part of their doctoral thesis/dissertation research at a host DOE national laboratory/facility in collaboration with a DOE laboratory scientist.

- Graduate students must apply online through the online application system.
- The application requires a research proposal and letters of support from both the graduate student's thesis advisor and the collaborating DOE laboratory scientist.
- Student's research and proposed SCGSR project must be aligned with one of the identified SCGSR priority research areas defined by the SC Program Offices and specified in the solicitation.
- Applications proposing to use an SC user facility must apply for user facility time separately.

Award Benefits:

- A monthly stipend of up to $3,000/month for general living expenses
- Reimbursement of inbound/outbound traveling expenses to/from the host DOE laboratory/facility of up to $2,000

(Award payments are provided directly to the student)

Eligibility:

- U.S. Citizen or Lawful Permanent Resident
- Qualified graduate program & Ph.D. Candidacy
- Graduate research aligned with an SCGSR priority research area
- Establishment of a collaborating DOE laboratory scientist at the time of application

2022 Solicitation 2 – Application Due November 9, 2022, 5:00 PM ET

Full details, requirements, FAQs, and link to application at: https://science.osti.gov/wdts/scgsr/

Key Dates for 2021 - 2023

At the submission deadline (shown in red), the online application system will close after which no additional materials will be accepted.

The online application system closes at 5:00 PM Eastern Time.

	2021 Solicitation 2 (Ongoing)	2022 Solicitation 1 (Under Review)	2022 Solicitation 2 (Upcoming)
On-line Application Opens	August 19, 2021	February 9, 2022	August 17, 2022
Applications Due (including all letters of support)	**November 10, 2021**	**May 4, 2022**	**November 9, 2022**
Offer Notification Period *Begins on or around*	April/May 2022	September 8 –21, 2022	April 3 – 17, 2023
*Earliest** Start Date for Proposed Project Periods	June 13, 2022	November 14, 2022	June 12, 2023
*Latest*** Start Date for Proposed Project Periods	October 3, 2022	March 6, 2023	October 2, 2023

**Proposed project periods may not begin before this date, and may be 3 to 12 consecutive months in duration.*
*** Proposed project period must begin no later than this date, and may be 3 to 12 consecutive months in duration.*

SCGSR Program: Priority Research Areas for 2022 Solicitation 2

https://science.osti.gov/wdts/scgsr/how-to-apply/priority-sc-research-areas/

Convergence Research Topical Areas
(a) Microelectronics (ASCR, BES, HEP, and NP)
(b) Data Science (ASCR, BES, BER, FES, HEP, and NP)
(c) Conservation Laws and Symmetries (HEP and NP)
(d) Accelerator Science (ASCR, BES, BER, FES, HEP, NP, DOE IP, and ARDAP)

Advanced Scientific Computing Research (ASCR)
(a) Applied Mathematics
(b) Computer Science
(c) Computational Partnerships
(d) Advanced Computing Technologies

Basic Energy Sciences (BES)
(a) Accelerator and Detector R&D
(b) Basic Geosciences
(c) Basic Science for Advanced Manufacturing
(d) Basic Science for Clean Energy and Decarbonization
(e) Chemical and Materials Sciences for Quantum Information Science (QIS)
(f) Data and Computational Sciences for Materials and Chemical Sciences
(g) Fundamental Electrochemistry for Chemical and Materials Sciences
(h) Gas Phase Chemical Physics
(i) Instruments R&D for Neutron and X-ray Facilities
(j) Instruments and Techniques R&D for Electron and Scanning Probe Microscopy
(k) Materials Sciences and Chemistry for Microelectronics
(l) Nuclear Chemistry and Radiochemical Separations
(m) Radiation Effects in Materials and Chemistry

Biological and Environmental Research (BER)
(a) Computational Biology and Bioinformatics
(b) Biomolecular Characterization and Imaging Science
(c) Plant Science for Sustainable Bioenergy
(d) Environmental Microbiology
(e) Environmental System Science
(f) Atmospheric System Research
(g) Earth System Model Development
(h) Regional and Global Model and Analysis

Fusion Energy Sciences (FES)
(a) Burning Plasma Science & Enabling Technologies
(b) Discovery Plasma Science

High Energy Physics (HEP)
(a) Theoretical and Computational Research in High Energy Physics
(b) Advanced Accelerator and Advanced Detector Technology Research and Development in High Energy Physics
(c) Experimental Research in High Energy Physics

Nuclear Physics (NP)
(a) Medium Energy Nuclear Physics
(b) Heavy Ion Nuclear Physics
(c) Fundamental Symmetries
(d) Nuclear Structure and Nuclear Astrophysics
(e) Nuclear Theory
(f) Nuclear Data and Nuclear Theory Computing
(g) Accelerator Research and Development for Current and Future Nuclear Physics Facilities
(h) Quantum Information Science for Experimental and Computational Nuclear Physics
(i) Artificial Intelligence and Machine Learning for Nuclear Physics
(j) Advanced Detector Technology Research and Development in Nuclear Physics

Isotope R&D and Production (DOE IP)
(a) Isotope Production Research
(b) Isotope Processing, Purification, Separations and Radiochemical Synthesis
(c) Biological Tracers and Imaging
(d) Isotope Enrichment Technology

Accelerator R&D and Production (ARDAP)
(a) Accelerator Technology Research
(b) Accelerator Technology Development

Merit Review Criteria

1. Scientific and/or Technical Merit of the Proposed Research*

a. **Is the proposed research well-conceived, and does it demonstrate a clear understanding of the scientific and technical challenges involved?**

b. **Is the proposed method and approach for the proposed research appropriate?**

c. **Is the applicant (graduate student) sufficiently well prepared to conduct the proposed research?**

d. **Are the DOE laboratory resources adequate? If applicable, has the necessary access to a scientific user facility been secured by the DOE laboratory collaborating scientist?**

2. Relevance of the Proposed Research* to Graduate Thesis Research and Training

a. **Does the proposed research have the potential to make a significant contribution to the applicant's (graduate student's) thesis research project?**

b. **Will the proposed research enhance the applicant's graduate training and research skills?**

* Research proposed is explicitly the scope of the research proposed to be conducted by the applicant (graduate student) at the DOE Laboratory/Facility.

Application Requirements

All applications to the SCGSR program must be completed through the online application system. Only complete applications submitted by the deadline will be considered.

A Complete SCGSR Application includes:

- All required fields of the Online Application System, *including:*
  - Contact information of the graduate applicant, primary graduate thesis advisor, and collaborating DOE laboratory scientist
  - Academic information, including undergraduate and graduate study
  - Professional information, including scientific publications and awards, research experiences, etc.
  - Alignment of proposed research to one of the SCGSR Priority Research Areas https://science.osti.gov/wdts/scgsr/how-to-apply/priority-sc-research-areas/

- A **SCGSR Research Proposal** (*3-page maximum including references, full guidance provided online*). https://science.osti.gov/wdts/scgsr/how-to-apply/research-proposal-guidelines/
- Official graduate transcripts and proof of Ph.D. Candidacy. https://science.osti.gov/wdts/scgsr/how-to-apply/graduate-transcripts/
- Two Letters of Support, one by primary graduate thesis advisor, and the other by collaborating DOE laboratory scientist. https://science.osti.gov/wdts/scgsr/how-to-apply/Letters-of-Support/