Opportunity Title: DOE-STP Industrial Technologies Office Fellow
Opportunity Reference Code: DOE-STP-CMEI-ITO-2026-0007

Organization U.S. Department of Energy (DOE)

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How to Apply Click on *Apply* below to start your application.

Description The U.S. Department of Energy (DOE) Science, Technology and Policy Program (DOE-STP) is designed to provide opportunities for recent graduates, postgraduates, established scientists, and faculty to participate in programs, projects, and activities at the Department. Fellows will receive hands-on learning that provides an understanding of the mission, operations, and culture of the DOE. As a result, fellows will gain deep insight into the federal government's role in the development and implementation of energy technologies; apply their scientific, policy, and technical knowledge to the development of solutions to issues of importance to the DOE and continue their education and involvement in areas that support the DOE mission.

About the Industrial Technologies Office

The Industrial Technologies Office (ITO) is part of the U.S. Department of Energy's Office of Critical Minerals and Energy Innovation. With over 30% of primary energy-use in the U.S. attributable to the industrial sector, ITO plays an important role in supporting innovative technologies that reduce the resource intensity, boost productivity, and drive affordability of industrial processes and products.

ITO's mission is to accelerate development and adoption of cost-effective technologies aimed at strengthening the global competitiveness of the U.S. industrial sector. As an office, ITO provides the planning, management, and direction necessary for a balanced national program of research, development, demonstration, commercialization support, technical assistance, and workforce development across the industrial sector.
Fellows can play a leading role across a range of core ITO activities, including the following:

- **Research and Development:** Fellows will gain an understanding of strategy development and program execution of a wide range of technology innovations that strengthen domestic energy-intensive industries, such as chemicals and refining, iron and steel, food and beverage, cement and concrete, and forest products. Fellows will research advanced innovative technologies and processes with applicability across multiple industrial sectors. Focus areas include industrial process heating; thermal storage and thermal management technologies; membranes and other separation processes; water supply and wastewater treatment; AI and high-performance computing; and technologies to support grid flexibility of large loads (e.g., data centers).
- **Technical Assistance:** Fellows will participate in activities related to addressing adoption barriers to technology deployment through tailored technical assistance programs to help industry save money and improve

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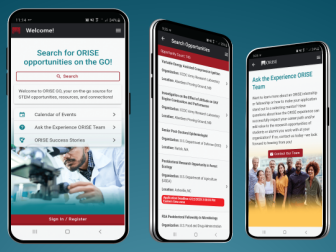
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productivity by streamlining operations, managing energy usage more effectively, and reducing water usage and waste production.
- **Commercialization:** Fellows will seek to understand the commercialization of new technologies by participating in designing programs to derisk emerging technologies and inform technology developers through the productization of their technologies.
- **Workforce Development:** Fellows will participate in workforce training and upskilling activities that prepare existing workers and attract a diverse mix of workers to the industrial jobs of the future.
- **Strategic Analysis:** Fellows have an opportunity to contribute to industrial focused strategic and market analysis that supports ITO decision-making. Efforts focus on state-of-the-art industrial technology analysis including life cycle analysis, input/output modeling, production & process modeling and associated tools development.

Appointment Expectations

ITO is seeking talented and passionate Fellows interested in learning about technical, programmatic, strategic, and policy efforts aimed at increasing productivity of the industrial sector. Fellows will participate closely with ITO staff—including several former Fellows—and will develop a broad understanding of the potential of new technologies and current barriers to technology deployment across all of ITO's subprograms. This involves researching the impact of the RD&D portfolio in ITO and assessing gaps or opportunity areas for future investments.

With guidance from a mentor, Fellows will have the opportunity to learn how to:

- Research and develop initiatives related to specific goals, area of interest and assignments, with the intention expanding ITO's understanding.
- Identify key technology opportunities and research the implementation of ITO, CMEI, and DOE-level strategies.
- Draft funding opportunity announcements and other investment solicitations (e.g., lab calls, prizes, etc.) as well as communication materials to achieve RD&D and policy goals.
- Learn how to review technical reports, analysis, research proposals, and other technical documents.
- Prepare and present briefings to a number of stakeholders.
- Collaborate with other DOE programs and offices, participating in office-wide or interoffice initiatives, task forces, or tech teams.
- Interface with technical, policy, and business leaders from academia, national labs, the private sector, and other government agencies (e.g., through interagency working groups).
- Assist in planning internal and external workshops, webinars, and other stakeholder events or initiatives.

Under the guidance of a mentor to be selected based on the fellow's skills and interests, learning opportunities include:

- Utilizing scientific expertise to inform decision-makers in the areas of energy and technology policy, strategic analysis, research, development, and/or commercialization.
- Application and strategy of using artificial intelligence in industry through enhanced and optimized discovery, design and controls.
- Applying financial, economic, and social research techniques to understand industrial decision making regarding new technology adoption.
- Analyzing technical needs and opportunities, and the potential impacts of program and policy decisions.
- Providing input for analysis and strategic planning.
- Researching the potential for commercial deployment of next-generation industrial technologies.
- Evaluating approaches to achieve next generation productivity levels for new technologies.
- Developing an understanding of technical resource for ITO applied research and development projects.

Appointment Location

Washington, D.C.

Anticipated start date

ITO is ready to make appointments immediately and will assess applications on a rolling basis through October 2026. Exact start dates will be determined at the time of selection and in coordination with the selected candidates. Five fellowships are available through this posting and ITO plans to fill them within calendar year 2026.

Appointment Length

The appointment will initially be for twelve months but may be renewed annually for up to five years upon recommendation of ITO and is contingent on the availability of funds.

Nature of the Appointment

Participants will not enter into an employee/employer relationship with ORISE, ORAU, the DOE, or any other office or agency. Instead, the participant will be affiliated with ORISE for the administration of the appointment through the ORISE appointment letter and Terms of Appointment.

Qualifications **Qualifications**

The candidate must have received a Bachelors, Master's, or Doctoral degree in engineering, economics, natural sciences, or public policy discipline, with emphasis on energy-related application of one of those disciplines by the anticipated start date within the last 5 years. Qualifying degrees must be completed by December 2026 and applicants must be

available to commit to the fellowship full time by January 2026. Applicants currently pursuing an advanced degree must provide proof of completion of all degree requirements before the appointment start date. If more than 5 years since receipt of degree, applicant must have an academic background and experience in a relevant field and must be seeking to gain new knowledge/experience in order to expand career opportunities or advance professionally.

How to Apply

A complete application consists of:

- Zintellect Profile and responses to opportunity specific questions
- A current resume/CV, including academic history, employment history, and relevant experiences
- 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. Selected candidate may be required to provide proof of completion of the degree before the appointment can start.
- One Recommendation - Applicants are required to provide contact information for at least one recommender in order to submit the application. You are encouraged to request a recommendation from a professional who can speak to your abilities and potential for success as well as your scientific capabilities and personal characteristics. Recommendation requests must be sent through the Zintellect application system. Recommenders will be asked to complete a recommendation in Zintellect. Letters of recommendation submitted via email will not be accepted.

All documents must be in English or include an official English translation. Submitted documents must have all social security numbers, student identification numbers, and/or dates of birth removed (blanked out, blackened out, made illegible, etc.) prior to uploading into the application system.

Eligibility Requirements

- **Citizenship:** U.S. Citizen and Lawful Permanent Residents
- **Degree:** Bachelor's Degree, Master's Degree, or Doctoral Degree.
- **Age:** Must be 18 years of age

Point of Contact Alyson

Eligibility Requirements

- **Citizenship:** LPR or U.S. Citizen
- **Degree:** Any degree .
- **Discipline(s):**
  - **Chemistry and Materials Sciences** (12 👁)
  - **Communications and Graphics Design** (1 👁)
  - **Computer, Information, and Data Sciences** (17 👁)
  - **Earth and Geosciences** (21 👁)

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  - **Engineering** (29 👁)
  - **Environmental and Marine Sciences** (14 👁)
  - **Life Health and Medical Sciences** (5 👁)
  - **Mathematics and Statistics** (11 👁)
  - **Physics** (16 👁)
  - **Science & Engineering-related** (1 👁)
  - **Social and Behavioral Sciences** (5 👁)
- **Age:** Must be 18 years of age