Opportunity Title: DOE-STP Office of Policy-Industrial Technologies Analysis Fellow
Opportunity Reference Code: DOE-STP-OP-2024-0006

Organization U.S. Department of Energy (DOE)

Reference Code DOE-STP-OP-2024-0006

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

This is a continuous posting. Applications will be reviewed and selected as opportunities become available.

Description The U.S. Department of Energy (DOE) Science, Technology and Policy Program is designed to provide opportunities for students, postgraduates, and faculty to participate in programs, projects, and activities at the Department. Fellows will receive hands-on experience that provides an understanding of the mission, operations, and culture of DOE. As a result, fellows will gain deep insight into the federal government's role in the creation and implementation of energy technology policies; 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 either in a technical or policy-related role

Industrial Technologies Analysis Fellow

The Department of Energy's (DOE) Office of Policy (OP) is leading analysis and supporting the coordination of joint activities across the research, development, demonstration and deployment (RDD&D) spectrum to reduce emissions in the industrial sector and increase U.S. competitiveness. With 30% of primary energy-related emissions attributable to the industrial sector, the enhanced coordination that the Office of Policy will provide plays an important role in supporting the reduction of U.S. CO2 emissions by 50% by 2030 (compared to 2005 levels) and achieving net-zero carbon emissions by 2050. Industrial subsectors of interest include petrochemicals, chemicals, metals, cement and concrete, pulp and paper, food and beverage. Technology areas of interest include carbon capture, process electrification, energy efficiency, and hydrogen.

The Office of Policy is seeking an Industrial Technologies Analysis Fellow to learn about the overall enhanced coordination of activities across multiple offices within the Department of Energy and with other agencies and external stakeholders. The Industrial Technologies Analysis Fellow will participate alongside the Industrial Technologies Senior Advisor in the Office of Policy under the guidance of the Chairs of the Industrial Technologies Joint Strategy Team from the Office of Manufacturing and Energy Supply Chains, Office of Industrial Efficiency and Decarbonization and the Office of Clean Energy Demonstrations.

Fellowship Activities

OP is seeking a talented and passionate fellow interested in participating on strategic, analytic, and policy efforts aimed at decarbonizing the industrial sector. The fellow will collaborate closely with multiple staff across DOE—including several former fellows—and will develop a broad understanding of the potential of new technologies and current barriers to technology deployment. This fellowship will last one year, with the

opportunity to renew for additional years at the discretion of the sponsoring office. You will have the opportunity to learn how to:

- Facilitate engagement and collaborate with other DOE programs and offices, participating in office-wide or interoffice initiatives, task forces, or tech teams (e.g. the Energy Earthshots and other Joint Strategy Teams).
- Assess modeling, analytical, and data development work across DOE and other agencies, identify enhancement opportunities and contribute to development of world class analytical capabilities.
- Participate in reviewing and providing input on technical reports, analysis, roadmaps, research proposals, and other technical documents.
- Participate in preparing and presenting briefings to upper management, external offices, and at conferences.
- Interface with technical, policy, and business leaders from academia, national labs, the private sector, and other government agencies (e.g. through interagency working groups).
- Participate in the planning and execution of workshops, webinars, and other stakeholder events or initiatives as needed.

Under the guidance of a mentor, learning opportunities include:

- Utilizing scientific expertise to engage decision-makers in the areas of energy efficiency policy, planning, research, development, and communication for industrial energy efficiency and decarbonization.
- Analyzing data and using technoeconomic or macroeconomic models to understand the potential impacts of program and policy decisions.
- Providing input for analysis and strategies for industrial decarbonization and economic opportunities.
- Assessing the potential for commercial deployment of industrial technologies focused on efficiency and decarbonization.
- Learning to become a technical resource for integrated coordinated planning and programs.
- Engaging with industry, research, academic, and other government stakeholders to define areas of need for decarbonization of the industrial sector.

Through these activities, fellows will participate in establishing and nurturing the critical link between DOE decision-makers and other scientific professionals to uphold public policy.

Nature of Appointment

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

Qualifications Applicants must have completed their bachelor’s, master’s, or doctoral

degree within the last 5 years. If more than 5 years since the receipt of the degree, the applicant must have an academic background or experience in a relevant field and must be seeking to gain new knowledge/experience in order to expand career opportunities or advance professionally.

Other preferred qualifications include experience with data analysis, technoeconomic modeling, energy and emissions modeling, and economic modeling of manufacturing processes and technologies, particularly for energy-intensive industries such as chemicals, metals, cement and concrete, pulp and paper, and food and beverages.

How to Apply

A complete application consists of:

- Zintellect Profile and responses to opportunity specific questions
- Transcripts/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.
- A current resume/CV, including academic history, employment history, and relevant experiences (*see below for instructions).
- One Recommendation - Applicants are required to provide contact information for one recommender in order to submit the application. You are encouraged to request a recommendation from professionals 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 submitted via Zintellect in order to be considered and 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.*

*The resume/CV must include the following:

- Basic applicant Information: Name, address, phone, email, and other contact information.
- Work & Research Experience: List all work and research experiences beginning with current or most recent. Include the name of the employer, location, position held, and time period involved.
- Leadership Experience: List experiences (e.g., work, civic, volunteer, research) that demonstrate your leadership skills. Detail your role, type of experience, organization, location, and duration.
- Educational History: List all institutions from which you received or expect to receive a degree, beginning with current or most recent

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institution. Include the name of the academic institution, degree awarded or expected date of awarded or expected degree, and academic discipline.
- Honors & Awards: List in chronological order (most recent first) any awards or public recognitions. Include the name of awarding institution, title of the award or honor, and date of award or honor.

If you have questions, please send an email to DOE-RPP@orise.orau.gov. Please list the reference code for this opportunity in the subject line of your email: DOE-STP-OP-2024-0006

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Point of Contact Alyson

Eligibility Requirements

- **Citizenship:** LPR or U.S. Citizen
- **Degree:** Bachelor's Degree, Master's Degree, or Doctoral Degree.
- **Discipline(s):**
  - **Chemistry and Materials Sciences** (12 👁)
  - **Computer, Information, and Data Sciences** (17 👁)
  - **Earth and Geosciences** (21 👁)
  - **Engineering** (27 👁)
  - **Environmental and Marine Sciences** (14 👁)
  - **Mathematics and Statistics** (11 👁)
  - **Other Non-Science & Engineering** (13 👁)
  - **Physics** (16 👁)
  - **Science & Engineering-related** (2 👁)
- **Age:** Must be 18 years of age