Opportunity Title: DOE-STP Critical Minerals and Energy Innovation - Alternative Fuels and Feedstocks Office Fellowship
Opportunity Reference Code: DOE-STP-CMEI-AFFO-2026

Organization U.S. Department of Energy (DOE)

Reference Code DOE-STP-CMEI-AFFO-2026

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

Description The Science, Technology and Policy (STP) Program through the U.S Department of Energy's Office of Critical Minerals and Energy Innovation (CMEI) serves as a next step in the educational and professional development of scientists and engineers by providing opportunities to participate in projects at CMEI's locations in Washington, D.C. and Golden, Colorado. Participants will be embedded with a group of highly trained scientists and engineers with education, background, and experience focused on expanding research related to the DOE's current and future mission.

CMEI's Alternative Fuels and Feedstocks Office (AFFO) funds research, development and demonstration (RD&D) to enable the use of bioenergy, hydrogen, and fuel cells in applications across multiple sectors. These technical innovations will support a strong domestic economy and an innovative energy future. Sub-Programs within AFFO include Feedstocks, Production, Infrastructure, Fuel Cells, Systems Development and Integration, and Analysis, Codes and Standards.

Feedstocks Technologies Sub-Program

The Feedstocks Technologies R&D program develops reliable and cost-effective technologies for producing, harvesting, storing, processing, transporting, and mobilizing abundant domestic biomass and waste feedstocks for conversion into alternative fuels, fertilizers, hydrogen, performance-enhanced chemicals, and high-value bioproducts that will advance national security and energy production.

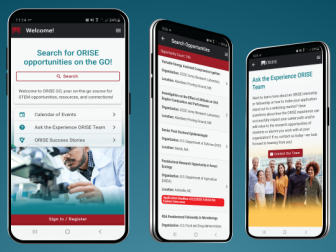
Production Technologies Sub-Program

The Production Technologies program reduces costs and enables expanded, resilient options for fuels, chemicals, and hydrogen—using a variety of energy resources, feedstocks, and conversion technologies. Their mission includes research and development in "energy addition," adding to domestic primary energy resources, and enabling conversion of nuclear and other energy resources to valuable chemicals. It also supports improving supply chain and production efficiency to support domestic energy and manufacturing, as well as boosting American-made fertilizer production by enabling more ways to produce ammonia.

Infrastructure Technologies Sub-Program

The Infrastructure R&D program advances infrastructure technologies to reduce the cost of transporting, storing, and dispensing alternative fuels and feedstocks. These efforts include promoting data center expansion and enhancing nuclear plant efficiency through cost-effective bulk hydrogen

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Fuel Cell Technologies Sub-Program

The Fuel Cell Technologies program develops fuel cells that are fuel-flexible and cost-competitive with incumbent and emerging technologies - for stationary power, such as data centers, and other applications. These efforts support data center expansion, nuclear-hydrogen synergies, and enable alternatives to critical minerals used in fuel cell technologies.

Systems Development & Integration Sub-Program

The Systems Development and Integration program integrates and validates technologies through first-of-a-kind demonstrations. This includes integration of technologies for production, transportation, and end-uses of alternative fuels, fertilizers, chemicals, and feedstocks at various scales. This work reduces technical and operational uncertainty, mitigates risk, and enables industry-led scale-up and commercialization.

Analysis, Codes & Standards Sub-Program

The Analysis, Codes & Standards program conducts analysis to inform direction, prioritization, and decision-making; conducts underlying research to develop technologies that enable the safe use of alternative fuels and feedstocks; and conducts research to inform common-sense regulations, codes, standards and workforce training.

AFFO seeks talented and innovative individuals to engage in innovative energy initiatives with hydrogen and fuel cells. This is a one-year fellowship appointment, with the opportunity to renew for additional years at the discretion of the sponsoring office. Under the guidance of a mentor, learning opportunities include:

- Reviewing technical projects funded by the Sub-Program, which includes tracking project progress and milestones; reading and analyzing project progress reports and other technical reports; and engaging project researchers to address technical questions and issues that may arise
- Drafting documents summarizing program strategy and accomplishments
- Informing program target-setting through technoeconomic analysis
- Collaborating with internal and external stakeholders through the organization of workshops and conferences to solicit feedback from experts on program direction and strategy
- Identifying priority areas of research for future program activities
- Participating in the review of research proposals
- Drafting technical papers or articles for publication
- Giving presentations at technical conferences and events to solicit stakeholder feedback on program activities

These activities may be carried out in collaboration with teams of multi-level federal employees, other participants, support service contractors, and

experts from national laboratories.

AFFO is currently seeking a total of four fellows, one for each of the following Sub-Programs: Fuel Cell Technologies, Production Technologies, Systems Development & Integration, and Analysis, Codes & Standards

For more information about HFTO, please visit: Department of Energy, Hydrogen and Fuel Cell Technologies Office

Fellowship Provisions

Selected candidates will receive a competitive stipend. Stipend rates are determined by DOE officials and are based on the candidate's academic and professional background.

This fellowship offers a range of additional provisions, including a stipend supplement to offset the cost of health insurance premiums. A one-time allowance of $5,000 may be issued to offset expenses at the beginning of a candidate's appointment if the address shown on the application is more than 50 miles away from the host facility.

Participants will receive a travel and research allowance of $10,000 per appointment year to cover expenses for scientific and professional development activities.

Extension of the appointment beyond the first year will be subject to mentor approval and availability of funds.

For more information about the DOE Science, Technology, and Policy Program, please visit:

Department of Energy Science, Technology and Policy Opportunities

Appointment Locations

Washington, D.C. or Golden, Colorado

Nature of the Appointment

Fellows will not enter 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 letter of appointment and Terms of Appointment. This is an equal opportunity program open to all qualified individuals without regard to race, color, age, sex, religion, national origin, mental or physical disability, generic information, sexual orientation, or covered veteran's status.

Qualifications You must have completed requirements for a Bachelor's, Master's, or Doctoral degree, or have completed all requirements for the degree by the anticipated start date of the appointment. You must be a U.S. Citizen or Lawful Permanent Resident (LPR). An ideal applicant will have a well-rounded background in the physical sciences as this technology area

crosscuts a broad spectrum of disciplines that may include physics, chemistry, materials, and chemical engineering. Applicants should have strong writing and communication skills; a writing sample will be requested. Applicants should be flexible with respect to the technical focus of their project, and willing to adapt and learn in new areas. Preferred applicants demonstrate superior academic performance and publication record, strong analytical research and communication (oral and written) skills and demonstrated capacity for creative thinking, a strong technical background, and be interested in participating with a multi-disciplinary, fast-paced environment, focused on energy technology research and development.

How to Apply

A complete application consists of:

- An application submitted using Zintellect
- Academic Records/Transcript(s) - 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 candidates may be required to provide proof of completion of the degree before the appointment can start.
- A current resume/curriculum vitae (CV)
- One Recommendation - Applicants are required to provide contact information for one recommender 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. Recommenders will be asked to complete a recommendation in Zintellect. Recommendation requests must be sent through the Zintellect application system. Letters of recommendation submitted via email will not be accepted.

All documents must be in English or include an official English translation.

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 the 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 institution. Include the name of the academic institution, the degree, the date of award, 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.

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If you have questions, please send an email to DOE-STP@orise.orau.gov. Please list the reference code DOE-STP-CMEI-AFFO-2026 for this opportunity in the subject line of your email.

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** (16)
  - **Earth and Geosciences** (4)
  - **Engineering** (29)
  - **Environmental and Marine Sciences** (1)
  - **Mathematics and Statistics** (11)
- **Age:** Must be 18 years of age