**Opportunity Title:** Hydrogen Production Infrastructure Fellow
**Opportunity Reference Code:** DOE-EERE-STP-HFTO-2020-1804

**Organization** U.S. Department of Energy (DOE)

**Reference Code** DOE-EERE-STP-HFTO-2020-1804

**How to Apply** Click on the *Apply* button at the bottom of the page.

**Description** The Energy Efficiency and Renewable Energy (EERE) Science, Technology and Policy (STP) Program serves as a next step in the educational and professional development of scientists and engineers by providing opportunities to participate in policy-related projects at DOE's Office of Energy Efficiency and Renewable Energy in Washington, D.C. Participants will become part of a group of highly-trained scientists and engineers with the education, background, and experience to be part of the workforce that supports the DOE's mission in the future.

*ORISE is continuing normal program operations during the COVID-19 pandemic. This opportunity will be offered as long as Department of Energy Headquarters is able to complete the onboarding process and ensure a meaningful experience to participants. We encourage you to apply and submit your application as soon as possible. Updates to this opportunity will be provided on this page as needed.*

The DOE's Office of Energy Efficiency and Renewable Energy's Hydrogen and Fuel Cell Technologies Office (HFTO) funds research and development to enable the use of hydrogen and fuel cell technologies in both transportation and industrial applications (https://www.energy.gov/eere/fuelcells/fuel-cell-technologies-office). Research sub-programs within HFTO include Hydrogen Infrastructure, Production, Storage, Fuel Cells, Technology Acceleration, and Systems Analysis. Participants within Infrastructure will interface with all of these sub-programs in cross-cutting tasks (e.g. technical target-setting, drafting office strategy documents, and supporting active project management).

The Fellow will engage with the Hydrogen Production and/or Infrastructure Teams within the Hydrogen Technologies Program of the Hydrogen and Fuel Cell Technologies Office. The ideal candidate should have a well-rounded background in the physical sciences as the relevant technology areas cross-cut a broad spectrum of disciplines that may include physics, chemistry, materials, and chemical engineering. Specifically, candidates with experience in electrolysis for hydrogen production are of interest.

**Activities include:**

- Fellows will learn and engage in critical aspects of HFTO's mission, including technical review of projects funded by the Hydrogen Production and Infrastructure sub-programs, drafting key documents summarizing program strategy and accomplishments, technoeconomic analysis to inform program target-setting, organization of workshops and conferences to solicit feedback from expert stakeholders on program direction and strategy, identification of priority areas of research for future program activities, and giving presentations at technical conferences and events to solicit stakeholder feedback on

program activities. Key areas of Research and Development (R&D) within the Hydrogen Production sub-Program include: electrolysis, solar thermochemical, photoelectrochemical, and biological processes. Key areas of R&D within the Infrastructure sub-Program include: materials compatibility, liquefaction, pipelines, tube trailers, and technologies used at hydrogen fueling stations, such as compressors, storage vessels, dispensers, and cryopumps.

- Collaborate with DOE to manage hydrogen production and infrastructure related projects including monitoring project progress and milestones as well as reviewing and analyzing project progress reports and other technical reports. Engage with DOE to communicate with researchers to address questions and issues that arise.

**Specialized Qualifications:**

- A PhD in the physical sciences or engineering, such as chemistry, physics, materials science, chemical engineering or a related area is required.
- Candidates with graduate, post-doctoral, or industrial experience in low and/or high temperature electrolysis will be given preference as one of the position's focus areas will be water electrolysis for hydrogen production.
- Good written and oral communication skills are important.
- Writing sample will be requested.

**Fellow Benefits**

Selected Fellows will receive a stipend as support for their living and other expenses during this appointment. Stipend rates are determined by EERE officials and are based on the candidate's academic and professional background. Relocation expenses, not to exceed $5,000, incurred in relocating from the participant's current address to Washington, D.C. (if more than 50 miles from the address shown on the application), may be reimbursed. Participants will receive a travel allowance of $10,000 per appointment year to cover travel-related expenses to scientific and professional development activities.

This opportunity is available to U.S. citizens and Lawful Permanent Residents (LPR).

For more information about the EERE Science, Technology and Policy Program, please visit https://www.energy.gov/eere/education/energy-efficiency-and-renewable-energy-science-technology-and-policy-program

**Appointment Location**

Washington, DC

**Nature of Appointment**

The Fellow will not enter into an employee/employer relationship with

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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** Program eligibility requirements can be found at: visit https://www.energy.gov/eere/education/energy-efficiency-and-renewable-energy-science-technology-and-policy-program

Applicants should have an educational background in science and engineering and/or relevant work experience, preferably in hydrogen and fuel cell technologies. At least an M.S. degree or 3-5 years of equivalent experience are preferred. 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.

**How to Apply:**

A complete application consists of:

- An application
- 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 candidate may be required to provide proof of completion of the degree before the appointment can start.
- A current resume/curriculum vitae (CV)
- 2 Letters of Recommendations

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 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.

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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.

**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 👁)
  - **Engineering** (27 👁)
  - **Mathematics and Statistics** (10 👁)
  - **Physics** (16 👁)
- **Age:** Must be 18 years of age