

Opportunity Reference Code: DOE-EERE-STP-AMMTO-2024-1001

Organization U.S. Department of Energy (DOE)

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How to Apply To apply, click on Apply at the bottom of this page.

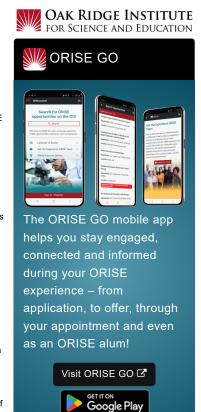
Connect with ORISE...on the GO! Download the new ORISE GO mobile app in the Apple App Store or Google Play Store to help you stay engaged, connected, and informed during your ORISE experience and beyond! The app is for both applicants and for use after one is appointed.

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, engineers, and professionals by providing opportunities to participate in policy-related projects at DOE's Office of Energy Efficiency and Renewable Energy (EERE) in Washington, D.C. Participants will become part of a group of highly-trained scientists, engineers, and policy experts with the education, background, and experience to support DOE's mission and transition to a clean energy economy.

The Advanced Manufacturing and Manufacturing Technologies Office (AMMTO) is part of the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE). AMMTO invests in manufacturing innovation to accelerate and strengthen clean energy technology manufacturing, material supply chains, and the broader clean economy, supporting the growth of a modern, equitable manufacturing industry. Current priority topics for AMMTO include the educational and methodological approaches necessary to build a robust, diverse, and thriving workforce that has the skills required to transform and accelerate the development and adoption of innovative materials and manufacturing technologies and drive a globally competitive, clean energy economy.

Description Innovation is central to AMMTO's vision, mission, and activities. AMMTO places a distinct emphasis on benefiting people and communities. AMMTO is committed to addressing the climate crisis and building a clean, decarbonized economy where the health, economic, and social benefits extend to all levels of society, regardless of ability, race, location, or socioeconomic status. As the world economy transitions away from fossil fuels, new opportunities arise to create healthier and more resilient communities, widespread economic prosperity, and well-paying jobs across the country. AMMTO is specifically interested in advancing its Education and Workforce Development (EWD) portfolio to help ensure the size and breadth of the nation's workforce is sufficient to meet the needs of a growing and innovating advanced manufacturing sector. EWD initiatives are to ensure the workforce is representative of the nation's diversity of people and talent; that advanced manufacturing careers are accessible and family-sustaining; that workers are equipped with skills required to accelerate the development and adoption of innovative materials and manufacturing technologies; that the workforce positions the nation as a leader in innovation, resulting in economic prosperity; and that the nation's workforce uses innovative materials and manufacturing technologies to develop and deploy clean energy technologies.

> AMMTO is seeking talented and passionate ORISE Fellows who can engage the education and workforce development needed to meet our related strategic goals: (1) inspire the current and future workforce to pursue and grow careers in advanced manufacturing; (2) prepare and equip the manufacturing and research and development workforce with the skills and support needed to deploy advanced technologies; and (3) grow the nation's workforce and support workers as they navigate their careers and acquire the necessary knowledge, skills, and abilities.



App Store



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You will collaborate closely with AMMTO staff – including former ORISE Fellows – and with guidance from a mentor, you will learn how to:

- Asses advanced manufacturing teaching methodologies currently utilized by AMMTO projects or partners.
- Share best practices in education and workforce development related to programs/projects/curricula that serve all students regardless of educational background.
- Examine the relative efficacy of traditional and simulation-based instructional approaches for teaching and learning in the advanced manufacturing ecosystem.
- Develop an analysis of pedagogy models that can assist educators in facilitating the learning
  of advanced manufacturing concepts in online, in-person, and hands-on environments that are
  equitable and inclusive of all learners.
- Identify and share pedagogical methods including inquiry-based practices that value active
  and creative learning, immersion in authentic settings, and engagement in reasoning and
  problem solving.
- Serve as an advisor for the integration of instructional techniques into methods courses to
  help improve innovative teaching and learning of advanced manufacturing content in higher
  education and continuing education settings.
- Engage with the other members of the AMMTO Education and Workforce Development (EWD)
   Team in developing and implementing EWD programming.
- Analyze socio-economic impacts and opportunities and the potential impacts of program and policy decisions related to regional and/or place-based workforce needs.
- Provide input for socio-economic analysis of education and workforce development initiatives
  as they relate to decarbonization, energy equity, and environmental justice.
- Identify and evaluate new critical pedagogies and programs for regional and community-level education and workforce development around America's energy and advanced manufacturing future.
- Engage in developing initiatives to strengthen external partnerships and targeted outreach
  opportunities with diverse education/workforce training institutions, organizations, etc.

Through these activities, you will help establish and nurture the critical link between DOE decision-makers and other scientific professionals to strengthen public policy related to education and workforce development.

### Stipend and Benefits

AMMTO offers a competitive stipend for participation in this program determined on an individual basis. This Fellowship also offers a range of additional benefits including: medical insurance, a local transportation stipend, and Federal holidays. Relocation expenses incurred in relocating from current address to Washington, D.C. will be reimbursed, in the amount of up to \$5,000 (if more than 50 miles from the address shown on the application). Fellows will receive a travel and research allowance of \$10,000 per appointment year to cover expenses for scientific and professional development activities. Fellows may be offered an extension for additional years with an increase in stipend and cost of living adjustment. Past Fellows have gone on to take a wide range of permanent positions in industry, academia, and government.

For more information about Fellowships with AMMTO in the EERE Science, Technology, and Policy Program, please visit <a href="https://www.energy.gov/eere/ammto/about-advanced-materials-manufacturing-technologies-office">https://www.energy.gov/eere/ammto/about-advanced-materials-manufacturing-technologies-office</a>.

### **Appointment Start Date**



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Exact start dates will be determined at the time of selection and in coordination with the selected applicant. Applications are reviewed on an on-going basis and appointments will be offered as qualified candidates are identified over the course of the application cycle, which is usually open for at least one year.

#### Appointment Location

Washington, D.C.

#### Nature of Appointment

The Fellow will not enter into an employee/employer relationship with ORISE, ORAU, DOE, or any other office or agency. Instead, the Fellow will be affiliated with ORISE for the administration of the appointment through the ORISE letter of appointment and Terms of Appointment. The initial appointment period will be for one year, with the possibility to extend the appoint for additional years at discretion of the mentor and sponsoring office.

Qualifications Qualified candidates will have a terminal degree or All But Dissertation (ABD) in the field of education, or another eligible discipline, with a specialization in workforce development, adult education, continuing education, pedagogy, and non-traditional learners related to the manufacturing industry. Desired qualifications in a candidate are to:

- · Have expertise in the field of education alongside the quantitative and qualitative methodologies of the social sciences (e.g. sociology, psychology, anthropology, sustainable development, economic development, etc.) and preferably experience in industry.
- · Be familiar with developing curriculum and instructional materials related to advanced manufacturing.
- Be familiar with a range of pedagogical techniques to engage and facilitate observational, thematic, and project-based learning.
- · Have a strong knowledge of culturally responsive teaching practices and community-based pedagogies to support AMMTO EWD projects and partnerships.
- Experience with education and workforce development for specific groups of students including community college students, 4-year college students, adult learners, reskilling learners, culturally specific groups, learners with disabilities or specific needs, neurodiverse audiences, etc.
- · Be familiar with various learning theories and teaching strategies, including VTS (Visual Teaching Strategies), inquiry-based pedagogy, and dialogic teaching.
- Have a demonstrated track record of embracing innovative teaching practices.
- · Have a willingness and ability to work both independently and collaboratively within AMMTO to prepare resources and materials for program activities.

You must be a U.S. Citizen or Lawful Permanent Resident (LPR) to be eligible for this opportunity.

## 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 candidates will be required to provide proof of completion of the degree before start of appointment.



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- A current resume/curriculum vitae (CV)
- 1 letter of recommendation

The resume/CV must include the following:

- Basic applicant Information: Name, address, phone, email, and other contact information.
- Work & Research Experience: List all relevant 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.

If you have questions, please send an email to <a href="DOE-RPP@orise.orau.gov">DOE-RPP@orise.orau.gov</a> and list the reference code [DOE-EERE-STP-AMMTO-2024-1001] in the subject line of your email.

# Eligibility Requirements

- Citizenship: LPR or U.S. Citizen
- Degree: Doctoral Degree.
- Discipline(s):
  - o Business (<u>3</u> ●)
  - Chemistry and Materials Sciences (1...)
  - Communications and Graphics Design (5\_●)
  - Computer, Information, and Data Sciences (3\_@)
  - o Engineering (<u>14</u> **●**)
  - Environmental and Marine Sciences (3\_●)
  - Life Health and Medical Sciences (11 ♥)
  - Other Non-Science & Engineering (3\_②)
  - Social and Behavioral Sciences (<u>27</u>.