RWFI E-NOTE MONTHLY

REGIONAL WORKFORCE INITIATIVE • APRIL 2023

Welcome Message

Greetings NETL RWFI stakeholders,

This month's funding opportunity in focus is an opportunity to respond to a request for information from the Department of Energy's Solar Office on the topic of Solar Manufacturing, entitled *Scaling the U.S. Solar Manufacturing Workforce RFI*. In addition to the entry in the workforce funding announcements, more information on the request can be found in the DOE STEM section of this note.

As always, feel free to reach out to us at *NETL.RWFI@netl.doe.gov* if you have any suggestions for information to present in future E-notes.

Attached to this email is a hyperlinked PDF version of this note. If you would like to unsubscribe, please reply "unsubscribe" to this email.

– Sincerely, The NETL RWFI Team

Workforce Funding Announcements

FUNDING SPOTLIGHT

Scaling the U.S. Solar Manufacturing Workforce Request for Information (RFI)

Department of Energy, Deadline, June 2, 2023

This RFI is intended to inform DOE Solar Energy Technologies Office (SETO) on the challenges and opportunities associated with scaling the domestic solar manufacturing workforce. This RFI pertains to job roles associated with operating U.S.-based manufacturing facilities involved in the production of photovoltaic modules and related components and materials.

Advancing Innovation and Impact in Undergraduate STEM Education at Two-year Institutions of Higher Education

National Science Foundation, Deadline, May 1, 2023

The National Science Foundation's (NSF) Education and Human Resources Directorate seeks to significantly enhance its support for research, development, implementation, and assessment to improve STEM education at the nation's two-year colleges. NSF encourages bold, potentially transformative projects that address immediate challenges facing STEM education at two-year colleges and/or anticipate new structures and functions of the STEM learning and teaching enterprise. This program description is a targeted approach for advancing innovative and evidence-based practices in undergraduate STEM education at two-year colleges. It also seeks to support systemic approaches to advance inclusive and equitable STEM education practices.

Basic Energy Sciences (BES)—Reaching a New Energy Sciences Workforce (RENEW)

Department of Energy, Deadline, May 2, 2023

RENEW aims to build foundations for Office of Science (SC) research and training at institutions historically underrepresented in the SC research portfolio. RENEW leverages SC's unique national laboratories, user facilities, and other research infrastructures to provide undergraduate and graduate training opportunities for students and academic institutions not currently well represented in the U.S. science and technology ecosystem. The hands-on experiences gained through RENEW will open new career avenues for participants, forming a nucleus for a future pool of talented young scientists, engineers, and technicians with the critical skills and expertise needed for the full breadth of SC research activities. Principal Investigators, students, and postdoctoral researchers supported by RENEW awards will be invited to participate in BES meetings for supported researchers and/or SC-wide professional development and collaborator events.

Workforce Data Quality Initiative (WDQI) Round 9

Department of Labor, Deadline, May 10, 2023

This announcement is for State Workforce Agencies (SWAs) in all 50 U.S. states, the District of Columbia, the Commonwealth of Puerto Rico, the U.S. Virgin Islands, American Samoa, Guam, Palau, and the Commonwealth of the Northern Mariana Islands. Among the eligible applicants listed above, the Employment and Training Administration plans to prioritize the selection of applicants that identify their current capacity with regard to longitudinal administrative databases as Launch Point (LP) 2, and after those, prioritize applicants that have never received a Workforce Data Quality Initiative (WDQI) grant (any LP). Applicants that previously received three or more WDQI grants are ineligible to apply. The following States' SWAs have received three or more WDQI grants and are ineligible for this reason: Arkansas, Indiana, Maine, Michigan, Mississippi, New Jersey, Texas, and Rhode

Island. Applicants that have an active WDQI grant are ineligible to apply. The following States' SWAs have active WDQI grants and are therefore ineligible to apply: Arkansas, Indiana, Maryland, Mississippi, and New Mexico.

Enabling Partnerships to Increase Innovation Capacity

National Science Foundation, Deadline, May 25, 2023

The purpose of this solicitation is to broaden participation in innovation ecosystems that advance emerging technologies (e.g., advanced manufacturing, advanced wireless, artificial intelligence, biotechnology, quantum information science, semiconductors and microelectronics) by supporting capacity-building efforts at institutions of higher education interested in growing external partnerships. Creation of this program is motivated by the commitment of the NSF, including the newly established NSF Directorate for Technology, Innovation, and Partnerships, to accelerating scientific and technological innovation nationwide and empowering all Americans to participate in the U.S. research and innovation enterprise. Establishing more inclusive innovation ecosystems will require broad networks of partners working together in support of use-inspired research; the translation of such research to practice or commercial application; and the development of a skilled workforce.

Charging and Fueling Infrastructure Discretionary Grant Program (CFI Program)

U.S. Department of Transportation, Deadline, May 30, 2023

The CFI Program is a new competitive grant program created by President Biden's Bipartisan Infrastructure Law (BIL) to strategically deploy publicly accessible electric vehicle charging and alternative fueling infrastructure in the places people live and work—urban and rural areas alike—in addition to along designated Alternative Fuel Corridors. CFI Program investments will make modern and sustainable infrastructure accessible to all drivers of electric, hydrogen, propane, and natural gas vehicles. This program provides two funding categories of grants—Community Charging and Fueling Grants and Alternative Fuel Corridor Grants. The BIL provides $2.5B over five years for this program. This first round of funding makes $700M from FY22 and FY23 funding available to strategically deploy electric vehicle charging infrastructure and other fueling infrastructure projects in urban and rural communities in publicly accessible locations, including downtown areas and local neighborhoods, particularly in underserved and disadvantaged communities.

Environmental Justice (EJ) Thriving Communities Grantmaking Program

Environmental Protection Agency, Deadline, May 31, 2023

The Environmental Protection Agency (EPA) is issuing this solicitation to request applications for the design and management of a new EJ-competitive pass-through program where EPA will competitively select multiple pass-through entities to provide grant funds via subawards to community-based nonprofit organizations and other eligible subrecipient groups representing underserved and disadvantaged communities. The definition of the term pass-through entity in 2 CFR 200.1 provides that a pass-through entity is a non-federal entity that provides a subaward to a subrecipient to carry out part of a federal program. The EPA provides extensive guidance to pass-through entities in the EPA Subaward Policy and related materials available on the EPA internet website.

Louis Stokes Alliances for Minority Participation (LSAMP) National Coordination Hub and Louis Stokes Community Resource Centers

National Science Foundation, Deadline, June 1, 2023

This new solicitation from the LSAMP calls for proposals for an LSAMP National Coordination Hub and for Louis Stokes Community Resource Centers. These new funding opportunities will support the overall goal of the LSAMP program to assist universities and colleges in diversifying the nation's STEM workforce by increasing the number of STEM baccalaureate and graduate degrees awarded to individuals from populations underrepresented in these disciplines: Blacks and African Americans, Alaska Natives, American Indians, Hispanic and Latino Americans, Native Hawaiians, and Native Pacific Islanders.

Tribal Colleges and Universities Program (TCUP)

National Science Foundation, Deadline, June 1, 2023

TCUP provides awards to federally recognized Tribal Colleges and Universities, Alaska Native-serving institutions, and Native Hawaiian-serving institutions to promote high quality science (including sociology, psychology, anthropology, linguistics, economics and bioeconomics, statistics, and other social and behavioral sciences; natural sciences; computer science, including, but not limited to, artificial intelligence, quantum information science, and cybersecurity), STEM, STEM education, research, and outreach. Support is available to TCUP-eligible institutions for transformative capacity-building or community engagement projects through Instructional Capacity Excellence in TCUP Institutions, Targeted STEM Infusion Projects, TCUP for Secondary and Elementary Teachers in STEM, TCU Enterprise Advancement Centers, Cyberinfrastructure Health, Assistance, and Improvements, and Preparing for TCUP Implementation. Collaborations led by TCUP institutions that involve non-TCUP institutions of higher education are supported through TCUP Partnerships, with the participation of other NSF programs to support the work of non-TCUP institutions. Finally, research studies that further the scholarly activity of individual faculty members are supported through Small Grants for Research. Through the opportunities highlighted above, as well as collaborations with other NSF divisions and directorates, and other organizations, TCUP aims to increase Native individuals' participation in STEM careers, improve the quality of STEM programs at TCUP-eligible institutions, and facilitate the development of a strong STEM enterprise in TCUP institutions' service areas.

DOE Traineeship in Accelerator Science & Technology

Department of Energy, Deadline, June 6, 2023

The DOE Office of Science program in High Energy Physics (HEP) hereby announces its interest in receiving applications for the DOE Traineeship in Accelerator Science & Engineering, which will provide support to train the next generation of scientists and engineers in this field. Up to four grants may be awarded to provide funding to universities or teams of universities to support tuition, stipend, and travel costs for students enrolled in specific accelerator science and engineering degree programs, and to provide modest support for topic-specific curriculum development and program administration. Award terms are expected to be up to five years, with the possibility of renewal for a second term. This program does not support dedicated accelerator research and development efforts; such efforts

are supported through the HEP General Accelerator R&D program, through accelerator R&D programs elsewhere in DOE, and by other federal agencies.

2023 STEM Talent Challenge

Department of Commerce, Deadline, June 12, 2023

The Economic Development Agency's Office of Innovation & Entrepreneurship is seeking applications from eligible applicants to create and implement innovative STEM work-based learning models (such as Registered Apprenticeships) that complement their respective region's innovation economy. The STEM Talent Challenge seeks to develop or expand regional workforce capacity to support high-growth, high-wage entrepreneurial ventures, industries of the future (which usually includes industries that leverage emerging technologies), and other innovation—driven businesses that have a high likelihood of accelerating economic competitiveness and job creation in their respective regions and in the United States.

Industry-University Cooperative Research Centers (IUCRC) Program

National Science Foundation, Deadline, June 14, 2023

The IUCRC program catalyzes breakthrough pre-competitive research by enabling close and sustained engagement between industry innovators, world-class academic teams, and government agencies. IUCRCs help industry partners and government agencies connect directly and efficiently with university researchers to achieve three primary objectives: 1) Conduct high-impact research to meet shared and critical industrial needs in companies of all sizes; 2) Enhance U.S. global leadership in driving innovative technology development; and 3) Identify, mentor, and develop a diverse, highly skilled science and engineering workforce.

Expanding Artificial Intelligence (AI) Innovation through Capacity Building and Partnerships

National Science Foundation, Deadline, June 26, 2023

The NSF and its partners support the continued growth of a broad and diverse interdisciplinary research community for the advancement of AI and AI-powered innovation, providing a unique opportunity to broadly promote the NSF vision and core values, especially inclusion and collaboration. The Expanding AI Innovation through Capacity Building and Partnerships program aims to significantly broaden participation in AI research, education, and workforce development through capacity development projects and through partnerships within the National AI Research Institutes ecosystem.

Centers for Research and Innovation in Science, the Environment and Society (CRISES)

National Science Foundation, Deadline, June 26, 2023

The NSF seeks to build research capacity and infrastructure to address complex and compounding national and global crises whose solutions require a human-centered approach. To help generate effective and long-lasting solutions that benefit the entire U.S. public, NSF is providing this funding opportunity to inform possible future CRISES.

Bipartisan Infrastructure Law (BIL): Energy Improvement in Rural or Remote Areas (ERA) Funding Opportunity Announcement

Department of Energy, Deadline, June 28, 2023

The Infrastructure Investment and Jobs Act, commonly referred to as the BIL, authorizes DOE to invest $1B in energy improvements in rural or remote areas. DOE's ERA Program will provide financial investment, technical assistance, and other resources to advance clean energy demonstrations and energy solutions that are replicable and scalable.

DE-FOA-0003064 Notice of Intent to Issue Funding Opportunity Announcement No. DE-FOA-0002954: Wind Energy Technologies Office Offshore Wind 2023 Centers of Excellence

Department of Energy, Deadline, June 30, 2023

the Office of Energy Efficiency and Renewable Energy seeks to seed one to three university-led Centers of Excellence to catalyze an education, research, and partnership ecosystem to address technology, deployment, and workforce needs for developing U.S. offshore wind industry leadership. The university-led Centers of Excellence funded through this opportunity are intended to accelerate and maximize the effectiveness, reliability, and sustainability of U.S. offshore wind deployment and operation through partnership with industry participants, including wind project developers and technology manufacturers, other institutions of higher education, other research institutions (such as national laboratories, non-governmental organizations, tribes, and state and local-level governments). The ideal institution will have relevant existing credentials, robust diversity and inclusion strategies, and expansive regional partnerships to excite and supercharge the next generation of the renewable energy workforce.

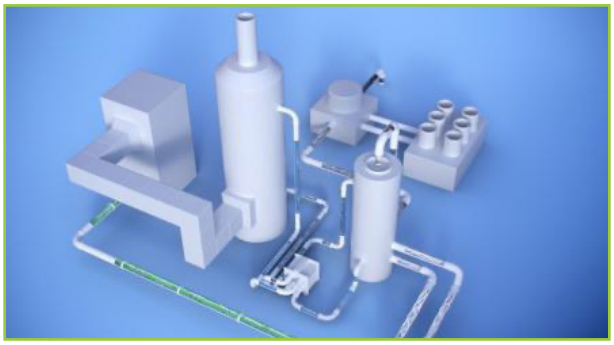
NETL News

NETL Data Portal to Accelerate Completion of Permit Applications for Carbon Storage

NETL has launched a new data portal that provides information needed to accelerate the process of completing federal drilling permit applications to sequester CO_2, a greenhouse gas, in the subsurface.

NETL Takes to the Sky with the Right Stuff to Find Undocumented Orphaned Wells

Lightweight sensor technology developed by NETL has taken off and provides an effective airborne tool to locate the remnants of abandoned oil and natural gas wells that emit methane, a potent greenhouse gas.



NETL to Co-Host Seventh International Energy Agency Greenhouse Gas (IEAGHG) Post-Combustion Capture Conference

NETL and the DOE will co-host the IEAGHG R&D Program's Seventh Post-Combustion Capture Conference Sept. 25–28, 2023, in Pittsburgh, PA, and bring together post-combustion capture experts to share knowledge, findings, and expertise.

NETL To Receive $150M from Inflation Reduction Act

The DOE's Office of Fossil Energy and Carbon Management announced $150M in funding will be provided through the Inflation Reduction Act to support site-wide infrastructure and laboratory modernization upgrades at all three of NETL's research sites.

DOE Invests $16M in First Phase to Build America's First-of-a-Kind Critical Minerals Production Facility

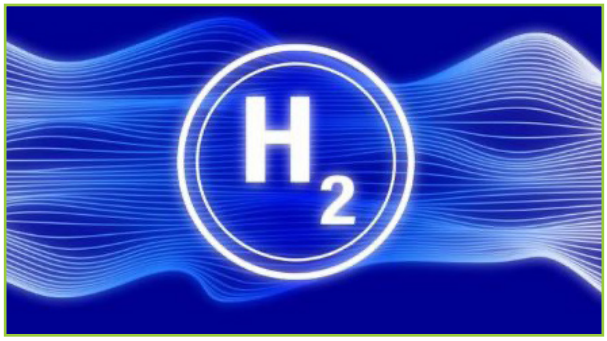
As part of President Biden's Investing in America agenda, the DOE today announced $16M from the BIL to bring critical mineral supply chains to America and reduce reliance on competitors like China.

NETL Demonstrates New Pipeline Sensor Technologies in a Pilot-scale Field Test

NETL's pipeline sensor team recently completed successful field tests of an extensive new collection of fiber optic sensor and surface acoustic wave sensor technologies for natural gas pipeline monitoring that can help ensure safer and more secure natural gas pipeline delivery and mitigate greenhouse gas methane emissions.

NETL Demonstrating Fuel Cell Stack Cost, Performance, and Durability

NETL is demonstrating how solid oxide fuel cell (SOFC) stacks are uniquely suited to address environmental concerns associated with electric power generation while meeting clean energy goals with installation of four 1.5 KW SOFC stacks at its Morgantown, WV, site to supply 5.6 KW of power to the facility's grid.



NETL Patents Fiber Optic Sensor Technology for Hydrogen Leak Detection

NETL researchers have been awarded a patent for a new fiber optic sensor designed to detect hydrogen leaks at storage facilities that can save time and money compared to traditional methods—progress that can help accelerate the drive to put hydrogen to work as a dependable fuel to advance America's decarbonization efforts.

Reports and Resources

Diversity and STEM: Women, Minorities, and Persons with Disabilities

National Science Foundation

A diverse workforce provides the potential for innovation by leveraging different backgrounds, experiences, and points of view. Innovation and creativity, along with technical skills relying on expertise in STEM, contribute to a robust STEM enterprise. Furthermore, STEM workers have higher median earnings and lower rates of unemployment compared with non-STEM workers. This report provides high-level insights from multiple data sources into the diversity of the STEM workforce in the United States.

DOE STEM Rising

DOE Seeks Input on Growing an Equitable Solar Manufacturing Workforce

SETO released an RFI to better understand the anticipated quantity, quality, and accessibility of solar manufacturing roles; to anticipate the challenges for filling and training those roles; and to gather potential solutions for overcoming these barriers.

DOE Awards More Than $6M to Future Nuclear Workforce

The DOE today announced $6.3M in scholarships and fellowships to students pursuing nuclear energy-related degrees across the United States. DOE is awarding 124 scholarships and fellowships to students at 39 colleges and universities. The awards are provided through the DOE's University Nuclear Leadership Program, which invests in the next generation of leaders who are researching innovative nuclear energy solutions to help tackle the climate crisis and work toward President Biden's goal of 100% clean electricity by 2035 and a net-zero economy by 2050.

DOE and Stellantis Announce the Battery Workforce Challenge

The DOE and Stellantis today announced the launch of the Battery Workforce Challenge, which includes a three-year collegiate engineering competition, vocational training, youth education in STEM, and career and technical education.

DOE Office of Environmental Management's (EM) Efforts to Develop an Inclusive STEM Workforce of the Future

More than 300 EM employees have recently retired, resulting in a large amount of job vacancies across the cleanup program. EM Workforce Management Office is implementing recruitment efforts to fill the vacancies with college graduates, early career professionals, mid-career candidates and seasoned veterans.

ABOUT NETL

NATIONAL ENERGY TECHNOLOGY LABORATORY

NETL, owned and operated by DOE, is one of the Department's 17 National Laboratories. NETL supports DOE's mission to advance the national, economic, and energy security of the United States.

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