RWFI E-NOTE MONTHLY REGIONAL WORKFORCE INITIATIVE • JANUARY 2024

Welcome Message

Greetings NETL RWFI stakeholders,

This month's funding opportunity in focus is from U.S. Department of Energy, and the FOA entitled Career Skills Training. The deadline for this funding opportunity is February 27, 2024.

In this month's Reports and Resources section you'll find a report *After Everything: Projections of Jobs, Education, and Training Requirements through 2031*, which analyzes increasing training and skills requirements needed for current and future jobs.

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

DE-FOA-0003132 BIL 40513: Career Skills Training

Department of Energy, Deadline, Feb. 27, 2024

The Career Skills Training Program will provide grants to eligible entities to pay the Federal share of Career Skills Training Programs under which students concurrently receive classroom instruction and on-the-job training for the purpose of obtaining an industry-related certification to install energy efficient building technologies.

Mathematical Sciences Infrastructure Program

National Science Foundation, Deadline, Feb. 6, 2024

The primary aim of the Mathematical Sciences Infrastructure Program is to foster the continuing health of the mathematical sciences research community as a whole. In addition, the program complements the Workforce Program in the Mathematical Sciences in its goal to increase the number of well-prepared U.S.-based individuals who successfully pursue careers in the mathematical sciences and in other professions in which expertise in the mathematical sciences plays an increasingly important role.

Hispanic-Serving Institutions (HSIs) Education Grants Program

U.S. Department of Agriculture, Deadline, Feb. 8, 2024

This competitive grant program is intended to promote and strengthen the ability of HSIs to carry out higher education programs in the food and agricultural sciences. Programs aim to attract outstanding students and produce graduates capable of enhancing the nation's food and agricultural scientific and professional work force.

Women and Minorities in STEM Fields Program

U.S. Department of Agriculture, Deadline, Feb. 9, 2024

The Women and Minorities in STEM Fields Grant Program is a competitive grants program supporting research and extension projects that will increase—to the maximum extent practicable—participation by rural women and underrepresented minorities from rural areas in STEM fields.

Science of Learning and Augmented Intelligence (SL)

National Science Foundation, Deadline, Feb. 14, 2024

SL supports potentially transformative research that develops basic theoretical insights and fundamental knowledge about principles, processes and mechanisms of learning, and about augmented intelligence—how human cognitive function can be augmented through interactions with others or with technology, or through variations in context.

Improving Undergraduate STEM Education: HSIs

National Science Foundation, Deadline, Feb. 14, 2023

The goals of the HSI program are to enhance the quality of undergraduate STEM education and to increase the recruitment, retention, and graduation rates of students pursuing associate's or baccalaureate degrees in STEM.

BIL: Storage, Validation and Testing (Section 40305): Carbon Storage Assurance Facility Enterprise (CarbonSAFE): Phases III, III.5, and IV

Department of Energy, Deadline, Feb. 20, 2024

This Funding Opportunity Announcement (FOA) will support the availability of Carbon Capture, Utilization, and Storage (CCUS) and CO_2 removal to reach climate goals by building upon these learnings to test, mature, and validate CCUS technologies at commercial-scale. One aspect is the need to improve practices regarding how to efficiently and cost-effectively characterize and permit commercial carbon storage project site(s) ensuring that secure geologic carbon storage is available in diverse regions and settings that will support longer term carbon management goals across the United States.

Buildings Energy Efficiency Frontiers & Innovation Technologies (BENEFIT)

Department of Energy, Deadline, March 5, 2024

The Office of Energy Efficiency and Renewable Energy is issuing, on behalf of the Building Technologies Office, a FOA titled "Buildings Energy Efficiency Frontiers & Innovation Technologies – 2024." The 2024 BENEFIT FOA will invest up to \$30M (subject to appropriations) across four topic areas.





NETL News



DOE Invests \$17M for University-Led Projects to Advance Decarbonization and Net-Zero Greenhouse Gas Emissions

The DOE's Office of Fossil Energy and Carbon Management (FECM) today announced the selection of 19 projects to receive \$17.4M to support novel, early-stage research at 17 U.S. colleges and universities. The funding will support projects that establish visiting scholars programs, create new academic curricula related to geosciences, and provide interdisciplinary training in humanities-driven STEM fields.



NETL Supports University of Oklahoma (OU) Project to Retrofit Natural Gas Engines for Methane Mitigation

OU, in cooperation with NETL and industry partners, has developed an advanced retrofit kit for natural gas engines used in the gas production, gathering, transmission and processing sectors that cut emissions while enhancing performance.



Lessons from the Boxing Ring Prepared NETL's Top Accountant for Success

As a young man, NETL's Samuel "Sam" Oyebanjo competed as a boxer. Besides learning how to throw a jab and land an uppercut, Oyebanjo acquired values through boxing that prepared him for

success in another endeavor—leading a team of accountants that oversees funding for projects to address climate change and other energy-related priorities.



Groundbreaking Federal Purchase Agreement Leads to Utility-Scale Solar Facility that Will Reduce NETL's Carbon Footprint

NETL leadership joined local, state, and federal officials in helping FirstEnergy subsidiary Mon Power celebrate the completion of the company's first utility-scale solar panel array—a carbon-free electricity project made possible in part by NETL's early first-of-its-kind commitment to purchase 100% of the power required to fulfill the electricity needs of its Morgantown, West Virginia Research Facility.



NETL Hydrogen Research Continued Down Successful Path in 2023

As part of the FECM Hydrogen with Carbon Management Program, NETL research focuses on the development and use of carbon-neutral or net-negative carbon emission energy systems and associated technologies.





NETL Researchers Among the Top 2% of Scientists Worldwide, According to Stanford University List

A recent analysis published by Stanford University included 26 current and former NETL researchers in the top 2% of global scientists, underscoring the deep pool of talent at the DOE national laboratory focused on creating a clean energy future.



2023 Sees NETL Make Strides in CO₂ Conversion Research & Development

Throughout 2023, NETL created substantial innovations for converting CO_2 into useful products, a vital step in achieving economical decarbonization.



DOE Plans to Invest in Carbon Conversion Technology Through Mineralization and Electrochemical Research

The FECM today issued a notice of intent to provide funding from the Bipartisan Infrastructure Law for large-scale conversion of carbon emissions into environmentally responsible and economically valuable products. Projects will develop the sustainable feedstocks and conversion technologies necessary to produce crucial fuels, materials, and other carbon-based products that are better for the environment than current petroleum-derived components.

Reports and Resources

After Everything: Projections of Jobs, Education, and Training Requirements through 2031

Georgetown University—Center on Education and the Workforce

By 2031, 72% of jobs in the US will require postsecondary education and/or training. Between 2021 and 2031, there will be 18.5 million job openings per year on average, and some 12.5 million of these annualized openings will require at least some college education. After Everything: Projections of Jobs, Education, and Training Requirements through 2031 includes a national overview of job projections and their educational requirements across industries, occupational clusters, and detailed occupational groups. These latest projections demonstrate the central role postsecondary education plays in preparing the workforce of the future.

DOE STEM Rising

Solutions for Lasting, Viable Energy Infrastructure Technologies (SOLVE IT) Prize Now Accepting Submissions from Community Change Makers

The DOE announced that the *SOLVE IT Prize* is now accepting submissions. The SOLVE IT Prize will support communities as they identify and work to implement innovative clean energy solutions in a way that works best to address their unique needs and challenges. By empowering communities to solve their energy-related challenges, the SOLVE IT Prize looks to promote the commercialization of promising energy technologies in a way that will lead to an equitable and just energy transition.

DOE Announces Early Career Research Program for FY24

The DOE announced it is accepting applications for the 2024 DOE Office of Science Early Career Research Program to support the research of outstanding scientists early in their careers. The program will support over 80 early career researchers for five years at U.S. academic institutions, DOE national laboratories, and Office of Science user facilities.

DOE Invests \$17M for University-Led Projects to Advance Decarbonization and Net-Zero Greenhouse Gas Emissions

The FECM today announced the selection of 19 projects to receive \$17.4M to support novel, early-stage research at 17 U.S. colleges and universities. The funding will support projects that establish visiting scholars programs, create new academic curricula related to geosciences, and provide interdisciplinary training in humanitiesdriven STEM fields. Projects were selected under FECM's University Training and Research program, which includes the University Carbon Research and the Historically Black Colleges and Universities and Minority Serving Institutions sub-programs.

DOE's Office of Science (OS) Supports 173 Outstanding Undergraduate Students and 8 Faculty Members from Institutions Underrepresented in the Scientific Research Enterprise

The OS will sponsor the participation of 173 undergraduate students and eight faculty members in three STEM-focused workforce development programs at 13 DOE national laboratories and facilities this spring. Collectively, these programs ensure that both DOE and communities across the nation have a strong, sustained workforce trained in the skills needed to address the energy, environment, and national security challenges of today and tomorrow.

The 2023 Mickey Leland Energy Fellowship (MLEF) Technical Forum

The FECM held its Technical Forum for the MLEF Class of 2023 in August. This year's program included 56 undergraduate and graduate students representing 43 academic institutions, with 37% of participants attending a minority serving institution. Participants also represented 20 states, Washington, D.C., and Puerto Rico. Over the course of the week, students gave presentations on the research projects they completed during the summer across DOE's network of national labs and headquarters.

ABOUT NETL



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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