

RWFI E-NOTE MONTHLY

REGIONAL WORKFORCE INITIATIVE • DECEMBER 2017

Welcome Message

Greetings NETL RWFI stakeholders.

In this December 2017 E-Note, you will find a wrap-up description of the December 2017 Joint Appalachian Region Community College and Economic Development Organizations Dialogue and tour of the NETL Morgantown Campus. The event provided participants with an in-person opportunity to meet NETL research and strategic partnerships staff and to learn about our research mission and how it is supportive of workforce and economic development for the Appalachian region. You will also find in this month's E-Note information about upcoming funding announcements with deadlines in January and February, including several National Science Foundation opportunities focused on conducting research on STEM and supportive of increased opportunities in STEM topics for underserved populations and women.

In closing out this year, the RWFI team would like to thank its stakeholders for their ongoing participation and efforts in increasing opportunities for energy and advanced manufacturing economic and workforce development in the region.

— Sincerely, The NETL Regional Workforce Initiative Team



RWFI December Stakeholders Meeting, NETL Morgantown

Workforce Funding Announcements

Research on the Science and Technology Enterprise: Statistics and Surveys - R&D, U.S. S&T Competitiveness, STEM Education, S&T Workforce

National Science Foundation; **Deadline January 16, 2018**

The National Center for Science and Engineering Statistics (NCSES) of the National Science Foundation (NSF) is one of the thirteen principal federal statistical agencies within the United States. It is responsible for the collection, acquisition, analysis, reporting and dissemination of objective, statistical data related to the science and engineering enterprise in the United States and other nations that is relevant and useful to practitioners, researchers, policymakers and the public. NCSES uses this information to prepare a number of statistical data reports as well as analytical reports including the National Science Board's biennial report, Science and Engineering Indicators, and Women, Minorities and Persons with Disabilities in Science and Engineering.

Louis Stokes Alliances for Minority Participation

National Science Foundation; **Deadline January 26, 2018**

The Louis Stokes Alliances for Minority Participation (LSAMP) program is an alliance-based program. The program's theory is based on the Tinto model for student. The overall goal of the program is to assist universities and colleges in diversifying the nation's science, technology, engineering and mathematics (STEM) workforce by increasing the number of STEM baccalaureate and graduate degrees awarded to populations historically underrepresented in these disciplines: African Americans, Hispanic Americans, American Indians, Alaska Natives, Native Hawaiians, and Native Pacific Islanders. The LSAMP program takes a comprehensive approach to student development and retention. Particular emphasis is placed on transforming undergraduate STEM education through innovative, evidence-based recruitment and retention strategies, and relevant educational experiences in support of racial and ethnic groups historically underrepresented in STEM disciplines. The LSAMP program also supports knowledge generation, knowledge utilization, program impact and dissemination type activities. The program seeks new learning and immediate diffusion of scholarly research into the field.

Training-based Workforce Development for Advanced Cyberinfrastructure

National Science Foundation; **Deadline February 14, 2018**

The overarching goals of this program are to 1) prepare, nurture, and grow the national scientific research workforce for creating, utilizing, and supporting advanced cyberinfrastructure (CI) that enables potentially transformative fundamental science and engineering research and contributes to the Nation's overall economic competitiveness and security; 2) ensure broad adoption of CI tools, methods, and resources by the fundamental science and engineering research community to enable new modes of discovery; and 3) integrate core literacy and discipline-appropriate advanced skills in advanced CI as well as computational and data science and engineering into the Nation's educational curriculum/instructional material fabric spanning undergraduate and graduate courses.

ADVANCE: Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers

National Science Foundation; **Deadline February 18, 2018**

Despite significant increases in the proportion of women pursuing science, technology, engineering, and mathematics (STEM) doctoral degrees, women are significantly underrepresented as faculty, particularly in upper ranks, and in academic administrative positions, in almost all STEM fields. The problems of recruitment, retention, and advancement that are the causes of this underrepresentation vary by discipline and across groups of women faculty (e.g., by race/ethnicity, disability status, sexual orientation, foreign-born and foreign-trained status, and faculty appointment type). The ADVANCE program is designed to foster gender equity through a focus on the identification and elimination of organizational barriers that impede the full participation and advancement of all women faculty in academic institutions. Organizational barriers that inhibit equity may exist in areas such as policy, practice, culture, and organizational climate.



Community College and Economic Development Organizations tour NETL in Morgantown.

NETL Meetings and Events

Joint Appalachia Region Community College and Economic Development Organizations Campus Meeting Review

Representatives from regional community and technical colleges and economic development agencies converged on the NETL Morgantown site on December 14 for the Laboratory's second Regional Workforce Initiative (RWF) Workshop. At the workshop, representatives from West Virginia, Pennsylvania, Maryland and Virginia community and technical colleges and economic development districts participated in a forum to discuss issues surrounding workforce and economic development issues in the energy and advanced manufacturing sectors. Visitors to the Morgantown NETL site also participated in laboratory tours and presentations that introduced them to emerging technologies for industrial development. The goal was to help the organizations align plans and programs to prepare a new generation of technical and skilled personnel. NETL staff offered high-level descriptions of technologies, predictions for commercialization of technology elements, and assessments of the skill sets an operator/installer/monitor/technician will need for jobs associated with those new technologies. Segments of the workshop were also devoted to an explanation of NETL external programs and funding opportunity announcement solicitations; how to engage NETL as a technology development partner; and the Laboratory's student internship and fellowship opportunities.

NETL News

Department of Energy Announces up to \$5.5 Million for First Phase of Advanced Turbine Technologies Funding Opportunity

The U.S. Department of Energy (DOE) has announced up to \$5.5 million in federally funded financial assistance for cost-shared research and development projects under the first phase of the Office of Fossil Energy's funding opportunity announcement (FOA) *Advanced Components for 65% Combined-Cycle Efficiency, SCO₂ Power Cycles and Advanced Modular Hybrid Heat Engines*. Selected projects will support DOE's Advanced Coal and Power Systems goals by developing advanced, highly efficient, turbine-based technologies applicable to fossil fuels, including coal-derived synthesis gas, coal-derived hydrogen, and natural gas. The projects will be managed by NETL.

NETL Software Developers Win Prestigious R&D 100 Award

An innovative computational toolkit developed by NETL, in collaboration with a team from other national laboratories, has been recognized by R&D Magazine as one of the 100 most technologically significant products introduced into the marketplace in the past year. The award-winning National Risk Assessment Partnership (NRAP) Toolset is a software package that includes 10 science-based computational tools that predict environmental risk performance of geologic carbon dioxide (CO₂) storage sites. NRAP, led by NETL, brings together expertise from other contributing DOE national laboratories: Lawrence Berkeley National Laboratory, Lawrence Livermore National Laboratory, Los Alamos National Laboratory, and the Pacific Northwest National Laboratory.

High Concentrations of Rare Earth Elements Found in American Coal Basins

NETL has found high rare earth element (REE) concentrations in coal samples taken from the Illinois, Northern Appalachian, Central Appalachian, Rocky Mountain Coal Basins, and the Pennsylvania Anthracite region. These highly concentrated samples are greater than 300 parts per million (ppm).

Workforce Conferences, Meetings, and Summits

National Association of Workforce Boards 2018 Annual Summit- Fueling Talent, Forging Change

March 24–27, Washington, Hilton, Washington, DC; The Forum convenes leaders, advocates, and changemakers in business, government, labor, and education to 1) network and share insights; 2) address key issues affecting U.S. workforce development; 3) consider the goals and policy framework affecting the future of human capital and economic growth.

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.

1450 Queen Avenue SW
Albany, OR 97321-2198
541-967-5892

3610 Collins Ferry Road
P.O. Box 880
Morgantown, WV 26507-0880
304-285-4764

626 Cochran's Mill Road
P.O. Box 10940
Pittsburgh, PA 15236-0940
412-386-4687

Program staff are also located in Houston, Texas, and Anchorage, Alaska

WEBSITE: www.netl.doe.gov



CONTACTS

Matt Garcia
Regional Workforce Initiative
Coordinator
956-314-0645
matthewgarcia@gmail.com

Kirk Gerdes
Regional Workforce Initiative
Coordinator
304-285-4342
kirk.gerdes@netl.doe.gov

Walter Perry
Communications Team Lead
304-285-4263
walter.perry@netl.doe.gov

Mike Knaggs
Associate Director of Partnerships
304-285-4926
michael.knaggs@netl.doe.gov