Funding Opportunities as of March 17, 2021

Opportunities Listed by Deadlines

1. **Department of Energy to Invest $25 Million in Polymer Upcycling, Plastic Waste Reuse**
   
   **Deadline:** Required Pre-Application - March 10, 2021 at 5 PM ET
   
   The U.S. Department of Energy (DOE) plans to invest $25 million in fundamental science to lay the groundwork for technology that finds reuses for plastic waste, makes strides toward addressing the global plastic waste crisis, and reduces the climate impacts of plastic production. DOE’s research investment will focus on polymer upcycling, the process of efficiently deconstructing and rebuilding polymers, which are the essential building blocks of plastics. Polymer upcycling has the potential to turn waste plastic into chemicals, fuels, and other products of value and greatly reduce the high energy costs associated with plastic production. The development of new, lower energy polymer upcycling processes could bring major energy savings for an industry that consumes six percent of the nation’s entire energy output annually, according to DOE estimates.

   National laboratories, universities, industry, and nonprofit organizations will be eligible to lead applications for the three-year awards, which will be selected based on peer review. The Office of Basic Energy Sciences (BES) within the Department’s Office of Science, which is funding the effort, envisions awards both for single investigators and larger teams.

   Find the [Funding Opportunity Announcement here](#).

2. **Department of Energy Announces $100 Million ARPA-E OPEN Funding Opportunity for Transformative Clean Energy Solutions**
   
   **Deadline:** Concept Papers - April 6, 2021 at 9:30 AM ET
   
   In support of the Biden Administration’s climate innovation agenda, the U.S. Department of Energy (DOE) announced up to $100 million in funding for transformative clean energy technology research and development via ARPA-E’s OPEN 2021 funding opportunity. The first of billions of dollars of DOE R&D opportunities to be announced this year, this funding will help identify cutting-edge, disruptive clean energy technologies to address the climate crisis.

   DOE will also participate in the National Climate Task Force’s Climate Innovation Working Group announced today by the White House. The working group will coordinate federal government-wide efforts to foster affordable, game-changing technologies that can help America achieve the President’s goal of net zero economy-wide emissions by 2050, and emphasize research to bolster and build domestic clean energy supply chains and strengthen American manufacturing.

   Potential applicants can visit ARPA-E’s newly launched [OPEN 2021 website](#) to access useful information and resources, including a [teaming partner list](#) for help forming new project teams and identifying potential...
collaborations, and webinars featuring Program Directors discussing technical areas they hope to pursue.

Complete application details are here.

3. **U.S. Department of Energy Announces $52.5 Million to Support U.S. Manufacturers and Industrial Workers**
   **Deadline: April 22, 2021, 5 PM ET**
   The U.S. Department of Energy (DOE) announced up to $52.5 million for DOE's Industrial Assessment Centers that help American manufacturers and wastewater treatment facilities improve their efficiency, save money, and reduce their carbon footprint. These university-based training programs also create a pipeline for students looking to join the growing clean energy economy.

   The funding will be distributed through DOE's Industrial Assessment Centers (IACs), which are university-based programs that train students and offer no-cost efficiency improvement recommendations to small- and medium-sized manufacturing facilities. IACs selected for this funding will offer coursework and hands-on experience for undergraduate and graduate engineering students in industrial processes, energy-assessment procedures, and energy-management systems. The program pursues two simultaneous goals: (1) supporting U.S. manufacturing competitiveness; and, (2) addressing a growing shortage of engineering professionals with applied energy and manufacturing-related skills. The IAC program provides assessment to small- and medium-sized manufacturers/enterprises (SMEs), defined as having gross annual sales below $100 million and fewer than 500 employees. The IAC program also screens for SMEs with yearly energy bills between $100,000 and $3.5 million.

   As a part of this funding opportunity, DOE will also launch a pilot project to expand IAC engagement with underserved communities. Applicants are encouraged to propose training partnerships with technical programs or community colleges that create new opportunities for a diverse mix of students, of all education levels.

   DOE anticipates selecting 25 to 35 universities, with individual awards of $1.5 to $2.25 million over five years. The deadline for optional letters of intent is April 1, 2021 at 5:00 p.m. ET. Mandatory full applications are due on April 22, 2021 at 5:00 p.m. ET. This four-year global competition invites innovators and teams from anywhere on the planet to create and demonstrate solutions that can pull carbon dioxide directly from the atmosphere or oceans ultimately scaling massively to gigaton levels, locking away CO2 permanently in an environmentally benign way. Solutions will be scientifically evaluated across multiple criteria such as: amount of CO2 removed, life cycle analysis of the removal process, energy efficiency, land footprint and sequestration capabilities. Any carbon negative solution is eligible: nature-based, direct air capture, oceans, mineralization, or anything else that sequesters CO2 permanently.

   For more information, eligibility requirements, and instructions on submitting an application, view the complete funding opportunity announcement. Potential applicants may also view a recording of a recent informational webinar on IAC operations.

4. **X-Prize - $100M Gigaton Scale Carbon Removal**
   **Deadline: April 22, 2021**
   This four-year global competition invites innovators and teams from anywhere on the planet to create and demonstrate solutions that can pull carbon dioxide directly from the atmosphere or oceans ultimately scaling massively to gigaton levels, locking away CO2 permanently in an environmentally benign way. Solutions will be scientifically evaluated across multiple criteria such as: amount of CO2 removed, life cycle analysis of the removal process, energy efficiency, land footprint and sequestration capabilities. Any carbon negative solution is eligible: nature-based, direct air capture, oceans, mineralization, or anything else that sequesters CO2 permanently.

   Team registration opens with the announcement of the full competition guidelines on Earth Day, April 22nd, 2021. The competition will last for 4 years through Earth Day 2025. Student teams are eligible to enter.

   Visit this link for more details: [https://www.xprize.org/prizes/elonmusk](https://www.xprize.org/prizes/elonmusk)

5. **DOE Announces $30 Million for Quantum Information Science to Tackle Emerging 21st Century Challenges**
   **Deadline: Open until Sept. 30, 2021**
   The U.S. Department of Energy (DOE) will provide $30 million for Quantum Information Science (QIS) research that helps scientists understand how nature works on an extremely small scale—100,000 times smaller than the diameter of a human hair. QIS can help our nation solve some of the most pressing and complex challenges of the 21st century, from climate change to national security. Watch this video to learn more about QIS.
QIS helps researchers discover new ways to measure, analyze, process, and communicate information. Potential applications for this work range from quantum computers to enable complex power forecasting to prevent outages during extreme weather events, to quantum devices to enable new smart windows, clothes, and buildings that can change their properties on demand. This funding opportunity is focused on developing advanced capabilities for synthesizing, constructing, and understanding quantum structures and phenomena, as well as making these capabilities available to the greater scientific community via access to DOE’s five Nanoscale Science Research Centers (NSRCs).

All five NSRCs will be selected based on peer review, and eligible to lead applications for awards of up to three years. DOE’s Office of Basic Energy Sciences, which is funding the effort, envisions awards both for single NSRCs and NSRCs working in partnerships or teams. The five NSRCs are:

- Center for Functional Nanomaterials at Brookhaven National Laboratory, Upton, New York
- Center for Integrated Nanotechnologies, jointly managed by Sandia National Laboratories and Los Alamos Laboratory, with locations in Albuquerque and Los Alamos, New Mexico
- Center for Nanophase Materials Sciences at Oak Ridge National Laboratory, Oak Ridge, Tennessee
- Center for Nanoscale Materials at Argonne National Laboratory, Lemont, Illinois
- Molecular Foundry at Lawrence Berkeley National Laboratory, Berkeley, California

See the [funding opportunity announcement](https://science.osti.gov/).  

6. The DOE Funding Opportunity Announcement (FOA), informally known as the “Open Solicitation” or “Open Call,” is issued annually at the beginning of each Fiscal Year (FY). It provides a vehicle for the Office of Science to solicit applications for research support in areas not covered by more specific, topical FOAs that are issued by the office over the course of the Fiscal Year. DOE anticipates awarding approximately $250 million for new, renewal, and supplemental grants, cooperative agreements, and inter-agency agreements under this FOA in Fiscal Year 2021, subject to the availability of FY 2021 appropriated funds.

Proposed research must fall within the programmatic priorities of DOE’s Office of Science and its major program offices, including Advanced Scientific Computing Research, Basic Energy Sciences, Biological and Environmental Research, Fusion Energy Sciences, High Energy Physics, Nuclear Physics, Isotope R&D and Production, and Accelerator R&D and Production.

Funding will be competitively awarded on the basis of peer review. The FOA remains open throughout the Fiscal Year.

The FOA, titled “FY 2021 Continuation of Solicitation for the Office of Science Financial Assistance Program,” can be found on the Office of Science funding opportunities page: [https://science.osti.gov/Funding-Opportunities](https://science.osti.gov/Funding-Opportunities)

7. **DOE Funding Opportunity Announcement - “Open Call”**

   **Deadline: Open until replaced by next fiscal year’s call, Sept. 30, 2021**

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8. **DOE to Provide $14.6 Million for New Atmospheric Studies**  
**Deadline:** Pending Congressional Appropriations  
The U.S. Department of Energy (DOE) announced a plan to provide $14.6 million for new studies of atmospheric processes aimed at improving the accuracy of today’s Earth system models. Studies are expected to rely on data gathered by the Atmospheric Radiation Measurement (ARM) user facility, a DOE Office of Science user facility and the world’s leading facility for ground- and air-based observation of atmospheric processes. Research will focus on interactions between clouds and aerosols (tiny particles that contribute to cloud formation), atmospheric processes in the Arctic, and studies of the warm boundary layer, or the layer of atmosphere closest to ground-level, among other topics. The Department anticipates that $14.6 million will be available for this program in Fiscal Year 2021, pending congressional appropriations. Funding is to be awarded competitively, on the basis of peer review, and is expected to be in the form of three-year grants with total award amounts ranging from $200,000 to $850,000, beginning in the current fiscal year.

More information: [https://www.energy.gov/science/articles/doe-provide-146-million-new-atmospheric-studies](https://www.energy.gov/science/articles/doe-provide-146-million-new-atmospheric-studies)

9. **COVID-19 Research at the Spallation Neutron Source and High Flux Isotope Reactor**  
**Deadline:** Ongoing – Resource available for research until further notice.  
With the continuing spread of the COVID-19 pandemic, the Department of Energy Basic Energy Sciences neutron sources will provide remote rapid access to support research into the COVID-19 virus and the search for effective diagnostics and therapies. Researchers who would like to use neutron scattering resources for COVID-19 research may submit a rapid access proposal [here](https://www.energy.gov/science/articles/doe-provide-146-million-new-atmospheric-studies).

10. **COVID-19 Research Questions**  
**Deadline:** Ongoing – Open until further notice.  
The Department of Energy (DOE) is taking steps to address COVID-19 and is soliciting ideas about how the Department and the National Laboratories might contribute resources for science and technology efforts and collaborations. The Department is encouraging the scientific community and others to consider research questions that underpin COVID-19 response and is requesting input on strategic, priority research directions that may be undertaken using DOE user facilities, computational resources, and enabling infrastructure. More information is available [here](https://www.energy.gov/science/articles/doe-provide-146-million-new-atmospheric-studies).

11. **Solar Energy Innovators Program Opportunity**  
**Deadline:** Rolling - Pending applications reviewed 1st of each month.  
The purpose of the Solar Energy Innovators Program is to enable selected applicants to conduct practical research on innovative solutions to the challenges faced by electric utilities, energy service providers, and electric public utility commissions as the levels of solar energy, as well as other distributed energy resources (DERs), increase on the electrical grid.

Selected applicants will participate for up to two years at a Host Institution on one or more topics related to the integration of solar energy. The applicant must identify a Host Institution and potential mentor at a utility, energy service provider, or public utilities commission (PUC) currently conducting research in an area related to the integration of solar energy onto the electricity grid. Host Institutions may seek potential Innovators that are eligible to apply to the program, but it is the potential Innovator, not the Host Institution or mentor, who submits the application and supporting materials to this site.

For more information, and to apply, [click here](https://www.energy.gov/science/articles/doe-provide-146-million-new-atmospheric-studies).

12. **Events Sponsorship Program: Grants up to $4,000 Available to ORAU Consortium Member Universities**  
**Deadline:** Ongoing  
Applications for events occurring between October 1 and March 31 must be received by September 1. Applications for events occurring between April 1 and September 30 must be received by March 1.

Event or conference sponsorship is often beneficial to our Council of Sponsoring Institution Members, whether as a means of fostering collaboration among Council members, gaining new and important information for a proposal or business plan, and more. To help make these event opportunities possible, ORAU’s University Partnerships Office offers an Events Sponsorship Program to member institutions. Each member university is limited to one award per fiscal year (October through September). Up to $4,000 may be requested to support an event that involves participants from more than one ORAU member institution, including students. Examples of such events include visits to an ORAU consortium member by a renowned speaker, conferences or workshops with a focused theme, or a technology transfer/business plan competition. For more information, please go [here](https://www.energy.gov/science/articles/doe-provide-146-million-new-atmospheric-studies).

13. **Funding Opportunity: USMA Releases BAA on Research Topics Related to Army Technologies**
Deadline: Continuously open through March 31, 2022
The U.S. Military Academy (USMA) released a broad agency announcement (BAA) seeking research proposals than can enable new and significant improvements to Army capabilities and technologies. White papers are expected to focus on basic knowledge and understanding of research topics rather than specific devices or components. The BAA includes topics of interest to the USMA departments, directorate, and research centers and institutes. White papers are encouraged to address the following research topics identified by USMA as they relate to Army technologies and operational capabilities: Socio-Cultural; Information Technology; Ballistics, Weapons, and Protections; Energy and Sustainability; Materials, Measurements, and Facilities; Unmanned Systems and Space; Human Support Systems; and Artificial Intelligence, Machine Learning, and Quantum Technologies. For more information, please go here.

14. Energy Department Announces Notice of Intent to Issue Funding to Enhance Manufacturing Competitiveness through Innovation
Deadline: TBD
The U.S. Department of Energy’s (DOE) Office of Energy Efficiency and Renewable Energy (EERE) announced its intent to issue, on behalf of the Advanced Manufacturing Office (AMO), a funding opportunity to stimulate technology innovation, improve the energy productivity of American manufacturing, and enable the manufacturing of cutting-edge products in the United States. The potential Funding Opportunity Announcement (FOA), entitled “FY20 Advanced Manufacturing Multi-topic FOA,” is intended to fund high-impact, applied research and development projects that integrate specified research opportunities across AMO. For more information, please go here.

15. Dear Colleague Letter: Career-Life Balance (CLB) Supplemental Funding Requests
Requests considered anytime.
The NSF recognizes that primary dependent care responsibilities and other family considerations pose unique challenges to the STEM workforce. The purpose of this DCL is to announce NSF’s continued interest in CLB supplemental funding requests. The supplemental request may include funding for up to six months of salary support or stipend for a maximum of $30,000 in direct costs of salary compensation or stipend, but the duration of the salary or stipend support may not exceed the duration of the family leave. Fringe benefits and associated indirect costs, but not tuition, may be included in addition to the salary costs, and therefore, the total supplemental funding request may exceed $30,000.


16. ADL Ventures and National Renewable Energy Lab Competition
Deadline: Ongoing
ADL Ventures is working with the National Renewable Energy Lab (NREL) as a Power Connector for the American-Made Solar Prize, a $3 million prize competition for researchers, innovators and entrepreneurs working on solar technologies. Winners of the competition can receive up to $500K in non-dilutive funding in addition to in-kind support from the National Labs. To date, 60 winners from 23 different states have been selected over 3 rounds for a total of $9M in funding. In addition to the publicity and resources associated with selection by DOE / NREL, the winners benefit from a much more streamlined funding process versus traditional collaborative awards and grants, allowing them to hit the ground running quickly, with minimal restrictions. More information about the prize can be found on our ProblemSpace platform or from the NREL Solar Prize information webinar on August 19th. For more information, please go here.