President Obama Announces $14 Million Funding Opportunity to Develop Transportation Fuels from Algae

To build upon current research and development activities, the Biomass Program recently announced the availability of funding for two topic areas in the Advancements in Sustainable Algal Production (ASAP) Funding Opportunity Announcement (DE-FOA-0000615). Topic Area 1 will support the development and demonstration of integrated cultivation and recycling technologies for algal biomass production that demonstrate minimal water and external nutrient inputs and/or the use of waste/effluent nutrients. Topic Area 2 will establish Regional Algal Feedstock Test Bed partnerships.

The ASAP FOA will accelerate efforts to increase the scalability of algae production and help the Biomass Program meet its aggressive goals for algal biofuels by supporting the development of innovative technologies to capture and recycle water and nutrients; developing test bed facilities that serve as engines for algal technology innovation, job training, and validation; and creating long-term cultivation data necessary to understand and promote algae biomass production.

The competitively selected projects will receive up to $14.3 million in fiscal year 2012 funds, with an additional $6.7 million available in fiscal year 2014 funding, subject to Congressional appropriations, for projects that meet rigorous performance criteria. Applications are due on April 18, 2012. For more information and application requirements for the Funding Opportunity Announcement, please visit the Grants.gov website.
Argonne Wins Award for Resin Wafer Technology

Argonne National Laboratory has received a Federal Laboratory Consortium Award for Excellence in Technology Transfer for a separations technology that improves the processing of biomass-based feedstocks into biofuels and chemicals. A team led by Argonne biochemical engineer Seth Snyder developed the innovative resin wafer electrodeionization technology to significantly reduce the cost of producing clean energy and of the chemicals and water used in industry.

Argonne's patented technology allows for the deionizing or the continuous removal of charged products—like organic acids from aqueous streams—and eliminates the requirement to continuously add neutralizing agents. Conventional bioprocessing technologies require significant capital expenditures or energy-intensive steps to recover these products and typically generate large waste streams. Controlling the processing costs is critical to the commercial success and growth of these product markets, especially if they are to be cost competitive with fossil-based products.

Funding for this work was provided by the U.S. Department of Energy’s Office of Energy Efficiency and Renewable Energy (Office of the Biomass Program, the Advanced Manufacturing Program and the Technology Commercialization Fund) and the Office of Fossil Energy (Innovations for Existing Plants Program).

For more information, visit Argonne’s website.

Save the Date: Biomass 2012

On July 10–11, 2012, the U.S. Department of Energy’s Biomass Program will host its fifth annual conference, Biomass 2012: Confronting Challenges, Creating Opportunities – Sustaining a Commitment to Bioenergy, at the Washington, D.C. Convention Center. This year’s conference will examine the dynamic playing field of bioenergy in 2012 as exciting new technologies move forward within a shifting policy and economic landscape. Situated just blocks away from Capitol Hill, the White House, and numerous national and international organizations, the conference will provide a superb forum for an open dialogue about overcoming common challenges and sustaining our national commitment to building the advanced bioenergy economy. For more information, visit the Biomass 2012 Web page.
Conversion Technologies for Advanced Biofuels (CTAB) Webinar Presentations Posted

This webinar, held on February 9, 2012, focused on the results from the CTAB Roadmapping Workshop hosted by the Biomass Program in December 2011. Central to the webinar were the critical technical barrier areas identified during the workshop. These were presented by the subject matter experts who led the breakout sessions at the original conference. The webinar also highlighted talks on broad technical issues (such as separation and catalysis) and innovative methods of biomass processing (such as hybrid conversion systems and lignin utilization). The information collected at the CTAB Workshop will form the basis of an upcoming roadmap document on research challenges and research and development activities for the commercial development of advanced biofuel technologies, slated for publication in late 2012. Presentations from the webinar are now on the Biomass Program Webinar Web page.

2011 Biomass Program Peer Reviews Released

The Biomass Program conducted a complete program review, including its platforms, in 2011 as part of the biennial requirement for all Office of Energy Efficiency and Renewable Energy programs. The process began with the review of the Program's eight primary technology areas (platforms) from February through April of 2011 and ended with a summary review of the Program on June 26–27, 2011. The reports can be found on the Biomass Peer Reviews Web page.

Past and Upcoming Events with Biomass Representation

- Second Annual Municipal Solid Waste to Biofuels Summit, February 7–8, 2012, Brian Duff, Chicago, Illinois
- AAAS Annual Meeting, February 16–20, 2012 Brian Duff, Vancouver, British Columbia, Canada
- National Ethanol Conference, February 22–24, 2012, Howard Marks, Orlando, Florida
- IEA Bioenergy Task 42 Meeting, February 27–March 3, 2012, Melissa Klembara, Copenhagen, Denmark
ARPA-E Summit, February 27–March 2, 2012, Elliott Levine, Paul Grabowski, Mark Decot, Barbara Twigg, and Howard Marks, Washington, D.C.


Advanced Biofuels Leadership Conference, April 2–5, 2012, Brian Duff, Washington, D.C.

International Biomass Conference and Expo, April 16–19, 2012, Elliott Levine and Barbara Twigg, Denver, Colorado

Social Aspects of Bioenergy Sustainability Workshop, April 24, 2012, Kristen Johnson and Ranyee Chiang, Washington, D.C.

Bio World Congress, April 29–May 2, 2012, Valerie Reed, Orlando, Florida

34th Symposium on Biotechnology for Fuels and Chemicals, April 30–May 3, 2012, Brian Duff, New Orleans, Louisiana


**Funding Opportunities**

- **Biomass Advancements in Sustainable Algal Production**: The U.S. Department of Energy is requesting applications to support outdoor phototrophic algae research and development in two areas: 1) nutrient and water use in algal production systems and 2) the development of algal technology test bed facilities. This research will support the Biomass Program’s goals to model pathways for significant (>1 billion gallons per year) volumes of cost-competitive algal biofuels by 2022.

- **Biomass Research and Development Initiative**: In partnership with United States Department of Agriculture, full proposals are being reviewed, and an announcement has been targeted for the first quarter of 2012. The fiscal year 2012 Solicitation is anticipated for release in coordination with the selections from the previous year.

**Bio Blogs and News Updates**

- President Obama Announces $14 million Funding Opportunity to Develop
Transportation Fuels from Algae, DOE Public Affairs, February 23, 2012

- CALL FOR PAPERS: The Sun Grant Initiative National Conference on Science for Biomass Feedstock Production and Utilization, University of Tennessee, February 1, 2012
- Austin Using Green Innovation to Beat the Utility Blues, Todd Allen, January 17, 2012
- Disappearing Pens Cross Out Petroleum, Joyce Yang, December 21, 2011