

**SFI weekly newsletter for the week of December 14, 2009**  
**A weekly service of SFI**



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**JOBS, POST DOCS, INTERNSHIPS, FELLOWSHIPS, SCHOLARSHIPS**

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**NEW RESOURCES**

1. **AASHE launches STARS, the Sustainability Tracking, Assessment & Rating System**

**EVENTS, CONFERENCES, & CFPs**

1. **2010 Soil and Water Conservation Society Annual Conference Ecosystem Services: Applications for Conservation Science, Policy, and Practice**
2. **Invitation To Present At A Great Lakes Areas Of Concern Session**

*In an effort to increase recognition and enhance SFI's image, we want to include more publicity about SFI member achievements. Please send announcements of your publications, presentations, awards, and names of awarded proposals to Denise Heikinen at [dmheikin@mtu.edu](mailto:dmheikin@mtu.edu).*

**SFI NEWS AND ANNOUNCEMENTS**

1. **Congratulations to Mark Rowe**, SFI associate, for passing his dissertation defense entitled "Development of Measurement and Modeling Techniques to Quantify Atmospheric Deposition of Persistent, Bioaccumulative and Toxic Chemicals in the Great Lakes". His advisor is Judith Perlinger.

## 2. Graduate Certificate in Sustainable Water Resources Systems

The degree schedule for the graduate certificate in Sustainable Water Systems Resources has been approved, and is now available on the CWS and graduate school websites.

[http://www.mtcws.mtu.edu/education\\_gradcert.html](http://www.mtcws.mtu.edu/education_gradcert.html)

<http://www.mtu.edu/gradschool/administration/academics/forms-deadlines/certificates/>

The CWS Colloquium courses UN5990 offered in Spring 2010 (Impacts of Climate Change on the Great Lakes Ecosystem) and Spring 2009 (Climate Change and the Sustainability of Water Resources) will satisfy the requirements of the 1-credit course, UN5100 Water and Society Colloquium.

### SUSTAINABILITY NEWS

#### 1. Tesla Motors on cross-country road trip that ends at NAIAS

Los Angeles-based Tesla Motors is embarking on a 2,700-mile road trip in the all-electric Tesla Roadster -- a historic journey to raise awareness about alternative-fuel cars and greet customers nationwide. Tesla Chief Designer Franz von Holzhausen, Tesla customers and employees gathered at Tesla's Los Angeles store at 10 a.m. Thursday, leaving an hour later in an "Arctic white" 2010 Roadster Sport. Tesla employees -- including engineers, lawyers, recruiters and salespeople -- will make dozens of stops nationwide for test drives, tech talks, customer-appreciation events and media opportunities. The car will arrive in Detroit before the North American International Auto Show, which starts Jan. 11. <http://www.wwj.com/Tesla-Motors-Kicks-Off--Roadster-Road-Trip--From-L/5920122>

#### 2. Great Lakes Restoration Action Plan available for review

In July 2009, EPA and the other members of the Great Lakes Interagency Task Force (IATF) shared an outline for a Great Lakes Multi-Year Restoration Action Plan for the purpose of public consultation. In July and August, a series of consultation meetings were held across the Great Lakes basin to get input on the outline from States, Tribes, local governments, and other Great Lakes stakeholders, as well as the public. Using information from these meetings, the Federal partners drafted the Great Lakes Restoration Action Plan.

<http://greatlakesrestoration.us/action/?p=5>

Please use the form at [http://greatlakesrestoration.us/action/?page\\_id=26](http://greatlakesrestoration.us/action/?page_id=26) to send us your comments.

Comments must be submitted no later than noon CST on January 8, 2010.

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### SEMINARS

#### 1. Center for Water & Society Colloquium: Spring 2010

UN5990 Special Topics – Interdisciplinary, CRN 13812, 1 Credit

Impacts of Climate Change on the Great Lakes Ecosystem

Schedule: Spring 2010, Fridays 4:00-5:00

Course Leaders: Alex Mayer ([asmayer@mtu.edu](mailto:asmayer@mtu.edu)), others to be announced

[http://www.mtcws.mtu.edu/education\\_colloquium.html](http://www.mtcws.mtu.edu/education_colloquium.html)

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### FUNDING & AWARD OPPORTUNITIES

*To submit research proposals through the Sustainable Futures Institute, add "SFI" to the DEPT/CENTER/INSTITUTE(S) column for identifying the PI's and co-PI's. SFI Director, David Shonnard, will sign the transmittal sheet on page 3. (If David Shonnard is unavailable for signing transmittal sheets, Rick Donovan can also sign for SFI). Submitting proposals under SFI provides wider publicity and recognition for your research as well as a 10% return on your incentive account.*

*Please feel free to contact SFI in regards to proposal development – SFI can serve as a "hub" for bringing together different faculty, merging concepts related to sustainability, providing literature review assistance, etc.*

#### 1. Great Lakes Restoration Initiative Request for Proposals

**Note:** SFI will be coordinating several responses to this RFP. Please feel free to contact Richard Donovan, SFI's operations manager regarding how you can participate.

<http://epa.gov/greatlakes/fund/2010rfp01/index.html>

HUFY2010 Great Lakes Restoration Initiative Interagency Funding GuideU

U.S. EPA, August 24, 2009

Bob Shuchman's write-up of the summer EPA presentations on the GLRI is here:

<http://www.mtri.org/GreatLakesRestorationInitiative.html>

## **2. NSF Environmental Implications of Emerging Technologies**

Deadline Mar 03, 2010

Upper Amount \$100,000 for one to three years. Equipment proposals for less will be considered

This program provides support to develop and test the environmental effects of new technologies. Fundamental and basic research is sought to establish and understand outcomes as a result of the implementation of new technologies such as nanotechnology and biotechnology. The program also supports research on the development and refinement of sensors and sensor network technologies that can be used to measure a wide variety of physical, chemical, and biological properties of interest in characterizing, monitoring, and understanding environmental impacts. The program emphasizes engineering principles underlying technology impacts. Innovative production processes, waste reduction, recycling, and industrial ecology technologies are of interest. All of these have implications that would be relevant to this program.

Current areas of support include

- understanding and mitigating how new developments in nanotechnology and biotechnology will interact with the environment;
- nanotechnology environmental, health, and safety implications and applications;
- predictive methodology for the interaction of nanoparticles with the environment and with the human body, including predictive approaches for toxicity;
- fate and transport of natural, engineered, and incidental (by-product) nanoparticles;
- risk assessment and management of the effect of nanomaterials in the environment;
- evaluation of the effect of increased usage of renewable resources on water supply and land use; and
- sensor and sensor network technologies as they relate to the measurement of these environmental implications.

All proposed research should be driven by engineering principles, and presented in an environmental health and safety or environmental sensor context. Proposals should include involvement of at least one engineering student.

URL for more info [http://www.nsf.gov/funding/pgm\\_summ.jsp?pims\\_id=501030](http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=501030)

## **3. Broadening Participation Research Initiation Grants in Engineering (BRIGE) - NSF 10-509**

Sponsor: NSF

Amount: \$175,000

Deadline: Feb 25, 2010

The Directorate for Engineering (ENG) at the NSF offers a research initiation grant funding opportunity with the goal of broadening participation to all engineers including members from underrepresented groups and persons with disabilities in the engineering disciplines. These grants are intended to increase the diversity of researchers in engineering disciplines to initiate research programs early in their careers, including those from underrepresented groups, engineers at minority serving institutions, and persons with disabilities. By providing these funding opportunities, ENG intends to further broaden participation of engineering researchers who share NSF's commitment to diversity in the following ways:

1. Expand the population of role models who will interact with an increasingly diverse student population, the workforce of the future.
2. Increase the number of engineering researchers at minority serving institutions actively and competitively engaged in research as independent investigators, thereby creating new research opportunities for students from underrepresented groups and persons with disabilities.
3. Fund engineering research projects that use innovative ways to attract and retain members of underrepresented groups and persons with disabilities to careers in engineering.

The participating ENG organizations are

- Electrical, Communications and Cyber Systems;
- Division of Chemical, Bioengineering, Environmental, and Transport Systems;
- Civil, Mechanical and Manufacturing Innovation;
- Engineering Education and Centers; and
- Industrial Innovation and Partnerships.

<http://fundingopps.cos.com/cgi-bin/getRec?id=110373& ksTicket=1adbf95f580b280eeacefbdbabc0f3c& ksExpires=2010010100:00:00>

#### **4. Fundamental Research Program for Industry/University Cooperative Research Centers (FRP) - NSF 10-507**

Amount \$50,000 to \$200,000 for ~10 awards No cost sharing required.

Deadline Feb 17, 2010 to Feb 02, 2011

Industry participation extends the scope and horizon of center research projects so as to drive innovation with industrially relevant fundamental research projects. Industry-defined fundamental research projects must demonstrate measurable industry collaboration and involvement that accelerates fundamental research.

The I/UCRCs contribute to the knowledge base of a large number of industrial manufacturing processes that involve a wide range of technological pursuits and are found in areas such as aerospace, electronics, chemicals, recovery of natural resources, the environment, petroleum, biochemicals, materials, food, power generation, and allied activities. To better enable these processes, the I/UCRC fundamental research program supports research that involves the development of fundamental engineering and science principles, process control and optimization strategies, mathematical models, and experimental techniques, with an emphasis on projects that have the potential for innovation and broad application in areas in industry. This fundamental research is leading to applications that include sensors, materials, pharmaceuticals, imaging, visualization, embedded systems, next generation computers, medical devices and instrumentation, alternative energy, ecological engineering, water and waste treatment, and robotics. Should the fundamental research proposals be awarded, there may be opportunities for additional funding for opportunities such as those listed below:

1. GOALI (NSF-09-516) - Graduate and Undergraduate Student Industrial Fellowship
2. Research Experienced for Undergraduates (NSF 09-598) - REU

Bookmark Url <http://fundingopps.cos.com/cgi-bin/fo2/getRec?id=115693>

URL for more info <http://www.nsf.gov/pubs/2010/nsf10507/nsf10507.htm>

#### **5. ERDC BAA - Construction Materials Made From Recycled Wastes (CERL-11)**

Sponsor: DOD

Amount not listed

Deadline Continuous

The Construction Engineering Research Laboratory announces research opportunities involving construction materials made from recycled wastes. Research is currently being conducted on construction materials made from recycled, post-consumer wastes with a primary focus on products made from recycled plastics. Required research on these polymeric materials includes, but is not limited to, studies concerning the relationship of fabrication techniques to end-product properties, degradation mechanisms in various environmental exposures, long-term mechanical properties and durability in severe and varying environments, creep behavior at varied temperatures and loads, behavior and design of bolted connections, quality assurance techniques, design criteria for structural applications, and modeling techniques to predict material behavior in different loading situations over the life-cycle of the product.

Bookmark Url <http://fundingopps.cos.com/cgi-bin/fo2/getRec?id=41644>

#### **6. ONR's Young Investigator Program (YIP)**

Deadline: Jan 29, 2010

The Office of Naval Research (ONR) is interested in receiving proposals for its Young Investigator Program (YIP). ONR's Young Investigator Program (YIP) seeks to identify and support academic scientists and engineers who have received Ph.D. or equivalent degrees within the last five years (on or after 01 November 2004 for this FY10 competition) and who show exceptional promise for doing creative research. The objectives of this program are to attract outstanding faculty members of Institutions of Higher Education (hereafter also called "universities") to the Department of the Navy's research program, to support their research, and to encourage their teaching and research careers. Proposals addressing research areas as described in the ONR Science and Technology (S&T) Department section of ONR's website at [www.onr.navy.mil](http://www.onr.navy.mil) which are of interest to ONR Program Officers and Division Directors will be considered. Contact information for each Division (a subgroup of an S&T Department) is also listed within the S&T section of the website. Potential applicants may contact the appropriate Division Director, or the Program Officer who is the point-of-contact for a specific technical area, to discuss their research

ideas. Brief informal pre-proposals may be submitted to facilitate these discussions. Such discussions can clarify the content and breadth of the priority research areas and enhance the match between a subsequent proposal and Department of the Navy research needs.

<http://www07.grants.gov/search/search.do?&mode=VIEW&flag2006=false&oppld=50529>

## **7. Research Excellence Fund Calls for Proposals**

Deadline: No later than 4 p.m., Thursday, Feb. 25.

Proposals are being solicited for the FY2010 Research Excellence Fund (REF), an internal award of the Office of the Vice President for Research.

The announcement, which includes a program description, proposal format, review criteria and process, award procedure and reporting requirements, is available online. A new REF category, Scholarship and Creativity Grants, has been added this year. More information about it can be found by clicking "announcement" above.

Incomplete proposals or those received after the deadline will not be accepted for consideration by the review committee for this year and will be returned. Newly funded REF awards will begin on Thursday, July 1.

Submit your proposal to Laurie Stark, office assistant in Research Integrity and Compliance, located on the third floor of the Lakeshore Center.

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## **STUDENT JOBS, POST DOCS, INTERNSHIPS, FELLOWSHIPS, SCHOLARSHIPS**

### **1. Kathryn Fuller Fellowships**

Advancing Conservation through Science

World Wildlife Fund – US (WWF-US) is pleased to announce the availability of Kathryn Fuller Fellowships for 2010. For nearly 50 years WWF has committed to delivering science-based conservation results while incorporating the latest research and innovations into our work. As part of its commitment to advancing conservation through science, WWF established Kathryn Fuller Fellowships to support PhD students and postdoctoral researchers working on issues of exceptional importance and relevance to conservation in WWF-US priority places. This year, the Kathryn Fuller Science for Nature Fund will support doctoral and postdoctoral research in the following three areas: (1) ecosystem services; (2) measuring and monitoring carbon stocks in forests; (3) climate change impacts on and adaptation of freshwater resources.

<http://www.worldwildlife.org/science/fellowships/fuller/item1296.html>

### **2. Multiple Positions, SUNY College of Environmental Science & Forestry**

The State University of New York College of Environmental Science and Forestry is seeking applicants for faculty positions in the following representative areas: biomimicry and design of sustainable systems; climate change drivers and responses of natural and urban systems; urban sustainability: built environments, ecological engineering, and sustainable communities; quantitative analysis of fate and transport of environmental contaminants, pathogens and/or invasive species; biomolecular engineering for sustainable products and processes; and renewable energy engineering. These tenure-track positions will be at the associate or assistant professor level, depending on qualifications. Candidates should have a Ph.D. in one of the areas described or a closely related field, a strong record of publication and external funding, and evidence of collaborative skill and effective college teaching. Successful candidates will begin August 15, 2010. Applications are due January 11, 2010.

<http://www.esf.edu/positions/>

### **3. Academic Dir, Golisano Inst for Sustainability, Rochester Inst of Tech**

The Golisano Institute for Sustainability (GIS) at Rochester Institute of Technology invites applications for the position of Academic Director. The GIS Academic Director will be a leading expert in an area related to sustainability, with the ability to establish strong partnerships with industry, government, and national labs; a strong research track record; leadership experience; effective communication and mentoring skills; and the ability to work collaboratively and lead effectively in a complex multi-disciplinary environment. S/he will be responsible for leading an interdisciplinary faculty in the development and operation of graduate programs related to sustainability; growing the program's research portfolio; hiring and mentoring of faculty and staff; creating a

supportive and stimulating environment for graduate students; and fostering academic and research collaboration in sustainability across the RIT campus. The Academic Director will report to the Director of the Golisano Institute for Sustainability, who reports to the Provost. Candidates should have a PhD and possess qualifications to be tenured at the associate or full professor level. Applications received before January 15, 2010, will be given the fullest consideration, and the position will remain open until filled.

#### **4. Assist Dir, Sustainability and Campus Utilities, SUNY Geneseo**

The State University of New York, Geneseo is seeking applicants for the position of assistant director for sustainability and campus utilities. The assistant director will be responsible for management oversight, maintenance coordination, and strategic planning of campus utility systems. Some duties will include supervising the central heating plant manager and working with others as required maintaining, upgrading, or expanding existing systems to ensure sustainability and service to the campus. Applications are due January 15, 2010.

<http://chronicle.com/jobs/0000618685-01>

#### **5. STARS Technical Development Coordinator, AASHE**

AASHE seeks a Technical Development Coordinator to contribute to the ongoing development and refinement of the Sustainability Tracking, Assessment & Rating System (STARS). The STARS Technical Development Coordinator's primary responsibility will be to coordinate a team of Technical Advisors across many disciplines to improve the STARS credits and corresponding support materials. Review of applications will begin on January 25, 2010, and will continue until the position is filled. <http://www.aashe.org/highlights/jobs/stars-technical-coordinator>

#### **6. Researcher, Renewable & Sustainable Energy Mgmt, Albany State U**

Albany State University (GA) is seeking applicants for the position of institutional researcher in renewable and sustainable energy management. Candidates should have a Ph.D. in a science or engineering field with appropriate postdoctoral experience or a Master degree with significant executive and operational experience in fields directly related to sustainable and renewable energy management. Demonstrated potential for successful teaching, scholarship, and service is preferred. Duties include developing and coordinating curricula, teaching at both undergraduate and graduate levels, and supervising and mentoring undergraduate and graduate student researchers. <http://chronicle.com/jobs/0000618812-01>

#### **7. Fellowships, National Wildlife Federation Campus Ecology**

The National Wildlife Federation Campus Ecology Program invites Fellowship applications for the Midwest Campus Climate Action Network and the Southeast Campus Climate Action Network for the spring 2010 and the fall 2010 semesters. Successful candidates will work directly with Campus Ecology staff on program initiatives, will gain professional experience, and will learn more about the youth climate movement. Undergraduate or graduate students from any college or university in the network area are able to apply. The deadline for applications is **December 20, 2009**. <http://www.nwf.org/campusEcology/fellowships/index.cfm>

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### **NEW RESOURCES**

#### **1. AASHE launches STARS, the Sustainability Tracking, Assessment & Rating System**

AASHE now offers a tool designed to meet these needs: STARS, the Sustainability Tracking, Assessment & Rating System. Developed with extensive stakeholder engagement over the past three years, STARS establishes a common standard of measurement for sustainability in higher education.

Through December 31, campuses have the opportunity to register for STARS 1.0 Early Release at a reduced rate:

For institutions that register on or before December 31, 2009:

AASHE Member.....\$650

Non-Member.....\$1,150

For institutions that register on or after January 1, 2010:

AASHE Member.....\$900

Non-Member.....\$1,400

Over 70 institutions have already registered as STARS Charter Participants. (All institutions that register for STARS by August 15, 2010 will be considered Charter Participants.)

Learn more about how to register for STARS 1.0 Early Release. You'll need to identify a "STARS Liaison" for your campus and an executive-level administrator who will be copied on initial emails. Don't miss this opportunity get the discounted registration rate!

On January 19, 2010, AASHE will formally launch the STARS program in Washington, D.C. The centerpiece of the launch will be an interactive webinar, "Measuring Campus Sustainability: Reaching for the STARS" (12 pm Eastern). The event is free, and will address how STARS helps meet the needs of the campus sustainability community. You'll be able to ask questions of these distinguished presenters:

Nan Jenks-Jay - Dean of Environmental Affairs, Middlebury College

Dave Newport - Director of the Environmental Center, University of Colorado at Boulder

Chris O'Brien - Director of Sustainability, American University

Paul Rowland - Executive Director, AASHE

RSVP for the webinar to receive log-in directions and learn more about this highly anticipated program.

Please visit the STARS website <http://www.aashe.org/stars/index.php>, for more information on the program, including the downloadable STARS 1.0 Technical Manual and a list of FAQs. You can direct any questions to [stars@aaashe.org](mailto:stars@aaashe.org), Hope to see you on the webinar and as a STARS Charter Participant!

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#### **EVENTS, CONFERENCES, & CFPs**

**1. 2010 Soil and Water Conservation Society Annual Conference Ecosystem Services: Applications for Conservation Science, Policy, and Practice**

July 18-21, 2010

St. Louis, Missouri

<http://www.swcs.org/index.cfm?nodeID=20605>

abstract due date: December 17, 2009

**2. Invitation To Present At A Great Lakes Areas Of Concern Session**

--- Call For Abstracts ---

2010 IAGLR Conference, University of Toronto

Session 49. Lessons from the Past, Solutions for the Future: Great Lakes Areas of Concern

May 17-21, 2010

This session will focus on the experience and lessons learned from the planning and management of the Great Lakes Area of Concern with an eye towards how the past can drive and inform the future efforts to address the Beneficial Use Impairments and resolve water quality concerns at the AOCs.

Abstracts are due January 15th and information on submissions can be found at

<http://iaglr.org/conference/callpapers.php>