



Sen

## **Engineering Professor Rajan Sen Named Jefferson Science Fellow**

*Professor Sen will serve as USF's first Jefferson Science Fellow during the academic year 2012-13 at the U.S. State Department.*

**TAMPA, Fla (May 31, 2012)** Rajan Sen, PhD, PE professor of structural engineering, has been named University of South Florida's first Jefferson Science Fellow. He is one of 12 Jefferson Science Fellows for 2012-2013 named by the U.S. State Department. Sen, has held appointments in the College of Engineering and the School of Architecture and Community Design as well as the inaugural Samuel and Julia Flom Endowed Chair, is the first professor at the University of South Florida to be appointed a Jefferson Science Fellow.

As JSF, Sen will advise the U.S. State Department on engineering issues as they relate to international diplomacy and policy. He will serve in the State Department for one year, beginning August 13 and will return to USF after the appointment ends, but remain available to the U.S. Department of State to serve as a field expert for the following five years.

Established in 2003 after 9/11 and the anthrax attacks, the JSF program provides a vital link between policymaking social scientists in the U.S. Department of State and senior scientists and engineers from prestigious universities across the United States. The program helps bridge the worlds of science, technology and policymaking by providing a greater understanding and awareness of scientific knowledge to State Department officials on a wide array of issues such as biosecurity, climate change, food security, geography, space sciences and genetic evolution, according to a 2010 Carnegie Corporation report.

"My interests lie in the areas of disaster mitigation and low-cost housing," said Sen. "But, I will not know where I serve until I arrive in Washington, D.C. I will interview with different bureaus within the State Department and those interactions will determine where I am assigned."

After graduating first in his civil engineering class from the prestigious Indian Institute of Technology, Kharagpur, Sen completed a master's degree in structural engineering from the University of British Columbia. He spent a decade at the Department of Transport in London, working closely on the development of bridge design software and the first load and resistance factor bridge design code, BS 5400. Following its publication, he left to pursue his doctorate in civil engineering at the State University

of New York Buffalo. Publications from his dissertation on boundary elements are still in citation 25 years later.

Under his leadership USF was among the first universities in the world to explore the use of fiber reinforced polymers (FRP) for the repair and rehabilitation of civil infrastructure. He has made pioneering contributions on FRP durability, its application for strengthening steel and underwater pile repair. His research led to the construction of Florida's first post-tensioned voided slab bridge in Miami and his work has been featured in *Steel Bridge News* and *Composites Technology*. His research has been funded by Florida Dept. of Transportation, National Science Foundation, Transportation Research Board and the U.S. Army Corps of Engineers.

The Dean of the USF College of Engineering, John Wiencek, supported Professor Sen's nomination and was very pleased to hear of his selection. "Dr. Sen is well respected by students and faculty alike. He has a very sharp wit and is able to effectively analyze and communicate very sophisticated concepts. His ability to motivate and communicate was clearly demonstrated over the past few years as he mentored our students in the Big Beam contest of the Precast/Pre-stressed Concrete Institute where the USF students have consistently placed very high in the state and national competitions. Working in the Civil Engineering field, Dr. Sen is acutely aware of the policy aspects of engineering solutions and the importance of communicating with the public. I am confident that his tenure as a Jefferson Science Fellow will provide great value to our government and to our global partners."

Sen has edited two books and authored over 200 publications including more than 80 journal papers. He has made more than 140 presentations worldwide and was a NSF sponsored US delegate to conferences in Europe, Japan and India and an invited speaker for the US Southern Command. He is a Fellow of the American Concrete Institute and the American Society of Civil Engineers, serves on FRP committees in Europe and US and is on the International Advisory Board of India's Fiber Reinforced Polymer Institute. He has chaired international conferences, and is the recipient of awards from USF, the Pre-stressed Concrete Institute and the American Institute of Architects for his contributions to teaching, research and service.

"You get an international perspective of the complexities of the world through this unique experience," said Sen, "and I am committed to bringing this knowledge to students here at USF."

The Jefferson Science Fellows Program is funded by the U.S. State Department with additional support from participating universities. The program is endorsed by numerous professional scientific societies and organizations, including the National Academy of Sciences, which administers the program.

Each fellow receives a \$50,000 stipend from the State Department for living expenses for a full year. An additional \$10,000 is available to each fellow through the National Academies for travel associated with his/her assignment. Fellows also continue to receive salaries and benefits from their home institutions.

All Jefferson Fellowships are contingent upon awardees obtaining an official U.S. government security clearance.

To learn more about the Jefferson Science Fellows Program, visit <http://sites.nationalacademies.org/PGA/Jefferson/index.htm>.

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*The University of South Florida is a high-impact, global research university dedicated to student success. USF is classified by the Carnegie Foundation for the Advancement of Teaching in the top tier of research universities, a distinction attained by only 2.2 percent of all universities. The Carnegie Foundation also classifies USF as a community engaged university. It is ranked 44th in total research expenditures and 34th in federal research expenditures for public universities by the National Science Foundation. The USF System has an annual budget of \$1.5 billion, an annual economic impact of \$3.7 billion, and serves 47,000 students in Tampa, St. Petersburg, Sarasota-Manatee and Lakeland.*

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