

## News



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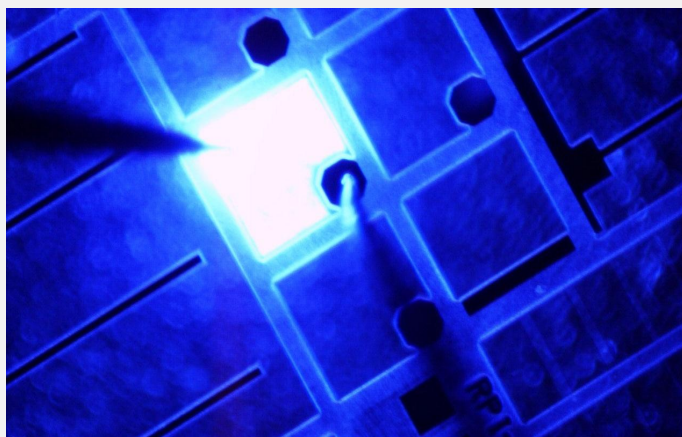
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## NSF Launches an ERC to Develop Smart Lighting



Smart Lighting ERC example.

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January 6, 2011

### NSF Launches an Engineering Research Center to Develop Smart Lighting

The National Science Foundation (NSF) announces an award to Rensselaer Polytechnic Institute and its partners to establish a new NSF Engineering Research Center (ERC). The ERC will develop interdisciplinary research and education programs that address an important societal need and provide the foundation for new industries through innovation. NSF will invest \$18.5 million in the Center over the next five years.

Since 1985 the ERC program has fostered broad-based research and education collaborations in close partnership with industry that focus on making technological breakthroughs and developing new products and services. A new generation of five NSF ERCs will place a greater emphasis on innovation and entrepreneurship and on international collaboration and cultural exchange.

"The Gen-3 ERCs have been designed to build on the well-developed understanding laid down by the two previous generations of ERCs," says Lynn Preston, the leader of the ERC Program. "We have added to Gen-3 ERCs several new dimensions designed to speed the innovation process and prepare engineering graduates who are innovative, creative, and understand how to function in a global economy where engineering talent is broadly distributed throughout the world. We expect these ERCs to make even more significant impacts on the competitiveness of U.S. industry than their predecessors."

The **NSF Smart Lighting ERC** aims to create new solid-state lighting technologies to enable rapid biological imaging, novel modes of communication, efficient displays, and safer transportation. Solid-state lighting, from sources such as light-emitting diodes, is more efficient and durable than incandescent and fluorescent lighting. ERC researchers will investigate and exploit the distinctive properties of advanced materials to create new lighting devices and systems with fully controllable and tunable characteristics. These innovations will make solid-state lighting significantly more functional and easier to manufacture.

The Smart Lighting ERC will be based at Rensselaer Polytechnic Institute and will partner with Boston University and the University of New Mexico. Chonbuk National University in Korea, National Chiao Tung University in Taiwan, Taiwan National University, and Vilnius University in Lithuania will contribute additional expertise and international perspectives.

Major lighting companies and small start-up firms are among the 18 industry partners enlisted by the ERC to guide strategic planning, spur innovation, and provide university students with first-hand experience in entrepreneurship. To further stimulate technology transfer, the ERC has established partnerships with the Center for Economic Growth in Albany, N.Y., the Optoelectronics Industry Development Association, and small business incubators at each of the partner universities.

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*\*This news release was updated on January 6, 2011, to reflect the current principal investigator.*

*The National Science Foundation (NSF) is an independent federal agency that supports fundamental research and education across all fields of science and engineering. In fiscal year (FY) 2010, its budget is about \$6.9 billion. NSF funds reach all 50 states through grants to nearly 2,000 universities and institutions. Each year, NSF receives over 45,000 competitive requests for funding, and makes over 11,500 new funding awards. NSF also awards over \$400 million in professional and service contracts yearly.*

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