



Richard Smalley and Robert Curl

# Year of Nano

**A quarter-century ago, Rice University found itself at the epicenter of a worldwide revolution in science and technology when the “Aha!” moment of three scientists and a pair of graduate students gave birth to the field of nanotechnology.**

Their discovery of buckminsterfullerene in 1985 — a soccer ball-shaped molecule of 60 carbon atoms nicknamed the buckyball — kicked off a transformation in chemistry and materials science and earned a Nobel Prize in Chemistry in 1996 for Rice professors Richard Smalley and Robert Curl and their colleague, Sir Harold Kroto, then of the University of Sussex.

Throughout 2010, Rice is recognizing their achievement with the Year of Nano, presented by Lockheed Martin. The series of events will be capped by a three-day symposium in October that will bring to campus some of the biggest names in carbon nanotechnology research.

That week — on 10/10/10, to be exact — Rice’s Richard E. Smalley Institute for Nanoscale Science and Technology will host a fundraising gala to commemorate the history of nanotechnology at Rice and support the future of a field that has the potential to remake the energy industry, medical care, materials science and more. The following evening, the institute will celebrate with a Bucky “Ball” to commemorate the fullerene discovery and highlight a wide range of nanotechnology research at Rice, which now incorporates 14 departments and 150 faculty members.

All of the events will honor the five men whose brainstorming session led to the original discovery: professors Smalley, Curl and Kroto and then-graduate students James Heath '88 and Sean O'Brien '88.

Smalley died in 2005, but the surviving four will speak at the symposium. Today, Curl is University Professor Emeritus and the Kenneth S. Pitzer-Schlumberger Professor Emeritus of Natural Sciences at Rice. Kroto is the Francis Eppes Professor in the Department of Chemistry and Biochemistry at Florida State University. Heath is the Elizabeth W. Gilloon Professor of Chemistry at the California Institute of Technology. And O'Brien is vice president of process engineering at MEMtronics.

prominent nano researchers in the world.”

Throughout the year, the Smalley Institute will hold a series of short courses in nanotechnology, and it plans to celebrate the anniversary in more fanciful ways as well. The institute will enter a nano-themed vehicle in Houston’s famous Art Car Parade in May, and the institute’s TunaFest, one of the best campus networking parties of the year, will return on July 2.

The Year of Nano also will honor the legacy of Smalley, whose series of advances in bulk nanotube production made possible the widespread use of nanotechnology by researchers and industry. His vision of an energy-efficient future continues to drive scientists at Rice.

**“This will be a gathering of the thought leaders in carbon nanotechnology. It will showcase not only the Nobel team, but also eight of the most prominent nano researchers in the world.”**

—Wade Adams

They will talk about their discovery on Oct. 11, the first day of the three-day symposium, which will include sessions on nanotechnology’s history as well as state-of-the-art nanotech applications in medicine, energy, photonics, electronics, aerospace, materials science, the environment and quantum research. Nanotechnology’s implications for business and policymakers also will be discussed.

“This will be a gathering of the thought leaders in carbon nanotechnology,” said Wade Adams, director of the Smalley Institute. “It will showcase not only the Nobel team, but also eight of the most

“This is going to be a happy, joyful and exciting event that’s only dampened by the fact that one of the most prominent people in this field is missing,” Adams said. “It was Rick who advocated for and led an international revolution in thinking about nanotechnology. It was Rick who had the great vision of nanotechnology as the key to solving the most pressing problems for humanity, especially for medicine and energy. We’ll celebrate this occasion in Rick’s honor. It’ll be a party he would have loved to attend.” ■

—Mike Williams

Learn more about the Year of Nano:

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