scale-up of carbon nanotube synthesis. After 4 years, he resumed academic studies and earned his Ph.D. in 1973 from Princeton University, focusing on the chemical physics of condensed phase and molecular systems with thesis advisor Elliott Bernstein.

During postdoctoral study with Donald Levy and Lennard Wharton of the University of Chicago, and later with Daniel Auerbach, Rick helped develop a powerful technique: supersonic beam laser spectroscopy. As a result, chemical physicists can now drastically simplify spectroscopy of complex molecules. Using the coldest part of expanding gas, researchers could achieve temperatures below 1 K, thereby freezing the rotations of moderate-sized molecules and complexes. After joining the faculty of Rice University in 1976, Smalley worked together with Robert Curl to produce a sequence of pioneering advances applicable for making and characterizing very cold supersonic beams of large molecules, radicals, and atomic clusters having precisely known numbers of atoms.

In August 1985, Smalley and Curl were joined by Harold Kroto from the University of Sussex for a short summer project to study interesting carbon cluster distributions found by Andrew Kaldor at Exxon using an apparatus constructed by Smalley's group. After a legendary late night of taping together cardboard cutouts of hexagons and pentagons on his kitchen table, using Kroto's insights into the importance of five-carbon rings, Smalley presented the carbon ''soccer ball'' as the only sensible way that 60 carbon atoms could be assembled to produce the observed spectra. A new field of scientific investigation was thus born, and then fueled by a seemingly continuous barrage of exciting new results from both Rick's laboratory and others across the world, which showed the diversity of carbon cage types, how their production could be scaled up, the diverse ways they can be modified, and their novel physical and chemical properties.

In 1993, Rick redirected much of his group's work to carbon nanotubes, which can be viewed as theh cylindrical version of carbon cage molecules, and Rick and his co-workers became leaders in the field. His experimental skills were again critical as his team developed the laser ablation and the high-pressure carbon monoxide processes for making single-walled carbon nanotubes. Rapid worldwide scientific progress was assisted by Rick's providing access to these high-quality nanotubes, first through a non-profit effort at Rice University, and then through the successful company he founded in 1999, Carbon Nanotechnologies, Inc.

Many call Rick the grandfather of nanotechnology. He was the most cited author in nanotechnology in the last decade, and his pivotal scientific and technological breakthroughs have inspired worldwide commercialization efforts. Because of Rick's key role in creating the National Nanotechnology Initiative, he was the only academic invited to the November 2003 Oval Office signing ceremony. His vision of using nanotechnology to help solve the energy crisis and to improve health through nanomedicine is motivating governments to fund effective programs. Many will dedicate themselves to a goal that Rick focused upon during his last 4 years of life: a carbon nanotube quantum wire cable much stronger than steel that would carry a current 10 times as high as that carried by copper wire and weigh one-sixth as much.

With his passing, the world lost a great intellect in chemistry, physics, and engineering, but we also lost a great advocate for science and technology and a great educator and mentor. Robert Curl said that ''Rick was a visionary, and his charisma and logic made those he worked with buy into the vision. Rick convinced us that we could be better, stronger, and take more chances if we just tried. I hope that we don't forget—then his legacy . . . will make a lasting transformative difference.'' In his humble way, Rick simply said that science and life go on.

RICHARD SMALLEY MEMORIAL REMARKS BY MALCOLM GILLIS

My first encounter with Rick Smalley came in 1993, when he served on the President's Search Committee. Rick peppered me with some really tough questions about the Free Electron Laser, which I helped bring to Duke. From his comments, I realized then and there that he was far more than an outstanding chemist; rather his interests ranged deep and wide into physics, mathematics and engineering. In the years to come, I came to regard Rick as one of the world's paragons of interdisciplinary understanding and insight. Rick's scientific interests and questioning nature could never be confined to any kind of disciplinary boundary.

The full implications of the legacy left by Rick's work will not be known for several decades. What we do know is that in 2006, one does not open a copy of Science or Nature or Journal of Applied Physics or Surface Science or engineering journals or medical journals without finding at least one article or review on nanoscience or nanotechnology. No one can lay a better claim for responsibility for this phenomenon than Rick Smalley and his collaborators here at Rice and across the earth.

And while Rick was pleased and even proud of the snowballing applications of nanotechnology, he was always careful to turn the spotlight on the work of other pioneers in nanoscience and nanotechnology. It comes as no news to anyone that Rick had a droll sense of humor lurking just beneath his deep intellect. An example: The word ''nano'' has its root in the ancient Greek word for dwarf. But Rick once cracked that for many PIs all over the globe, the root for nano came from a newer verb: ''to seek research grants.''

Honors of all stripes came to Rick during his all-too-short lifetime. However, he cared little for honors and very greatly about nanotechnology's potential for resolving pressing human problems in food supplies, energy accessibilities, medical diagnosis and medical treatment. I observed in the final year of his life, his primary inspiration for his dogged, determined battle against disease had first to do with his family and second his desire to witness the fruition of a few more of the social benefits he expected from innovative use of buckyballs, nanotubes and other particles.

We will all remember Rick for many, many things. We will remember that in Fall 1996, when he and Bob Curl shared the Nobel Prize with Kroto, both were teaching undergraduate chemistry. I will remember him for his boundless energy, dry wit and tolerance of the quirks of others.

We admired him not only for his intellect but also for his humanity. Speaking for myself, I have yet to adjust to the absence of his presence. On several occasions since October, I have reached for the phone to call Rick to ask him to help me understand such things as the quantum hall effect or quantum dots, only to realize that neither landlines nor cell phones could reach that far.

Ehamos de menos muchisimo, el Doctor Smalley. We miss you greatly Dr. Smalley.

PAYING TRIBUTE TO THE LAW ENFORCEMENT EXCHANGE PROGRAM

HON. JON C. PORTER

OF NEVADA

IN THE HOUSE OF REPRESENTATIVES

Monday, June 12, 2006

Mr. PORTER. Mr. Speaker, I rise today to pay tribute to the Law Enforcement Exchange Program, sponsored by the Jewish Institute for National Security Affairs. I am proud to recognize this organization for its progress in better training law enforcement officials in the prevention of and response to terrorist attacks.

Since the events of September 11, 2001, the prevention of and response to terrorism have become important aspects of law enforcement training. While American law enforcement officials have been a vital asset in the war on terrorism, they require more training in order to become more effective in their fight to prevent terrorist attacks at home.

Because they have had many years of experience and have developed specialized skills in dealing with all aspects of terrorism, the Israel National Police are considered the number one police force worldwide in prevention of and response to terrorist attacks. In 2002, the Jewish Institute for National Security Affairs (JINSA) created the Law Enforcement Exchange Program (LEEP) in coordination with the Israel National Police and other Israeli agencies to help improve the training for American law enforcement officers in the counter-terrorism realm. The program consists of three core aspects: a trip to Israel for selected high-ranking law enforcement officials to learn first-hand Israeli police tactics; conferences held in the United States to reach a broader law enforcement audience; and finally, a process of dissemination, in which the practices learned are extended throughout the law enforcement community to those unable to attend conferences. This three-part program will provide immediately useful information to law enforcement officials nationwide.

I am pleased to say that one such conference will be held in Las Vegas, Nevada. A reception recognizing the program will be held on June 11, 2006 at the Bellagio Hotel, and I am honored to recognize a few of the distinguished guests of this event. The current Vice President of JINSA, David Justman, will offer the welcoming remarks. Steve Pomerantz, former Assistant Director of the FBI, now serves as the Director of counter-terrorism for JINSA. In 2004, Yoram Hessel retired as Director of the Global Operations, Intelligence, and Foreign Relations Division of the Mossad, after holding the position for 4 years. ''Rolli'' is currently a Senior Officer of the Israel Security Agency, a department for which he has dutifully served 15 years. Assistant Sheriff Rod Jett of the Las Vegas Police Department, a Las Vegas native and distinguished law enforcement official, will share with us his experiences in the 2005 LEEP program and how he believes the conference will benefit the Las Vegas community. These fine men have all contributed immensely to this important issue and I am glad to have the privilege of speaking along side of them.

I rise to acknowledge the hard work of these individuals and all who have participated in making LEEP a vital component of law enforcement training across America in the difficult fight against terrorism.