Wolfgang Krätschmer, winner in the "Lifetime achievement" category

With his process for producing fullerenes, a particularly complex form of pure carbon, German physicist Wolfgang Krätschmer founded an entire branch of research in nuclear physics. Before the announcement of his procedure in 1990, scientists investigating the rare substance had to make do with theoretical assumptions. His invention paved the way for systematic research into fullerenes and led to applications from new fuels and lubricants to magnets, semiconductors and revolutionary medicines. Fullerenes now constitute a market with a turnover of more than \$300 million (2008), expected to rise to \$4.5 billion a year by 2015. Now 67, Krätschmer has been an honorary professor at Heidelberg University since 1993 and has set up a research group dedicated to systematically expanding our understanding of fullerenes.