

# ENI AWARD 2015

## New Frontiers of Hydrocarbons - Downstream Prize

Helmut Schwarz

Winner

*Concepts Rather than Recipes: an Unorthodox, Novel Approach to Selectively Activate Inert C-H Bonds*

### Biography

In January 2008, one of the leading international researchers in the field of molecular chemistry, Helmut Schwarz, acceded to the office of President of the Humboldt Foundation. After having worked as a technician in chemical industry and reading chemistry, he took his doctorate at Berlin University of Technology in 1972, completed his professorial qualifications there in 1974 and, after having spent some time abroad (ETH Zürich, Cambridge University (U.K.), and MIT Cambridge), he was appointed to a professorship for the theory and practice of mass spectrometry four years later. Helmut Schwarz has been Professor of Chemistry at TU Berlin since 1983.

He has worked as a visiting professor at a number of research institutions abroad, including Cambridge (Great Britain), Jerusalem and Haifa (Israel), Lausanne (Switzerland), Canberra (Australia), Innsbruck (Austria) as well as Paris and Strasbourg (France). He has been granted numerous awards for his work in basic research, amongst others, the Otto Bayer Award for Chemistry (1989), the German Research Foundation's Gottfried Wilhelm Leibniz Award (1989), the Alexander von Humboldt Foundation's Max Planck Research Award (1991), the International Mass Spectrometry Society's J.J. Thomson Medal in Gold (1994), the German-Israeli Lise Meitner-Alexander von Humboldt Award (1997), the German Chemical Society's Liebig Medal (1998), the ETH Zurich's Prelog Medal in Gold (2000), the American Chemical Society's F. H. Field and J. L. Franklin Award (2001), the Otto Hahn Award for Chemistry and Physics (2003), the Erwin Schrödinger Award (2008), the European Academy of Sciences' Blaise Pascal Medal in Chemistry (2011), the Officer's Cross of the Order of Merit of the Federal Republic of Germany (2011), the Göttingen Academy of Sciences' Lichtenberg Medal (2012), the WATOC Schrödinger medal (2015), and the Karl-Ziegler Award of the German Chemical Society (2015).

Helmut Schwarz was one of the first new members to be accepted into the Erfurt Academy of Arts and Sciences when it reopened in 1991. Amongst others, he is also a member of the German Academy of Sciences (Leopoldina), the Academia Europaea (London), a corresponding member of the Göttingen Academy of Sciences, honorary member of the Learned Society of the Czech Republic (Prague), fellow of the Institute for Scientific Information Database of Highly Cited Researchers, member of the German Academy of Engineering, foreign fellow of the Estonian Academy of Sciences (Tallinn), member of the European Academy of Sciences and Arts (Salzburg), member of the European Academy of Sciences (Liège), National Academy of Sciences (India), and fellow of the American Academy of Arts and Sciences (Cambridge/MA). Furthermore, he was one of the founding members of the Berlin-Brandenburg Academy of Sciences and Humanities and served as Vice-President from 1998 to 2003. The Israel Institute of Technology TECHNION in Haifa (Israel), the Hebrew University of Jerusalem (Israel), the University of Innsbruck (Austria), the Weizmann Institute of Science Rehovot (Israel), die ETH Zurich (Switzerland), the Sofia University "St. Kliment Ohridski" (Bulgaria), the Hanyang University at Seoul (South Korea) and the Academy of Sciences (Moldova) have all awarded him honorary doctorates. In addition to his research work, published in > 950 peer-reviewed articles and delivered in > 1,000 invited or named lectures, Helmut Schwarz has been a busy editor and a member of the editorial board of various scientific journals as well as having made a name for himself as a science policy expert. From 2001 to 2007, he served as Vice President of the German Research Foundation (DFG).

