ENI AWARD 2010

New Frontiers of Hydrocarbons Prize

Winner (*ex aequo*)

Avelino Corma

New Catalysts and Process for better use of fossil resources and biomass transformation, energy saving and waste minimization

Biography

Avelino Corma is Research Professor and Director of the ITQ (Instituto de Tecnología Química), at the Universidad Politécnica de Valencia since 1990. His current research field are structured nanomaterials and molecular sieves as catalysts, covering aspects of synthesis, characterization, and reactivity in acid-base and redox catalysis.

Professor Corma studied Chemistry at the University of Valencia, where he obtained his BA in 1973 and later, in 1976, he then obtained the Ph.D. "with honours" at the Chemical Engineering Department from the University Complutense of Madrid. In 1979 he became Associated Researcher at the Institute of Catalysis in Madrid after two years of postdoctoral work at the Chemical Engineering Department of Queen's University in Canada with Professor B. W. Wojciechowski, and in 1987 was appointed Research Professor.

He has been collaborating for research projects with many important companies who deal with catalysis, such as Shell, BP-Amoco, ExxonMobil, Total, Elf, Repsol, and Enichem, among the others. Thanks to his important research work Professor Corma is also member of the Royal Academy of Engineering of Spain, of the Academia Europaea, and of the National Academy of Engineering USA. He is Fellow of The Royal Society of Chemistry and Member of the Scientific Boards of numerous institutions prestigious journals, such as the Max-Planck and Institut für Kohlenforschung (Germany), BP, the Journal of Catalysis, Microporous and Mesoporous Materials, Catalysis Letters, Japanese Catalysis Surveys, Catalysis Reviews: Science and Engineering, the Journal of Molecular Catalysis and the Journal of Physical Chemistry. He is also Scientific Advisor for BP, ExxonMobil, Shell, Rhodia, Albemarle, Sumitomo, Sasol, CEPSA, Conoco-Phillips.

He has written about 800 articles on these subjects in international journals, three books, and a number of reviews and book chapters. He is co-author of more than 100 patents; 11 of them have been commercialized. Professor Corma's work allowed him to be awarded with numerous prizes, including the DuPont Award on New Materials, the Spanish National Award on Science and Technology, the F.G. Ciapetta and E.J. Houdry Awards of The North American Catalysis Society, the Gabor A. Somorjai Award from the American Chemical Society, the François Gault Award of the European Federation of Catalysis Societies. He is Doctor Honoris Causa of the Utrecht University, Technical University of Munich, UNED from Madrid, Jaime I University and Universitat of Valencia