

Short biographical Note – Johannes A. Lercher

Johannes Lercher studied Chemistry at the Technische Universität Wien, graduating in 1978. He continued with doctoral studies with Prof. Heinrich Noller receiving the Dr. techn. in 1980 (summa cum laude). 1982 he spent at Yale University working with Prof. Gary Haller as postdoctoral researcher. After returning to the TU Wien he obtained the *venia docendi* in 1985 and was Associate Professor from 1989 to 1993. During the following five years (1993-1998) he was Professor of Chemical Technology at the University of Twente, Netherlands. In 1998 he was appointed as Professor of Chemistry at the Technische Universität München as. Since 2011 he is also the Director of the Institute of Integrated Catalysis and Battelle Fellow at the Pacific Northwest National Laboratory.

Johannes Lercher is Editor-in-Chief of the Journal of Catalysis and has served as President of the International Zeolite Association (2001 - 2004) and as President of the European Federation of Catalysis Societies (2013 - 2017). In 2008, he was elected to the Austrian Academy of Sciences, 2010 to the Academia Europaea, 2015 to the European Academy of Sciences, 2017 to US National Academy of Engineering, and 2019 to the US National Academy of Inventors. His contributions to research have been recognized by several awards including, Alwin Mittasch Prize, Society for Chemical Engineering and Biotechnology e.V., DECHEMA (2021), the inaugural David Trimm and Noel Cant Lectureship of the Australian Catalysis Society (2017), the ENI Award for Hydrocarbon research (2016), the R.B. Anderson Award of the Canadian Catalysis Society (2015), the Francois Gault Lectureship Award of the European Federation of Catalysis Societies (2013) and the Kozo Tanabe Prize for Acid Base Catalysis (2013), and the Robert Burwell Lectureship in Catalysis of the North American Catalysis Society (2011). He is Honorary Professor at the China University of Petroleum, the Qingdao Institute of Bioenergy and Bioprocess Technology of the Chinese Academy of Sciences and the Dalian Institute of Chemical Physics.

Prof. Lercher's research addresses fundamental aspects of catalysts and catalyzed reactions that enable catalysis to lower the carbon footprint via radically new approaches to synthesize energy carriers and chemical intermediates. Aiming to catalyze chemical conversions at significantly lower reaction temperatures and with higher selectivity than currently possible, the steric and chemical environment of sites and as a consequence the excess chemical potentials along a reaction path are used as guiding principle to synthesize novel catalysts.