Joachim Sauer

Joachim Sauer is Professor of Theoretical Chemistry at the Humboldt University in Berlin, and external scientific member of the Fritz Haber Institute (Max Planck Society). He received the Dr. rer. nat. degree in Chemistry from Humboldt University in 1974, and the Dr. sc. nat. degree from the Academy of Sciences in (East-)Berlin in 1985. He is member of the Berlin-Brandenburg (formerly Prussian) Academy of Sciences, the German National Academy Leopoldina, and the Academia Europaea. He holds an Honorary Doctorate (DSc) of University College London and he was given the 2015 Francis Gault Lectureship Award of the European Federation of Catalysis Societies.

In his research he applies quantum chemical methods to solve problems in chemistry, in particular in surface science, adsorption and catalysis. He has published 370 research papers, notably in the area of modeling the structure and reactivity of transition metal oxide catalysts, zeolites and metal-organic frameworks, and he has given 460 invited lectures. From 1999 to 2011 he was chairman of the Collaborative Research Center 'Aggregates of transition metal oxides – Structure, dynamics, reactivity' funded by German Research Foundation and he is co-founder and principal investigator of the Cluster of Excellence 'Unifying concepts in catalysis' in Berlin.