



## Curriculum Vitae Prof. Dr. Hans-Peter Steinrück



Name: Hans-Peter Steinrück

**Main research interests: Surface and interface properties of ionic liquids, hydrogen storage in liquid organic hydrogen carriers, surface chemistry of redox-active metalloporphyrins, chemical modification of supported graphene, electron beam induced deposition (EBID) of nanostructures on different surfaces**

### Academic and Professional Career

- 2009 - 2015 Guest Professor, University of Science and Technology of China (USTC), Hefei, China
- 2006 - 2011 Vice President, Universität Erlangen-Nürnberg, Germany
- 2003 - 2005 Dean, Faculty of Science II, Universität Erlangen-Nürnberg, Germany
- 2002 - 2003 Senator, Universität Erlangen-Nürnberg, Germany
- 2001 - 2003 Vice-Dean, Faculty of Science II, Universität Erlangen-Nürnberg, Germany
- 1998 - 1999 Chairman, Department of Chemistry and Pharmacy, Faculty of Science II, Universität Erlangen-Nürnberg
- since 1998 Full Professor (C4/W3) of Physical Chemistry, Department of Chemistry and Pharmacy, Universität Erlangen-Nürnberg, Germany
- 1994 - 1998 Associate Professor (C3) of Experimental Physics, Department of Physics, Universität Würzburg, Germany
- 1993 Visiting Scientist, Dept. of Physics & Astronomy, Rutgers University, USA
- 1992 Habilitation (Dr.rer.nat. habil.) in Experimental Physics, Technische Universität (TU) München, Germany
- 1986 - 1994 Assistant of Prof. Dr. Menzel, Department of Physics, TU München
- 1985 - 1986 Postdoctoral Fellow with Prof. R. J. Madix, Department of Chemical Engineering, Stanford University, USA
- 1985 PhD (Dr. techn.) in Physics, Technische Universität Graz, Austria

- 1983 Diploma in Technical Physics (Dipl.-Ing.) at TU Graz  
 1978 - 1983 Physics studies, TU Graz

### **Functions in Scientific Societies and Committees**

- 2016 - 2018 DFG Senate Commission for Collaborative Research Centers (SFB), German Science Foundation (DFG)  
 2015 Chairman, Chemical Sciences Panel, Evaluation of the Institutes of the Czech Academy of Sciences  
 since 2015 Advisory Board, Materials Science and Physics Division, Universität Salzburg, Austria  
 2014 Special working group of the RIKEN Advisory Council, Japan  
 since 2014 Editor of Surface Science  
 2012 - 2013 Review Panel "Synergy Grants", European Research Council (ERC)  
 2011 - 2016 Member, DFG-Fachkollegium 302 „Chemische Festkörperforschung“  
 2010 - 2016 Chairman, Advisory Board, Fritz-Haber-Institut, Max-Planck-Gesellschaft, Berlin  
 2009 - 2011 Scientific Council (SC), Helmholtz-Zentrum Berlin für Materialien und Energie (HZB)  
 since 2008 Scientific Advisory Board, Synchrotron Radiation Facility (ANKA), Karlsruhe Institute of Technology (KIT)  
 2008 - 2009 Vice-Chair, Advisory Committee for Research with Photons (AFP), BMBF  
 2007 - 2011 Intern. Advisory Board, Max Planck Society - Chinese Academy of Science (MPG-CAS) Partner group, University of Science and Technology China (USTC)  
 2005 - 2008 Commission for Research on Condensed Matter at Large Scale Facilities in Germany (KEKM)  
 2005 - 2008 Chairman, German Committee for Research with Synchrotron Radiation  
 2004 - 2008 Scientific Advisory Committee, BESSY II, Berlin  
 2003 - 2005 Scientific Advisory Committee, European Synchrotron Radiation Facility (ESRF), France  
 1996 - 2004 Beam Time Review Panels at BESSY (1996 - 2002) and ESRF (2003 - 2004)  
 2000 - 2002 Chairman, Surface Science Division of the German Physical Society (DPG)

### **Project coordination, Membership in collaborative research projects**

- 2016 - 2021 ERC Advanced Grant "Ionic Liquid Interface Dynamics"  
 2014 - 2017 DFG Research Group FOR 1878 "Functional Molecular Structures on Complex Oxide Surfaces"  
 2011 - 2019 DFG SFB 953 "Synthetic Carbon Allotropes"  
 2007 - 2017 DFG Cluster of Excellence EXC 315/1 "Engineering of Advanced Materials"

2006 - 2012	DFG SPP 1191 "Ionic Liquids"
2004 - 2012	DFG SFB 583 "Redox active metal complexes"
2000 - 2007	DFG SPP 1091 "Brückenschläge in der Heterogenen Katalyse"
1999 - 2001	DFG SFB 292 "Mehrkomponentige Schichtsysteme"
1995 - 1998	DFG SFB 410 "II-VI Halbleiter"
1989 - 1995	DFG SFB 338 "Adsorption an Festkörperoberflächen"

### Honours and Awarded Memberships

since 2018	Member of the European Academy of Sciences
2017	Medard W. Welch Award of the American Vacuum Society
since 2016	Fellow, Association for the Advancement of Science (AAAS)
since 2016	Member of the German National Academy of Sciences Leopoldina
2016	ERC Advanced Grant 2015
2015	Doctor Honoris Causa, University of Szeged, Hungary
since 2015	Corresponding Member of Austrian Academy of Sciences (ÖAW)
since 2013	Fellow of the American Physical Society (APS)
since 2012	Full member of Academia Europaea – The Academy of Europe
1986	Fritz Kohlrausch-Preis, Austrian Physical Society
1983 - 1985	Scholarship by the Austrian sponsorship organisation PRO SCIENTIA
1983	Young Researcher Award, Federation of Austrian Industry
1980 - 1985	Scholarship for Outstanding Students, TU Graz

### Major Scientific Interests

The activities of the Steinrück group focus on the area of surface and interface science at the border between chemistry and physics. Main research interests are the development of new materials with novel electronic, geometric and chemical properties, the investigation of elementary steps of surface reactions, and the construction of advanced scientific apparatus.

These studies aim at a fundamental physical and chemical understanding of the mechanisms and processes involved, at the molecular level. The Steinrück group has performed outstanding research and received highest international recognition in the following areas of fundamental research: Surface and interface properties of ionic liquids, model studies for hydrogen storage in liquid organic hydrogen carriers, surface chemistry of redox-active metalloporphyrins, in situ studies of surface reactions, chemical modification of supported graphene, and electron beam induced deposition (EBID) of nanostructures on different surfaces. For these studies, a large variety of state-of-the-art spectroscopic or microscopic techniques is applied, partly utilizing synchrotron radiation.