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## Curriculum Vitae Professor Dr. Frédéric Merkt

**Name:** Frédéric Merkt

**Born:** 12 July 1966



### Academic and Professional Career

- since 1999 Full Professor of Physical Chemistry at ETH Zurich, Department of Chemistry and Applied Biosciences (D-CHAB), Zurich, Switzerland
- 1995 - 1999 Assistant Professor of Physical Chemistry at ETH Zurich, Zurich, Switzerland
- 1994 - 1995 Junior Research Fellow of St. John's College and Lecturer of Keble College, Oxford University, Oxford, UK
- 1993 - 1994 Postdoctoral Fellow of the Swiss National Science Foundation for research at Stanford University, Stanford, USA
- 1992 - 1993 Junior Research Fellow of St. John's College, Oxford University, Oxford, UK
- 1992 Postdoctoral Fellow, Boursier du Gouvernement Français, Université de Paris-Sud and CNRS, Laboratoire des Collisions Atomiques et Moléculaires LCAM, Orsay, France
- 1992 Ph.D., University of Cambridge, Cambridge, UK
- 1989 - 1992 Ph.D. student, Leslie Wilson Scholar of Magdalene College, University of Cambridge, UK
- 1988 Diploma, ETH Zurich, Switzerland
- 1984 - 1988 Studies of chemistry at ETH Zurich, Switzerland

### **Project coordination, Membership in collaborative research projects (Selection)**

- 2011 - 2014 National Centre of Competence in Research of the Swiss National Science Foundation, QSIT (Quantum Science and Technology), Principal Investigator / Partner
- 2011 - 2014 COHERENCE, ITN, Marie Curie Action (Cooperativity in Highly Excited Rydberg Ensembles Control and Entanglement), Principal Investigator / Partner

### **Functions in Scientific Societies and Committees (Selection)**

- since 2012 Member of the Selection Committee of the Alexander von Humboldt Foundation
- since 2011 Co-editor of the European Physical Journal D
- since 2011 Member of the Editorial Board of the Journal of Chemical Physics
- since 2008 Member of the Research Commission of ETH Zurich, Switzerland
- 2008 - 2011 President of the Division Chemical Research of the Swiss Chemical Society
- 2007 - 2010 Member of the Editorial Board of the Journal of Molecular Spectroscopy
- since 2005 Member of the Steering Committee of the Division Chemical Research of the Swiss Chemical Society
- since 2005 Member of the Editorial Board of Chemical Physics
- 2004 - 2010 Board Member of the European Group on Atomic Systems (EGAS) of the European Physical Society; 2006 - 2010: Secretary of EGAS
- 2003 - 2007 Co-Editor of Molecular Physics
- 2003 - 2004 Chairman of the Institute of Physical Chemistry of ETH Zurich, Department of Chemistry and Applied Biosciences (D-CHAB)
- since 2001 Member of the Advisory Board of Molecular Physics

### **Honours and Awarded Memberships, Achievements (Selection)**

- 2014 Otto-Bayer-Preis
- 2012 van't Hoff-Preis 2012 of the Deutsche Bunsen-Gesellschaft für Physikalische Chemie

- 2011 Elected Fellow of the Optical Society of America
- 2010 William F. Meggers Award of the Optical Society of America
- 2010 Carus Medal of The German Academy of Sciences Leopoldina, Halle (Saale), Germany
- 2010 Carus Prize of the City of Schweinfurt, Germany
- 2009 Elected Member of the Leopoldina, Section Chemistry, The German Academy of Sciences  
Leopoldina, Halle (Saale), Germany
- 2008 ERC Single Investigator Advanced Grant / Awarded ERC Advanced Grant
- 2005 Frontiers in Spectroscopy Lecturer, Ohio State University, Columbus, USA
- 2004 Academy Award of the Berlin-Brandenburg Academy of Science and Humanities,  
Berlin, Germany
- 1999 Swiss National Latsis Prize awarded by the Swiss National Science Foundation
- 1999 Werner Prize of the Swiss Chemical Society

### Major Scientific Interests

The research in the group of Frédéric Merkt is devoted to studies of the electronic structure and dynamics of atoms and molecules in the gas phase by high-resolution spectroscopy. The driving force of the research program is the desire to study and understand in detail the behaviour of electronically excited states of atoms and molecules and the processes that result from the interaction of molecules with short-wavelength radiation. Topics of particular interest are: (i) molecular photoionization and photoelectron spectroscopy, (ii) atomic and molecular Rydberg states, (iii) the structure and dynamics of reactive species such as free radicals and cations, (iv) the Jahn-Teller effect and rovibronic interactions, (v) the physical chemistry of atomic and molecular samples at very low temperatures, and (vi) atom and molecule optics.