

Prof. Dr. Petra Hellwig

Professeure de classe exceptionnelle, Université de Strasbourg, France
Laboratoire de bioélectrochimie et spectroscopie, UMR 7140, Chimie de la matière complexe

Interdisciplinary expertise in biophysics and physical chemistry. In the laboratory we use bioelectrochemistry and vibrational spectroscopies for the study of the reaction mechanism of membrane proteins and their principle(s) of operation.

EDUCATION AND TRAINING

- 16.02.2002 Habilitation at the Physics Department of the J.W.Goethe-University of Frankfurt, Germany
- 1995-1998 PhD in the department of physical chemistry, F.A. Universität Erlangen, Department of Physical Chemistry, Laboratory of Prof. Dr. W. Mäntele, Title "Electron and proton transfer in the cytochrome *c* oxidase from *Paracoccus denitrificans*: Electrochemical and FTIR spectroscopic investigations";
- 1990 - 1995 Diploma in chemistry, Friedrich Alexander Universität Erlangen, Germany;

PROFESSIONAL EXPERIENCE

- Since 2006 Full professor for physical chemistry at the chemistry faculty of the university of Strasbourg; since 2015 as *professeure classe exceptionnelle 2*, promoted in the CNU;
- 2005-2006 Associated Professor, *Institut de Chimie*, Louis Pasteur University, Strasbourg;
- 2001-2005 Assistant Professor, Institute for Biophysics, J.W. Goethe- University, Frankfurt;
- 2000 Visiting Fellow in the Johnson Foundation; Philadelphia, Laboratory of Prof. T. Ohnishi (EPR on redox proteins);
- 1999-2000 Post doc in the department of biochemistry, University of Illinois at Urbana Champaign; USA, Laboratory of Prof. Dr. R.B. Gennis (Molecular biology);
- 1998-1999 Research Fellow, Institute for Biophysics, J.W. Goethe- University, Frankfurt, Laboratory of Prof. Dr. W. Mäntele (Vibrational spectroscopies);

HONORS

- 2022-2026 Senior member of the Institut Universitaire de France (IUF);
- 2018-2020 Member of the University of Strasbourg Institute of Advanced Studies, USIAS;
- Since 2007 Allowance for excellence in research (PES/PEDR) by the French research ministry;
- 2011-2015 Junior member of the Institut Universitaire de France (IUF);
- 2007-2010 Chair d'excellence; junior; award from the French research council (ANR);
- 2002 Michael and Biserka Baum award from the 'Freunde der Universität Frankfurt' at the J. W. Goethe-University for excellent habilitation in Physics;
- 1999-2000 Scholarship by the German research council (DFG) for post-doctoral studies at the University of Illinois (UIUC), USA;

INSTITUTIONAL RESPONSABILITIES

- Since Jan 2018 Director of the research unit (UMR) 7140 Chemistry of complex matter,
- 2013-2017 Deputy director of the UMR 7140;
- Since 2006 Head of the « Laboratoire de spectroscopie vibrationnelle et électrochimie des biomolécules » (part of UMR 7177) and renamed in 2013 "Laboratoire de bioélectrochimie et spectroscopie" (part of UMR 7140);
- 2014-2018 Member of the bureau of the chemistry faculty,
- 2019-2023 Director of the PhD school of the chemistry department (école doctorale ED222) with currently 306 PhD students: <http://ed.chimie.unistra.fr/>
- 2017-2019 Deputy director of ED222;

2011-2019	Elected member of the ED222 council
2008-2019	Elected member of the faculty council (chemistry) and member of the experts committee of the faculty (section 31);

COMMISSIONS OF TRUST

2016-2021	Nominated to the national council from the CNRS - CoNCNRS, section 13 (physical and theoretical chemistry);
2009-2016	Elected member of the National University Council, Paris - <i>Conseil National des Universités</i> – CNU section 31 (physical, theoretical and analytical chemistry);
2008-2013	Expert for the French Ministry of Research and Higher Education in the PEDR and PES ad hoc committee;
Since 2014	AERES/HCERES committees: 2019, Grenoble (LCBM), president of the committee; 2018, LEM, Paris; 2015, CRPP, Bordeaux; 2014, UMR 8000, Paris; 2013, ENSCP, Paris;
2018-2023	Member of the committee for permanent education, CNRS, Alsace
2008-2012	Member of the administration comity of the RTRA (chemistry excellence center in Strasbourg); elected representative of the 82 research groups;
2018, 2019	Member of the IUF committee, junior;
2010-2014	Member of the scientific review panel ARC, KIT, Karlsruhe (attribution of beamtime at the synchrotron ANKA);
2009-2012	Member of the scientific review panel for Helmholtz Center Berlin;
2006-2012	Elected member to the selection committee 315 for the students exchange program of the DAAD (German exchange service),

COLLABORATIVE ACTIONS

2007-2023	Responsible for the German-French graduate project “Membranes and Membrane Proteins” within the German-French University CDFA 04-07; 14 member labs;
2008-2012	Speaker and coordination of the French partners in the trinational German-French-Swiss graduate training center project on “Biological Membranes and Membrane Proteins”, GRK 1478 (DFG); organisation of regular meetings;
Since 2013	Member of the LABEX (excellence cluster) Chimie des Systèmes Complexes (CSC), Strasbourg, now ITI CSC;

MAJOR COLLABORATIONS - NETWORKING

Since 2000	Several national and international collaborations, for example, in Germany T. Friedrich (U Freiburg.), H. Michel (MPI Frankfurt), D. Schneider (U Mainz), D. Moss, (KIT) in Japan, M. Osawa (Hokkaido), in the USA: HR. Kaback (UCLA), RB. Gennis (UIUC), B. Barquera (RPI, Troy), and in Strasbourg, France: A.G. Mensah, B. Bechinger, P. Faller, V. Torbeev, J. Weiss, T. Ebbesen.
Since 2012	Creation and responsibility for the binational master program (Strasbourg-Freiburg) in “Biophysics and Biochemistry”

SCIENTIFIC SOCIETIES

2013-2015	President of the French bioenergetics group (GfB);
Since 2011	Member of the administration council of the French bioenergetics group;
2007-2009	Speaker of the molecular biophysics section in the German biophysical society; Member of several research societies (ISE, Société Chimique de France, Biophysical society, etc);