

Philip Willmott

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Personal

Date of birth 13th March, 1963
Marital status Married, 3 children
Nationality British/Swiss

Professional

- July 2007 – present **Beamline Manager**, *Materials Science Beamline, Swiss Light Source*, Paul Scherrer Institut.
Responsible for Materials Science beamline, including beamline upgrade to undulator ID, administration of two stations, supervision of four permanent members of staff, four PhDs, and three postdocs.
- December 2008 Promotion to **Titular Professor**, Experimental Physics Institute, University of Zürich.
- April 2001 – June 2007 **Beamline Scientist**, *Surface Diffraction Station, Materials Science Beamline, Swiss Light Source*, Paul Scherrer Institut.
Responsible for user support, beamline and station development and maintenance, five PhD and diploma student projects, in-house research.
- June 2000 Completion of Habilitation thesis, promotion to **Privatdozent**, Physical Chemistry Institute, University of Zürich.
- March 1995 – March 2001 **Oberassistent**, *Physical Chemistry Institute*, University of Zürich.
Pulsed laser vaporization and deposition of novel materials, mechanisms of thin film growth, investigations of nanostructures. Laboratory group leader of seven co-workers. IT coordinator.
- August 1994 – March 1995 **Postdoctoral Fellow**, *ENEA Institute*, Frascati, Italy.
Silicon-germanium superlattices and quantum dots by laser-CVD.
- 1992 – 1994 **Postdoctoral Fellow**, *Physical Chemistry Institute*, University of Zürich.
National Research Program NFP30 “High-temperature superconductivity”: Epitaxial growth of thin-film superconductors and metal oxides via Chemical Beam Epitaxy and Pulsed Laser Deposition.
- 1984 – 1986 **Scientific Officer**, *General Electric Company PLC*, Hirst Research Laboratories, Wembley, England.
Development of novel, polymer-based optical fibers and components.

Teaching

- March 1995 – Present **Lecturer and Tutor**, *University of Zürich and ETH, Zürich*.
Statistical thermodynamics, Thermodynamics, Quantum chemistry, Molecular spectroscopy, Laser physics and spectroscopy, Introduction to synchrotron radiation, Introduction to surface physics.
- December 1988 – March 1992 **Demonstrator**, *Physical Chemistry Institut*, University of Zürich.
Physical chemistry practicals.

Education

- 1988 – 1991 **Doctoral dissertation (PhD.)**, *Physical Chemistry Institute*, University of Zürich.
Supervisor: Prof. Dr. J. Robert Huber, “Energy dependence and symmetry breakdown of radiationless processes in propynal: A study using ultra-high resolution quantum beat spectroscopy”
- December 1991 Doctoral examination
- 1987 – 1988 **Diploma thesis**, *Experimental Physics*, University of Zürich.
Supervisors: Prof. E. Brun and PD Dr. S. Vepřek, “Low-temperature silicon epitaxy by microwave-induced, plasma-enhanced chemical vapor deposition”
- Bachelor of Science **Physics**, *University of Newcastle-upon-Tyne*, England.
2:1 Honours

Academic Awards

- 1994 – 1995 European Union “Human Capital and Mobility” Scholarship
- 1986 – 1988 ICI “New Science Group” International Scholarship
- 1981 – 1984 GEC “Hirst” Scholarship

Further Information

- MaNEP Member of MaNEP (Materials with Novel Electronic Properties) Consortium
- Publications Over 100 in peer-reviewed journals. H-index = 24
- Review Panels Member of the PSI Research Committee Panel
- Societies Swiss Physical Society, Swiss Crystallographic Society
- English **Native**
- German **Fluent**
- Computing UNIX/Linux, Mac, PC. Programming: C++, PASCAL, FORTRAN, MATLAB, SPEC, LABVIEW
- Co-editor IUCr, Acta Crystallographica A
- Journal Referee Several journals, including Nature, Reviews of Modern Physics, Phys. Rev. Lett.
- Textbook An Introduction to Synchrotron Radiation: Techniques and Applications, Wiley, July 2011
- References Available upon request