

Max Planck Institute for Biophysical Chemistry
 Dept. of NanoBiophotonics
 Am Fassberg 11
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Fields of Specialization/Accomplishments

- Pioneered physical concepts for fundamentally overcoming the diffraction barrier in a fluorescence microscope using conventional lenses
- Invention and development of STED microscopy and related concepts
- Discovered the on-off switching of (fluorescence) signal as key mechanism for overcoming the diffraction resolution limit

Qualifications and Positions

1981 – 1987 Physics studies, University of Heidelberg
 1990 Doctorate in Physics, University of Heidelberg (*summa cum laude*); *Advisor: S. Hunklinger*
 1991 – 1993 Postdoctoral Researcher, EMBL (European Molecular Biology Laboratory)
 1993 – 1996 Principal Scientist, Laser Microscopy Group; University of Turku, Finland
 in 1994 Visiting Scientist, Dept. Engineering Science, Oxford University, UK
 1996 Habilitation in Physics, Univ. Heidelberg
 1997 – 2002 Group leader, Max-Planck-Institute for Biophysical Chemistry Göttingen, Germany

present **Director, Max-Planck-Institute for Biophysical Chemistry**; Dpt. of NanoBiophotonics
 German Cancer Research Center (DKFZ); Head, Optical Nanoscopy Division

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Apl. Prof., Faculty of Physics, University of Heidelberg
 Hon. Prof., Faculty of Physics, Univ. of Göttingen

Honors and Awards

2000 ICO Prize awarded by the International Commission for Optics (ICO)
 2001 Helmholtz-Prize for metrology (co-recipient)
 2002 Innovation Award of Leibinger-Foundation
 2002 Carl-Zeiss Research Award awarded by the Ernst-Abbe-Fonds
 2002 Karl-Heinz Beckurts-Prize awarded by the Karl Heinz Beckurts Foundation

2004	Gottlieb Daimler- and Karl Benz Prize, Berlin Brandenburg Academy of Sciences
2006	Innovation Award of the German President (Zukunftspreis des Bundespräsidenten)
2007	Cozzarelli Prize awarded by the Proc. Natl. Acad. Sc. USA
2007	Julius Springer Prize for Applied Physics
2008	Gottfried Wilhelm Leibniz Prize of the German Research Council (DFG)
2008	Lower Saxony State Award (Niedersächsischer Staatspreis)
2009	Otto Hahn Prize (Physics)
2009	Doctor honoris causa med, University of Turku, Finland
2010	Ernst-Hellmut-Vits-Prize
2011	Hansen Family Award
2011	Körber European Science Prize (Physical Sciences)
2011	Gothenburg Lise Meitner Prize 2010/2011
2011	Meyenburg Prize for Cancer Research

Named Lectures

2006	Robert B. Woodward Visiting Scholar, Harvard University
2007	Ångström Lecture, Uppsala Universitet, Sweden
2008	Debye Lecture, Utrecht University, The Netherlands
2009	Frederick Seitz Lecture, University of Chicago, USA
2010	David Sears Memorial Lecture, Yale University, USA
2010	University Lecture, University of Utah, Salt Lake City, USA
2011	Lord Lecture, Massachusetts Institute of Technology, MA, USA
2012	Ramabrahman and Balamani Guthikonda Memorial Lecture, Columbia University, New York, USA

Distinguished Memberships

Since 2002	Max Planck Society, Scientific Member of Chem-Phys-Tech & Biomedical Section
Since 2003	Board of directors, Laser Laboratorium Göttingen e.V
Since 2003	Associate Member, European Neuroscience Institute (ENI), Göttingen
Since 2005	Secretary of the International Society on Optics Within Life Sciences (OWLS)
Since 2007	Göttingen Academy of Science
Since 2007	Board of trustees, X-LAB, Göttingen
2007-2010	Board of trustees, Niedersachsen Foundation for Innovation
Since 2009	Spokesperson, DFG Center Molecular Physiology of the Brain Göttingen
Since 2009	Heidelberg Academy of Science, Corresponding Member

Editorial Boards / Advisory Boards

1995 –	Journal of Biomedical Optics
1997 – 1998	Bioimaging

1999 – 2002	Review of Scientific Instruments
2000 –	Journal of Microscopy
2002 – 2003	Single Molecules
2002 –	Journal of Fluorescence
2002 – 2007	Optics Express
2005 –	Journal of Structural Biology
2007 –	Journal of Biophotonics
2009 –	Journal of Biomedical Optics
2010 –	Biomedical Optics Express
2010 –	ChemPhysChem
2011 –	Optical Nanoscopy (Editor-in-Chief)
2012 -	Annalen der Physik