

CURRICULUM VITAE

PROF. DR. MELANIE SCHNELL

Date of Birth 8. September 1978
Place of Birth Uelzen, Niedersachsen
Nationality German

CURRENT POSITION

since 2017 W3 Professor for Physical Chemistry, Christian-Albrechts-Universität zu Kiel, and Leading Scientist at the Deutsches Elektronen-Synchrotron (DESY), Hamburg, Germany (joint appointment).

EDUCATION

2014 **Habilitation** in Physical Chemistry, Leibniz Universität Hannover
English title: "Structure, dynamics and chirality of polar molecules"

2004 **Dr. rer. nat.** (*summa cum laude*, Institute for Physical Chemistry and Electrochemistry, Universität Hannover, Germany), Advisors: Prof. Dr. J.-U. Grabow, Prof. Dr. J. A. Becker
English thesis title: "Internal dynamics and interactions with external fields: rotational spectroscopic and group-theoretical investigations"

2002 **Diploma in chemistry**, Thesis advisor: Prof. Dr. S. D. Peyerimhoff (Rheinische Friedrich-Wilhelms-Universität Bonn)
English thesis title: "Theoretical investigations of the photochemical radical reactions of the methoxy radical with atomic chlorine"

1997-2002 **Chemistry studies** (Diploma), Universität Hannover and Rheinische Friedrich-Wilhelms-Universität Bonn

1997 **Abitur**, Herzog-Ernst-Gymnasium Uelzen

EXPERIENCES AND PREVIOUS POSITIONS

2010-2017 **Max Planck Research Group leader** (W2-equivalent) at the Max Planck Institute for the Structure and Dynamics of Matter, Hamburg, Germany; (until 2013 jointly hosted by the Center for Free-Electron Laser Science, Hamburg and the Max Planck Institute for Nuclear Physics, Heidelberg).

2014-2017 **Privatdozentin (University lecturer) for Physical Chemistry** at the Leibniz Universität Hannover

2012, 14-16 **Lecturer (Lehrauftrag)** in Experimental Physics, Universität Hamburg

2007 and 2009 **Maternity leaves**

2006 **Lecturer (Lehrauftrag)** in Physical Chemistry, Free University Berlin

2006-2010	Group Leader at the Department of Molecular Physics (Fritz Haber Institute of the Max Planck Society, Berlin)
2005-2006	Postdoctoral researcher at the Department of Molecular Physics (Fritz Haber Institute of the Max Planck Society, Berlin)
2004-2005	Postdoctoral researcher at the National Institute of Standards and Technology (NIST, Gaithersburg (USA))
2003/2004	Visiting scientist: several shorter DAAD exchange research stays with Prof. Dr. J. L. Alonso (Universidad de Valladolid, Spain) and with Prof. Dr. W. Caminati (Università di Bologna, Italy)
April 2004	Visiting scientist with Dr. J. T. Hougen at the National Institute of Standards and Technology (NIST, Gaithersburg (USA))
2002-2004	PhD student at the Institute for Physical Chemistry and Electrochemistry, Universität Hannover, Germany
Dec. 2001	DAAD exchange research with Prof. Dr. G. E. Froudakis (University of Crete, Greece)

TEACHING ACTIVITIES (LECTURES ONLY)

2019, 2020	Block lecture: "Modern Methods in Physical Chemistry, Rotational spectroscopy" Christian-Albrechts-Universität zu Kiel.
2019-now	Lecture: "Basics of Physical Chemistry for students of biology and pharmaceutical sciences", Christian-Albrechts-Universität zu Kiel
2017/2018	Lecture: "Physical Chemistry 4: Molecular Symmetry and Spectroscopy", Christian-Albrechts-Universität zu Kiel
2017-now	Lecture: "Modern Electrochemistry: from batteries to fuel cells", Christian-Albrechts-Universität zu Kiel
2016	Block lecture: "Modern Molecular Spectroscopy" at the University of Aarhus, Denmark, 8 hours course.
2015, 2017	Block lecture: "Molecular Interactions", International Max Planck Research School (IMPRS) UFAST and Universität Hamburg
2012-2016	Lectures: "Physical Chemistry I: Thermodynamics and Kinetics", "Mathematics for Chemists II", "Physical Chemistry III: Statistical Thermodynamics" and "Theoretical Chemistry I", Leibniz-Universität Hannover, shared with Prof. Dr. R. Imbihl and Prof. Dr. J.A. Becker
Summer 2012	Lecture: "Modern Molecular Physics: Spectroscopic Probes of Fundamental Physics", Universität Hamburg, equally shared with Prof. Dr. J. Küpper
since 2011	Research seminar "Molecular Physics", together with Prof. Dr. Jochen Küpper
Winter 06/07	Lecture: "Physical Chemistry II: Structure of Atoms and Molecules", including exercises, Freie Universität Berlin

THESES SUPERVISION

Current PhD theses supervisions: 4; former PhD supervisions: 7
 Master and diploma theses supervised so far: 6

AWARDS AND DISTINCTIONS (SELECTION)

2020	Björn-Wiik-Preis
2018	Bernstein junior award of the Stereodynamics conference
Since 2018	Principal Investigator in the Sonderforschungsbereich SFB1319 "Extreme light for sensing and driving molecular chirality", ELCH, Kassel University
2015	"Akademiepreis für Chemie" of the Akademie der Wissenschaften zu Göttingen
2014	ERC STARTING GRANT
2014	"Young Talented Scientist Lecture" at the Chirality 2014 conference in Prague.
2014	short-listed (2 nd) for a professorship in Physical Chemistry, CAU Kiel
2013	Helene-Lange-Preis, Carl von Ossietzky University Oldenburg, Germany
2013	short-listed for a full professorship in Physical Chemistry, ETH Zürich
2012	Dozentenstipendium of the Fonds der Chemischen Industrie
2006-2011	Member of Die Junge Akademie an der Berlin-Brandenburgischen Akademie der Wissenschaften und der Deutschen Akademie der Naturforscher Leopoldina
2006	Woodward Lecturer, Physical Chemistry Seminar, Harvard University
2005-2010	Liebig-Stipendium of the Fonds der Chemischen Industrie
2005	Akademiestipendium 2005, Berlin-Brandenburgische Akademie der Wissenschaften
2004/2005	Postdoctoral scholarship of the Deutsche Akademische Austausch Dienst (DAAD)
2004	Pliva-Prize, 18 th International Conference on High-Resolution Spectroscopy, Prague, Czech Republic
2004	Rao-Prize, 59 th International Symposium on Molecular Spectroscopy, Columbus, Ohio, USA
2002-2004	Doctoral scholarship of the Fonds der Chemischen Industrie
2003	Amat-Mills-Award, 18 th Colloquium on High-Resolution Molecular Spectroscopy, Dijon, France
1999-2002	Scholarship of the Friedrich-Ebert-Stiftung

MEMBERSHIPS

2006-2011	Die Junge Akademie an der Berlin-Brandenburgischen Akademie der Wissenschaften und der Deutschen Akademie der Naturforscher Leopoldina
Since 2002	Gesellschaft Deutscher Chemiker
Since 2002	Deutsche Bunsen-Gesellschaft für Physikalische Chemie

FUNDING ID

2018-2022	Principal Investigator in the Sonderforschungsbereich SFB1319 "Extreme light for sensing and driving molecular chirality", ELCH, Kassel University
2018-2021	DFG priority program SPP 1807: "Control of London dispersion interactions in molecular chemistry"
2015-2018	DFG priority program SPP 1807: "Control of London dispersion interactions in molecular chemistry"
2015-2020	ERC Starting Grant 2014 "ASTROROT",
2012-2017	DFG, The Hamburg Centre for Ultrafast Imaging (CUI, Cluster of Excellence), "Atomically Resolved Reaction Dynamics of Model Systems"
2012-2015	DFG Normalverfahren Sachbeihilfe, "Tailored molecular samples for precision spectroscopy"
2012-2015	Fonds der Chemischen Industrie, Dozentenstipendium
2011-2015	Max-Planck-Gesellschaft, Independent Research Group "Cold and Controlled Molecules"
2005-2010	Fonds der Chemischen Industrie, Liebig-Stipendium

INSTITUTIONAL AND COMMITTEE RESPONSIBILITIES (SELECTION)

Since 2020	Kuratorium des Fonds der chemischen Industrie
Since 2018	Elected member of the Ständige Ausschuss der Bunsen Gesellschaft für Physikalische Chemie
Since 2019	Co-coordinator of the Center for Molecular Water Science (CMWS), Hamburg
Since 2017	Mentor in different mentoring programs of the Universities of Kiel, Hamburg, and Bremen
2015-2017	Elected member of the section Chemistry, Physics, and Technology of the Max Planck Society to represent the scientists of our institute
2012-2016	Member of the Board of Directors and Project Leader within the Cluster of Excellence "The Hamburg Centre for Ultrafast Imaging" (CUI), Germany.
since 2011	Faculty and Executive Committee Member of the International Max Planck Research School for Ultrafast Imaging and Structural Dynamics (IMPRS-UFAST)
since 2011	Organizer of the Molecular Physics seminar at the Center for Free-Electron Laser Science, Hamburg, Germany (together with Prof. Dr. J. Küpper)
1998-2000	elected student member of the faculty council (Fachbereichsrat, Chemistry department), Universität Hannover, Germany

OTHER PROFESSIONAL ACTIVITIES (SELECTION)***Referee for international scientific journals:***

- Angewandte Chemie International Edition
- Nature Physics
- Chemical Sciences
- Physical Review Letters

- Physical Review X
- The Journal of Chemical Physics
- The Journal of Physical Chemistry Letters
- The Journal of Physical Chemistry A
- Journal of Physics B
- Molecular Physics
- New Journal of Physics
- Physical Chemistry Chemical Physics
- Chemical Communications
- Chemical Physics Letters
- ChemPhysChem
- Chemistry – A European Journal
- European Physics Journal D
- Journal of Molecular Spectroscopy

Further referee activities:

- Referee for the European Research Council (ERC) for ERC Advanced Grants, the Deutsche Forschungsgemeinschaft (DFG), the National Science Foundation (NSF), the Schweizer Nationalfonds (SNF), and the Fonds der chemischen Industrie
- Member of the selection committee for Alexander von Humboldt research grants (2016-2021, Fachvertreterin Physikalische Chemie)
- Selection committee member for the Louise-Johnson stipend, The Hamburg Centre for Ultrafast Imaging (2015, 2016, 2019)
- Selection committee member for Max Planck research groups 2014/2015
- Selection committee member for the Mildred-Dresselhaus award, The Hamburg Centre for Ultrafast Imaging (2013,2014,2016)
- Reviewer for the Alexander von Humboldt foundation (since Sept. 2013)
- Selection committee member of the Albert-Weller-Preis of the Gesellschaft Deutscher Chemiker and the Bunsen-Gesellschaft für Physikalische Chemie (since 2012)
- Member of the selection committee for the *Zukunftscolleg* at the University of Konstanz (2012/13)

Editorial activities:

- Editorial board, *Molecular Physics* (since January 2016)
- Editorial board, *Zeitschrift für Physikalische Chemie* (since January 2014)
- Associate editor, *Frontiers in Physical Chemistry* (since June 2013)

Organization of scientific meetings:

- Member of the international advisory committee of the International Symposium on Molecular Spectroscopy (ISMS)
- Member of the organizing committee of the 20. Deutsche Physikerinnentagung 2016 in Hamburg
- Member of the international advisory committee of the International Symposium on Molecular Beams (ISMB)
- Member of the international steering committee of the 1st Conference on Cold and Controlled Molecules, Switzerland (2014)
- Member of the local organizing committee of the annual meeting of the German Bunsen society for Physical Chemistry, Hamburg, Germany (2014)

- Member of the program committee of the annual meeting of the German Bunsen society for Physical Chemistry, Leipzig, Germany (2012)
- chair and organizer of the career symposium at the annual meeting of the German Bunsen society for Physical Chemistry, Leipzig, Germany (2012)
- organizer of the physics session, Anniversary Symposium of Die Junge Akademie, Berlin, Germany, (2010)
- organizer of the 379th WE-Heraeus Seminar on cold molecules Bad Honnef, Germany (with Prof. R. Grimm and Prof. G. Meijer) (2006)

Participation in Science-Management seminars:

- “Management Development in Science” seminar series of the Max Planck Society, three courses since 2010
- “Young Leaders in Science” management series of the Scheringstiftung, 2006/2007
- ProFiL-Programm (joint program of the three Berlin universities FU Berlin, HU Berlin, TU Berlin to support female careers), 2006