

Dr. Katrin F. Domke – Curriculum vitae

Research statement

I aim to obtain atomistic insights into electrochemical molecular systems (e.g. redox-active molecules, electrocatalysts, fuel cells) under realistic conditions by developing and employing space- and time-resolved nearfield and nonlinear *operando* spectro-microscopies to facilitate the rational engineering of electro-active device components.

Professional experience and education

- since 11/2012 **Independent group leader (Emmy Noether, Boehringer Ingelheim Plus 3)**,
MPI for Polymer Research, Germany
Electrochemical surface science – <https://www.mpip-mainz.mpg.de/en/domke>
- 8/2008-10/2011 FOM Institute AMOLF, The Netherlands (postdoc with Prof. M. Bonn)
Ultrafast nonlinear spectroscopy of condensed phases
- 1/2008-6/2008 Bern University, Switzerland (postdoc with Profs S. Decurtins, Th. Wandlowski)
Nearfield spectroscopy at the solid/liquid interface
- 1/2007-12/2007 Fritz Haber Institute Berlin, Germany (postdoc with Dr. B. Pettinger)
Tip-enhanced Raman spectroscopy
- 12/2006** **Dr. rer. nat. (summa cum laude), Department for Physical Chemistry,**
Free University Berlin, Germany
- 4/2004-12/2006 Fritz Haber Institute Berlin, Germany (PhD studies)
PhD thesis: Tip-enhanced Raman spectroscopy – Topographic and
chemical information on the nanoscale (Profs G. Ertl, K. Christmann)
- 3/2004** **Diplom Chemikerin (Gesamtnote sehr gut),** Bonn University, Germany
- 10/1998-3/2004 Rheinische Friedrich-Wilhelms University Bonn (chemistry studies)
Diploma thesis in physical chemistry: Restrukturierung einer Ag-Adsorptionsschicht
durch CO-Koadsorption (Prof. H. Baltruschat)
- 2/2002-7/2002 CSIC and Sevilla University, Spain (student with Prof. E. Carmona Guzmán)
CH-activation of ethers with Tp*-iridium complexes
- 7/2001-12/2001 Alicante University, Spain (student with Prof. J.M. Feliu)
Cyclic voltammetry and infrared spectroscopy at stepped Pt(100) surfaces

Professional activities

2021/22	Chair-elect of Division 7 Physical Electrochemistry of the International Society of Electrochemistry (ISE)
2019-2020	Invited external program committee member, ICAVS 2021
since 11/2018	Vice Chair of Division 7 Physical Electrochemistry of the International Society of Electrochemistry (ISE)
2016-2018	Steering committee member of Carl-Zeiss ELYSION project at JGU Mainz
2013-2017	Coordinator of EU ITN "Female investigators in nonlinear optical nanoscopy"
since 9/2013	Scientific-technical-coordination representative for the Molecular Spectroscopy Department at MPIP
since 5/2013	Junior Faculty of Max Planck Graduate Center MPGC, Mainz
6/2013-11/2017	Member of EU COST Action MP1302 Nanospectroscopy
since 2007	Mentor for Minerva FemmeNet of the Max Planck Society
since 2006	Peer & proposal review for journals <i>e.g.</i> ACS Nano, Advanced Materials, Angewandte Chemie, Journal of the American Chemical Society, Nano Letters, Nature, Physics Today, Small; for agencies <i>e.g.</i> ACS, DFG, ETH Zürich Grants, European Commission, National Science Center Poland, Research Councils UK

Awards and achievements

7/2017	Awarded a Boehringer Ingelheim Plus 3 fellowship
2014-2019	Selected member of the Elisabeth Schiemann Kolleg of the Max Planck Society
since 10/2013	Selected member of AcademiaNet (online platform for leading women scientists)
7/2012	Awarded an Emmy Noether Research Group (DFG)
4/2008-7/2010	Awarded a Feodor Lynen fellowship for postdocs (A. v. Humboldt Foundation)
11/2007	Awarded the " Wilhelm-Ostwald-Nachwuchspreis 2007 " (Wilhelm-Ostwald-Gesellschaft zu Großbothen e.V., Deutsche Bunsengesellschaft and GDCh)
8/2007	Awarded a "Promotional Lecture" (European CMA Network of Excellence)
4/2004-12/2006	Selected member of the International Max Planck Research School IMPRS-CS, Berlin

Funding Total of ca. **3.9 Mio EUR group funding**

Publications **45 published** peer-reviewed papers of which 4 first, 28 last/corresponding authorships; 1957 citations, h-index 20 (Google scholar, Dec 2020)

>40 invited conference talks, >65 invited seminars at national and international meetings/institutions

Supervision

Current group 2 PhD students, 2 postdoctoral researchers (1 Marie-Curie fellow), 2 associated technicians, 1 administrative staff; all scientific staff and own position at MPIP have always been third-party funded

Former supervision 5 PhD theses and 4 Master theses completed; 2 A.v.Humboldt postdocs hosted

Teaching summary

Regularly Invited lecturer at surface-science and/or spectroscopy related summer schools

since 2016 Optical spectroscopy lecture at MPIP, with department scientists

since 2013 Electrochemistry Masters' course (lectures, exercises, practical course, exams) at JGU Mainz (annual, with JGU scientists)

2008 Teaching assistant in physical chemistry (seminars, exercises, exams), organization of laboratory course in physical chemistry, lecture on Raman spectroscopy at surfaces (2 hrs, part of a block course) at Bern University

1998 – 2003 Teaching assistant in physical chemistry (seminars, exercises) at Bonn University

- Outreach** Organized 9 conferences and symposia (e.g. at DPG and ISE annual meetings, Heraeus Seminars, etc.)
- Participated in and organized courses on scientific writing, presenting, communication, team building, conflict and time management, leadership, unconscious bias
- Organized and carried out experiments at Kindergarten, primary school, university, Wissenschaftsmarkt, Open Days etc.
- Affiliations** Deutsche Bunsen-Gesellschaft, Deutsche Physikalische Gesellschaft, International Society of Electrochemistry, Royal Society of Chemistry
- Languages** German (native), English & Spanish (excellent), Dutch, French & Italian (good), Swedish (basic)

December 9, 2020