

## Curriculum Vitae

### Personal Data

|                   |   |
|-------------------|---|
| Title             | Prof. Dr.   |
| First name        | Olav  |
| Name              | Schiemann   |
| Current position  | Full Professor (W3)   |
| Address           | Clausius-Institute for Physical and Theoretical Chemistry, Rheinische Friedrich-Wilhelms-University Bonn, Wegelerstr. 12, 53115 Bonn, Germany |
| Identifiers/ORCID | <a href="https://orcid.org/0000-0001-6346-9779">orcid.org/0000-0001-6346-9779</a>   |

### Qualifications and Career

| Stages                                  | Periods and Details   |
|---|---|
| Degree Programme                        | 1989 – 1995 Diploma in Chemistry, University of Marburg, Germany  |
| Doctorate                               | 1995 – 1998 Mentor: C. Elschenbroich, Ph.D. in Chemistry, University of Marburg, Germany                              |
| Stages of Academic/ Professional Career | Since 2011 Full Professor (W3), Clausius-Institute of Physical and Theoretical Chemistry, University of Bonn, Germany |
|   | 2011 – 2014 Professor (20%), Biophysical Chemistry, School of Biology, University of St Andrews, UK                   |
|   | 2008 – 2011 Reader, Biophysical Chemistry, School of Biology, University of St Andrews, UK                            |
|   | 2007 – 2008 Lecturer, Biophysical Chemistry, School of Biology, University of St Andrews, UK                          |
|   | 2005 – 2006 Acting Professor, Physical Chemistry, Technical University of Munich, Germany                             |
|   | 2003 – 2007 Privatdozent, IPTC, University of Frankfurt, Germany  |
|   | 2000 – 2003 Habilitand (Mentor: T.F. Prisner), IPTC, University of Frankfurt, Germany                                 |
|   | 1998 – 2000 Postdoctoral fellow (Mentor: J.K. Barton), California Institute of Technology, USA                        |

### Activities in the Research System

#### Committee involvement & activities in the field of academic self-governance:

|             |   |
|-------------|---|
| Since 2024  | Representative of Germany in the EFEP Board   |
| Since 2023  | Recruitment Commissioner, University of Bonn  |
| Since 2021  | Chair “AK EPR”, GDCh-Fachgruppe “Magnetische Resonanz”                                    |
| Since 2019  | Editorial Board member of the Journals <i>Molecules</i> and <i>Analysis &amp; Sensing</i> |
| 2016 – 2024 | Board member, BIGs “Chemistry”, University of Bonn  |
| 2018 – 2022 | Board member, TRA Matter, Excellence Initiative University of Bonn                        |
| 2018 – 2021 | International Representative RSC ESR Spectroscopy Group, UK                               |
| 2018 – 2021 | Independent Steering Committee, EPSRC National EPR Facility, UK                           |
| 2014 – 2018 | Director, Institute for Physical and Theoretical Chemistry, University of Bonn            |
| 2011        | Director, Centre of Magnetic Resonance, University of St Andrews, UK                      |
| 2009 – 2011 | Chair-Elect, Chair, Past Chair, Molecular Biophysics Group, Biophysical Society (USA)     |

**Reviewing activities:** **Funding Agencies:** Israel Science Foundation (ISF; Israel), French National Research Agency (ANR; France), EPSR (UK), BBSRC (UK), DFG: Normalverfahren, SFB, Heisenberg. **Journals:** *Nature Rev. Meth. Prim.*, *Nature*, *Molecules*, *Angew. Chem. Int. Ed.*, *J. Am. Chem. Soc.*, *ChemPhysChem*, *Phys. Chem. Chem. Phys.*, *Chem. Eur. J.*, *ACS Chem. Biol.*, *ACS Sensors*, *J. Org. Chem.*, *J. Phys. Chem.*, *J. Phys. Chem. Lett.*, *J. Magn. Reson.*

**Memberships in scientific societies:** European Federation of EPR Groups (since 2011); International EPR Society (since 2011); Member of the German Academic Organization (Deutscher Hochschulverband; since 2010); GDCh, Division “Magnetic Resonance” (since 1995).

**Organization of academic events:** Chair “46<sup>th</sup> Annual Discussion Meeting” of the FGMR (2025); Scientific Committee “Euromar” (2025); International Advisory Board “1<sup>st</sup> International Conference on EMR Applications” (2024); International Advisory Board “9<sup>th</sup> International Conference on Nitroxide Radicals” (2023); Co-organizer “43<sup>rd</sup> Annual Discussion Meeting” of the FGMR (2022); Scientific Advisory Board “Annual Discussion Meeting” of the FGMR (since

2020); FGMR Prize Committees (since 2019): Ernst-, Overhauser-, Otto-Stern-Award; Co-organizer “EF-EPR Summer School” (2008); Co-organizer “EF-EPR summer school” (2005).

**Supervision of Researchers in Early Career Phases:** Supervision of more than 80 Ph.D., Master’s, and Bachelor’s students since 2007. Former members of the group in faculty positions: Gregor Hagelüken (University of Bonn, Germany), Aliaksandra Lisouskaya (University of Notre Dame, USA), Dinar Abdullin (University of Ulm, Germany), Hideto Matsuoka (Hokkaido University, Japan), Bela E. Bode (University of St Andrews, UK).

**Academic Distinctions:** Biology/Medicine Medal of the International EPR Society (2025; international triannual award); Teaching Award of the student body of Chemistry (2025); Weston Visiting Professorship, Weizmann Institute, Israel (2022; fully funded); One of the Most Outstanding Referees for *Angew. Chem. Int. Ed.* (2021, 2022); RCUK Fellowship (2007 – 2011); Hermann-Willkomm-Award of the University of Frankfurt (2004); DFG Habilitation Fellowship (2001 – 2003); DFG Research Fellowship (1999 – 2000); DFG Postdoc Fellowship (1998 – 1999).

#### **10 Most Important Papers of the last 10 years** (\* corresponding author)

1. K.L. Kopp, A. Pellegrini, S. Grimme, **O.Schiemann\*** “How spin conductive are oligo(p-phenylenes) in trityl-based biradicals” *J. Am. Chem. Soc.* **2026**, accepted. DOI: [10.26434/chemrxiv.10002037/v2j](https://doi.org/10.26434/chemrxiv.10002037/v2j).
2. L. Denkler, M. Shekar, T. Jason Ngan, L. Wylie, D. Abdullin, M. Engeser, G. Schnakenburg, T. Hett, F. Pilz, B. Kirchner\*, **O. Schiemann\***, P. Kielb\*, A. Bunescu\* “A General Iron-Catalyzed Decarboxylative Oxygenation of Aliphatic Carboxylic Acids” *Angew. Chem. Int. Ed.* **2024**, e202403292. DOI: [10.1002/anie.202403292](https://doi.org/10.1002/anie.202403292)
3. J. Borggräfe, J. Victor, H. Rosenbach, A. Viegas, C.G.W. Gertzen, C. Wuebben, H. Kovacs, M. Gopalswamy, D. Riesner, G. Steger, **O. Schiemann**, H. Gohlke, I. Span, M. Etzkorn\* “Time-resolved structural analysis of an RNA-cleaving DNA catalyst” *Nature* **2022**, 601, 144–149. DOI: [10.1038/s41586-021-04225-4](https://doi.org/10.1038/s41586-021-04225-4).
4. **O. Schiemann\*** et al. “Benchmark test and guidelines for DEER/PELDOR experiments on nitroxide-labeled biomolecules” *J. Am. Chem. Soc.* **2021**, 143, 17875–17890. DOI: [10.1021/jacs.1c07371](https://doi.org/10.1021/jacs.1c07371).
5. D. Nguyen, D. Abdullin, C.A. Heubach, T. Pfaffeneder, A. Nguyen, A. Heine, K. Reuter, F. Diederich, **O. Schiemann\***, G. Klebe\* “Unraveling a ligand-induced twist of a homodimeric enzyme by PELDOR” *Angew. Chem. Int. Ed.* **2021**, 60, 23419–23426. DOI: [10.1002/anie.202108179](https://doi.org/10.1002/anie.202108179).
6. T. Hett, T. Zbik, S. Mukherjee, H. Matsuoka, W. Bönigk, D. Klose, C. Rouillon, N. Brenner, S. Peuker, R. Klement, H.-J. Steinhoff, H. Grubmüller, R. Seifert, **O. Schiemann\***, U.B. Kaupp\* “Spatiotemporal Resolution of Conformational Changes in Biomolecules by Combining Pulsed Electron-Electron Double Resonance Spectroscopy with Microsecond Freeze-Hyperquenching” *J. Am. Chem. Soc.* **2021**, 143, 6981–6989. DOI: [10.1021/jacs.1c01081](https://doi.org/10.1021/jacs.1c01081).
7. C. Wuebben, M.F. Vicino, M. Mueller, **O. Schiemann\*** “Do the P1 and P2 hairpins of the Guanidine-II Riboswitch interact?” *Nucleic Acids Res.* **2020**, 48, 10518–10526. DOI: [10.1093/nar/gkaa703](https://doi.org/10.1093/nar/gkaa703).
8. N. Fleck, C.A. Heubach, T. Hett, F.R. Haege, P.P. Bawol, H. Baltruschat, **O. Schiemann\*** “SLIM: A short-linked, highly redox-stable trityl label for high-sensitivity in-cell EPR distance measurements” *Angew. Chem. Int. Ed.* **2020**, 59, 9767–9772. DOI: [10.1002/anie.202004452](https://doi.org/10.1002/anie.202004452).
9. C. Domnick, F. Eggert, C. Wuebben, L. Bornewasser, G. Hagelueken, **O. Schiemann\***, S. Kath-Schorr\* “EPR Distance measurements on long nc RNAs empowered by genetic alphabet expansion transcription” *Angew. Chem. Int. Ed.* **2020**, 59, 7891–7896. DOI: [10.1002/anie.201916447](https://doi.org/10.1002/anie.201916447).
10. J.J. Jassoy, A. Berndhäuser, F. Duthie, S.P. Kühn, G. Hagelueken, **O. Schiemann\*** “Versatile Trityl Spin Labels for Nanometer Distance Measurements on Biomolecules in vitro and within cells” *Angew. Chem. Int. Ed.* **2017**, 56, 177–181. DOI: [10.1002/anie.201609085](https://doi.org/10.1002/anie.201609085).