

Curriculum Vitae

1 Personal Data

Title	Apl Prof. Dr.
First name	Schleicher
Name	Erik
Current position	permanent
Current institution	Department of Chemistry and Pharmacy, Universität Freiburg, Freiburg
Identifiers/ORCID	0000-0003-2953-050X

2 Qualifications and Career

Stages	Periods and Details
Stages of academic/professional career	Okt. 2017 – date: Adjunct Professor at the Institute of Physical Chemistry, University of Freiburg, Germany Feb. 2012 Habilitation in the Department of Chemistry and Pharmacy, University of Freiburg; Title: “<i>The Molecular Mechanisms of Light-Active Flavoproteins</i>” Supervisor: Prof. Dr. S. Weber April 2008 – Okt. 2017: Group leader at the Institute of Physical Chemistry, University of Freiburg, Germany Aug. 2002 – April 2008: Postdoctoral scientist in the group of Prof. Dr. R. Bittl, Institute of Experimental Physics, Free University Berlin, Germany
Doctorate	Okt. 1998 – March 2002: Ph.D. at the Technical University of Munich, Department of Organic Chemistry and Biochemistry, Technical University Munich, Germany March 2002: Dr. rer. nat., Technical University Munich, Title: „<i>Über den Reaktionsmechanismus der DNA Photolyase</i>”, Supervisors: Prof. Dr. Dr. A. Bacher and Prof. Dr. Dr. P. Schieberle
Degree program	Oct. 1992 – Okt. 1998: Study of Chemistry at the at the Technical University of Munich, Germany

Okt. 1998: Diplom-Chemiker, Technical University Munich, Title: "*Klonierung und Expression von Cryptochrom I aus A. Thaliana*", Supervisor: Prof. Dr. Dr. A. Bacher

2.1 Supplementary Career Information

2014: Senior Visiting Research Fellow in the groups of Prof. P.-J. Hore and Prof. C. Timmel, Oxford University, UK

2007: Postdoctoral Research Fellow, Prof. P.-J. Hore and Prof. Dr. C. Timmel, Oxford University, UK

3 Activities in the Research System

3.1 Academic management

3.2 Organization of meetings:

- Workshop: "SPP 1601 Young Researcher Workshop" (Berlin, Germany), Sept. 2013
- Workshop: "Conformational dynamics of photoreceptors at different time scales" (Castle Ringberg, Tegernsee, Germany), Oct. 2019
- 27th Hans-Fischer-Symposium: "Good or Bad? Radicals in Natural Sciences" (Freiburg, Germany), Nov 2023

4 Supervision of Early Career Researchers

PhD (Master/Diploma) theses supervised: 6 (27), presently 2 PhD projects under supervision.

5 Scientific Results

Scientific Publications (Total publications: 69; 4196 citations, h-index 32; WoS 01/25)

- [1] L. Heidinger, K. Perez, T. Spatzal, O. Einsle, S. Weber, D.C. Rees, **E. Schleicher**, Analysis of early intermediate states of the nitrogenase reaction by regularization of EPR spectra, *Nature Communications* 15(1) (2024) 4041.
- [2] **E. Schleicher**, S. Rein, B. Illarionov, A. Lehmann, T. Al Said, S. Kacprzak, R. Bittl, A. Bacher, M. Fischer, S. Weber, Selective ^{13}C labelling reveals the electronic structure of flavocoenzyme radicals, *Scientific Reports* 11(1) (2021) 18234.
- [3] T. Hochstoeger, T. Al Said, D. Maestre, F. Walter, A. Vilceanu, M. Pedron, T.D. Cushion, W. Snider, S. Nimpf, G.C. Nordmann, L. Landler, N. Edelman, L. Kruppa, G. Dürnberger, K. Mechtler, S. Schuechner, E. Ogris, E.P. Malkemper, S. Weber, **E. Schleicher**, D.A. Keays, The biophysical, molecular, and anatomical landscape of pigeon CRY4: a candidate light-based quantal magnetoreceptor, *Science Advances* 6 (2020) Art. No. eabb9110.
- [4] O. Berntsson, R. Rodriguez, L. Henry, M.R. Panman, A.J. Hughes, C. Einholz, S. Weber, J.A. Ihalainen, R. Henning, I. Kosheleva, **E. Schleicher**, S. Westenhoff, Photoactivation of

- Drosophila melanogaster* cryptochrome through sequential conformational transitions, Science Advances 5 (2019) Art.-No. eaaw1531.
- [5] A. Rostas, C. Einholz, B. Illarionov, L. Heidinger, T. Al Said, A. Bauss, M. Fischer, A. Bacher, S. Weber, **E. Schleicher**, Long-lived hydrated FMN radicals: EPR characterization and implications for catalytic variability in flavoproteins, Journal of the American Chemical Society 140 (2018) 16521-16527.
- [6] D. Nohr, B. Paulus, R. Rodriguez, A. Okafuji, R. Bittl, **E. Schleicher**, S. Weber, Determination of radical–radical distances in light-active proteins and their implication for biological magnetoreception, Angewandte Chemie International Edition 56 (2017) 8550-8554.
- [7] D. Nohr, S. Franz, R. Rodriguez, B. Paulus, L.-O. Essen, S. Weber, **E. Schleicher**, Extended electron-transfer pathways in animal cryptochromes mediated by a tetrad of aromatic amino acids, Biophysical Journal 111 (2016) 301-311.
- [8] L. Heidinger, A.C. Kneuttinger, G. Kashiwazaki, S. Weber, T. Carell, **E. Schleicher**, Direct observation of a deoxyadenosyl radical in an active enzyme environment, FEBS Letters 590 (2016) 4489-4494.
- [9] T. Spatzal, M. Aksoyoglu, L. Zhang, S.L.A. Andrade, **E. Schleicher**, S. Weber, D.C. Rees, O. Einsle, Evidence for interstitial carbon in nitrogenase FeMo cofactor, Science 334 (2011) 940.
- [10] R. Brosi, B. Illarionov, T. Mathes, M. Fischer, M. Joshi, A. Bacher, P. Hegemann, R. Bittl, S. Weber, **E. Schleicher**, Hindered Rotation of a Cofactor Methyl Group as a Probe for Protein-Cofactor Interaction, Journal of the American Chemical Society 132(26) (2010) 8935-8944.