





F. Schoenebeck

The author presented on this page has published more than 10 articles in Angewandte Chemie in the last 10 years, most recently: "Asymmetric Synthesis of Spiropyrazolones by Sequential Organo- and Silver Catalysis": D. Hack, A. B. Dürr, K. Deckers, P. Chauhan, N. Seling, L. Rübenach, L. Mertens, G. Raabe, F. Schoenebeck, D. Enders, Angew. Chem. Int. Ed. 2016, 55, 1797; Angew. Chem. 2016, 128, 1829.

Franziska Schoenebeck

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Education: 2001–2004 Undergraduate education at the Technische Universität Berlin and the University of

Strathclyde, Glasgow

2008 PhD with Prof. John A. Murphy, WestCHEM Research School, University of Strathclyde 2008–2010 Feodor Lynen Postdoctoral Fellow with Prof. Kendall N. Houk, University of

California, Los Angeles

Awards: 2012 ADUC Prize; 2014 ERC Starting Grant; 2014 Marcial Moreno Lectureship, Real Sociedad

Española de Química; **2014** ORCHEM Prize, Liebig-Vereinigung für Organische Chemie der Gesellschaft Deutscher Chemiker; **2014** Dozentenpreis, Fonds der Chemischen Industrie; **2014** *Journal of Physical Organic Chemistry* Award for Early Excellence in Physical Organic

Chemisty; 2016–2017 Novartis Chemistry Lectureship

Current research Experimental and computational organic and organometallic chemistry with an emphasis on

interests: understanding and developing reactivities in the context of catalysis

Hobbies: Inline skating, kayaking, skiing ...

My biggest motivation is my curiosity.

What I look for first in a publication is its innovative component.

My favorite quote is "strive not to be a success, but rather to be of value" (Albert Einstein).

My favorite food is mango sushi.

chose chemistry as a career because "it offered the ideal combination of logic and creativity" (self-citation of *J. Phys. Org. Chem.* **2014**, *27*, 1).

The most exciting thing about my research is the possibility to understand, predict, and design in addition to observe, discover, and develop.

My 5 top papers:

- "Highly Efficient C-SeCF₃ Coupling of Aryl Iodides Enabled by an Air-Stable Dinuclear Pd¹ Catalyst": M. Aufiero, T. Sperger, A. S.-K. Tsang, F. Schoenebeck, Angew. Chem. Int. Ed. 2015, 54, 10322; Angew. Chem. 2015, 127, 10462. (Our latest application of the concept of Pd(I) dimer catalysis. Coincidentally, while the author list seems unbalanced in one way (all are female), it couldn't be more diverse in another (all are from different countries).)
- "Fundamental Studies and Development of Nickel-Catalyzed Trifluoromethylthiolation of Aryl Chlorides: Active Catalytic Species and Key Roles of Ligand and Traceless MeCN Additive Revealed": G. Yin, I. Kalvet, U. Englert, F. Schoenebeck, J. Am. Chem. Soc. 2015, 137, 4164. (Our first study in the area of nickel catalysis and combines detailed mechanistic studies with method development.)
- "Computational Ligand Design for the Reductive Elimination of ArCF₃ from a Small Bite Angle Pd^{II} Complex: Remarkable Effect of a Perfluoroalkyl Phosphine": M. C. Nielsen, K. J. Bonney, F. Schoenebeck, Angew. Chem. Int. Ed. 2014, 53, 5903; Angew.

- *Chem.* **2014**, *126*, 6013. (Showcases the special reactivity induced by the $P-CF_3$ moiety, adding electrostatic repulsion as additional design element to steric and electronic effects of ligands.)
- 4. "Chemoselectivity in the Reductive Elimination from High Oxidation State Palladium Complexes—Scrambling Mechanism Uncovered": M. C. Nielsen, E. Lyngvi, F. Schoenebeck, J. Am. Chem. Soc. 2013, 135, 1978. (Through the combined use of computation and experiment, we were able to gain greater mechanistic insight than would have been accessible otherwise, ultimately allowing us to uncover a new mechanism.)
- "Redox Reactions in Palladium Catalysis: On the Accelerating and/or Inhibiting Effects of Copper and Silver Salt Additives in Cross-Coupling Chemistry Involving Electron-rich Phosphine Ligands": M. Aufiero, F. Proutiere, F. Schoenebeck, Angew. Chem. Int. Ed. 2012, 51, 7226; Angew. Chem. 2012, 124, 7338. (Common additives do not act synergistically, but instead oxidize Pd catalysts, which has several mechanistic consequences.)

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