



## René Peters

**Date of birth**: August 26, 1971

Position: Professor, Institut für Organische Chemie, Universität Stuttgart

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**Education:** 1992–1997 Diploma in chemistry, RWTH Aachen 1997–2000 PhD with Prof. D. Enders, RWTH Aachen

2000–2001 Postdoctoral position with Prof. Y. Kishi, Harvard University 2001–2004 Process research chemist at F. Hoffmann–La Roche (Basel)

2004-2008 Assistant professor at ETH Zurich

Awards: 2006 Thieme Chemistry Journal Award; 2007 IUPAC Young Chemist Travel Award
Current research Cooperative asymmetric catalysis; mechanistic elucidations; organometallic chemistry;

interests: organic synthesis

Hobbies: Sports cars, my Siberian husky, soccer (supporter of Alemannia Aachen), nature



R. Peters

In a spare hour, I ... enjoy being in nature with my husky.

My favorite way to spend a holiday is ... to relax by the sea.

**M**y biggest inspiration is ... nature.

admire ... the ancient Romans.

get advice from ... my wife.

f I had one year of paid leave I would ... read, read, read, and travel a lot.

My favorite musicians are ... Ozzy Osbourne, and my wife, who is a concert pianist.

My favorite books are ... Perfume (Patrick Süsskind) and War and Peace (Leo Tolstoy).

If I could be an animal it would be ... preferably a wolf, since I am fascinated by wolves.

Chemistry is fun because ... one can be creative like a master builder, play with reactivities, experience surprises every day, and because theory and experiment are equally important to find a solution to a problem.

If I could be anyone for a day, I would be ... my husky.

f I were a car I would really like to be ... (please, please!) a Porsche 918 Spyder (also from Stuttgart).

My first experiment was ... the synthesis of iron sulfide from the elements in the cellar of my parents' house.

## My 5 top papers:

- "Asymmetric Michael additions of α-cyanoacetates by soft Lewis acid/hard Brønsted acid catalysis: stereodivergency with bi- vs. monometallic catalysts": S. H. Eitel, S. Jautze, W. Frey, R. Peters, *Chem. Sci.* 2013, 4, 2218–2233. (Identified the strengths and also the current weaknesses of cooperative bimetallic catalysis.)
- 2. "Paramagnetic Palladacycles with Pd<sup>III</sup> Centers Are Highly Active Catalysts for Asymmetric Aza-Claisen Rearrangements": S. H. Eitel, M. Bauer, D. Schweinfurth, N. Deibel, B. Sarkar, H. Kelm, H.-J. Krüger, W. Frey, R. Peters, *J. Am. Chem. Soc.* 2012, 134, 4683– 4693. (The first organometallic, dimeric, paramagnetic Pd<sup>III</sup> complexes were identified in cooperation with three other research groups.)
- "Bispalladacycle-Catalyzed Brønsted Acid/-Base Promoted Asymmetric Tandem Azlactone Formation Michael Addition": M. Weber, S. Jautze, W. Frey, R.

- Peters, *J. Am. Chem. Soc.* **2010**, *132*, 12222–12225. (A very rapid step-economic asymmetric access towards complex, biologically interesting quaternary amino acids and dipeptides using simple chemicals.)
- "Enantioselective Bimetallic Catalysis of Michael Additions Forming Quaternary Stereocenters": S. Jautze, R. Peters, Angew. Chem. 2008, 120, 9424– 9429; Angew. Chem. Int. Ed. 2008, 47, 9284–9288. (A C-C bond formation step occurs almost instantaneously at room temperature, even for the construction of quaternary stereocenters.)
- "Contact Ion Pair Directed Lewis Acid Catalysis: Asymmetric Synthesis of trans-Configured β-Lactones": T. Kull, R. Peters, Angew. Chem. 2008, 120, 5541-5544; Angew. Chem. Int. Ed. 2008, 47, 5461-5464. (The cooperation of an aprotic organic ion pair with a Lewis acid within the same catalyst molecule.)

The author presented on this page has published more than 10 articles in Angewandte Chemie in the last 10 years, most recently: "Asymmetric Palladium(II)-Catalyzed Cascade Reaction Giving Quaternary Amino Succinimides by 1,4-Addition and a Nef-Type Reaction": M. Weber, W. Frey, R. Peters, Angew. Chem. 2013, 125, 13465 – 13469; Angew. Chem. Int. Ed. 2013, 52, 13223 – 13227.

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