



Curriculum Vitae

Sebastian Benz

Date/Place of Birth

16.08.1987 in Zurich, Switzerland

Contact details

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Education and Experience

- 2014 - 2018 Ph.D. in Chemistry
Advisor: Professor S.M. Matile
University of Geneva, Geneva, Switzerland
- 2012 – 2013 M.Sc. in Chemistry
Advisor: Professor H.J. Jessen
University of Zurich, Zurich, Switzerland
- 2010 – 2011 Industrial traineeship
CSIRO, Clayton, Victoria, Australia
- 2007 – 2010 B.Sc. in Molecular Lifesciences
Thesis at Novartis Pharma AG
FHNW, Muttenz, Switzerland
- 2006 – 2007 Chemical Laboratory Technician
Ciba SC AG, Newport, Delaware, USA
- 2003 – 2006 Education as Chemical Laboratory Technician
Ciba SC AG, Basel, Switzerland

Core Laboratory Experience

Synthesis and study of oxygen delivery systems and organocatalysts operating with novel non-covalent interactions. Synthesis and characterization of nanoparticles, dyes, pigments, unnatural amino acids and organo electronic materials for transistors and solar cells.

Publications

- (1) **Benz, S.**; Besnard, C.; Sakai, N.; Matile, S. *Manuscript in preparation.*
- (2) **Benz, S.**; Poblador-Bahamonde, A. I.; Low-Ders, N.; Matile, S. "Catalysis with Pnictogen, Chalcogen, and Halogen Bonds" *Angew. Chem. Int. Ed.* **2018**, *57*, 5408-5412.
- (3) **Benz, S.**; Mareda, J.; Besnard, C.; Sakai, N.; Matile, S. "Catalysis with chalcogen bonds: neutral benzodiselenazole scaffolds with high-precision selenium donors of variable strength," *Chem. Sci.* **2017**, *8*, 8164–8169.

- (4) **Benz, S.**; Lopez-Andarias, J.; Mareda, J.; Sakai, N.; Matile, S. "Catalysis with Chalcogen Bonds," *Angew. Chem. Int. Ed.* **2017**, *56*, 812–815.
- (5) **Benz, S.**; Macchione, M.; Verolet, Q.; Mareda, J.; Sakai, N.; Matile, S. "Anion Transport with Chalcogen Bonds," *J. Am. Chem. Soc.* **2016**, *138*, 9093–9096. Spotlight in *J. Am. Chem. Soc.* **2016**, *138*, 10055–10055.
- (6) Cotelle, Y.*; **Benz, S.***; Avestro, A.-J.; Ward, T. R.; Sakai, N.; Matile, S. "Anion–p Catalysis of Enolate Chemistry: Rigidified Leonard Turns as a General Motif to Run Reactions on Aromatic Surfaces," *Angew. Chem. Int. Ed.* **2016**, *55*, 4275–4279.
*Equal author contribution. Selected VIP Paper.
- (7) Zhao, Y.; **Benz, S.**; Sakai, N.; Matile, S. "Selective acceleration of disfavored enolate addition reactions by anion–p interactions," *Chem. Sci.* **2015**, *6*, 6219–6223.
- (8) **Benz, S.**; Nötzli, S.; Siegel, J. S.; Eberli, D.; Jessen, H. J. "Controlled Oxygen Release from Pyridone Endoperoxides Promotes Cell Survival under Anoxic Conditions," *J. Med. Chem.* **2013**, *56*, 10171–10182.

Awards and Honors

1st Poster prize ESOC 2017 Cologne

Alfred Werner legat for outstanding M. Sc.

Swiss chemical society travel award

3rd Oral presentation Geneva chemistry and biochemistry days