Curriculum vitae

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| Name, Date of birth: | Henrik Sundén, 780917 |
| Affiliation: | Dept. Chemical and Chemical Engineering, Chalmers |

# Education and degrees

2003 Bachelor of Science, Chemistry. *Palladium Pincer Complex Catalyzed Trimethyltin Substitution of Functionalized Propargylic Chlorides* Supervisor: Kalman Szabó, Stockholm University

2005 Licentiate Degree in Organic Chemistry, *Highly Enantioselective α-Oxidation, Epoxidation and Diels Alder Reactions,* Supervisor: Armando Córdova, Stockholm University

2007 Doctoral Degree in organic Chemistry, *Organocatalytic Domino Reactions,* Supervisor: Armando Córdova, Stockholm University. Completed in 3.5 years

# Current and previous positions

Assistant professor: Chalmers University of Technology Feb 2013– on-going.

Post-doctoral position: Jan. 2009–Dec. 2012, Research 100%: Nuclear receptor modulation, research 100%, Advisor: Prof. Roger Olsson, Medicinal Chemistry, University of Gothenburg.

Post-doctoral position: Sept. 2007–Dec. 2008, Research100%: “Brønsted Acid Catalysis” and “Oxidative Organocatalysis”, Advisor: Prof. Magnus Rüping, Goethe University, Frankfurt am Main.

# Major grants

2015 Knut and Alice Wallenbergs stiftelse project grant (5-year grant co-applicant)

2014 Swedish research council VR young investigator (4-year research grant)

2012–2016 Swedish research council Formas young investigator (4-year research grant)

# Supervising experience

PhD students: Linda Ta (2013–) and Anton Axelsson (2015-) Master degree students: Katharina Dihm (2015, Chalmers), Marie Mignonat (2015, Toulouse) Anton Axelsson (2014, Chalmers), Joachim Bilj, (2014, Utrech University of Applied Sciences), Dr Claire Sauvée (2011, University of Provence), Dr Mareike Holland 2010, (ETH), Dr Lukas Hubener 2009, (RWTH, Aachen).

**Publications**

49 publications (H-index 32) in high impact peer-reviewed journals with broad spectra of research including: transition-metal catalysis, amine catalysis, domino reactions, NHC-catalysis, investigations on the origin of homochirality and medicinal research (nuclear hormone receptor modulation). For a complete publication list se: http://www.researcherid.com/rid/A-5477-2009

# Latest publications

(1) Axelsson, A., Ta, L., Sundén, H. Direct highly Regioselective Functionalization of Carbohydrates: A Three-Component Reaction Combining the Dissolving and Catalytic Efficiency of Ionic Liquids. *Eur, J. Org. Chem.* **2016** accepted

(2) Sundén, H., Schäfer, A., Scheepstra, M., Leysen, S., Malo, M., Ma, J-M., Burstein, E., Ottmann, C., Brunsveld, and Olsson R. Chiral Dihydrobenzofuran Acids Show Potent Retinoid X Receptor−Nuclear Receptor Related 1 Protein Dimer Activation. *J. Med Chem.* **2016**, 1232–1238

(3) Ta, L., Axelsson, A., Sundén, H. Attractive Aerobic Access to the α,β-Unsaturated Acyl Azolium Intermediate: Oxidative NHC Catalysis Via Multistep Electron Transfer, *Green Chemistry,* **2016,** 18 (3), 686-690

(4) Axelsson, A., Ta, L., Sundén, H. Ionic Liquids as Carbene Catalyst Precursors in the One-Pot Four-Component Assembly of Oxo Triphenylhexanoates (OTHOs), *Catalysts* **2015**, *5*(4), 2052-2067

(5) Ta, L., Axelsson, A., Sundén, H. Highly Stereoselective Synthesis of 1,6-Ketoesters Mediated by Ionic Liquids: A Three-Component Reaction Enabling Rapid Access to a New Class of LMWGs, *J. Vis. Exp*, e53213, doi:10.3791/53213 (**2015**).

(6) Sundeń, H. Mareike C. Holland, C. M., Poutiainen P. K., Jaäs̈kelaïnen, T., Pulkkinen J. T., Palvimo J. J., Olsson R. Synthesis and Biological Evaluation of Second-Generation Tropanol- Based Androgen Receptor Modulators. *J. Med. Chem.* **2015**. 1569-1574

(7) Ta, L., Axelsson, A., Bijl, J., Sundén, H. Ionic Liquids as Precatalysts in the Highly Stereoselective Conjugate Addition of α,β-Unsaturated Aldehydes to Chalcones. *Chem. Eur. J.* **2014**, 13889-13893