Welcome to the sixth ORCA meeting Palermo, 7th-10th May 2014

Dear Guest,
we have the pleasure to organize and to welcome you in Palermo for this sixth meeting focused on the most recent developments and advances in the exciting field of organic catalysis.
We wish you all a nice meeting and hope that you will enjoy your stay in Palermo.

The Organizing committee
Michelangelo Gruttadauria, Francesco Giacalone, Claudio Trombini, Andrea Pace
The Scientific committee
Alexandre Alexakis, Albrecht Berkessel, Pavel Kočovský, Benjamin List, Imre Pápai, Petri Pihko

May 7th		
Time	**Program**	**Speaker**
16.00-17.45	**Registration**	
17.45-18.00	**Welcome and Opening remarks**	
Chair: Prof. Herbert Mayr		
18.00-18.45	**Plenary PL1** Carbene Catalysis Made Visible: Characterization of Intermediates by NMR and X-Ray Crystallography	Albrecht Berkessel
18.50-19.35	**Plenary PL2** Organocatalyzed Reductive Amination with Trichlorosilane	Pavel Kočovský
19.40-19.55	**Oral O1** Enantioselective Halogenation-Initiated Semi-Pinacol Rearrangements	Fedor Romanov Michailidis
20.00-20.15	**Oral O2** Synthesis and Desymmetrization of Prochiral Bicyclo[2.2.2]octene Derivatives	Marko Krivec
20.30-22.00	**Dinner**	

Water-Compatible Hydrogen-Bond Activation: A Scalable and Organocatalytic Model for the Stereoselective Multicomponent Aza-Henry Reaction[1]

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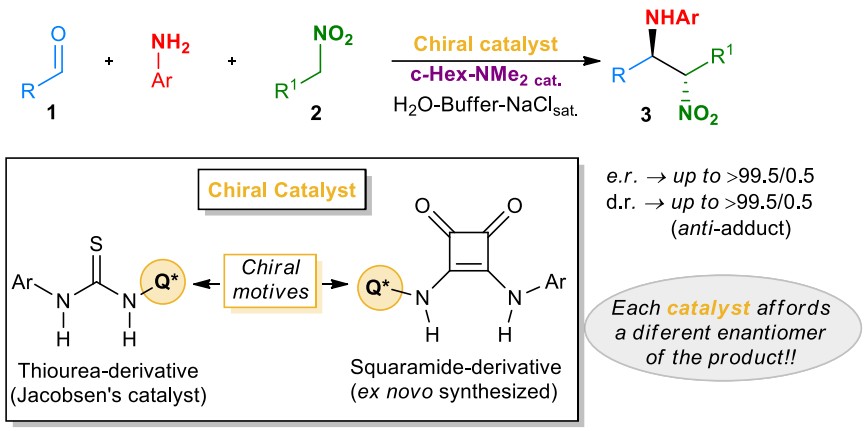
In this communication we described the development and implementation of the first example of a hydrogen bond based organocatalytic multicomponent manifold operating "in the presence of water" conditions. The manifold performs a multicomponent and stereoselective version of the organocatalyzed aza-Henry reaction and it utilizes aniline, aromatic or aliphatic aldehydes, primary or secondary nitroalkanes, N,N-dimethylcyclohexylamine as the catalytic base and a chiral thiourea or squaramide catalyst as the chiral source to afford the corresponding α,β-disubstituted β-nitroamine derivatives. The reaction does not require a large excess of nitroalkane (two equivalents are enough) to afford the corresponding product in good yield and high stereoselectivity (up to ≥99.5:0.5 e.r. and ≥99.5:0.5 d.r., anti-adduct). The catalysis is performed through H-bond interactions between the nitroalkane and the chiral catalyst in the presence of interfacial water. Importantly, each family of catalysts delivers the β-nitroamine product with complementary enantioselectivity, allowing for the selective access to the two enantiomeric series of these building blocks in an efficient, instrumentally simple and scalable manner.



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1. Cruz-Acosta, F.; de Armas, P.; García-Tellado, F. *Chem. Eur. J.* **2013**, *19*, 16550-16554.