



Prof. Walter Baratta

Title of the talk:

Highly efficient hydrogenation ruthenium and osmium catalysts based on ampy type ligands.

Curriculum vitae

Prof. Walter Baratta

Walter Baratta obtained a fellowship from the Scuola Normale Superiore of Pisa in 1983 and graduated in Chemistry cum laude in 1989. He completed his Ph.D in Chemistry in 1993 under the supervision of Prof. F. Calderazzo and spent one year in the group of Prof. P. Pregosin at the Technical Institute of Zürich (CH). He carried out postdoctoral studies in the laboratory of Prof. W. Herrmann at the Technical Institute of München (D) (Alexander von Humboldt fellowship). After returning to Italy he became Research Associate in 1996 at the University of Udine and in 2005 was appointed Associate Professor.

His research interests are mainly focused on coordination chemistry and homogeneous catalysis, with particular regard to the development of catalytic systems for C-X (X = H, C, N) forming reactions. In addition to the studies on ruthenium complexes for carbene transfer reactions and the use of heterocyclic carbenes as ligands, a particular successful outcome has been the isolation of rare examples of 14-electron complexes (Ru and Pt) stabilized by agostic interactions. In the last decade most of the research has been concentrated on the transfer hydrogenation and hydrogenation of carbonyl compounds promoted by a new class of highly selective and productive ruthenium and osmium catalysts based on amino-pyridine ligands. W. B. is author of 90 publications (h = 37), 8 patents and some ruthenium catalysts are commercialized by Johnson Matthey. In 2008 he was awarded of the first prize of the Solvias Ligand Contest (Basel, CH).