Research Cooperations

Team and Rennes cooperation

Fruitful cooperations within the Catalysis and Organometallics laboratory of the "Institut Sciences Chimiques de Rennes" UMR 6226 CNRS-Université de Rennes, with:

Prof Christian Bruneau, from alkyne activation, alkene metathesis to C-H bond activation

Dr Sylvie Dérien, Associate professor (catalysis and fine chemistry with ruthenium catalysts) **Dr Cédric Fischmeister,** IR CNRS (alkene metathesis and catalysis)

Prof Christophe Darcel, (C-H bond activation with Ruthenium) with Prof Li Bin Wuyi University, Guangzhou province, China

Prof Henri Doucet, DR CNRS (C- H bond activation with Palladium)

Dr Jean-François Soulé CR CNRS (Phosphine & Nitrogen ligands catalytic C-H bond functionalization with Rh and Ru based catalysts)

Main Recent international cooperations

Bekir Cetinkaya, University of Izmir, and Ismaïl Özdemir, University of Malatya (Turkey) Metal-NHCcarbenes and catalysis, (CNRS-TUBITAK/COST Actions) (15 publications) Serguei N. Osipov, INEOS, Moscow (Russia), INTAS Programme, PICS CNRS and GDRE CNRS Moscow Academy of Sciences (19 Publications) Matthias Beller LIKAT Rostock for new catalytic systems and green catalysis (7 publications)

European Network IDECAT, Beller-Bruneau LIA CNRS-Leibniz Institute Rennes-Rostock **XiaoFeng Wu** LIKAT Rostock Germany new catalytic processes involving radicals. LIA CNRS-Leibniz institute (8 publications)

Min Zhang South China University of Technology SCUT, Canton, Guangdong, China (6 publications)

Main cooperations for kinetics and Theory

Anny Jutand, ENS Ulm Paris, For kinetics, electrochemistry and catalysis mechanisms Odile Eisenstein, Eric Clot, Montpellier (France) Theoritical studies of catalytic mechanism Carlo Mealli CNR Florence (Italy) Computational studies of Organometallic reactions Feliu Maseras ICIQ, Tarragona and Universidad de Barcelona (Spain) Computational studies of catalytic cycles for C-H bond activation

Past International cooperations Fruitful cooperations have led to many publications

- **Zuowei Xie**, Chinese University of Hong Kong *(4 publications)* Carborane ruthenium complexes and catalysts, (PROCORE)
- •**Irina P Beletskaya**, Lomonosov university Moscou Phosphine addition to alkynes CNRS-Lomonosov University+ INTAS programme
- •Claudio Bianchini, CNR Florence: "activation of small molecules" European HCM network
- •Alois Fürstner indenylidene-Ru catalysts for alkene metathesis (3 publications)
- •Peter W. Fehlhammer, Freie Universität Berlin on Carbenes within Humboldt cooperation (2 publications)
- •Armin de Meijere, University of Goettingen activation of cyclopropylalkynes (2 publications)
- •Arthur J. Carty university of Waterloo Activation by bimetallic systems (17 publications)