



Université Blaise Pascal

UNIVERSITÉ BLAISE PASCAL
U.F.R de Recherche Scientifique et Technique



CYCLE DE CONFÉRENCES DE CHIMIE

Avec le concours de : *Manufacture Française des Pneumatiques MICHELIN*
Centre de Développement Préclinique, Schering-Plough
Fédération de Chimie (FR 2404)
Section Auvergne de la Société Française de Chimie
U.F.R.S.T. / Master de Chimie / Département de Chimie

Mercredi 1^{er} Juillet 2009 à 16h

Amphi de Chimie Paul REMI - (Site des Cézeaux)

Pr. Jernej Iskra

Laboratory of Organic and Bioorganic Chemistry
Department of Physical and Organic Chemistry
"Jožef Stefan" Institute, Ljubljana, Slovenia

Environmentally sustainable halogenation reactions: new methods and evaluation of their environmental parameters

Halogenation is one of the basic chemical transformation as halogenated organic compounds are essential building blocks in the synthesis of various compounds, while organo-halogen molecules are important molecules in industry, material science, pharmaceutical and agrochemical industry. Molecular halogens are mostly used for the preparation of halogenated compounds, however they are hazardous, toxic, corrosive and very reactive chemicals. Furthermore, reactions are usually performed in chlorinated solvents, which altogether points to a high environmental burden of reactions of halogenation. With increasing awareness of environmental problems there is also increased interest in a development of environmentally sustainable reactions of halogenation. A development of various approaches to decrease the environmental burden of halogenation reactions with keeping at least the same effectiveness as in reactions with molecular halogens will be presented. Environmental parameters of these approaches will be evaluated in terms of "green" chemistry