

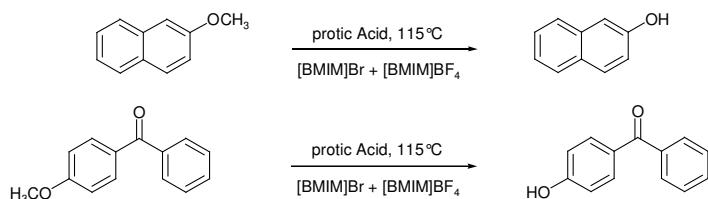


## Organic Synthesis, Part I

The use of ionic liquids as "Green Solvents" or "Designer Solvents" for chemical reactions was subject in a number of publications over the past 10 years. Currently, about 120 materials are commercially available from IOLITEC's well-sorted portfolio and a much larger number is described in the literature today. Even with this straightforward number of materials, chemists from many different disciplines demonstrated that ionic liquids can indeed be used in a broad variety of chemical reactions as high performance solvents, leading to advanced results. Furthermore, in some cases ionic liquids are the key to chemical reactions, which are impossible in common solvents.

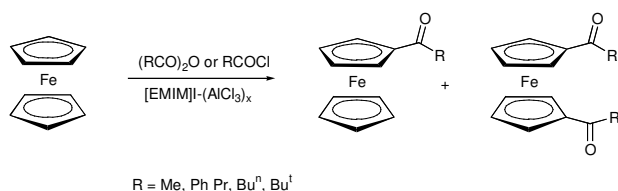
### Selected Examples:

#### a) Advanced Nucleophilicity: Cleavage of ethers



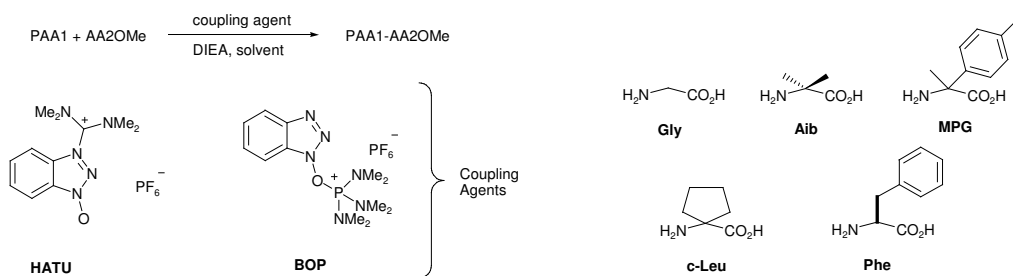
S.K. Boovanahalli, D.W. Kim, D.Y. Chi, *J. Org. Chem.* **2004**, *69*, 3340.

#### b) Friedel-Crafts reactions in room temperature ionic liquids



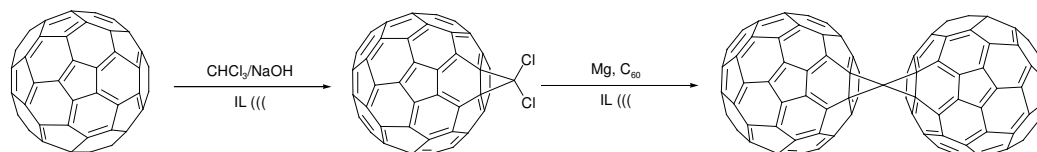
A. Stark, B.L. MacLean, R.D. Singer, *J. Chem. Soc., Dalton Trans.*, **1999**, 63-66.

#### c) Peptide Synthesis in ionic liquids



H. Vallette, L. Ferron, G. Coquerel, A.-C. Gaumont, J.-C. Plaquevent, *Tetrahedron Lett.* **2004**, *45*, 1617.

#### d) Functionalization of Fullerenes



Z. Yinghuai, S. Bahnmüller, C. Chibun, K. Carpenter, N.S. Hosmaneb, J.A. Maguirec, *Tetrahedron Lett.* **2003**, *44*, 5473.

Product Code	Compound	Quantities
IL-0012-HP	1-butyl-3-methyl-imidazolium tetrafluoroborate, 99%	25 g to bulk
IL-0093-HP	1-ethyl-3-methyl-imidazolium chloride, 99%	25 g to bulk
IL-0029-HP	1-butyl-3-methyl-imidazolium bis(trifluoromethylsulfonyl)imide, 99%	25 g to bulk
IL-0011-HP	1-butyl-3-methyl-imidazolium hexafluorophosphate, 99%	25 g to bulk

