DENSELY FUNCTIONALIZED FURANS, PYRROLES AND IMINODIOXOLANES VIA MULTICOMPONENT REACTIONS OF ISOCYANIDES

Mohammad Bagher Teimouri

Petrochemical Department, Iran Polymer and Petrochemical Institute, P.O. Box 14965-115, Tehran, Iran

Organic isocyanides are versatile reagents for organic synthesis due to their unique reactivity in multicomponent reactions.[1] At the present time, this class of compounds can be regarded as one of the most powerful tools for the synthesis of heterocyclic compounds. They enter various cyclizations and cycloaddition reactions giving different types of heterocycles.[2]

In continuation of our interest in isocyanide-based multicomponent reactions leading to the various heterocycles synthesis,[3-10] in the talk, many high yielding protocols for the preparation of highly functionalized furan, pyrrole and dispiro iminodioxolane derivatives will be described.