

Switchable Multicomponent Heterocyclizations Involving Aminoazoles and Salicylaldehydes

Prof. Valentyn CHEBANOV

Division of Functional Materials Chemistry

SSI "Institute for Single Crystals" NAS of Ukraine – Ukraine, Kharkiv

e-mail : chebanov@isc.kh.ua

To control selectivity of multicomponent reaction the Condition-Based Divergent Strategy had been developed and applied for wide range of heterocyclizations, for instance, to switch directions of the treatments between carbonyl-containing CH-acids, aromatic aldehydes and aminoazoles. An introduction of additional reactive functional groups into the starting reagents allows to increase diversity of final structures, therefore, we applied the Strategy to tune selectivity of the MCRs involving aminoazoles and salicylaldehydes (see Scheme) using conventional and non-classical methods of activation (microwave irradiation and ultrasonication) as well as different catalytic systems.

