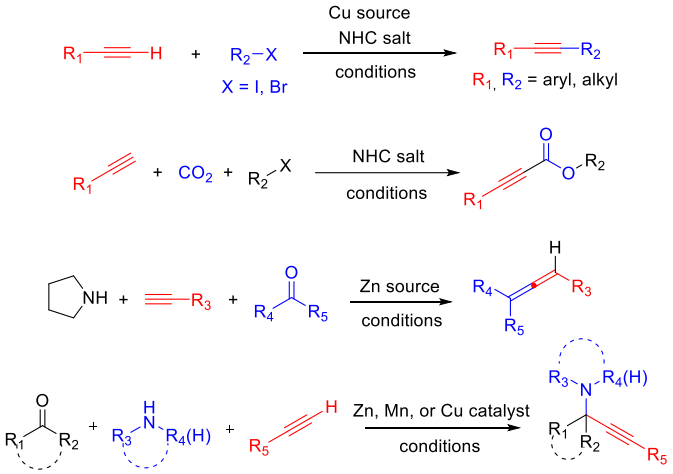
Sustainable Catalysis in Useful Organic Transformations: Multicomponent Reactions, Cross-Couplings, and CO_2 Activation

Georgios C. Vougioukalakis

Laboratory of Organic Chemistry, Department of Chemistry, National and Kapodistrian University of Athens, Athens GR-15771, Greece
e-mail: vougiouk@chem.uoa.gr

Sustainable catalysis is one of the most active Organic Chemistry research fields, both in industry and academia [1,2]. After a brief introduction to our research group and interests, some recently developed sustainable catalytic protocols, employing Cu, Zn, Mn, or N-heterocyclic carbene (NHC) catalysis, will be presented. These include two palladium-free Sonogashira coupling strategies [2,3], an approach for the coupling of terminal alkynes with CO_2 and allylic chlorides [4,5], as well as a multi-component reaction between ketones, amines and alkynes, leading to propargylamines or allenes [6-8].



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