

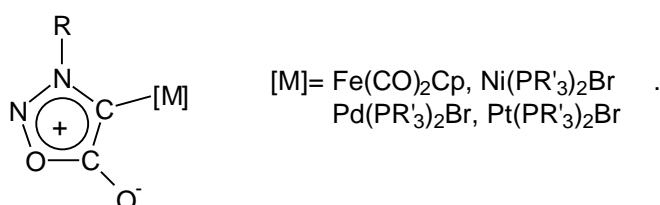
## New Approaches in Sydnone Chemistry

Valery N. Kalinin

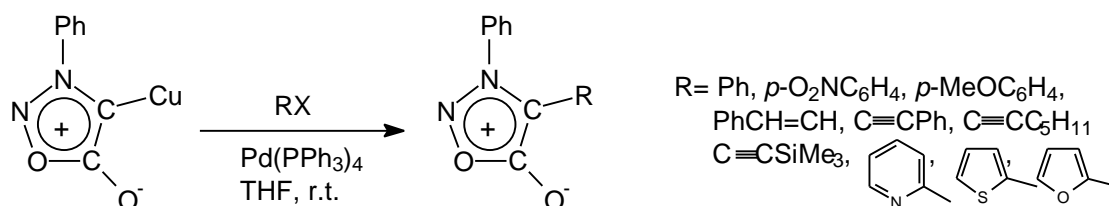
*A.N.Nesmeyanov Institute of Organoelement Compounds, Russian Academy of Sciences, Vavilov str. 28, Moscow, 117813, Russian Federation. Fax: +7 095 135 5085; vkalin@ineos.ac.ru*

Mesoionic compounds are of special interest among heterocycles due to their unusual structure. Sydnone are the most important representatives of mesoionic compounds because they possess physiological activity of different types depending on substituents in heterocycle ring.

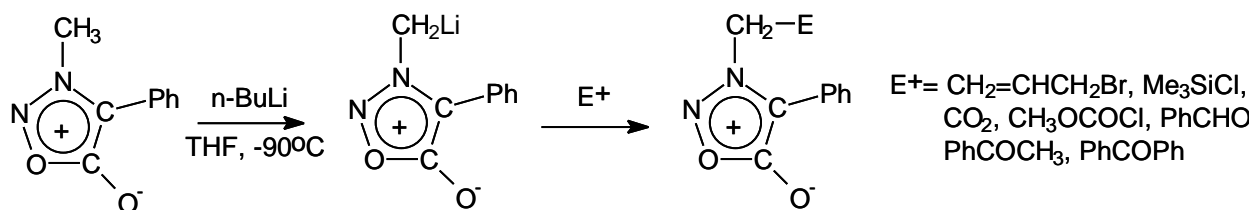
In this work the methods of obtaining sydnones derivatives with carbon-transition metal s-bond have been elaborated on the base of the reaction of 4-lithiosydnone with organometallics containing transition metal-halogen bond and the oxidative addition reaction of 4-bromosydnone to zero-valent metal complexes:



4-Cupriosydnone has been synthesized and its great potential in Pd-catalyzed cross-coupling reactions with aryl, vinyl, ethynyl and heteroaryl halides has been shown:



A new metallation reaction of 3-methylsydnone on CH bond in methyl group was opened up and reactions of 3-lithiomethylsydnone with electrophiles were investigated:



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