

## Cyclic Nitrones in Organic Synthesis

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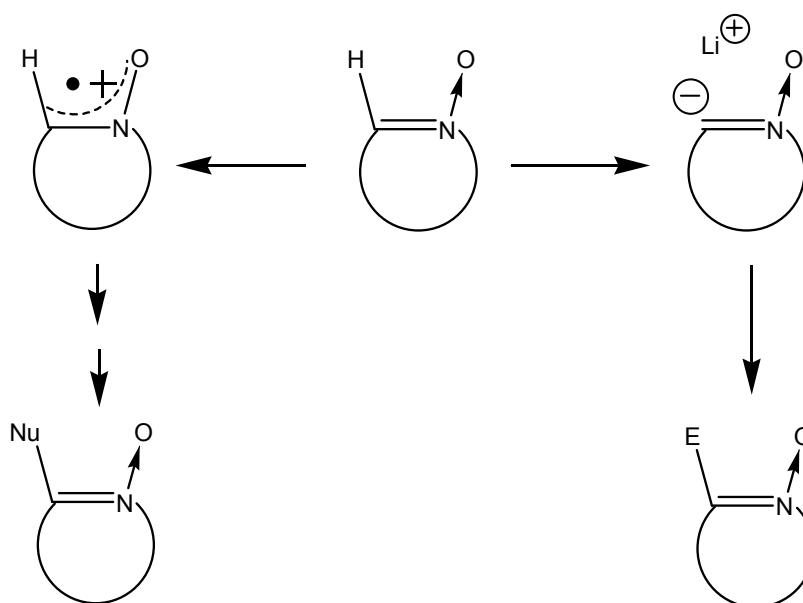
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Heterocyclic compounds containing nitrono group have wide application in different synthetic strategies. Also they are useful, specific and sensitive research instrument for processes in chemistry, physic, biology, medicine etc.

New methods for nitrono group activation in both nucleophilic and electrophilic reactions are described, including oxidant-mediated addition of nucleophile via radical-cation formation, and inversion of reactivity of aldonitrono group via lithiation with dipole-stabilized carbanion formation. Electronic structures of active intermediates are discussed.



Some examples of application of the new approaches in the synthesis of heterocyclic compounds are given.