

PhD Seminar

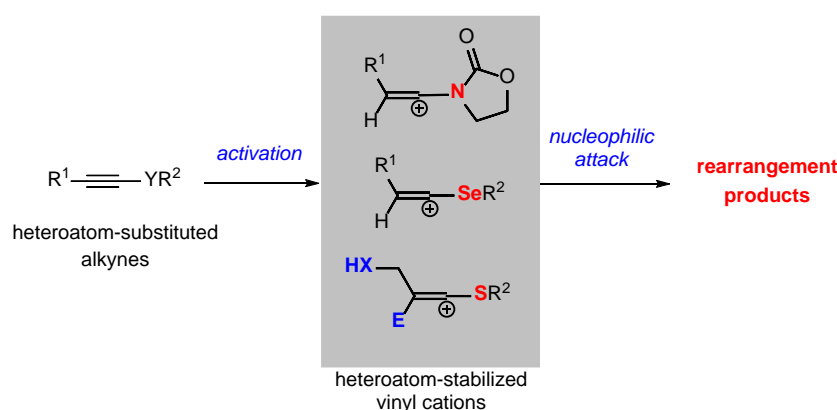
**PLAYING AROUND WITH ELECTRON-DEFICIENT INTERMEDIATES:
THE CASE OF VINYL CATIONS AND GLYCOSYL RADICALS**

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Abstract

Over the past few years, our research group has become interested in exploring the chemistry of electron-deficient reactive intermediates. Within this context, two different systems have been the focus of our interest: heteroatom-stabilized vinyl cations and glycosyl radicals.

The highly reactive vinyl cation intermediates have been prepared through electrophilic activation of heteroatom-substituted alkynes. Ynamides, thio- and selenoalkynes can be activated with different electrophiles, resulting in a transient cationic intermediate which might be trapped by nucleophiles, triggering several different molecular rearrangements which have allowed us to prepare a variety of useful compounds.



On the other hand, more recently we turned our attention to the potential of the generation carbohydrate-derived radicals by using photoinduced or photocatalytic single-electron transfer reactions and taking advantage of the resulting radical intermediates to engage in different reactions.

