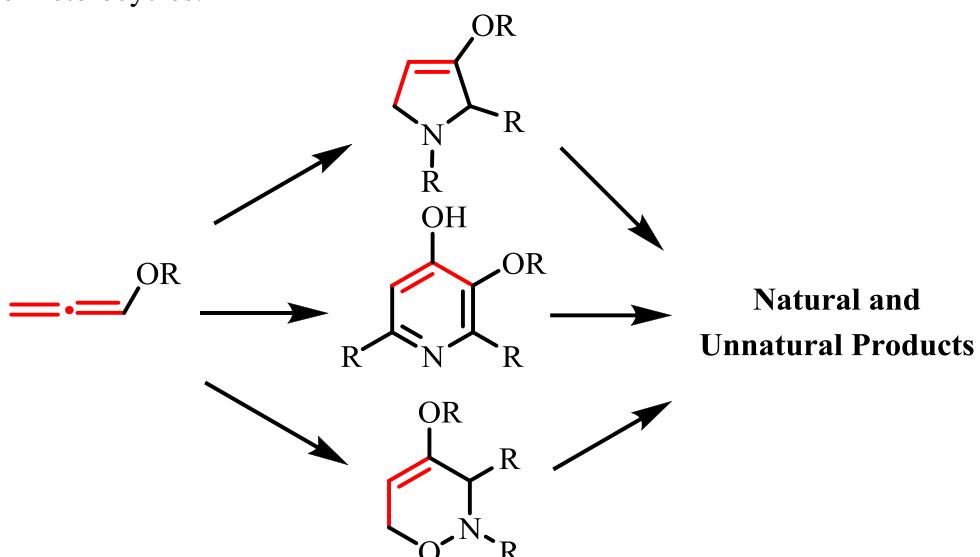


SYNTHESIS OF HETEROCYCLES AND NATURAL PRODUCTS VIA ALKOXYALLENES

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ALKOXYALLENES – true chemical chameleons! Their α -lithiation generates C_3 -nucleophiles that combine with various electrophiles to synthetically highly versatile allenic intermediates. These were employed for the synthesis of a variety of important heterocyclic compounds, such as dihydrofurans, dihydropyrroles or enantiopure 1,2-oxazine derivatives. These heterocyclic intermediates are precursors of natural products, e. g. alkaloids, carbohydrate derivatives or their analogues. By serendipity, we also found new routes to heteroaromatic compounds such as highly substituted imidazole, oxazole, pyrimidine and pyridine derivatives, which are excellent substrates for palladium catalyzed coupling reactions providing comprehensive libraries of heterocycles.



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