

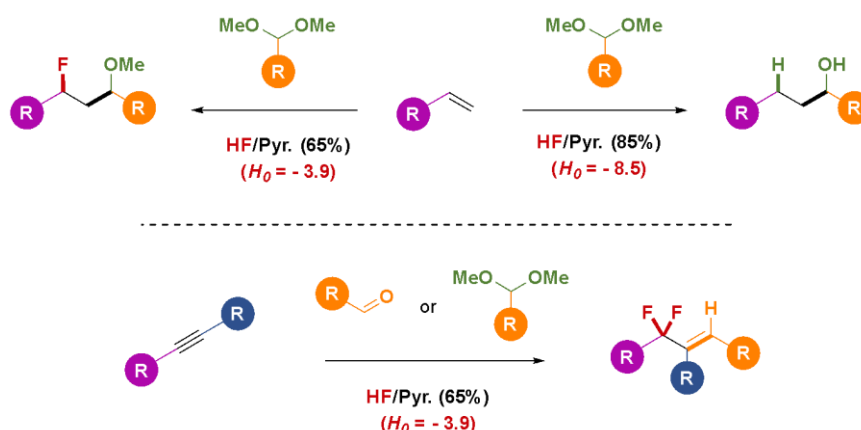


EXPLOITATION OF HF/PYRIDINE MEDIA FOR THE (FLUORO)FUNCTIONALIZATION OF OLEFINS AND ALKYNES

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Although anhydrous hydrogen fluoride (HF) is scarcely exploited as such on an academic scale for the development of new transformations, it is used on a large scale in industry for the preparation of high added-value synthons (fluoroarenes, trifluoromethylarenes, etc.).^[1] HF is most commonly used in combination with an organic base (e.g. HF/pyridine, HF/Et₃N)^[2] as a nucleophilic fluorinating agent, particularly for the fluorofunctionalization of unsaturated compounds. The crucial role played by the acidity of these HF/base mixtures on the efficiency and selectivity of these transformations has been highlighted by various research groups in recent years.^[3] Our team has recently developed a method to quantify the acidity of these media for the first time on the Hammett scale (H_0).^[4] In this context, the study of the reactivity of alkenes and alkynes in the presence of electrophiles derived from dimethoxymethane or paraformaldehyde in HF/pyridine media has highlighted the key role of the acidity on the chemoselectivity of these transformations.



References

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