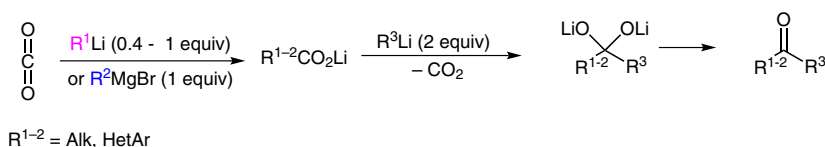
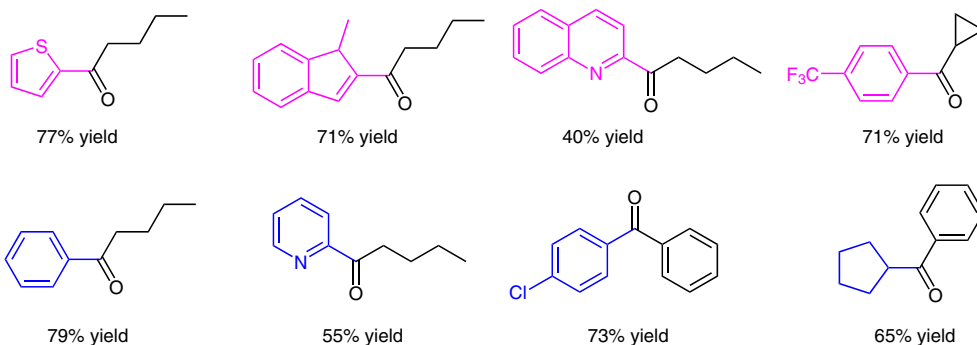


Ketones from Carbon Dioxide and Organolithium or Grignard Reagents



Selected examples:



Significance: The authors report two complementary continuous flow systems using either stoichiometric amounts or an excess of CO_2 for the preparation of ketones. Starting from organolithium or Grignard reagents, the described synthesis shows significant advantages over conventional batch conditions in suppressing undesired symmetric ketone and tertiary alcohol byproducts.

Comment: The observation that in this reaction organolithium reagents are more reactive in Et_2O than in THF is unprecedented. Furthermore, by integrating an in-line generation of organolithium or organomagnesium species, a telescoped one-flow process capable of preparing ketones in a modular fashion from simple precursors has been established.