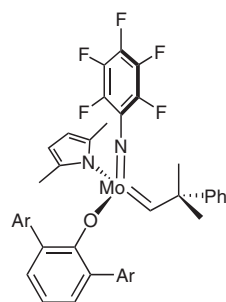
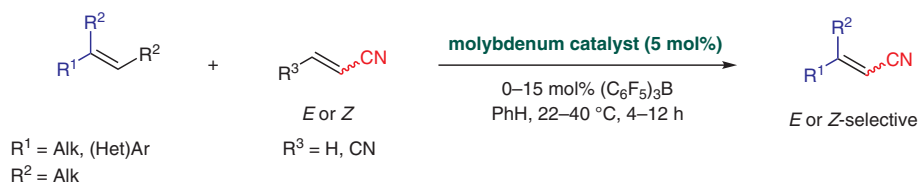
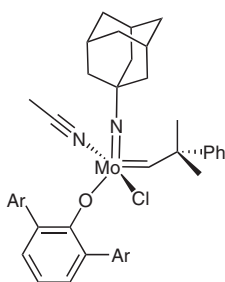


Y. MU, T. T. NGUYEN, M. J. KOH, R. R. SCHROCK, A. H. HOVEYDA* (BOSTON COLLEGE, CHESTNUT HILL AND MASSACHUSETTS INSTITUTE OF TECHNOLOGY, CAMBRIDGE, USA)
E- and *Z*-, Di- and Tri-substituted Alkenyl Nitriles through Catalytic Cross-Metathesis
Nat. Chem. **2019**, *11*, 478–487.

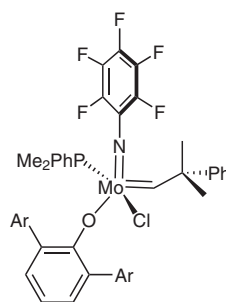
Di- and Tri-substituted Alkenyl Nitriles



Ar = 2,4,6-triethylbenzene
catalyst 1

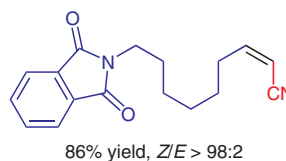
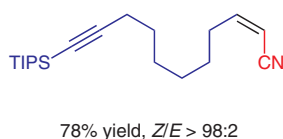
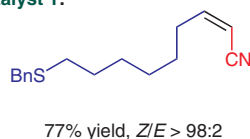


Ar = 2,4,6-tri(*iso*-propyl)benzene
catalyst 2

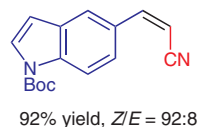
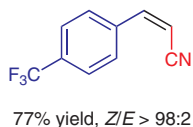
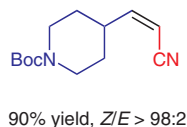


Ar = 2,4,6-tri(*iso*-propyl)benzene
catalyst 3

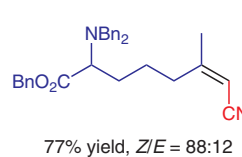
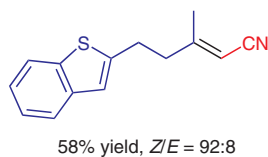
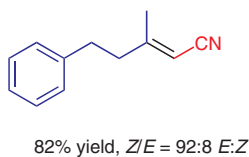
with **catalyst 1**:



with **catalyst 2**:



with **catalyst 3**:



Significance: Hoveyda and co-workers disclose the preparation of *E*- and *Z*-multiply-substituted alkenyl nitriles in high yields and excellent diastereoselectivities through molybdenum-catalyzed cross-metathesis reactions.

Comment: The choice of the molybdenum catalysis discussed in detail and the application of the methodology is demonstrated by the preparation of a wide range of biologically active substrates.

SYNFACTS Contributors: Paul Knochel, Moritz Balkenhohl
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