H. WU, F. HAEFFNER, A. H. HOVEYDA* (BOSTON COLLEGE, CHESTNUT HILL, USA)
An Efficient, Practical, and Enantioselective Method for the Synthesis of Homoallenylamides Catalyzed by an Aminoalcohol-Derived, Boron-Based Catalyst

Enantioselective Allene Addition to Aryl and Alkyl Imines

Significance: Hoveyda and co-workers report a highly efficient method for the enantioselective preparation of aryl-, heteroaryl-, and alkyl-substituted homoallenylamides. The addition of an alleny unit to various Boc-protected imines proceeds with high yield and very good enantioselectivity.

Comment: The application of this new protocol shows its relevance in the total syntheses of the natural products anisomycin and epi-cytotoxazone. Furthermore, it is shown that the alleny addition performed on gram scale proceeds with high efficiency and selectivity, providing the corresponding product in excellent yield.

**Selected examples:**

- **Aryl imines**
  - 86% yield, er = 98:2
  - 74% yield, er = 97:3
  - 88% yield, er = 97:3
  - 89% yield, er = 95:5

- **Heteroaryl imines**
  - 77% yield, er = 84:16

- **Alkyl imines**
  - 80% yield, er = 99:1
  - 75% yield, er = 99:1
  - 91% yield, er > 99:1

**Transition state:**

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L₃BOR

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SYNFACTS Contributors: Paul Knochel, Diana Haas

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Metal-Mediated Synthesis

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