Molecular oxygen is by far the most attractive terminal oxidant for catalyzed oxidations, one of the central transformations in organic chemistry. Guest Editor Professor Shannon Stahl has assembled a diverse set of experts in the field of catalytic aerobic oxidations, highlighting accomplishments and ongoing challenges in this important area.

Tom Rovis
D. Yang

Aliphatic alkenyl amides
X = C, NTs; n = 1, 2

13 examples
up to 74% yield

N-heterocycles

B. U. W. Maes

M. Shibuya

N. Jiao
Z. Li