

## Oxidation Catalysis: Bringing Together the Interests of Academic and Industrial Researchers

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Oxidation catalysis brings together the interests of academic and industrial researchers perhaps to a greater extent than any other reaction class. “Big” targets in the field, such as alkane hydroxylation, are recognized both as fundamental problems of great interest and for their great potential economic impact if developed successfully. More generally, the selective catalysis of oxidation of olefins, alcohols, sulfides, and other key functional groups represents some of the most challenging, fascinating, and potentially useful reactions in chemistry

today. In oxidation catalysis – as much or more than in any other areas – one sees efforts by academic researchers directed specifically to matters of direct practical concern such as reduction of cost of feedstocks, minimization of by-product generation, catalyst encapsulation and recycling, and use of environmentally friendly solvents. Similarly, one sees industrial oxidation chemists address questions of greatest fundamental interest such as basic mechanistic pathways, and control of product and stereoselectivity.

Given the manner in which oxidation chemistry seems to marry the interests of academic and industrial chemists, the topic is perfectly matched to the mission of *Advanced Synthesis & Catalysis*, which is to advance synthetic chemistry and catalysis in both practical and fundamental ways. We are pleased to help bring you this special issue on oxidation chemistry.

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