



2008–2009 POCC Lecture Series

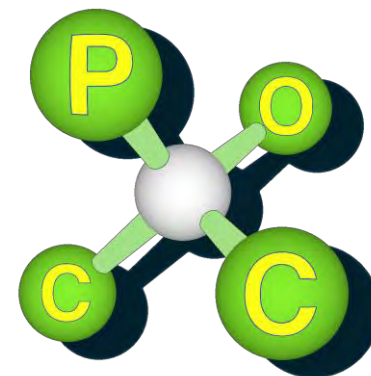
February 26, 2009, 8:00 PM

Prof. Patrick J. Walsh
University of Pennsylvania

*"Asymmetric C–C and C–O Bond-Forming
Reactions"*

Carolyn Hoff Lynch Lecture Hall
Chemistry Building, University of Pennsylvania

The Philadelphia
Organic Chemist's
Club



POCClub.org

Patrick J. Walsh received his B.A. from UC San Diego (1986) and Ph.D. in chemistry at UC Berkeley with Prof. Robert G. Bergman (Ph.D., 1991). He was an NSF postdoctoral fellow with Prof. K. B. Sharpless at the Scripps Research Institute. Moving across town from 1994-1999 he was an assistant professor at San Diego State University and also professor at Centro de Graduados e Investigación, Instituto Tecnológico de Tijuana, Mexico (1996-1999). In 1999 he moved to the University of Pennsylvania where he was promoted to associate professor in 2002, professor in 2005, and to the Alan G. MacDiarmid Professor of Chemistry in 2008. Walsh has received several awards, most recent of which was the 2006 Philadelphia Section Award of the ACS. Walsh's interests are in asymmetric catalysis, development of new synthetic methods, reaction mechanisms, and inorganic synthesis. With Prof. Marisa Kozlowski, Walsh coauthored "*Fundamentals of Asymmetric Catalysis*" (University Science Books, 2008).

Abstract: Research in the Walsh group merges the fields of catalysis and organic and inorganic synthesis with the goal of achieving new catalytic asymmetric transformations for the synthesis of chiral building blocks. The transformations to be presented include asymmetric C-C and C-O bond-forming reactions, because construction of these bonds lie at the very heart of organic synthesis. The seminar will cover asymmetric carbonyl addition combined with diastereoselective epoxidation, cyclopropanations, halocyclopropanations, and the catalytic asymmetric synthesis of diaryl methanols. The development and applications of practical 1,1-bimetallics and palladium catalyzed pi-allylation reactions will also be presented.