

CBC SEMINAR ANNOUNCEMENT

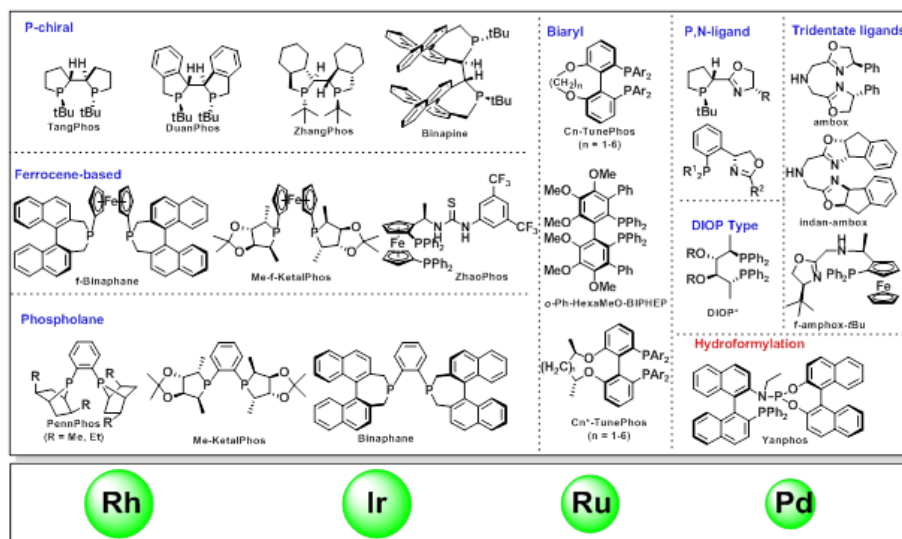


Professor Zhang Xumu Southern University of Science and Technology

Practical Asymmetric Hydrogenation

Dr. William Knowles, in his 2001 Nobel Lecture, describes his 1960s and 70s work in developing asymmetric hydrogenation catalysts. Now, 45 years later after the first commercial application of asymmetric catalysis, although major advances have been made (e.g.; Professor Noyori's Nobel prize winning work in asymmetric hydrogenation), significant challenges remain. This presentation describes innovation in asymmetric hydrogenation catalysis from both an academic and industrial perspective. Having invented a catalyst that addresses an unmet need in asymmetric hydrogenation, many challenges remain before the catalyst provides an economic return. The knowledge gained and shortcomings recognized during scale-up and commercialization can lead to greatly improved 'next generation' catalysts.

This presentation highlights recent advances in our labs and the commercialization of many chiral phosphine ligands by Chiral Quest, Inc. The broad array of our chiral catalyst toolbox and their numerous applications for a variety of functional group hydrogenations will be reviewed. The emphasis will be on the practical application of asymmetric hydrogenation to make chiral pharmaceutical in ton scale.



Date: 3rd May 2017 (Wednesday)
Time: 10:30am – 12:00pm
Venue: SPMS Research & Graduate Studies Office Conference Room
Host: Professor Tan Choon Hong