Assistant Professor KOH Ming Joo

(President's Assistant Professor)

1 Post-Doctoral Research Fellow Position Available

We have one funded position available from July 2018 onwards for individuals who are interested in pursuing post-doctoral studies in Singapore. Annual base salary for post-doctoral research fellows is approximately S$48,000 (negotiable). Contract is for one year (renewable). Talented and self-motivated chemists with a strong background in synthetic organic chemistry, organometallic chemistry, medicinal chemistry and/or natural product synthesis are welcome to join us. Good English proficiency and communication skills are mandatory. Please send an electronic copy of your curriculum vitae (CV), research summary and contact information of referees to Dr. Koh at mjkoh87@gmail.com. Various funding opportunities are available in Singapore. For further enquiries, please contact Dr. Koh via email. For more information on the chemistry department, please visit: http://www.chemistry.nus.edu.sg

Research Interests

Stereoselective catalysis has revolutionized the art of chemical synthesis and tremendous progress has been made in this area over the last few decades. Despite these advances, many existing protocols suffer from poor applicability and often rely on catalyst systems that contain increasingly expensive noble metals. The high cost and limited availability of these metals makes it compelling to search for more economical and sustainable alternatives.

The key objective of our program is to develop sustainable and enabling catalytic solutions that address critical and unresolved problems in chemical synthesis. Our research approach will leverage creative, direct and unprecedented disconnections of complex target molecules to fuel our efforts in devising practical stereoselective methods that utilize abundant, biocompatible and inexpensive catalysts. Insights gained from the study of reaction mechanism will aid us in designing new catalyst systems that promote transformations to facilitate economically and environmentally viable preparation of important compounds for the chemical, pharmaceutical and polymer industries.

Current topics of interest include: (a) development of catalytic transformations involving organohalides for rapid assembly of bioactive natural products and pharmaceuticals, (b) design and preparation of novel fluorinated building blocks for medicinal and polymeric material applications and (c) discovery of new reactivity patterns in synergistic catalysis for efficient synthesis and diversification of therapeutic agents. We cordially welcome collaborations in all areas of research including chemical biology and materials science.

Research Publications