Prof Huang Kuo-Wei

King Abdullah University of Science and Technology

Wednesday, 28 September 2022
10:00am to 11:00am (SGT)

Venue: Ciston A and B@Matrix Level 5

Seminar is open to all
No registration required

Understanding catalysis for small molecules activation and functionalization.

Catalysis plays an important role in organic synthesis relevant to the pharmaceutical industry by offering more economical and greener manufacturing processes. A summary of our results and ongoing research programs in both organocatalysis (with emphasis on non-covalent bonding interactions) and transition metal catalysis (in particular the Hunag PN3(P) pincer ligand platform) will be highlighted to showcase how the mechanistic understanding could guide our design and synthesis of catalysts with novel or improved reactivity for small molecules activation and functionalization.

Kuo-Wei Huang received his B.S. from National Taiwan University as a Yuan T. Lee Fellow and Ph.D. from Stanford University as a Regina Casper Fellow. Prior to joining KAUST as a founding faculty member, he had been Assistant Professor in National University of Singapore and Goldhaber Distinguished Fellow at Brookhaven National Laboratory. The research interests of his group include CO_2 utilization, hydrogen storage, small molecules activation and synthesis (particularly on the PN3(P) ligand platform his group has developed and pioneered) and kinetic and DFT studies of transition metal and organocatalysis. He has received numerous awards, including Appreciation of distinguished teaching contribution, Ministry of Education, Saudi Arabia (2017), Rising Stars Lectureship, 41st International Conference on Coordination Chemistry (2014), and Asian Rising Stars Lectureship, the 15th Asian Chemical Congress (2013). He was recently highlighted in "Pioneers and Influencers in Organometallic Chemistry" in Organometallics in 2020.

Questions? Contact us at **seminars@idlabs.a-star.edu.sg**

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