

## CBC SEMINAR ANNOUNCEMENT



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### Advances in Target-Oriented Synthesis – A Recent Account

Over the course of history, Target-Oriented Organic Synthesis has served admirably as a vehicle for advancing chemical, physical and biological sciences. Concurrently, the thought-process behind a synthetic chemist's mind, as reflected in the masterfully designed and executed synthetic campaign, has also evolved tremendously over the last two decades. While serving its multifaceted role in methodological developments, structural and biological investigations, we pondered the underlying scientific essence that is uniquely bestowed by target-oriented Total Synthesis. In this talk, snapshots of current projects from a design viewpoint will be discussed, together with personal thoughts of Target-Oriented Organic Synthesis. Hopefully, this lecture will transform our perception of total synthesis beyond simply a "compound-making" exercise, and uncover new possibilities for future directions.



#### References:

#### Reviews:

- 1) Adventures in Total Synthesis – A Personal Account. *Synlett*. **2011**, *17*, 2459-2481;
- 2) A Personal Perspective on Organic Synthesis: Past, Present, and Future. *Isr. J. Chem.* **2018**, *58*, 85-93.

#### Research articles:

- 1) A Local-Desymmetrization-Based Divergent Synthesis of Quinine and Quinidine. *Angew. Chem. Int. Ed.* **2019**, *58*, 488-493
- 2) A Desymmetrization-Based Total Synthesis of Reserpine. *Angew. Chem. Int. Ed.* **2018**, *57*, 16152-16156
- 3) Asymmetric Total Syntheses of Communesin F and a Putative Member of the Communesin Family. *Angew. Chem. Int. Ed.* **2017**, *56*, 14237-14240
- 4) An Asymmetric Pathway to Dendrobine by a Transition-Metal-Catalyzed Cascade Process. *Angew. Chem. Int. Ed.* **2017**, *56*, 12250-12254
- 5) Total Synthesis of Actinophyllic Acid. *Angew. Chem. Int. Ed.* **2017**, *56*, 12277-12281
- 6) Total Synthesis of Strychnine. *Chem. Eur. J.* **2017**, *23*, 16189-16193.

<b>Date:</b>	<b>21<sup>st</sup> March 2019 (Thursday)</b>
<b>Time:</b>	<b>2.30pm to 4.00pm</b>
<b>Venue:</b>	<b>SPMS Research &amp; Graduate Studies Office Conference Room</b>
<b>Host:</b>	<b>Professor Loh Teck Peng</b>