

Advanced Material Chemistry Lecture Series 2018

Title of Lecture: Simplifying Molecular Complexity:
Synthetic Routes to Novel Polymer Materials

Speaker: Professor Patrick Théato

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Date: December 17, 2018

Venue: Room 1004/4, 10th Floor, Mahamakut Bldg., Faculty of Science,
Chulalongkorn University

Time: 9.00- 12.00

Abstract: Incredible progress has been made in synthetic polymer chemistry to control the polymer chain length, structure and architecture, leading to an ever-increasing molecular complexity which usually demands for highly advanced specialists possessing the skillset to synthesize such chemical structures. This clearly limits or slows down the advancement to new scientific areas. Hence, we have addressed this challenge over the years by developing *simple* synthetic routes, while maintaining a molecular complexity, thereby providing the synthetic tools for many scientists to prepare highly functional polymer materials with unprecedented molecular precision. Synthetic routes, possibilities, remaining challenges and opportunities for next generation polymers will be discussed with the aim to development and study of structure-property relationships of polymeric materials. As such, novel syntheses of polymer materials for smart materials and battery related materials will be presented as examples.