

Webinar

Part-I: Computer-Planned One-Pot Synthesis of Oligosaccharides Derived Commercial Drugs & Potential Vaccine Candidate &

Part-II: Synthesis, Conformation and Glycosidic Bond Stability of Septanoside Sugars

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In this talk, I will discuss the development and application of Computer-Program in the synthesis of complex oligosaccharides. The synthesis of complex oligosaccharide has been a challenging task for the synthetic chemists over the years. The development of the computer program, namely, "Optimer" and "Auto-CHO" simplified the synthesis of complex oligosaccharides. The program is based on the Relative Reactivity Value (RRV) of thioglycoside donor and was successfully employed for the one-pot synthesis of oligosaccharides such as heparin sulfate, heparin-based commercial anticoagulants and N-glycans to understand diseases biology. Besides the one-pot synthesis, I will also discuss (i) chemo-enzymatic synthesis of asymmetric N-glycans: A potential cancer vaccine candidate & (ii) synthesis, conformation and stability studies of unnatural seven-membered sugar, namely, "septanosides/septanose"

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5:00 PM