清華大學 化学系

Department of Chemistry, Tsinghua University

学堂班系列讲座

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报告题目： **Designer DNA Architectures for Programmable Self-assembly**

时　　间：2015年12月2日（星期三）晚7点

地　　点：化学馆301会议室

Abstract：The central task of nanotechnology is to control motions and organize matter with nanometer precision. To achieve this, scientists have investigated a large variety of materials including inorganic materials, organic molecules, and biological polymers as well as different methods that can be sorted into so-called “bottom-up” and “top-down” approaches. Among all of the remarkable achievements made, the success of DNA self-assembly in building programmable nanopatterns has attracted broad attention. In this talk I will present our efforts in using DNA as an information-coding polymer to program and construct DNA nano-architectures with complex geometrical features. Use of designer DNA architectures as molecular sensor, actuator and scaffolds will also be discussed.