

CBC SEMINAR ANNOUNCEMENT



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Inorganic Nanomaterials: Functional Scaffold in Therapeutics and Diagnostics

The past decade has shown tremendous advances in the synthesis of inorganic nanomaterials with precisely controlled structures and properties. If we can engineer these nanomaterials to sensitively diagnose cancer and infectious diseases, it will provide critical information for stratifying patients and assessing treatment efficacy. Furthermore, the development of nanomaterials for drug delivery will improve the bioavailability and enhance the therapeutic efficiency. In this talk, I will describe my research efforts in functional inorganic nanomaterials focused on 1) the synthesis of highly porous nanomaterials as versatile carrier and delivery system for biologically active molecules, and 2) the development of signal amplification in magnetic resonance assay for molecular diagnostics. These efforts are specifically designed to address two issues: How can we provide relevant clinical diagnoses using limited sample specimen and minimal purification? How can we enhance the therapeutic efficacy to eliminate the disease, but minimize the damage to healthy tissues? Combining these methods with current technology can potentially resolve current diagnostic and therapeutic challenges in oncology and global health.

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| Date: | 20th July 2012 (Friday) |
| Time: | 2:30pm – 4:00pm |
| Venue: | NTU SPMS CBC Building Level 2, Conference Room |
| Host: | Asst Professor Zhao Yanli |