



## **Research Profile**

Name: Yang Li
Position: Lecturer

Institute/division: College of Materials Science and Engineering,

**Beijing University of Chemical Technology** 

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## **SUMMARY OF MY RELEVANT RESEARCH AREAS:**

Building nanostructures using living radical polymerization, Multifunctional nanoparticles for drug delivery and bio-imaging, Polysaccharide based hydrogels for medical applications.

通过活性自由基聚合构建纳米材料,多功能药物控释及示踪纳米载体,多糖基水凝胶医用材料。

# **Primary Research interests:**

Dr. Li did his PhD research on nanoparticles for bio-imaging applications in The University of New South Wales under the supervision of Prof. Thomas Davis and A/Prof. Cyrille Boyer. Then he moved to ARC Centre of Excellence in Convergent Bio-Nano Science & Technology (Monash University) to keep on his research on Nano-medicine. At the moment, Li is a lecturer of Beijing Laboratory of Biomedical Materials, Beijing University of Chemical Technology.

Main research projects include:

Biomaterials for Immunotherapy: Using nano-sized materials to stimulate immune systems.

Biomaterials for Chemotherapy: The designation of advanced drug delivery systems.

**Biomaterials for Wound Dressing:** The development of novel dressings for burn wound healing and diabetic foot.

Topics in which you would like to develop collaborative research:

Drug delivery systems, advanced wound dressing







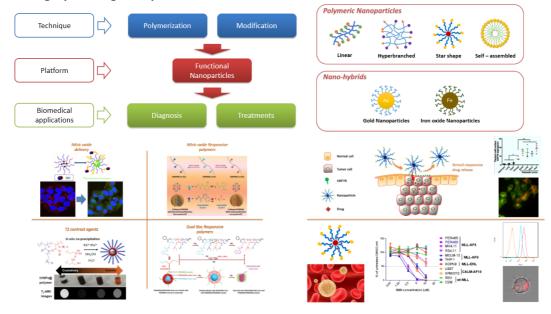




## Relevant existing collaborations (academic/clinical/commercial) inside or outside China.

Australia: The University of New South Wales, Monash University

### Relevant graphics, figures, pictures:



## Publications and other outputs relevant to your interest in this programme (up to 5)

ARC Discovery Grants DP110104251 (PhD Thesis, Ranked A+)

Title: New polymers for imaging applications

Summary: Cancer and cardiovascular disease are the most devastating diseases in any developed country. This project describes improved imaging agents to improve the detection and earlier treatment of diseases whilst avoiding any problems with toxicity of imaging agents in the body.

## ARC Discovery Grants DP1092640

Title: Polymer Stabilized and Bio-functionalised Metal Nanoparticles as Potential Vectors for Drug Therapies

Summary: The project aims to make novel nanoparticles (extremely small, nano means one billionth of a meter) that carry medicines to very specific sites of the body and then release them. This would result in much improved outcomes for conventional chemotherapy but may also allow new gene therapies where diseases can be silenced at their source.

# ARC Discovery Grants DP130100107

Title: Design of multimodal polymeric nanoparticles as targeted carriers for the co-delivery of therapeutic molecules

Summary: This project will greatly enhance the tools available to oncologists by providing new treatment options, minimising side-effects to conventional chemotherapy approaches. In this project, the design of next generation of drug delivery will be developed using the most recent advances in materials sciences.

#### NSFC 51603008

Title: Novel polysaccharide assemblies as controlled cytokines delivery vectors.



