



## Open PhD Positions – Macromolecular and Bioorganic Chemistry / Nanomaterial Science

**Location:** University of New South Wales, Sydney (Australia)  
School of Chemical Engineering – [WichLab.com](http://WichLab.com)

**Starting Date:** within next 6-12 months

**Duration:** 3–3.5 years

**Title:** Biopolymer-based Nanomaterials for Applications in Drug Delivery and Catalysis

### **Project Details:**

Nature's polymers, such as polysaccharides and proteins show a remarkable versatility as multifunctional materials. They can be easily modified with the toolkit of bioorganic chemistry and are particularly attractive because of their degradability and biocompatibility. Since they are structurally well-defined biopolymers they can be used for the formation of multifunctional nanomaterials, for example for the delivery of therapeutic drugs or being part of advanced molecular machines. The open PhD projects will focus on the preparation of biopolymer-based nanomaterials using various chemistry and nano/biotechnological approaches.

Key techniques (projects can be adjusted based on interest and experience): organic chemistry, biochemistry, bioconjugation methods, nanoparticle preparation, bio assays, cell culture

### **Further information:**

The successful candidate will work in a highly interdisciplinary and world-leading research environment and will be a member of the Centre for Advanced Macromolecular Design (CAMD) and the Australian Center for NanoMedicine (ACN). The PhD degree at UNSW is a 3–3.5 year research-intensive course (there is no requirement to teach lab courses or give seminars and tutorials). Research will primarily be based at the University of New South Wales in Sydney. However, international research stays, and conference visits are encouraged and will be supported during the PhD time. PhD students are supported by scholarships that cover living expenses and waive tuition fees.

UNSW Sydney: [www.unsw.edu.au/about-us/excellence](http://www.unsw.edu.au/about-us/excellence)

School of Chemical Engineering: [www.unsw.edu.au/engineering/our-schools/chemical-engineering](http://www.unsw.edu.au/engineering/our-schools/chemical-engineering)

### **Contact us / Application:**

Interested candidates are encouraged to send their application documents via email. Please don't hesitate to contact us in advance if you have questions. We are looking forward to your application!

➔ Visit our website for more details about our research focus and the open positions: [www.wichlab.com/join](http://www.wichlab.com/join)

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