MONASH University
Engineering

Summer Research Program 2011/2012

Project Title: Graphene-based drug delivery nanosystems

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Objective

This project aims to explore the application of graphene-based functional hydrogels for drug delivery.

Description

Graphene, a Nobel-Prize winning nanomaterial, has received tremendous interest throughout the world. Our group has recently discovered that chemically modified graphene can form a new class of ultrastrong, electroconductive hydrogels. When used as electrodes for energy storage devices (supercapacitors), this new nanostructure significantly outperforms other existing carbon materials. This project will explore the application of this new class of carbon nanomaterials for smart drug delivery system. The successful student will have an opportunity to work with senior researchers in the frontier of nanotechnology and is expected to co-author publications relating to this research.

For more information about our group's research, please visit: http://users.monash.edu.au/~lidan/.

Self-motivated students with a background in materials science and engineering, general chemistry and physics are encouraged to apply.