



"Molecular Self-Assembly: Biomimetics as a route to novel products and processes"

2nd Nanoforum Summer School

University of Cambridge Nanoscience Centre

Sunday 5th to Friday 10th September 2004

A rare opportunity to learn from world-class scientists about using nature as a model for and provider of nano scale-up technology.

Biomimetics and molecular self-assembly are rightly attracting interest from many industries, with applications in electronics, energy, material sciences and medicine to name but a few. Learning from nature we can improve biocompatibility, produce more complex electronic circuits, engineer material surfaces to have many different properties, efficiently harvest energy from natural light and provide locomotion and motility to nanoscale objects and mechanisms.

This five-day school is essential for any post-graduate or post-doctoral researcher who wants to learn about cutting edge developments and techniques in molecular self-assembly and biomimetics. The school has been designed to have a blend of seminars and practical classes (which will be held in the laboratories of the Nanoscience Centre) with ample opportunity for participants to discuss and learn from world-class scientists.

Speakers include:

Dr Jon Preece	University of Birmingham	<i>"Introduction to top-down and bottom-up fabrication." "Nanoscale surface modifications."</i>
Dr Cait Ma'Phee	University of Cambridge	<i>Amyloid fibril self-assembly.</i>
Prof Tony Ryan	University of Sheffield	<i>"Introducing soft-nanotechnology: directed and self-assembled polymer systems."</i>
Prof Peter Laggner	Austrian Academy of Sciences	<i>"Membranes- self-assembly in natural and artificial systems."</i>
Dr Dek Woolfson	University of Sussex	<i>"The self-assembly of natural peptides and proteins." "Designing peptide-based nanostructures from the bottom up."</i>
Prof Graham Leggett	University of Sheffield	<i>"Self-assembled monolayers: versatile templates for molecular nanostructures."</i>
Dr Teodor Silviu Balaban	Forschungszentrum Karlsruhe	<i>"Natural and artificial light-harvesting nanostructures."</i>
Dr Richard Berry	University of Oxford	<i>"The bacterial flagellar motor, a (nearly) self-assembled nano-machine".</i>
Dr Brian More	University of Coventry	<i>Intellectual property rights and patenting.</i>

