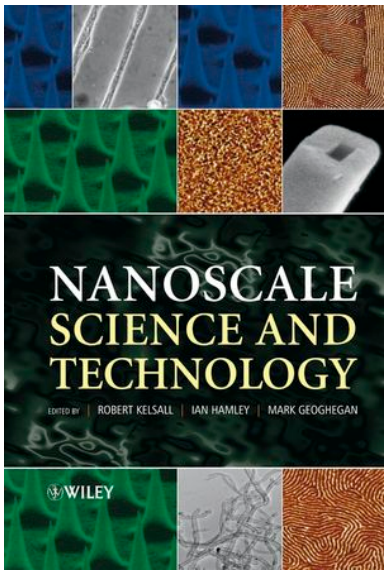

Nanoscale Science and Technology

Robert Kelsall (Editor), Ian W. Hamley (Co-Editor), Mark Geoghegan (Co-Editor)

E-Book	ISBN: 978-0-470-02086-9	November 2005	**£72.99**
Hardcover	ISBN: 978-0-470-85086-2	February 2005	**£80.00**
O-Book	ISBN: 978-0-470-02087-6	December 2005	**Available on Wiley Online Library**

DESCRIPTION

Nanotechnology is a vital new area of research and development addressing the control, modification and fabrication of materials, structures and devices with nanometre precision and the synthesis of such structures into systems of micro- and macroscopic dimensions. Future applications of nanoscale science and technology include motors smaller than the diameter of a human hair and single-celled organisms programmed to fabricate materials with nanometer precision.

Miniaturisation has revolutionised the semiconductor industry by making possible inexpensive integrated electronic circuits comprised of devices and wires with sub-micrometer dimensions. These integrated circuits are now ubiquitous, controlling everything from cars to toasters. The next level of miniaturisation, beyond sub-micrometer dimensions into nanoscale dimensions (invisible to the unaided human eye) is a booming area of research and development. This is a very hot area of research with large amounts of venture capital and government funding being invested worldwide, as such Nanoscale Science and Technology has a broad appeal based upon an interdisciplinary approach, covering aspects of physics, chemistry, biology, materials science and electronic engineering. Kelsall et al present a coherent approach to nanoscale sciences, which will be invaluable to graduate level students and researchers and practising engineers and product designers.

ABOUT THE AUTHOR

Robert W Kelsall is Course director for the joint Leeds/Sheffield MSc in Nanoscale Science and Technology, which was one of the first (and is currently one of the largest) taught postgraduate nanotechnology programmes to be established in Europe. **Ian Hamley** and **Mark Geoghegan** are both actively involved in the delivery of the course. All three Editors manage substantial research programmes covering low-dimensional semiconductor devices, structured surfaces and interfaces, polymers and soft matter.