Preface

Nanotechnology is the study of the control of matter on an atomic and molecular scale. Nanotechnology has promised to be one of the important growth areas in the twenty first century: it has the potential to create many new materials and devices with wide-ranging applications in medicine, electronics, energy production and so on. Since the invention of the scanning tunnelling microscope and the discovery of fullerenes in the 1980s, researchers worldwide have devoted much resources and effort to harness the potential of technology at the nanoscale.

This book is a collection of twelve review articles written by experts in their respective fields, and is classified under the sub-headings:

- Scanning Probe Techniques
- Nanofabrication
- Functional Nanomaterials
- Molecular Engineering
- Bionanotechnology and Nanomedicine

Although the coverage is not exhaustive, these reviews are representative of the current research areas in nanoscience and nanotechnology. This book is suitable as a resource volume for a senior undergraduate or introductory graduate course in nanoscience and nanotechnology, as well as for general scientific readership. The articles were originally written for the review journal *COSMOS* (Volume 3 Issue 1 and Volume 4 Issue 2).

We believe you will find this book useful and informative.

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