

M. PHILS. (one-year courses), DIPLOMAS AND SPECIAL COURSES

MICHAELMAS 2005

LENT 2006

EASTER 2006

M. PHIL. IN MATERIALS MODELLING

Course Organiser: Dr P. D. Bristowe. (email: pdb1000@cus.cam.ac.uk)

Lectures will be delivered in the *Department of Materials Science and Metallurgy*

PROF. A. H. WINDLE AND DR K. M. KNOWLES

MP1a. Introduction to Materials Science. (Five lectures)

DR P. D. BRISTOWE AND DR M. R. MANNING

MP1b. General Methodology of Modelling. (Seven lectures)

DR P. D. BRISTOWE

MP2. Ab Initio Methods and Approximations. (Twelve lectures)

DR J. A. ELLIOTT

MP3. Montecarlo and Molecular Dynamics Methods. (Twelve lectures)

PROF. D. J. FRAY AND DR J. A. LITTLE

MP4. Thermodynamics and Phase Diagrams. (Ten lectures)

PROF. A. L. GREER AND DR R. V. KUMAR

MP6. Kinetics and Microstructure Modelling. (Fifteen lectures)

DR H. R. SHERCLIFF

MP7. Finite Element Modelling. (Six lectures)

DR J. A. ELLIOTT

MP5. Mesoscale and Multiscale Modelling. (Seven lectures)

DR T. SOURMAIL

MP9. Information Theory. (Four lectures)

DR K. M. KNOWLES

MP10. Plasticity and Deformation Processing. (Nine lectures)

DR E. R. WALLACH

MP11. Integrated Selection of Materials and Processes. (Three lectures)**M. PHIL. IN MICRO- AND NANOTECHNOLOGY ENTERPRISE**

Course Director: Prof. M. G. Blamire, (e-mail: mb52@cam.ac.uk)

Lectures will be delivered in the *Department of Materials Science and Metallurgy*

DR A. C. TWITCHETT AND DR A. ILIE

NE.01 Characterisation Techniques (Sixteen lectures)

DR A. A. SESHIA

NE.02 MEMS Design (Sixteen lectures)

DR A. FLEWITT

NE.03 Materials and Processes for MEMS (Sixteen lectures)

PROF. M. G. BLAMIRE AND DR Z. BARBER

NE.04 Nanofabrication Techniques (Sixteen lectures)

PROF. A. L. GREER AND DR I. A. KINLOCH

NE.05 Nanomaterials (Sixteen lectures)

DR W. T. S. HUCK AND DR S. CLARKE

NE.06 Nanochemistry (Sixteen lectures)

DR C. DURKAN, DR D. G. HASKO AND DR J. A. ELLIOTT

NE.07 Physical Properties at the Nanometre-scale (Sixteen lectures)

DR P. D. BARKER

NE.08 Bionanotechnology (Sixteen lectures)**Additional lecture courses**

MR W. BAINS

T14BBE Building and Financing: a High Tech Business (Thirty-two lectures) to be arranged by the Institute of Biotechnology

VARIOUS LECTURERS

MoTI Management of Technology and Innovation (Forty-eight lectures) to be arranged by the Judge Institute of Management

DR R. DOUBLEDAY

Societal and Ethical Dimensions of Technology