

UK Magnetism Society

Tuesday, 12 December 2006

at The Institute of Materials, Minerals and Mining
1 Carlton House Terrace, London SW1Y 5DB

afternoon seminar

Nuclear Fusion and the Challenge for Magnetism

Chairman: Dr Alex Michaelides, Vector Fields Ltd

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| 1430 REGISTRATION/TEA | 1600 Mechanical Engineering Challenges in Fusion , David Martin, UKAEA Culham Division |
| 1500 Scientific and Engineering Challenges of a Demo Fusion Reactor , Dr Derek Stork, UKAEA Culham Division | 1630 Applications of Magnetic Field Systems in Fusion Research , Tom Todd, UKAEA Culham Division |
| 1530 Power Supplies , Stephen Shaw, UKAEA Culham Division | 1700 TEA |
| 1730 20th Ewing Lecture: Guest Speaker Dr Frank Briscoe, Operations Director, UKAEA Culham Division | |

Magnetic Fusion Energy: Progress and Remaining Challenges

Considerable progress has now been made in the use of magnetic fields to control hot D-T plasmas capable of producing fusion energy, one major highlight being the production of 16 MW of fusion power in the JET device at Culham. The recent decisions to construct ITER - the next major device in the roadmap to fusion power, a 10B• project involving Europe, Japan, Russia, USA, China, India and South Korea, and to finalise the design of IFMIF, an accelerator-based fusion materials test facility, with a view to constructing it in parallel to ITER, mark the beginning of a transition from the 'science' to the 'engineering' stage.

The lecture will cover the motivation for developing fusion as an energy source, the progress to date with magnetic confinement, the remaining challenges including the roles of ITER and IFMIF, and the final steps in the roadmap to commercial fusion power. The UK contribution will also be brought out.

- 1845 DENNIS HADFIELD MEMORIAL PRIZE AWARD
[Best Student Bursary Conference Report in Magnews]
- 1900 BUFFET SUPPER
- 2030 END

PLEASE COMPLETE AND RETURN TO:

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I wish to attend the UK Magnetism Society afternoon seminar *Nuclear Fusion and the Challenge for Magnetism* and the 20th Ewing Lecture *Magnetic Fusion Energy: Progress and Remaining Challenges* to be held on Tuesday, 12 December 2006, at The Institute of Materials, Minerals and Mining, London, and enclose remittance to cover technical sessions, seminar documentation, refreshments and buffet supper (**cheques made payable to 'UK Magnetism Society' and drawn on a UK bank**). Payment may also be made by bank transfer: UK Magnetism Society, Barclays Bank plc, 17 Market Place, Wantage, Oxon OX12 8AG, UK, Account No 50893293, Sort Code No: 20-90-91; **please add on £10 to cover bank charges if paying by bank transfer from overseas**.

If you wish to pay by VISA/Mastercard/Delta etc, please complete all sections of the form overleaf.

	Fee	VAT	Total
<input type="checkbox"/> UKMAG member	£80.00	£14.00	£94.00
<input type="checkbox"/> UKMAG student member	£40.00	£7.00	£47.00
<input type="checkbox"/> Non-member	£140.00	£24.50	£164.50
<input type="checkbox"/> Non-member student	£60.00	£10.50	£70.50

Please register by by 4 December 2006 if possible

Surname.....

First name.....Title (Dr/Mr/Mrs etc).....

Organisation.....

Address.....

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