

UK Magnetics Society

one day seminar

Magnetics in Medicine

Wednesday, 21 February 2007

at the University of Birmingham
Department of Mechanical and Manufacturing Engineering

Magnets and magnetic sensors are finding increasing uses in medical and biological applications such as heart pumps, orthodontics, body scanners, nerve stimulation etc. There has also in recent times been much interest in examining the effect of EMF fields on biological specimens to determine if these pose a risk to human health. This seminar will look at all aspects of magnetics in medicine and the interaction of magnetics with biological systems.

PROGRAMME

from 0900 REGISTRATION/COFFEE

Chairman: Dr Robin Cornelius, Hirst Magnetic Instruments

1000 WELCOME/INTRODUCTION

1010 **The Application of Permanent Magnets in Medical Devices**, Dr Andy Williams, University of Birmingham, Dept of Metallurgy and Materials

1040 **Bilayer Magnetic Sensors in Biomedical Applications**, Dr Turgut Meydan, Wolfson Centre for Magnetics, Cardiff University

1110 **Some Non-Medical Applications for MRI**, Dr Peter Aptaker, Laplacian Ltd

1140 **Nanostructured Optical Bio Sensors**, Dr David Jenkins, University of Plymouth, School of Computing, Communications and Electronics

1210 LUNCH

Chairman: Dr Andy Williams, University of Birmingham, Dept of Metallurgy and Materials

1340 **Magnetic Nerve Stimulation, Reaching the Parts Other Stimulators Can't Reach**, Prof Tony Barker, Royal Hallamshire Hospital, Dept of Medical Physics and Clinical Engineering

1410 **Diffusion and Differentiation of Magnetic Bone Marrow Stem Cells in Slices of Rat Brain Hippocampus with an Induced Lesion**, Prof Jim Watson, University of Southampton, School of Physics and Astronomy

1440 **Developing and Optimising Magnetic Separators for Use in Biomagnetic Separation**, Dr Gareth Hatch, Dexter Magnetic Technologies Inc, USA

1510 TEA

1525 **Clinical Applications of Magnetic Stimulation**, Chris Hovey, The Magstim Company Ltd

1555 **7T Whole Body Imaging - Technical and Biological Challenges**, Dr Matthew Clemence, Philips Medical Systems UK

1625 END

The UK Magnetics Society accepts no responsibility or liability in any way whatsoever for any statements made or opinions expressed during this event

PLEASE COMPLETE AND RETURN TO:

Margaret Swadling, The UK Magnetics Society,
Grove Business Centre, Grove Technology Park,
Wantage, Oxon OX12 9FA tel: +44 (0)1235 770652,
fax: + 44 (0)1235 772295, email:mswadling@ukmagsoc.
co.uk, www.ukmagsoc.org

I wish to attend the UK Magnetics Society one-day seminar **Magnetics in Medicine**, Wednesday, 21 February 2007, at University of Birmingham, and enclose remittance to cover technical sessions, seminar documentation, refreshments and lunch (cheques made payable to the **UK Magnetics Society** and drawn on a UK bank). Payment may also be made by bank transfer: UK Magnetics Society, Barclays Bank plc, 17 Market Place, Wantage, Oxon OX12 8AG, UK, Acct No 50893293, Sort Code No: 20-90-91; *please add £10 to cover bank charges if paying by bank transfer from overseas.*

If you wish to be invoiced, please give Purchase Order number, if appropriate. PO Number.....

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 organisation	£69.00	£12.08	£81.08
<input type="checkbox"/> As above [student]	£20.43	£3.57	£24.00
<input type="checkbox"/> Non-member	£146.00	£25.55	£171.55
<input type="checkbox"/> Non-member student	£34.00	£5.95	£39.95

Please register by 9 February 2007 if possible

Surname.....

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

Organisation.....

Address.....

Tel.....

Fax.....

Email.....

Web.....



For payment by
VISA/Mastercard/Delta/Electron/
JCB/Solo/Maestro/Switch/AMEX:

*Please complete in BLOCK CAPITALS
and return to:*

Margaret Swadling
The UK Magnetics Society
Grove Business Centre
Grove Technology Park
Wantage
Oxon OX12 9FA
tel: +44 (0)1235 770652
fax: +44 (0)1235 772295
email: mswadling@ukmagsoc.co.uk
www.ukmagsoc.org

Card Number:	<input type="text"/>
Start Date:	<input type="text"/>
Expiry Date:	<input type="text"/>
Name of Cardholder:	<input type="text"/>
Mailing address of Cardholder:	<input type="text"/>
Signature of Cardholder:	<input type="text"/>

**UK Magnetics
Society**

One-day seminar

Magnetics in Medicine

Wednesday, 21 February 2007

at

**University of Birmingham
Department of Mechanical and
Manufacturing Engineering**