



16th - 21st July 2006
York, England
www.euromar.org

Joint conference of British NMR-DG, AMPERE and EENC

INTRODUCTION

The Organising Committee of EUROMAR is pleased to extend an invitation to attend the first in a series of pan European conferences on Magnetic Resonance spectroscopy. This series replaces the British NMR Discussion Group's International Meetings that started in 1969 and finished in Cambridge in 2003, as well as the biannual Congress AMPERE and EENC meetings. The new format will bring together participants from AMPERE, EENC and UK NMR-DG and aims to cater for all parties interested in magnetic resonance.

DATE AND LOCATION

The EUROMAR meeting will take place at the University of York during the period Sunday 16th to Friday 21st July 2006, with participants gathering on the Sunday afternoon. There will be an inaugural reception and presentation on the Sunday evening at which Sir Peter Mansfield, Nobel Laureate, will be presenting some of his latest results. The main sessions will start on Monday morning and the meeting will end at lunchtime on Friday. The Wednesday afternoon and evening have been set aside for organised excursions and an evening meal in one of the Pubs in the area.

YORK

York is situated halfway between London and Edinburgh, approximately 300 km north of London. The walls of the old city are still complete and enclose an area containing York Minster, the Castle (Clifford's Tower), innumerable fine buildings from the medieval period and from the eighteenth century. York Minster is one of the great masterpieces of Gothic architecture. Attractive museums (The Castle Museum, Yorkshire Museum, Jorvik Centre, Fairfax House) allow the visitor to explore local history, including outstanding archaeological finds in Roman, Anglian and Viking times.

The National Railway Museum is extremely popular and will be the venue for the conference dinner. York is within easy range of other sites of interest, including Castle Howard and Fountains Abbey. The coast, the North York Moors and the

Yorkshire Dales may be reached within a 1 or 2 hour drive.

All the lectures and poster sessions will take place at the University on the main campus. This is located in Heslington and forms a 200-acre landscaped park, well-known for its lake and wildfowl. The colleges and academic buildings are on a level site within easy walking distance of each other. Proximity to the historic city of York makes the University a popular choice and provides a pleasant working and residential environment. See www.york.ac.uk for more information about the venue

TRAVEL TO YORK

Air: Leeds Bradford International Airport is 40 km, Robin Hood Airport at Doncaster is 60 km, Durham Tees Valley Airport is 65 km and Manchester Airport is 100 km from York. Heathrow, Gatwick, Luton and Stansted International Airports are located around London approximately 300 km from York. Rail links will get you from any of the above airports to York, except for Leeds Bradford, Robin Hood and Durham Tees Valley Airport, where there are bus connections. The MetroConnect 757 from LBIA to Leeds station, the Airport Arrow from Robin Hood to Doncaster station and Sky Express 737 from DTVA to Darlington station.

Rail: York is on the main East Coast Line from London King's Cross to Edinburgh. Fast trains make stops here for both north and south directions, at frequent intervals. There is also a direct service across the Pennines between York, Leeds and Manchester Airport.

Road: The University is two miles from the railway station and you will need to get a bus or taxi onto campus. A journey by taxi from the railway station to the University will take approximately 15 minutes (cost £5 - £6). There is a taxi rank just outside the station. Number 4 buses run from the station to campus every 8 minutes between 09.00 and 18.00 (cost £1.50) If travelling by car, visitors approaching York from the south or west on the A64 should turn off at one of the exits marked **University** (A19 or A1079), in order to avoid the City centre. Subsequent turns are also signposted. Visitors coming from other directions should take the Selby road (A19) to Fulford and follow signs to the University.

For further details please see www.york.ac.uk/np/maps .

Parking permits are required for the University site at a cost of £3 per day or £10 for the week. Please indicate your requirements on the application form. More information about registration is available on our Website www.euomar.org which has links to the registration site www.confsec.co.uk .

WEATHER

Generally the weather in York in July is pleasant, the average temperature is 24°C. The temperature can get up to 32°C during the day and down to 15°C during the night. It could be bright and sunny or overcast and raining, so please allow for both possibilities.

COMMITTEES

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For further information:
Telephone & Fax: +44 (0)1275 853311
Email: esw@confsec.co.uk

Website: www.confsec.co.uk

POSTERS AND ORAL PRESENTATIONS

Posters will feature as an integral part of the meeting. All participants are invited to submit abstracts of scientific communications that will be peer reviewed for possible acceptance. The Program Committee reserves the right to select and finalise the entire program. Please note that an abstract will not be accepted unless the presenting author is registered for the conference. Some selected abstracts will be invited to be presented as oral communications. Your preference for oral and poster presentation should be indicated on the tick boxes in the on-line abstract submission pages. Persons wishing to offer an oral presentation or poster should produce an abstract according to the format below, and submit it on-line by Monday **April 17th 2006** using the website www.euromar.org . Please note there will be **no on-site registration**.

ABSTRACTS

After you have registered and submitted your abstract(s), confirmation and an acceptance e-mail of its status, will be sent towards the end of April 2006. The abstracts of the accepted communications will be included in an Abstracts Book distributed to all delegates at the start of the conference.

Abstracts should be written in English and can only be submitted electronically through the on-line system, which is available at www.euromar.org/abstracts . Note that abstracts cannot be submitted by fax or post. Authors will be guided automatically through the system when submitting their abstract on-line. Should you experience any difficulties, please contact the conference secretariat by e-mail (esw@confsec.co.uk).

INSTRUCTIONS FOR ABSTRACT SUBMISSION

The abstracts will be reproduced directly from the file that is submitted. The typed area will be contained within a rectangle of size 150 x 210 mm in portrait form, justified both sides and minimum point size 12, preferably Arial font. There should be a 30 mm heading margin. The heading should be presented as below, including the full line separating text and heading. References, denoted by superscript numbers in the text, should be listed at the end using standard Chemical Abstracts Source Index (CASSI) terminology followed by Year, Volume and Pages. An example is shown below.

USE OF PARAHYDROGEN TO STUDY CATALYTIC REACTIONS BY NMR SPECTROSCOPY

S B Duckett, D Blazina, S. Anwar, H Carteret, J Jones.

Department of Chemistry, University of York, York, YO10 5DD, UK. (sbd3@york.ac.uk)

By using parahydrogen that is preformed at 20 K, it is possible to produce a pure two-spin state for the two hydride ¹H nuclei in Ru(H)₂(CO)₂(dpae), where dpae indicates.....¹

1. Anwar, M. S., Blazina, D., Carteret, H., Duckett, S. B. and Jones, J. A. *Chem. Phys. Lett.* **2004**, 400, 94-97

SOCIAL PROGRAMME

A full programme of evening social events is planned, including the inaugural reception on the Sunday evening for all participants and their accompanying guests. The Conference Dinner will be held in the York Rail Museum on the Thursday evening.

The Scientific sessions on Wednesday will end at lunchtime, so as to allow persons to participate in organised excursions on Wednesday afternoon and evening. The charges include all entrance fees, and a pub evening meal.

There are six excursions to choose from. The York tour has no participant limits, but the others will be assigned on a first-come-first-served basis.

EXCURSION A Tour of York

The group will start with a guided tour of York Minster and then visit the Jorvik Viking Centre and then the Merchant Adventurer's Hall. The Merchant Adventurers Hall is a magnificent building constructed of oak beams in the 1350s for the Merchant Adventurers, the guild of export and import tradesman. It is one of the finest mediaeval timber buildings in Europe.

The Jorvik Centre brings archaeology to life with an accurate reconstruction of a Viking village on the banks of the river, complete with wax figures, sounds and smells. The tour finishes with a visit to the museum of finds, from the dig where the horrific injuries inflicted with mediaeval weapons can be appreciated.

EXCURSION B Walk in the North Yorkshire Moors

The walk of about 10 km will start in Old Byland and follow the valley past Rievaulx Abbey, one of the magnificent ruined mediaeval abbeys, to Helmsley.

Participants should be equipped with boots or shoes suitable for rough and wet ground, and waterproofs are also advisable.

EXCURSION C Visit to Fountains Abbey

Fountains Abbey and Studley Royal encompasses the spectacular ruins of the 12th century Cistercian Abbey, a mansion of the early 17th century and the 18th century Water garden with its lakes, avenues neo-classical temples and cascades all set in a beautiful valley on the edge of the Yorkshire Dales.

EXCURSION D Visit to Pickering Castle and Whitby

Pickering Castle is a fine mediaeval castle built mostly between 1180 and 1330. It includes a curtain wall and a circular keep built on an artificial hill (or motte). Whitby is a small fishing port with a ruined Abbey on top of the cliffs above the town. This is where Captain Cook learned his trade.

The Captain Cook Memorial Museum houses manuscripts, water colours and drawings. The streets of Whitby include numerous old buildings and attractive small shops selling local specialities including jewellery made of jet, an unusual black stone.

EXCURSION E
Visit to Royal
Armouries
Museum Leeds

The Royal Armouries Museum was opened in 1996 as the new home for the national collection of arms and armour. There are five themed galleries covering War, Tournament, Self-Defence, Hunting and the arms and armour of the Orient that offer something to captivate the visitor. There is an exciting combination of spectacular displays, dramatic interpretations, live action events, interactive technology and thrilling exhibitions.

EXCURSION F
Visit to Castle
Howard

Castle Howard is the vast and opulent Baroque country house built to a very original design by Vanbrugh starting in 1701. It is the largest house in Yorkshire and has been the home of the Howard family, since the 17th century. The house has many superb rooms, filled with fine furniture, statues and beautiful china. You will marvel at the remarkable collection of paintings by Rubens, Tintoretto, Van Dyke, Canaletto and Reynolds; the most famous is the portrait of Henry VIII. There is also a 1,000-acre park to explore with lovely lakes, fountains and a rose garden. The visit will include entrance to Kew at Castle Howard.

Accompanying
Persons
Programme

A guided tour of York has been arranged for **Monday 17th July**. This will include a visit to York Minster, lunch at St Williams College, a tour of the Jorvik Viking Centre and Clifford's Tower.

On **Tuesday the 18th July**, a coach tour of the Yorkshire Dales is planned. This will include stops at Hawes, home to Wensleydale Cheese and Grassington, a small village centred around a cobbled square with a selection of family-owned shops offering quality food, clothing and gifts, alongside small cosy cafes and restaurants and will include lunch.

Accompanying Persons are encouraged to enrol with their partners on one of Wednesdays' Excursions. Thursday is left free.

The Conference Secretariat reserves the right to cancel a tour or excursion if the minimum number of participants is not met.

Vendor Delegates

Vendor delegates, who will not be attending any of the lectures because they are involved in their respective company's exhibitions, have the option to register as an 'exhibitor only' with no Programme and Abstract book or access to the lecture programme, ie the same as an accompanying person.

E-Mail Facilities
&
Telephone

The Conference venue offers access to the internet through the University's computer network from several computer labs across the campus. Each user will require a username and password and should you require this facility then it will need to be pre-ordered at a cost of £10 per username for the week. Alternatively, if you bring a laptop with you, the telephone point in the bedrooms may be used to access the internet. Use of the telephone points requires a 'Dog n Bone' card (minimum charge of £5) purchased on site from the Duty Porter at College Receptions.

FEES & ACCOMMODATION

The fees for attendance at the Conference for delegates registering and paying before **April 17th 2006** will be £220 (£110 for students or retired delegates and £50 for accompanying persons or vendor delegates 'exhibitor only'). The registration fee includes the conference dinner to be held at the National Railway Museum on the Thursday evening. **Only single occupancy en suite** rooms and standard rooms, all non-smoking, are available during the meeting. The full board package for the duration of the meeting (5 nights) will be £420 for an *en suite* room or £340 for a standard room. The accommodation package includes room plus meals from Sunday evening through to Friday lunch. The exceptions are the Wednesday and Thursday evening meals. The Wednesday afternoon Social Event (£35) will also include the evening meal. For those not going on excursions on Wednesday, dinner can be purchased separately at the conference venue. Alternatively information on hotel accommodation for family groups can be found at www.york-tourism.co.uk and meals at the venue, purchased on request to the Conference Secretariat.

STUDENT GRANTS

EUROMAR gratefully acknowledges the generosity of the manufacturers of MR equipment, vendors of MR related products and several scientific organisations and industries. As sponsors of EUROMAR, they have made possible a number of grants for students, which will be available from February 2006. A prospective grantee is required to present a poster. A grantee is also eligible for presenting the poster in a contributed lecture. Grant applications will be evaluated by the EUROMAR Board of Trustees and the Program Committee. Students (people currently studying for an undergraduate or postgraduate degree and born in 1976 or later) wishing to apply should submit:

- an abstract of the poster to be presented,
- a short (not more than one page A4) *curriculum vitae*
- a brief letter of recommendation from his/her supervisor at the time of registration, by fax or mail to the conference secretary. A deadline of the **9th April 2006** has been set for all students wishing to apply for grants. A £200 contribution towards the registration and accommodation will be made and deducted directly from the cost of the student package.

PAYMENT

Payment for registration and accommodation may be made in one of the following three ways. Please indicate your method of payment on the [on-line application form](#) or print the attached form below and return by e-mail (print with Acrobat distiller as a pdf attachment), post or fax to Elaine Wellingham.

- 1) By sterling cheque
- 2) By Bank Transfer
- 3) By credit card (Visa, Mastercard, or American Express)

Bank:	National Westminster
Account name:	EUROMAR 2006
Account no:	60033134
Sort Code:	60-14-49
IBAN:	GB62 NWBK 6014 4960 0331 34
BIC:	NWBK GB 2L

CANCELLATION POLICY

The registration fees and accommodation fees less a processing fee of £20 will be refunded, provided a written cancellation is received by the Conference Secretary before **17th April 2006**. For cancellations between 18th April and 9th June 2006 a full refund less a fee of £85 will be made, provided written cancellation is received by the Conference Secretary **before 9th June 2006**. Please note that there will be **no refund** for cancellations received **after 9th June 2006**.

The **9th June 2006** is also the deadline for cancellation for Accompanying Persons. No refund will be provided after this date. Substitutions are possible at any time provided the Conference Secretariat is notified by post, fax or e-mail.

FURTHER INFORMATION

Is available on the website:

www.euromar.org

Any organisational/administrative queries may be referred to

Conference Secretariat

Elaine Wellingham
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Tel and Fax: +44 (0) 1275 853311

Email: esw@confsec.co.uk

Scientific queries should be referred to

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e-mail: Duncan.Farrant@gsk.com

Local queries should be referred to

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Fax: 44 (0) 1904 432516

Email: sbd3@york.ac.uk

Scientific Programme EUROMAR 2006

Sunday 16 July	
From 14.00	Registration & Poster mounting
18.30	Mixer & Dinner
20.00	Welcome: Central Hall EUROMAR Medal Lecture Sir Peter Mansfield "MRI of Fluid Flow in Porous Media - Applications to the Oil Industry"
21.00	Hospitality suite party by JEOL & Oxford Instruments and Poster mounting

Monday 17 July			
09.00	Plenary Lectures: Central Hall Pharmaceutical Applications: Lucio Frydman "Principles and Progress in Ultrafast Multidimensional NMR" Imaging: Klaes Golman "Real-time Metabolic Imaging using Hyperpolarized ¹³ C"		
10.30	Coffee Break		
11.00	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none; vertical-align: top;"> <p>Session 1A: Chair: Duncan Farrant Pharmaceutical Applications 1 Tony Watts "Receptor dynamics and structure in membranes resolved using solid state NMR" 1 Andrew Mason "Refining vector and antibiotic peptides using data acquired from solid-state NMR" 2 Jean-Baptiste Guilbaud "Solid-state NMR studies of drug-polymer interactions in poly-lactide-co-glycolides" 3 Christoph Deller "Investigation of local Dynamics via ²H Solid-State MAS NMR"</p> </td> <td style="width: 50%; border: none; vertical-align: top;"> <p>Session 1B: Chair: Kevin Brindle Imaging 1: Silvio Aime "Targeting and Responsive Probes for MR Molecular Imaging Applications" 4 Luis Pedros "Gases as structural contrast agents in MRI, controlling the diffusion by admixture of buffer gases for biomedical applications" 5 Michael Fey "MR Microscopy of Small Samples with Resolution Below 10 Micrometers" 6 Susie Huang "Designing feedback-based contrast enhancement for in vivo imaging"</p> </td> </tr> </table>	<p>Session 1A: Chair: Duncan Farrant Pharmaceutical Applications 1 Tony Watts "Receptor dynamics and structure in membranes resolved using solid state NMR" 1 Andrew Mason "Refining vector and antibiotic peptides using data acquired from solid-state NMR" 2 Jean-Baptiste Guilbaud "Solid-state NMR studies of drug-polymer interactions in poly-lactide-co-glycolides" 3 Christoph Deller "Investigation of local Dynamics via ²H Solid-State MAS NMR"</p>	<p>Session 1B: Chair: Kevin Brindle Imaging 1: Silvio Aime "Targeting and Responsive Probes for MR Molecular Imaging Applications" 4 Luis Pedros "Gases as structural contrast agents in MRI, controlling the diffusion by admixture of buffer gases for biomedical applications" 5 Michael Fey "MR Microscopy of Small Samples with Resolution Below 10 Micrometers" 6 Susie Huang "Designing feedback-based contrast enhancement for in vivo imaging"</p>
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18:00	Bruker Vendor presentations: Central Hall		
19.00	Dinner		
20.30	Hospitality Suites with Bruker Party		

Tuesday 18 July			
09.00	Plenary Lectures: Central Hall Methods in Solids: Lyndon Emsley "NMR Crystallography of Powders" Paramagnetic Sys: Jan Schmidt "High-Frequency EPR and ENDOR Spectroscopy on Semiconductor Nanoparticles"		
10.30	Coffee Break		
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Session 4A: Chair: Jeremy Titman Methods in Solids: Stephen Wimperis "NMR of quadrupolar nuclei in solids: new methods for studying structure and dynamics" 19 Sharon Ashbrook "Study of High-Pressure Silicates using High-Resolution NMR and First-Principles Calculations" 20 Sasa Antonijevic "Nitrogen-14 Excitation via Residual Dipolar Splittings (NERDS) in Solids" 21 Steven Brown "High-Resolution Solid-State NMR Methods for Probing Hydrogen-Bonding Interactions"	Session 4B: Chair: Daniella Goldfarb Paramagnetic Systems 2: Thomas Prisner "Multidimensional Hyperfine and REFINE Spectroscopy on Metalloenzymes" 22 Edward Reijerse "Spin Density Distribution in the Active Site of Iron-only Hydrogenase as revealed by Q band pulsed ENDOR and HYSORE Spectroscopy" 23 George Mitrikas "Pulse EPR Studies on the Copper(II) and Cobalt(II) Complexes of N-Confused Porphyrin" 24 Victor Chechik "Adsorption And Mobility Of Spin-Labelled Thiolate Ligands On The Au Nanoparticle Surface: Pulse EPR Distance Measurements"		
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14.15	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> Session 5A: Chair: Duncan Farrant Pharmaceutical Applicns 2 Jacques Courtieu "NMR in chiral liquid crystal solvents" 25 Mate Erdelyi "Epothilone Bioactivity: A Solution NMR Investigation of the Tubulin-bound Conformation and the Conformational Change Upon Binding" 26 Ulrich Scheler "Binding of Amino Acids to Macromolecules Monitored by 3D Electrophoresis NMR" 27 Monika Bayrhuber "Structural and functional characterization of the first member of a new Kunitz type neurotoxin family – Konkunitzin-S1" </td> <td style="width: 50%; vertical-align: top;"> Session 5B: Chair: Daniella Goldfarb Paramagnetic Systems 1: Klaus Moebius "High-field EPR on Membrane Proteins: Probing Functional States with High Resolution and High Sensitivity" 28 Silvia Schleidt "A site-directed spin-labeling study of surfactants in polymer-clay-nanocomposites" 29 Damien Murphy "Visualising Diastereomeric Interactions in Enantioselective Homogeneous Catalysis by Combined EPR and Computer Modelling" 30 Vadim Atsarkin "Electron spin resonance and relaxation in superparamagnetic nanoparticles" </td> </tr> </table>	Session 5A: Chair: Duncan Farrant Pharmaceutical Applicns 2 Jacques Courtieu "NMR in chiral liquid crystal solvents" 25 Mate Erdelyi "Epothilone Bioactivity: A Solution NMR Investigation of the Tubulin-bound Conformation and the Conformational Change Upon Binding" 26 Ulrich Scheler "Binding of Amino Acids to Macromolecules Monitored by 3D Electrophoresis NMR" 27 Monika Bayrhuber "Structural and functional characterization of the first member of a new Kunitz type neurotoxin family – Konkunitzin-S1"	Session 5B: Chair: Daniella Goldfarb Paramagnetic Systems 1: Klaus Moebius "High-field EPR on Membrane Proteins: Probing Functional States with High Resolution and High Sensitivity" 28 Silvia Schleidt "A site-directed spin-labeling study of surfactants in polymer-clay-nanocomposites" 29 Damien Murphy "Visualising Diastereomeric Interactions in Enantioselective Homogeneous Catalysis by Combined EPR and Computer Modelling" 30 Vadim Atsarkin "Electron spin resonance and relaxation in superparamagnetic nanoparticles"
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16.00	Tea Break		
16.30	Poster Session 1		
18:00	Varian Vendor presentations: Central Hall		
19.00	Dinner		
20:30	Prize Session: AMPERE, ER Andrew and Russell Varian prizes.		
22:00	Hospitality Suites with Varian Party		

Wednesday 19 July	
09.00	Plenary Lectures: Central Hall High Sensitivity MR: Robert Griffin "High Frequency Dynamic Nuclear Polarization in Solids and Liquids" Catalysis: Cornelis Elsevier "High Pressure and Transition Metal NMR Spectroscopy: Splendid Tools for Molecular Sciences"
10.30	Coffee Break

11.00	<p>Session 6A: Chair: Malcolm Levitt High Sensitivity MR 2: HongWen Jiang "Single Electron Spin Detection in Silicon Based Semiconductor Structures" 31 Damir Blazina "Recent Developments in DNP NMR" 32 Joerg Matysik "High sensitivity and spatial selectivity in photosynthetic reaction centre complex obtained by photo-CIDNP MAS NMR" 33 John Clarke "SQUID-Detected Nuclear Magnetic Resonance and Magnetic Resonance Imaging in Microtesla Fields"</p>	<p>Session 6B: Chair: Simon Duckett Catalysis 1: Michael Anderson "Nanoporous Catalysts : Formation and Function" 34 Rudolph Willem "High Resolution Magic Angle Spinning ¹H, ¹³C, ¹¹⁹Sn NMR as a Powerful Tool for Investigations on Grafted Organotin Catalysts in Transesterification Reactions" 35 Michael Hansen "Characterization of The Surface Structure for Alumina-Boria Catalysts and Their Precursors by ¹H, ²H, ¹¹B, and ²⁷Al Solid-State NMR Techniques" 36 Olga Lapina "Solid State ⁵¹V, ⁹³Nb NMR and their Application in Catalysis"</p>
12.45	Lunch	
13.30 – 21.00	Excursions	
21:00	Hospitality suites	

Thursday 20 July		
09.00	<p>Plenary Lectures: Central Hall Solid State Phys: Giorgios Papavassiliou BioSolids: Marc Baldus</p>	<p>"Magnetic and orbital nanotextures in ferromagnetic transition-metal oxides studied with NMR" "(Membrane) protein complexes investigated by solid-state NMR spectroscopy"</p>
10.30	Coffee Break	
11.00	<p>Session 7A: Chair: Janez Dolinsek Solid State Physics 1: Claude Berthier "High-field NMR studies of field-induced phase transitions in low-dimensional systems" 37 Alexander Panich "Nuclear Spin Diffusion via Indirect Exchange Coupling in Semiconductors" 38 Robert Blinc "NMR of nanoclusters in perovskites and perovskite based relaxors" 39 Adriana Popa "Magnetic Resonance Investigations of Core-Shell Fe₃O₄ / PPy Nanocomposites"</p>	<p>Session 7B: Chair: Beat Meier Biosolids 2: Kurt Zilm "Structure Determination, Methyl Groups and Water in the Solid State NMR of Proteins" 40 Erica Wise "Solid-State NMR Studies of the Protein and Protein-Mineral Interface of Bone" 41 David Middleton "Solid-state NMR methods for guiding the design of amyloid inhibitors" 42 Henrike Heise "Investigating the 3D structural organization of full-length alpha synuclein fibrils by solid-state NMR"</p>
12.45	Lunch	
14.15	<p>Session 8A: Chair: David Neuhaus Bio-Macromolecules 1: Gerhard Wagner "NMR methods for studies of large proteins and their application to problems of protein biosynthesis." 43 Rolf Boelens "NMR studies on structure and dynamics in DNA repair" 44 Gerhard Wider "Fully automated backbone resonance assignments in proteins using automatic projection spectroscopy (APSY)" 45 Lars Kuhn "Pulse-Labeled Photo-CIDNP NMR Characterization of Residual Structure in the Denatured State of the 'Trp-Cage' Protein"</p>	<p>Session 8B: Chair: Simon Duckett Catalysis 2: John Brown "NMR in the service of asymmetric catalysis" 46 Ruth Gschwind "Structure Identification of Precatalytic Phosphoramidite Copper Complexes in Solution" 47 Paul Elliot "Using parahydrogen to study catalytic reactions" 48 David Doty "Progress on a 4-channel 3 mm CryoMAS Probe for High Fields with Auto Sample Exchange"</p>
16.00	Tea Break	
16.30	Poster Session 2	
17:00	Oxford Instruments Vendor presentations: Central Hall	
18:00	JEOL Vendor presentations: Central Hall	
19:00	Remove posters	
20.00	Conference Dinner – Railway Museum	

Friday 21 July	
09.00	<p>Session 9A: Chair: Geoffrey Bodenhausen Frontiers: Yishay Manassen "Noise spectroscopy of a single electron spin"</p> <p>49 Stephan Appelt "Mobile chemical analysis by ultrahigh-resolution NMR spectroscopy in the Earth's magnetic field" 50 Guilhem Pages "PFG NMR with a chromatographic phase: first steps towards understanding the chromatographic process" 51 Robert Prance "Electric Field NMR a New Technique"</p>
	<p>Session 9B: Chair: David Neuhaus Bio-Macromolecules 2: Frederic Allain "NMR of protein-RNA complexes: Shape and sequence-specific recognition" 52 Bernd Simon "NMR approaches for structural analysis of multi-domain proteins and protein complexes" 53 Janina Buck "Kinetic Investigations of Ligand-Induced Riboswitch-Folding by NMR" 54 Miquel Pons "Phosphatase Oligomerization Studied by ¹⁵N NMR Relaxation and Protein Induced Xenon Shifts: Cosolvent Effects"</p>
10.45	Coffee Break
11.15	<p>Plenary Lectures: Central Hall</p> <p>Frontiers: Dan Rugar "Nuclear Spin Detection and Imaging by Magnetic Resonance Force Microscopy"</p> <p>Bio-macromolecules: Peter Wright "Excited states and (NMR) relaxation: Linking protein dynamics to enzyme catalysis"</p>
12.45	Close of conference
13.00	Lunch
14.00	Departure



APPLICATION FORM

Preferably, please complete the **on-line registration form** and comply with the acknowledgement e-mail
Or complete the following Application Form with your requirements and send with payment as indicated overleaf to:

Elaine Wellingham, Conference Secretariat, Field End House, Bude Close, Nailsea, Bristol BS48 2FQ, UK. Fax: +44 (0)1275 853311. Email: esw@confsec.co.uk

Application forms without payment will not be accepted. We will acknowledge receipt within 14 days.
If you do not receive an acknowledgement, please check that your form has been received.

Please help us to plan for your visit by telling us if you have special dietary, mobility or other requirements.

YOUR DETAILS

Title (Prof, Dr, Mr, Ms etc)

First NameLast (Family) Name

Institution

Address

Post CodeCityCountry

Telephone / Fax (in case we need to contact you)

Email (for acknowledgements)

REGISTRATION FEES

Delegates: Includes final programme, abstracts, Symposium bag, name badge, Reception on 16 July and Conference Dinner on 20 July, refreshments as in the meeting schedule, admission to the scientific sessions and Certificate of Attendance.

Accompanying Persons: Includes name badge, Reception 16 July, Conference Dinner 20 July.

	Before 17 April	17 April to 9 June	After 9 June
Delegate	£220	£250	£300
Student*	£110	£140	£190
Vendor delegate	£ 50	£ 80	£130
Accompanying person#	£ 50	£ 80	£130
Registration Total £			

* **Students** must enclose written proof of their status from their institution, ie CV and letter from supervisor.

#Accompanying person, please give the full name for badge

ACCOMMODATION (All available rooms are single occupancy only)

The accommodation package includes 5 nights bed and breakfast in a single student room:
16, 17, 18, 19, 20 July; Lunches: 17, 18, 19, 20, 21 July; Dinners 16, 17, 18 July

En-suite Room (includes own shower and wc) **£420**
OR **Standard Room** (shower and wc shared with adjacent rooms) **£340**

Special Needs? (please indicate here).....

Excursions 19th JULY

Each excursion includes an evening meal, transport and admission fees. The cost for each ticket is £35.

- A Tour of York
- B Walk in the North Yorkshire Moors
- C Fountains Abbey
- D Pickering Castle and Whitby
- E Royal Armouries Museum, Leeds
- F Castle Howard

Accompanying Persons Tours, includes lunch, transport and admission fees. The cost of each tour is £35.

- M Tour of York on Monday 17th July
- T Coach tour of the Yorkshire dales on Tuesday 18th July

PAYMENT	Registration Total	£
	Accommodation	£
	Excursion or Tours	£
	Car Parking Permit (6 days) £10	£
	Computer username (week) £10	£
	PLUS 3% if paying by credit card	£
	Total	£

SIGNATUREDATE

SESSION ATTENDANCE

Please indicate which of the parallel sessions you are most likely to attend as in the program of 2nd circular. Note that your choice is **not** binding, we will only use it statistically to help us plan which session should go in which lecture theatre.

- 1A 1B 2A 2B 3A 3B 4A 4B 5A 5B 6A 6B 7A 7B 8A 8B 9A 9B

METHODS OF PAYMENT: in GB Pounds Sterling only

- By Cheque:** In sterling only, payable to **EUROMAR 2006** for £
- By Bank Transfer:** Please use the name of the delegate as the reference and enclose a copy of the transfer instruction with this form. All bank charges must be paid by the delegate.

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DATA PROTECTION: The information you supply will be used for the administration of the meeting. A List of Participant names and addresses will be distributed at the conference. If you **DO NOT** wish your address to be included, please tick the box.

Deadlines:

9th April 2006

Deadline for Student Grant applications (extended from 31/03)

17th April 2006

Deadline for low rate registration fee and
Deadline for Abstract submittal for Oral consideration.

22nd May 2006

Deadline for all poster abstracts.

9th June 2006

Deadline for cancellation of registration for delegates and
accompanying persons. All poster abstracts
All cancellations must be in writing to the Conference
Secretariat.

7th July 2006

Deadline for registration. **No on-site registrations!**

16th – 21st July 2006

Conference at University of York.

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companies as major sponsors of this conference.
All student grants are funded by our sponsors.

