

## Fly-past celebrates new partnership between Loughborough University and the MOD

A fly-past by a combat aircraft and a ceremony featuring top military officials marked the start of a new partnership between the Ministry of Defence (MOD) and Loughborough University.

*Photograph courtesy of the MOD*

The University has been selected to take part in the Defence Technical Undergraduate Scheme (DTUS). The scheme has been set up by the MOD to support sponsored students studying for engineering and science degrees, all of whom are committed to become officers in one of the services (Army, Royal Navy, Royal Air Force, Civil Service).

Selected students will join the Typhoon Squadron at Loughborough, where they will be mentored throughout their academic study to help them develop the skills and attributes they will need to fulfil their long-term commitment to the services. In return for its support, the MOD will recruit high quality qualified engineers, who are ready to assist the military in its work across the world.

In October the University and the MOD signed a Memorandum of Understanding (MOU), which officially



recognised the University as a member of the Defence Technical Undergraduate Scheme (DTUS). Top military officials and senior officers of the University attended the MOU signing ceremony, which was followed by a fly-past by a Eurofighter Typhoon, the world's most capable and dynamic combat aircraft, after which the Loughborough University branch of the DTUS has been named.

Colonel John Rouse, who coordinates the training scheme for the MOD said: "The

enable the all round development of our young men and women in preparation for their chosen careers."

Professor Chris Backhouse, Dean of the University's Faculty of Engineering added: "We are delighted to be part of this excellent training scheme and to be able to assist the MOD in recruiting some of the country's top engineers."

Two students have already joined the Typhoon Squadron and have started their studies at Loughborough.

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Loughborough honours Sir Clive Woodward, OBE.

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## On campus developments

There are some exciting developments on campus which will provide support for the University's strategic aim of expanding postgraduate teaching.

One of the biggest projects is the development of the former Foundry adjacent to the James France building. The site is currently being cleared of asbestos and part of the building will be demolished, with the rest being taken back to the steel frame. The space is being converted into a postgraduate teaching centre and will have the following facilities: a 220 capacity tiered lecture room, a 100 capacity tiered lecture room arranged in a U-shape, two 40 capacity rooms, two 24 capacity rooms, two 16 capacity rooms, a computer suite with 80 seats which can be divided into 50/30, an informal study room with seating, computers and wireless networking and accommodation for the Media Services teaching support team.

The layout is somewhat restricted by the current structure, but within that the building designers have tried to provide a range of room sizes to maximise flexibility. The main entrance to the building will be off the James France Walk and will be set back in a



An artist impression of the Foundry development.

Photograph courtesy of Dr Anne Mumford

courtyard area to facilitate access.

The other development is a new building on the west park opposite the current entrance to Burleigh Court and adjacent to David Collett Hall. This will be a two-story building providing teaching rooms on the ground floor. There will be three 50-seater rooms, one of which can be divided in half. The facility will also incorporate some offices for the Defence Technical Undergraduate Scheme (DTUS) in which the University is a partner (see front-page article). This development will use a new building material on some walls called kalwall, which provides natural ventilation and glare-free daylight into the rooms. The design aims to be innovative in both its use of

building materials and mechanical plant to reduce energy requirements.

Both projects are moving in a similar timeframe and work will start in late January, with both buildings being open in the autumn.

Dr Anne Mumford has been acting as University representative on the design discussions following consultation with academic staff and students. Colin Morgan (for the Foundry Development) and Tim Walton (for the West Site Development) are the Estates Development Office contacts for the work. Email [a.m.mumford@lboro.ac.uk](mailto:a.m.mumford@lboro.ac.uk), [c.morgan@lboro.ac.uk](mailto:c.morgan@lboro.ac.uk) or [t.walton@lboro.ac.uk](mailto:t.walton@lboro.ac.uk) for more information.

## Harassment Panel

The University has a policy on harassment and bullying, which states that it is committed to fostering an environment where its staff, students, visitors and contractors can work, study and live free from intimidation, aggression, coercion and victimisation.

The University is particularly concerned to eliminate all forms of harassment and bullying as it recognises that such behaviour

is unacceptable, discriminatory and, in certain circumstances, also unlawful.

Loughborough has a Harassment Panel, consisting of members of staff who have received training in dealing with incidents of harassment and bullying. These people are available to talk to any member of staff or student in confidence and will offer support, advice and assistance in seeking a satisfactory solution. They are willing to

discuss any incidents or problems, no matter how serious or trivial they may seem.

Further details on the Harassment Panel can be found at [www.lboro.ac.uk/harassment](http://www.lboro.ac.uk/harassment). If you do not have access to the Internet, and wish to talk to someone about harassment or bullying, please contact Anne Lamb, Harassment Panel Coordinator, by calling 01509 222168.

# Vice Chancellor receives Knighthood at Buckingham Palace

The University's Vice Chancellor and his family recently attended the investiture at Buckingham Palace, where he was knighted in recognition of his services to UK Science, Technology and Engineering.

Professor David Wallace, who joined Loughborough in 1994, attended the University of Edinburgh as an undergraduate and postgraduate, studying theoretical physics, before carrying out further research at Princeton University. In 1972 he was appointed as lecturer in the Physics Department at the University of Southampton and in 1979 he returned to the University of Edinburgh as Tait Professor of Mathematical Physics. He was also Director of the Edinburgh Parallel Computing Centre and was awarded a CBE for services to parallel computing in 1996.

He is currently Treasurer and Senior Vice President of the Royal Society, immediate past-President of the Institute of Physics and a fellow of the Royal Academy of Engineering. He is Chair of the UK e-Science Steering Committee and a Deputy Lieutenant of Leicestershire. He is married to Elizabeth, and they have one daughter, Sara.

Professor Wallace said: "I have been very fortunate in the people and places where I have worked, and to have such a supportive family. I am very grateful to Loughborough University and to all colleagues, for the encouragement and opportunities that I enjoy here."



Professor Sir David Wallace.

Photograph courtesy of Charles Green

## A free and fair right of access to information

New legislation will challenge secrecy and the bureaucracy within public sector organisations.

The public will have a right to know how decisions are being made and where public money is being spent. The recent release of MPs' expenses into the public domain is just one example of the Government's commitment to transparency. Other Public Authorities are also preparing themselves for the new Freedom of Information Act.

But what will this mean for Loughborough University? From January 1 2005, the Freedom of Information Act will provide members of the public with the right to access information held by the University. All decision-making processes must be transparent, and budgets and expenditure accountable. Most formal University Committees will proactively publish their agendas and minutes on the website.

A request for information must be responded to within 20 working days,

therefore information will need to be accessible and communicated effectively. There will only be limited situations in which access to information can be refused, and advice should be sought from the Freedom of Information and Records Manager, Academic Registry.

Further information and guidance will soon become available on the University website at: [www.lboro.ac.uk/admin/ar/policy/foi/Folindex.html](http://www.lboro.ac.uk/admin/ar/policy/foi/Folindex.html) or visit The Campaign from Freedom of Information at: [www.cfoi.org.uk](http://www.cfoi.org.uk)

## The Residential Organisation renamed as imago Services

As long as most staff can remember the Residential Organisation at Loughborough has provided catering and residential services across the campus.

In 2001/2002 the organisation carried out extensive market research looking at how the self-funding department would generate new interest and income from external sources. Working with other departments, notably Loughborough Sport, it was decided that Loughborough should put itself into the commercial conference market in a more productive and assertive way.

So following a series of workshops and discussion groups, imago at Loughborough Ltd was created. A wholly owned University company which would sell, market and capitalise on the facilities at the campus via Burleigh Court, Holywell Park, sports facilities and residential vacation conferences.

During the course of establishing the new company standards and values the Residential Organisation staff have been very involved in training and development to help all the team understand what was expected of them. During these sessions it became clear that the staff wanted a more creative part of making imago at Loughborough Ltd a success, and following discussions it was agreed that the name Residential Organisation should be changed in favour of the name imago Services. In August 2004 this change formerly took place.

It is hoped that by using the imago connection throughout the department it will engender a clear understanding for staff and customers of what the organisation is about and what it is trying to achieve. The company remains committed to providing all its customers with an inspirational environment for all events and to providing services unrivalled by others.

# Interview with the University's Bursar

Interviewing the Bursar is part of News@lboro's annual cycle. The University's finances are always a topical issue and there is usually something provocative to report. Here's what the Bursar, Michael Pearson had to say this year:

*Ed: Can we start with a general overview of our financial position? How are we doing?*

My summary of the position is it's business as usual. By that I mean we have a settled budget for the new academic year, we're well within our financial strategy targets, we're regarded as low-risk by HEFCE and the banks, and I expect to report a healthy surplus on last financial year's operations. Of course, every year brings heated debate about budget priorities, but that's to be expected in a lively institution.

*Ed: Such as?*

The balance of spending between people and buildings is frequently raised. Of course we must improve the staff/student ratio at Loughborough by employing more academic staff. But the majority of departments say they are desperate for space - especially for research students - and that means more buildings. Incidentally, the national statistics are not consistent. Financial statistics show that our expenditure on staff is almost exactly the same as the HE sector mean. Yet published SSRs show us in a poor light compared with our peer group. That doesn't help us plan a way forward. We also have to balance maintenance of our present operations and curriculum with the need to look ahead to the emerging disciplines in the University and elsewhere, which will be the research successes of the future. The RAE is a constant concern, of course. We're planning to allocate substantial amounts of money to the Development Fund so that we can recruit outstanding people who would like to work here, but everyone needs to think about what to do now to achieve international esteem, which will be the key to successful research profiles for the 2008 assessment. Finally, every support service budget is subject to challenge during a two-day 'star chamber' hearing; perhaps surprisingly, both sides emerge from these robust exchanges feeling better, because there's been a serious discussion and not just a handed-down decision. That's one innovation I'm pleased about.

*Ed: Tell me about OFFA*

That's the Office For Fair Access. We have the opportunity to increase tuition fees for full-time UK and EU undergraduates to £3,000 pa from October 2006, provided we can satisfy OFFA. We need to spell out our plans for helping to improve access to higher education as a whole (not just to Loughborough), how we will operate an effective student financial advice service for applicants and what financial support we'll offer to students, especially those from lower-income families. Council has already decided to follow that route and we'll be putting in our formal application to OFFA around Christmas. We do need the extra money - both to employ more staff and to tackle some of our infrastructure problems, such as refurbishment of older buildings and replacement of out-of-date equipment. We also have to recognise that students will expect to see better facilities when they're paying much higher fees.

*Ed: There aren't quite so many builders on campus at present - have you run out of ideas, or space, or what?*

It's a temporary lull, I'm afraid, and it's the turn of the West Park to be disturbed next. As I said earlier, most departments want more space so quite a lot of projects are in the pipeline. Redeveloping the remainder of James France to create a post-graduate teaching centre has just started. We're also close to creating more post-graduate teaching space on West Park. Planning for the Centre for Collaborative Construction Research is well under way and an extension to Burleigh Court should start early in the new year. The big question concerns student residences. We've stated publicly our intention to create more on campus to relieve pressure on domestic housing in the town and we now have an outline planning application awaiting approval by the local authority. After extensive discussions with local neighbours we have a scheme which is thought to be acceptable and I hope we can soon move forward. We believe the residential experience is a key part of the total student experience at Loughborough.



Michael Pearson, Bursar.

It's something we will shout about in the increasingly competitive market place for students.

*Ed: Is it correct that our international student numbers are falling?*

No, but it's a useful point I should cover. Many staff know well enough how international numbers have grown in recent years, but it's worth recognising just how much growth there's been and its impact. Only five years ago, our income from international student fees was a little over £4 million pa. This year, I expect it to be over £15 million (in our total income of £150 million). That's a huge increase, which has put a lot of pressure on the resources of some departments. At the same time, it has helped avoid a serious squeeze on spending throughout the University - we'd be looking for savings of a couple of per cent each year to match the rise in costs, especially pay costs, which are rising faster than the cost of living generally. I would not have been surprised to see a small reduction, especially in the context of falls elsewhere in the UK. Drops in international intake in Australia and particularly the US appear to be much more dramatic. In fact our international student numbers will be broadly the same this year as last because a small drop in intake is largely matched by progression of the increased undergraduate intakes of recent years and it does give us a chance to pause for breath. Long-term, I believe we can continue to increase our international and especially our postgraduate numbers, but we must always be careful to give excellent value for money to all our students. Lots of challenges ahead, as always, but we're well placed to face them.

# Bringing the Big Bang theory to life

More than 300 people attended a Science Faculty guest lecture by the talented author and broadcaster Simon Singh.

Simon, who is renowned for being able to demystify complex scientific and mathematical theories, based the lecture on his new book, *Big Bang*, which tells the story of the brilliant minds that deciphered the mysteries of the Big Bang theory.

Before becoming an author Simon worked for five years on the popular science programme, *Tomorrow's World*. His films covered subjects as diverse as the invention of the everlasting light bulb and the fixing of the Hubble Space Telescope, to cyber crime in New York and the scientific explanation of Italian miracles.

In 1996, he worked with John Lynch, the editor of the BBC series *Horizon*, to produce and direct the award-winning documentary, *Fermat's Last Theorem*.



Professor Ken Parsons (left), Dean of the University's Faculty of Science, thanks Simon Singh for his excellent lecture.

During the preparation and filming of the programme he spent several days interviewing the key figures involved in tackling the world's hardest mathematics problem. Simon wrote his first book, called *Fermat's Last Theorem*, in 1997. The book became a number one hardback best seller. In 1999 Simon wrote *The Code Book*, which focussed on the history of codes, codebreaking and cryptography, and was

later made into a six-part Channel 4 series called *The Science of Secrecy*. In his latest book, *Big Bang*, as well as explaining what the theory actually is, he addresses why cosmologists believe that it is an accurate description of the origin of the universe.

Professor Ken Parsons, Dean of the University's Faculty of Science, which hosted the lecture, said: "Simon was awarded an honorary degree by the University last year in recognition of his contribution to UK science, so we were delighted when he agreed to return to the campus to present a guest lecture. The free event gave staff, students and local people a rare opportunity to see one of the country's top science writers bring the most important theory ever to life."

The Science Faculty will be hosting a series of guest lectures over the next few months to try and show people just how interesting and varied science can be. Details of forthcoming speakers will be advertised as soon as possible.

## Win a copy of Simon Singh's Big Bang book

*Whilst at the University Simon kindly donated several copies of his book to the Science Faculty to send out to local schools. News@lboro was also able to get hold of a copy - for your chance to win it simply send an email including your contact details to the News@lboro editor, Judy Smyth at J.L.Smyth@lboro.ac.uk. Alternatively post your details to Judy Smyth, Publicity Office, Rutland Hall, Loughborough University. The closing date for entries is 4 January 2005.*

## New centre for management education

A new centre for professional and management training has been unveiled at the University, offering individuals, companies and organisations the best opportunities in management education.

The Business School's Professional and Management Development Centre (PMDC) specialises in the design and delivery of a stimulating range of short courses and University-accredited programmes at Certificate, Diploma and Masters levels. Training is offered locally, nationally and internationally, and is tailor made to suit the needs of clients.

The PMDC brings together four of the Business School's renowned specialist units, each dedicated to particular areas of expertise:

The **Management Development Centre** provides specialist training and development for practising managers, as well as a range of company and industry bespoke programmes, from one-day short courses to fully accredited part-time postgraduate programmes.

The **Centre for Hazard and Risk Management (CHaRM)** is a multidisciplinary centre dedicated to providing postgraduate and post-experience programmes for professionals working within the fields of health and safety, security and risk management.

The **Centre for Automotive Management (CAM)**, in conjunction with the Henry Ford College, offers specialist training and development for directors, managers, supervisors and team leaders in automotive dealerships of all marques, as well as undertaking research for the automotive industry.

The **Banking Centre** specialises in short courses and tailored programmes for clients within the financial services sector.

John Whittaker, director of the PMDC said: "This newly formed centre brings together a wealth of experience and knowledge that can assist both private and public organisations and individuals working within a wide range of disciplines to improve professional management skills and business performance."

Further information about the PMDC and the range of courses offered is available at <http://www.lboro.ac.uk/departments/bs/pages/index.html> or by contacting the Centre direct, T: 01509 223140, E: [mdc@lboro.ac.uk](mailto:mdc@lboro.ac.uk)



# Lotus and Loughborough join forces

A consortium from industry and academia has launched a cutting edge research programme investigating an innovative approach to managing a gasoline direct injection engine.

particulate traps, adding to vehicle costs. Such additional costs have in part been responsible for the slow growth of sales in gasoline direct injection

fully variable valve train. In combining these two world-class Lotus research technologies, this optical AVT™ engine is one of the most advanced research engines in the world. Siemens VDO, a leading system supplier for the automotive industry, is supplying the direct injection equipment and brings world-leading expertise in direct injection technology.

The HOTFIRE team at the project launch ceremony, which was held at the University's Department of Aeronautical and Automotive Engineering.

The HOTFIRE consortium (Homogeneous and Throttleless for Fuel efficiency with Reduced Emissions) is made up of Lotus Engineering, Siemens VDO Automotive AG, Loughborough University and University College London. Lotus Engineering, the world-renowned automotive engineering consultancy, is managing the consortium which aims to achieve better performance, lower emissions, and improved fuel efficiency from a gasoline direct injection engine.

Gasoline direct injection is seen as critical to meeting future legislative and market requirements for greater fuel efficiency. Current gasoline direct injection engines operate in two modes. The 'homogeneous' mode gives superior performance when higher outputs are required, while lean burn or 'stratified' mode delivers more economical fuel consumption at part load through reduced throttling losses.

Despite offering fuel savings, lean burn does not allow proven three-way catalyst technology to be used, forcing manufacturers to fit deNOx catalysts and

vehicles because the first generation of stratified charge engines did not achieve the fuel savings needed to justify the add-on cost.

As a result, the HOTFIRE consortium sees two options emerging in the future:

- A second generation stratified (spray-guided) concept delivering greater fuel savings justifying the add-on cost of the deNOx system.

- A homogeneous charge direct injection strategy offering a reduced fuel saving potential for lower system cost. It is this approach that the HOTFIRE programme is exploring.

The HOTFIRE consortium will investigate a new concept for managing the combustion in the chamber.

As well as managing the research programme, Lotus Engineering is supplying two single cylinder research engines, one of which has optical access (SCORE) and is fitted with the company's Research AVT™

The research engines will be run at two academic institutions renowned for research in automotive fields. Loughborough University will run the optical research engine in conjunction with its impressive laser diagnostics facility to gain a comprehensive understanding of the in-cylinder phenomena. The second single cylinder research engine will run at University College London (UCL) to measure the thermodynamic properties in terms of power and emissions.

The HOTFIRE project is scheduled for completion in September 2007, with a PhD student at each university undertaking the research. The consortium is receiving almost £500,000 funding from the UK Engineering and Physical Sciences Research Council (EPSRC), with additional funding from Lotus and Siemens VDO taking the total research budget to around £1 million.

## Can you help protect ancient woodland?

Estates Services is on the look out for members of staff who can help protect a valuable area of ancient woodland.

Holywell Wood, near Nanpantan, was acquired by the University in April 2003 as part of the purchase of Holywell Park from Advantica Technologies Ltd. To look after this new asset, a woodland management group made up of wildlife experts, representatives from Estates Services and volunteers was set up. They developed a programme of management activity for the wood which is into its second year. The University is now hoping to establish an informal network of 'the friends of Holywell Wood'.

As a 'friend of Holywell Wood' any member of staff visiting the woodland would simply need to act as the eyes and ears of Estates and report back if any action or work might be required. This could be notification of a dangerous tree, overgrown path or a report of unauthorised access such as vandalism or dumped rubbish.

Because management of the woodland does not require personnel to visit the wood regularly such help would be invaluable. The wood is closed to the general public for nature conservation reasons but staff are welcome to visit at anytime.

The nearby Burleigh Wood was also acquired by the University as part of the technology park deal. It is open to the public and a similar 'friends of' scheme is being launched there aimed at local residents. Staff are welcome to support either (or both!) projects.

For anyone wanting to get more actively involved in looking after the woodlands, volunteering days are regularly organised. At Holywell there is a project to remove non-native species on 12 December. For further information on the 'friends' schemes staff should contact Dave Burgess in Estates Services on 01509 222117. Additional details of the volunteering days are also available from Dave or by contacting Charnwood Conservation Volunteers on 01509 264714.

## **Aeronautical & Automotive Engineering**

*Unconventional Nozzle Research - Phase 5 - Interim 2*  
Prof J J McGuirk  
£51,200 BAE Systems

*Dependability Modelling of Aircraft Systems*  
Prof J Andrews  
£20,000 Rolls Royce

*Modelling Maintenance*  
Prof J Andrews  
£70,757 EPSRC/BAES CASE Award

*Modelling of Aircraft Systems*  
Prof J Andrews  
£70,200 EPSRC/Rolls Royce CASE Award

*Development of a Systems Fault Detection Capability*  
Prof J Andrews  
£70,200 EPSRC/BAES CASE Award

## **Business School**

*Why Qualified Allied Health Professionals Stay In, Leave, or Return to the NHS.*  
Prof J M Arnold, Mr J Loan-Clark and Dr C Coombs  
£95,807 Dept of Health, UK

*Toyota Training Needs Assessment (Extension)*  
Mr G M Reed and Prof J Saker  
£26,041 Toyota Motor Marketing Europe, Brussels

## **Chemistry**

*RAIS Award:*  
Prof P C B Page  
£33,000 EPSRC(CTA)

*Preparation of nano-metal deposit samples*  
Prof S Fletcher  
£5,000 IMRA EUROPE S.A.S

*Investigation of the Effect of MG Concentration on the Kd of Ionsiv IE-911*  
Prof P Warwick  
£10,000 British Nuclear Group

*Palladium Catalyzed Routes to the Tricyclic Core of the Stenine Group of Stemonal Alkaloids.*  
Dr G J Pritchard  
£30,000 Eli Lilly and Co. Ltd.

## **Civil & Building Engineering**

*RAIS Award: Context Aware Services Delivery for Mobile Workers*  
Prof C J Anumba  
£32,000 EPSRC(CTA)

*Regional Innovation Director*  
Dr A Dainty and Prof A Thorpe  
£30,000 EPSRC (IMRC)

*Rapid Construction*  
Dr C Pasquire, Prof S A Austin, Dr A M Bouchlagem,  
Prof A G Gibb and Dr R C Soar  
£156,301 EPSRC (IMRC)

*Support of the DIME-team in the context of the OPTIMUM 2 Project*  
Dr M P Enoch  
£9,283 SenterNovem

*Sustained Competitiveness in the UK Construction Sector: A Fresh Perspective*  
Prof S Austin, Prof T Thorpe, Prof A Price and Dr A Dainty  
£238,280 EPSRC

## **Computer Sciences**

*RAIS Award:*  
Dr S Acar  
£32,000 EPSRC (CTA)

## **Design and Technology**

*Engineering Emotional Design*  
Dr C S Porter  
£34,847 European Commission

## **Electronic & Electrical Engineering / Computer Science**

*UKLIGHT Monitoring and Analysis at Many Scales*  
Prof D J Parish and Dr I Phillips  
£343,268 EPSRC

## **Electronic & Electrical Engineering**

*Meta-antennas:Metamaterials-based highly-directive planar antennas for wireless LAN and fixed broadband systems*  
Dr A P Feresidis  
£104,007 EPSRC

*Faraday Partnership for the Integration of New and Renewable Energy in Buildings*  
Prof D Infield  
£55,840 DTI

*Trials Support, capacitor performance testing and measuring technique investigation*  
Prof I R Smith  
£42,010 DSTL for MOD

*Electromagnetic Protection Research*  
Prof I R Smith  
£11,000 DSTL for MOD

*Research on Tesla Transformers*  
Prof I R Smith  
£19,675 DSTL for MOD

*Study of Military Significant Materials*  
Prof I R Smith  
£15,000 Cranfield University

## **Geography**

*Contested Spaces - living in areas of street prostitution*  
Dr P Hubbard  
£32,662 Joseph Rowntree Foundation

## **Human Sciences**

*A Staged Approach to Improving Health and Safety in the Workplace*  
Prof R A Haslam and Prof C Haslam, Notts University  
£9,400 Health and Safety Exec

*"Sleep Debt" - A Critical Evaluation of Laboratory Evidence*  
Prof J Horne and Dr C Anderson  
£183,278 ESRC

*Socioeconomic Status and Child/Adolescent Health in Johannesburg-Soweto*  
Dr P Griffiths  
£435,685 Medical Research Council

## **Information Science**

*Digitisation of Research Resources*  
Dr A Muir  
£28,912 JISC

## **IPTEME**

*RAIS Award:*  
Prof R Faulkner  
£36,300 EPSRC(CTA)

*Microwave sintering of boron carbide (CASE Studentship)*  
Prof J G P Binner  
£18,900 Atomic Weapons Establishment plc

*A Radically Innovative New Production Process for Single-Piece, Recyclable Fluid Transmission Systems with Self-Diagnostic Capacity to Fluid Loss Potential*  
Mr J F Harper and Prof J Binner  
£469,822 European Commission

## **Mathematical Sciences**

*European Network in Geometry, Mathematical Physics, and Applications*  
Dr A P Veselov, Dr E Ferapontov and Dr R Halburd  
£64,242 European Commission

## **Mechanical & Manufacturing Engineering**

*Technologies and Methods for the Lifecycle Engineering of*

*Modular Reconfigurable Manufacturing Automation Systems*  
Dr R Harrison  
£35,000 The Royal Academy of Engineering

*Additional Management Support for the Loughborough IMRC*  
Prof P M Dickens  
£287,496 EPSRC

*Low cost, low energy consumption, compact, infinitely configurable diesel particulate filter and regeneration system (LOCOFILT)*  
Prof C P Garner, Dr J E Harry and Prof J Binner  
£145,000 DTI (via Perkins Engines Co Ltd)

## **Physics**

*ESF Science Meeting 413*  
Prof F Kusmartsev  
£27,743 ESF

## **School of Sport & Exercise Sciences**

*An evaluation of the training provided by PEAK/BAALPE for Partnership Dev. Managers, School Sport Coordinators, Specialist Link Teachers and Primary Link Teachers associated with the School Sport Partnership Programme*  
Prof B Houlihan  
£12,000 Physical Education Association UK

## **Social Sciences**

*Helpful responses in heterosexual couples in talking about personal upset*  
Dr D Cramer  
£46,991 ESRC

*The Social Fund: Current Role and Future Direction Award Increase*  
Ms S Middleton, Dr B Stafford, Mr N Smith and Ms K Legge  
£5,439 Joseph Rowntree Foundation

*Identities in Neighbour Discourse: Community, Conflict and Exclusion*  
Dr E Stokoe and Prof D Edwards  
£128,347 ESRC

*Media Analysis of the North East Regional Assembly Referendum*  
Dr D J Wring, Prof P Golding and Dr D N Deacon  
£10,993 Electoral Commission

# Students awarded books by Loughborough graduate

Jon Horler of BP Chemicals recently made a return visit to his former university, Loughborough to meet some of its current chemical engineering students.

While at the campus he presented 15 students from the department with books in recognition of their academic achievement in their first year of study. They were each given a copy of Perry's Chemical Engineering Handbook – the

chemical engineers bible – that will prove useful to them in their studies and their later professional careers.

Staff were delighted to welcome Jon Horler back to the University. He has kept strong

links with the department and uses his knowledge and expertise to assist with the teaching of design.

Professor Richard Wakeman, head of Loughborough University's Department of

Chemical Engineering said: "We are incredibly grateful to Jon and BP Chemicals for the support they give to our first-year students. Their encouragement helps our students immensely."

# Queen's Award for Loughborough KTP industrial partners

Congratulations to Supply Point Systems (SPS) Ltd in Fleckney, Leicestershire, who have recently won the Queen's Award for Enterprise in the category of innovation.

SPS Ltd is the producer of an innovative industrial tool dispensing system, and over the last three years Dr Steve Newman and Dr Shahin Rahimifard of the Wolfson School of Mechanical & Manufacturing Engineering have been working with the company on a Knowledge Transfer Partnerships (KTP) and Teaching Company Scheme (TCS) collaboration project. The objective was to develop and implement a suite of software and supporting hardware to enhance the management and control of cutting tools using the SPS industrial dispenser system.

The company has developed closer links with Loughborough University via the academics involved in the KTP project, resulting

in further collaborative work with the Engineering and Physical Sciences Research Council (EPSRC) and a second University KTP project. The experience and case study materials generated during this initial project have also been used to improve the undergraduate and postgraduate teaching modules at Loughborough, including a number of undergraduate industrially based design projects.

Elaine Browne, the University's KTP Associate, has substantially increased her technical knowledge on tool management through working with SPS. She is currently studying for an MPhil degree and has been offered a permanent position as the Development Engineer within the company.

Geoff Herrington, Chairman of SPS believes the experience of KTP has been very positive and has encouraged them to consider the employment of further graduates within the company.

# Charity bike ride a massive success

At the end of October Alistair Hutchinson of Media Services, set off from a dark gloomy Workington on a solo cycle from the West coast to the East coast.

As a keen cyclist, it had always been his personal ambition to attempt this challenge. However, following the death of Gill Murray, a family friend, in April the ride took on a new significance. Gill was diagnosed with cancer in January and set up an appeal to raise £100,000 to buy scanner equipment for Nottingham City Hospital. Following her death, her family and friends are determined to achieve her goal.

The ride proved to be more eventful than Alistair had imagined due to lack of, or

vandalised, sign posts, which led to him being lost in a wood on the first day!

Undeterred he continued and reached Sunderland 128 miles later in glorious sunshine.

Alistair would like to say thank you to his generous supporters, many of whom are University staff. As a result he is well on his way to exceeding his original target of £500 and with a little more help he will have raised a fantastic £1,000. If you would like to contribute towards this deserving local appeal please contact Alistair by

calling 01509 222035 or emailing [a.j.hutchinson@lboro.ac.uk](mailto:a.j.hutchinson@lboro.ac.uk)

Photograph courtesy of Alistair Hutchinson



Alistair celebrates his arrival at the East coast.

# CRSP celebrates 21 years of success

The Centre for Research in Social Policy (CRSP), based in the Department of Social Sciences, has been celebrating its 21st birthday.

A special conference held at the University in September brought together more than 80 colleagues in the social policy research and academic community as well as those involved in policy making, to consider and debate the role of research in shaping social policy.

Keynote speakers were: the Rt Hon Dawn Primarolo MP (senior Minister within the Treasury); Sue Duncan (Chief Government Social Researcher) and Professor Ruth Lister (Professor of Social Policy at Loughborough University).

CRSP was also very pleased to welcome back its founder, Professor Sir Adrian Webb (now Vice Chancellor at the University of Glamorgan), and its former Director, Professor Robert Walker (now at the University of Nottingham).

In the afternoon sessions, participants discussed the role of research in shaping social policy around CRSP's four research themes: work, poverty and social exclusion; welfare and life transitions; comparative welfare and progress towards social inclusion. Each session included a speaker from CRSP and other UK and international experts.

The day was a great success and concluded with a round table discussion about the future direction of social policy research.

## New name, new start for LTSN Engineering

LTSN Engineering has now become the Higher Education Academy – Engineering Subject Centre.

The Higher Education Academy is an organisation established by the UK Government to support quality enhancement and the student experience in higher education.

All LTSN Subject Centres have now become an integral part of this new organisation, along with the Institute for Learning and Teaching in Higher Education (ILTHE), and the TQEF National Co-ordination Team (NCT).

The Engineering Subject Centre, located in the Faculty of Engineering since January 2000, has received international recognition for its

work in assisting the UK's higher education engineering community. It will continue under its new name to be the national support centre for all UK engineering academics, promoting quality learning and teaching by encouraging the sharing of good practice and innovation.

The Engineering Subject Centre produces resources aligned to the needs of the engineering community, and has a major role in responding to national initiatives and policy issues, ensuring that resources are available to help engineering academics work with the latest changes in legislation and accreditation.

For further information about the Engineering Subject Centre visit the web site: [www.engsc.ac.uk](http://www.engsc.ac.uk)



**Pictured at the conference from the left is Professor Sir Adrian Webb, Director of CRSP Dr Bruce Stafford, the Rt Hon Dawn Primarolo MP, fellow Director of CRSP Sue Middleton and Loughborough Vice Chancellor Professor Sir David Wallace.**

More information about CRSP's work can be accessed by visiting: <http://www.crsp.ac.uk> or by emailing Clare Lawson at [e.c.lawson@lboro.ac.uk](mailto:e.c.lawson@lboro.ac.uk)

Full conference proceedings will be available via the website early next year.

## High-tech equipment already in use

The University is already making use of a new piece of high-tech equipment located in the Department of Physics.

Cash for the Raman Spectrometer, which cost around £130,000, was secured following a bid by the departments of Chemistry, IPTME (the Institute of Polymer Technology and Materials Engineering) and Physics to the Science Research Infrastructure Funding scheme. The machine was just one of a number of items purchased using funding from the second round of the scheme, in a bid led by Jon Binner of IPTME.

When light is scattered by materials, a very small fraction of it is shifted in wavelength. Raman spectrometers are designed to measure the spectrum of this wavelength-shifted light and are a powerful tool for studying the physics and chemistry of materials. The machines are also established tools in analysing material composition. Anyone interested in using the Raman Spectrometer should contact Richard Giles in the Department of Physics by calling 01509 223315.



# Roll of honour

## Loughborough University rewards long service

Twenty-nine members of staff at the University have been presented with a certificate by the Vice Chancellor, Professor Sir David Wallace, to mark 25 years' service. Each person was also invited to choose a gift to the value of £150. The presentation ceremony is an annual event and this year's list of recipients were:

Academic Registry - Dr Roy Frost

Business School - Professor Paul Finlay

Chemical Engineering - Yasmin Kosar

Chemistry - John Kershaw and Professor Peter Warwick

Civil & Building Engineering - Joy Hull and Professor Tony Thorpe

Computing Services - Raymond Birch

Corporate Information Services - Nicholas Bullen

Estates Services - Victor Adlard and Kim Schofield

Human Sciences - Peter Lockwood and Jayshree Savania

Imago Services - Brenda Barrett, Audrey Bruce, Maria Calabrese, Marilyn Clarke, Christine Cramp, Sue Dormer and Mariano Gonzalez

Information Science - Professor John Feather

Institute of Polymer Technology & Materials Engineering - Dr David Ross

School of Art & Design - Jim White

Media Services - Stuart Bentley

Security - Michael Hibberd

Social Sciences - Dr Michael Stephens

Wolfson School of Mechanical and Manufacturing Engineering - Margaret Carden, Dr Paul Leaney and Roger Walton



## New book gets Downing Street launch

A new social policy book written by Loughborough's Professor Ruth Lister had a special launch at 11 Downing Street.

The book, entitled *Poverty* and published by Polity Press, was the subject of a Smith Institute seminar at the prestigious address, which was attended by a number of ministers, civil servants, Government advisers and other representatives from parliament, the voluntary sector and academia. Professor Lister, who is based in the Department of Social Sciences, introduced the book briefly and drew out some policy implications. Ed Miliband, Chair of the Treasury's Council of Economic Advisers, and Polly Toynbee, Guardian columnist, acted as respondents. This was followed by a lively discussion that touched on many aspects of Government policy.

## Physics Department organises ESF workshop

The University's Physics Department recently organised the first workshop for the 'Arrays of Quantum Dots and Josephson Junctions' network.

The network, which is made up of 13 European universities, is led by Loughborough's Professor Feodor Kusmartsev and has been granted 500,000 by the European Science Foundation (ESF). The objective of the network is to expand knowledge in the areas of Josephson junction and quantum dot arrays, nanoparticles, and semiconductor superlattices. Possible applications for the concepts analysed and developed may lie in quantum computation, quantum communication, and high frequency electronics.

The workshop, which was held in Croatia, had almost 30 participants with the primary goal of enhancing collaboration efforts and to highlight the areas of research being undertaken.

## WEDC receives prestigious prize

Brian Reed and Sarah House from the University's Water Engineering Development Centre (WEDC) recently attended the Institution of Civil Engineers awards ceremony in London.

At the event they were presented with the Frederick Palmer Prize. It was awarded for a paper written by Brian Reed and Sue Coates on WEDC's work bringing gender and engineering together on water and sanitation projects in low-income countries.

## Dear Editor ....

To all friends at the University

Thank you all for your good wishes for my retirement. I look forward to watching the birds using the birdbath. The other gifts - the pendant, picture frames, plants and flowers - are all wonderful.

Best wishes to you all  
**Sylvia Power - Media Services**

## Remembrance Day service

The annual Remembrance Day service was held at Loughborough University on November 11.

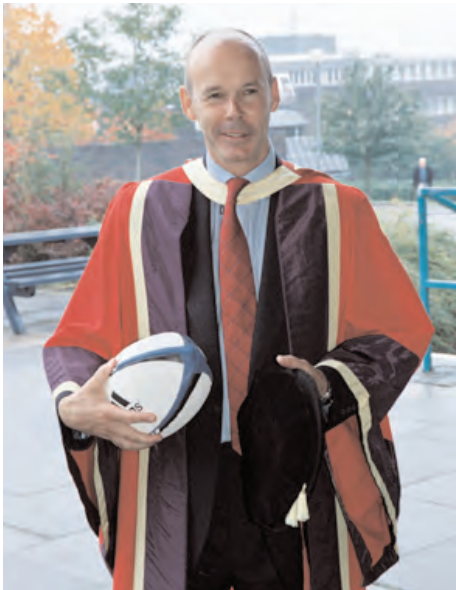
The ceremony is led by the University Chaplains and commemorates those who have fallen in conflict, as well as staff and students who have passed away. It takes place on campus in the Garden of Remembrance, which was

created to provide people with a quiet place to reflect.

At this year's service the Rev Simon Richardson also said a dedication prayer for a new gazebo that has been erected in the garden. The beautiful sheltered seating area was funded through generous donations from staff, former students and friends of the University.



# Sir Clive Woodward, OBE, awarded honorary degree



Sir Clive Woodward, OBE pictured after receiving his Honorary Doctor of Technology from Loughborough University.

Hordes of people gathered at the campus in October to see rugby legend Sir Clive Woodward receive an honorary degree from Loughborough University.

The degree, Doctor of Technology (Hon DTech), was awarded in recognition of Sir Clive's outstanding contribution to the development of rugby in England, which culminated in the World Cup win of 2003.

Sir Clive also presented a lecture to staff, students and friends of the University before receiving his degree from Vice Chancellor Professor Sir David Wallace.

Sir Clive said: "I was delighted to be offered this honorary degree from Loughborough. As a student at the University I enjoyed great facilities and teaching and have many good memories of that time. It's great to see how much the University has developed to maintain its position as a world class sports facility."

Vice Chancellor Professor Sir David Wallace said: "Sir Clive Woodward is one of our most eminent graduates and we are delighted to be able to confer this honorary degree on to him today. He developed a squad and the best coaching support to reach the pinnacle of excellence in his sport on the world stage, and his example will be an inspiration to many."

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The Loughborough Building Society  
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**Tuesday 7  
December**

**Loughborough Enterprise Club event 4.00pm**

Presentations: 'Long term exit strategies for company shareholders' by Mary Mackintosh, Freethcartwright LLP; followed by 'Psychological profiling' by Dr Cheryl Travers. Loughborough Innovation Centre. Please register for this event. Contact Gemma Pendleton, T: 01509 228684

**Royal Aeronautical Society –  
Inst. Logistics & Transport 7.30pm**

Cdr. David Hobbs describes the history of flying within the world's navies, the development of the aircraft carrier and operations during the Gulf conflicts. Brockington Building, room U020. Contact Goff Tearle, T: 01509 227260.

**Monday 13  
December**

**Anatomy of Apologia: The Intellectual Trajectory  
of a Displaced Child 7.00pm**

Department of English & Drama Lecture by Professor Geoffrey Hartman (Yale University) followed by wine reception. Sir Robert Martin Hall Theatre. Contact Professor John Schad, T: 01509 222952.

**Tuesday 14  
December**

**Christmas Concert by Loughborough Students'  
Concert Band 7.30pm**

Christmas music by the Students' award winning Concert Band. Sir Robert Martin Theatre, Adults: £4, Students: £4, Concessions: £4. Contact Viv Green, T: 01509 222899.

**Wednesday 15  
December**

**Universities and the Europe of Knowledge:  
Towards the Year 2010 4.00pm  
to 5.30pm**

Anne Corbett (LSE) will deliver a brief presentation entitled "Universities and the Europe of Knowledge: Towards the Year 2010", which will be followed by a Q&A session. Schofield building, room A204. Contact Professor Dave Allen, T: 01509 222983.

**Seminar 1.30pm**

Professor Peter Garrett gives a seminar on the mode of action of antifoams. Chemical Engineering Department, room S174. Contact Yasmin Kosar, T: 01509 222533.

**Thursday 16  
December**

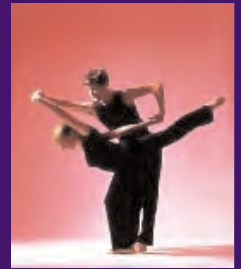
**Carol Service 7.00pm**

Annual Chaplaincy Christmas carol service. Cope Auditorium. For further information contact Revd Simon Richardson, T: 01509 223741.

**Monday 10  
January 2005**

**GaWC Annual Public Lecture:  
'London as a world city' 3.00pm  
to 4.50pm**

Professor Alan Freeman, Chief Economist of the Greater London Authority, will present a lecture on 'London as a world city.' All welcome. Cope Auditorium. Contact Professor Jon Beaverstock, T: 01509 223093.



**Merry Christmas  
and  
Happy New Year  
to all our readers**