

Launch of groundbreaking centre for disability sport

Loughborough University's world-famous School of Sport and Exercise Sciences is delighted to announce the formation of The Peter Harrison Centre for Disability Sport.

With funding of nearly £750,000 over five years from the Peter Harrison Foundation, the Centre is due to be formally launched in January 2005 with the appointment of a Director (currently being sought). It will become an international focus for evidence based advice and developments in the field of disability sport and will be the only centre of its kind in the UK.

The Peter Harrison Foundation already has links with one second year student at Loughborough, Daniel Greaves, who won gold in the F44/46 Paralympic discus competition in Athens as part of the GB team. Daniel is now starting on his third year at the University as the beneficiary of a Peter Harrison Scholarship.

Loughborough, with its world-class sports facilities as well as extensive partnerships with sports agencies on campus, can claim to be one of the world's best integrated sports development environments. It is within this context and environment of existing knowledge, networks,

facilities and expertise that The Peter Harrison Centre for Disability Sport could make a significant impact. "We are extremely pleased to be providing such a valuable and forward thinking facility to add to the extensive portfolio of research and professional developments at Loughborough and are very grateful to The

Photograph courtesy of the Sports Development Centre



Gold medal winning Paralympian and Loughborough student Daniel Greaves.

Peter Harrison Foundation for their generous support," commented Professor Stuart Biddle, Professor of Exercise & Sport Psychology and Head of the School of Sport and

Exercise Sciences. "We are keen that the expertise in the Centre will enhance the world of disability sport through excellent research that feeds into practice."

The Peter Harrison Foundation was set up by Peter Harrison in 1999 to provide help to people with disabilities and those that are disadvantaged. This help is provided by making grants to registered charities, particularly in the fields of education and sport, that work with or for such people. The support of children and young people is also a particular priority for the Foundation.

"I believe that education and sport provide the key stepping stones to self-development, the creation of choice, the building of self-confidence and self-reliance," said Peter Harrison.

"By making these stepping-stones available to those that are disabled or disadvantaged I hope that the Foundation will provide opportunities for people to develop to their full potential."

Inside



3

Termite study
Could termites hold the key to self-sufficient buildings?



6

The Holt unveiled
Ceremony held to celebrate the opening of the redeveloped hall of residence.



8

WATS
Widening Access Through Sport project is proving a big hit.



9

Medal success
All the news from the Olympic and Paralympic Games.

Praise for Loughborough

Loughborough is the most research intensive University in the country, in terms of research grants and contracts according to the latest performance indicators for higher education institutions, compiled by the Higher Education Statistics Agency (HESA).

The research performance indicator measures the research outputs of universities in relation to their inputs, such as staff costs. For the academic year 2002-2003, Loughborough is once again ranked as the UK's leading institution for attracting external research grant income per academic staff cost.

Continued on page 2.

news@lboro is published by the Publicity Office, Rutland Hall, Loughborough University, Loughborough LE11 3TU Tel: 01509 222224 Fax: 01509 223902 Email: news@lboro.ac.uk

Editor: Judy Smyth Ext: 8697 Email: J.L.Smyth@lboro.ac.uk

Layout by: Sue Rowbottom

Unless otherwise stated, photos by Media Services

Printed by John Price & Sons Ltd

Contributions to news@lboro should usually be made on disk or by emailing news@lboro.ac.uk

Due to space restrictions, not all submitted material can be printed. The editor reserves the right to amend or withdraw articles without notice.

Extracts from news@lboro should not be reproduced without prior permission from the Publicity Office.

Issue No 31: Tuesday 7 December 2004 Copy deadline: 5pm Tuesday 23 November 2004

news@lboro is also available online in pdf format at www.lboro.ac.uk/service/publicity/newsatlboro/newsletter30.pdf

The performance indicators were released just days after the University was heralded an 'outstanding success' in The Sunday Times University Guide. Excellent teaching assessments helped Loughborough retain its 13th position in the guide, which ranks every university and higher education college in the country on seven key areas.

These are: teaching excellence; research quality; A/AS-level/Higher points needed to gain entry to course; graduate employment; firsts/2:1s awarded; student/staff ratio and dropout rates.

In the 2004 league table Loughborough University comes second only to Cambridge in its teaching assessments and is also praised for its excellent links with industry.

Referring to the University, the guide states: "Campus-based Loughborough is one of the outstanding successes of the 1960s generation of universities.

"Renowned for its sporting prowess – facilities are the best in the UK and countless Loughborough-educated athletes have represented their country – the University backs this up with an academic record that makes its graduates among the nation's most employable."

Alumni message for University staff

You may not be aware that all staff of the University are members of the Alumni Association. This means that all staff are entitled to the services the Association provides to the University's graduates and honorary members.

A new advantage offered to Alumni this year is a range of benefits that can be seen on the Association's new website: www.lboro.ac.uk/alumni

These include discounts of 10 percent at Interflora, 45 percent at Vision Express, 15 percent on RAC membership, 20 percent off Warwick Castle entry and much more.

See the 'Alumni Benefits' page on the website for full details. Event details and information on Loughborough's famous Alumni are also available

on the Association's open pages. If you are interested in finding past student details you will need to register to view the secure areas of the site.

To do this contact the Alumni office by email to set up an ID number.

Please email your name, department, job title and date of birth to alumni@lboro.ac.uk

Within the next few weeks all staff will be able to register on the website in order to search for Loughborough Alumni online, leave messages for Alumni and be involved with discussions on the discussion board.

If you would like further information about any of the services offered by the Alumni Association email alumni@lboro.ac.uk

Black History Month 2004

Loughborough University will be celebrating Black History Month throughout October and November.

The annual celebration was started in 1926 by Carter Godwin Woodson and was originally called Negro History Week.

The University will be using the definition of 'black' in its

broadest terms in order to try and encompass the diverse community of the campus.

There will be a variety of events held at the University over the next few weeks, including an African Drumming Workshop for staff, a performance by black poet Patience Ababi, a Bollywood musical and an anti slavery exhibition from the

Leicestershire Records Office. For further information about all the events taking place please contact Lesley Mansell, Equal Opportunities Advisor, by calling 228026 or emailing L.A.Mansell@lboro.ac.uk

Alternatively visit the University's Black History Month website at: http://www.lboro.ac.uk/admin/personnel/blackhistory.htm

Researchers hope termites could hold the key to self-sufficient buildings

Mounds built by highly-evolved African termites could inspire new types of building that are self-sufficient, environmentally friendly and cheap to run.

The mounds provide a self-regulating living environment that responds to changing internal and external conditions.

A multidisciplinary team of engineers and entomologists, led by Dr Rupert Soar of the University's Wolfson School of Mechanical and Manufacturing Engineering, is looking at whether similar principles could be used to design buildings that need few or no mechanical services (e.g. heating and ventilation) and so use less energy and other resources than conventional structures.

The innovative project is being funded by the Engineering and Physical Sciences Research Council (EPSRC) and will include research in Namibia to digitally scan the structure of the termite mounds. This research will be filmed by the BBC Natural History Unit for inclusion in a new Sir David Attenborough series due to be screened in 2006.

The mounds incorporate a complicated network of tunnels and air conduits designed to channel air flow for the control of internal air

quality, temperature and moisture levels. Furthermore, the termites have evolved in such a way that they out source some biological functions, for example, digestive functions to a fungus that they farm inside the mound. They supply the fungus with chewed wood fibre which the fungus breaks down into nutritious food. The structure of the mound ensures a constant and optimum environment for the fungus to thrive.

The human equivalent of these 'smart' mounds would be buildings that meet all energy, waste management and other needs on site.

By digitally scanning the mounds, the new project will allow their three dimensional architecture to be mapped in a level of detail never achieved before. This computer model will help scientists develop an understanding of exactly how the mounds work and so provide a platform for further studies.

Dr Rupert Soar said: "We hope that our findings will provide clues that aid the ultimate development of new kinds of self-sufficient human habitats.

"These habitats might be suited to use in a variety of arid, hostile environments, not only on the Earth but maybe one day on the Moon and beyond."

Experts from Loughborough's Department of Civil and Building Engineering are also involved in the project, along with scientists from Cambridge University and the State University of New York.

Photograph courtesy Jean Ruelle 1962



A concrete casting of the internal tunnel networks in a *Macrotermes* mound made in the 1960s.

Appeal for Rainbows Children's Hospice

Loughborough University Enterprises Limited (LUEL) is running a project to help the local charity Rainbows Children's Hospice in Loughborough and would like to ask for your help.

LUEL would like to collect from University staff and students on an on-going basis all leftover foreign currency and old English coinage.

The money collected will be sent to a company called Lockdales in Lowestoft, who will then give the University the best price for this, whether it be exchange rate value or scrap value. The money

is then donated to the town's children's hospice.

If you would like to help you can drop off any unwanted coinage at the LUEL offices on the ground floor of Rutland Hall, room RH0.03, or hand it to your department's nominated collector. If you are unsure who this is, please call 228694 for further details.

The scheme has the support and backing of the Vice Chancellor Professor Sir David Wallace and Registrar John Town, who are both enthusiastic that the University can raise a significant amount of money for Rainbows.

Network conference

Several world-leading theoretical and experimental neuroscientists recently visited the University for the first annual meeting of the Theoretical Neuroscience Network.

The Network is led by Dr John Terry of the Mathematical Sciences Department and was established earlier this year, following a grant award of almost £80,000 by The Leverhulme Trust. Its main aim is to try to develop innovative mathematical and computational techniques for the analysis of brain interactions using real neural data from EEGs (Electroencephalograms), MEGs (Magneto-encephalograms) and fMRI (functional Magnetic Resonance Imaging). In the future this work could help us to understand and treat debilitating brain disorders such as epilepsy and Parkinson's disease.

The three-day meeting was organised by Dr Terry and Jackie Baseley, the Faculty of Science Conference Organiser. It has been hailed as a major success, attracting more than 30 delegates from across the world as well as a special visit by MP for North West Leicestershire, David Taylor.

The date of next year's meeting is September 21 – 23.

Inspiring the scientists of tomorrow

The University is hoping to join forces with teachers across Charnwood and inspire the next generation of scientists.

Loughborough is being offered a share of almost £1 million as part of a new scheme to try and encourage more teenagers to consider studying chemistry when they go onto higher education.

Entitled Chemistry: The Next Generation, the scheme is being funded by the Aimhigher national activity initiative of the Higher Education Funding Council for England. This aims to help widen participation in UK higher education, particularly among students from non-traditional backgrounds, minority groups and the disabled. The cash was awarded following a successful bid by the Royal Society of Chemistry (RSC), supported by the Aimhigher East Midlands Region.

The project, which will operate in three areas of the country (the East Midlands, London and the North-West of England), will involve 12 universities, three pharmaceutical companies, two Sector Skills Councils and the RSC.

Staff at Department of Chemistry will bid for funds from the scheme to run various projects aimed at raising the interest and expectations of young people in chemistry.

The department is hoping local secondary school teachers will come forward with any ideas on how they could use the cash. The money could, for example, be put towards travel expenses to bring groups of teenagers to the campus for hands on chemistry sessions, to support University staff in giving talks or demonstrations in schools, or to develop new teaching materials that the University can use with schools to help make chemistry lessons more exciting.

Professor Ray Jones of the University's Chemistry Department said: "This is an excellent opportunity for us to work in partnership with schools and local industry to show young people just how interesting and relevant to everyday life chemistry is."

Dr Mark Mabey of Aimhigher East Midlands added: "This is a national project and we are delighted as a region to support this exciting development in chemistry to encourage students from non-traditional backgrounds to enter the chemistry profession."

Chemistry: The Next Generation is viewed by the RSC and the chemistry community as its flagship outreach exercise. It will have the twin benefits of demonstrating the excitement and importance of chemical sciences, whilst the collaboration between universities and industry will show that a higher education qualification in chemical sciences can lead to some very exciting career opportunities.



Engineering Doctorate scheme reaps rewards for Stent

A research engineer based in the University's Centre for Innovative Construction Engineering (CICE) has helped a leading company win a prestigious award.

Mike Ward has been sponsored by Stent Foundations on the CICE Engineering Doctorate scheme for the past four years, during which time he has developed the SHERPA system for piling works.

The system, which utilises a site based server, wireless network and workforce driven data capture, has been implemented on a number of prestigious projects, including Wembley National Stadium and Kings Cross. It has been shown to be effective in reducing costs from defective work and improving the quality of pile construction through effective capture and control of site data.

The SHERPA system helped Stent beat off stiff competition from T-Mobile and Network Rail to win the 'Most Effective use of Mobile and Wireless' title at the inaugural Effective IT Awards. The awards, which form part of Infoconomy's Effective IT 2004 initiative, are designed to highlight the very best in effective use of IT across all industry sectors.

Photograph courtesy of the CICE



Pictured from the left at the awards ceremony are Mike Ward, with Jason Scott and Cliff Wren of Stent.

Few industries are as low-tech as construction, and piling is no exception. However, the experience gained in deploying a variety of wireless technologies to the needs of civil engineering show that there is huge potential for this to change.

By winning the award Stent have not only demonstrated that a relatively small investment in wireless and mobile technology can deliver significant benefits in terms of resource utilisation, cost saving and in-the-field record capture and processing, but also the significant contribution to business success that can be achieved through collaboration with the University's Engineering Doctorate scheme.

Mike Ward is supervised by Professor Tony Thorpe, Head of the University's Department of Civil and Building Engineering, and Professor Andrew Price, also from the department.

High-tech facial implants to be developed at Loughborough

A University researcher has been awarded more than £200,000 to develop state-of-the-art tailor made implants for people requiring facial reconstructive surgery.

The Department of Health's 'New and Emerging Applications of Technology' (NEAT) funding programme has awarded Dr Russell Harris of the Wolfson School of Mechanical and Manufacturing Engineering £234,761 for the two year project.

The aim of the work is to research and develop a technique that will provide the rapid and direct manufacture of tailor made implants for bone replacement and tissue growth.

The project could help a wide range of people, including victims of bone disease, oral cancer, congenital defects and traumatic injuries.

Patients currently requiring reconstructive surgery may have to wait several weeks for a customised implant to be made. This is because, with conventional manufacturing techniques, implants have to be moulded, cut, or formed, which is time consuming and costly.

These conventional techniques also impose geometrical restrictions on the shapes that can be produced and means the fit and placement of implants may be compromised.

The implant production method being investigated by Dr Harris is called Laser Sintering, which belongs to a family of techniques known as Rapid Prototyping (RP). The use of RP allows physical parts to be created immediately, directly and automatically from a 3D representation, known as a 3D computer-aided-design (CAD) model.

It works by breaking down a 3D model into 2D sections which are built up layer by layer by high tech machines. In Laser Sintering the 2D layers are built up by selectively binding powder particles together using a laser in just a few hours.

Data from CT or MRI scans of facial injuries are utilised to create a 3D model of the required implant.

This means that the implant would be tailor made to fit exactly to a patient's requirements in terms of shape, performance and integration into existing structures within the body, using data collected by non-intrusive scans.

The new implants would be made from a mixture of a polymer and a bioactive ceramic. Bioactive ceramics are used for bone implants and tissue scaffolds due to their ability to bond with natural bone.

An important such material, hydroxyapatite, can be combined with polymers to form a

material with appropriate stiffness, toughness and bioactivity for use in the body. Dr Harris said: "The requirement for bone replacement/reconstruction due to traumatic injury or radical surgery has, of course, long been required by patients. And materials have now been developed that are capable of bonding with natural bone to allow such repair.

"Through research and development these materials could be harnessed with a high tech but established production technique for the direct, quick, custom manufacture of bone implants that will integrate themselves within the body, and require only one surgical operation.

"This new technique would reduce patient distress; patient risk; operative procedures; costs and waiting times, whilst increasing implant performance.

"The realisation of such implant production techniques would revolutionize the application and possible treatment routes for the immediate and long term benefit of patients, clinicians and healthcare providers."

Dr Harris will be working with several other organisations on the project, including Queen Mary University of London, University College London and the Facial Surgery Research Foundation, Saving Faces.

New name, new web site, new logo, new address for LISU!



It's all change for the University's Library and Information Statistics Unit as it has decided to leave behind its previous title to be known simply as LISU.

The name change has been made to reflect the expanding role of LISU in the world of performance evaluation, information research and statistics, and is accompanied by a new logo.

LISU will also be moving to Holywell Park and is looking forward to taking up its new space in November. Directions and telephone numbers will be on the LISU web site shortly.

Along with all this exciting development LISU has been continuing to work hard and currently its research projects include: evidence Based Management in Action, working with Lancashire Library and Information Services, 'Ladder to learning and employment' project,

for the North East Museums, Libraries and Archives Council and customer satisfaction surveys for JISC Regional Advisory Services. Recently completed projects include: evaluation of the International Bibliography of the Social Science (IBSS) for the Economic and Social Research Council, estimating the availability of accessible publications for visually impaired people for the RNIB and support to set up INSPIRE, a national access scheme for library and information services.

LISU's core statistical work also continues with annual publications such as: Annual Library Statistics, the Public Library Materials Fund and Budget Survey, the Survey of library services to schools and children in the UK and the LIST (Library & Information Statistics Tables). Please visit LISU's restyled and updated web site for further information on its staff, projects and publications at: <http://www.lboro.ac.uk/departments/dis/lisu>

Loughborough University takes to the road

Loughborough University has taken to the road with an exhibition packed with information for local residents.

The display material explains some of the University's history and growth and what the future might hold. It includes information on the facilities that are on offer to the community and details how the University is managing its activities and the student population.

The exhibition will take in locations that local people and staff might routinely visit as they go about their day-to-day business. These include community centres, the library and shopping outlets.

The full list of remaining public venues, dates and times can be found at <http://www.lboro.ac.uk/service/publicity/whatson/or> by calling the Community Relations Officer, Alison Barlow on 228696.

The exhibition will also be available to the staff of two of the town's major employers. It will visit the premises of 3M on October 18 - 21 and AstraZeneca on November 1 - 3. Question/comment forms will be available and, for those that want one, a formal reply will be sent.

Alison Barlow said: "Being part of the community is important to the University and we want local people to know what we have to offer in terms of facilities and what we are doing to manage our activities effectively. This exhibition is designed to supplement other sources of information for residents - our community newsletter and website - and we are open to suggestions for future locations for it."

New student accommodation unveiled

Local residents and civil dignitaries were amongst the invited guests at the opening of the recently refurbished The Holt hall of residence.

Most of the off campus hall, located on Holt Drive, has been replaced with brand new modern student apartments in a partnership project between UNITE Group plc, the UK's largest provider of student accommodation, and Loughborough University. It is now home to 262 students.

At an official opening ceremony in September the Mayor of Charnwood, Councillor Mike Jones and Professor Sir David Wallace, Vice Chancellor of Loughborough, were joined by colleagues from the University, from UNITE and from the construction partners, William Davis to

mark the completion of the project. Local residents, who made significant contributions towards the development of The Holt, also attended the ceremony and were given a tour of the new accommodation.

The Holt has been designed in a traditional style to complement nearby houses. It has been arranged across a number of apartment buildings providing spacious en-suite study rooms. An older property, built in Victorian times, has also been refurbished and will now offer students shared amenities including a leisure room and laundry facilities.

Roy Hill, Director of Estates Services at Loughborough University commented: "We are developing a strategy to improve the quality of the accommodation and to help reduce the pressure on private

rented housing. The opening was a great opportunity to show the facilities to the



Pictured is Guy Higgins (top left) of William Davis, Jon Whittle (bottom left) of Unite, Mayor of Charnwood, Councillor Mike Jones and Loughborough Vice Chancellor Professor Sir David Wallace (far right).

local residents who contributed significantly to the design and development of The Holt."

On campus update

Further progress has been made towards the provision of more on campus student accommodation and an outline planning application will be submitted to Charnwood Borough Council very shortly.

The outline planning application will show proposals for: the re-development of the Ann Packer building from an academic building into accommodation, providing approximately 450 bed spaces; provision of approximately 760 bed spaces on the site of car park seven; provision of approximately 500 bed spaces on the site of the Cayley football pitch (the pitch would be relocated to a site at the west end of campus adjacent to the existing Holywell sports pitches); provision of approximately 400 bed spaces on the site of the existing Elvyn Richards pitch (pitch would stay but be

realigned); provision of approximately 650 bed spaces on part of the Holywell sports pitches and relocation of those pitches to the same area as the Cayley pitch.

A map showing all the sites is included in the latest edition of the University's Community newsletter and copies are available from the Publicity Office. If the outline application is successful development of the schemes would be phased over a period of time. Priority would be given to developing the car park seven site together with relocation of the pitches as it will take some time for the new pitches to reach the required standard. Key to the progress has been very productive discussions with local residents, particularly the Nanpantan Residents' Network, and approval of the proposals by various internal committees.

Aeronautical & Automotive Engineering

ANTLE Fuel Injector Support
Dr J F Carrotte
£23,357 Rolls-Royce plc.
ATAP10 Research
Prof J J McGuirk, Dr A Spencer, Dr Z Yang and Dr P A Denman
£1,574,000 Rolls Royce Plc (and DTI)
Acoustic Resonator Gas Ingestion
Dr J F Carrotte
£21,176 Rolls Royce Plc
Support to Low Emissions Combustor Research
Prof J J McGuirk
£32,431 Rolls Royce Plc
Carburettor Icing Research
Dr M Render
£15,000 Civil Aviation Authority
Zero Constraint Free Piston Energy Converter
Dr R Chen
£240,821 EPSRC

Business School

Buying into Retail : East Midlands Retail Research
Mrs C Hart and Prof J Saker
£63,577 Skillsmart Retail Limited

Chemical Engineering

Transforming Nano-Particles into Sustainable Consumer Products through Advanced Product and Process Formulation
Prof C D Rielly
£155,509 European Commission
Preparing for the Hydrogen Economy by Using the Existing Natural Gas System as a Catalyst (Naturalhy)
Dr G Hankinson
£1,125,498 European Commission

Chemistry

Quasi-Racemic and Enantioselective Synthesis of Marine Polysulfide Nature Products
Dr G W Weaver
£231,162 EPSRC
Comprehensive multidimensional chromatography for applications within pharmaceutical industry
Prof R Smith
£30,000 3M
EPSRC Case Award - New Stereoselective routes for the Total Synthesis of Complex Indole Alkaloids
Dr S M Allin
£16,100 Charnwood Molecular Ltd
Impact on Complexants on Radionuclide Mobility - 2004/2005 - CONTRACT EXTENSION
Prof P Warwick
£30,000 UK Nirex Ltd
PPA : Renewable Energy : From Sunlight to Electricity
Dr R J Mortimer
£72,824 EPSRC
Development of a Novel Radical Formylation Methodology (Res.St. Ms. Katy McRae)
Prof W R Bowman
£21,000 GlaxoSmithKline Res. & Dev. Ltd.
A New Organocatalytic System for

Asymmetric Epoxidation
P Page
£21,000 GlaxoSmithKline Res. & Dev. Ltd.

Synthesis and Screening of Ligands for Catalytic Olefin Oligomerisations (Res.Stu'ship)

Dr M B Smith
£26,250 Sasol Technology (Pty) Ltd., Johannesburg, South Africa

Civil & Building Engineering

Sustained Competitiveness in the UK Construction Sector : A Fresh Perspective

Prof S Austin, Prof T Thorpe and Prof A Price
£238,280 EPSRC

Elastomeric Shockpads for Outdoor Artificial Sport Pitches

Dr P Fleming
£13,500 Murfitts Ind, Aggregate Ind, Polytan Sports Surfaces (UK) Ltd
Lega Issues For The Advancement of Information Society Technologies

Dr T Hassan
£105,100 European Commission
Tech4All - Variable Price and Attribute System
Dr M P Enoch
£18,500 University of the West of England

Computer Sciences

Parallel block Jacobi-like algorithms for the singular value decomposition of large space matrices

Dr O Sykora
£29,803 EPSRC

e-Science Human Factors Audit and Best Practice Review

Prof R Kalawski
£30,020 JISC

CRSP

Implementation of the Education Maintenance Allowance Pilots - The Fourth Year

Ms S Middleton
£76,900 Department for Education and Skills (DfES)

Needs and Resources in Later Life
Ms S Middleton, Ms L P A Adelman and Ms J Rennison

£59,769 Joseph Rowntree Foundation
A Systematic Review of Poverty Dynamics Research

Ms S Middleton and Ms L P A Adelman
£49,775 Joseph Rowntree Foundation

Design & Technology

AUNT-SUE Evaluation and Implementation Core, Project 3
Prof J M Porter, Dr D Gyi (HU) and Prof K Case (MM)
£32,144 London Metropolitan University (via EPSRC)

AUNT-SUE Design and Operations Core, Project 2
Prof J M Porter, Dr D Gyi (HU) and Prof K Case (MM)

£117,454 London Metropolitan University (via EPSRC)

Electronic & Electrical Engineering

MetaMaterials Organised for adio,

millimeter wave, and Photonic Superlattice Eng.

Prof J C Vardaxoglou
£95,302 European Commission
PV Catapult

Prof D G Infield
£120,550 European Commission
Co-ordination Action for Autonomous Desalination Units based on Renewable Energy Systems

Mr M Thomson
£24,342 European Commission
UKLIGHT Monitoring and Analysis at Many Scales

Prof D J Parish
£343,268 EPSRC
Optimised Efficiency of Thin Film Photovoltaic Device

Dr R Gottschalg
£208,710 EPSRC
Advanced Research Fellowship - Optimised Efficiency of Thin Film Photovoltaic Device

Dr R Gottschalg
£233,963 EPSRC

ESRI HUMANIST Phd Studentship - The Dev. Of Innovative Methodologies to evaluate ITS Safety and Usability

Mr J H Richardson
£45,750 TRL Ltd
SOTS - Matching Ability with Jobs

Ms V I Haines
£60,487 Portsmouth C C

Geography Drinking places : social geographies of consumption

Dr S Holloway
£52,893 University of Sheffield through Joseph Rowntree Foundation

Information Science Improving the Transparency, Quality and Effectiveness of Pro-Public Services using ICTs

Prof P Sturges
£13,000 One World International

IPTME 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
£469,822 European Commission
Improved Resistance to IASCC in Austenitic Steels (Res.Studentship)

Prof R G Faulkner
£42,000 Rolls Royce Plc

Mathematical Sciences Mathematical methods for Wave Interaction with Large Arrays

Dr C M Linton
£173,933 EPSRC
Reality Grid - Ab-initio Modelling of Defects in Iron

Dr S Kenny
£22,350 EPSRC via UCL
Branched Solutions of Differential Equations and Continuation

Dr R Halburd
£96,358 The Leverhulme Trust

Mechanical & Manufacturing Engineering

A Knowledge-Based Manufacturing System, established by integrating Rapid Manufacturing, IST and Material Science to improve the Quality of Life of European Citizens through Custom fit Products

Dr R J M Hague
£584,439 European Commission
Robust 3-D phase unwrapping software for phase contrast Magnetic Resonance Imaging

Prof J M Huntley
£25,000 GlaxoSmithKline R & D Ltd.
An Innovative Electronics Manufacturing Research Centre

Mr P P Conway
£5,455,930 EPSRC
Low cost, low energy consumption, compact, infinitely configurable diesel particulate filter and regeneration system (LOCOFIL)

Prof C P Garner and Dr J E Harry
£145,000 DTI (via Perkins Engines Co. Ltd.)

PLATFORM: Pioneering new optical techniques, instruments and processes

Prof N A Halliwell, Prof C P Garner, Prof J M Huntley and Dr M R Jackson
£450,153 EPSRC
Driveline Refinement (Jaguar Res.Fell'shp in Powertrain Engineering)

Dr H Rahnejat and Prof S J Rothberg
£68,645 Jaguar Cars Ltd

School of Sport & Exercise Sciences Evaluation of SportScotland's Investment in Active Schools

Dr T Kay and Dr M Neveill
£193,000 SportScotland
Centre for Disability Sport

Prof S J H Biddle and Prof C Williams
£746,500 The Peter Harrison Foundation
Functionality of Personal Relationships in the Face of Work Stressors

Dr S Jowett
£46,951.79 ESRC
Branding, Identity and the 2004 Olympics : A Case Study of Global Media-Sport

Prof J A Maguire
£40,022.77 ESRC

Social Sciences Evaluation of the Piloting of the Integrated Children's System

Ms J M Scott
£48,706 Evidence Based Policy
Fund(joint with Royal Holloway, Open Uni. and Cardiff Uni)

Broxtowe International Students Study
Prof P Golding
£13,020 EMDA

Systems Engineering Emergent threats

Prof M Woodhead
£77,500 BAE Systems

Widening Access Through Sport

The 'Widening Access Through Sport' (WATS) project being held at the campus is proving to be very popular amongst ethnic minority youngsters in the Loughborough and Leicester areas.

The project, now well into its second year, is funded by the European Social Fund and led by the School of Sport and Exercise Sciences and the University's Widening Participation team. It provides activity programmes for young people from ethnic minority communities, which give them a chance to develop both their sport and education skills.

Recent events at the University include a six-a-side football tournament held in conjunction with the Loughborough Students' Union Community Fun Day. The

tournament was held on the campus at the state-of-the-art artificial football surface and involved more than 60 youngsters.

Photograph courtesy of Widening Participation



Each player on the winning side received an engraved trophy for their efforts and all

those involved had a very enjoyable afternoon.

Over the summer period intensive sports programmes were also organised for two groups of youngsters from Loughborough's Bangladeshi community. The young people took part in various sports in some of the University's top facilities and had qualified coaches to guide them along. The female group also completed a community coaching qualification in netball.

The WATS project runs until the end of 2004, with hopes of continuing beyond that. If you would like any further information on the project, visit the WATS website (www.lboro-wats.co.uk) or contact the WATS project officer James Lowrey, by emailing J.W.Lowrey@lboro.ac.uk or calling 226318.

Quality of learning and teaching praised

Academic quality and standards at the University received a resounding vote of confidence in a recently published report by the QAA (Quality Assurance Agency).

A team of QAA auditors visited the campus in March to carry out the institutional audit. The purpose of the visit was twofold: to assess the quality of the opportunities available to students, and the academic standards of the University's awards. The audit team received a wide range of documents explaining and illustrating the University's procedures for maintaining and enhancing academic quality, and quizzed members of staff and students from across the campus. The audit team also considered examples of institutional processes at work at programme level, through the exploration of five different 'discipline audit trails'.

The audit team concluded that "broad confidence can be placed in the soundness of the University's current and likely future management of the quality of its academic programmes and the academic standards of its awards". The report, which was published in August, identified many features of good practice at Loughborough, including the work of the Mathematics and Engineering Education Centres, and the links the University has developed with employers which have enabled to provide outstanding student placement opportunities.

Professor Morag Bell, Loughborough's Pro Vice Chancellor for Teaching, said: "We are delighted with the outcome of this institutional audit, which reiterates the University's standing as one of the country's leading institutions for teaching. Congratulations must go, not only to those directly involved in the audit, but to all staff and students whose hard work has been evidenced in this report." Institutional Audit has replaced the previous processes of continuation audit and universal subject review.

Staff volunteering

Loughborough Students are calling on staff to 'get a piece of the action', quite literally!

For the first time all the volunteering opportunities offered to students by the section of the Student Union known as Community Action are being offered to staff.

The Vice Chancellor is a supporter of Community Action and in 2002 staff were given permission for an hour off each week to volunteer in schools as part of the Right to Read project.

Staff will now be able to choose from a much bigger range of projects.

The opportunities on offer are diverse. They include special events and activities requiring a regular commitment. There are projects involving young people, the elderly, young offenders, children and adults with learning and physical disabilities.

Some involve sport, others arts and crafts. Sometimes Community Action get called in to help with one-off projects and these are usually

responded to by the creation of an 'A-Team'. This type of project may be particularly interesting to a department or section interested in team building.

Katy Osborn is the current Community Action Chair. She said: "For students volunteering is about making a real difference to the lives of local people and at the same time gaining new skills, making new friends and having some fun.

"There is no reason why it should be any different for staff." Any staff interested in volunteering should discuss the possibilities with their line manager.

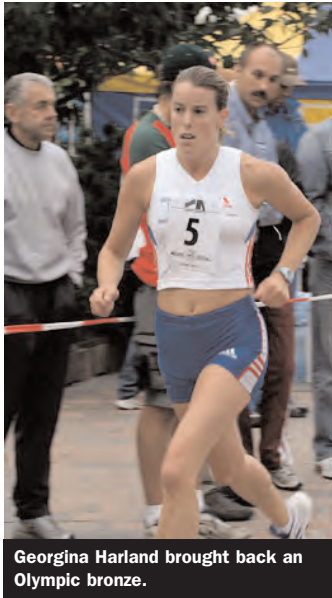
There will be a display on volunteering touring round campus in the next few weeks and the Community Action office in the Students' Union is available to provide more information.

They can be contacted by calling 635041.



Congratulations to all our Olympic and Paralympic stars

Athens put on a fantastic show this summer for the Olympic and Paralympic Games, and Loughborough's athletes, coaches and technical support staff played a key part in both events.



Georgina Harland brought back an Olympic bronze.

The University had a staggering 50 students, staff and graduates at the games, who were either competing or assisting the athletes and event organisers. Their contribution reinforces both the historic and ongoing significance of Loughborough University's role in the world of sport.

The Olympic Games started with disappointment in the pool, not least for Loughborough's swimmers, and was followed by two weeks of agony and ecstasy for the GB team. But at the end of the competition GB's athletes were

triumphant, bringing home 30 medals. Loughborough Geography graduate and Sport Scholar Georgina Harland contributed to GB's

medal haul, winning a bronze in the Modern Pentathlon.

The Paralympic Games were a massive success for GB, with the team winning a superb 94 medals, including 35 golds. This meant that GB came second only to China in the overall medals table.

Contributing to this success was Loughborough graduate Tanni Grey Thompson, who won two gold medals in the T53 400m

and the T53 100m to become Britain's most successful Paralympian. Current University student, Loughborough Sport Scholar and Peter Harrison Sports Scholar, Daniel Greaves also brought home a gold medal, smashing the world record in the F44/46 discus competition. Swimmer Jane Stidever, who trains at the University's Olympic pool, was another gold medallist in the women's 4 x 50m freestyle 20pts relay team.



Daniel Greaves smashed a world record to secure Paralympic gold.

Loughborough University would like to congratulate all its students, staff and graduates who played a part in the 2004 Olympic and Paralympic Games. The University is incredibly proud of their contribution to what is the world's showpiece sporting occasion. For a full write up on Loughborough's Olympic athletes, coaches and support staff see the latest edition of the Loughborough Sport magazine, on sale now.

Badminton project

Youngsters from across the region are being encouraged to take to the badminton courts as part of a project to increase Leicestershire's wealth of talent.

Following the success of Nathan Robertson and Gail Emms, who won Silver in the Badminton mixed doubles at the Athens Olympics, it is hoped that the development programme will increase participation in the sport across the borough and also provide the county squads with talented new hopefuls.

Fifty young players have been selected to take part in the project, which is being held at

the Soar Valley Leisure Centre in Mountsorrel.

The programme will provide coaching every week for seven months.

The project is being run in association with The Badminton Association of England (BA of E) and the Loughborough Sport Education Consortium. The training sessions will be delivered by BA of E qualified coaches.

Muggins Pottery

Burton Bandalls Farm, Cotes, Loughborough



supplying high quality pottery to our own individual and unique designs

visit us and buy on-line for Christmas at:

www.muggins.com

Roll of honour

First Loughborough Fellow of British Academy

The British Academy announced its newly elected Fellows in July and among them is Professor Peter Taylor of the Department of Geography.

Peter's fellowship is a first for Loughborough and he joins a small but select list of geographers who are Fellows of The British Academy. His contributions lie in a number of areas and, in reality, there are three Peter Taylor's: world-systems analyst, political geographer, and world cities scholar. The world-systems analysis provides the bedrock upon which the other two substantive areas are built.

Peter has founded a number of key journals and contributed to many books, some translated into languages as distant from English as Serbo-Croat. He is currently on study leave at Ghent University where he holds the Franqui International Inter-University Chair for 2004/2005.

Professor receives two prestigious appointments

Emeritus Professor Richard Wilson of the Business School has been elected to the Executive Committee of the International Association for Accounting Education and Research (IAAER). The IAAER is responsible for organising the World Congress of Accounting Educators.

He has also been appointed to the Education Committee of the American Accounting Association (AAA). The AAA is the world's



Professor Peter Taylor (right) and Vice Chancellor Professor Sir David Wallace cut a cake to celebrate Peter's election to Fellowship of The British Academy.

largest academic body in its field, and rarely invites non-Americans to join its inner ranks. Professor Wilson will be involved in developing a model curriculum for benchmarking purposes during his three-year term.

Tony Drake Scholarship

Sam Godfrey, a research associate with the Water Engineering Development Centre (WEDC), has been awarded the highly competitive Tony Drake Scholarship.

He has been given the scholarship for his part time PhD studies on 'Improved microbial risk assessment of shallow groundwater in Mozambique'.

The Tony Drake Scholarship of The Worshipful Company of Water Conservators commemorates the life and work of Tony Drake, a distinguished former member of The Chartered Institution of Water and Environmental Management (CIWEM) and the first Clerk to The Worshipful Company of Water Conservators. It is offered to members of CIWEM and is a travelling scholarship.

WEDC to work with UNICEF

The World Health Organization (WHO) and UNICEF's Joint Monitoring Programme for Water Supply and Sanitation (JMP) have asked for the assistance of WEDC's Rod Shaw on one of their latest projects.

Jointly the WHO and the JMP use data collected from household surveys to report global estimates on access to water supply and sanitation and the needs of national populations. Recognizing the need for consistency in using and analyzing survey data, the JMP is currently standardising the water supply, sanitation and hygiene related survey questions. As part of the standardising process, the JMP has contracted Rod Shaw to develop pictorials to be used during interviews with householders to facilitate the reporting of the types of water supply sources and sanitation facilities in use.

Tug of War success

Louise James, based in Personnel Services, recently travelled to Minnesota in the USA to compete in the 520kg Open Class of the Tug of War World Championships.

The Personnel Assistant is a member of the Belvoir Vale Ladies Tug of War team, who were competing against 14 other groups from nine different countries in the Championships. Belvoir Vale had a fantastic start, beating teams such as The Netherlands, Korea, Scotland and two teams from the USA. In the semi-final Belvoir Vale met Famille Janssen from Belgium. The competition was tough, and after an excellent fight Belgium took the

first end. On the second end Belvoir Vale took the rope from the drop, charging backwards but the Belgian team relied on their vast experience and Belvoir Vale were held and taken back second end, which meant that Belgium went through to the final against Sweden.

Belvoir Vale then competed in the pull off for the bronze medal against DJ's of the USA. After their disappointment of not making it to the final, Belvoir Vale were even more determined to try for the bronze. But the pressure and humidity of the day were telling and they lost in two straight ends to an experienced side with a massive advantage of a home crowd. After the

initial disappointment of not winning a medal, the team were very pleased with a fourth place in a world championships in only their second competitive year.

Louise and Belvoir Vale began training for the indoor season at the beginning of October and are hoping to gain further successes and medals in Tug of War. All the staff in Personnel Services are very proud of Louise's success and wish the Belvoir Vale Ladies all the best for the future. If you are interested in joining the team, require any further information or are interested in providing sponsorship, please contact Louise by calling 228020, or emailing l.a.james@lboro.ac.uk

Remembrance

Professor Don Freshwater

It is with great sadness that we report the death of Professor Donald Freshwater, who passed away peacefully in August, aged 80.

Professor Freshwater was appointed first Head of the new Department of Chemical Engineering when it was formed in the then Loughborough College of Advanced Technology in 1957. He started with £230, two Quonset huts and a third of a World War Two aircraft hanger.



Professor Freshwater recruited new academic staff wisely, and under his shrewd and inspired leadership the department grew and flourished to become one of the premier departments in the country. Beginning with just 30 undergraduates and three staff, when he retired after 29 years as Head of Department there were 250 students, 50 postgraduates and 20 staff.

A man with vision, Professor Freshwater was strongly influential in the development of the University. He was Dean of Science for two periods of three years, Senior Pro Vice Chancellor for two years and a repeated member of Council.

He was also active in the Institution of Chemical Engineers, spending time on its Council and being Vice President for two years. Professor Freshwater wrote the Institution's history, 'People, Pipes and Processes', for its 75th anniversary and was founding editor of The Chemical Engineering Journal (1971).

After his retirement in 1986, he joined the staff of Louisiana State University as a professor to spend a further ten years doing what he loved, teaching young engineers - even winning the Dow Excellence in Teaching award. He was made FEng in 1986 and awarded a DSc Hon by Loughborough in 1989. He returned to the UK in 1996 and settled in Mountsorrel, where he became a Parish Councillor. He had no pretensions, listing his Clubs in 'Who's Who' as 'Athenæum; Mountsorrel Working Men's'.

Professor Freshwater was a collector of English watercolours and books, and was an accomplished watercolorist himself. He enjoyed opera and only a few weeks before his death made his annual pilgrimage to Glyndebourne. He was much loved, admired and respected as a man and as a chemical engineer.

Letter to the Editor...

On my retirement I would like to thank you all for many happy memories of my 30 years at the University. I am very grateful for the support and friendship I

received from colleagues during that time. My leaving presentation was a very enjoyable occasion and one that I shall always remember.

Professor Brian Scarlett

It is with great sadness that we report the death of Professor Brian Scarlett, who passed away aged 66 in September in Gainesville, Florida.

Born in Biddulph, Staffordshire and educated at Wolstanton Grammar School, Brian obtained a BSc and MSc in Physics from the University of Durham in 1963. He was later awarded a DSc in Chemical Engineering both from the universities of Coimbra, Portugal, and Loughborough in recognition of his extensive research contributions to chemical engineering over many years. He was elected to Fellowships of the Royal Academy of Engineering, the Institute of Physics and the Institution of Chemical Engineers.

The early part of his academic career was spent at Loughborough University, beginning in 1963 when he formed a research and teaching group in particle technology, which was then a newly emerging topic in chemical engineering. Together with several colleagues he developed new modules on this topic for the undergraduate courses and a range of short courses for engineers and scientists in industry. His lectures were clear and concise, and he readily communicated his enthusiasm for his subject. His tutorials to small groups of students were especially enjoyable and he soon recruited some able research students, many of whom went on to hold important positions in industry and academia.

During this period he also found time to be active in local politics and was a councillor for Charnwood Borough Council and represented Leicestershire on the Severn Trent Water Authority.

In the mid-1970s he was asked to fill a gap at Delft University of Technology, Holland, and for several years he did this on a part-time basis, commuting from Loughborough. His contribution to the university at Delft and to his subject was later recognised by his appointment to a full professorship by the Dutch Queen.

In 2000 he retired from Delft, where he had by this time been the Professor of Particle Technology for over twenty years, and moved to the University of Florida as a Research Professor in the National Science Foundation Engineering Research Centre for Particle Science and Technology.

He was also appointed a Visiting Professor at the Particle Science and Technology Institute at the University of Leeds. He is survived by his wife of 42 years, Joan, three children and four grandchildren.

Should any donations wish to be made in Brian's memory, the family has suggested that they be made to a local hospice or cancer charity.

Gwen Massey

It was very nice to see so many of you from all over the campus giving up your time to be there. I have bought a digital camera with the money collected enabling me to continue with my hobby of photography. I was

overwhelmed by the many good wishes and cards that I received.

I send my thanks to you all.

Best Wishes
Robert Bramley

Tuesday
19 October **Royal Aeronautical Society** **7.30pm**
Airborne Aircraft and Operations in WW2. U020, Brockington Building. Further details from Goff Tearle, T: 01509 227260.

Wednesday
20 October **Coleshill Interchange Project - multimodal transport (ILT/IHT)** **7.30pm**
A presentation on a project to build a new interchange station at Coleshill in and the relevance of the scheme to local airports. JJ002, EHB. Further details from Dr David Gillingwater, T 01509 223409.

AstraZeneca R&D Charnwood & Loughborough University Organic Synthesis Symposium **2.00pm – 6.15pm**
CC011, James France Lecture Rooms. Further information, T: 01509 222581.

Friday
22 October **Mahler: Song & Dance Man** **7.30pm**
Like a Mahler symphony this is a big production. Sir Robert Martin Theatre, Adults: £7, Students: £6, Concessions: £6.*

Wednesday
27 October **Wrestling School Theatre Co presents 'Dead Hands' by Howard Barker** - Drama Studio, all tickets £5.* **7.30pm**

Tuesday
2 November **Loughborough Enterprise Club (LEC) event** **4.00pm**
'Funding for companies' and 'Innovation in the region' - Loughborough Innovation Centre. Further information T: 01509 228684.

Wednesday
3 November **Blake Morrison - best selling author 'AND WHEN DID YOU LAST SEE YOUR FATHER'** **7.00pm**
Blake Morrison talks about his writing. Sir Robert Martin Theatre.*

Saturday
6 November **Richard III** **7.30pm**
Sir Robert Martin Theatre, Adults: £8, Students: £6, Concessions: £6.*

Wednesday
10 November **Professor J R Ebbatson's Inaugural Lecture** **6.00pm**
Martin Hall Theatre, Further details from Trish Swift, T 01509 222475.

Thursday
11 November **John Carson Guitar duo** **12.45pm**
Music Centre.*

Wednesday
17 November **Belcea Quartet** **7.30pm**
Cope Auditorium, Adults £8, Students £5, Concessions £7.*

23 November **Laser Safety Course** **9.00am – 5.00pm**
24 November
Burleigh Court International Conference Centre. Further information from Dr John O'Hagan, T 01235 822673.

Tuesday
30 November **Tom Kitching - violin** **12.45pm**
Music Centre.*

Tuesday
7 December **Loughborough Enterprise Club (LEC) event** **4.00pm**
Loughborough Innovation Centre. Further information T: 01509 228684.

*Further information T: 01509 222899

