Buckyballs and beyond

THE story of how Professor Sir Harry Kroto (CPES) and his team discovered buckminsterfullerenes has gone on display at the Science Museum. The ‘Buckyballs and Beyond’ exhibition shows how serendipity helped find a new carbon molecule shaped like a football.

Carbon_60 was discovered in 1985, and it was soon followed by the discovery of a whole family of carbon-cage molecules, collectively dubbed fullerenes after their similarity to the geodesic domes designed by the late Richard Buckminster Fuller.

The molecules are characterised by their extraordinary strength, and vary in shape from the prototype ball to rugby balls and tubes, known as nanotubes, first synthesised by Sumio Iijima in Japan. Nanotubes are about 100 times as strong as steel, but as light as the graphite in ordinary pencils, properties make for endless practical applications. Part of the exhibition focuses on current research in the UK which includes using fullerenes as a protective layer on sunglasses (Heriot-Watt University) and nanotubes as carriers for delivering DNA and proteins to specific cells in the body (Universities of Edinburgh, Oxford and Reading).

The exhibition is at the Science Museum, South Kensington until 11 October.

Novelty brains

ANGLING a red ping-pong ball in front of a chick may not sound like hard science, but this method has produced new evidence of hemispheric specialisation in the chick brain. The findings support the hypothesis that the right eye’s visual system in chicks is particularly good at controlling response to visual cues. This lateralisation, where different hemispheres are largely responsible for different functions, is thought to apply to all mammals, including chicks and humans.

Professor Richard Andrew and Dr Ray McKenzie, from the Centre for Neuroscience (BIOLS) in collaboration with a colleague at the Roslin Institute, Edinburgh, have found marked differences between the function of the left and right chick eye. The left is predominant in detecting novelty and the right for selecting cues to decide how to respond.

For example, if the chick is familiar with ping pong balls, and is presented with red one, the left eye will be used to investigate it, and the right will be used to decide what to do about it, e.g., ‘have I seen a ball like this before?’ or ‘should I eat it?’ If it is a novel stimulus, the chick learns about it.

This marked lateralisation between visually-prompted responses is indicative of persistent differences between the hemispheres of the chick brain, as novelty detection and response are two discrete and complex behaviours. According to Richard Andrew “For years we thought that humans were special because we developed language, but recent work in chicks and fish show degrees of similar specialisation in all vertebrates, as if in preparation for developing language.”

Public Lectures

What’s the use of History?
Patricia Thane
Professor of Contemporary History

6.15pm Tuesday
26th May

South Downs NHS Trust Annual Health Lecture
Dame Cicily Saunders
Founder of the Hospice Movement

LESSONS IN LIVING FROM THE DYING
Wednesday 27 May
6.00 for 7.00 pm
Terrace Room, Refectory
These are open lectures and everyone is most welcome to attend.
In brief

Green News

As part of National Car Free Day on June 16, the University is organising a range of events on campus. We are looking for anyone who would be willing to use an innovative form of transport on the day. If you own a tandem, unicycle, roller-blades, or any unusual form of transport, this is your chance to join in and promote awareness about alternatives to the car, and maybe win a prize for the most innovative method of transportation.

Meridian TV have indicated an interest in televising events, so please contact me asap if you are entering, so I can generate some enticing press releases to stimulate media coverage. With many thanks. Penelope Chapple, Environmental Adviser, ext 8904, P.J.Chapple@sussex.ac.uk

Changing face of campus

PLANNED FUTURE WORKS IN 1998
- Chichester I: roof and concrete repairs, planned for July to September.
- Library: refurbishment. Phase B, internal alterations, Stage 2, start 15 June until September.
- Campus Signposting: Another new finger-post, improvements to building name signs.
- Access for Disabled: Arts A: alteration and automation of two pairs of doors on each floor (date dependent on listed building consent). Signage: New signage along the main campus spine path.
- Falmer House: major repairs of external building fabric and services.
- Roads: major repairs, starting a resurfacing programme with the areas in worst condition.

Pat Brewerton, former Catering Secretary, would like to thank everyone for making her retirement day so wonderful and for all the generous gifts and flowers.

News

The University of Sussex at Brighton

New look for the Undergraduate Prospectus

The 1999 entry undergraduate prospectus is now out. The new prospectus has been substantially re-vamped both in content and design. Elements of the typography and graphics are drawn from the 1960s era, which not only reflects when the University was founded, but being back in fashion, gives the publication a very contemporary look.

Copies of the prospectus can be obtained from Lynda Whity-Eastwood in the Undergraduate Office. Among the new degree programmes on offer for the 1999 intake are Natural Science, Economics and Politics (joint), and Robotics, Cybernetics and Process Automation.

Migration Professor on his way

Professor Stephen Castles, the new Visiting Professor in Migration Studies, will be at Sussex from 25 May to 19 June. Stephen is Professor at the Centre for Multi-Cultural Studies, University of Wollongong, Australia, and is arguably the leading authority on contemporary European and global migration patterns. He joins the Sussex Centre for Migration Research for one month each year for the next three years.

Whilst here, Stephen will be involved in two one-day workshops organised by the Centre on 'Migration and Sustainable Development'; and on 'Methods in Migration Research'. The Methods workshop is open to MA and undergraduate students conducting research on migration topics for their dissertations.

Stephen can be contacted during his stay via Russell King (8744) or Khalid Koser (3394).

Papal blessing

THE University's Roman Catholic chaplain has returned from a conference on university pastoral care with a Papal blessing for everyone at Sussex.

Fr Rob Esdaile (second from right) attended the meeting in Rome with 200 other chaplains from European universities, to discuss how staff and students can develop and maintain a common identity and how to improve communication between people of different disciplines. Rob said that the chaplain could play the role of facilitator between people, to discuss topics such as ethics and values.

Fr Esdaile enthused about his visit to Rome, "the best bit of the trip was the nostalgia factor of returning to Rome, where I'd studied for six years."

Part-Time Learning Centre for Continuing Education

CONTINUING CHOICE & OPEN EVENING

- Discuss with tutors your choice of course for next year
- Meet our guidance and learning support workers
- Enjoy a glass of wine at the Terrace Room Refectory Building University of Sussex Wednesday 20 May 5.30-8.30 pm
- Reduced fees for University staff
- Chat with other students about their courses
- See displays of students' work

Stan Hildred

We are very sorry to report the death of Stan Hildred who for 20 years was the fireman and 'greeter' of audiences at the Gardner Arts Centre. We extend our sincere condolences to his wife Wendy who works in the University Bookshop.
Universities’ regional role

Universities have a huge economic impact in their region, employing large numbers of local people and purchasing substantial amounts of goods and services from local companies. A conference held at the University last week looked at the regional role of five universities in the Rives Manche region: Sussex, Brighton and Le Havre, Picardie Jules Verne and Rouen. The aim of the conference was to share information on each university’s regional strategy, to examine their potential for economic development within their region and to explore local partnerships which could benefit from successful European Union bids for regional funding.

The conference, ‘Regional strategies for innovation – the regional role of the universities’, was opened by Professor Brian Roberts, the Pro-Vice-Chancellor responsible for regional development and Mark Clark of the Research Grants and Contracts Office outlined Sussex’s regional strategy, focusing in particular on the Academic Corridor and its flagship project, the Sussex Innovation Centre.

Over 60 delegates from Sussex and Northern France attended the conference which was funded by European Regional Development funds. It provided an excellent opportunity for people from a variety of organisations concerned with economic development and technology transfer to discuss complementary skills and expertise and to explore possibilities for new initiatives in partnership with people from their regions.

If you would like a copy of the overheads from each presentation, please contact Ross Dowsett (European Liaison Officer), email R.L.Dowsett@sussex.ac.uk.

Peaks of biodiversity

When you think about climate change, mountain areas may not be the first ecosystems that come to mind. Common foci of environmental problems such as diminishing rainforests and ice shelves tend to leave mountains in the shade, despite their importance in providing resources for half the planet and containing ten per cent of the population.

A report recently published summarises conclusions from a European conference on environmental and societal change in mountain regions at which academics including Dr Don Funnell (AFRAS) discussed how social science and natural science could be integrated and brought to bear on the problems associated with global change in mountain areas. Mountains have been given prominence following the Rio Earth Summit in 1992, which emphasised the importance of these areas in terms of their indigenous cultures, as water sources and as core areas of biodiversity.

Because of the effects of altitude, Don commented, "mountains usually contain several different ecosystems, for example ranging from temperate grassland to cold desert all within the space of a few kilometres. On a flat landscape, the contrast might take place over several hundred kilometres." He added that mountain landscapes are useful indicators of climate change when boundaries between areas shift or the mixture of species alters. Other key indicators include the amount of precipitation, snowline, economic and social changes.

One of the greatest challenges is to generate locally controlled initiatives which harness the experience of the mountain populations and also link with national objectives. To this end, a European group is currently building a database to make information on mountain developments widely available.

Research Opportunities

This is a selection of Research Opportunities. More details of these and other opportunities are available from Mylene Powell in the Research Grants and Contracts Office, ext 3812 or email: M.Powell@sussex.ac.uk.

INDIAN BIOSCIENCE: The Wellcome Trust new annual fellowship scheme supporting Indian bioscience. Applications are invited from those with five to ten years' postdoc scientific or clinical experience who wish to work in a non-commercial Indian research institute. Deadline: 1 June 1998.

LOCAL GOVERNMENT: The Local Government Management Board invites applications for three research projects. Constitutional change: the impact of regional levels of government on local authorities and local democracy; enhancing the research capacity of local government; corporate management and service delivery. No deadline.

For an extensive listing of funding opportunities see REFUND linked to the Research web site: http://www.sussex.ac.uk/Units/research or USSIS Home Page, select 'Teaching & Research', 'Research Funding at Sussex'.


THE LEVERHULME TRUST RESEARCH PROGRAMMES 1998: grants could be awarded in support of research in the fields of (1) trade unions in modern Britain and (2) nation and regions. A grant would be intended to support a major research undertaking and should typically be designed to last for up to 5 years at an annual cost of some £220,000. Deadline: 15 October 1998.

 Lectures, Seminars, Colloquia

Monday 18 May
12.30 pm Sussex Continuing Education Research Forum: Mary Stuart & colleagues, The urban programme: rhetoric and reality. Room D310
1.00 pm Experimental Psychology Seminar: Brendan Weeks (University of Kent) Oral reading of alphabetic and non-alphabetic scripts. Biology Lecture Room (EP 3.9)
1.00 pm IDS Special Seminar: Desmond McNeill (University of Oslo) Interdisciplinary research on development and the environment. Room IDS 221
2.00 pm Particle Theory Group Seminar: Jesus Moreno (Madrid) Bubbles in the super-symmetric standard model. Room Pevensey 2A1
4.30 pm Neuroscience Seminar: Phil Husbands, Brains, gases and robots. Biology Lecture Room (EP 3.9)
5.00 pm Sociology and Social Psychology Seminar: Ritsuko Ozaki, Society, culture and housing form. Room D310
6.00 pm Lapidus Seminar: Phyllis Creme, Using journals in academic writing: an interdisciplinary course on death and dying. Room D410

Tuesday 19 May
12.30 pm American Studies Seminar: Carole Sweeney, Paris noir: race and the American diaspora in the inter-war period. Room A71
2.15 pm Sussex European Institute Seminar: Yusaf Akbar (SEI & European Business School) Global competition policy: formulation and harmonisation. Room A71
4.00 pm COGS Seminar: Peter Cheng (University of Nottingham) Problem-solving and learning with low encoding diagrams. COGS SC11
4.15 pm Biochemistry and Genetics and Development Seminar: Juan-Pablo Couss (Royal Holloway College, London) Genetic analysis of the development of homologous appendages in Drosophia. Biology Lecture Room (EP 3.9)
5.00 pm Social Anthropology Seminar: Akbar Ahmed (Cambridge University) Dare to dream: the making of the feature film ‘Jinnah’. Room EDB 121
5.00 pm International Relations and Politics Seminar: Fiona Robinson, International liberalism reconsidered. Room D640
5.15 pm German Research Colloquium: Nick Saul (Trinity College Dublin) Body and death in German romanticism. Room A155

Wednesday 20 May
1.00 pm IDS (Poverty Research Programme) Seminar: John Micklewhite (UNICEF) How has child welfare changed in Eastern Europe and the former Soviet Union? Room IDS 221
3.00 pm Sussex Centre for Optical and Atomic Physics Seminar: R J Butcher, Ten micron saturation spectroscopy: molecular hyperfine structure and dynamics. Room Pevensey 2A2

Monday 25 May – Sunday 31 May

Lectures, Seminars, Colloquia
4.00 pm Research Centre for Southern African Studies Special Lecture: Etienne Nel (Rhodes University) Local development initiatives in South Africa: reflections on current policy and practice. Room C337
4.30 pm History of Art Work in Progress Seminar: Chin-tao Wu (University of East Anglia) Guardians of the enterprise culture: art trustees in the 1980s. A5 Lecture Theatre
5.00 pm English Graduate Colloquium: Peter Boxall, The existence I ascribe: memory and invention in Beckett’s fiction. Room D640
5.00 pm Centre for Statistics and Stochastic Modelling Seminar: Luidus Giraitis (LSE) - Stationary ARCH models – dependence structure and central limit theorem. Room Pevensey 2A3

Thursday 21 May
1.00 pm IDS (Participation Group) Seminar: Heidi Attwood & Emmanuel Lugussha, What can happen in six months? Experiences from Shinyanga. Room IDS 221
4.00 pm Geography Research Seminar: Gabriel Lipschitz (University of London) Core v periphery: migration and regional development in Israel 1948 - 1995. Room D610
4.30 pm Social and Political Thought Seminar: Dierk Bubeck (Berlin) Nietzsche’s discussion of virtue and modern political theory. Room D630
5.00 pm Centre for Modern French Thought Seminar: Andrew Goffey (University of East London) Delire, speed, thought. Room A71
5.00 pm History Work in Progress Seminar: Deborah Cherry, The seduction of Elizabeth Siddall. Room A155

Friday 22 May
10.15 an Environmental Politics Seminar: Rolf Ahlzen (University of Karlstad) The birth and growth of Swedish environmental politics and policies. Room D610
2.00 pm SPRU Seminar: Steve Pollak (MIQS, Inc.) Knowledge-based healthcare delivery: a new model for the next century. Room EDB 121
4.00 pm Astronomy Centre Seminar: Michael Rowan-Robinson (Imperial College) The star formation history of the Universe - an infrared perspective. Room Anundel 401
4.30 pm Philosophy Seminar: Katherine Morris (Oxford University) The phenomenology of clausumness. Room A155

Miscellaneous
- Lunchtime recital at the Meeting House - Gordon Pullin (tenor) 19 May at 1.20 pm in the chapel
- International Families Outing - all international families are invited on a day’s outing to Chessington World of Adventures, a large family leisure park about 50 miles from Brighton. Lots of different rides, shows, a magnificent circus, zoo animals and other entertainments. Once entrance fee covers all facilities and rides. The University will pay for the coach there and back plus entrance fee for all children, adults will pay £12.75 each. A£5 non-returnable deposit must be paid to Gillian Hall at York House Reception, ext 8323.

Small Ads
FOR SALE: IBM notebook, mono, extra battery and charger, Windows 3.11, case, £110 o.n.o.; Brother 486SX-50 notebook, mono, Windows 3.11, case, perfect condition, £300 o.v.n.o. Contact ext 2710 or e-mail: j.park@sussex.ac.uk
FOR SALE: Rover 216SE, 1988, T & T until September, owner going abroad, £700 o.n.o.; hi-gear coxeyt mummy-style sleeping bag, £15; twin-spot floor standing lamp, £10. Contact Paul on ext 2841 or 208602
WANTED: native Spanish speaker to help improve Spanish of English person planning a trip in six weeks’ time. Contact Michaela on 206329 (eves.)
POEMS ON THE UNDERGROUND: unique opportunity to purchase a selection of the famous prints, framed and glazed, £5 each. Offers may be considered and reductions for bulk, 20 prints available. Contact Jane ‘Expansio on ext 8880 or e-mail: jane@sussex.ac.uk
TO LET: house in South of France near Grasse, half-hour from coast, sleeps six, available July and August, £300 per week (negotiable). Contact 0033 493 098911
TO LET: quiet ground-floor country flat for single, NS, mature occupant, four rooms, own front door, just renovated, available now, £405 p.c.m inclusive, contact 01825 723494

The Bulletin appears every Friday of term, with copy deadlines the preceding Friday lunchtime. We welcome any suggestions for news, events, letters and small ads. Please contact the Information Office, Sussex House on ext. 8209 or e-mail: bulletin@sussex.ac.uk