

IC Reporter

Issue 6 23 May 1995

STAFF NEWSPAPER OF IMPERIAL COLLEGE OF SCIENCE, TECHNOLOGY AND MEDICINE

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Duplicate

Imperial College launches press

Imperial College Press (ICP), a new venture between Imperial College and World Scientific Publishing, was launched on 15 May. ICP will publish technical books and journals in both printed and electronic formats.

The first book to be published by IC Press will be *Lectures on Quantum Theory - Mathematical and Structural Foundations*, by Professor Chris Isham, Physics.

ICP is jointly owned by Singapore-based World Scientific Publishing (51 per cent share) and Imperial College (49 per cent). Lord George Porter, Nobel Laureate and a professor in the Chemistry Department, will chair the Editorial Advisory Board.

"It is high time that an institution of the stature of Imperial College had its own press," said Sir Ronald Oxburgh, Rector.

Dr K.K. Phua, chairman of World Scientific Publishing and an alumnus of Imperial College, said the press would publish in a number of languages as well as English. "We hope to develop Imperial College Press so that it is as good as Cambridge University Press or Oxford University Press - or better."



IN BRIEF

Imperial chaplain achieves top role

Paul Brice left the College on 12 May, after six years as Anglican chaplain. Appointed Secretary for Higher Education/Chaplaincy, Board of Education, General Synod of The Church of England, Paul's new handle incorporates two roles: first he will be chaplain to the chaplains of around 70 universities, organising inductions and conferences; and second he will advise The Church of England on HE policy.

IC professor advises Lords

Professor John Beddington, Director of ICCET and Head of the Renewable Resources Assessment Group, has been appointed specialist adviser to the House of Lords Select Committee on Science and Technology Sub-Committee I on Fish Stock Conservation and Management.

Shakespeare and rock'n'roll

Imperial College Union's Dramatic Society is getting ready this term for a rock'n'roll version of William Shakespeare's *A Midsummer Night's Dream*. Set in a recording studio in Athens in the mid-sixties, the fairies play rock'n'roll in the background and the four lovers rebel against their parental commands and escape to the woods (a nightclub).

Classic Shakespeare, classic rock'n'roll, this mixture of play and music has a magical feel, making it perfect end of term entertainment.

Tickets available from the Union Office or call 0181-940 2848. The performances will be in the Union Concert Hall, Beit Quad on Monday 12 June - Saturday 17 at 19.00 hours (excluding Friday 16). Ticket price £6 (£4 for students). Preview on Sunday 11 June at 17.00 hours. Entrance fee £2.

Two medals for research fellow

Emeritus Professor Brian Steele, a Senior Research Fellow in the Department of Materials has been awarded the Kroll Medal and Prize by the Institute of Materials and the H.M. Richardson Medal by the Institute of Refractories.

Board of Studies update

The Board of Studies, the group which holds formal responsibility for academic standards at Imperial, held its second meeting of the year on 10 May. The following main points were discussed.

- In a recent review, the standard of undergraduate teaching in the Department of Materials was judged to be very high.

- The term dates were set for 1996-97 and 1997-98. Provisional dates until 2004-05 were noted.

- In March, the Vice Chancellor of the University of London, Professor Andrew Rutherford, issued a paper which laid out the criteria for degrees issued by constituent colleges. The paper suggested that a framework should be set up to assess the quality of these degrees. The Board discussed a letter written by Sir Ronald Oxburgh, Rector, that criticised the paper.

"This paper is based on a fallacy," agreed Professor Alan Swanson, Pro Rector (Educational Quality). The Board of Studies accepted the view that while theoretically degrees are of equal standard, in reality they vary from college to college and even from department to department. The

Board will discuss the University of London's future direction on another occasion.

- The Board includes several sub-committees, which examine issues in more detail. These include committees on admission policy, engineering studies, graduate studies, medical studies, and undergraduate studies. However, there is no 'science studies' committee, which would correspond to the engineering and medical committees. The Board therefore agreed that a science studies committee should be established as of October 1995.

- Finally, the Rector suggested that the Board of Studies' days are numbered. At present, only a third of those invited to attend the meeting actually do so. This makes it possible to hold the meeting in 170 Queen's Gate, which otherwise would be too small. However, over the next few years, as the College merges with various medical schools, the meetings may become so large as to be unworkable. Alan Swanson and Peter Mee, Registrar, will look into future options for a changed Board of Studies.

For more information on any of these items, contact your head of department.

IC Women's Club donates money to students' hardship fund



Professor Julia Higgins was the speaker at the Women of Imperial College lunch on Wednesday 3 May, writes Louise McIvor. Lady Oxburgh (pictured right) presented Professor Higgins, as chairman of the Students' Hardship Fund Committee, with a cheque for £1,000 from the Imperial College Women's Club. During her talk she spoke of her education and career, which brought her to Imperial as a lecturer in 1976. She described the Department of Chemical Engineering and Chemical Technology as a mixture of scientists and engineers and the only one of its kind in the country. Recently elected as a Fellow of the Royal Society, Professor Higgins mentioned the Society, commenting that only 36 women number among its Fellows, who total over 1,000.

Media mentions

Asteroid plays part in extinction of dinosaurs

A half-page article and colour photo in *The Times* on 1 May described the work of two seismologists in the Department of Geology. Dr Michael Warner and Dr Joanna Morgan are studying the largest crater in the world caused by the impact of an asteroid with Earth 65 million years ago. It is thought that a cloud of sulphuric acid thrown up by the asteroid may have brought about the extinction of the dinosaurs. However Dr Warner commented in the article: "The problem is that some people think the dinosaurs were dying out anyway and that the impact just killed off the last few." Dr Morgan was also interviewed about the crater on the BBC World Service *Science in Action* programme.

Trading success for chemical engineer

A chemical engineering alumnus has joined the Tokai Bank on a two-year contract reported to be worth £3.1 million in salary and benefits. Mr Alan Howard, 31, whose appointment was reported in *The Daily Telegraph* and *The Financial Times* (8 May) is described as "one of the best traders around the City".

Tutoring conference success

The Times Higher Education Supplement (5 May) reported on the success of the recent student tutoring conference jointly organised by BP and Imperial College. Sinclair Goodlad, Head of Humanities, who established the first scheme at Imperial College, spoke at the conference. He commented that the College scheme, known as the Pimlico Connection, 'may be for the chop'. The conference will be reviewed on Radio 4's new *Education Matters* programme later this month.

St Mary's professor advises Cosmo readers

Professor Robert Priest, Head of Psychiatry at St Mary's, received a mention in *Cosmopolitan* magazine's recent Health and Beauty supplement. In a section on the importance of sleep he said: "The best way to tell if you're getting enough sleep is to monitor how you feel during the day. Listen to your body."

Top Gear disappointment

IC Reporter readers who tuned in to BBC2's *Top Gear* on 11 May were in for a disappointment. The feature showing Imperial students racing against time to build a kit car was dropped at the last minute - contradicting listings in the *Radio Times* and *The Evening Standard*. However, the May issue of *Top Gear* magazine carries the full story of the challenge, complete with colour photos and snide remarks about students. The *Top Gear* production team said they will run the feature in the autumn series.

Prince Consort in raft race

A team of Students' Union and College staff is taking a raft, named *The Prince Consort*, down a hundred miles of the river Wye for charity.

The race, an annual event, takes place from 27-29 May. There will be 74 teams rafting from Hay-on-Wye to Chepstow.

Ian Parish and Dan Look, deputy presidents of the Union, are leading a team of 16, comprised of security guards, other Union staff and students. Ian commented, "Both Dan and I are thankful to the mad men and women willing to give up their time for this adventure".

If you would like to sponsor the rafters ring Ian Parish on extension 58063. Money raised will go to the Pymlinon Trust, the College Day Nursery and the Mangotsfield Opportunity Group.

New Language Lab opens



Katie Gent, supervisor of the Language Lab, demonstrating some of the new equipment at the opening of the lab on Friday 5 May.

The view from the tower

by Don

ZEITVIEW

1. MAY I BE EXCUSED?

From the immoral maze of health and safety rules, it appears that a head of department is responsible for ensuring that the effluent from his building conforms with the norms set for connection to the public sewer system. It is rumoured that Ian Caldwell is having permission chitties printed which heads can consider and sign each time an inhabitant of their building wishes to use the public conveniences. Perhaps these could be pre-signed in case anyone gets taken short ...

2. BARRIER INTELLIGENCE

Those interested in artificial intelligence could do worse than study the security barrier at IC. Sometimes on arrival, card insertion is greeted by frantic beeping and no upward motion of the bar. The human security guard suggests the exertion of power over mind - 'push it in hard', he says. It does the trick, but on leaving in the evening, more beeps and no amount of hard pushing persuades the system to provide an escape. The guard reports that the computer monitor insists that you cannot be trying to leave as you were not legally admitted in the morning! Please send other examples of such impeccable machine intelligence either to Computing or Electrical Engineering, on a postcard please.

3. LEMON GRASS ROOTS

Could our burgeoning links with Thailand have some important side effects? The traffic of academic interchange might be made to bring in its wake some traffic for tasty recipes. While it is understood that steak and kidney goes down well in Bangkok, the scent

of lemon grass and lime leaves wafting from Sheffield kitchens might do wonders to placate the few Thaisceptics who say that they fail to see the point of the exchange agreements.

4. WINDOW SHOPPING

The Department of Mechanical Engineering has struck a positive blow for international cooperation by showing passers-by in the Exhibition Road French cars, Japanese and American robots and congenially dusty surroundings, which are undoubtedly British. To diminish the division of opinion over Europe, a machine could be shown manufacturing ECU coins - the common European currency. Electrical engineers could display electronically the value of these in pounds sterling. Seeing the coin and its steady rise in value might leave observers in no doubt on how to vote, come a referendum.

5. WHAT'S IN A SLOGAN

The VAT slogan competition has been a success. Here is another (superfluous) suggestion with two elements of strategy. First, plagiarise, and second, put it in Latin which is not much understood, but sounds good. With VE day celebrations still reverberating in our ears, the RAF's 'Per Ardua ad Astra' might be a good model to copy. Bearing in mind the importance of Suite 5, the command centre in Sheffield, 'Per Troclea ad Quintum' seems entirely appropriate. Loosely translated it means 'to get to the fifth floor you need to take the lift'. (Note, 'troclea' meaning 'lifting engine' has to be used as Mr Otis was not in business at the time of Marcus Aurelius.)

Apologies to *Zeitgeist* of *The Guardian* on Saturday.

The new language laboratory has been formally opened by the Rector.

Command of foreign languages, he said, is vital for many jobs - but it is also invaluable for making friends with people from other countries and cultures.

The lab, opened on Friday 5 May, will be particularly helpful for overseas students improving their English, and students preparing for a year in Europe.

There are now twenty full video and audio machines, as well as two computer-aided terminals. Students can dub their voice on one channel of a stereo video recording, just as they can record

their voice on one track on an audio tape without erasing the master track.

From the teacher console, a number of recordings, video and audio, can be sent out simultaneously to different students without disturbing those studying privately.

All members of the College are welcome to use the lab. It is situated in room 305 Mechanical Engineering and is open from 09.00-21.00 hours Monday - Friday. Every Wednesday at 14.00 hours there is an introductory demonstration (no appointment is necessary). For further information ring Katie Gent on extension 48756.

Pay on display

As of next year, all universities will be required to publish the higher salary bands according to HEFCE specifications.

In advance of this directive, the College included a table in the

1993-94 *Annual Accounts* which followed these specifications.

The following table extends the pay bands shown in the *Accounts*, and gives additional information. It is hoped that this will satisfy Don's speculation (Issue 1, *IC Reporter*).

EARNINGS BANDS	NUMBER	COMMENTS
under £19,999	3729	Not differentiated
£20,000-£29,000	950	Not differentiated
£30,000-£39,999	375	Includes 19 clinical academic and 46 admin staff (of whom two work for subsidiary companies)
£40,000-£49,999	80	Includes 18 clinical academic and five admin staff (of whom two work for subsidiary companies)
£50,000-£59,999	34	Includes 19 clinical academic and three admin staff
£60,000-£69,999	8	Includes six clinical academic staff
£70,000-£79,999	10	Includes eight clinical academic staff
£80,000-£89,999	9	Includes eight clinical academic staff and the Rector
£90,000-£99,999	1	Clinical academic
£100,000-£109,999	1	Clinical academic
Total	5196	

Note: The figures are misleading to the extent that they include payments to academic staff made for consulting through College subsidiary companies but no equivalent for those who consult outside the College.

Coffee Break: are we all specialists now?

A quiz designed by Professor Bryan Coles

Some people are worried about the fragmentation of human knowledge, while others feel that scholarship needs to be more professional and focused.

A few years ago I sent the following quiz to all full professors at Imperial College, to explore how aware they were of developments in fields other than their own.

As I stressed then, this *jeu d'esprit* is a personal enquiry and does not form part of a new promotion exercise!

Scoring: zero points for 'I don't know'; one point if you can name the correct field of study; two points for a correct answer.

1. What is important about mitochondrial DNA?
2. What early insights are supported by the theory of plate tectonics?
3. Outside the City of London why is the Big Bang important?
4. Where did structuralism begin and where now is deconstruction taking place?
5. Who was Lucy?
6. How many quarks to a proton and what holds them together?

7. Who worries about finite elements, chemists or engineers?
8. What was the most exciting result of the decipherment of Linear script B?
9. Why can it be argued that the battle of Bouvines was the most important European battle between Hastings and Waterloo?
10. What sort of mathematician has defeated a monster?
11. Where did the ribs appear, Durham or Milan?
12. Where are (or were) Catal Huyuk and Mohenjo-Daro?
13. Do vent communities disprove the single food-chain based on photosynthesis?
14. 'Malt does more than Milton can, to justify God's ways to man.' Who is doing more than Milton to put chaos on the map?
15. Is the transformation BRUNO to BEROWNE Galilean?

Send your answers to Professor Bryan Coles, Physics. The names of the highest scorers, as well as the correct answers, will be published in the next issue of *IC Reporter*.

Women return to College

Report by Carrie Golus

Two engineers who left their careers to have children are now updating their skills at Imperial College.

Hilary White, Department of Electrical and Electronic Engineering, and Sally Knudson, Department of Mineral Resources Engineering, hold Daphne Jackson Memorial Fellowships, intended to help high-level scientists and engineers return to their professions after a career break.

Fellows retrain by pursuing a two-year guided research project at a British university. The Fellowship scheme is named in honour of Daphne Jackson, the first woman professor of physics in the UK.

Hilary studied electrical engineering first at Edinburgh University, then Strathclyde. After working as an electrical engineer for twelve years, she took a career break of six years to raise her two children. "In fact two years ago I trained to be a reflexologist, as this was an activity I could combine quite easily with motherhood," Hilary said. "I would probably have continued to practise if I had not seen the advertisement in the *IEE News* and decided that the Daphne Jackson Trust was the thing for me."

Hilary's research was inspired by the changing electricity industry, in which small producers can connect their generators to the local electricity grid. "This can cause problems for the regional electrici-

ty companies, particularly if the type of generation is an unconventional one, such as wind generation," Hilary explained. She is developing a software package that will model the impact that small producers have on the local grid, aiming to sell the software to these producers.

Sally, who holds a degree in mathematics from Bath University, worked in the oil industry for ten years before quitting her job to have a family. After her second child was born, Sally began to investigate the possibility of returning to her profession. However, she did not find many options in Humberside, where her husband works as a lead production engineer.

The Daphne Jackson Fellowship fits her needs perfectly, even allowing her to do research on a remote basis. Sally's project, an investigation of low-velocity water flow in highly permeable reservoirs, includes a detailed literature survey, data analysis and computer modelling - all of which she can do at home. Once a month she visits Imperial to meet with her supervisor and use the library.

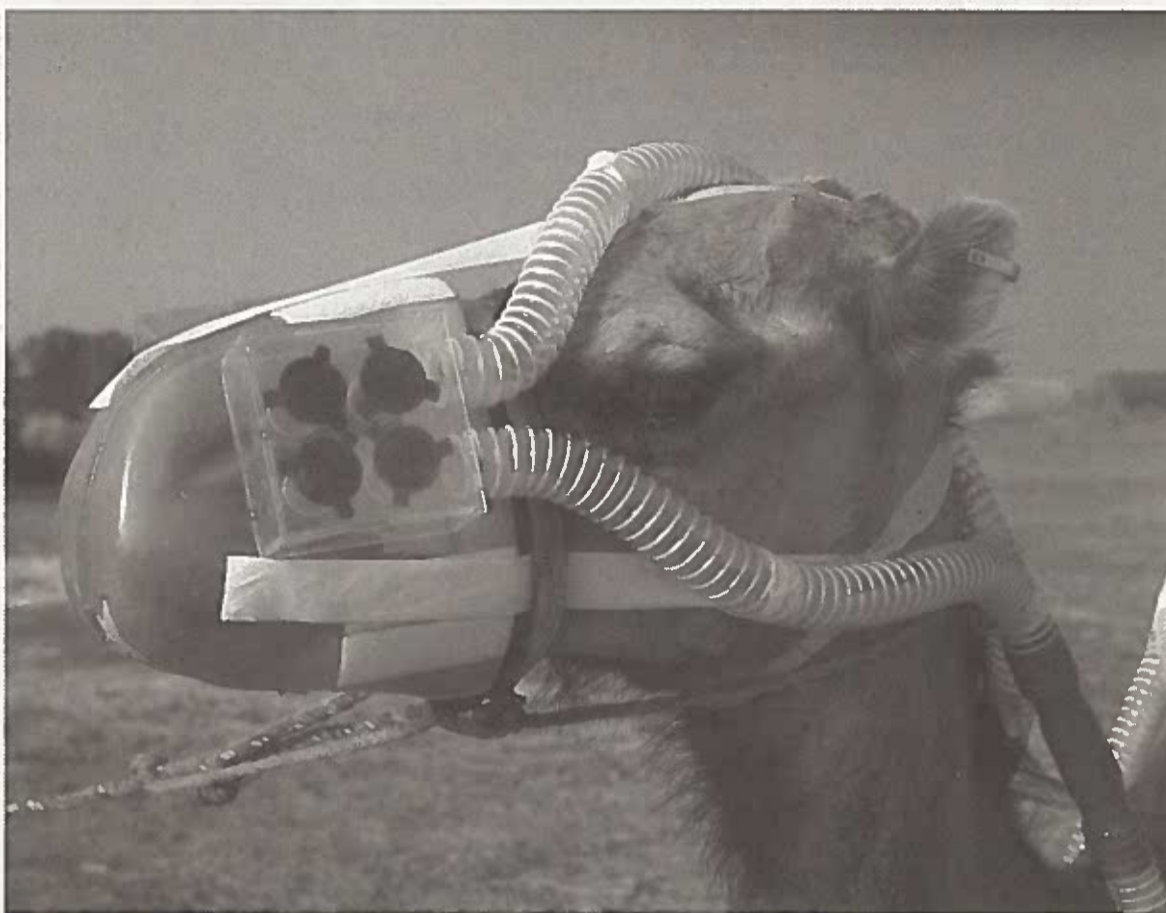
Combining academic work with children can be a challenge, both admit. "I don't work when the children are at home unless their father is at home or they are asleep or I am desperate. Occasionally I have had to handle calls from

Continued on back page

LECTURE REVIEWS

'Camels, horses and committees - is design related to function?'

Review by David Edwards



Measurement of the oxygen consumption and workload of a camel whilst ploughing.

In his inaugural lecture on Tuesday 16 May Bob Schroter, Professor of Biological Mechanics, described his research into aspects of animal physiology involving camels, horses and penguins.

The main thrust of Bob Schroter's work has been in the mechanics of respiration, however this lecture dealt mainly with his research into the physiology of camels and horses and how design in animals is related to function. The successful functioning of animals under stressful conditions such as excessive heat or lack of water is seen as vital especially when the animals are used for farming and sources of food. There are 18.5 million dromedary camels worldwide providing an

important power source in many developing countries. Experiments carried out by Professor Schroter and his group into work rates under differing climatic conditions show that camels, in common with most animals, reach a stage where normal temperature maintenance systems such as sweating and heat exchange in the nose are unable to cope with sustained increase in heat load.

This research has led more recently to Bob Schroter's involvement in an investigation into heat stress in horses competing in three-day events. Following problems experienced by some of the horses in the Barcelona Olympics, the International Equestrian Federation has commissioned a study to safeguard the health of the equine competitors in the

Centenary Games in Atlanta. The team hopes, by gathering climatic data from Atlanta and relating this to physiological measurements from horses exercising in the laboratory and under field conditions, to establish a heat index enabling a decision to be taken to halt the competition in severe conditions.

The vote of thanks was given by Professor Knut Schmidt-Nielsen, winner of the prestigious International Prize for Biology in 1992. He said: "Bob Schroter has a unique approach as he applies engineering principles to fundamental aspects of animal physiology."

David Edwards is an alumnus of the Department of Biology and works in the PR and Press Office

'The College in the changed environment of UK higher education'

The consequences of the shift in Government attitude towards higher education formed the basis of the Rector's lecture. He believes awareness of these changes is vital in order for the College to survive effectively in the HE system of today.

His lecture, on Monday 15 May, began with an informative account of the history of HE since 1979. Before the reforms of the 1980s a college renowned for excellent research was considered the ideal learning ground for undergraduates, so teaching and research were funded accordingly by the Government. Imperial College,

one of these institutions, was the aim and inspiration for other colleges.

The Government of the 1980s was determined to expand HE. By funding teaching and research separately, the Government could expand teaching without the expense of an increase in research funding.

Illustrating his lecture with graphs, the Rector showed that the rate of HE expansion is large. In 1979 12 per cent of 18-21 year olds attended universities. Today more than a third of this age group undertake HE courses. At the same time the level of public funding of students has dropped to about two thirds the amount it

was in 1980. These figures, coupled with the changes in research funding, have inevitably led to much greater variation in degree standards nationwide, argued the Rector, and a new sort of graduate has emerged. Unfortunately the job market has not fully woken up to this change.

The massive expansion of HE nationwide and its changed emphasis means that Imperial is no longer the yardstick by which other institutions measure their achievements, he said. Instead the majority of colleges will look for ways of 'doing things cheaply and in large numbers'.

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D I A R Y

May

COLLEGE EVENTS

Wednesday 24 May

Humanities Programme open day
To be held in rooms 313A and 313B Mechanical Engineering at 12.00-14.00 hours.

Thursday 25 May

Networking reception
'Meeting the challenge of science communication'. John Durant, Professor of Public Understanding of Science. To be held in the Clore lecture theatre (Huxley 213) at 18.00 hours. Tickets (£9.00 to IC staff, including buffet) and further information from room 301, Sheffield Building, extension 46134.

Friday 26 May

Imperial College Choir
Vaughan Williams 'Serenade to Music'; Szymanowski 'Stabat Mater'; Mozart 'Requiem'. To be held in the Great Hall at 20.00 hours. Tickets available from choir members; level 2 Sheffield Building on 25-26 May at 12.00-14.00 hours; and on the door. Price £5.00 (£2.50 students).

Wednesday 31 May

European Social Fund seminar
Alan Badger will review the current situation, highlight the expected changes and advise on how to make successful applications. To be held in the Clore lecture theatre at 13.30 hours.

EXHIBITIONS

28 May - 3 September

T.H. Huxley Esquire, scientist, artist and educator
To be held in the Science Museum picture gallery.

LECTURES

Tuesday 23 May

Almroth Wright lecture
'Gastric lymphoma: infection, neoplasm or both?'. Professor Peter Isaacson, University College, London. To be held in the Almroth Wright lecture theatre, Wright Fleming Institute at 17.00 hours.

Wednesday 24 May

Inaugural lecture
'The private life of polynomials'. Eduardo Ortiz, Professor of Mathematics. To be held in the Clore lecture theatre (Huxley 213) at 17.30 hours.

Tuesday 30 May

Almroth Wright lecture
'How p53 stops cancer'. Professor David Lane, Medical Sciences Institute. To be held in the Almroth Wright lecture theatre, Wright Fleming Institute at 17.00 hours.

TRAINING PROGRAMME COURSES

Wednesday 31 May

Course for academic and research staff
'Supervising research students'. Afternoon course. No charge. For further information ring extension 45521/0.

Wednesday 31 May

Health and safety course
'Practicalities of cylinder handling'. Afternoon course. No charge. For further information ring extension 49422.

31 May - 1 June

Computing course
'Lotus 123 for DOS level 1'. Charge £120. For further information ring extension 45520.

June

COLLEGE EVENTS

Wednesday 7 June

ICCET symposium on the environment and health
To be held in the Clore lecture theatre (Huxley 213), all day. Further information from Diana Paterson-Fox, extension 49274 or e-mail d.pfox

Wednesday 14 June

Imperial College Environment Day
The day will consist of a series of presentations, an exhibition and the launch of the environment brochure. Further information from the Graduate School

of the Environment, extension 47460 or e-mail GSE

Friday 16 June

Department of Physics' first year undergraduate projects open day for schools

The Department will be open to fifth and sixth form students from 13.00-17.00 hours. Any staff member who would like to forward a poster for this event to a school contact, ring Bob Speer on extension 47514.

Thursday 22 June

College open day
All departments will be open for fifth and sixth form students. Further information from the Schools Liaison Office, extension 58042/3.

Saturday 24 June

St Mary's students' Summer Ball
To be held at the Park Lane Hotel, Piccadilly. Further information from Robert Hughes, telephone 0171-725 5196.

26 June - 7 July

WISE courses
A series of two-day residential courses in science and engineering for lower sixth girls. Further information from the Schools Liaison Office, extension 58042/3.

LECTURES

Thursday 1 June

College lectures
'Enough is never enough - how the College gets its income and how it allocates it'. Professor John Archer (Deputy Rector). 'The College Estate'. Professor Bill Wakeham (Head of Chemical Engineering Department). To be held in the Clore lecture theatre at 16.30 hours.

Tuesday 6 June

Inaugural lecture
'Awaiting the great British earthquake'. Amr Elnashai, Professor of Earthquake Engineering. To be held in the Clore lecture theatre (Huxley 213) at 17.30 hours.

Wednesday 7 June

Inaugural lecture

'The nine numbers of the cosmos'. Michael Rowan-Robinson, Professor of Astrophysics. To be held in the Blackett laboratory theatre 1 at 17.30 hours.

Wednesday 14 June

Inaugural lecture
'Virtual ecology'. Professor John Woods, Department of Mineral Resources Engineering. To be held in the Clore lecture theatre at 17.30 hours.

TRAINING PROGRAMME COURSES

1 - 2 June

Health and safety course
'First aid at work requalification'. No charge. For further details ring extension 49422.

Wednesday 7 June

Computing course
'Introduction to MSDOS/PCDOS'. Charge £60. For further information ring extension 45520.

Thursday 8 June

Health and safety course
'Look after yourself - safety for new staff'. Afternoon course. No charge. For further information ring extension 49422.

12 - 13 June

Computing course
'dBase V level 1'. Charge £120. For further information ring extension 45520.

13 - 14 June

Course for academic and research staff
'Speaking technically'. No charge. For further information ring extension 45521/0.

Wednesday 14 June

Computing course
'Lotus 123 for DOS level 2'. Charge £60. For further information ring extension 45520.

14 - 15 June

Courses for academic and research staff
'Speaking technically'. No charge. For further information ring extension 45521/0.

NOTICE BOARD

Training vacancies for mechanical engineering technicians

An opportunity exists for two people to join the technicians training programme. IC are offering a bursary and four years full-time training, leading to BTEC qualifications in mechanical engineering. Applications by Friday 21 July. Further information and application forms from Penny Clarke, room 513A Sheffield Building, extension 45519.

Training vacancies for life science technicians

An opportunity exists for two people to join the technicians training programme. IC are offering a bursary and four years full-time training, leading to BTEC qualifications in biological sciences. Applications should be received by Friday 21 July. Further information and application forms from Penny Clarke, room 513A Sheffield Building, extension 45519.

The Alexander Technique

Private lessons are available at Imperial College Health Centre on Mondays, Tuesdays and Fridays in the morning. For further information and appointments contact Pauline Wetherell on 0171-837 6932.

Tapes, tapes, tapes...

"I have a large collection of QIC-150 and TK50 computer tapes available free of charge. One careful owner. Also some reel-to-reel tapes dating from the year dot. Hurry, hurry, hurry - I'm drowning in the blessed things." Contact Mike Brent, on extension 46472 or e-mail m.brent

Careers on WWW

The Careers Advisory Service now provides information on the World Wide Web about the services it offers. Staff and students can access this information via computer terminals throughout the College.

IC Reporter

IC Reporter will be published fortnightly during term time. Contributions for the next issue should be received by **Friday 26 May**. These can be sent to Victoria Browning via e-mail (v.browning) or internal post (Rm 546b, Sheffield Building). Extension 46697. Fax 0171-594 6700. Please note the editor reserves the right to cut or amend the articles as necessary. Information correct at time of going to press.

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UK higher education

HE of the future may feature modular systems, suggested the Rector, where students can transfer credits from a variety of different universities. Three- or four-year residential undergraduate courses may give way to degrees which can be studied over a number of years at different places, with periods of time spent back at work.

The Rector encouraged the audience to look to the future and consider the role IC has to play in HE today, not simply back to the 'good old days'. He believes that there was and would continue to be a demand for continuous, demanding residential education of the kind upon which the College

has built its reputation. But the case for it would have to be made positively; it is more expensive and its benefits are hard to quantify. He stressed the importance of finding ways of providing it more economically. The pressure to charge additional fees, as demonstrated by the US system, is growing, he continued, although it could only happen in an environment where this practice was the accepted norm.

In conclusion the Rector pointed to the research trends of the future: medicine/health care and environmental issues. He also mentioned the boom in IT, saying, "We do not know what will happen because of the increased activity in this area, but it will undoubtedly affect our teaching and research of the future".

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Women returners

industry representatives when the children have been at home," Sally said. "As a result of one such call I found myself in sensitive negotiations with Sam over the use of the computer. He wanted to play Noddy's Big Adventure and I needed to send a fax."

However, the benefits far outweigh the drawbacks. "I have always felt that it was important for my children to see that I have a career and enjoy my work," Sally continued. "Hannah and Sam turn my work days into family work days. Hannah tells me she is off to work at school and Sam tells me he is off to work at his nursery. They have grasped the idea that work is enjoyable."

Funding for the Fellowship scheme comes from charitable trusts, industry and universities. Sally Knudson's Fellowship is funded by Imperial, while Hilary White's is jointly funded by Imperial and the 1851 Commission.

Carrie Golus is the Media Liaison Officer

VAT slogan

Apologies for the delay in announcing the slogan winner. The judges have selected two slogans which have been put forward to the VAT man and we are awaiting the decision. Hopefully this will be received in time for inclusion in the next issue of IC Reporter.