IC Reporter

Issue 4 25 April 1995

STAFF NEWSPAPER OF IMPERIAL COLLEGE OF SCIENCE, TECHNOLOGY AND MEDICINE

IC stages science extravaganza

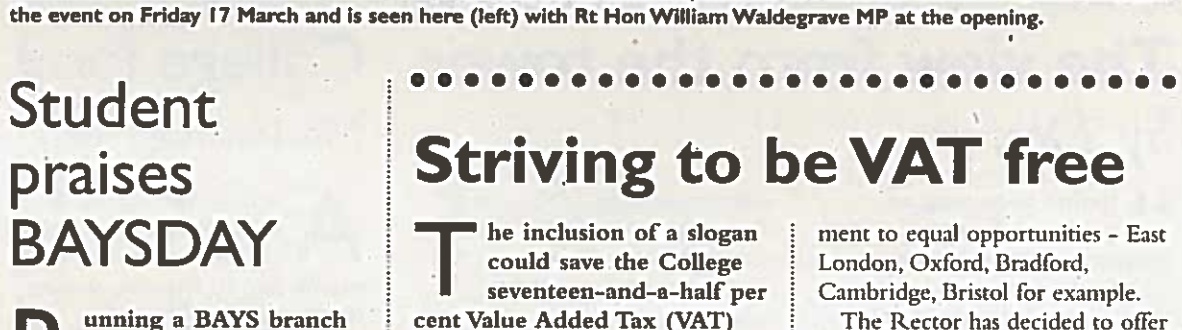
Thousands of young people visited the College last month when set95 was launched in Prince's Gardens and IC hosted BAYSDAY

On 17 and 18 March the College hosted the annual BAYSDAY (the British Association Youth Section Days) with the Science Museum, which attracted more than 6,000 enthusiastic young people.

As the event becomes more popular and important, Meg Post, a teacher from Christ Church School in south west London, commented: "We feel strongly in our school that children need to realise that an academic, professional, industrial and technical environment is relevant to them personally, and it was very encouraging and exciting to see them involved in that way".

BAYSDAY and set95 were jointly managed by Schools Liaison and Public Relations.

set95 events organised by other members of College were as follows:
'Designing people - engineers and psychology' - an afternoon of lectures by Professors Igor Aleksander and Bob Spence (Department of Electrical and Electronic Engineering)
'A guide to our universe' - lecture by Professor Michael Rowan-Robinson (Department of Physics)
'Exciting chemistry' - demonstration lecture by Professor David Phillips (Department of Chemistry)
'Chemistry in the atmosphere' - a demonstration lecture by Professor David Phillips (Department of Chemistry).



Over 6,000 school students from all over the UK attended the Technology at Work exhibition held in Prince's Gardens at the start of National Science Week - set95. Rt Hon David Hunt MP, Minister of Public Service and Science launched the event on Friday 17 March and is seen here (left) with Rt Hon William Waldegrave MP at the opening.

Helen Sharman, the UK's first astronaut, seen here with some of her young fans, released 2,000 balloons for BAYSDAY on the Queen's Lawn.

Photography:
Neville Miles, College Photographer

Student praises BAYSDAY

Running a BAYS branch at his school provided one student with the inspiration to buck the trend towards arts A levels and gain MoD sponsorship to study engineering at Imperial.

Karl Drage, Mechanical Engineering IV, ran BAYS at Higham Lane School, Nuneaton and cites this as being the main motivation in his choice of degree: "I'd always been interested in science and engineering but I think it was BAYS that made me realise my potential in these fields".

Trips to power stations and Faraday lectures, visits to car factories and science departments at universities, coupled with strong staff interest and support ensured the success of BAYS at Karl's school. "We had a teacher at school who had spent a long time in industry so he was quite clued up and had lots of useful contacts," said Karl.

In summer holidays Karl has worked in Japan and Germany and recently accepted a job offer from Unilever as a production engineer.

Karl is also a keen rugby player and will be touring Canada with the IC team this summer.

Striving to be VAT free

The inclusion of a slogan could save the College seventeen-and-a-half per cent Value Added Tax (VAT) on the costs of advertising.

Richard Hermitage, Financial Accountant, has alerted the College to this recent opportunity. "If we adopt this practice, the College could save around £40,000 on its advertising costs this year," says Richard.

A number of institutions, including several universities, have already included phrases in their advertisements. 'Promoting excellence in teaching and research' is used by the universities of Bradford, Hull, Leeds, Sussex and Wales. Others include a commitment to equal opportunities - East London, Oxford, Bradford, Cambridge, Bristol for example.

The Rector has decided to offer staff an opportunity to suggest an appropriate slogan for the College. He will chair a panel of judges, and a prize will be presented to the author of the chosen slogan after its approval by the VAT inspectors.

Any suggestions, no longer than 10 words, should be addressed to the Public Relations Office, Room 553, Sherfield Building or e-mail marketing by Wednesday 3 May.

The winner will be announced in the *IC Reporter* 9 May issue.

Biochemistry researchers retreat

The Department of Biochemistry held a research retreat at Wye College on 27 and 28 March.

Just under a hundred academic staff, researchers and postgraduate students participated in an intensive programme of research talks and poster displays which covered the broad range of topics studied in the Department.

With the appointment of four new lecturers and several senior research fellows during the past year the retreat was an ideal opportunity for members of the Department to get to know one another.

IN BRIEF

Royal Society Fellowship

Professor Julia Higgins, Dean of the City and Guilds College and Professor of Polymer Science in the Department of Chemical Engineering and Chemical Technology, was recently elected to Fellowship of the Royal Society.

Student wins scholarship

Nishant Deshpande, a first year student in the Department of Electrical and Electronic Engineering, has won an IEE Jubilee Scholarship for 1994. These scholarships are awarded to students of outstanding ability embarking on IEE-accredited UK honours degree courses.

IC seeks head for new School

An advertisement appeared in *The Sunday Times* (12 March) for a Principal for the Imperial College School of Medicine. It is hoped the person will be in place for the coming academic year, or sooner. The Principal will be responsible for the 'organisation and academic leadership of the School, the formulation of its teaching and research strategies and the fostering of academic links with the rest of the College'.

Paul Bunge Prize

Gerard L'E. Turner, Visiting Professor in the History of Scientific Instruments, has been awarded this prize for 1995. It is financed by the Hans R. Jenemann Foundation for a distinguished contribution to the history of instruments.

Fizzics news

Undergraduate students in the Department of Physics have produced another issue of their newsletter, *Fizzics*. Dr Bob Speer, a senior lecturer in the Department, called the venture "remarkably positive". Contributions for the next issue can be e-mailed to ka.yates@ph.ic.ac.uk

Geology alumni medallists

Three alumni of the Department of Geology have been awarded medals by the Geological Society.
G.P.L. Walker received the Wollaston Medal;
I.S.E. Carmichael received the Murchison Medal;
and J.L. Knill received the William Smith Medal.

Media mentions

Fishing dispute
Professor John Beddington of ICCET's Renewable Resources Assessment Group commented in the *New Scientist* (25 March), *Nature* and *The Guardian* (16 March) on the protracted fishing dispute between Spain and Canada.

Mexican rebels contact IC
BBC Radio 4's *Mediumwave* programme of 14 March discussed Imperial College receiving messages on the Internet from rebels during the political turmoil in Mexico.

TV debate looks at public understanding of science
Dr David Thomas, Pro Rector (Research Contracts), joined a debate on BBC1's *Business Breakfast* on 20 March about science and engineering week. He discussed the problems of creating a better public understanding of science and technology.

Imperial rows with success
Imperial College rowing was mentioned in a *Financial Times* piece (2 April) on the boat race. The article said "Oxford's form is good but not sparkling. They lost to Imperial College at the Reading Head last month. Imperial College came third in the Head of the River race two weeks ago and were only four seconds behind the Great Britain squad." The article went on to discuss international sportsmen and women undertaking postgraduate degrees at Oxbridge.

College staff mad about football
Liam Madden from the Department of Electrical and Electronic Engineering made it into the pages of the 3 April edition of *The Times* for founding a Luton Town Football Club 'fanzine' for the Internet. The service is called WHOSH, Worldwide Hatters on the Super Highway.

Radio 4 interviews IC staff
Three Imperial College academics were interviewed on BBC Radio 4 last month. Dr David Edgerton (HOST) on *Analysis* about Britain's science policy; Professor John Durant (Humanities) on *Science Now* about set95; and Professor Richard Kitney (Centre for Biological and Medical Systems) on *Medicine Now* about the use of computer systems networks for cardiograms.

Press Office makes the news
The Press Office itself received credit for its new media brief in an article by John Newell, published in the 1 April *New Scientist*. A summary of interesting research around the College is sent out to around 400 journalists quarterly. The last media brief resulted in three articles appearing in the national press. The next edition will be sent out at the end of April, so if you are currently involved in research that could be of interest to a general scientific or lay readership, please contact the Press Office as soon as possible on extension 46701.

DTI backs partnership between Imperial and WRc

Dr Nigel Graham

The DTI Minister for Trade and Technology, Mr Ian Taylor, visited IC recently to announce an extension to the postgraduate training partnership scheme (PTP).

The PTPs aim to transfer technology and first class researchers directly into industry. Mr Taylor commented, "The five existing partnerships have demonstrated their ability to attract high quality postgraduates who can undertake research that is of direct relevance to industry.

"This announcement will allow the present partnerships to continue with DTI (Department of Trade and Industry) and EPSRC (Engineering and Physical Sciences Research Council) support for at least a further two intakes."

The postgraduate research students involved in the scheme (associates) spend most of their three-year studentship at an industrial research and technology organisation, which works in partnership with a university. IC's partner is WRc Plc, formerly the UK Water Research Centre.

Mr Taylor met some of the 28 associates involved in the IC/WRc partnership during his visit to the College on Tuesday 4 April.

Above: The Prince of Wales meeting Imperial College PTP associates at UMIST in February.
Below: Chris Greenshields, PTP associate in Mechanical Engineering, discussing his research on crack propagation in plastic pipes with Mr Ian Taylor, DTI Minister for Trade and Technology.

They are working on multidisciplinary projects in the areas of environmental management, water treatment technology, waste water process and control, plant and pipelines.

The five existing PTPs were set up in 1992 as a result of a competitive bid which attracted nearly 60 entries. The idea was one of the outcomes of the Prince of Wales's Working Party on Innovation. His Royal Highness has taken a keen interest in the development of the PTPs and earlier this year met a number of associates from all the partnerships.

Dr Nigel Graham (Department of Civil Engineering) is the IC/WRc PTP coordinator for the College

Letters to the editor

Research contracts
Dear Editor
At the recent meeting of the Academic Staff Assembly the Rector encouraged submission of letters to this journal. At this meeting the question of waivers of redundancy rights for contract research staff (CRS) was raised. The Rector declined to comment in detail but said he was happy to discuss issues of principle.

The employment of CRS on short-term contracts is an issue of principle. Do any members of the College actually believe that lack of any career structure for young scientists is beneficial to research in the College?

UCL which is a major competitor for funds and students is attempting to introduce a system where CRS are regularly assessed and told after five years whether they could expect a permanent post after seven.

It is self-evident that given the choice between IC and UCL a career scientist should go to UCL.

The present system where half the staff are on insecure short-term contracts and the rest are supported on a soft cushion of teaching funds is contrary to natural justice.

I hope this letter stimulates a discussion, not about the minutiae of contracts, but on the role of CRS in British science and IC in particular.

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The view from the tower

by Don

"Before becoming an academic I dreamt of the wonders of doing research.

I would have a secret book where I would record the day's discoveries, then release them in an astonished world to tumultuous applause. Every now and then I would give a lecture at something like the Royal Institution and listen to the gasps of disbelief as the new revelations about the nature of things were disclosed.

Romantic and naive, you might say. But I wouldn't mind betting that it's this kind of notion that turned many of us towards academia. Of course, being older and wiser (?) I now know that the rate of generation of new discoveries does not exactly happen once every day. Indeed I'm probably still waiting for the first really good idea to blossom forth.

It is with this vague thought in mind that I recently looked at a corner of my desk reserved for something called 'research'. Indeed, it is heaped high with papers. Are they the secret notebooks of which I dreamt in my youth? None of it. They are things marked 'EPSRC wealth creation strategy', 'Rodney Eastwood's guide to filling in the RAE forms', 'The Foresight Saga' and other interesting things of that ilk.

Research has become some kind of intelligence test for the extraction of money from funding organisations. The reason that the Research Assessment Exercise is so precarious has to do with the fact that it avoids measuring true research quality and goes for some notion of 'internationality'. If it did actually measure research quality there would be many nil returns from all those who are still waiting to have a really good idea. I sometimes wonder whether, with new focus and drive towards wealth creation, anyone will ever invent anything again.

Nevertheless, we are still lucky to be paid to use our brains which does not need an EPSRC grant. However, when the letter from EPSRC arrives telling us that our great plans are not in line with somebody's foresight, it is necessary to keep a sense of humour. Talking of which, while I was having these morose thoughts, Henry Kelly came over the air and all seemed well again. For those who do not listen to Classic FM, I shall repeat his story and apologise to those who have heard it.

'Excuse me sir, but do you have any pornographic material in your luggage?' said the customs officer. The answer came quickly: 'Oh begorra, there's no chance of that! I don't even have a pornograph to play it on'.

Oh well, it's an indication of how little it takes to be distracted from exciting literature about research strategy."

College food assessed

John Vandridge-Ames

An informal survey of College catering was carried out earlier this month for *IC Reporter*, during lunch times in Sherfield.

People were asked to judge the food in terms of quality, quantity, variety, cost and presentation. Participants had to be members of the College who are users of IC catering, but no attempt was made to ensure a representative sample of the College community.

Staff wanted to see an improvement in the presentation and quality of food offered by Catering. Students tended to criticise the cost and quantity available. Both groups felt the variety of food was poor.

Suggestions for change were eagerly presented. Two frequently expressed ideas were:

- the responsibility of IC to provide good quality, affordable meals to students who study in an expensive part of London
- the need for Catering to enlist the views of its customers, both student and staff, on a continuing basis to improve service.

John Foster, the new head of Catering and Conference Services, points out that they monitor customers' usage on a daily basis: "Customers do vote with their feet." He continued, "College Catering at South Kensington carries out over 100,000 customer transactions each month. Lunch in the main dining hall and SCR is served to about 1,400 customers".

John intends to address Catering's administrative and management issues. He believes that his appointment to a new position, together with a new reporting structure, indicates a positive commitment by the College to ensure the Department receives the support it needs to be successful.

A separate, independent survey, using questionnaires in the SCR, was carried out by Catering in early March. The results are still being evaluated but response was strong, with over 300 replies received. "Many of the replies were both positive and constructive," said John, "They will enable Catering to meet customer needs more fully in future."

However, he thinks questionnaires are just one of several ways to judge customer satisfaction: "They are a useful exercise in determining what people think; but it is usually the case that when one asks for criticism one tends to get it".

The question raised by the *Reporter* survey was, 'Is it possible for an institution like IC to offer a good range of quality food in reasonable portions, well presented and at a fair price?' John says the answer is yes, and that Catering will prove it in the months ahead.

John Vandridge-Ames is an Assistant Registrar

BOOK REVIEW

Chemical facts galore

Review by *Saskia Daniel*

The Consumer's Guide to Good Chemicals
John Emsley 1994
Spektrum
£18.99 hbk

Those of us who are not science-trained generally rely on information from the media for what we think we 'know' about chemicals which affect our lives. In his recent book John Emsley shows that much of this information is often flawed and hyped by the media so that it is, actually, misinformation.

Any initial scepticism engendered mainly by the popular title and the structure of the book with the soft chapters on perfume and alcohol first, is swiftly dissipated by the lucid and entertaining style, and by the fascinating facts with which this book is crammed. For example, the average punter, who may have imagined that rats are used as 'guinea pigs' because of some likeness to humans, will discover that it is their inability to vomit even the most toxic substance which renders them so indispensable (or should it be dispensable?) to science.

Overall, the historical detail and the repeatedly serendipitous nature of so many important scientific discoveries totally captivates the attention. However there is a risk of scepticism returning when asked to consider as equal the risk of having triplets and of dying as a result of surgery because both enjoy the same statistical probability of one in 10,000 (I'll have the triplets anyday...).

What this book does more than anything is make one doubt what one reads as fact. If this encourages young people interested in chemistry at school but put off by the subject's current poor press, to think of discovering more at first hand, then John Emsley's underlying aim will have been achieved.

Saskia Daniel is the Publications Officer

LECTURE REVIEW

Eighth Schrödinger lecture

Review by *Laura Durnford* and *Ayala Ochert*

Professor Bruno Latour, of L'Ecole des Mines in Paris, gave the lecture on Thursday 16 March, with the Rector, Sir Ronald Oxburgh, in the chair.

Having first trained in philosophy and anthropology, Professor Latour spent two years at the Salk Institute, California, as an anthropologist following a 'tribe' of research scientists. This background provided for some revealing insights in his lecture, entitled 'Should Science Studies be X-rated? New understandings of science and technology.' This differed from his original title, which specifically referred to Louis Pasteur, because a physicist apparently had told him that Imperial's scientists might not know who Pasteur was!

Struggling to make his French accent understood over a poor-quality sound system, he began with an entertaining demonstration of a 'berliner key'. This cunning device, used in Berlin, is designed in such a way that it forces tenants to lock their doors behind them. This example brought to light the artificiality of the distinction we make between the world of 'things' and the world of 'people', and answered his first question, 'What are science and technology studies after?' Instead of explaining the berliner key in terms of its engineering or the social behaviour of the tenants, Latour advocated applying an integrated approach. This approach would reflect the real interconnection between people and things: the berliner key forces a change in people's behaviour.

Latour then used a historical example to illustrate a similar point. Louis Pasteur was a key figure in the nineteenth-century debate over 'spontaneous generation' and the nature of air. According to Latour, the swan-necked flasks that Pasteur designed were not merely things, but also incorporated Pasteur's argument that air has two roles: germ-carrier and nourisher.

When we repeat Pasteur's experiments today, in using the swan-necked flask we also use Pasteur's arguments. So we inherit the practices as well as the theories, through the use of things. By thinking of science in terms of the certainties of textbooks rather than the uncertainties of research, we are denying that this happens, said Latour.

The second part of the lecture dealt with the question, 'Why are science and technology studies so controversial?' Science is normally seen as 'pure' and uncontaminated by social influences, but 'science studies' suggests that this may not be the case. Latour argued that scientists confuse the necessity for autonomy with the desire for science to be pure. This attitude means that we see only society or science - we don't see the links. By representing scientific power and political power as two arms of the same body, he showed that conceiving science and society to be separate is equivalent to dismembering the arms.

With this image, Professor Latour gave a tongue-in-cheek answer to his title question, 'Should Science Studies be X-rated?' He surprised the audience with his view that it should, but perhaps not for the reasons that they might have expected. "Science Studies," he said, "puts the flesh back, and links the arms. That's why it should be X-rated." Flesh symbolises not only all that is gruesome, but also all that is sexy.

Laura Durnford and Ayala Ochert are MSc science communication students

World-Wide *What?*

Introduction by *Dr Thomas Weil* and article by *Dr Henry Rzepa*

Pick up any newspaper, including *IC Reporter*, and you will find something about World-Wide Web (WWW).

WWW can send high-quality text, images and sound over the world-wide Internet computer network.

Most academic departments at Imperial have WWW servers to broadcast information about their courses, research work and related interests. The College has had a WWW home page for almost a year, and Administration plans to put the prospectus, research reports and other College promotional material onto WWW.

As the following article shows, WWW will have a big impact on teaching and research in College. If you have a suitable computer and network connection and some free software (available from the Centre for Computing Services) you too can access WWW.

Change is in the air...

West End coffee houses now offer cyberspace with the cappucino; college computer committees are busy incorporating buzz words such as 'information strategy' in their titles; first year undergraduate students appear to spend more time sending and reading e-mails than sitting in the College bars; and word processors are passé, having been replaced by 'HTML' editors, the language of the 'Web'.

This seems to have happened in little more than 12 months. Should it all be ignored, in the hope that some new fad will replace it, and we can all return to the tranquility of tea and tutorials? Well, as a chemist, I think I can still recognise an irreversible chain reaction when I see one. Here are some genuine examples of changes in the way we work which occurred in 1994.

- The Internet bookshop now offers credit card ordering of some 750,000 titles in 1,800 subject lines.
- Virtual Internet conferences now cohabit with real meetings, and are being recognised as genuine 'scholarly' events.
- A major MSc course in protein structure, involving some 300 registered students and around 50 very well known consultants started operation in late 1994 from Birkbeck College, and has attracted attention for the quality of the information it offers.
- In the specific area of chemistry alone, some estimate that around five electronic journals will be operating by the end of 1995. There were none at the start. We recently received funding to produce an electronic journal, in collaboration with Cambridge and Leeds Universities and the Royal Society of Chemistry. Proposals in such areas are being funded, although as yet only a very small proportion of university academics have awoken to the possibilities.

To inject a controversial note, Imperial College is not yet doing as well as it could in this area. We need more recognition that such activities will actually improve our prospects for excellence in the forthcoming teaching and research assessments.

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Self-taught man of the people

In light of the recent conference and current exhibition *Anne Barrett* introduces Thomas Henry Huxley (1825–1895)

Thomas Huxley was an indefatigable worker for the cause of science.

He was a fighter all his life, pulling himself out of his humble origins and making his way, largely self-taught, through medicine to palaeontology and biology. He never took a higher examination than the First London MB (for which he won the Gold Medal for anatomy and physiology). His rise through the scientific world was achieved by dint of his research work, powered by his capabilities and ambitions.

His research work began when, still a medical student, he published a paper on the hair follicle. It continued when he was appointed assistant surgeon of the *Rattlesnake*, a naval survey ship. During its voyage to Australian seas, between 1846 and 1850, Huxley studied the sea creatures which he dredged up over the side of the ship. These sea creatures he drew in immense detail, dissected and minutely described, and in so doing added new knowledge to comparative anatomy. In his cramped cabin he gathered information for papers on three groups of animals: coelenterata, ascidians and cephalous mollusca. He showed that all jellyfish-like animals are composed of two layers. These papers were published in the late 1840s, and more after his return to England in 1850.

In 1854 Huxley took up the post of palaeontologist and lecturer in natural history at the Government School of Mines (later Royal School of Mines) in Jermyn Street. As well as teaching science to students from all levels of society, he worked on the reclassification of several groups of fossils, laying the foundations for future work on vertebrates. Importantly he suggested that birds were descendants of dinosaurs. Taxonomy was one of his strong points, emphasising his capacity for clarity of thought when faced with a problem.

Huxley played a large part in the evolution of the scientific schools at South Kensington, the forerunners of IC's constituent colleges. He remained at the Government School of Mines until 1881, when he became dean of the Royal College of Science. He was instrumental in the movement of sections of the School of Mines to the Science School's building (now the Henry Cole wing of the V&A Museum) which occurred between 1872 and 1892.

By lobbying for funds Huxley and other influential figures ensured the construction of another building in Exhibition Road, which housed the Central Institution (later City and Guilds College). It opened in 1884 to provide much needed technical education at university level.

As a researcher, teacher and lobbyist Huxley demanded the highest standards of himself and others. He fought to promote the professionalism of science, helping to establish it as a career proper. He was a member of a number of government commissions relating to science and education: in later life he was awarded with a privy councillorship. Throughout his career he was involved with many scientific societies and held presidencies of the Royal Society and the British Association for the Advancement of Science.

Besides his work Huxley had many friends and a long and happy marriage which produced eight children. When asked to say how he would like to be remembered he said, "Posthumous fame is not particularly attractive to me, but, if I am to be remembered at all, I would rather it should be as 'a man who did his best to help the people' than by any other title".

The Huxley Papers are held in the College Archives and the Huxley family are still very much involved with IC. His great-grandaughter, Angela Darwin, is producing a book on the family letters and correspondence. Sir Andrew Huxley kindly lent items for the exhibition, which is located in the Consort Gallery, Sherfield Building until 28 April.

Anne Barrett is the Imperial College Archivist

DIARY

April

LECTURES

Tuesday 25 April
Friends of Imperial College
'Imperial College and its Archives'. Anne Barrett, College Archivist. To be held in the Ante Room at 18.30 hours. Further information and tickets from the HUB Office, room 355, Sherfield Building. Extension 48740.

Thursday 27 April
RSMA lecture
'How to raise £850 million to buy English coal and what to do next'. Guest speaker Richard Budge. Further information and tickets (£9) from room 301, Sherfield Building; or telephone extension 46134. Admission by ticket only.

May

EXHIBITIONS

28 May - 3 September
T.H. Huxley Esquire, scientist, artist and educator
To be held in the Science Museum picture gallery.

LECTURES

Wednesday 3 May
Women of Imperial luncheon
'Stepping sideways through science'. Professor Julia Higgins, Dean of City and Guilds College. To be held in 170 Queen's Gate at 12.30 hours. Further information and tickets available from the HUB Office, room 355, Sherfield Building. Extension 48740/1.

Tuesday 9 May
Inaugural lecture
'There she blows'. Stephen Richardson, Professor of Chemical Engineering. To be held in the Clore Lecture Theatre (Huxley 213) at 17.30 hours.

Tuesday 16 May
Inaugural lecture
'Camels, horses and committees: how are design and function related'. Professor Robert Schroter. To be held in the Clore Lecture Theatre (Huxley 213) at 17.30 hours.

Wednesday 24 May
Inaugural lecture
'The private life of polynominals'. Edward Ortiz, Professor of Mathematics. To be held in the Clore Lecture Theatre (Huxley 213) at 17.30 hours.

June

COLLEGE EVENTS

Tuesday 20 June
Special service of thanksgiving and dedication to mark the 150th anniversary of St Mary's Hospital
To be held in Westminster Abbey at 12.00 hours. For complimentary tickets apply no later than Friday 28 April to Richard Abbott, room 20, c/o The Nursing Office, St Mary's NHS Trust, Praed Street, London W2 1NY.

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.

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

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. Details to be supplied.

WORKSHOPS

6 - 7 June
8 - 9 June
13 - 14 June
15 - 16 June
USC workshops for academic staff and GTAs
'Speaking technically (on lecturing and conference presentations)'
Departments should register participants through the Training Office, Level 5, Sherfield Building, extension 45518.

July

COLLEGE EVENTS

Saturday 1 July
Street party and Hospital open day
To be held in Norfolk Place at 12.30-15.30 hours. Further information from the Project Manager 0171-725 1330.

MUSIC & HUMANITIES

Sunday 2 July
St Mary's Hospital Music Society presents a celebration concert at the Duke's Hall, Royal Academy of Music. Further information from Lucy Jenkins 0171-723 8655.

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World-Wide Web

MIT for example is taking a very positive attitude. It is now the world centre for the World-Wide Web organisation, having headhunted the creator of the system, Tim Berners-Lee (a graduate of a UK university).

Currently, we are mostly worshipping the messenger, and not thinking sufficiently deeply about the quality of the message. Whilst we do need to consider copyright, intellectual property rights, plagiarism, security and a myriad of other issues, there are also many new possibilities for improving our teaching, creating collaborative opportunities in research and, dare I say it, even making ourselves better administrators! In the spirit of the above, this article is on the Web as http://www.ch.ic.ac.uk/e-ic.html

Dr Thomas Weil is a group manager in the Centre for Computing Services and Dr Henry Rzepa is a reader in the Department of Chemistry

Personnel news

The February issue of *icaut news* claimed that for members of the Universities Superannuation Scheme, "from 1 April 1995 the pension age for both sexes will become 63.5 years". According to Hazel Fuller, Payroll and Pensions Manager, this applies only to individuals who have left service and are holding deferred benefits. "The normal retirement age for USS members will remain unaltered at 65 for men and women," Hazel explained. Questions should be directed to Hazel Fuller on 45525.

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Letters to the Editor

I remain your faithful servant (for 12 months)
James Bayley (j.bayley@ic.ac.uk)
Research Assistant, Department of Physics

PS ic.general news group, an electronic forum for discussion, has also received correspondence regarding this issue. If you have a pc, mac or unix workstation with e-mail you can probably access it. For help send an e-mail to the computer help desk c.cshelp@ic.ac.uk with the words "I want to access the ic.general newsgroup" in the subject line.

The Rector's reply

This is a knotty problem and one with which every research university in the country is struggling. It may seem complex and obscure to those who are not personally involved but it centres around the unsatisfactory career prospects of research workers employed by universities on short term research contracts. The problem has been with us for a long time but in recent years it has been exacerbated by both a shortage of funds and their relatively increased volatility. It is now much harder to know whether any particular research project, regardless of how well it has gone, will continue beyond the end of its existing contract. There are various reasons for this, ranging from a change in the way that Government views universities, through changing funding council practices, to the major shift of funding from the Higher Education Funding Council to the research councils.

This places research universities such as Imperial in a difficult position. We all know that an essential role in the College research effort is played by researchers who are employed on short term contracts that are coterminous with the short term funding that supports the project on which they are working. This may lead to feelings of insecurity among those who are employed in this way and in the case of any particular individual, the consequences can become more serious with time as commitments grow.

A problem that is in some respects peculiar to Imperial relates to the level of our funding. We differ from all the other institutions with which we are most often compared both worldwide and in the UK, in that we have virtually no endowment funds i.e. long term sources of unconstrained income that do not depend on government or on any other outside body. Moreover our funding council income which is now determined by a national formula is (as the most recent HEFCE allocations indicated) unlikely to take full account of the fact that as an institution we are involved almost exclusively with expensive subjects.

Our work in these involves an atypically heavy investment in expensive experimental facilities, and at the same time we are expected to find 'efficiency gains' in research. In short, we are an expensive and we hope high quality operation with a large turnover, but with an income within which we shall be hard pressed to contain our costs.

It is against this background that we have to face the question of the appropriate conditions of employment of contract research staff. As things stand, even though it may be clear when work begins on a contract that the funds, and therefore the job, are guaranteed only for a fixed period, if the College does not continue to employ someone when the funding ceases this is technically a dismissal and unless there is a specific agreement to the contrary at the time the employment began (i.e. a waiver clause is signed) the College could be subject to claims for redundancy or complaints of 'unfair dismissal'. The College on the other hand has no claim against those who awarded the contract and decided not to continue it.

In our present circumstances, however, we took the view that the situation for individuals during their early years of employment with the College, is different from that of individuals who have been with the College a long time. In the latter case we felt that regardless of legalities, over a period of time the College develops an obligation to those who have worked here for a number of years. Furthermore while there is a fairly active (and the figures suggest, growing) market of opportunities for young researchers, as time goes on that market narrows markedly and opportunities for any particular individual become more limited and the consequences of losing a job possibly more serious.

We came to the view that we could help contract research staff most by asking staff during their earlier period of college employment to sign waiver clauses, but to offer any contract staff who had served the College continuously for more than seven years significantly enhanced severance terms beyond the legal requirement. No one who we employ at present will be asked to sign waivers if they don't wish to do so. On the other hand it would not be fair for anyone who did not agree to do so to have enhanced benefits later i.e. their position will be exactly as it is at present.

From the point of view of the young contract researcher this is a less advantageous situation than before. Obviously I am not happy about this, but trying to take an overall view of the corporate College interest, it seems to me that making the conditions of service of those who are with the College a short time less good in order to improve those who have been here longer and for a variety of reasons are more vulnerable, is right. It is also worth pointing out that we may be able to alleviate the position of the young contract researcher by pressing our sponsors of research to allow us to appoint them as high as possible on the salary scale.

This we shall certainly do.

IC Reporter

Copy deadlines for the summer term are as follows:
Friday 28 April
Friday 12 May
Friday 26 May
Friday 9 June
Contributions must be received by 17.30 hours.
They should be sent to Victoria Browning via e-mail (v.browning) or internal post (room 546b, Sherfield 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.