

Felix

THE NEWSPAPER OF IMPERIAL COLLEGE UNION

Leicester threaten legal action

Leicester Students Union have complained to the Commission for Racial Equality over the 'offensive' nature of Imperial College Union's Rag Mag. According to the Commission Leicester have grounds for private prosecution under the Race Relations Act.

Similar complaints have been voiced by Keele University's Students Union who have written to the National Union of Students (NUS), NUS London and the University of London Union (ULU) asking for action to be taken.

The Staffordshire Area NUS Convenor, John Rushton has since written to Imperial's Rag Mag Editor expressing his disgust at the contents of the Rag Mag and at the Editor's 'Naïve and immature approach' to 'fellow human beings'.

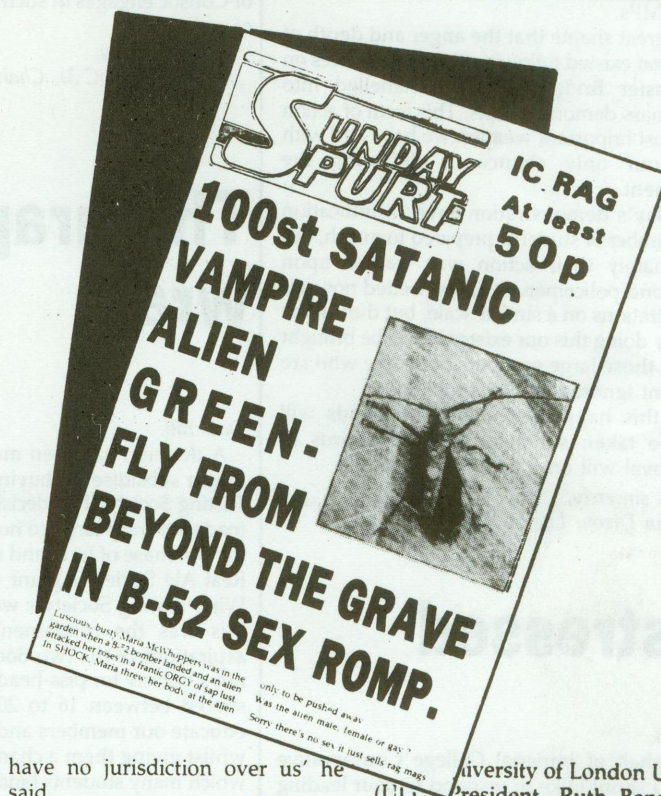
Keele University have also written to the Editor pointing out that Imperial College Rag would not be welcome to sell mags at Keele University again.

The letter complained that the publication was of a 'sick' nature and 'blatently offensive'. It claims that the ICU Rag Mag Sellers started at a 'Ridiculously early hour', and did not ask KUSU permission to sell the mag in the Union building. It highlights as offensive, 19 sexist, 12 hetreosexist, 9 racist, 3 ableist, 3 anti aids jokes, and 3 jokes against victims of child abuse.

The Rag Mag Editor told FELIX that the mag was egalitarian in its offensiveness. He also pointed out that rag had made £82 from its sale at Keele and had sold a copy to the KUSU President, who did not try to stop them from selling further copies.

The Editor maintains he started selling at 9.30am and said that he expected some negative reaction. He pointed out that a similar reaction had followed the publication of the 1984/85 mag which contained jokes about dead babies and the Bradford fire disaster.

'We are not in the NUS and they



have no jurisdiction over us' he said.

When interviewed by FELIX yesterday, Imperial's Rag Chairman commented 'I don't think our rag mag is any more offensive than any other rag mag. I think its an over reaction - nobody is forced to buy rag mags.'

University of London Union (ULU) President, Ruth Benzimra, told FELIX that she had recieved complaints from the NUS and from Leicester University. She said that she was liasing with IC Union President Nigel Baker concerning the mag but pointed out that it was a matter for Imperial College Union.

see back page for story



Protesters display their anger over student loans

RHBNC off

The Rector, Professor Eric Ash announced on Wednesday that the proposed merger of IC and Royal Holloway and Bedford New College (RHBNC) was no longer feasible.

Speaking to a meeting of the Academic Staff Assembly, he commented that it was 'not just shelved', but he considered it to be 'dead'. He concluded that it was both the logistic problems and the lack of staff support which had prevented the merger's completion.

The working party which had been set up to consider the

feasibility, initially concluded in favour of a merger set for 1993, first reported in FELIX on February 3rd, but after further study announced itself to be no longer in favour of a merger. The Universities Funding Council had pushed for the completion of the merger, but according to Professor Ash, it was unwilling to provide the finance that was required.

The initial report stressed that the longer term advantages of a merger would outweigh the short-term disadvantages, but the difficulty of expansion on Royal Holloway and Bedford New College's Egham site would seem the main reason that the proposal to merge has been dropped.

Heads of Departments, at IC and
continued on back page

Loans anger

Dear Bill,

Following last Saturday's mass march through London I feel it is time to assess the effectiveness of the current campaign against loans. So far, the main form of protest has been polite lobbying and encouraging students and parents to write letters to their MPs.

It is a great shame that the anger and depth of feeling that existed following the disturbances on Westminster Bridge was not channelled into further mass demonstrations. This form of action is the most important weapon we have and with it lies our only chance of defeating the government.

Saturday's demonstration gave an indication of the number of students prepared to march, but unfortunately their action was wasted upon tourists and policemen. What is needed now are demonstrations on a similar scale, but during the week. By doing this our existence will be brought home to those large numbers of people who are at present ignorant of the problem.

Until this happens students' demands will never be taken seriously and the chorus of disapproval will once again be ignored.

Yours sincerely,

Martin Dixon, Life Sci 3.

Distressed

Dear Bill,

On behalf of Imperial College Conservative Society I should like to respond to your leading story and editorial regarding one of our members, Mr Dylan James.

On 13/12/89 practically all of the publicity we had produced for our Angela Rumbold speaker meeting disappeared. Since many of them were replaced by SWSS posters it seemed fairly obvious what had happened.

Therefore it does not surprise me that a rather over-zealous first year was on the look out for any illegal left-wing posters. Mr James made a mistake and regrets tearing down a legitimate Union poster.

That said, there are some far more serious aspects to this rather childish fiasco. Firstly, Consoc does not have, and never has had, a policy of ripping down our opponents publicity. To engage in tit-for-tat activity would lower us to the level of SWSS which is not very high in most people's opinion. We are a well oiled and efficient society with many events for our members.

We are very distressed at how apathetic most students at IC are. We would love to come and listen to a top Labour MP putting a case against government policy. But the left wing at IC is so badly organised, this never happens. We have no incentive for trying to stop a suitable opposition being built up.

Next I should like to say how appalled I was that Mr James has been both verbally and physically threatened. On the evening of 23/2/89

a note appeared on Mr James' bedroom door saying 'Red or Dead—SWP'. This is frankly unacceptable. It is the job of ICU Disciplinary Committee to decide Mr James' fate. It is typical of SWSS/SWP to resort to violence and abuse. One only has to recall the Battle of Westminster Bridge, the Nurses Strike and many other recent situations when the SWP has hijacked a perfectly legitimate dispute.

Your suggestion that Mr James tore down ninety SAL posters is outrageous unless you can produce some evidence to back this up. Furthermore your implication that every member of Consoc engages in such activity is equally out of order.

Yours sincerely,

Al Roberts (DoC 3), Chairman Consoc.

The grapes of wrath

Dear Bill,

A decision has been made by the UFC to no longer subsidise the buying of wine for the Wine Tasting Society. This decision is based on a ruling made several years ago not to subsidise clubs for the purchase of food and drink. At that time the Real Ale Society's grant was cut, however the Wine Tasting Society's was not. The reason for this was the fundamental difference in the aspirations of the two Societies. Wine tasting is not a Society for piss-heads—not with one bottle shared between 16 to 20 people. We exist to educate our members and develop their palates whilst giving them a chance to experience wine which many students (and indeed many salaried people) could never afford. The price of a quality bottle of wine varies from £5 to over £100, so without a subsidy the Society would have no option but to fold.

One of the major activities through the year is to train a team for the inter-university blind tasting competition. To date Imperial College have won this so often we actually retained the trophy two years ago for four consecutive wins. The team is trained by having experts and masters of wine from the trade coming along to lecture on wines from all over the world. We also have blind tasting competitions throughout the year to practice for the competition. Another area of success is in the McCallan malt whiskey blind tasting. We therefore enjoy a high reputation with people in the trade.

We seem to be left with no solution but to put our case to Council in the hope that this seemingly uninformed decision will be overturned. We are not asking for special attention, Wine Society has a large membership and should survive to provide an outlet for the interest many students have for the subject.

Emma Simpson,

Fiona Erne

Claire Rulkin

Nick Battersby

Sam O'Loughlin

Compromise vaunted

Dear Bill,

I was appalled at Neil Motterams opinion article in issue 829, entitled 'St Mary's No Thanks'. In the article, he showed incredible selfishness: his attitude is 'We're alright, so why should we compromise to merge with Mary's?'.

True, St Mary's have their own identity and independence. They would keep it as a CCU of IC Union. Our three current CCUs have their own Rag, clubs, UGMs, policies, sports teams, social events and mascotry, and the St Mary's CCU would have the same.

I dispute the claim that St Mary's would have a 'disproportionate weighting in (their) favour' on Council. As a CCU they would have five representatives on a Council of 55—one eleventh. By coincidence, their 500 students are one eleventh of the 5,500 at IC. This is hardly disproportionate.

Having read the minutes and proposals of the ICU/SMHMSSU merger working party, I've seen no demands to restrict FELIX, to hold half of the ICU UGMs in Paddington, or to give St Mary's one third of the seats on Council. Perhaps Neil should state his sources here.

Maybe we could force Mary's to merge by taking control of their finances. I doubt it: if we don't merge within four years, College will simply force merger upon us, which is sure to be damaging to both Unions. Anyway, does the fact that we could do this mean that we should? I don't think so.

Name withheld by request

Holbein house of horror

Dear Bill,

As I was browsing through FELIX last week I noticed a few references to a so-called society RIP(?)Soc. It mentioned something about the new breed of Holbein deviants and as a resident in Holbein I have noticed a few unnatural occurrences. Large lumpy black plastic bags seem to be strewn over a few staircases; can someone investigate? I haven't seen my roommate for quite some time, although I have my suspicions that he is the third lumpy black plastic bag on the staircase of House B1. I am terrified that I may be next. I no longer leave my room door unlocked as several times during the night you can hear groaning and sick banter which I cannot bring myself to repeat as I am a Christian. I may be paranoid or naive but I think that something is definitely amiss.

Yours in-hiding,

Resident Holbein House,

F G Jay.

LAGERLOUTLAGERLOUTLAGERLOUTLAGERLOUTLAGERLOUTLAGERLOUTLAGERLOUTLAGER

A cartoon illustration of a car with a face, arms, and legs, driving on a road. The car has a speech bubble that says "STOP FOLLOWING US YOU STUPID FANBOY". The car's legs are wearing sneakers. The car's arms are raised in the air. The car's face is wearing sunglasses. The car is surrounded by speech bubbles from other characters: "I'M GONNA LAY THESE MEN BIRDS AT NIGHT", "GIVE ME THAT S-M-PH", "DON'T TALK AHEAD OF ME YOU FANBOY", "EVERYBODY TO GET IN THE EXPRESS BUSSES", "HIDE WE GO... HIDE WE GO...", and "WU SAITS".

March 3 1989



Editorial

Apology

I would like to apologise to Dominic O'Kane, president of Positive Alternatives To Abortion (PATA) for a pasting error in issue 827 in which his name was attributed to a letter he did not write. Mr O'Kane had in fact submitted a letter of his own that week but it was far too boring to print.

Threats

Mr Emmanuel Saridakis of PATA has threatened FELIX with legal action should we decide not to print one of his letters this week.

Having taken advice from the Union Solicitor, I have decided to print the letter which best sums up his correspondence with FELIX to date. I hope this satisfies Mr Saridakis and that he will reconsider his threat of legal action.

Unfortunately, because our typesetter operator has developed an allergy to the word 'Saridakis' FELIX will not be able to accept any more letters from the gentleman concerned unless they are excessively interesting.

Elections

Whilst it is pleasing to see an unprecedented 12 candidates running for Union Sabbatical posts, it is unfortunate that many of the contestants this year are particularly unimpressive.

It is important that you take the time to find out which candidates will strengthen the Union next year. Read the manifestos carefully, and where possible talk to the candidates in person. Do not be taken in by transparent and non committal speeches about the problems the Union will face next year. Find out what they are going to do to solve them. A candidate who is strong enough to voice his or her opinions in public without worrying about losing votes will also be strong enough to stand up to the College when they try to steam roller the Union as they have done so often in the past.

The most telling question to ask a candidate is 'why are you standing?'. Often the response will be some inane comment about being the best person for the job, but no one stands purely for the benefit of the Union.

In many ways the most valid reason for standing is to spend a very enjoyable year out—after all a Sabbatical who does not enjoy his or her year in office will not benefit the Union.

Think carefully about those candidates who appear to be standing to satisfy their own cravings for power. Experience has shown that within a very short space of time they will become more interested in their own self-importance than the students they represent.

FELIX

There will be an extra election results FELIX on Wednesday morning.

Credits Unbelievable thanks to Jason Lander and Wendy Kite for staying up late, Liz Warren, Paul Barton, Sez Wilkinson for looking after the news, Simon Bradshaw, Andy Clarke, Summit Guha, Andy Bannister, Ramin Nakisa, Nicky Fox for doing something unmentionable, Dave Thomas for sweeping the floor, Robin Davison and Dave Smedley, Doug King for putting up with Pub Board, Nik Jones for putting up with Doug King, Adam Harrington, Anj Ahuja, Arup, Neil Motteram, Azhar Abid, Michael Kirsch, Paul Stephenson, everyone who submitted articles this week which were postponed due to lack of space, Dramsoc (you're not all obnoxious honest), Linstead Hall, anti-loans and Con Soc for collating last week and anyone I've forgotten.

WELFARE 89

'LOOK AFTER YOUR HEART WEEK'

Wednesday 8th March

National no smoking day—a chance to give up smoking!

Thursday 9th March

How to 'Look After Your Heart'—displays and information
JCR, 12.00noon-2.00pm

Smallads

ANNOUNCEMENTS

● **Information** on scholarships or grants for Postgraduate study can be obtained from the Scholarship Office, Room 314, Sherfield Building. Closing dates coming up soon for applications: 10 Mar—Exchange scholarship for study at ITH Zürich, 15 Mar—RTZ Bursaries, 31 Mar—Arab-British Chamber Charitable Foundation Scholarship, 31 Mar—Concrete Structures Bursary, 28 Apr—ORS Awards. Details are displayed on departmental noticeboards; application forms from Scholarship Office.

● **If anyone is interested in setting up an Imperial College Animal Welfare Society please contact Wendy Rooke via first year Life Science pigeonholes asap.**

● **Indsoc:** Touche Ross business game, Wed 8 Mar, 12.30 in the JCR to reserve a place.

● **AIESEC Meeting,** 12.45 Tuesday, Mech Eng. Join up, get involved in parties or just 'brownie points' for companies.

● **Driver** wanted to drive a Union minibus on a booze cruise to France on March 11, 7am to midnight. All travel costs will be paid for. Apply to P Young, Maths 2, Before Wednesday March 8.

● **Ladies basketball** needs more players. It's wacky fun. Meet in the Volleyball Court (behind Chemistry), Fridays 12.30pm or contact K Crawley via Chem pigeonholes.

FOR SALE

● **Nissan Sunny 1.5l.** W reg (1981), just been serviced, MOT Nov 1989, new clutch. £895. Phone 577 5645 Yamada.

● **Apple Macs** at student prices. Educational prices are currently available for Apple Macintosh computer range for Imperial College students and staff. £850 (plus VAT) compared to RRP £1395.

PERSONAL

● **Manog**—you're the cutest spud I've met!

● **Colin**—you're still a pratt!
● **JSU's** seedy 'don't kiss and tell' life story is appearing all over College now.

● **Ros & Hill's** revenge. No. I can take a joke—the dream boy.

● **Ros & Hill's**—frightened I would be Philip the Stripper.

● **Ros & Hill's**—come on, you can take it you like your little jokes, don't you—A true friend screaming blue murder.

● **Special offer!** Only limited places left. Visit the Southside Bordello, meet Raunchy Ros—friend of chickens and sheepskin rugs. She'll let you keep your boots on, or Hot Bills—specialising in positions 15 & 29. Remember these girls have busy diaries so hurry. It's the best little whorehouse in South Ken.

● **Ros & Hill's**—Hons about a cease fire—a true friend.

● **To all those young men in Maths One,** Who despair that Ann has now gone, She had to make up her mind, Well it's cruel to be kind, And you had no real hope all along.

● **Fruit** aka Adrian Pagan, I know who you are now. Beware.

● **How to score on a pool table.** Ask Jace 'The Hustler' Brewer.

● **KO 'ED,** or fucked senseless, Anna?

● **Hot crossed bunny?** Pierre à la mode.

● **The bells,** Mathias?

● **Give me hope,** Joanne! JB.

● **Fox sale,** nonel lines to woo your lover, boxed as new, all tested. Contact Mark G.

● **Fed up with your chat-up line?** Get down to EEZ and sample the latest in oral sensation.

● **Second-hand coffins,** as new, only one careful owner. Any offers considered. Contact RIP(?)Soc.

● **Wanted:** Man-sized chest freezer, spades, wellingtons, torches, etc. Contact RIP(?)Soc.

● **Anke and David**—your secret has been exposed.

● **Let's legalise** petting in the swimming pool.

● **Victoria** the yuppie White, Gives the man she loves marmite.

● **Myra,** where are they?

RCSU

Country House Ball at Silwood Park Friday May 5th

Double tickets now available from the RCSU Office at £55 (deposit £20) to include sherry & champagne receptions, buffet dinner, breakfast, band, disco & travel

PHOENIX

free backnumbers
available today
contributions
for this year's issue
urgently required
bring to FELIX

SCIENCE Ψ

It is almost three years since the Chernobyl disaster and what has now been forgotten amid all the cries of 'it couldn't happen here' is that the accident was very much the result of human error and human error, like radioactive fall out, is no respecter of national boundaries. Jason Lander asks what went wrong.

A very human error

On the 26th April 1986 one of the nuclear reactors at the Chernobyl nuclear power plant near Kiev in the Soviet Union exploded. The blast, however, was not nuclear: the reactor was literally blown apart by the pressure of an enormous and rapid build-up of steam, showering the area with radioactive Uranium fuel. The fire that followed spewed clouds of smoke and radioactive particles into the atmosphere to spread and contaminate much of Europe. Even today, meat from some areas, including Cumbria and North Wales, is too radioactive to eat.

The Chernobyl reactors are of a type known as the RBMK, found only in the Soviet Union and unique in being the only type of reactor to combine the use of a graphite moderated core with fuel held in water carrying pressure pipes (See box). The fuel is allowed to boil the water and the steam produced is fed to electricity producing turbines. This is not a naturally safe design. A large number of safety systems have to be built in to enable the reactor to shut down if there is a fault. If these systems are shut off as they were at the time of the explosion, the reactor becomes unstable.

The fission chain reaction itself takes place in the reactor core, a cylinder of moderating graphite some 12m across by 7m high through which pass almost 2000 channels running from top to bottom. The majority of these channels hold the fuel and coolant; the rest hold moveable rods of absorber known as 'control rods'.

Each fuel channel contains a thin pressure resistant pipe or 'pressure tube', just under 9cm in diameter, which holds the fuel and through which the coolant flows. Inside this are suspended 18 long thin fuel pins.

Each pin consists of a central cylinder of Uranium Dioxide fuel, specially enriched so that it contains more of the usable isotope Uranium-235, clad in a Zirconium metal coat. The water coolant passes through the tube, from bottom to top, to be heated by the reacting fuel.

The control channels hold rods of the absorber Boron Carbide attached at the top to motors which allow them to be raised and lowered. By altering the position of these rods it is possible to remove neutrons and alter the reactivity of the core.

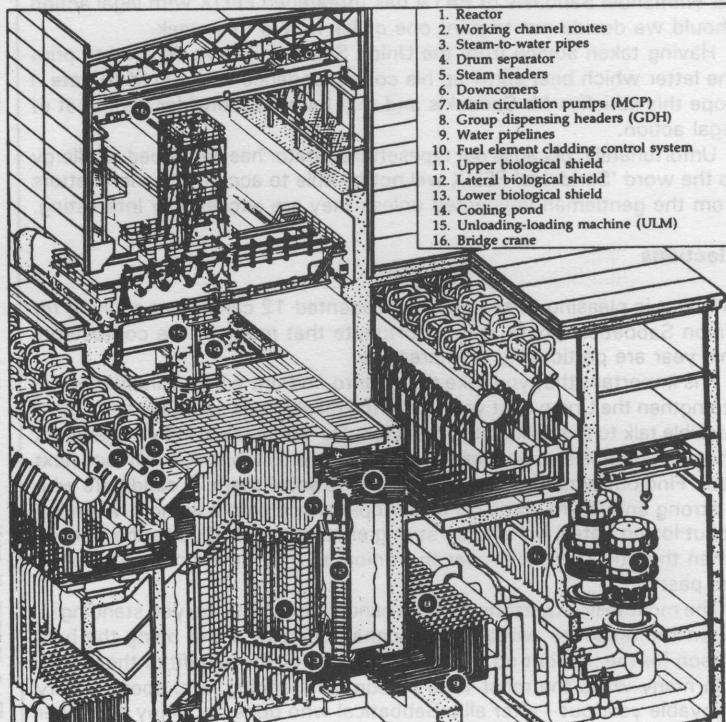
In emergencies the reactor can be 'tripped', in which all the control rods are simultaneously and rapidly inserted into the core. This mops up all available neutrons and halts the chain reaction. In the RBMK it is possible to partially trip the reactor: that is, to let the rods drop but to stop them before they reach the bottom if, for example, the fault clears. An operator can manually trip the reactor in what is known as a SCRAM.

The RBMK reactor is not a naturally safe design. A boiling water coolant is inherently unstable. To use the jargon, the RBMK has a highly positive 'void coefficient of reactivity'.

Water and steam have very different properties: water is a good absorber of neutrons whereas steam is not. As the power in the reactor core increase, more water will boil and less will be available to absorb free neutrons. With more neutrons available, the chain reaction will accelerate and the power will increase, boiling more water. Without the absorbing control rods, the reactor power and temperature would rapidly increase until the reactor blew itself apart. At very low power, near shut down even a fully controlled RBMK reactor is dangerously unstable.

Even with these inherent faults the reactor could still have been made safe. This the designers failed to do. The core of the reactor is enclosed in a leak proof concrete and steel vault filled with a Nitrogen-Helium mixture. Even at the high temperatures involved in nuclear fission, these gases will not react with the graphite of the core: graphite which is required by the design to absorb large amounts of energy. However if the vault is breached, highly reactive Oxygen can enter from the atmosphere and the Graphite will catch fire.

The vault itself is not designed to withstand exceptionally large



The RBMK reactor

pressures: it could burst under the pressure produced by the breakage of a few pressure pipes. Furthermore, there is no effective outer containment surrounding the vault so the radioactive particles from the burning core will be released straight into the atmosphere.

The core itself is made up of graphite blocks. The pressure pipes are held within these blocks, nearly touching the sides. If one of these pipes is moved or vibrated, the bricks could move and cause damage that can spread throughout the core dislocating other pipes and even blocking vital fuel channels.

That is not to say that the reactor could have exploded at any time, its many layered safety system would have been able to cope. The reactor was designed to reduce power or even to shut itself down in an emergency.

If the primary cooling circuit is damaged, the 'emergency core cooling system' (ECCS) comes into play. This consists of three sub-

systems activated in two stages. It is assumed that if there is a failure, only one half of the circuit will be affected and the first task of the ECCS is to provide coolant for this section. Fast acting, electrically driven pumps can spring into action with 4 seconds of a fault occurring. These will carry water from reserve tanks straight into the damaged loop and keep the water flowing until the second stage can be started.

During the second stage the other two ECCS sub-systems are started. These are designed to keep the reactor cool in the longer term: each cools half the core, like the primary cooling system, working with a large store of water and using pumps powered by diesel generators.

It is critical that a high voltage source is available to power the first stage ECCS. If an external source, such as electricity from another power station, is available, the reactor can call on this. If not, it has to find the power to cool itself from within itself.

This extra power comes from the stations own generators. After the steam supply is shut off and they start to run down, the turbines will spin fast enough to supply power to the first stage ECCS for 45 to 50 seconds.

The generators at Chernobyl reactor number 4 had just been modified to try and increase this time and it is because of mistakes made in tests on the modification that the reactor exploded.

The accident at Chernobyl was the culmination of a series of mistakes and miscalculations which has begun some 24 hours earlier with a test on the ECCS. The reactor was due to be shut-down temporarily for maintenance, and it was decided to take this opportunity to see how the recently redesigned turbine-generators could work the first stage ECCS. The test instructions are said to have been poor.

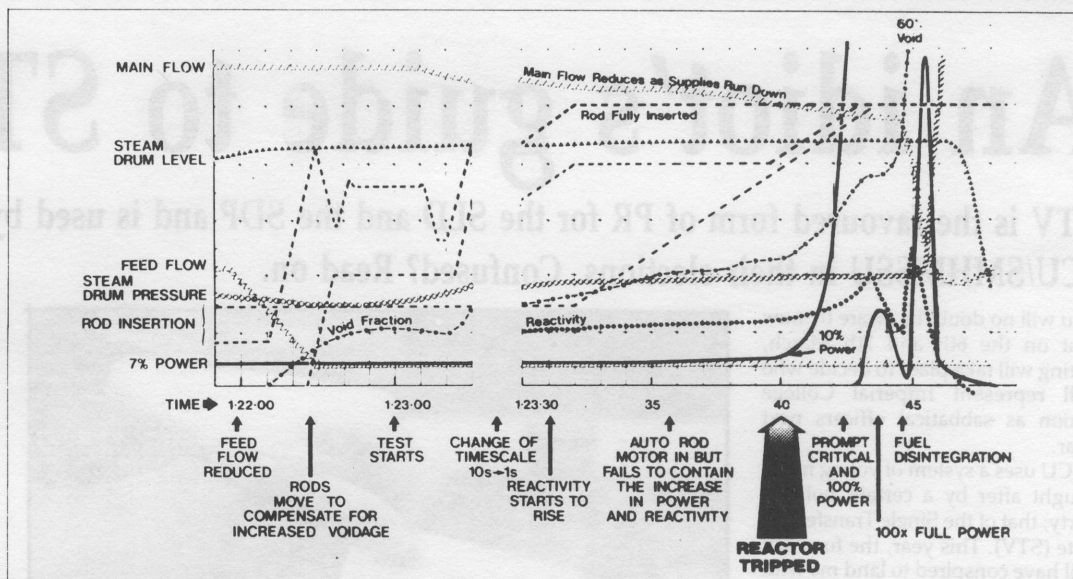
Over the next twelve hours, the operators reduced the core thermal power output, initially 32 000 MW by half and reset the reactor to work just one generator. Then, as apparently instructed by the test procedure, they turned off the ECCS and several other safety systems. There followed a nine hour delay as the plant was brought in to cope with a sudden surge in electricity demand. During this time, a different operator shift, possibly less aware of the test conditions, clocked in.

When the reactor came off stream, the new operators resumed the test. They set up an automatic control system to halve the power again. However, whoever set up the system badly miscalculated, and the core power output dropped to a mere 30 MW, under 1% of the original power and well below the level at which the power coefficient becomes highly positive. The reactor would have become unstable.

Such a rapid reduction of power naturally led to a build up of absorbing Xenon which had not had the time to be removed or to decay. This reduced the reactivity but also made the reactor much less easy to control.

The operators started to withdraw control rods and succeeded in increasing the power to the safer level of 200 MW. But because of the extra Xenon, the rods had to be withdrawn further than usual.

Nobody knows why the operators did what they did next: they turned on all the working and reserve coolant pumps and greatly increased the water flow to almost a ton a minute, fast enough to vibrate the pipes and damage the core. They also disabled safety systems designed to force a shut down in the event of a major pressure drop.



The final two minutes

The pressure did drop and with it the reactivity as the enormous volume of water flowing started to take effect. As the pressure dropped, the water level in the steam drums dropped. Cooling water was diverted to top them up and this worked its way to the core further reducing the reactivity. By now all the control rods were out of the core.

To increase the volume of steam and increase the reactivity and power, the operators slowed the coolant flow and shut off steam release valves. Half a minute later steam started to build up and automatic control rods began to

drop. Much of the Xenon had been washed out of the system and the power started to rise.

It did not stop rising, although the control room seemed unaware of this, and the decision was taken to finish the test and cut off steam to the turbine. This caused an increase in pressure, some of the steam condensed and the reactivity dropped. Again automated control rods withdrew to counteract this and then dropped almost immediately as steam again started to build up. It continued to build up and the core started to rapidly warm.

The SCRAM button was pressed but it was too late: too many control

rods were too far from the core and some of those that were not jammed in distorted channels. The pressure build up was so great that it shut one-way valves in the cooling system. No more cooling water could reach the core. What was already there evaporated and the core reached 100 times its safe maximum power. The pressure build up blew pressure tubes and the inadequate vault apart and left the World with its worst ever nuclear disaster.

Jason Lander

Splitting the atom

It has been observed experimentally that the mass of a nucleus is less than the sum of the masses of its parts. For example, an atom of Carbon-12 (six protons, six neutrons) is less massive than six single protons and six single neutrons. The difference is due to the 'binding energy'. This is the energy needed to force the constituent 'nucleons' in an atomic nucleus apart. It is a measure of how much unused or potential energy is available within the nucleus: the more 'spare' energy there is, the less needs to be added to separate the nucleons.

Very light and very heavy nuclei tend to be more weakly bound: they hold more spare energy than average. So by combining two light nuclei or by splitting a heavy nucleus into two some of this energy can be released. The former process is nuclear fusion, the latter, nuclear fission - the basis for all viable nuclear power stations.

Were nature left to its own devices

and the available, fissionable fuel atoms, for example Uranium-235, allowed to release energy naturally by decaying into smaller particles: the process would be too slow to be usable. Atomic fission has to be artificially speeded up.

Fission reactors take advantage of the fact that while Uranium-235 is comparatively stable, the heavier and much rarer isotope Uranium-236 is not, and will decay rapidly releasing its energy in the form of fast neutrons. To produce useful power, the lighter isotope must be converted into a heavier one by bombardment with slow moving neutrons.

A chain reaction can be set up: Uranium-236 can be produced by bombarding atoms of Uranium-235 with the neutrons produced in Uranium-236 decays. What is needed is some means of slowing the neutrons from the decay sufficiently for them to be absorbed. This is achieved with a material known as a moderator which is

dense enough to interact with the neutrons but stable enough not to absorb a significant number. Graphite, used in the RBMK, is by far the most common example.

It must be possible to control the reaction. Here, some form of absorber is used. This is a material, such as Boron, that can readily accept excess neutrons. By changing the amount of absorber, it is possible to vary the number of neutrons 'in circulation' and increase or decrease the reactors ability to sustain a reaction, or 'reactivity'. A higher reactivity means a greater power output. Xenon, one of the by-products of Uranium fission also has absorbing properties and, if allowed to build up can slow or even halt a reaction.

The heat generated by the fission has to be removed. Not surprisingly, this is done by a coolant. In the RBMK, the coolant is light water (H_2O) which also has the properties of a moderator and an absorber.

An idiot's guide to STV

STV is the favoured form of PR for the SLD and the SDP and is used by the recently merged ICU/SMHMSSU in their elections. Confused? Read on.

You will no doubt be aware by now that on the 6th and 7th March, voting will take place to decide who will represent Imperial College Union as sabbatical officers next year.

ICU uses a system of voting much sought after by a certain political party; that of the Single Transferable vote (STV). This year, the forces of evil have conspired to land me with five candidates for President which, as you will see as I explain the counting procedure, will be an absolute bummer. There are two candidates each for Honorary Secretary and FELIX Editor and three for Deputy President.

How to vote

Ballot boxes will be situated around the College and all you need to vote is your Union card. Your name will be checked against the College register and your Union Card will be punched (not by a fist). There will be a slip of paper for each candidacy and your first preference should be indicated with a '1' in the first box.

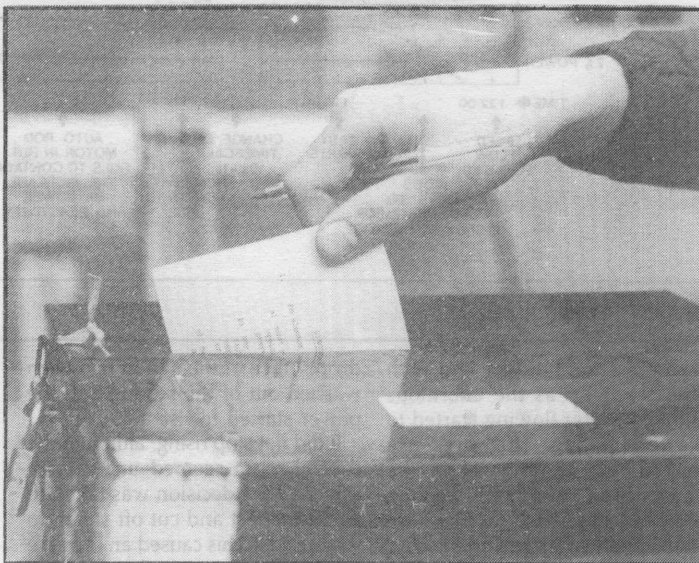
This year, a new addition is the provision of a space on the voting slip for **New Election**. A preference for **New Election** should be indicated if you feel that none of the candidates is suitable and wish that nominations should be re-opened.

Examples of first preference:

CANDIDATE A	
CANDIDATE B	
CANDIDATE C	1
CANDIDATE D	
CANDIDATE E	
NEW ELECTION	

CANDIDATE A	
CANDIDATE B	
NEW ELECTION	1

Further preferences can be indicated up to the number of candidates standing plus one. Preferences must be consecutive, ie if you wish to express a third preference, you must have expressed a second and first preference. It is not necessary to express a preference for each and every candidate.



Examples of further preferences:

CANDIDATE A	2
CANDIDATE B	3
CANDIDATE C	1
CANDIDATE D	4
CANDIDATE E	6
NEW ELECTION	5

CANDIDATE A	3
CANDIDATE B	
CANDIDATE C	1
CANDIDATE D	
CANDIDATE E	2
NEW ELECTION	

CANDIDATE A	
CANDIDATE B	1
NEW ELECTION	2

How does STV work?

STV revolves around the preferences indicated after the first one. For example, if you felt that only two candidates could do the job well out of those standing then you might express them as 1st and 2nd preference then choose **New Election** as third preference.

When the votes are counted the total number of valid papers (see

later) is divided by two and increased by one (ignoring fractions). This number is called 'quota'. If any candidate passes quota after counting the first preferences, he/she is deemed elected. If no candidate reaches quota, the candidate with the lowest number of votes is excluded. Their votes are then transferred in accordance with any second preferences expressed to the remaining candidate as relevant.

Papers expressing only first preference votes for the excluded candidate are not transferred and the total number of votes to be considered is decreased by the number of such votes, thus lowering quota. The total votes (first preference and transferred votes) are then considered and if any exceed the 'new' quota, that candidate is elected. If quota is not then reached by any candidate, the candidate with the lowest in the round is excluded and their votes transferred as above with respect to third preferences cast.

This procedure is repeated as necessary until a candidate reaches the value of quota for a particular round.

Valid Papers

In previous years, abstention has been available and registered by writing **Abstain** across the ballot paper. This has been replaced by **New Election** and any papers marked for **Abstain** will be counted as 'Invalid'. Crosses may not be

used for the purpose of indicating preference for a candidate, only numbers and these *must* be consecutive. Nothing other than numbers in the boxes should be written on the paper.

Examples

Valid papers:

CANDIDATE A	4
CANDIDATE B	3
CANDIDATE C	
CANDIDATE D	1
CANDIDATE E	
NEW ELECTION	2

CANDIDATE A	
CANDIDATE B	
CANDIDATE C	1
CANDIDATE D	
CANDIDATE E	
NEW ELECTION	

Invalid Papers:

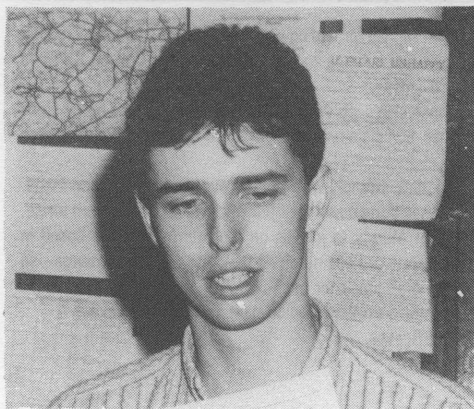
CANDIDATE A	
CANDIDATE B	
CANDIDATE C	X
CANDIDATE D	
CANDIDATE E	
NEW ELECTION	

CANDIDATE A	
CANDIDATE B	1
CANDIDATE C	
CANDIDATE D	3
CANDIDATE E	
NEW ELECTION	

CANDIDATE A	
CANDIDATE B	
CANDIDATE C	
CANDIDATE D	
CANDIDATE E	
NEW ELECTION	

PRESIDENT

Neil McCluskey proposed by Paul Watkiss



Proposer: Paul Watkiss Entertainments Chairman.

As Entertainments Chairman this year, I have been closely

involved in the Union. I have seen first hand the teething problems that have occurred with the introduction of new sabbatical job descriptions. To avoid the new sabbaticals entering their posts with little idea of what they are continuing on, the President must have worked closely with the Union over the past year.

Neil has been extensively involved in the Union this year as Internal Services Officer and Council Chairman, sitting on many college and Union committees. In addition he has found time to do his degree and find success in the sporting field. This combination of dedication, enthusiasm, involvement and organisation makes him the ideal candidate.

Neil is easily the most experienced of all the Presidential candidates and, in my opinion, would benefit students' interests the most over the forthcoming year.

Candidate: Neil McCluskey

Representation and Information

I promise to represent students views as faithfully as I can,

allowing through Council and UGM's to take decisions. I promise to represent policy made by you and to report on the consequences of that policy.

Accommodation

I can guarantee there will be no rent increases in college owned accommodation from the 89/90 to the 90/91 session. I will fight for a better service for students outside of college accommodation.

Welfare

Most students problems stem from lack of finances. I promise to give you more for your money by obtaining sponsorship, fighting for a fairer grant system, negotiating student discounts and providing cheaper services. I will always be approachable on and attentive to students needs.

Immotive issues (NUS affiliation, Poll Tax, the RHBNC merger, St Mary's merger etc) are imminent. I am already talking and collating information so you can make informed decisions.

Lastly, I promise to keep

PRESIDENT

Clare McErlane proposed by Duncan McGregor



Clare has been involved in the Union as Broadsheet Editor and RCSU President. I believe her strength of character, sensitivity to students needs, experience in student representation and decision making processes will make her an excellent Union President next year.

Duncan McGregor (SCC Chairman)

The Union comprises a vast web of committees. To spare you the logistics of eg the Car Parking committee I have concentrated on topics I consider extremely important.

Internal Affairs

Accommodation is a serious problem affecting undergrads, postgrads and Overseas students. College rents are near students affordable limit. Guaranteeing first year students accommodation is a problem which I believe could be resolved by pressing college to buy up suitable properties within commuting distance. The situation will be exacerbated for students living outside college by the abolition of the Fair Rent Act while Poll Tax will effect everyone. Effective representation to college is

essential. I would establish a strong Welfare service to help students negotiate the jungle of landlords and benefits.

As President I would also concern myself with the provision of support for students in Academic Affairs and optimisation of recreational facilities. The merging of the unions may mean that St Mary's students must also be considered in provision of services.

External Affairs

It is time for ICU to reconsider its stance on the NUS. The legal advice they provide, contact with other universities and the possibility of a reduced financial subscription may make reaffiliation a topic for sensible discussion.

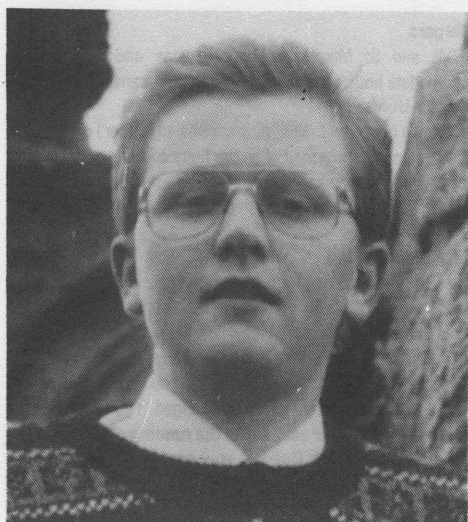
We have supported the NUS in their Anti Loans stance and it so imperative that IC remains abreast of current Government Policy and proposals for education.

IC Union must be run like any other sizeable business proposition with regard to efficiency, profitability, service and accountability to you the students.

Clare McErlane.

PRESIDENT

Andrew Meredith proposed by Phil Drew



The post of IC Union President is much more than being the figurehead of a large organization with annual turnover of around £2M. It's a question of representation. The President is often the first and last contact with both College and External bodies. For this reason, your choice of President must be able to judge public opinion and not be clouded by personal prejudices.

I've spent the last year as RCS Academic Affairs Officer liaising between Academic and Departmental representatives to several College committees including Board of Studies. I have also sat on ICU Council and chaired RCS Academic Affairs Subcommittee. This doesn't mean a detachment from reality whilst sitting on committees. I'm also RCS Motor Club Chairman, as such the harsh realities of budgets and dead lines have been dealt with effectively and efficiently.

The coming year has many problems on the horizon. St Mary's Union merger with IC Union should be an ultimate aim, but neither side should be pushed into an unworkable agreement just for the sake of merger. Disussion, open and involved must take place to present all the possibilities. Only then can an informed decision be made by the students of all sides.

Next year will see a referendum on whether to reaffiliate with the NUS. There will be strong views on both sides, and the Union needs a President strong enough to not take sides whilst allowing fair debates and ballot.

The financial situation of London students, especially with loans, poll tax and accommodation. It's time to inform students on the current situation and act as the students decide.

As President, my deepest concern will be to represn't your views and actually bother to ask you how you feel.

Andrew Meredith ICU President.

Manifestos

PRESIDENT

Mark Reeves proposed by Andrew Jeanes

No photo submitted

I've known Mark since his first day at college. His dedication to any task he undertakes never ceases to amaze me. Mark has some radical plans for the Union—plans he has drawn up after watching the Union very closely this year. Realistic plans that put the Union back in the hands of its students—not its hacks. Vote for a **students** union next year—Vote Mark Reeves on March 6th and 7th.

Andrew Jeanes

My election pledges are as follows:

Drastic lowering of Bar and Snack Bar prices next year. More value for money in all Union outlets such as increasing the portion sizes in the Union Snack Bar. Putting Soft drinks at realistic prices. Southside and other college outlets should be radically undercut.

Voucher scheme for clubs membership. The first five clubs that a student join are free—thereafter a nominal sum is paid.

Proper action on student loans—not pussyfooting as has been done this year. Co-operation with other SU's to organise sit-ins, demos, parliament lobbies—whatever is necessary.

Union service for finding part-time jobs for students. Creation of Jobfinder scheme to succeed where the College Careers service fails.

Sponsorship deals with outside companies to fund better clubs facilities, complete renovation of Union Building, more minibuses etc.

Negotiate strongly with College over accommodation costs. Either they bring down their prices or we organise a rent strike.

Ask St Mary's to join us on their terms. We are based in Kensington not Paddington. If they don't want to merge—so much more money for us.

Vote for a **students** union next year—vote Reeves.

Mark Reeves.

PRESIDENT

Sez Wilkinson proposed by Andy Bannister



Proposers Speech by Andy Bannister

Sez tells me she is the best candidate for president and I don't dare argue. If you value your lives you won't either!

Sez has considerable experience of working in mortuaries and psychiatric hospitals—experience which should prove invaluable when working on Union committees.

Her ambitions are to travel and meet people.

The ripening of a voluptuous new union is nigh. The swelling libido of power-lust and erogenous ego excitation is thrust-out in spasms of bulging excitement from standing sebaticals and we witness a paroxysm of profound promises, but in the tempestuous writhings of election revelry and debauchery we must not blow the job of President. Partners, this is no wet joke.

Together we have witnessed the ever-painful crushing of our beloved union. No longer can we lie back with our heads buried in the pillows. We must unlock the chasity of our fate and overcome it. We must never be impregnated by the fiery torrent of anti-student politics, we will fight them in the walkway, we will fight them in the JCR, we will fight them from every shadow

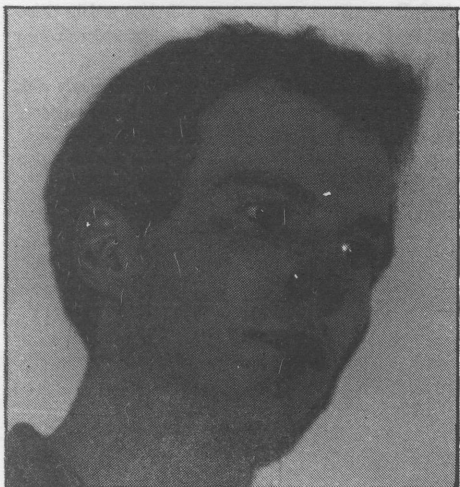
and shower in College. We will never submit.

May the great leaders of our time remove from us the warm wet tears of financial strain, the rhythmically rising rents, the languid looming of loans and the penetrating pain of poll-tax. Never before in the wild conflicts of student-government politics have so many owed so much to so few.

Arm in arm, hand in hand, wholly together we can fill the pot-holes and the chasms that line the road of life. We need a sense of direction, time and rhythm to insert ourselves directly into the warm swelling streams of action, to project ourselves towards the wild throws of success, until in the final ejaculation of

DEPUTY PRESIDENT

Alistair Goodall proposed by Margaret Poole



External Affairs

The biggest threat facing students today is apathy. As DP I will ensure that every student is kept aware of all the current legislation affecting students. ICU must make its opinions on loans, grants, benefits etc. understood by those that matter before apathy changes student life forever.

Academic Affairs

Departments must provide adequate support for their students, many of whom face problems with finance, workloads or accomodation. I will monitor the current Dep./Ac. Rep. system closely to see if it represents and protects students' interests sufficiently.

Union Finance

Clubs should be allowed to hold their own bank accounts (With suitable safeguards), furthermore wherever possible I will encourage and help clubs to find outside financing through sponsorship or donations. This will lead to better and simpler funding of Clubs and more money for the Union.

Mergers

UGMs and St Mary's are here to stay and ICU should accomodate both, possibly by providing free transport between sites for UGMs.

Before a merger with RHBNC is considered further I will ensure that the Union is informed of all the facts and that subsequent policy is presented at all stages of the negotiations as it's vital that ICU's interests are protected throughout.

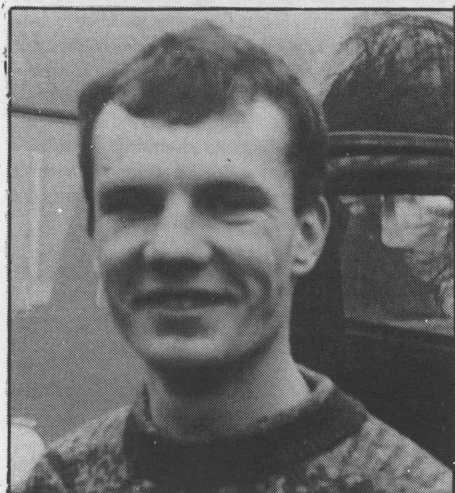
A Student's Union

The Deputy President exists to report to the President and be responsible to UGMs for a number of issues and so it is you who should decide the full policy of next year's sabbaticals.

This manifesto has stated part of what I would achieve as DP but the rest needs writing next year when you decide what areas need attention and what should be changed. Your vote counts so use it, and **Vote for your say in the running of your Union and make me, Alistair Goodall, your next Deputy President.**

DEPUTY PRESIDENT

Gavin Spittlehouse proposed by Tom Yates



Personally and professionally I have known Gavin for some 18 months, during which time his contribution to the Union has steadily increased. From a very capable start within individual societies, his involvement grew to the point where he was elected Chairman of the newly-created Industrial Relations Committee, a job which he performed with admirable skill. From this background, Gavin now has a grasp of Union affairs unsurpassed outside the current Executive.

He will make an excellent Deputy President.

Proposer: Tom Yates, Physics PG.

Would our bookshop, bar and snackbar serve us better by making profits for the Union, or by providing better/cheaper services and lower profits? I will look into this.

The proposed IC/RHBNC merger would destroy student clubs and social life. I am completely against it.

Hall rent levels have increased dramatically over the last few years, to pay for Fisher Hall. The agreement which led to these increases is coming to an end. We must consider whether we want low rent increases, or would accept higher increases if it

means more places in hall.

Our Union building is a vital facility. It is unclean, untidy and in a bad state of repair. I will ensure it is repaired and improved, and looked after properly.

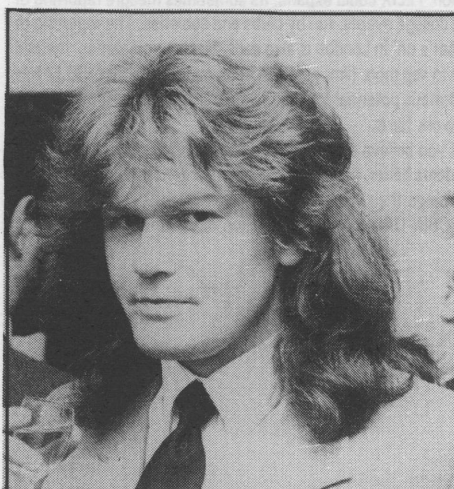
Countless past sabbatical candidates have promised to produce "Exec News". I make no such promise. FELIX is an excellent medium for communication, which I will use to keep in touch with students. I want to see UGM motions publicised in advance.

The lecturer questionnaire is an excellent idea. The first published results are due soon. We must ensure that departments use them to improve teaching standards.

Little has been done towards the SMHMSSU merger. It is to everyone's advantage that it takes place smoothly and quickly. I will work towards this.

DEPUTY PRESIDENT

Dave Williams proposed by Dave Osborne



Proposer

Most people associate Dave Williams with Rag, since as Vice President this year he has led RCS Rag to their highest ever total. He also edited this year's IC Rag Mag, which has proved to be popular both here and across the country. He has achieved this through enthusiasm and hard work—qualities which he has continually shown in his posts in RCSU.

As RCS Treasurer last year, Dave and his President saved their Union's Finances from death. In this capacity, Dave also attended ICU Finance meetings, and will have no difficulty looking after IC Union's money. Dave has also sat on ICU Council this year, and has considerable knowledge in how the Union runs. In all my experience with him, he has been easy going, whilst still taking the job seriously. I have no doubt he will do an excellent job as ICU DP, and urge you all to vote for him.

Dave Osborne, Chem Eng III.

Candidate

Recently we have seen the Union expand its services considerably, however this has brought us sabbaticals with

minds set firmly on profit. People have forgotten that the job of DP is about services to students, whilst still keeping a close eye on the balance sheet.

I want to improve the image of the Unions facilities by organising a survey of students to find where things are going wrong. We must reconsider our bonds with the Southside Bar pricing policy which artificially inflates our own.

We must renovate and maintain the Union building so it is a place we can all enjoy using and are not ashamed to show visitors.

These are only the start of my plans, bring these and more to fruition by voting for me, the man who knows what it is all about!

HON SEC

Doug King proposed by Andrew Garside



If I am elected to the post of Hon Sec next year I shall do my very best to drag the Union down to my level. I was brought up in the gutter and have sunk lower since.

Experience

I have no experience whatsoever that would benefit me as Hon Sec. I especially haven't had anything to do with ents. However between me and a few friends I can muster quite a large tape collection. I also know how to produce publicity on the cheap. The Hon Sec is also responsible for organising the contact between the Exec and the students through the UGM. In my time at IC I have been to at least 2 UGMs so I have seen what they're like. I have also watched council on one occasion so I know how little there is to do.

To sum up: If elected I will do as little as possible for a year and will be useless as Hon Sec. But I'm the only candidate who has told you the truth and not made any false claims.

So vote for me and I'll do Fuck All for you.

HON SEC

Fiona Nicholas proposed by Ralph Greenwell



Hon Sec (Events)

Fiona Nicholas, proposed by Ralph Greenwell

Fiona Nicholas is an honest, hard-working, approachable third-year biochemist who has always believed in playing as hard as she works and working as hard as she can.

Having played an active part in the social life of Beit Hall in her first year, Fiona became RCS VP in her second year and was awarded an RCS UGA (the highest reward a CCU can give for service and dedication) for her contribution to their Rag. As RCS VP, Fiona worked continuously with and on the ICU Rag Committee; this led to her being voted this year's Chairman. She has performed this job diligently and with unfailing enthusiasm, despite unconstructive criticisms levelled at her by other parties. The job has placed her in an excellent position to learn about the workings of ICU, particularly the organisation of large functions.

Ralph Greenwell, Guilds President.

I see the job of Hon Sec as very much one of co-ordination and it is to this effect that I intend to set up an Events Committee,

on which will sit reps from Ents, Rag, SCAB, the CCUs, OSC and IRC. The aim of the Events Committee would be to make for a balanced social calendar and to ensure that clashes such as the infamous Careers Fair: Rag Week one never re-occur.

Ian Morris has taken a very firm stance on publicity in the past year and I intend to do the same. Removing old and illegal posters results in more space for legitimate advertising.

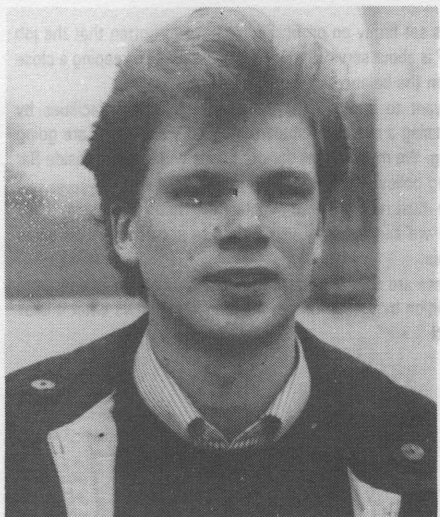
Two of my main ambitions as Hon Sec are to actively reduce the social and academic gap between here and St Mary's and to procure useful sponsorship for Union events.

I believe I am the number 1 choice.

Fiona Nicholas.

FELIX EDITOR

Rob Davison proposed by Paul Barton



I have known Robin or 'Winthrop' as he is often called, in the FELIX office, since joining the editorial team last year. I proposed him for FELIX Editor, because I consider him to be competent and professional. He has the experience to run FELIX well, and has many ideas to introduce into a new FELIX, particularly those of humour. Robin is a very approachable person and will create a very friendly atmosphere in the office.

Remember - vote Winthrop!

Paul Barton, Travel Editor.

FELIX as the newspaper of Imperial College Union is the only source of news and views to most of its readers. I believe that there is a little too much emphasis on the reporting of news. A FELIX that combined being informative and entertaining could have an appeal, much wider than it is now. I have used the slogan "Does your newspaper take you too seriously?" to try to highlight this. I would like to see more humour and satire in FELIX, it would be both more fun to read and to produce.

FELIX should cover the news about IC and be free to critically examine and comment upon, the running of the College and the

Union. FELIX could expand, its sometimes meagre reporting of the college events, run by clubs and societies. The reporting of 'what's on' in London is also sadly lacking sometimes. I would like to see more film, play and book reviews. In fact, FELIX has enormous potential for expansion, if it could attract more staff, to work for it.

If you believe that I can run FELIX and the print unit to serve students better, and would like a more entertaining read on Friday mornings then vote-

ROBIN DAVISON 1, on election days 6th and 7th March.

FELIX EDITOR

Dave Smedley proposed by Julian Moore



I am pleased to be able to propose Dave for FELIX Editor because I believe that he is the best candidate for the post.

His experience includes:

1. Broadsheet Editor 1987/88
2. ICU Handbook Editor 1988
3. FELIX News Editor 1988/89

Dave has worked in every area of FELIX and has both the capability and the know-how to run the Print Unit.

Having worked closely with all the FELIX staff this year, Dave will provide next year's FELIX with continuity and a friendly atmosphere as well as a wealth of experience.

I feel that Dave is the only logical choice for FELIX Editor and I hope that you will agree with me and vote for him on March 6 and 7.

Julian Moore, proposer.

Felix

The first cause to which any FELIX Editor must devote himself is the accurate reporting of news at IC with the backing of fair editorial comment; I have no intention of changing this. The city

we live in offers far more than this however. I am therefore proposing a London section for next year's FELIX.

I should also like to introduce a weekly sports results column, a **wide-interest** humour section and a regular column from St Mary's. This is not all however! I would like to increase the input of ideas into FELIX by sending staff out to ask what **you** want.

In general, I would like to promote features with more impact, contrasting with a light-hearted approach in other areas.

Print Unit

As Print Unit Manager I would like to help people using the facility next year by moving staff meetings from Friday lunchtimes to Monday evenings. This would allow St Mary's students to contribute to FELIX and would enable people to do print work on Friday lunchtimes.

Alternative accommodation: squatting

The alternative guide to finding somewhere to live in London.

Squatting

Short-life housing originally grew out of the squatting movement of the 1970's. Groups of squatters formed housing cooperatives and succeeded in getting licences from the local authorities. According to latest estimates there are still about 35,000 people living in squats in London alone (April 1987). There are now eight local squat groups left in London coordinated by the Advisory Service for Squatters (the ASS), which also publishes the 'Squatters Handbook', an excellent source of information and advice on all aspects of squatting.

Squatting is *unlawful* not *illegal*. This means that it is a civil dispute dealt with by civil courts. The police are only involved in criminal matters where something illegal has happened. It is essential to understand the laws involved. If you follow some commonsense guidelines when setting up a squat you will avoid many problems later.

The main laws covering squatting are contained in the criminal law act, 1977 (sections 6 to 10). Squatting an empty premise which nobody else is using, nor intending to use, with a few exceptions, is still legal. Indeed, the same laws protect you from being thrown out by force. Anyone doing so without first getting a proper eviction order, may

these rights have to be worked for and are never really secure. The insecurity is the main drawback to squatting.

The first rule about squatting is careful planning and organisation. By doing the initial research thoroughly one can avoid many of the possible pitfalls and you may be able to find good accommodation with the potential to last a long time.

When looking for a place to squat, be realistic. As a general rule boarded-up accommodation awaiting development, previously empty for at least a month and owned by the council or by a housing association is ideal. A trip to the local planning consents office is extremely useful. Often this can tell you how long you will be able to live in a property. Planning consent takes ages and, as often as not, is refused. Hopefully nobody will bother evicting you until they are ready to go ahead with development.

Too many squatters go for smart accommodation only left empty for a short period. Not surprisingly they are evicted quite quickly and are back on the streets. This short-sighted opportunism gives squatting a bad name.

It is essential to ensure that the property is not occupied nor is there anyone intending to occupy the property in the near future.

Both situations are covered by the

When you are sure that the place is vacant, the next thing to check is the condition inside. Many landlords, and even councils, simply vandalise empty properties by disconnecting the electrical mains and tearing out piping. They may do this simply to enhance their chances of gaining planning permission. Local authorities are often reluctant to grant permission that destroys living accommodation, so by vandalising the property landlords can claim that it is uninhabitable anyway. For every property that landlords actually handover for temporary short-life housing, while awaiting planning permission consent, there are dozens vandalised in this way and left vacant. Such properties are a sheer waste. The cost of repairing them to make squatting possible is not worth the risks involved.

ORGANISE

Usually for a successful squat a large group of at least six people is needed. Move in quickly, change and fit all the locks, and then start furnishing and decorating. For the first few weeks at least there must be someone in the squat at all times. This prevents anyone using section 6 in the Criminal Law Act; simply breaking in and throwing your stuff out. In effect, if you leave the place empty someone could squat you! If someone is going to evict you legally, they will have to go to the civil courts which can take up to two months and even then it might be another month before the over-worked court bailiffs can get round to evicting you. Hopefully though, you have found somewhere where nobody will bother you. Often squatters can come to an arrangement with the owners which can benefit both sides and avoid the courts.

Many people object to squatting as immoral and say that it is basically a crime, that squatters are jumping the house waiting lists and that they are trying to get something for nothing. Accusations that all squatters are of dubious and undesirable character are common.

Squatters are normal people who often, due to desperation, have chosen to act rather than be pushed around. The present system of rented accommodation sees many poor people having to pay most of their earnings to rich landlords who just sit back and let it roll in.

It is a greater crime that there are more than 850,000 empty homes in the UK which could be used to house the homeless. A vast majority



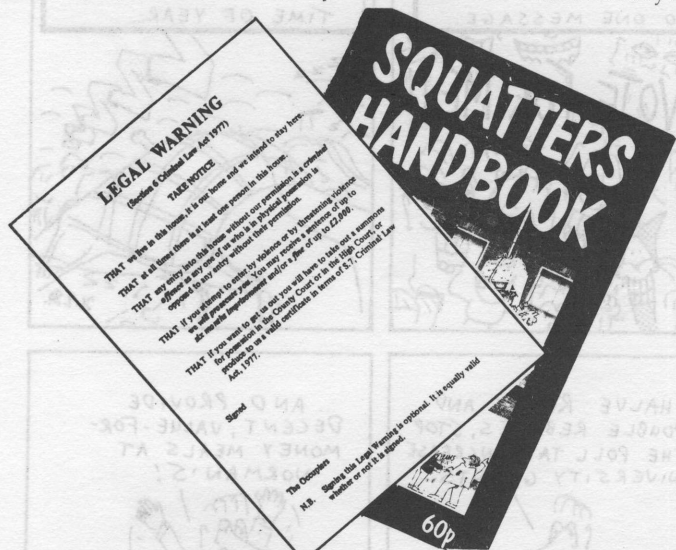
Libyan Embassy squatted

of these are in London and by squatting they are regained and made inhabitable again.

Imperial College students have been involved in squatting before. In particular, the mass squat of the Libyan consulate from mid-April 1986 until late June. During this time, around 40 people occupied the abandoned consulate until finally being evicted. It is quite possible that if they had caused less nuisance to local residents they could have been there much longer.

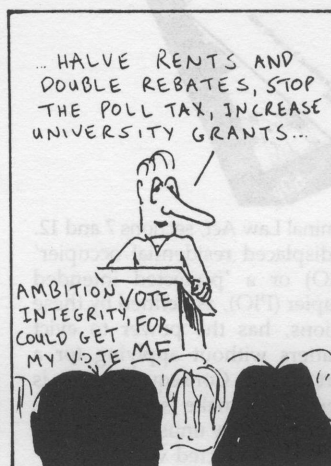
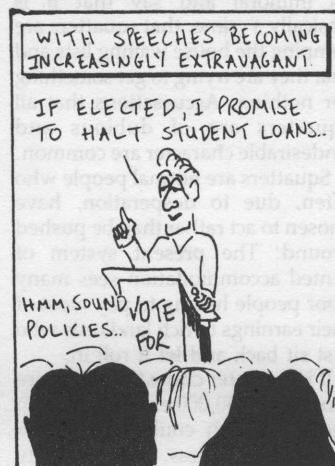
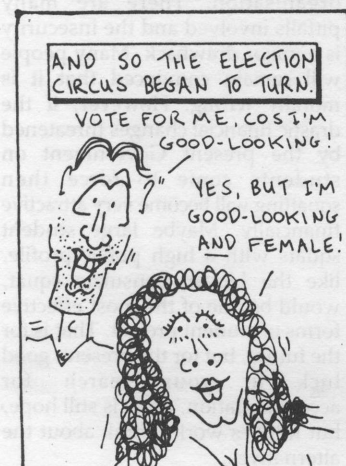
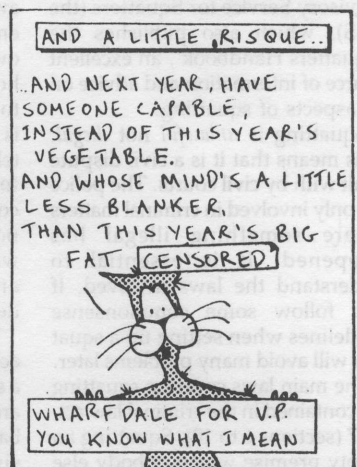
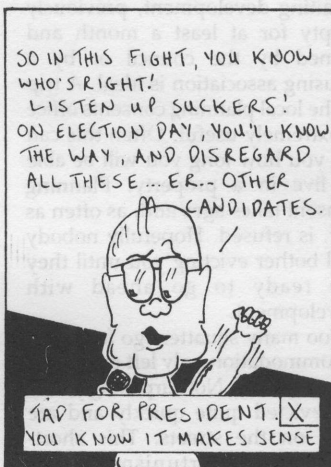
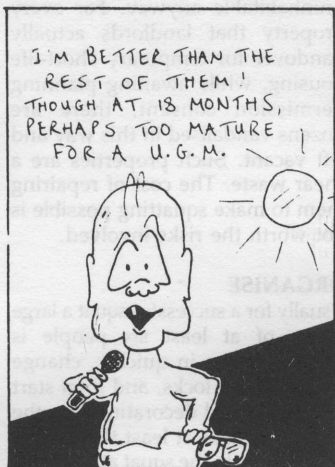
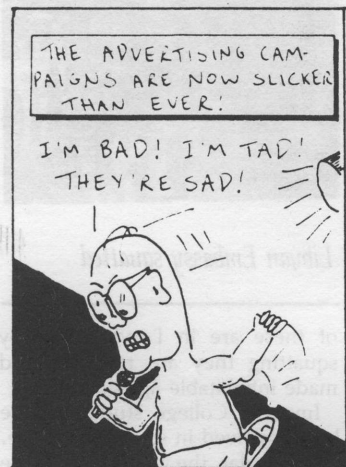
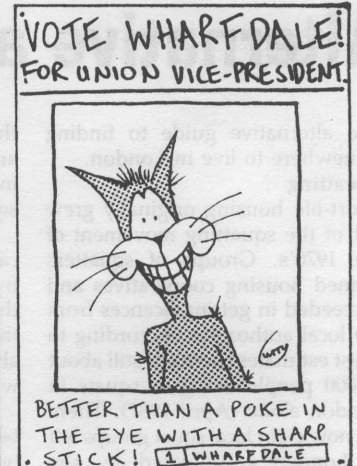
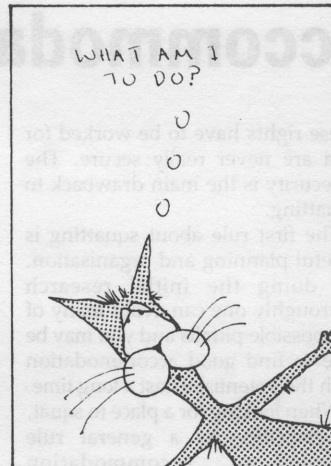
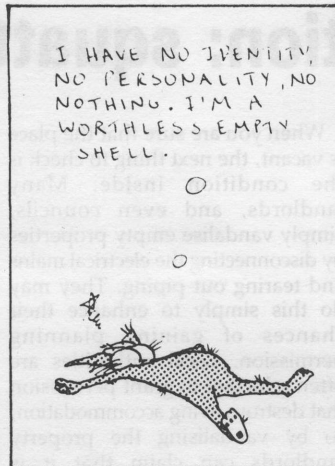
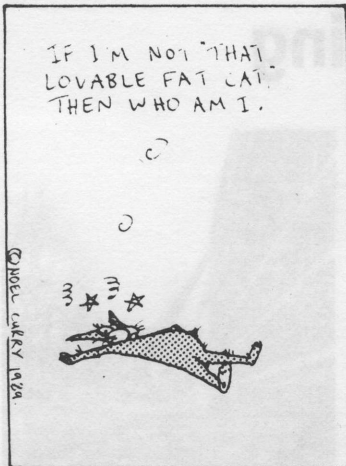
In conclusion, both short-life housing and squatting offer viable and cheap alternative sources of accommodation. Both require work and effort to furnish, decorate and be successful. Whilst short-life housing is a cheap alternative to normal rented accommodation it is difficult to get a place without persistence.

Squatting requires good organisation. There are many pitfalls involved and the insecurity is a major drawback. Many people will remain convinced that it is morally wrong. However, if the drastic financial changes threatened by the present Government on students come to force then squatting will become very attractive financially. Maybe large student squats with a high public profile, like the Libyan consulate squat, would be one of the most effective forms of student protest. That is for the future, but for the present, good luck in your search for accommodation, there is still hope, but it takes work! Think about the alternatives.



themselves be committing a criminal offence under section six. In this respect and for other basic rights, squatters have the same entitlements as any other householder. They have the right to privacy, rubbish collection, postal delivery, social security and essential services like water and electricity. In practice almost all of

Criminal Law Act, sections 7 and 12. A 'displaced residential occupier' (DRO) or a 'protected intended occupier' (PIO), as defined by these sections, has the power to evict squatters without applying for a court order. Consequently, it is essential to make sure that the property is really unused or you will probably be evicted very quickly.



OPERA

A King Listens

A King Listens or *The Emperor's New Clothes*? That was the question I heard voiced in the ladies' during the interval of the British premiere of this new opera—a reworking of Shakespeare's *Tempest*. It was certainly hard to tell whether the tangibly enthusiastic atmosphere in the Royal Opera House was out of a genuine enjoyment of the performance or a desire to appear as musically sophisticated as the next person. At the end of the initially polite applause swelled as the audience recognised the individual contributions of the soloists, designer, production team and

finally the composer—Luciano Berio, who had also conducted. This was quite right and proper as the performances were well crafted and Graham Vick's, apparently 'wholly faithful', production creates what the stage directions describe as a 'Kaleidoscope of action'. Berio's music is modern, rich and intriguing but is the opera a success?

When we hear do we listen? When we listen what do we hear? There are arguably no more important questions for a musician to ask in an age when the act of conscious listening and understanding is ever more forcibly submerged by the tumult of passive hearing. Berio has made them the centre of this, his theatrical extravaganza and in place of what could have been merely a didactic

Sadly this talent is floundering in the rest of the film. Cox succeeds so well in avoiding any established styles and attitudes that he loses sight of his own. There is no dishonest, cheap emotion, no glorification of battle, nor even easy condemnation of America. It is not clichéd. But it is not interesting either.

Even the character of Walker remains unexplored, rendered impotent, for the most part, by comedy. There is only one scene of scary craziness, when Walker cuts off his lifeline shipping supply from the US almost to spite himself. Hovering on the thin edge of sanity and genius, from whence the power-craze springs, this is a breath-holding, tantalising glimpse of what could have been.

Cox sticks to his guns throughout, and edits out any more emotion. What a shame, all we have left is the visual stimulation and a few laughs with a cynical after-taste. Go home and make a music video boys.

Susan Appleby.

and philosophising drama based on Calvino's libretto he has created an enthralling, dream-like musical spectacle which circles around the questions without ever answering them. So writes Nicholas Kenyon of the *Sunday Observer*.

Agreed, the evening was entertaining, the story is irrelevant, and no answers are provided. There is a constant background 'noise' of

singers, scene shifters, ballroom dancers, acrobatics, a trapeze artist, a woman sawn in half etc. (I was mesmerised by a prolonged lovers' tiff between two mimes) and when the chorus took off (literally) it was something of a theatrical coup. But in the final analysis I am reminded of Rossini's comment on Wagner. There were some beautiful moments but bad quarters of an hour!.



VIDEO

Wall Street

Oliver Stone's expedition into the fast world of high finance and high society was one of last year's best film releases. The leading role is taken by Michael Douglas, playing the corporate raider Gordon Gekko, rich beyond belief and ruthless beyond imagination.

Broker Charlie Sheen aspires to be

his understudy, and gets a shot through sheer persistence. Catapulted into this crazy world, unready and incapable, he is always destined for a mighty fall and his only compensation is that he just might be able to bring Gekko down with himself.

The supporting cast of Daryl Hannah, Martin Sheen and Terrence Stamp help the movie along, and the insular setting of the New York business world gives a solid and believable element to an excellent movie. This film is recommended to everyone, especially if you missed it last time around.

Andrew Clarke.



PREVIEW

Working Girl

Wall Street meets *Secret of my Success* in this comedy drama set in the executive shark pools of Manhattan.

Tess McGill (Melanie Griffith) is smart, gorgeous and struggling. Her life has become an endless round of ferry commutes, lecherous bosses and low pay. But she is determined to use her brain and talent to pull herself out of the secretarial pool and into the upper echelons of New York's brokerage industry. With the

help of a white collar Prince Charming (Harrison Ford), she takes a trip up the treacherous corporate ladder, but all the while trying to avoid her high-powered boss (Sigourney Weaver), a seductive piranha.

A powerhouse trio of stars add zest to an already impressive script. Melanie Griffith (*Body Double*, *Stormy Monday*) at last gets a chance to shine after years of mediocre roles; Harrison Ford tries his hand at comedy, and is rather good at it. We'll see him in *Indiana Jones and the Last Crusade* in June; and Sigourney Weaver is delightfully evil in an Oscar nominated role.

The film has picked up a wealth of Oscar nominations including best picture. It promises to be this year's *Broadcast News*.

Release date March 31st.
Sumit Guha.



Reviews



Rainman

Every Easter we have the Oscars, a time when movies are sold on nominations rather than cast. Every year there are a couple of films hoping to grab more than a handful, prominent for a while, forgotten a few months later. Remember *The Last Emperor*, *Ghandi* and *Amadeus*? This year is no different.

Rainman boasts eight nominations, including best actor, director and film. It opens today, in a swarm of publicity, and while it may well clean up at the Academy, it will be far from your mind by the time you're lazing on a beach, just as its illustrious predecessors were in summers past.

This is the story of Charlie Babbitt (Tom Cruise), a smooth, slick Italian car salesman, struggling between big bucks and big debts. His character has all the substance of Cruise's previous roles in *Top Gun*, *Cocktail* and *The Colour of Money*, especially his arrogance and insecurity. Here though is a guy that women would kill to have, and men would have to kill.

Charlie learns of his father's death, but does not inherit the three million dollar estate. There are events past which have severed their relationship. He remembers little except that he was unhappy. 'When I was a kid and got scared, the Rain Man used to sing to me.'

Raymond Babbitt (Dustin Hoffman) is Charlie's elder brother, formerly undiscovered, and now sole beneficiary of the will. He is an autistic savant, a man of great talent, locked within his own mind, his incomprehension of feeling and emotion, a barrier to the outside world.

Charlie needs Raymond to get his half of the estate. He also needs to be in LA to rescue his business, but Raymond will only travel on backroads. It is destined to be a long and tiresome journey for Charlie, as he attempts to cope with the present whilst rendezvousing with a forgotten past.

It is hard to explain the appeal of *Rainman*. Hoffman is superb and there can be few complaints when he walks away with his Oscar next month. Tom Cruise too is uncharacteristically proficient, giving depth and feeling to a difficult role, and all the time emphasising the frustration of Charlie Babbitt: 'I think this autism



is a bunch of shit because you can't tell me you're not in there somewhere.'

The music and photography give the film a warm feel, and there is almost a touch of Miami Vice about it. A good deal of close camerawork keeps the story intense despite an absence of action and there are one or two laughs to relieve this tension.

Academy Award for best film? Perhaps. It deserves something, a few hours of your time if nothing else. But it would be nice to see the Academy mark Cruise's first proper film role, and Hoffman's best, in some way.

Rainman is showing at The Plaza, Lower Regent Street.
Andrew Clarke.

EXHIBITION

Leonardo

Artist, Scientist, Inventor,
(Hayward Gallery)

Anybody who calls themselves a scientist or an engineer owes it to themselves to visit this unique exhibition of Leonardo da Vinci's work. The range of exhibits on show demonstrate the incredible breadth of da Vinci's interests, opening with an outline of his career through drawings which relate to his artistic projects, running through 'The Ages of Man', 'The Natural World', 'Body of Earth and Body of Man', 'The Vortex', 'The Forces of Destruction', 'Art and Imagination', 'The Measuring Eye' and 'Structure and Mechanism'. The draughtsmanship and beauty of his drawings is quite breathtaking, and their surprisingly small size serves to emphasize the incredible intricacy—the anatomical drawings are particularly remarkable.

The exhibition moves onto da Vinci's scientific and engineering work, but the comment theme is the magnificent coherence of his vision of man in nature, and his observation of the forms which occur in nature, and the way in which these forms could be utilised. The sketches of the inventions are realised in well-made models, most notably the lovingly made

centralised symmetrical church, and the flying machine, which was created especially for this exhibition.

The exhibition also includes computer graphics on the transformation of geometrical bodies, the effects of shadow and light, symmetrical churches, the branching system of trees and lungs, and the perspective of the 'Last Supper', all supplied by IBM, the sponsor. These give a fascinating insight into da Vinci's thoughts.

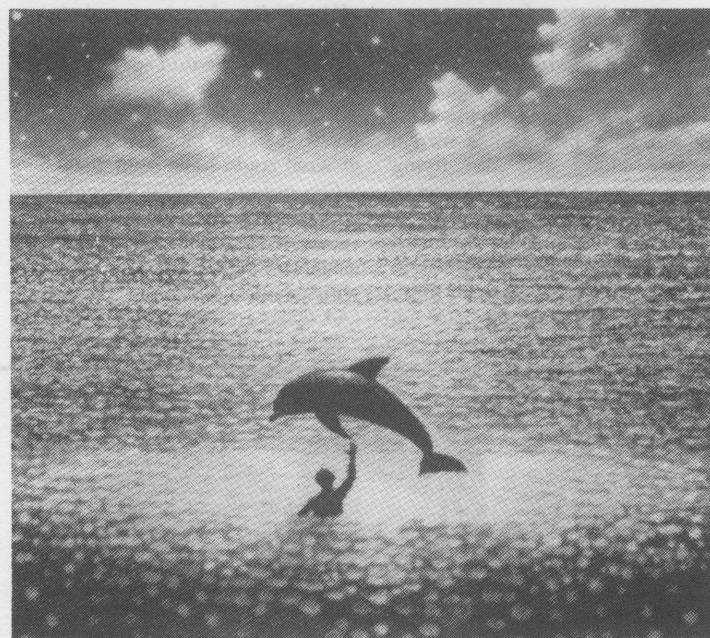
This incredible assemblage of work will probably never be gathered together again, and so your £2 (with a student card) will be money well spent. By the way, wrap up well; the exhibition is very popular, and a long queue is almost inevitable.

Michael Kirsch.



The Big Blue

'An existential comic strip' is how *Time Out* described Luc Besson's *The Big Blue*. The film is about two men's passion for the sea. Jacques (Jean-Marc Barr) is a quiet, monosyllabic Frenchman and his childhood friend Enzo (Jean Reno),



a boistrous Italian. They are competing against each other in the World Diving Championships. Pouting blond Johana (Rosanna Arquette) provides the romantic interest.

The scene is set in Sicily, Greece and the French Riviera and boasts some of the most mesmerising photography to be seen on the silver screen in recent years.

A strong cast of happy dolphins charms the audience with their gymnastics. The two men

themselves perform superhuman feats of staying under water for incredible lengths of time.

Throbbing music, 70mm scope and slow motion sequences give the impression of another world.

This film is powerful, melancholic and different—a healthy antithesis of *Jaws*.

Long after I had left the theatre, images of *The Big Blue* still reverberated through my head.

A minor classic.
Azher Abidi.

FOOTBALL

Bit of a scrap

IC VI—0
Barts II—0

With half the team making their last appearance for IC, this was a match that everybody wanted to win. However, the game quickly degenerated into a violent scrap, largely due to the referee's inability to spot, control or punish the excesses of some players. The IC defence, expertly marshalled by Dave Harper, contained the opposition for most of the game, but on the several occasions that the defence was breached, Paul Bradley produced some breath-taking saves to keep the goal intact. IC should have had a penalty when Lee Davis was quite clearly illegally brought down in the penalty area, but the referee remained true to form, unable to distinguish the difference between a football and rugby tackle, and waved 'play-on'.

HOCKEY

Domination

IC 2nd XI—3
IC 3rd XI—0

The 2nds continue to dominate the UL Division Two, a point ahead of nearest rivals, St Georges. The scoreline was clear-cut but hard-earned against firm resistance. The first goal came quickly, with Paul Turner stepping up to slot a penalty flick high and to the right of the keeper after only five minutes play. Also in the first half, our short corner routine yielded a goal. The shot was stopped by the keeper but Jon Beedsmore ghosted in to touch the ball home.

During the second half, the 3rds had one clear-cut chance when Steve Burton broke free at the top of the circle, but keeper Hari Vamadevan saved well to keep a clean sheet. Max Michaelis then made sure of the result scoring the third with a shot from the edge of the opposition circle passing through a crowd of players into the net. Full credit to the 3rd XI for putting up a determined fight, but after the first five minutes, the 2nds never looked back.

SKI RACING

We like pain

Last Saturday night, the Ski Club (soon to be renamed Masochist Soc) competed in the last league race of the year at Hemel Hempstead. Once again we entered three full teams, which perhaps reflects the success of the Club this year. Before the race, the first team were in a strong

position ten points clear at the top of the table, but the second team needed a good result to earn a place in the National finals.

The appalling conditions throughout the evening made the slope more slippery than usual, and this caused the first team to lose their first race. The second team also won one race and lost the other in the first round, so the teams were in the same group for round 2. Unfortunately the third team were drawn against two very good teams, so they qualified for spending the second round in the bar.

The second round proved to be disastrous—only the first team won a race, and that was against the second team! The final placings were: Firsts 7th, seconds 8th and the thirds 13th equal.

BADMINTON

All round effort

Imperial College—5
Manchester—4

Imperial College continues to show that its Badminton Club has players to rival those of any other university. On Wednesday February 1, IC mens 1st team faced Manchester in the quarter finals of the UAU. Supporters were kept on the edge of their seats as an excruciatingly close game unfolded. Our first pair, Simon and Tim, had a very bad day, only managing to win one game against Manchester's 3rd pair. Our 2nd pair, Bharat and Richard, having lost to their 2nd pair managed to pull the game round by beating their 1st pair 17-16 in the third. Heros of the day were Trevor and Svein who, against all expectations, won two games, bringing the match to four all. Bharat and Richard then went on to complete what should have been a routine win over Manchester's 3rd pair. Instead though they decided

to increase my stress level even more by allowing themselves to be beaten to three before winning the game and match.

ICU SEDS

Space Exploration

Ever wondered how advanced and efficient the Russian Space Programme 13 is, or how plans for the next generation of space planes are shaping up? Have you even considered space as a career?

ICU Students for the Exploration and Development of Space (SEDS) exists to promote what in most people is a 'latent' interest in space flight, and to assist and advise people considering space as a career. We aim to achieve this by having guest speakers talk on various aspects of spaceflight. For example we recently had a highly successful talk on 'Hotol' by Dr R C Parkinson of British Aerospace Future Studies Department.

Our next lecture is 'future space missions and lessons from the past' by David Baker of Sigma Projects. The lecture will take place on Wednesday March 8 in room 144 Huxley at 2.00pm. The following week sees Dr Anders Hanson of Commercial Space Technology speaking on 'Biomedical Problems of Space'.

Interested? Contact Charmian Leaver, Computing MSc or Jason Hatton, Life Sci 1. Membership is £1.50.

FILMSOC

Thrills & Chills

This Thursday Filmsoc presents Angel Heart, Alan Parker's stylish thriller. Set in the 1950s it begins as a conventional detective story, with

private eye Harold Angel (Mickey Rourke) hired by the mysterious Louis Cyphre (a chilling performance by Robert de Niro) to find a singer who has disappeared, owing Cyphre money.

Angel's search leads him to New Orleans where he is drawn into the frightening world of voodoo and satanism.

The film climaxes with a shock ending that will haunt you for days afterwards...

Angel Heart is also noticeable for a sexually-charged performance by Lisa Bonet, in a role a million miles away from that of homely daughter Denise Huxtable, in *The Cosby Show*. Details in 'What's On'.

Finally a plea to all you film buffs out there looking to flesh out your CVs. Filmsoc is looking for new committee members. Put up posters and help set up the film equipment on Thursday evenings and in return get to see the films free! If you're interested, come and see any committee member at Thursday's screening.

IC RADIO

Radio Haze

You know the feeling: switch on IC Radio in the mood for Tom Jones, and there's Sonic Youth instead. How do you know what to expect?

Well every week we have a range of specialist music shows catering for a variety of musical palates, Tom Youth and Sonic Jones included.

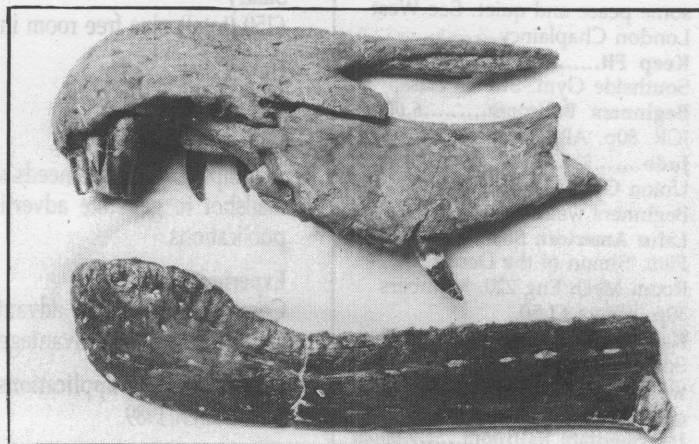
Sunday, 10am-12noon: Garbriella's Sunday Supplement, our very own talking magazine.

Monday, 6-7pm: Susan's Ripvan-winklepicker Show. Indie thrash, house and mouse followed by The Show with No Name: Carl plays hardcore, medium core, apple core thrash, anything fast and the occasionally slip into mainstream indie pop. 9-10pm: Favid induces you to step into his funky and crazy world; move to the music and marvel at his vocal range.

Tuesday, 5-7pm: Tom and Dave (that cheery cockney duo—or perhaps not).

Thursday, 5-7pm: Joseph—from acid house to acid goth, with the odd pint of Guinness in between, teams up with Rob. 9-11pm: Nigel Baker, the man behind the cuddly toy, plays punk to Mantovani but mostly thrusty rock music.

This is just a taste of our regular shows—call into the station for up-to-the-minute schedules, and if you're not hearing your style of music, why not come in and do a show yourself?



Emmanuel Saridakis

What's On

A guide to events in and around IC.

FRIDAY

Consoc Meeting.....12.30pm
ME569.

Friday Jamaa Prayer.....1.00pm

Southside Gym.

Christian Union

Meeting.....5.30pm

308 Huxley. Time for prayer, worship and discussion.

Poetry Readings.....6.30pm

University of London School of Oriental and African Studies Room G57.

Fencing Club.....12.30pm

Union Gym. Meeting also at 6 o'clock.

IC Ents Gig.....9.00pm

'Jesus Jones' & 'Century Boys' in the Union Lounge. Disco and bar extension. Tickets £1.50 (adv) or £2 (door).

SATURDAY

Karate.....10.00am

Southside Gym. Beginners welcome. Build your fitness and confidence.

IC Kung Fu.....4.30pm

Southside Gym. Beginners always welcome.

SUNDAY

Sunday Mass.....11.00am

West London Catholic Chaplaincy, More House, 53 Cromwell Road. Also at 6pm (followed by bar supper). All welcome.

Wargames.....1.00pm

Senior Common Room. All Welcome.

Kung Fu.....4.30pm

Union Gym. Beginners welcome.

RCSU Night in the Bar.....7.00pm

Union Bar.

MONDAY

Rock Soc Meeting.....12.30pm

Southside Upper Lounge.

Anyone interested in any form of rock music come along.

Artsoc Meeting.....12.30pm

Union SCR. Sign up for shows. Membership £2.

Yacht Club Meeting.....12.30pm

Upstairs in Southside.

Recitation of

Holy Qur'an.....1.30pm

9 Prince's Gardens (Basement).

Keep Fit.....5.30pm

Southside Gym.

IC Concert Band

Rehearsal.....5.45pm

Great Hall. All players please.

Improvers Ballroom.....6.00pm

JCR. 80p.

Beginners Rock

'n' Roll.....6.45pm

UDH. 80p.

Advanced Ballroom.....7.00pm

JCR. 80p.

Karate.....7.00pm

Southside Gym. Beginners welcome. Build your fitness and confidence.

Latin American

Dance Class.....8.00pm

UDH. Cha, Samba, Rumba, etc.

80p

TUESDAY

CU Prayer.....8.15am

308 Huxley. For those who think prayer is more important than sleep. Free.

Remote Controlled

Modelling Club.....12.30pm

Southside Upper.

Sailing Club.....12.30pm

Meeting in Southside Lounge.

Boardsailing Club.....12.30pm

Southside Lounge.

Audio Soc Demo.....12.30pm

Holland Club Function Room.

'The Cornflake Shop'. Which sounds better vinyl LP or compact disc?

Audiosoc Meeting.....12.30pm

Union SCR. Cheap records and tapes etc.

Roman Catholic

Mass.....12.40pm

Mech Eng 702. Mass followed by lunch. 50p.

Ski Club Meeting.....12.45pm

Southside Lounge. Interested in learning to ski? Already hooked? Want to try racing? Come and find out more.

IC Ents Meeting.....1.00pm

Union Lounge. All welcome.

3rd World First.....1.00pm

4th Floor, Env Tech, 48 Prince's Gardens.

Beatles Hour.....1.00pm

For all the best Beatle and Beatle-related material on Cd with Spenser Lane.

Qur'an, tradition

of Prophet.....1.30pm

9 Prince's Gardens.

Amnesty Meeting.....5.30pm

Brown Committee Room (top floor Union Building).

Meditative Prayer.....5.45pm

Chaplain's Office, 10 Prince's Gardens. Come and join us for some peace and quiet. See West London Chaplaincy.

Keep Fit.....6.00pm

Southside Gym. Stretch class.

Beginners Ballroom.....6.00pm

JCR. 80p. All welcome.

Judo.....6.30pm

Union Gym. All grades.

Beginners welcome.

Latin American Soc.....7.00pm

Film 'Simon of the Desert' in Room Mech Eng 220. Members 50p, others £1.50.

Karate.....7.00pm

Southside Gym. Beginners welcome. Build your fitness and confidence.

Intermediate Ballroom.....7.00pm

JCR. 80p.

Caving Club Meeting.....7.00pm

Southside Upper Lounge.

Everyone interested should come along.

Improvers Ballroom.....8.00pm

JCR. 80p.

Mountaineering

Club Meeting.....9.00pm

Southside Upper Lounge.

Beginners always welcome.

WEDNESDAY

Keep Fit.....12.30pm

Southside Gym.

Sailing Meeting.....12.30pm

Outside Southside.

Caving Club Meeting.....1.00pm

Micro Club Meeting.....1.00pm

Third Floor, Union Building. If you're interested in computers come along.

Hamsoc Meeting.....1.15pm

Third Floor of Union Building.

Amateur Radio Society regular weekly meeting.

ICU SEDS Meeting.....2.00pm

Huxley 144. Students for the Exploration and Development of Space present Dr David Baker of Sigma Projects.

Intermediate Rock

'n' Roll Class.....2.15pm

UDH. 80p.

Jazz Dance Class.....3.15pm

UDH. 80p.

Karate.....3.30pm

Southside Gym. Beginners

welcome. Build your fitness and confidence.

Open Circle Study.....4.30pm

9 Prince's Gardens. See Islamic Soc.

Kung Fu.....7.30pm

Union Gym. Grandmaster CK Chang's class.

Basic Christianity.....6.30pm

Senior Common Room, 7th Floor.

A meeting held by University

Christian Outreach examining the

life and claims of Jesus.

Orchestra Rehearsal.....7.00pm

Great Hall. Last chance to get Mahler 3 right.

THURSDAY

Fencing Club.....12.30pm

Union Gym. Meeting also at 6 o'clock

ICYHA Meeting.....12.30pm

Southside Upper Lounge.

Everyone welcome.

Audiosoc Meeting.....12.30pm

Union SCR. Cheap records, tapes etc.

Methsoc Meeting.....12.30pm

Mech Eng 703. AGM, elections and communion.

Ski Club.....

The Ski Club will only meet on Tuesdays this term.

Debating Society.....1.00pm

Room 341 Maths (Huxley).

Arabic Lessons.....1.30pm

9 Prince's Gardens. See Islamic Soc.

Keep Fit.....5.30pm

Southside Gym.

Prayer Meeting.....5.30pm

Chaplain's Office, 10 Prince's Gardens. All Christians in

College are welcome to come and pray for the work of Christians in College.

Cricket Nets.....5.45pm

Meet in Mech Eng Foyer. Sign up on cricket noticeboard.

Everyone welcome.

Judo.....6.30pm

Union Gym. Beginners welcome.

Filmsoc Film.....7.00pm

Mech Eng 220. 'Angel Heart' (see Club's page). Members 50p, non-members £1.50, membership £3.

Soup Run.....9.15pm

Meet Week's Hall Basement (back by 11pm).

INDUSTRIAL RELATIONS COMMITTEE

Situation Vacant

One person required to work in the Union Office from Thursday 30th March to Friday 21st April.

Salary

£150 (total) plus free room in Hall

Hours

37½ per week

Job Description

A computer database needs setting up and using for an initial mailshot to generate advertising revenue for various Union publications.

Experience

Computer literacy an advantage, publications or advertising experience also an advantage.

Closing date for applications

10th March 1989.

For more details and application form see Nigel Baker in the Union Office, Beit Quad.

Heart attack city

Look after your heart week, 6-10 March

Coronary Heart Disease is a most common cause of death in Britain today. It kills more people than all the different types of cancer put together. Every year in England about 150,000 people die of a heart attack or related condition. The death from Coronary Heart Disease (CHD) in England and Wales is one of the highest in the world.

There are several different causes of CHD and scientific studies over the last thirty years have shown that certain factors can increase the likelihood of developing the disease. Some of these; such as gender, age, and family history are unavoidable—others are not.

Cigarette smoking is now the most important preventable cause of premature death and chronic illness. About one out of every four smokers dies from diseases directly caused by smoking. Lung cancer, and other lung diseases like emphysema can be caused by smoking and the risk of getting heart disease is double for a smoker.

A survey of 'the Heights and Weights of Adults in Great Britain' carried out by OPCS in 1984 showed that more than 30% of adults in England are overweight. Most obesity is not just due to overeating but eating too much of the wrong kind of food. A diet high in fat, and particularly saturated fats raises the concentration of cholesterol in the blood which over a time causes

narrowing of the arteries consequently leading to heart disease. A low fat, high fibre diet can keep weight under control and lessen the risk of CHD.

Lack of exercise, high alcohol intake, high blood pressure and stress are also contributing factors in the incidence of heart disease. Regular exercise increases the efficiency of both the heart and circulation, releases tension and helps control weight. Hypertension (high blood pressure) sufferers can alleviate their condition and reduce the risk of CHD by cutting down their alcohol and fat intake, giving up smoking and increasing exercise.

Having looked at the causes of CHD many of us will realise that we are already at risk of developing the disease in later life. So what can we do about it? The answer is to try to change to a healthier lifestyle which might mean giving up smoking, changing our diet or getting some exercise. As part of the Welfare '89 initiative IC Union have arranged with the Riverside Health Promotion Service to run an event to promote 'Look after your heart week'. This will take place in the JCR on Thursday 9th March between 11am-2pm. There will be displays providing information about diet, exercise, giving up smoking etc and representatives from Riverside Health Promotion Service will be there to answer your questions. So call in to the JCR on March 9, your future health may depend on it!

Yve Posner.

'Blistering guitar, keyboards, drums from a maniac and samples'

Tonight, Friday 3rd March, IC Ents are putting on *Jesus Jones* plus support from *Century Boys* in the Union Lounge. Not only this, but there's a disco and bar extension.

The doors open at 9pm and tickets are available on the door (at £2) or in advance from the Union Office (£1.50).

For those of you who've not heard of the band, they're just outside the charts with their debut single *Info-Freako* (if you've come along to any of the Union discos in the past couple of weeks you'll have heard it played regularly).

Widely recognised as potentially

the first pop stars of '89, the band, since forming in August last year and signing a deal with food records, have attracted a great deal of attention and those of you who've glanced through the music press recently will have seen the hype associated with this.

The live show has been described as 'blistering guitar, keyboards, drums from a maniac and samples'. The band look set to chart in the next couple of weeks and this will be one of the last opportunities to catch them before they become incredibly successful.

Paul Watkiss.

Rumours

Elections

I have heard a few rumours that certain candidates are expressing disquiet because I am a bit friendly (not biblically) with some of their adversaries. My answer to this is simple. I was elected as Hon Sec last year as a fit and proper person with sufficient integrity to act out all my duties, including Returning Officer. If people think that my integrity will not encompass the ability to remain impartial during the elections or any appeal against procedure, then they should no-confidence me at a UGM. If, however, they feel that this is not the case but that I should shun the friends I have had for years purely because they are standing, I would suggest that they consider how they would feel if people expected them to compromise their friendships because of pressure applied due to the nature of their work.

Bye-Laws

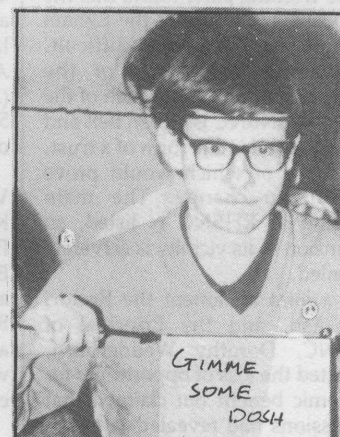
Could all Chairmen with constitutions filed in the 'Blue Book' in my office please come and see me

as we are trying to update it over Easter.

Voting

Could anyone wishing to earn some money on the 6th and 7th March (Monday and Tuesday) manning the ballot boxes please contact Jen in the Union Office.

Ian Morris.



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ULU TRAVEL

continued from front page

RHBNC met last week to discuss the merger proposals and, both groups were against the idea 'on principle'.

Mr John Smith, the College Secretary, told FELIX last week, that the merger could not be forced through against the wishes of the staff at either College.

The working party found that the proposed expansion at the Egham campus would prove difficult, because of the deeds of the ownership of the land. Much of the land at RHBNC is Green Belt and is maintained in the form of a trust, the terms of which would prove difficult to change. The main building at RHBNC is listed, so expansion in its vicinity is severely curtailed.

In a joint statement the Rector, Eric Ash, and the Principal of RHBNC, Dorothy Wedderburn, regretted the loss of opportunity for academic benefit but claimed that discussions had revealed 'areas of collaboration which would be of substantial mutual advantage'.

AUT join last NUS loans march

Over 35000 students formed a two mile long procession through London last Saturday in a final protest against student loans. The march, organised by the NUS, was attended by students from colleges across the country and included a large contingent from the Association of University Teachers (AUT). The event was controlled by 500 stewards and 1000 police, but only five arrests were made.

The march progressed from the Victoria Embankment to Kennington Park via the Houses of Parliament and Downing Street. Between 60 and 100 students held a 'sit-down' protest on Lambeth Bridge but were easily moved on, and the traffic in Central London was severely disrupted until late evening.

A rally held at the end of the march saw speeches from the General Secretary of the AUT,



Young supporters caught by the atmosphere of the march

Diane Warwick, and the NUS president Maeve Sherlock followed by musical contributions from a number of bands. Miss Warwick told the crowd she was 'immensely

impressed' with the student support for the AUT action.

Imperial College had between 60 and 100 delegates on the march including all the Union Executive.

Satanic motion dropped

A motion on Salman Rushdie, author of 'The Satanic Verses' was dropped from the agenda of Tuesday's Union General Meeting (UGM) following strong opposition from the Islamic Society.

The motion instructed the society to submit a written statement to FELIX condemning the death threats against Mr Rushdie.

The motion was deferred when members of the society pointed out that under the Union constitution a UGM agenda should be posted on all Union noticeboards 14 days in advance and that the Union had failed to do this. They added that they needed more time to prepare

their arguments.

Ian Morris, Hon Sec (Events), pointed out that the Union does not know all the motions 'even up to two minutes before the UGM', and perhaps something ought to be done to iron out this anomaly. He also said it would be unfair and unnecessary for the Islamic Society to use this constitutional quibble to take attention from the issue.

Mr Morris added that the motion had not been proposed by him or the Union and said that he would 'be pleased if no more indignant rhetoric about the motion was spouted in the Union's direction.'

Here we go, here we go

Hustings for the ICU Sabbatical elections were held at St Mary's on Tuesday and IC on Thursday this week.

At the St Mary's hustings, speeches were made by Neil McCluskey, Clare McLernane and Andrew Meredith for the post of President, Alistair Goodall, Gavin Spittlehouse and David Williams for Deputy President, Fiona Nicholas for Hon Sec (Events) and Robin Davison and David Smedley for FELIX Editor and Print Unit Manager.

The same candidates made speeches at the hustings at IC. In

addition speeches were made by Doug King who is standing for Hon Sec (Events) and Andy Bannister who spoke on behalf of Sez Wilkinson who is standing for President.

Mr Bannister claimed that Miss Wilkinson was unable to be present as she had been abducted by Daleks.

Voting will take place in all departments on Monday 6th and Tuesday 7th March, but Geology students attending a field course next week will be permitted to vote today.

Guilds nick Reggie

Kings College is now minus a 3 foot long red and gold concrete lion. The lion, which answers to the name of 'Reggie', is the Students' Union mascot and was last seen being escorted out of the college's Strand site by members of the City and Guilds Mascotry squad.

The hectic five minute raid took place at around quarter-to-five yesterday when fifteen crack Guilds mascotteers, acting on 'inside knowledge' descended on the site and wheeled the soon-to-be missing lion into a waiting van.

IC bomb threats

Following last weeks bombing of Bristol University by 'Animal Rights' activists a number of suspect telephone calls, have been received in the Sheffield Building at Imperial.

The College has received two calls in the last week which have taken the form of enquiries from alleged students asking what type of research is carried out in various departments. Staff have been asked not to divulge information over the phone, but have been sending prospectuses to enquirers.

The staff in the Biochemistry

Department have been given identity cards and the possibility of increasing security further will be discussed at a staff meeting next Wednesday.

College Secretary, John Smith, told FELIX that the increased security in the Biochemistry and Chemistry building was mainly a result of an explosion last term. He stressed that the Animal House in Biochemistry permanently 'poses a large security risk' and that the additional security is therefore a long-term measure.

Woman in strip shock

A woman stripped naked in the sports centre on Tuesday evening when staff tried to evict her for stealing a purse. Police were eventually called in to remove the woman, described by witnesses as black, 6 foot tall and 'possibly

schizophrenic'.

Sports Centre staff told FELIX that the woman was not a regular but added that 'we get our fair share of that sort of thing here'.

The Rector, Professor Eric Ash, did not comment on the incident.