

IFS & Bits

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**Deadline for Next
Issue**

30 April 2004

Editor

Tracey Royds

Messages from the Head of Institute

Professorial Lectures

I am pleased to announce that we have now arranged the dates for each of the three Professorial Lectures that IFS will be hosting over the next few months. The schedule is as follows:

Roger Reeves	30 April 2004
Robert McKibbin	28 May 2004
Peter Schwerdtfeger	16 July 2004

In each case an afternoon tea will be served in the Marsden foyer immediately following the lecture, which will commence at 3.00 pm. Peter Schwerdtfeger's lecture will also be presented on the Albany Campus and arrangements for this are being handled through Professor McKibbin.

Enrolments

The week prior to commencement of lectures saw a massive increase in student numbers studying papers taught by IFS staff. While the final figures are still fluid it looks as if our EFTS will increase by about 4% this semester. This is a very pleasing result after nearly 10% growth both in 2002 and in 2003. It is certainly good to see that students are returning to the basic sciences once more, though part of our growth this year lies with an increase in the numbers of Veterinary Science students.

Website Success

Congratulations go to Judy Edwards, the IFS Webmaster, for her success in finishing a close third in the competition for the best Academic Websites at Massey University. Increasingly frequently students, staff and colleagues all over the world visit websites for information. Judy has devoted a considerable amount of time and effort in making sure that the IFS site is both welcoming and informative, and its success is clearly evident by this award. Well done Judy!

As an aside can I remind staff that they should keep their personal data on the web as up to date as possible and to ensure that Judy is provided with all materials that will enable our site to remain one of the very best at this university. Thank you.

Strategic Plan

Most of you will know that each of the IFS Committee's is now addressing goals pertinent to its mandate. Shortly, each will be producing a plan of action for consideration by the Management Committee. As I stated before the new Strategic Plan for the Institute will not be a document residing on your shelf gathering dust. It is a direct indication of where we are heading and our job now is to implement it over a sensible timeframe. Nonetheless, we do plan to make large inroads into it over the next two years and your help in making this happen will be much appreciated.

Gavin Hedwig

It is always good news when one of our staff members is asked to serve on the Editorial Board of a highly respected international Journal. Gavin has just been asked to serve in this capacity for Biophysical Chemistry. As always an appointment of this type signifies a high standing in the field. Congratulations Gavin – another useful point for the next PBRF round.

Peter Schwerdtfeger's Group

Peter has now commenced duties at Albany and some of his colleagues and students are in the process of transferring their activities from Auckland University to Building 44. A complete list of staff and students is given below though I should add that they will not all be on deck at this particular time:

Behnam Assodallahzadeh (Doctoral Student)
Nicola Gaston (Bright Futures Doctoral Student)
Dr Robert Krawzyk (Humboldt Postdoctoral Fellow)
Professor Uzi Landman (Visiting Scientist)
Dr Matthias Leim (Postdoctoral Fellow)
Ivan Lim (Doctoral Student)
Brian Vest (Doctoral Student)

The establishment of such a high profile and successful group within the Institute is very exciting for us all and has given our Albany staff in particular a tremendous boost. Many thanks go to John Harrison and Al Nielson for the hard work that they have put in to this venture. Much of the credit for its success lies at their door. Other initiatives aimed at enhancing our activities at Albany are in progress and I hope that before too long we will be able to announce these to all staff members.

Research Grant Assistance

Should any staff member require assistance with their grant application they are most welcome to approach the Research Committee. Sometimes this may just involve commenting on the text and offering advice from a different standpoint. The Research Committee is also in the process of compiling a register of staff members who have been successful in gaining various grants. This will be made available to all staff in due course and will provide a means whereby staff can also approach successful grantees directly for suggestions.

Annual Leave, Timetabling and Room Booking Issues

Staff have rightfully been annoyed by their inability to use the new on-line annual leave, timetabling and room booking systems. These were all written with PCs in mind and our Mac-based Institute is currently paying the price. We have indicated our desire that this problem be rectified as quickly as possible but in the meantime we will do our best to deal with the various issues as they arise.

David A D Parry

New Arrivals

Olivia Tews takes up her position as Institute Secretary on Monday 5 April and we look forward to her starting with us.

Matthew Hardy is a Massey University Postdoctoral Research Fellow. Matthew Hardy has commenced a postdoctoral research project in computational mathematics. Working with Associate Professor Igor Boglaev, Matthew will investigate the parallel implementation of monotone methods for singular perturbation problems. Matthew's PhD, undertaken at Oxford University, comprised numerical studies of gas-powered micro-particle propulsion devices. Previously, Matthew completed a BSc at the University of Sydney, with honours in Pure Mathematics.

We'd also like to welcome **Dr Stephen Headey**, who has recently joined the institute as a post-doctoral fellow. Stephen comes to us from Walter & Eliza Hall Institute and Melbourne University, where he recently completed a PhD jointly supervised by Prof. Ray Norton (President of the Australian Society of Biophysics, and until recently, President of ANZMAG) and Assoc. Prof. Leon Bach. Stephen's PhD research used NMR to investigate the structures and interactions of IGF-binding proteins. At Massey, he will be turning his attentions to NMR studies of picornaviral replication with Steve Pascal. [Note: to avoid confusion, the two Steve's have agreed to *Stephen Headey* and *Steve Pascal*]

A new arrival in Chemistry is **Maritza Nicolay**, who is a final-year undergraduate from the University of Pointers in France. She will be here for six months, working with Roger Reeves and Simon Hall. In her spare time Maritza is interested in skiing, mountain biking and running, and also (in France) plays competitive handball.

New Graduate Assistant in Physics



Mr Nitin Roy Nand has commenced as new graduate assistant in Physics. Nitin obtained his BSc, Postgraduate Diploma, and MSc degrees in physics from the University of the South Pacific (USP) at Suva (Fiji).

He has experience teaching science at secondary school and worked as a full-time assistant lecturer at the physics department of USP before joining Massey on 25 March. For his Master's thesis, Nitin did research applying nuclear-physics methods to environmental studies. Looking for a new challenge, he is keen on switching fields and has expressed his interest in working on theoretical aspects of nano-electronics. Nitin will be commencing PhD studies with Uli Zuelicke.

Physical Sciences Research Centre Personnel - Albany Campus

Professor Peter Schwerdtfeger recently joined the Institute of Fundamental Sciences where he holds a chair in theoretical chemistry at Albany. Peter studied Chemical Engineering in Aalen, and continued with Chemistry and Mathematics in Stuttgart (Germany). In Stuttgart he joined the theoretical chemistry group working on constructing relativistic pseudopotentials. After postdoctoral studies at Auckland University, he obtained a research fellowship joining Martin Bennett's inorganic chemistry group at the Australian National University. In 1991 Peter moved back to Auckland where he last held a personal chair. In 1995 he completed his habilitation in theoretical chemistry at the Philipps University of Marburg. His interests are in all areas of theoretical chemistry and physics, with specific emphasis on relativistic quantum theory and heavy element chemistry. His latest interests are in nano-structured materials and electroweak quantum theory. His immediate goal is to build a super-computer centre at Albany, which eventually will serve the high performance computational needs for Massey University.

Peter shifted his research group to Albany consisting of three PhD students and one postdoctoral fellows: **Nicola Gaston** currently holds a Bright Future PhD Scholarship working on simulation of mercury clusters. **Behnam Assadollahzadeh** studied in Germany and starts on a Marsden funded PhD scholarship to investigate gold nano-structures. **Ivan Lim** is currently finishing his PhD on the calculation of precise atomic polarizabilities. **Dr Robert Krawzyk** holds the prestigious Feodor-Lynen scholarship of the Alexander von Humboldt Foundation and is currently working on dynamic problems in nano-materials. **Dr Martin Field** from Grenoble is currently visiting his research group working on amino acid clusters and the problem of biomolecular homochirality.

Peter is currently the President of the Alexander von Humboldt Association in New Zealand and is strongly involved in postdoctoral exchange programs between Germany and New Zealand.

4th Annual Chemistry Research Symposium

The 4th Annual Chemistry Research Symposium was held on February 19th and was organised by Toni Wilson with some assistance from myself. As a new staff member this was my first opportunity to meet our postgraduates and get an overview of the chemistry research being carried out within IFS. The one thing that really stood out was the quality of the presentations. Everybody spoke with authority and handled Trevor Kitson's curly questions gracefully. As Andrew Brodie mentioned, being able to present one's work clearly is a valuable skill. Having everybody keeping to time made my job a lot easier. Thanks also to our colleagues from IMBS, AgResearch, HortResearch and Fonterra for attending.

And next year's challenge? More physical and inorganic talks!

Mark Waterland

Bits and Bobs

Moans and Groans: Well here I go again sounding off at the appalling mess left by IFS users in the two photocopier rooms. I often wonder if these people treat their own home the same way as they treat the good facilities provided to them by the Institute. From past experience IFS offers its staff much better access to photocopiers and printers than is available elsewhere on the campus.

Please think of the next user and me, as I am the one who gets so fed up with the mess that I turf out the unwanted bits of paper. On that note, remember that more money spent of photocopy paper, which ends up in the bin and toner means less money available for other purposes.

I suppose I should continue my gripe by adding that the Common Room kitchen is also treated like a tip! The mind boggles at such arrogance.

General Staff: Hands up all those who spotted Graham Freeman on TV 1 news, 7 March. A former staff member Rod McKenzie appeared in the Bay-Harbour News, Christchurch, 4 February 2004 and Steve Denby on TV 3 News in the Battle of Otaki Gorge, 22 March.

Knees seem to be the in or is that out fashion at the moment with two general staff members damaging their knees. Daniel Farley fell off his motorbike and Dave Peterson tripped over a kerb on campus and fractured his patellar. Not to mention backs and big toes or the dreaded finger of the writer of Bits 'n Bobs. It looks like the General Staff are falling apart under the strain.

OSH Audit: IFS were commended for their proactive approach to Health and Safety. The OSH Inspector's Report highlighted clutter in various research laboratories, re-surfacing of the floor in the woodworking shop, Engineering Services and **chocking open of fire stop doors** as the main concerns. Please do not chock open any smoked stop doors. I know this is done when trolleys are being used to shift "stuff" but they are then closed.

The issues of housekeeping have now been addressed and RFMgt have been approached to address the floor problem in Engineering Services.

Safety: New Accident/Incident and Hazard/Near Miss forms are available from Chemical Services, Andrew Trow or myself. You can download these forms from the Health and Safety web page.

Buildings: Renovation work has commenced on up grading the old enzyme unit for Simon Hall's Anzode Research Centre and plans are just about finalised for the alterations to the NMR Lab for the installation of the new magnets.

Social: Anyone interested in being a member of the Social Committee? If so pop in and have a chat.

Travel: Orbit have a new website which staff can visit – www.orbitwellington.co.nz - to check up on the latest in airfare prices.

Congrats:

to Judy Edwards for her work building the IFS Web Site which was placed in the top 3 in a recent very hush hush competition.

Bob P

Health and Safety

Defibrillator (PNSC 2004/007)

Massey University has purchased an automated external defibrillator for the Palmerston North Region. This defibrillator is located at Security within the Turitea Campus. Automatic external defibrillators have been shown, in some situations, to increase the survival rate of a cardiac arrest (heart attack) substantially. The shorter the time span from cardiac arrest to defibrillation, the higher the survival rate for cardiac arrest victims. Survival rates are at the best if shocked within 5 minutes.

Should a cardiac arrest or heart attack occur, **firstly** call for an ambulance on **111**, then notify security on P/N ext**5030** and Albany on ext 9777. The defibrillator is designed for anyone to use by following the voice instructions. CPR must be maintained while awaiting the arrival of defibrillator and the ambulance.

Accident and Incident Reporting Forms

There is now an updated accident and incident report form on the University health and safety website. <http://hrs.massey.ac.nz/docs/AccidentReport200402.pdf>

Hazard Notices and Near Miss Forms

For any hazard which has to be reported (which is not currently recorded in your departmental hazard register) or a near miss incident (where no injury occurred) there is a simple form to be completed. <http://hrs.massey.ac.nz/docs/HazardNotice200402.pdf>

Palmerston North Regional Health and Safety Web Page

This web page has been updated to the new corporate colours and structure of the University. <http://palmerstonnorth.massey.ac.nz/healthandsafety/>



*Igor Boglaev
Mathematics*



*Simon Hall
Chemistry*



*Charles Little
Mathematics*



*Bob O'Driscoll
Physics*

Teaching Awards 2003

The 2003 Distinguished Teaching Awards were recently presented at the Institute meeting held on 17 March 2004. I would like to congratulate all of the winners for their outstanding efforts at 300-level:

Igor Boglaev
Simon Hall
Charles Little
Bob O'Driscoll
Emily Parker
Tony Signal
Carol Taylor
Bruce van-Brunt

Reading the SECATs of these staff members (together with many others I must add) is a real pleasure and it is abundantly clear that our students have been greatly appreciative of the efforts of IFS staff on their behalf to give them the best possible research-led education. There can be little doubt that IFS staff do go that extra distance in their teaching and this is on top of what may well be the most active set of research programmes of any Institute/School/Department in the University. It is good to see some new names in the list as well as those who have triumphed before. Once again my heartiest congratulations go to our eight winners.



*Emily Parker
Chemistry*



*Tony Signal
Physics*



*Carol Taylor
Chemistry*



*Bruce van-Brunt
Mathematics*

Research Funding Opportunities

Unless otherwise specified guidelines for contract applications under this programme are available from Miralie Thomas Vincent on extn 5945 or e-mail your request to M.E.Thomas@massey.ac.nz.

MASSEY UNIVERSITY INTERNAL FUNDING ROUNDS

Advance Notice

University Womens' Award (UWA)

Closes: 5.00 pm, 3 June 2004

University Maori Award (UMA)

Closes: 5.00 pm, 3 June 2004

Massey University Research Fund (MURF)

Closes: 5.00 pm, 1 July 2004

University Research Fellowship (URF)

Closes: 5.00 pm, 1 July 2004

University Research Award (URA)

Closes: 5.00 pm, 1 July 2004

University Technical Assistant Award (UTAA)

Closes: 5.00 pm, 1 July 2004

Post-Doctoral Fellowships (PDF)

Closes: 5.00 pm, 1 July 2004

Application forms and guidelines will be available March/April 2004 at:

<http://research.massey.ac.nz>

Rod Lambert's Farewell

A farewell function to celebrate Rod Lambert's retirement took place on Monday 22 March 2004 and was attended by many of his colleagues.

Rod sharing some highlights in his career with his wife Joan.

Photos come care of Andrew Coy.

