

**ORSNZ  
ANNUAL REPORT 2010/2011**

**President's Report**

My third year as president of the Operations Research Society of NZ has been a time of both achievements and significant challenges for OR in New Zealand.

**Membership**

The table below shows our membership counts. The figures show the count of paid up members, while the bracketed figures show the additional count of members owing subscription fees. The latest figures are conspicuous in their absence of student members and a corresponding increase in standard members with subscriptions owing. In previous years, we have kept student members in our database under the student classification, and sent out subscriptions to them stating that they owe us a zero (or small) student membership fee. In 2011, we changed all students into standard members before the billing round. Thus these members had to actively change their category back to 'student' and inform us that they still met the associated conditions. No such forms were returned to us, and thus the student count dropped to zero! The next billing round will provide an opportunity to follow up on late payers (including these ex-students) which will then give us a better idea of actual membership counts.

	2011	2010	2009	2008	2007	2006	2005	2004	2003
Corporate Sponsors								2	3
Corporate Members	4	4	3	3	3(1)	3(1)	5(2)	5	5
Corporate Representatives	5	5	4	3		6	5	8	7
Life Members	1	1	1	1	1	1	1	2	2
Standard Members	43 (69)	53 (23)	42 (30)	50 (23)	52 (19)	62 (17)	77 (13)	91	94
Members (overseas)	10 (11)	14 (5)	10 (8)	7 (6)	8 (5)	8 (8)	17 (5)	8	14
Members (no branch)	3 (9)	5 (5)	4 (6)	4 (6)	10 (4)	11 (5)	16 (2)	12	13
Retired Members	4 (4)	7 (3)	8 (2)	8 (1)	7	5	5	5	4
Student Members	0	20 (22)	25 (20)	14 (30)	23 (16)	26 (18)	35 (19)	41	51
Total Membership	70 (93)	109 (58)	96 (67)	90 (66)	104 (45)	122 (49)	161 (41)	174	193

Table 1: Membership counts. The 2011 data above was correct at 8/2/2012.

The last Annual General Meeting discussed the results of trialing free membership for students and recent graduates. While the results from 2010's trial were difficult to interpret, it was felt that this was a worth-while initiative and this option was again available in 2011.

As a result of another discussion at the AGM, 2011's subscription form included the option for members to receive paper or electronic versions of the newsletter and the conference proceedings. Only 1 member indicated that they did not want the default

‘electronic only’ option, suggesting that there is little support for the continued production of printed material.

### **Finances**

As you can see in the Treasurer’s report, our financial reserves continue to be in a healthy state. I wish to acknowledge the excellent contribution Andrea Raith continues to make as our treasurer. I’d also like to acknowledge, once again, the work of our long standing auditor Paul Rouse, who has risen to the task of ensuring we can have full confidence in our financial records. We are very grateful to Andrea and Paul for their contributions.

### **Newsletter**

Unfortunately, Kenneth Kuhn, our newsletter editor since Nov 2009, has left his position at Canterbury University and headed overseas. Ken has done an excellent job producing the newsletters, particularly given all that has been going on in Christchurch. We wish Ken all the best for his future. We are now looking for a volunteer to fill the vacant newsletter position.

We are very grateful for the continuing support we receive from Hoare Research Software Ltd (<http://www.HRS.co.nz>) who cover the printing costs of the newsletter.

### **Council**

This year, we welcomed two new members to our ORSNZ Council. John Buchanan, a long standing member of the society, joined the committee as a representative from the University of Waikato. Geoff Pritchard joined us as the new ORSNZ Secretary; I am grateful to Geoff for his contributions over the year. I wish to thank all the Council members, listed below, for their contributions.

<b>President</b> <a href="#">Andrew Mason</a>		<b>Vice President</b> <a href="#">Matthias Ehrgott</a>	
<b>Newsletter</b> <a href="#">Ken Kuhn</a>	<b>Secretary</b> <a href="#">Geoff Pritchard</a>	<b>Treasurer</b> <a href="#">Andrea Raith</a>	<b>Council (APORS / IFORS Rep)</b> <a href="#">David Ryan</a>
<b>Council</b> <a href="#">Alastair McNaughton</a>	<b>Council</b> <a href="#">Ross James</a>	<b>Council</b> <a href="#">Stefanka Chukova</a>	<b>Council</b> <a href="#">Andy Philpott</a>
<b>Council (Industry Representative)</b> <a href="#">Geoff Leyland</a>	<b>Council</b> <a href="#">Paul Rouse</a>	<b>Council (ex Treasurer)</b> John Paynter	<b>Council</b> <a href="#">Fernando Beltran</a>
<b><a href="#">Auckland Branch</a></b> <b>Chair</b> <a href="#">Golbon Zakeri</a>	<b><a href="#">Christchurch Branch</a></b> <b>Chair</b> <a href="#">Grant Read</a>	<b><a href="#">Wellington Branch</a></b> <b>Chair</b> <a href="#">Mark Johnston</a>	<b><a href="#">Waikato Branch</a></b> <b>Chair</b> <a href="#">John Buchanan</a>

### **Conferences: IFORS 2011, APORS 2012, ORSNZ 2012**

There was no ORSNZ conference in 2011 because of the IFORS (International Federation of OR Societies) conference running in Melbourne. It was good to see so many familiar ORSNZ

faces at this IFORS conference, which was a great success with over 1000 participants joining us down-under. My duties at the conference included meetings for both IFORS and APORS (Asia Pacific OR Societies). Our APORS meeting included a discussion of the next triennial conference, **APORS 2012 (July 28-30 2012, Xi'an, China)**. Xi'an is an ancient city best known as home of the famous terra cotta warriors and horses. See <http://apors2012.csp.escience.cn> for more details of this conference, which I recommend to ORSNZ members. Also keep an eye out for the new APORS web site at that is under development at <http://www.apors.asia>.

The **2012 ORSNZ conference** will take place in Wellington at Victoria University in early December; visit <http://www.orsnz.org.nz/conf> for more details. I look forward to seeing you there.

### **Pickering Medal for Professor David Ryan**

A highlight for OR in 2011 was the awarding of the prestigious Pickering medal to ORSNZ member and ex-President Professor David Ryan for his work “developing technology which is at the heart of optimisation software used worldwide for solving complex logistics problems, such as airline scheduling”. This Pickering medal is awarded “annually to a person who, while in New Zealand, has through design, development or invention performed innovative work the results of which have been significant in their influence and recognition both nationally and internationally, or which have led to significant commercial success.” It is fantastic to have David’s OR contributions recognized nationally by this award. I hope this has helped raise the profile of OR in NZ.

### **Canterbury Events**

The 2011 earthquake in Christchurch was a devastating event in the lives of our Canterbury members, and indeed for all New Zealanders. Fortunately, I am not aware of any ORSNZ members suffering direct personal injuries from the quake. However, the event has contributed to difficult times for the Canterbury OR group who face an uncertain future as the University of Canterbury debates their future. Grant Read summarized the situation in the December 2011 ORSNZ newsletter, saying that “*teachers of smaller classes*” are definitely at risk as the university sheds staff to deal with a 25% drop in first year students and a 30% drop in overseas students.” I believe that a strong group at Canterbury is important to ensure OR has a vibrant and successful future in NZ, and am making representations to this effect on behalf of the ORSNZ. I wish our colleagues in Canterbury all the best as they work through these challenges as part of the many difficulties faced by Cantabrians.

*Andrew Mason*  
President

### **Treasurers Report 2010/2011**

The funds available at the start of the period (01/07/2010) were \$46,973.10. The funds at the end of the period (30/06/2011) were \$59,362.50. There is an excess of receipts over expenditure of \$12,389.40.

Some changes in expenses from the 2010 accounts are due to the timing differences (and the number of years respective payments cover). This is the case for IFORS subscription (paid for 2010 and 2011), The Royal Society (paid for 2010 and 2011). It

should also be pointed out that 2010 membership subs request letters were sent out in June, i.e. relatively late, in the 09/10 period. Hence, most of the membership income for the 09/10 period was collected in the 10/11 period (under Subscriptions, Past Years). Likewise, some payments for the 10/11 period were only received after 30/06/2011.

The 2010 conference ran a significant profit of over \$5,000 despite having free student registrations for students who are ORSNZ members (there were 22 free students attending the conference). The conference income was significantly boosted by having \$8,700 conference sponsorship. The conference also received \$1,000 for the YPP prize, \$1000 for a new Energy Centre prize with an additional \$1,000 sponsorship towards the conference. As a not for future conference organizers: We should require that YPP sponsors also make an additional contribution towards the conference, not only the prize money. It should be noted that not all conference income was received within the 10/11 period, hence more of 2010 conference sponsorship will show in the 11/12 accounts and also another conference-related payment. Conference costs also include producing copies of the conference proceedings to all non-attending members and subscribers, such as libraries. Printing the proceedings volumes is included in the conference costs but postage for sending them is paid by the ORSNZ.

We have no branch related expenses in 10/11. Branch related expenses were already very low in 09/10. Maybe branches would like to put on some ORSNZ sponsored events? We have an increase in postage and packing and administration costs. A large part of this is for sending proceedings overseas which can cost more than \$20 a parcel depending on destination. Furthermore we purchased 1000 postage-included envelopes of which half have not yet been used. Visa related charges have increased, this is expected as most payments for conference and membership subs are now processed via credit card. The credit card account comes with a fixed monthly fee of \$35 and an additional charge depending on volume. The treasurer is very happy that she now rarely needs to walk to the bank to cash cheques and would like to thank everyone who makes payments by credit card or bank transfer.

On 10 June 2010, we deregistered for GST which led to a subsequent GST refund. \$34,966.58 was held on term deposit at the end of the financial year. It is continuing to be rolled over every 180 days (matures 8 December 2011). Two 180-day interest receipts fell into the 10/11 financial year. The interest rate was higher than in the previous period, hence interest income was higher in 10/11 than in the 09/10 period.

*Andrea Raith*  
Hon. Treasurer

## **Christchurch Branch Report**

2011 has been a difficult year for Canterbury OR. Since February, the MSCI group at Canterbury University have been unable to use their offices in the quake damaged Commerce Building, and have struggled to catch up on teaching schedules, retrieve a limited collection of files and materials, and re-establish a base in temporary accommodation. Research continues, and some internal seminars were held, but no ORSNZ meetings as such, and no international visitors. The future of OR at Canterbury is now unclear. We understand that the Commerce Building will not be re-occupied until (at least) 2013, by which time the group expects there will have been significant reductions in staffing, and teaching programmes, as the university attempts to match its resources to increased costs and reduced student numbers.

*Grant Read*

Christchurch Branch Chair

## **Wellington Branch Report**

The Wellington Branch was very pleased to host Prof Matthias Ehrgott who kindly travelled to Wellington in September 2011 to give a talk entitled “Bridging the Gap between Real World Decision Making and Mathematics: Multiobjective Optimisation in Action”. This was a repeat of his inaugural professorial lecture at the University of Auckland. It was well received by a large group of undergraduates, academics and the local ORSNZ faithful. We are very grateful to ORSNZ for willingly funding Matthias’ flights.

Huge congratulations to Vicky Mabin who was promoted to Professor of Management in 2011. Some snippets from her citation read ... “Vicky has an established international reputation for her research in the domain of Theory of Constraints. She is a dedicated and innovative teacher who effectively weaves together her research, consulting and industry experience to inform her teaching. Vicky is an effective postgraduate supervisor, and her teaching performance profile has been of a remarkably high standard throughout her career. In her role as Associate Dean Learning and Teaching for the Faculty of Commerce and Administration, Vicky has taken key responsibility for the Assurance of Learning requirements for the Faculty’s AACSB accreditation and used this as an opportunity to bring about fundamental changes in the attitudes to learning and teaching within the Faculty which has greatly enhanced the learning experiences for students.” Many congratulations from us all.

*Mark Johnston*

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## **Auckland Branch Report**

2011 started with a summer school in integer programming and we saw a large crop of part iv students specializing in OR. OR has been popular amongst our students and this trend has continued in 2012. The project topics range from transportation to optimization in the health sector to the electricity industry. We have had several OR visitors in the department this year already and we are anticipating a few more. So far this year we have had 2 meetings of the Auckland branch of the OR society that were i seminars followed by drinks and nibbles. The seminars were delivered by Bob Grun speaking on ``Organizing Teacher Education In German Universities: An Operations Research Approach" and Nikolaus Furian speaking on ``Constrained Order Packing - Optimizing Concrete-Part Production Layouts". Tony Downward accepted a lectureship in the department last year and has contined to be with Engineering Science this year. Javad Khazaei successfully defended his PhD in May 2012 and has taken up a postdoctoral fellowship at Princeton University's Operations Research and Financial Engineering Department. There are several other OR PhD students close to finishing up their studies in the department.

*Golbon Zakeri*

Dept of Engineering Science