

NEWSLETTER

July 2008

Operational Research Society of New Zealand, Inc.
PO Box 6544, Wellesley St. Auckland, New Zealand, www.orsnz.org.nz

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The newsletter is published three to four times per year, regular dates are March, June, September, and December. Submissions deadline is the 15th of the month for the following month's issue. Send contributions by email to the Newsletter editor, Matthias Ehrgott, at newsletter@orsnz.org.nz.

The President's Column

It seems only a few weeks ago that I was writing my first newsletter article, but now the Editor is once again twisting my arm for another contribution. It's been a particularly busy time for me, with my life now revolving around a highly optimized schedule of feeds, sleeps and nappy changes thanks to a hungry addition to our growing family.



When I wrote last time, one of our ORSNZ members, Mikael Rönnqvist, was about to present as a finalist at the 2008 Franz Edelman Award for Achievement in Operations Research and the Management Sciences. In April, Mikael's team delivered a very professional presentation on optimized scheduling of visits to the sick and the elderly. Unfortunately, you may have heard that the Edelman winner this year

was not Mikael's group, but instead the Netherlands Railways for their work on *The New Dutch Timetable: The O.R. Revolution*. Mikael reports back that he felt his group's presentation went very well, but that it was hard for their small company to compete with the increased annual profit of US\$60 million reported by the Netherlands Railways. However, given Mikael's successes so far, I'm sure it will only be a few years until his company is also delivering improvements of this magnitude!



Prof. Mikael Rönnqvist, centre right, on the right of Patrik Eveborn of Optimal Solutions at the 2008 Franz Edelman competition. Photo courtesy of INFORMS.



Prof. Mikael Rönnqvist, centre, and the team from Optimal Solutions at the 2009 Franz Edelman competition. Photo courtesy of INFORMS.

I mentioned before the new INFORMS electronic magazine *Analytics* – <http://www.analytics-digital.com/> – which takes content from OR/MS Today and re-packages it online. The second issue is now out, and looking very professional. If you see something of interest in this, please consider forwarding a link on to your business colleagues to help spread the OR word. I also commented on the online INFORMS *Transactions on Education*, the editor of which has provided a more detailed article on page 5 of this newsletter.

A number of our members have recently been in South Africa for the IFORS conference. The next IFORS conference in 2011 is particularly relevant to our members, as it is being hosted by the Melbourne chapter of the Australian Society of OR (ASOR). ASOR have asked for our support, and at our last Council meeting we readily agreed to combine our 2011 ORSNZ Annual Conference with the IFORS one. Patrick Tobin from ASOR comments that they have produced a logo (below) that “I am sure NZ will find particularly inclusive ☺.” So, please note in your diaries that the 2011 ORSNZ conference will be held at the Melbourne Convention Centre in Melbourne, Australia from the 10th to the 15th July 2011; see page 11 for more details. We look forward to an enjoyable conference.



Talking of conferences, Mark Johnston from Victoria University tells me that their planning for this year’s Wellington conference is progressing well. The dates for this are Mon 24 - Tue 25 November; more details are provided on page 3.

Our last ORSNZ Council meeting broke new ground by using Skype to allow Mark Johnston to be present in Auckland while sitting at his computer in Wellington. We hope to make more use of Skype to ensure all of our council members can provide input to these meetings.

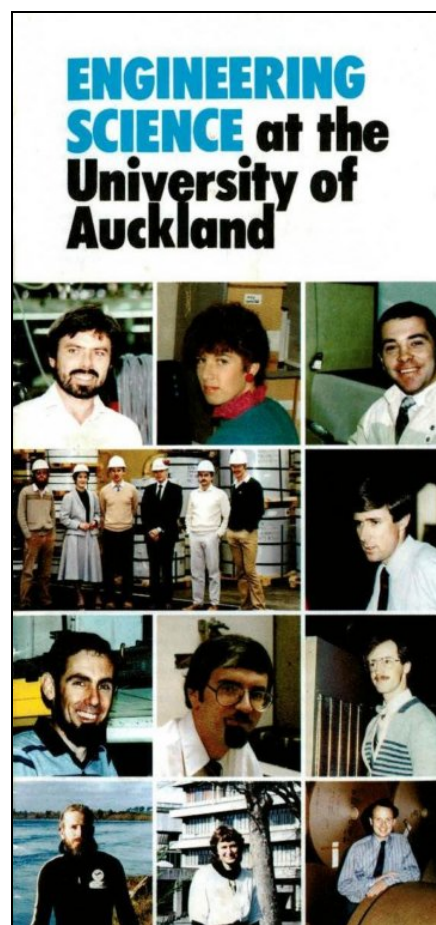
As many of you will know, the Department of Engineering Science at Auckland is celebrating its 45th anniversary this year. This is shaping up to be a very exciting evening. I look forward to seeing at least a few of you at this event.

Andrew Mason, President

Engineering Science 40th Birthday Celebrations

Originally known as the Department of Theoretical and Applied Mathematics, the Department of Engineering Science at the University of Auckland is celebrating 40 years since the first graduation, and 45 years as a department. All TAM/EngSci graduates are invited to a celebratory birthday dinner at The Langham Hotel, Symonds St, Auckland on 30 August 2008. We will be attempting to contact all our graduates to send out formal invitations, so please help spread the word. For more information, visit <http://www.esc.auckland.ac.nz>.

Andrew Mason



1988 Brochure



43RD ANNUAL CONFERENCE OF THE ORSNZ

24–25 November 2008, Wellington, New Zealand

Operational Research Society of New Zealand, Inc.
PO Box 6544, Wellesley St. Auckland, New Zealand, www.orsnz.org.nz

The Wellington Branch of the ORSNZ and Victoria University of Wellington are pleased to host the 43rd Annual Conference of the Operational Research Society of New Zealand, ORSNZ'08, on the 24th and 25th of November 2008.

Call for Papers

We welcome papers on all aspects of operations research, with particular emphasis on practical applications. Please email your abstract, in 200 words or less, in plain text, to the conference organisers at conference@orsnz.org.nz.

Submission deadline for abstracts:
1 October 2008.

Following acceptance of your abstract, we will invite you to submit a full-length paper for publication in the conference proceedings. A copy of the proceedings will be provided to every attendee at the conference. Full papers must be submitted by email in pdf format to the conference organisers.

Submission deadline for full papers:
31 October 2008.

Registration forms, guidelines for the preparation of full papers, and further information about the conference, will be available on the conference website conference.orsnz.org.nz.

Free Registration & Membership for Students and New Graduates

Full-time students¹ and recent graduates² who present at the conference will have their confer-

ence registration fee waived. They will also receive a complimentary one-year student member subscription to the Society.

Student Travel Assistance

Full-time students studying at a New Zealand university, who are members of ORSNZ, and will be presenting a paper at the ORSNZ conference, are eligible for travel assistance from ORSNZ to attend the conference. Applications should be made when registering for the conference, and will require confirmation by the student's supervisor or Head of Department that the applicant is enrolled in a full-time university course. Students seeking support must have registered and paid for the conference by 1 October 2008. Grants are only valid for travel within New Zealand and will be payable either before or at the conference upon production of a GST receipt/tax invoice for the travel expenses.

Young Practitioners' Prize (YPP)

OR practitioners and students who will be under 30 years of age on 24 November 2008 are invited to compete for the ORSNZ Young Practitioners' Prize. Condition for entry is the presentation of a paper at the 43rd Annual Conference of the ORSNZ. When registering for the conference, competitors should request that their paper be scheduled in the YPP session and must provide proof of their eligibility. The total prize money awarded will be \$1,000, split between the authors of the best papers at the judges' discretion.

Mark Johnston

¹ Students studying full time at a NZ university

² Graduates who studied full time during the previous calendar year and are now resident in NZ.





MANAGEMENT CONSULTANCY OPPORTUNITIES

Seeking Post Grad Operations Research Skills

- Wellington based
- Career Platform
- Flexible start dates – 2008 or 2009

We are keen to speak with Post Grad students who have an Ops Research skill set or similar.

This opportunity lies with a niche firm operating in Wellington for the past 10 years. Their flagship product is in Strategy development and mapping. Underpinning this is a huge amount of research, modelling and analysis which is where these Business Analyst roles fit in. Other activities include business case development, process design and capability reviews.

You may already have some experience in management consulting and be looking for a fresh new environment. Alternatively you may have qualitative or quantitative research experience backed by strong academic credentials.

The main attributes we are after are:

- Intellectual horsepower and problem solving skills
- Effective presentation skills (these are client facing roles where you are dealing directly with General Managers and CEO's)
- Excellent writing skills – the ability to frame tight documents and effectively communicate findings is essential.

What's in it for you?

- You'll work across all industries so you'll not be quarantined to one industry sector
- You will be working directly with the Principals on assignments gaining exposure to all facets of each assignment
- You will be out on site dealing with clients rather than merely crunching data behind the desk
- You'll be dealing with some quantitative data but the challenge of drawing insight from qualitative data will stretch you. Its not just "hard" numeric modelling.

I would be happy to engage in conversations with any potential candidates to explore this further. Start dates are flexible as you may be looking to complete your studies later in the year.

Please contact Eddie Ng on 04 472 8877 or email for eddie@kinetic.co.nz more information.





April 19, 2008

Dear ORSNZ Members,

As I assume the position of interim Editor-in-Chief of *INFORMS Transactions on Education (ITE)* for 2008, I am pleased to find a journal that is healthy and enjoying steady growth in its ninth year. *ITE* is a rigorously refereed electronic journal on management science and operations research education that is published three times annually by the Institute for Operations Research and the Management Sciences (INFORMS). *ITE* strives to achieve its mission to foster the advancement OR/MS education at all levels worldwide by publishing high-quality articles in a variety of areas related to the teaching of OR/MS - cases, spreadsheet applications, review and opinion articles, resource reviews, and discussions of the impacts of new technologies and new methods of assessment on OR/MS education.

The electronic format of *ITE* supports innovations in content and reader involvement not possible in a print journal, such as immediate electronic access to data sets, software, Java applications, interactive graphics, multimedia applications, hypertext links, and full-text searching. *ITE* is an open access journal, so anybody interested in OR/MS education may read the articles in the twenty-four past issues or the current issue of *ITE* at no cost. I invite you visit the *ITE* website (<http://ite.pubs.informs.org/>) to browse through the journal's current and past [issues](#); you likely will find several articles that will help you sharpen your teaching skills and improve your performance as an instructor.

I am very excited about the opportunity to serve as Editor-in-Chief of *ITE*. While the journal has achieved a great deal in its relatively brief life, *ITE* is poised to accomplish a great deal more. During my term as Editor-in-Chief of *ITE*, I plan to work with the Editorial Board (and others, including you) to expand awareness, readership, authorship, and editorial contributions to a wider audience. I hope to accomplish this by attending international conferences and large regional con-

ferences in targeted geographies and through outreach via e-mail and the Internet to promote *ITE* and recruit authors, referees, and Editorial Board members.

My recent experiences co-organizing and co-chairing the INFORMS/IFORS/ EURO series of OR education workshops (2006 in Montevideo, 2007 in Cape Town, 2008 in Cartagena, 2009 in Nairobi) have reinforced my beliefs that i) a very large potential worldwide audience for *ITE* exists and ii) every culture can learn a great deal about effective pedagogy and instruction from other cultures. My goal is for *ITE* to become a worldwide facilitator of such exchanges.

Also note that *ITE* produces an annual special issue. Topics of these issues and the years in which these issues have been published to date include:

- [SpORts in the OR Classroom](#) - Volume 5, Number 1, September 2004
- [Integrating OR in Teaching Supply Chain Management](#) - Volume 6, Number 3, May 2006
- [Effective Use of Software in the MS/OR Classroom](#) - Volume 7, Number 1, September 2006
- *Educational Games* - Volume 8, Number 1, September 2007
- *Teaching Revenue Management* - Volume 9, Number 1, forthcoming in September 2008

These special issues have been extremely popular and successful, and they are generally published in conjunction with special sessions at INFORMS conferences that feature presentations by authors who have written articles for the special issue. This coordination provides readers/session participants with the unique opportunity to discuss a paper with the author(s) within a few weeks of the publication of the paper. Topics under consideration for future special issues include:

- unique challenges of hybrid OR/MS-Statistics classes (now common in American MBA programs);
- differences and similarities in classroom environments across cultures;

- project-based teaching (perhaps with an emphasis on service-based education);
- case-based teaching (perhaps including tutorials on how to find promising case topics, write cases, use cases, and publish cases);
- green/environmental OR/MS education;
- unique challenges of teaching OR/MS in math departments;
- unique challenges of teaching OR/MS outside the traditional engineering/business/math settings (such as the OR/MS in public service at Indiana, OR/MS in forestry at U of Washington, etc.); and
- executive education and OR/MS.

I welcome suggestions for other provocative potential special issue topics.

Finally, *ITE* is developing a system for controlling the distribution of teaching notes associated with cases that are published by the journal. I expect this system will result in more frequent publication of teaching cases (accompanied by an article about the creation and/or use of each case) on a wide variety of OR/MS topics for classroom use by instructors (again, at no charge). I hope this will support and encourage the classroom use of cases by OR/MS instructors who have previously lacked access to quality cases.

I sincerely hope you will become a regular reader of *ITE*. I further hope you will submit your original cases, spreadsheet applications, review and opinion articles, resource reviews, and discussions of the impacts of new technologies and new methods of assessment on OR/MS education to *ITE*. Finally, I hope you will become involved

in the administration of *ITE* by volunteering to referee cases, spreadsheet applications, review and opinion articles, resource reviews, and discussions of the impacts of new technologies and new methods of assessment on OR/MS education for *ITE*. Please visit the *ITE* website (<http://ite.pubs.informs.org/>) or contact me at jcochran@latech.edu or 011-318-257-3445 for explicit instructions on how to contribute to the journal.

I will gladly discuss *ITE* with you, so please let me know if you have questions, suggestions, or concerns about the journal and the thoughts I have expressed in this brief note. I genuinely believe this is a tremendous opportunity for us to share and learn across cultures, and I look forward to working with each of you toward these goals.

Sincerely,

Jim

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People

John Scott

John Scott has retired recently from the Department of Management Systems at the Waikato Management School.

John started his OR career as a doctoral student of Professor Tony Vignaux and Bruce Murtagh, then at VUW, with John making a fundamental contribution to large scale scheduling. He then moved through a gamut of problem solving process applications, from decision support systems, to the interface between quantitative, and to his great love – experiential learning and reflection as tools in teaching. Indeed, he was a keynote speaker in the latter area at the 2005 conference of the Operational Research Society in the UK.

Certainly, learning, teaching, thinking, and problem solving have always been central to John's academic activities. And he has always had a very high regard for student welfare, making outstanding contributions to the Teaching and Learning Development Unit on campus.

But it has not all been deadly serious. John has always had a wry, whimsical, self-effacing *Weltanschauung*. Those of us lucky enough to share meetings with him will always cherish his hilarious hockey and travel stories.

John is one of the earliest members of ORSNZ. While living in Wellington, then the HQ of ORSNZ, he had a variety of roles, including one of the original editors of the journal, vice-president, and education convenor.

Les Foulds

On Reflection – a “couple of paragraphs” promised

ORSNZ was largely a “young men's club” when I joined in 1970. NZ had little exposure to this new discipline and a necessary condition for gaining publicity and respectability was seen to require both a newsletter and journal. National Airways Corporation, who took me on as their OR analyst (with only $\frac{3}{4}$'s of a maths degree and no OR experience) had a printer in their Shell House basement. We used that to produce early issues, which I briefly edited until Hans and his Canterbury colleagues rightly recognized there was much room for improvement. Thus journal editing and management moved

south, becoming a very “tidy number” for its time.

Microprocessors also came on the scene in the early 70s and a Wellington club was set up, meeting weekly in a VUW lecture theatre. Several were building their own PCs. I decided this was too ambitious first up pour moi, so started with a kitset tennis game to run off the TV. Unfortunately some flux found its way into a few of the joints that were difficult to get at. Fine if you're putting 10amps through the wires; not so good for micro currents ... Looking back, it was a fresh, exciting time

My first assignment for National Airways was to look at their inventory control for aircraft parts. Three aircraft types generated nearly a million part types, so plenty of potential there. The ordering supervisor had heard of the deterministic EOQ model and was interested in using it. We can do much better than that thought this green, wanting-to-make-an-impression analyst, and after some environment familiarization and two visits, proceeded to play with a probabilistic model with refinements. I then asked the supervisor if I could bring these down to Christchurch and show them to him. Expecting we'd sit in his office and discuss them, this young analyst was somewhat taken aback to arrive at Christchurch airport to find the supervisor had set up a presentation meeting with about ten managers and related staff. Tentative ideas took on the air of young Head Office know-it-all coming to tell the field what to do. Worse was to follow for the supervisor subsequently simulated the procedures, as I hoped he would, but found safety stocks would rise and fall like spring tides and half of Ch-Ch seemed now to know about it. Damage control was then beyond me although an EOQ like model was finally implemented and manually operated. Lesson learnt: If a supervisor suggests trying something, try it, unless it will burn down the building or similar, use the results and their involvement to quietly move to alternatives. Well known now perhaps, but literature on the subtle aspects of good praxis was almost non-existent then.

Something that has interested me over the years is the preparedness of OR academics to share such stories with students. Personally I've found it better to avoid the “sage on the stage”, ego-centered model of teaching and became prepared to share your failures (as well as successes) with students. Further, Lecturers(sic) have a reluctance to embrace uncertainty in the

classroom, yet the environment we are preparing students for is full of it. Can students effectively learn to deal with this by being taught in a controlled environment? Preparing students for uncertainty needs include enhancing their ability to effectively reflect on how they actually learn*. Associated is the role/use of questions. In the teacher-centered classroom, questions come from the sage; in learner-centered they come just as much from the students. I recall writing a little about this for an earlier newsletter, looking at what makes for Interesting Questions (IQs). An IQ for teachers is: How do you personally respond to an in-class question for which you genuinely do not have an answer?

With good wishes to all,

John Scott

Chapter News

Auckland News

The Auckland Branch of ORSNZ continues to be active led by the younger members of the Engineering Science Department (namely the Society President, Secretary, and Newsletter Editor) rather than your correspondent who is on a short leave for the second semester of 2008.

We have been enjoying a number of academic visitors over the past three months. Professor Kim Allen Andersen from Aarhus in Denmark visited Matthias Ehrhoff from January to June, to work on problems of common interest in multi-criteria optimization. Professor Sarah Ryan from Iowa State visited the Engineering Science Department from March to July. She was working with Tony Downward, Golbon Zakeri and Andy Philpott on strategic behaviour in energy networks (combined fuel and electricity networks).

Also visiting the EPOC group in July were Dr Par Holmberg from Sweden and Dr Eddie Anderson from the University of Sydney. They are both experts in supply-function modelling of electricity markets. The EPOC group held an informal seminar at which Par and Eddie summarized their latest research on supply-function equilibria. This has moved on considerably from the symmetric models used in the 1990s, to models that deal with asymmetric players and different payment mechanisms (such as pay-as-bid). The development of computational algorithms has also advanced.

In June and July the Department also hosted David Goodrich from the University of Arizona. David works in hydrology (an important topic in Tuscon) and has been researching methodologies for estimating water-catchment properties (e.g. soil permeability) from stream-flow data. He is also collaborating with researchers at NIWA.

Since the last Newsletter ORSNZ members in Auckland have been contributing to a baby boom. Cameron Walker and partner Amy had a son Harry on July 15th, and Andrew Mason and Catherine Swan had a son Benjamin on May 20th. Golbon Zakeri and Mark Wilson are expecting their second child any day soon. The Department Head has been scrambling to arrange teaching cover for parental leave.

Stuart Mitchell, David Ryan, Matthias Ehrhoff and their graduate students Oliver Weide, Andrea Raith, and Richard Lusby attended IFORS in Johannesburg in July. Despite my repeated warnings about the risks to New Zealand's national game, David accepted the invitation to run a session at this conference. True to form, his visit (like his last one to the Republic) jinxed the All Blacks, and at the time of writing they have not won a game since. David tells me that as the New Zealand delegate at the reception he made light of the loss, quipping to the audience that New Zealand were the second-best rugby nation in the world. I am hoping (on the eve of the second Bledisloe Cup test) that this is not as good as it gets.

Andy Philpott

Canterbury News

O.R. has been very low key over the past few months in Canterbury. Nicola Petty has recently returned from a three month Erskine visit to the US looking into first-year teaching of Operations Research at various universities. Ross James has just left on sabbatical to Japan, Europe and the States. He has an exciting range of research planned. Terri Green is heavily involved in health research projects, as always.

This year Canterbury has six Honours students. They all have projects for local or national businesses. The clients range from Antarctic New Zealand to Contact Energy to a local plant nursery.

Shane Dye

Waikato News

No News was reported from Waikato.

Wellington News

Members of the Wellington branch have been quite active so far this year. Vicky Mabin has been appointed Associate Dean, Teaching and Learning for Faculty of Commerce and Administration. Vicky says that this is a new role and the first position of its kind at Victoria University, so it will be challenging and uncharted. Craig McLeod (Orbit Systems) gave a great talk to the ORSNZ Wellington Branch in April. He spoke on “Vehicle Load Building: Evolving Solution Techniques” which included some interesting (and very funny) stories about consulting with large companies on loading of trucks for regular short and long haulage. His main message was that in most projects, data collection and cleaning is 99% of the project. Bob Cavana has some recent publications that could be of interest to ORSNZ members, including a second edition of his book “Systems Thinking, System Dynamics: Managing Change and Complexity” with Prof Kambiz Maani (formerly with the University of Auckland), published in late 2007. Bob has also co-edited a special issue of Systems Research & Behavioral Science 24(2), which commemorates the first 12 years of the ANZSYS community.

Tony Vignaux is celebrating 40 years at Victoria University of Wellington. He became foundation professor of operations research in January 1968, moving office down one floor in the Rankine Brown building from the DSIR applied mathematics division. Some things have changed over the last 40 years—from the Elliott 503 to the Dell Pentium 4 on his desktop. Some things have not changed—he always wears a tie when teaching. Highlights of his 40 years include being awarded a prize as one of the Victoria's top 100 lecturers of all time, serving as president of the OR Society (and the NZSA), and sabbatical visits to Hawaii, Berkeley, Warwick and Oxford. He observes that a good trend in OR is the development of free and open source software (possibly a shameless plug for his “SimPy” discrete-event simulation package in Python, see <http://simpy.sourceforge.net/>) and a bad trend is that we now seem to teach OR techniques rather than modelling real problems. However, Tony feels that he enjoys OR a lot

more now that he has retired and does not have to do any university admin.

Stefanka Chukova is a grandma for a second time — Kara Battestilli is now a seven month old healthy and happy baby! Stefanka participated in two conferences in Bulgaria in June, both on the Black Sea coast: the first one, in Informing Science (IS) and Information Technology Education, was held in the city of Varna; and the second, the XIII International Summer Conference on Probability and Statistics, was held in Sozopol. In March, Stefanka and her husband David walked from Waikanae (on the Kapiti coast) to downtown Wellington in three consecutive weekends. The total distance of their trip accumulated to more than 100km! They are planning a walking trip in Nepal at the end of the year.

Not to be outdone, Tom Halliburton has taken a break from HVDC project analysis at Transpower to cycle Britain from end to end, i.e., from Land's End to John o' Groats. This 1000 mile trip was done on a tandem bicycle, with (a little) help from his wife. The OR component of the trip to Europe consisted of a visit to Ukraine to discuss the development of an electricity market simulation model. Ukraine is changing its electricity market from a pool arrangement, similar to New Zealand's, to the system used in most of Europe. This involves generation and distribution companies setting up bilateral contracts amongst themselves, with a separate balancing market mechanism to handle differences between these contracts and actual generation and demand. Ukraine has a very large power system, include the Chernobyl nuclear plants. The change from being part of the Soviet Union to an independent country creates a variety of interesting political influences on the power system.

Finally, Mark Johnston is learning that one should never argue about the probability model of delivery date with a pregnant woman, especially one now overdue.

Mark Johnston

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Take a fresh look at International Transactions in Operational Research

Recent articles now freely available. We are pleased to send you details of the following recent articles, which we believe reflect the range of top research recently published in *International Transactions in Operational Research*. These articles are now available online without charge - irrespective of whether you or your university has a subscription:

[Integer programming solution approach for inventory-production-distribution problems with direct shipments](#) Miguel A. Lejeune and François Margot

[A bibliography of applications of operational research in West Africa](#) David K. Smith

[A Branch-and-Prune algorithm for the Molecular Distance Geometry Problem](#) Leo Liberti, Carlile Lavor and Nelson Maculan

Why submit to *International Transaction in Operational Research*?

Papers published in ITOR are widely read and cited:

- Your article will be disseminated worldwide: ITOR is available in over 2,500 libraries in 77 countries
- Your work will be read by the leading academics and practitioners in the field: 85% of the top business schools have access to ITOR.

Outstanding review process and author service

- The time between submission and first response is currently 4½ months and time between acceptance and publication is 5 months – considerably less than other journals within the field.
- We value personal contact with authors. Our editorial board is truly international and we have regional editors based in offices in the Asia Pacific and Africa, which means that authors have someone near at hand to receive their submissions. Our editors are always happy to discuss papers with potential contributors.

Coming soon

- Online submission, making it easier to submit and track progress with your article.

From the editor

“International Transactions in Operational Research aims to attract the best papers in Operational Research, regardless of their scope, methodology or geographical origin. We encourage submissions which push the boundaries of theoretical or applied research. I would like ITOR to act as an indispensable outlet for quality research focusing on algorithmic, experimental, and theoretical work. Its publication policy also emphasizes the search for outstanding application papers, highlighting successful case studies throughout the world. Particular emphasis is given to the publication of literature surveys, in order to provide an exceptional resource to readers of all levels who wish to keep abreast of the latest developments or to broaden their understanding of research fields outside of their own area of expertise.

ITOR is a central aspect of IFORS' mission to promote the study and practice of Operational Research around the world, and we welcome proposals and initiatives to develop and further improve the journal. “

Celso Ribeiro

IFORS 2011

Conference for the International Federation of Operational Research Societies

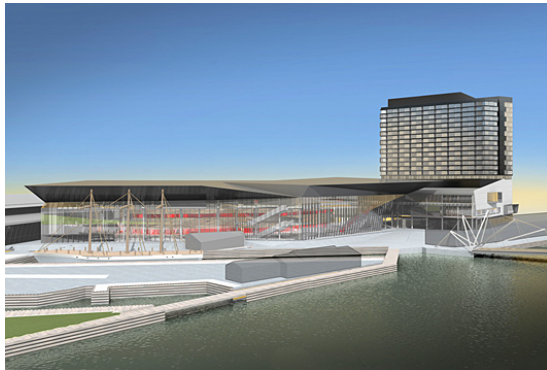
International Federation of Operational Research Societies Conference 10-15 July 2011



The 19th Triennial Conference of the International Federation of Operational Research Societies (IFORS) which will be hosted by the

Victorian chapter of the Australian Society for Operations Research (ASOR).

The conference will be held at the new Melbourne Convention Centre in the centre of the city of Melbourne, Australia from the 10th to the 15th July 2011 and will bring operational researchers from around the globe together.



Melbourne Convention Centre

You are invited to join your colleagues and other guests for this major international conference in operational research, which will offer an intensive scientific programme covering the full spectrum of topics in our field.

Melbourne is a dynamic city of 3.8 million people on the banks of the Yarra river and around Port Phillip Bay on the southern tip of the Australian mainland. It enjoys a temperate climate and a host of outstanding attractions for the visitor and repeatedly appears at the top of the list of the world's most liveable cities. Melbourne is a friendly city with many parks and gardens at its heart and a host of world class sporting venues. A former Olympic venue, it is also a leading centre for food, fashion and the Arts in Australia.

Delegates will also have an excellent opportunity to explore the hospitality and natural beauty of the state of Victoria.

The Conference and Travel Organisers, will assist you with all your travel reservations including flight, transfer, tour and hotel bookings, giving you the convenience of registering and making your reservations in one place.



Melbourne, Australia



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Step up! Find yourself on the fast track with one of the airline industry's talked about companies...Air New Zealand. AirNZ is building a promising future on a solid foundation and we're taking air travel to the next level so come and be a part of it.

The objectives of the Operations Research Group at AirNZ are to provide thought leadership and ground breaking research capabilities that challenge the status quo and to partner with the business groups and delivery groups to create value through excellence in modelling and research. This group consists of people with advanced degrees in Mathematics, Statistics, Operations Research, and Engineering. The nature of the work includes mathematical modelling, forecasting, scheduling, inventory theory, stochastic modelling, heuristic optimisation, statistical modelling, and data analysis and modelling.

The primary responsibilities of the Operations Research Analyst are:

- Apply expertise in mathematical modelling, optimisation, forecasting, statistical modelling, heuristics, scheduling, etc.
- Interact with users to develop requirements and understand business problems.
- Formulate and define system scope and objectives through research and fact finding to develop or modify complex information systems.
- Analyse data sources, integrity, and trends for ad hoc studies and fitness for optimisation inputs.
- Develop prototypes to solve business problems, validate the prototype results with users and bench mark benefits.
- Code, test, debug, document models. Enhance and modify models as business conditions change.
- Partner with system professionals to develop full blown production systems. Must be fully confident to work on all phases of a project life cycle.
- Work on multiple tasks and prioritise among objectives/project deadlines.

Qualifications:

- A degree in mathematics, statistics, operations research, engineering or related discipline preferred.
- Knowledge of modelling toolkits such as CPLEX, Xpress-MP, GAMS, OPL, etc.
- Ability to work in Unix/Linux platform with languages including FORTRAN, C/C++, Java, VB.NET, C#.
- Creative and innovative thinking in developing solutions to complex business problems.

Interested applicants should apply by submitting cover letter and CV online at www.airnz.co.nz/aboutus/careers. For further information call Jennifer Hull on 3362110.



IFORS 2008 South Africa

The 18th Triennial Conference of the International Federation of Operational Research Societies (IFORS) was hosted by the Operations Research Society of South Africa (ORSSA). The theme of the conference was *Operational Research: developing communities, managing the connections amongst them*. This is the first time that an IFORS conference will be hosted on the African continent since its initiation in 1957. The conference took place from 13-18 July in Sandton, the business capital of the country

The ORSNZ had a quite big delegation to South Africa. David Ryan, Stuart Mitchell, Matthias Ehrgott, Judith Wang, Andrea Raith, Oliver Weide, Richard Lusby all attended the conference and gave presentations:

- Richard Lusby, “A set packing problem for train routing”
- Oliver Weide, “An iterative approach to integrated aircraft routing, crew pairing and flight re-timing”
- Andrea Raith, “Solving the bi-objective integer minimum cost flow problem”
- Judith Wang “Modelling bi-objective user equilibrium on a toll highway network”
- Stuart Mitchell “Yield frontier analysis of forestry standing inventory”
- Matthias Ehrgott “Primal and dual approximation methods for multiobjective linear programming”
- David Ryan, “The train driver recovery

problem – a set partitioning model and solution method”.

While there was some disappointment with the general quality of talks (or we had just been unlucky in our selection), the talks by our PhD students received excellent feedback, underlining the good OR work done in New Zealand. As usual the conference is an occasion to meet friends and colleagues from around the world. David Ryan did not miss the opportunity to tell Celso Ribeiro of Brazil about the excellent results obtained one of our 4th year project students had obtained on the sports referee assignment problem that Celso had posed as a challenge.



The conference also celebrated the 50th anniversary of IFORS. At the dinner, a representative of every OR society present (about 40 were) was asked to come to the stage and introduce their country in one sentence. David’s comment on being the home of the second best rugby team was well received by the hosts. Some of us had actually watched the game amongst a primarily South-African audience.

Judith, Andrea, Oliver, Richard and the author had the chance to spend a few days wildlife watching in Kruger National Park and following the South African national passion for braai, or BBQ.

Matthias Ehrgott



Meetings Calendar

New Zealand

43rd Annual Conference of the Operational Research Society of New Zealand
Wellington, New Zealand
www.conference.orsnz.org.nz

Asia Pacific

7th International Symposium on Operations Research and Its Applications
31 October – 3 November 2008, Lijiang, China
<http://www.aporc.org>

The 9th Asia Pacific Industrial Engineering & Management Systems Conference
3 – 5 December 2008, Bali, Indonesia
<http://www.apiems2008.org>

International

The 7th International Conference on the Practice and Theory of Automated Timetabling (PATAT 2008)
19-22 August 2008, Montreal, Canada
<http://w1.cirrelt.umontreal.ca/patat2008/>

International Conference Operations Research (OR 2008)
3-5 September 2008, Augsburg, Germany
www.or2008.de/

OR50 The OR Society's 50th Annual Conference
9-11 September 2008, York, UK
[http://www.orsoc.org.uk/orshop/\(5gpwhnvq0putoi55x1lmxqae\)/orcontent.aspx?inc=or50_main.htm](http://www.orsoc.org.uk/orshop/(5gpwhnvq0putoi55x1lmxqae)/orcontent.aspx?inc=or50_main.htm)

1st International Conference on Applied Operational Research (ICAOR'08)

15-17 September 2008, Yerevan, Armenia
<http://www.tadbirstm.org.ir>

AIRO 2008

Ischia, Italy, 8 – 11 September 2008
www.airo2008.unina.it

XIV Latin-Ibero American Congress on Operations Research (CLAIO 2008)

9-12 September 2008, Cartagenas de Indias, Colombia
<http://www.socio.org.co/CLAIO2008/>

MOPGP08, 8th International Conference on Multiple Objective and Goal Programming

24-26 September 2008, Portsmouth, UK
www.mogpp.com

INFORMS Annual Meeting 2008

12-15 October 2008, Washington DC, USA
<http://meetings.informs.org/DC08/>

Valuetools 2008 - 3rd International Conference on Performance Evaluation Methodologies and Tools

20-24 October 2008, Athens, Greece
<http://www.valuetools.org>

VI ALIO/EURO Conference on Applied Combinatorial Optimization

15 – 17 December 2008, Buenos Aires, Argentina
<http://alioeuro2008.dc.uba.ar>

INFORMS Practice Conference: Applying Science to the Art of Business

26 – 28 April 2009, Phoenix, AZ, USA,
<http://meetings.informs.org/Practice09/>

EMO2009

See also <http://meetings.informs.org/> for extensive listings of conferences.

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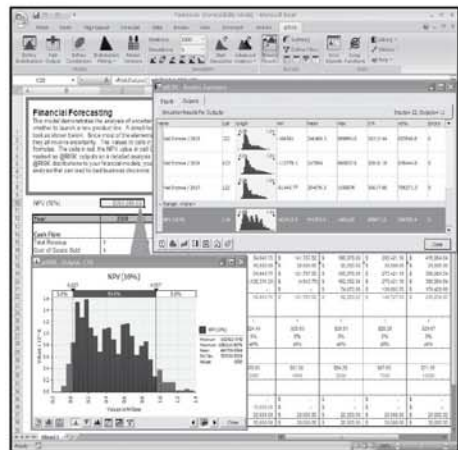
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