

ASOR News — April 2013

Contents

2013 Annual General Meeting	1
Membership	2
Upcoming OR Seminars	2
ASOR April Seminar	2
ASOR 2013 Conference	2
Support for Visiting Researchers	3
Second Food Supply Chain Workshop - Chile	3
Summary of OR workshops and conferences in Australia	4
Web Pages of Interest	4
Committee Membership for 2012-2013	4

2013 Annual General Meeting

The 2013 Annual General Meeting of the ASOR Melbourne Chapter will be held on 17 April 2013, commencing at 5.30pm sharp.

Electing the committee for the ASOR Melbourne Chapter, for April 2013 to March 2014, is one of the main tasks for the AGM.

The committee is comprised of five office-bearer positions (Chair, Vice-Chair, Secretary, Treasurer and ex-officio Chair), a student representative, and five or more ordinary committee members. All positions are voluntary and unpaid. It is the role of the committee to manage and oversee all aspects of the ASOR Melbourne Chapter’s operations and strategy.

We may have as many ordinary committee members as we think practical (a vote on this can be contemplated at the AGM, in the event that many nominations are received).

Any currently-financial ASOR Melbourne Chapter member can be nominated for the committee, and the office-bearer positions (except ex-officio).

A nomination requires the support of two other currently-financial ASOR Melbourne Chapter members

Nominations for the committee can be made in one of three ways:

1. By the nominee attending the AGM and being proposed by two other ASOR Melbourne Chapter members who are also present at the AGM.
2. By the nominee attending the AGM and presenting written evidence (**preferably using the attached nomination form**) that their nomination is supported by two other ASOR Melbourne Chapter members.
3. In the case where the nominee is unable to attend the AGM, a filled-in nomination form should be forwarded to Kaye Marion or Simon Dunstall by midday on 17 April. The nomination needs to be supported by two other ASOR Melbourne Chapter members.

Nominations will be accepted at any time up to the time that voting for the committee commences during the AGM on 17 April. **Please consider throwing your hat into the ring for the ASOR Melbourne Chapter committee!**



OR in interesting places: this is the port of Valparaiso in Chile. A vessel is being loaded with fresh fruit, bound for the USA. (Photo by Sergio Maturana)

Membership

ASOR membership forms were sent out late last year, and we kindly request that if you have not done so already, that you spend a few minutes completing your re-subscription for 2013. If you have lost your form, or have been struck by some other disaster of comparable severity, approach a member of the committee (by email or in person) and we'll help you sort out your membership.

Upcoming OR Seminars

ASOR Melbourne Series

Wednesday 17 April, 6pm, RMIT 8.9.66 and other sites by Access Grid: David Marlow, *Fleet management operations research in DSTO*. See details elsewhere in this newsletter.

Hosted by RMIT, City

Friday 12 April, 4pm. *Fire management in the boreal forest region of Canada: an operations research perspective*, Professor David Martell (University of Toronto, Canada). RMIT Access Grid Room, 8.9.66.

Hosted by Optimisation and OR in Melbourne

Friday 12 April, 12pm. *Cargo Assembly Planning*, Dr. Olivia Smith (IBM Research). Brown Theatre, Electrical Engineering Building 156, University of Melbourne. For more information see www.or.ms.unimelb.edu.au.

ASOR April Seminar

Our next ASOR Melbourne Seminar will be presented by **David Marlow** from DSTO just after the AGM on **Wednesday 17 April** at 6pm. The title of the seminar is **Fleet management operations research in DSTO**.

The Department of Defence within the Australian Government is being challenged to implement reform to allow it to acquire the future capabilities it needs to be a 21st Century force. The Strategic Reform Program (SRP) is aiming to reduce costs by \$20 billion in a decade. Target areas for reform include Logistics and Smart Sustainment, such as focussing on improving operational availability, maintenance processes and overall efficiency and effectiveness.

The Defence Science and Technology Organisation (DSTO) has recently formed a fleet management common interest group within its Operations Research Hub. The goal of the theme is to assist Defence in prosecuting best-practice fleet management, in order to achieve fleet effectiveness targets and minimise costs for Defence and Government. This goal therefore aligns with those of the SRP.

This talk describes fleet management work and research occurring within DSTO. It provides a broad overview of areas where DSTO is involved in fleet management work across the maritime, land, air domains as well as combinations of these. This work is in areas such as fleet sizing, cost-of-ownership, sustainment, logistics, scheduling and availability modelling.

Many of the problems lend themselves to OR techniques in modelling and simulation and optimisation. Complexity often arises when uncertainty is included, such as unscheduled maintenance. Specific example problems are provided, including: scheduling transport aircraft to carry loads; determining which helicopters should fly over certain periods to maximise availability; and how patrol boats can maintain continuous coverage of various areas within resource constraints.

ASOR 2013 Conference

The 22nd National Conference of the Australian Operations Research Society (ASOR 2013) will be held at the Adelaide Convention Centre in Adelaide, South Australia, from Sunday 1 to Friday 6 December 2013.

ASOR 2013 will be run in conjunction with the 20th International Congress on Modelling and Simulation (MODSIM 2013) and DORS (the DSTO led Defence Operations Research Symposium). Papers can be submitted through the MODSIM Operations Research stream led by ASOR National President Dr Paul Gaertner.

Abstracts are due by April 30 2013 (recently extended!). **Note also that ASOR tracks will accept both extended abstracts and full paper submissions** – the choice is yours. See <http://www.mssanz.org.au/modsim2013> for more information.

Support for Visiting Researchers

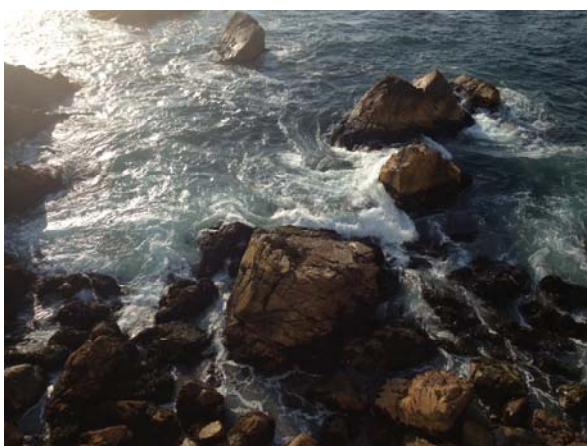
Have you got an interstate or international visitor? ASOR Melbourne has committed funds to assist with the costs of visits, in exchange for visitors giving a seminar for the members. Contact your favourite committee member to discuss the opportunities.

Second Food Supply Chain Workshop - Chile

A conference report by Simon Dunstall (photos by Sergio Maturana)

In mid-March I attended the Second Food Supply Chain Workshop organised by Sergio Maturana and Alejandro Mac Cawley from the Catholic University of Chile. This was gathering of OR people from around the world with an interest in food and wine supply chains. The workshop continues an initiative started by John Bartholdi and Don Ratliff from Georgia Tech in 2007, and on this occasion was attended researchers from Argentina, Italy, Chile, Australia, Germany and the USA.

The conference venue in Viña del Mar is on the central Chilean coast, and the picture below was taken from a hotel room window. The standard has been set for future ASOR conferences.



The first two days of the conference consisted of presentations on diverse topics ranging from tactical planning for piggeries to interview-based surveys of social entrepreneurs in the food retail industry, and from long-term land-use optimisation to measuring the temperature in shipping containers on international voyages. OR in its various forms – as well as just a little interest in

good food and wine – was the common thread. On behalf of a CSIRO team I presented work on analysing and optimising Northern Australia beef supply chains (this was the topic of a recent ASOR talk by Rodolfo Garcia-Flores)

From the discussions at this and previous workshops a number of international OR and



Industrial Engineering collaborations have started and blossomed, especially in the temperature tracking area where the group now has one of the world's largest collections of (publicly-available) temperature history traces.



Site visits after the presentation days included visits to kiwifruit and grape packing sheds, trucking depots and ports. Chile in many ways is very comparable to Australia, especially in having agriculture and minerals as major drivers of the economy. OH&S is sometimes a little less strict, however, because in Australia it is unlikely that OR researchers would be permitted to crawl over ships taking photos with pallets and shipping containers

swinging overhead. The photo above shows John Bartholdi (right) and Alejandro Mac Cawley (left) making a careful study of a refrigerated container on the deck of a vessel being loaded for a trip through the Panama canal to the US East Coast.

Summary of OR workshops and conferences in Australia

AMSI Workshop on Mathematics of Transportation Networks on 19-21 June 2013 brings together researchers and stakeholders from government and industry to discuss the application of mathematics to the design and operation of transportation networks. Visit <http://users.monash.edu.au/~mpetn/> for more information.

MODSIM 2013 / ASOR 2013. Adelaide Convention Centre, December 1-6, 2013. The Theme of the conference is Adapting to Change: the multiple roles of modelling. MODSIM 2013 incorporates DORS and the 2013 ASOR National Conference. <http://mssanz.org.au/modsim2013>

The 4th **Freight Logistics Optimisation Workshop (FLOW)**, on 9 December 2013, is a one-day course introducing optimisation to logistics practitioners in industry. Holiday Inn, Flinders Lane, City. FLOW is a joint initiative of CSIRO, ASOR and the Logistics Association of Australia.

Web Pages of Interest

We are affiliated with FASTS through AMSC. To keep abreast of FASTS activities, consult:

www.usyd.edu.au/fast

ASOR National: www.asor.org.au

ASOR Melbourne Chapter:
<http://www.melbourne.asor.org.au/>

NZ OR Society <http://www.orsnz.org.nz/>

ORS (UK): <http://www.orsoc.org.uk/>

INFORMS (US): <http://www.informs.org/>

IFORS: <http://www.ifors.org>

Optimisation in Melbourne:
<http://www.or.ms.unimelb.edu.au/>

For the latest international news, conference and jobs details see: <http://www.ifors.org/panorama/index.html>

tutOR: <http://www.tutor.ms.unimelb.edu.au>

Committee Membership for 2012-2013

Chair — Simon Dunstall,
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Vice Chair — Henry Burley,
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Kaye Marion

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ASOR MELBOURNE CHAPTER NOMINATION FORM

I, _____ (Block letters please)

being a financial associate/member of the Melbourne Chapter of ASOR,

hereby nominate _____ (Block letters please)

for the position of _____

of the chapter for 2013/2014.

Proposed: _____

Seconded: _____

Nominee: _____

To be returned by Wednesday 17 April 2013 to Kaye E. Marion at

School of Mathematical and Geospatial Sciences,
RMIT University
GPO Box 2476V\
Melbourne 3001

or by email: kaye.marion@rmit.edu.au.