

June 2008

The AUSTRALIAN SOCIETY for OPERATIONS RESEARCH Inc. MELBOURNE CHAPTER

GPO Box 1048, Melbourne, Vic 3001

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Print Post Approved - Publication No. PP325032/00019

Contents

- 1. June Meeting
- 2. What Else is on
- 3. Web Pages of Interest
- 4. Committee Members for 2008/9

June Meeting:

Two-period relaxations on bigbucket production planning problems

Speaker: Kerem Akartunali, Ph.D.

Postdoctoral Research Fellow Dept. of Mathematics and Statistics The University of Melbourne

Date: 18th June, 2008

Location: RMIT University, 360 Swanston St..:

Access Grid Room, Building 8 Level 9

Room 64/66

Time: 6.00pm.

Abstract: Production planning provides significant cost reduction opportunities for manufacturing companies and hence been studied by many researchers since the seminal paper of Wagner and Whitin [1958]. Of particular interest for this talk are multi-level production planning problems with big bucket capacities, i.e., multiple items compete for the same resources, which frequently occur in practice yet remain daunting in their difficulty to solve. We will briefly review practical methods to generate feasible solutions and present a better understanding of why these problems are so hard to solve. We propose a novel methodology to generate all valid inequalities based on the convex hull closure of the two-period subproblems, which may be the simplest model that captures the basis of the difficulty of these problems. We will discuss computational results and conclude with possible extensions.

Keywords: Production Planning, Integer Programming, Strong Formulations, Column Generation

What Else is On

Victorian Statisticians

The Statistics Society of Australia (in Victoria), typically has meetings on every 3rd Tuesday of the Month starting in March 2008. The next major event is:

Australian Statistical Conference 2008 - 30

June - 3 July 2008, Melbourne

http://www.foxevents.com.au/Current-Events/2008-

Events/Statistical-Society/

For latest information check at:

http://www.statsoc.org.au/Branches/VIC/meetings.htm

The AOQ (Vic)

For the latest information – see http://www.aoqvic.org.au

Topic: *Do You Always Know What You Eat?*. **Presenter:** Dr Chris Brendon, International Academy for Quality, on Food Industry Standards and Compliance. (www.iqs.com.au). **Date and Time:** Tuesday, 24th June 2008

6:00 for 6:30 pm Presentation start, 7:30pm Refreshments and Networking.

Location: AIM, Fitzroy St, St Kilda (check Web page for the latest information)

Conferences

18th Triennial Conference of the International Federation of Operational Research Societies 13th -18th July, 2008

The IFORS Triennial 2008 conference will bring operational researchers from around the globe together in **Sandton**, in **South Africa**. We invite you to join your colleagues for the pre-eminent international conference in operational research, offering an intensive scientific programme covering the full spectrum of topics in our field. For further details see:

http://www.acitravel.co.za/event/index.php?eventID=3

You can still make it!

Don't forget the IFORS 2011 conference in Melbourne – details will be posted soon.

Web Pages of Interest

We are affiliated with FASTS through AMSC To keep abreast of FASTS activities consult: http://www.usyd.edu.au/fasts/

ASOR National: http://www.asor.org.au/

Melbourne Chapter

http://www.asor.ms.unimelb.edu.au/melbourne

The new website for ASOR - Sydney is: http://www.asor-sydney.asn.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

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

CSIRO's Double Helix Club http://www.csiro.au/

Committee Membership for 2008/9

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Minute Secretary - to be appointed

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