

Academic Qualifications

Bachelor of Science (First Class Honours) in Mathematics, University of Melbourne (1970)

Doctor of Philosophy in Mathematics, Monash University (1973)

Diploma in Education Monash University (1981)

Academic appointments

1987 to 1992 Senior Lecturer, Melbourne Business School, University of Melbourne

1992 Senior Lecturer, Department of Mechanical and Manufacturing Engineering, University of Melbourne

2002 Principal Fellow (with title Associate Professor), Department of Mechanical and Manufacturing Engineering, University of Melbourne

Faculty of Engineering Teaching Excellence Award 1999

Research

50 refereed journal articles

2005 onwards:

Dunstall, S. and Wirth, A. - **Heuristic methods for the identical parallel machine flowtime problem with set-up times** *Computers & Operations Research* 32: 2479-2491 (2005)

Gan, H.S. and Wirth, A. - **Comparing deterministic, robust and online scheduling using entropy** *International Journal of Production Research* 43(10) 2113-2134 (2005)

Dunstall, S. and Wirth, A. - **A comparison of branch-and-bound algorithms for a family scheduling problem with identical parallel machines** *European Journal of Operational Research* (to appear)

Abdekhodae, A. Wirth, A and Gan, H.S. - **Scheduling parallel machines with a single server: the general case** *Computers & Operations Research* 33(4): 994-1009 (2006)

Gan, H.S., Khammuang, K and Wirth, A. - **Getting out of a (strawberry) jam – an introduction to supply chain analysis** *Institute for Operations Research and the Management Sciences (INFORMS) Transactions on Education* 3(6) (2006) 10 pages [electronic journal]

Khammuang, K. and Abdekhodae, A. and Wirth, A. - **On-line scheduling with forbidden zones** *Journal of the Operational Research Society* 58: 80-90 (2007)

Gan, H.S. and Wirth, A. - **Heuristic stability: a permutation disarray measure** *Computers & Operations Research* (to appear)

5 book chapters

Three most recent:

Dunstall, S. and Wirth, A. - **Models and algorithms for machine scheduling with setup times** chapter 2 of 8 chapter book *Systems techniques and computational methods: volume 1 of Computer-aided design, engineering, and manufacturing systems techniques and applications* series editor C.

Leondes CRC Press, Boca Raton Florida pages 2-1 to 2-86 (86 pages) (2001) **(invited contribution)**

Wirth, A. - **Management science models** chapter 5 of 16 chapter book *Management for Engineers 3rd edition* editor D. Samson Prentice Hall Frenchs Forest NSW pages 151-176 (2001) **(invited contribution)**

Ouveysi, I., Sesana, L. and Wirth, A. - **The video placement and routing problem** chapter in *Operations research/management science at work: applying theory in the Asia Pacific region* *International Series in Operations Research and Management Science* volume 43 editors E. Kozan and A. Ohuchi Kluwer Academic Publishers pages 53-71 (2002) **(invited contribution)**

40 plus conference papers and invited seminars

Selection:

Wirth, A. – **A manpower model of an Australian police force** *International Federation of Operational Societies 10th World Conference* Washington D.C. (1984)

Samson, D., Rickard, J. and Wirth, A. – **The value of information from multiple sources of uncertainty in decision analysis** *Department of Decision Sciences National University of Singapore* (1987) (**invited seminar**) and *The Institute of Management Sciences/Operations Research Society of America Joint National Meeting* Washington D.C. (1988)

Ouveysi, I. and Wirth, A. – **Synthesis of a protection telecommunications networks for two link failures : large scale optimization and an efficient heuristic** *IEEE 1995 Global Communications Conference Globecom'95* Singapore pages 921-925 (1995)

Abdekhodae, A. and Wirth, A. – **Parallel machine scheduling with setup times and a common server** *16th International Symposium on Mathematical Programming* Lausanne, Switzerland (1997)

Ouveysi, I., Safaei, F. and Wirth, A. – **Dimensioning and dynamic reconfiguration of hierarchical multi-service crossconnect platforms for multi-hour traffic profiles** *International Conference on Communications, ICC'98* Atlanta, Georgia (1998)

Dunstall, S., Baker, K. and Wirth, A. – **Solving the weighted completion time problem with batch setups** *Institute for Operations Research and Management Sciences National Meeting* Cincinnati, Ohio (1999) (**invited paper**)

Khammuang, K. and Wirth, A. – **On-line single machine scheduling with bounded processing times** *Canadian Operational Research Society/ Institute for Operations Research and Management Sciences Joint International Meeting* Banff, Canada (2004)

Khammuang, K. and Wirth, A. – **Some on-line scheduling problems** *Institute for Operations Research and Management Sciences International Meeting* Hong Kong (2006) (**invited presentation**)

Postgraduate research supervision:

5 Masters and 10 PhD (including two de Fina Prize winners) completions

Two latest:

Gan, H.S. – **Scheduling robustness measures** (2004)

Khammuang, K. – **On line scheduling** (2005)

Reviewer

Journal of the Australian Mathematical Society, International Journal of Operations and Production Management, Australian Telecommunications Research, Multi-Criteria Decision Analysis, Journal of the Operational Research Society, Annals of Operations Research, Production Planning & Control, International Transactions in Operational Research, Computers & Operations Research, Transaction of Mechanical Engineering, Computers & Industrial Engineering, International Journal of Production Economics, European Journal of Operational Research, Mathematical Reviews, Journal of Systems Science and Systems Engineering

Research Grants Council (RGC) of Hong Kong External Reviewer 2005

ARC 'expert of international standing' reviewer

Invited chair of Australian session on scheduling, Institute for Operations Research and the Management Sciences, International Conference, Hong Kong, June 2006