



Canadian Operational Research Society

Calgary Section

<http://www.corscalgary.org/>

PROFESSIONAL DEVELOPMENT SEMINAR

When: Noon to 1:30 PM, Thursday, Jan. 21st, 2010

Room 217

TransCanada Tower

450 - 1 Street SW

(See attached map)

SPEAKER

Wei Li (Mike)

PhD Candidate, Schulich School of Engineering

University of Calgary

TOPIC

**Adaptive Production Scheduling and Control for One-of-a-Kind
Production (OKP)**

Abstract:

Nowadays, one-of-a-kind production is a manufacturing trend, which causes difficulties on production scheduling and control. Besides, heuristics for hybrid flow shop production scheduling are still scarce, particularly for production control. Our heuristics, average processing time and lever (APT-LVR) and state space (SS), provide near optimal solutions to traditional and hybrid flow shop production, and they are fast and flexible, thus suitable for production control. Such conclusion is made based on case studies on well-accepted benchmarks among APT-LVR, SS, CDS and NIS heuristics. Moreover, the state space concept used in the SS heuristic extends the Johnson's algorithm, whose paper has been regarded as a seminal paper in the literature of flow shop production scheduling.

Keywords: Flow Shop, One-of-a-Kind Production, Production Control, and Scheduling

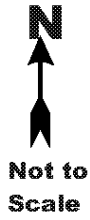
About the Speaker:

Wei Li currently is a PhD candidate in the Department of Mechanical and Manufacturing Engineering at the University of Calgary (U of C). He is doing research on production scheduling and control for one-of-a-kind production (OKP). Because of the particular characteristics of OKP, his research focuses more on adaptive production control. Wei has been under the supervision of Dr. Paul Tu and Dr. Deyi Xue since his M.Sc study in 2004 in the same department at the U of C. Wei has also been co-operating with one of his PhD committee members, Dr. Barrie Nault, the director of the Informatics Research Centre (iRC) at the U of C. Wei Li integrates research in some other areas such as supply chain management, management information systems (MIS), and organizational behaviour.

There is no charge for attending the meeting. The room is available until 1:30 PM for those interested in staying afterwards to mingle and meet other OR practitioners.

Sketch of Location for CORS Meetings at TransCanada Tower in Conference Rooms 214 and 217.

4th Ave. S.W.



214

217

1st Street S.W.

TransCanada Tower
Lobby (ground level)

TCT +15 Balcony

Parkade

Elevators

Sunterra Market

+15 to 5th
Avenue Place

+15

+15 to James
Short Parkade

5th Ave. S.W.

