

UK Operational Research Society Simulation Workshop 2008 (SW08)

1st - 2nd April 2008

Abbey Hotel Golf and Country Club, Worcestershire, England, UK



Programme Overview

Day 1 1st April 2008	Henley & Arden suite (ground floor)	Norton & Adderley suite (first floor)
09:00	Registration & Coffee	
09:45-10:00	Welcome	
10:00-11:00	Keynote (Henley & Arden suite) "Intelligence, Innovation & Integrity - K D Tocher and the dawn of simulation" Brian Hollocks (<i>Bournemouth University Business School</i>)	
11:00-11:30	Coffee Break	
11.30-12.30	Session 1: Simulation applications I	Session 2: Modelling Human Factors
12:30-14:00	Lunch	
14:00-15:30	Session 3: Simulation applications II	Session 4: Simulation analysis
15:30-16:00	Coffee Break	
16:00-17:30	Session 5: Conceptual modelling I	Session 6: Simulation in health
19:30	Conference Dinner	

Programme Overview

Day 2 2nd April 2008	Henley & Arden suite (ground floor)	Norton & Adderley suite (first floor)
09:00-10:30	Session 7: Conceptual modelling II	Session 8: Comparing simulation methods
10.30-11.00	Coffee Break	
11:00-12:30	Session 9: Conceptual modelling III	Session 10: Simulation and system optimisation
12.30-13.30	Lunch	
13:30-15:00	Panel Discussion: (Henley & Arden suite) "Simulation optimisation: the best thing since sliced bread?" Steve Chick (INSEAD); Mark Elder (simul8); Shane Kite (Saker Solutions); Ray Paul (Brunel/LSE) Led by Mike Pidd (<i>University of Lancaster</i>)	
15:00-15:30	Coffee Break	
15:30-17:00	Session 11: Simulation applications III	Session 12: Simulation software
17:00	Close	

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Day 1 (Tuesday 1st April 2008)

09:00 **Registration and coffee**

9:45-10:00 **Welcome**
Stewart Robinson (*Warwick Business School*) & Simon J E Taylor (*Brunel University*)

10:00-11:00 **Keynote**
Keynote Chair: Stewart Robinson (*Warwick Business School*)

"Intelligence, Innovation & Integrity - K D Tocher and the dawn of simulation"
Brian Hollocks (*Bournemouth University Business School*)

11:00-11:30 **Coffee Break**

11:30-12:30 **Session 1: Simulation applications I**
Session Chair: Sally Brailsford (*University of Southampton*)

Successful Simulation In Social Services: Two Case Studies
Sally Brailsford (*University of Southampton*) et al.

Integrating Simulation With Shift Pattern Design Software To Enable Effective Demand Management
Peter Loader (*Process Evolution Limited*)

11:30-12:30 **Session 2: Modelling Human Factors**
Session Chair: Jeremy Garnett (*University of the West of Scotland*)

An Agent-Based Simulation Of In-Store Customer Experiences
Peer-Olaf Siebers (*University of Nottingham*) et al

A Cellular Agent Based Method For Modelling Human Queueing Systems
Jeremy Garnett (*University of the West of Scotland*)

12:30-14.00 **Lunch**

- 14:00-15:30 **Session 3: Simulation applications II**
Session Chair: Korina Katsaliaki (*Middlesex University*)
- Simulation Modelling Of Airport Passenger Departures**
Martin Barber (*University of Salford*) & Peter Durie (*Manchester Airport Group*)
- A Discrete Event Simulation To Improve Maintenance Performance**
Krige Visser (*University of Pretoria*) & Christiaan Visser (*University of South Africa*)
- Capacity Planning And Facility Layout Of Road Services With The Use Of Simulation**
Korina Katsaliaki (*Middlesex University*)
- 14:00-15:30 **Session 4: Simulation analysis**
Session Chair: Katy Hoad (*Warwick Business School*)
- Simulation Assisted Optimization By Random Search**
Russell Cheng (*University of Southampton*)
- An Investigation Of The Sequential Sampling Method For Crossdocking Simulation Output Variance Reduction**
Adrian Adewunmi, Uwe Aickelin & Mike Byrne (*University of Nottingham*)
- Automating Estimation Of Warm-Up Length**
Katy Hoad, Stewart Robinson & Ruth Davies (*Warwick Business School*)
- 15:30-16:00 **Coffee Break**
- 16:00-17:30 **Session 5: Conceptual modelling I**
Session Chair: Bhakti Ongoo (*Lancaster University*)
- Conceptual Modelling And The Modelling Process In Simulation Projects: A Survey Of Simulation Modellers**
Wang Wang & Roger Brooks (*University of Lancaster*)
- Conceptual Modelling for Participative Simulation – a Case Study on Lean Planning**
Durk-Jouke van der Zee, Arnout Pool & Jacob Wijngaard (*University of Groningen*)
- The Conceptual Model of a Distribution Warehouse Simulation**
Bhakti Ongoo, Murat Gunal (*Lancaster University*) & Will Maden (*University of Huddersfield*)
- 16:00-17.30 **Session 6: Simulation in health**
Session Chair: Michael Pidd (*University of Lancaster*)
- Developing Simulation Models Of Possible Future Scenarios For The Delivery Of Acute Care In NHS Ayrshire And Arran To Inform The Decision Making Process**
Consuelo Lara & Kirstin Dickson (*NHS Ayrshire & Arran*)
- An Agent-Based Simulation Model Of MRSA Transmission In Hospital**
Yang Meng and Ruth Davies (*Warwick Business School*) et al.
- DGHPsim: Performance Modelling Of General Hospitals**
Michael Pidd & Murat Günal (*University of Lancaster*), Alec Morton (*LSE*)

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Day 2 (Wednesday 2nd April 2008)

09:00-10:30

Session 7: Conceptual modelling II

Session Chair: Cathal Heavey (*University of Limerick*)

A Framework For Applying Case-Based Reasoning In Simulation Modeling

Ming Zhou (*Indiana State University*), Zhimin Chen (*Shen Zhen University*) & Xu Chen (*University of Electronic Science & Technology of China*)

Conceptual Modelling Of Logistic Terminals: A Frame Work For Classification Of Models

K.C. James & M. Bhasi (*Cochin University of Science and Technology*)

Conceptual And Process Modelling: Analysis In Complex Simulation Environments

Cathal Heavey (*University of Limerick*)

09:00-10:30

Session 8: Comparing simulation methods

Session Chair: Antuela Tako (*Warwick Business School*)

System Dynamics And Discrete Event Simulation: A Meta-Comparison

Kirandeep Chahal & Tillal Eldabi (*Brunel University*)

Selection Of Simulation Tools For Improving Supply Chain Performance

Chris Owen (*PricewaterhouseCoopers LLP*), Doug Love & Dr. Pavel Albores (*Aston University*)

Comparison Of Model Building In Discrete-Event Simulation And System Dynamics

Antuela Tako & Stewart Robinson (*Warwick Business School*)

10:30-11:00

Coffee Break

11:00-12:30

Session 9: Conceptual modelling III

Session Chair: Mohammad Hamdhaidari (*University of Sussex*)

Blurring The Boundaries Of Simulation: The Doris Multimedia Living Extensions

Phil Watten, Mohammad Hamdhaidari et al (*University of Sussex*)

Conceptual Modelling For Stochastic Micro-Population Simulations

Dineli Mather (*Deakin University*)

Simulation Modelling In Viral Marketing

Dineli Mather (*Deakin University*) et al

- 11:00-12:30 **Session 10: Simulation and System Optimisation**
Session Chair: Oliver Rose (*Dresden University of Technology*)
- A Simulation-Based Workforce Scheduling Heuristic For Complex Assembly Lines**
Martin Falk Majohr & Oliver Rose (*Dresden University of Technology*)
- Train Conflict Resolution With SMD-Approach**
Assil Al-Ibrahim & Jan van der Wal (*University of Amsterdam*)
- Using Varying Levels Of Simulation Detail To Model One System**
Anthony Timmiss (*Nissan Motor Manufacturing Ltd*)
- 12:30-13:30 **Lunch**
- 13:30-15:00 **Panel Discussion: "Simulation Optimisation: the best thing since sliced bread?"**
Session Chair: Mike Pidd (*University of Lancaster*)
- 15:00-15:30 **Coffee Break**
- 15:30-17:00 **Session 11: Simulation Applications III**
Session Chair: Tillal Eldabi (*Brunel University*)
- Understanding Agile Organizations**
James Moffat (*DSTL*)
- A Survey of Simulation Techniques in Commerce and Defence**
Tillal Eldabi et al. (*Brunel University*)
- Modelling The Military Operational Future**
Catherine Brown (*DSTL*)
- 15:30-17:00 **Session 12: Simulation software**
Session Chair: Simon Taylor (*Brunel University*)
- Are State Of The Art Simulators Moving The Modelling Goalposts?**
Michael Ellarby & Gary Pattison (*Saker Solutions Ltd.*)
- Investigating Grid Computing Technologies For Use With Commercial Simulation Packages**
Navonil Mustafee (*Warwick Business School*) & Simon Taylor (*Brunel University*)
- Search And Discovery: Investigating The Role Of Ontologies In Commercial Simulation Packages**
Simon Taylor et al (*Brunel University*) Paul Fishwick (*University of Florida*)