

MOHSEN ELHAFSI

The A. Gary Anderson Graduate School of Management
University of California, Riverside CA 92521
Phone: (951) 827-4557
Fax: (951) 827-3970
E-mail: mohsen.elhafsi@ucr.edu

My research interest is in the general area of Operations and Supply Chain Management. It includes using optimization in the design, planning and control of large-scale industrial processes and service operations. My focus is on developing analytical models of complicated systems, developing solution procedures using quantitative techniques, and drawing managerial insights from the analysis of these models.

EDUCATION

<u>Degree</u>	<u>Field</u>	<u>Institution</u>	<u>Date</u>
Ph.D.	Industrial Engineering	University of Florida	1995
M.S.	Industrial Engineering	University of Florida	1995
M.E./B.Sc.	Industrial Engineering	Ecole National d'Ingenieurs de Tunis	1988

PROFESSIONAL EXPERIENCE

2007 – present	Associate Dean of MBA Program & Graduate Advisor	A. Gary Anderson Graduate School of Management, University of California, Riverside
2006 – 2007	Visiting Professor	Ecole Centrale de Lille, France
2002 – present	Associate Professor	A. Gary Anderson Graduate School of Management, University of California, Riverside
1997 – 2002	Assistant Professor	A. Gary Anderson Graduate School of Management, University of California, Riverside
1996 – 1997	Visiting Professor	A. Gary Anderson Graduate School of Management, University of California, Riverside
1995 – 1996	Post Doctoral fellow	Dept. of Industrial and Systems Engineering, University of Florida
1988 – 1990	Project Manager	Institut Regional des Science Informatiques et des Télécommunication,

Tunisia

FIELDS OF INTEREST

Operations and Supply Chain Management
Design and Management of Manufacturing and Service Systems
Mathematical Modeling and Operations Research

COURSES TAUGHT

Undergraduate Level

Production and Operations Management
Introduction to Management Science
Supply Chain Management

Graduate Level

Production and Operations Management
Logistics and Supply Chain Management
Introduction to Management Science
Statistics for Management
Applied Business Forecasting
Operations Planning and Control
Management Synthesis

AWARDS AND HONORS

\$10,000 Committee on Research (COR) Fellowship Award: University of California, Riverside, 2007
Fulbright Fellowship Award for France: 2006-07
Regents Faculty Fellowship Award: University of California, Riverside, 2000-01
ΦΚΦ Honor Graduate, 1995
Teaching Assistantship: ISE Department, the University of Florida, 1994 –95
Research Assistantship: ISE Department, the University of Florida, 1991 – 94

Graduate Study fellowship: United States Agency for International Development, 1990 – 94

High Honors Qualified Engineer Diploma: IE Department, Ecole Nationale d'Ingenieurs de Tunis, 1988

High honors Baccalaureate Diploma, 1982

LANGUAGES

English (Fluent)

French (Fluent, education language)

Russian (Two-year Certificate)

SERVICES AND PROFESSIONAL ACTIVITIES

School and Campus Wide Services

Graduate Advisor: 2007-present

Chair: Admission Committee, 2007-2008

Chair: Recruiting Committee (two senior positions in Supply Chain Management), 2007-2008

Member (non-voting): Executive Committee

Member: Graduate Program Committee, 2007-2008

Member: Internal Strategic Planning Steering Committee

Member: Senate Research Committee, 2007-2008

Member: Interdisciplinary Teams and Networks Grants Program Committee 2007-2008

Chair: Recruiting Committee for Dean's Academic Appointment, 2004-2005

Chair: Resources Committee, 2004-2005

Chair: "Management Department: The Economic Approach", 2003-04

Member: Strategic Planning Committee, 2003-04

Chair: MS/OM Recruiting Committee, 2002-03

Member: Steffy Chair Recruiting Committee, 2002-03

Member: Graduate Program Committee, 1997-2000, 2002-03

Member: Research Committee, 2000-2001

Member: MIS Recruiting Committee, 1997-1998

Member: Center for Research in Intelligent Systems (CRIS), 1996-present

Member: Ad hoc committee for 5th year appraisal evaluation 2002-2003

Member: Several Ph.D. Oral Examination, Statistics Department, 1999-2006

Editorial Board

The International Journal of Mathematics in Operational Research

Session Chair

2005 Operations Research 2005, International Scientific Annual Conference, Bremen, September 7-9, 2005.

2002 33rd Annual DSI Meeting, San Diego, California, Nov. 23-26, 2002

2001 National INFORMS Meeting, Miami, FL, November 4-7, 2001

2001 International Conference, Academy of Business and Administrative Sciences, Brussels, Belgium

2000 International Conference, Academy of Business and Administrative Sciences, Prague, Czech Republic

1998 National INFORMS Meeting, Seattle, WA, October 25-28, 1998

5th Industrial Engineering Research Conference, Minneapolis, MN, May 18-21, 1996

Proposal Assessor

Hong Kong Research Grants Council (RGC), 2000

Grants to Enhance and Advance Research (GEAR) Program, University of Houston, 2006.

Journals Refereed

Operations Research, Management Science, IIE Transactions, European Journal of Operational Research, International Journal of Mathematics of Operational Research, IEEE Transactions On Automatic Control, IEEE Transactions on Automation Science and Engineering, Journal of Scheduling, International Journal of Production and Operations Management, International Journal of Flexible Manufacturing, Computers and Industrial Engineering, Mathematical and

Computer Modelling, Omega Journal, Naval Research Logistics, International Journal of Production Research

PROFESSIONAL AFFILIATIONS

The Institute for Operations Research and Management Science, since 1991

The Manufacturing and Service Operations Society, since 1997

The Production and Operations Management Society, since 1993

The Institute of Industrial Engineering, since 1992

The Honor Society of Phi Kappa Phi, since 1995

The Fulbright Association, Since 2007

Sloan Industry Studies Program, since 2008

PUBLICATIONS

ARTICLES IN JOURNALS (TECHNICAL, REFEREED)

1. M. Elhafsi, "Optimal Integrated Production and Inventory Control of an Assemble-to-Order System with Multiple Non-Unitary Demand Classes" European Journal of Operational Research, Forthcoming.
2. M. Elhafsi, H. Camus and E. Craye, "Optimal Control of a Nested-Multiple-Product Assemble-To-Order System" International Journal of Production Research, Forthcoming.
3. S. Benjaafar and M. Elhafsi, "Production and Inventory Control of a Single Product Assemble-to-Order Systems with Multiple Customer Classes," Management Science, 52(12) 1896-1912, 2006
4. S. Benjaafar, M. Elhafsi and F. De Véricourt, "Demand Allocation in Multiple-Product, Multiple-Facility Make-To-Stock Production Systems," Management Science, 50(10) 1431-1448, 2004.
5. B. Dodin and M. ElHafsi, "Production Planning of a Multi-Item-Single-Facility System with Non-Stationary Demands," International Journal of Operations and Quantitative Management, 10(1) 1-22, 2004.
6. M. ElHafsi, "Optimal Lead-Time Planning in Serial Production Systems with Earliness and Tardiness Costs," IIE Transactions, 34(3) 233-243, 2002
7. M. ElHafsi, "A Production Planning Model for an Unreliable Production Facility: Case of Finite Horizon and Single Demand," European Journal of Operational Research, 143, 94-114, 2002.

8. B. Dodin, M. Elhafsi, J. Varzandeh, and K. Farahbod, "Decision Support Systems and Design for Reverse Logistics," Journal of International Information Management, 69-73, Fall 2001.
9. M. ElHafsi, "An Operational Decision Model for Lead-Time and Price Quotation in Congested Manufacturing Systems," European Journal of Operational Research, **126**(2): 355-370, 2000.
10. M. ElHafsi, and E. Rolland, "Negotiating Price/Delivery Dates in a Stochastic Manufacturing Environment," IIE Transactions, **31**(3): 255-270, 1999.
11. M. ElHafsi and S. X. Bai "Multi-Period Production Planning and Control with Demand and Cost Fluctuations," Journal Of Mathematical and Computer Modelling. **28**(3): 103-119, 1998.
12. M. ElHafsi and S. X. Bai, "Optimal and Near Optimal Control of a Two-Part-Type Stochastic Manufacturing System with Dynamic Setups," Journal of Production and Operations Management, **6**(4): 419-438, 1997.
13. M. ElHafsi and S. X. Bai, "The Common Cycle Economic Lot Scheduling Problem with Backorders: Benefits of a Controllable Production Rate," Journal Of Global Optimization, **10**: 283-303, 1997.
14. G. Vairaktarakis and M. ElHafsi, "The Use of Flowlines to Simplify Routing Complexity in Two-Stage Flowshops," IIE Transactions, **32**(8): 687-699, 2000.
15. F. J. Krämer, M. ElHafsi and S. X. Bai, "Production Flow Control for a Manufacturing System with Flexible Routing," Journal of Production and Operations Management, **6**(1): 37-56, 1997.
16. S. X. Bai, Y. K. Tsai, M. ElHafsi, and K. Deng, "Production Scheduling in a Price Competition," Computers and Mathematics with Applications, **33**(5): 5-19, 1997.
17. S. X. Bai and M. ElHafsi, "Scheduling of an Unreliable Manufacturing System with Nonresumable Setup Changes," Computers and Industrial Engineering, **32**(4): 909-925, 1997.
18. M. ElHafsi and S. X. Bai, "Optimal Production Control of a Dynamic Two-Product Manufacturing System with Setup Costs and Setup Times," Journal Of Global Optimization, **9**:183-216, 1996.
19. M. ElHafsi and S. X. Bai, "Optimal Production and Setup Control of a Dynamic Two-Product Manufacturing System: Analytical Solution," Journal Of Mathematical and Computer Modelling, **24**(3): 57-78, 1996.
20. S. X. Bai and M. ElHafsi, "Transient and Steady State Analyses of a Manufacturing System with Setup Changes," Journal Of Global Optimization, **8**:349-378, 1996.
21. S. X. Bai, H. Burhanpurwala, M. ElHafsi and Y. K. Tsai, " Hierarchical Production Control for a Flow Shop with Dynamic Setup Changes and Random Machine Breakdowns," Operations Research Spektrum, **18**: 81-96, 1996.

22. M. ElHafsi and S. Yeralan, "Computer Control System for a Cutting Machine," Computers and Industrial Engineering, **23**(1-4), 345-348, 1992.
23. L. Ammar, M. Achour and M. ElHafsi, "Etude Et Conception De Systèmes d'Appoint Pour Chauffe-Eau Solaire", Les Annales de l'ENIT, **2**, July 1988.

ARTICLES IN PROCEEDINGS (TECHNICAL, REFEREED)

24. M. Elhafsi, H. Camus, E. Craye, "Optimal Control of a Nested-Multiple-Product Assemble-To-Order System" International Workshop: Logistics and Transportation, *IEEE/SMC co-sponsored workshop*, Nov. 18-20, 2007, Tunisia
25. M. ElHafsi, S. Benjaafar, and Y. Yu, "Production and Inventory Control of a System with Multiple Sources of Supply" 15th *International Annual EUROMA Conference* June 15-18, 2008, University of Groningen, The Netherlands.
26. S. Yeralan and M. ElHafsi, "Recent Advances In Intelligent Machine Tools," *Proceedings of the 5th Annual Conference On Recent Advances In Robotics*, Florida Atlantic University, June 11-12, 1992.
27. S. X. Bai and M. ElHafsi, "Optimal Feedback Control of a Manufacturing System with Setup Changes," *Proceedings of the Fourth International Conference on Computer Integrated Manufacturing and Automation Technology*, October 10-12, 1994, in Troy, New York.
28. M. ElHafsi and S. X. Bai, "Production and Setup Control in a Stochastic Manufacturing System," *Proceedings of the 5th Industrial Engineering Research Conference*, May 18-20, 1996, Minneapolis, Minnesota.

SUBMITTED WORK: ARTICLES IN JOURNALS

29. S. Benjaafar, M. Elhafsi, C. Y. Lee, and W. Zhou "Optimal Control of an Assembly System with Multiple Stages and Multiple Demand Classes," Operations Research, second review.
30. S. Benjaafar, M. Elhafsi, and W. Tinglian "Optimal Control of a Production-Inventory System with both Backorders and Lost Sales," Naval Research Logistics, under review.

WORK IN PROGRESS

31. "Optimal Control of Inventory Systems with Multiple Supply Sources." With S. Benjaafar.
32. "Managing Production and Inventories in a System with Information on the Production and Demand Status with Multiple Non-Unitary Demand Classes"
33. "Managing VMI Systems in a Production and Inventory Context: Quantifying the benefits of VMI"

34. "Optimal Control of a Multi-Product System with a Single Component interaction." With S. Benjaafar.
35. "Optimal Order Quantity and Pricing with Forward-Looking Buyers." With R. Banker and R. Chen.
36. "The effect of Customer Referrals in a two-Stage Supply Chain." With R. Chen and Y. Liu.
37. "Assignment and Loading of Liquid Chemicals to Ship Compartments," with A. Elimam and B. Dodin.

INVITED TALKS AT UNIVERSITIES

University of Geneva, College of Business (HEC), Switzerland, 2006.

University of Neuchâtel, College of Business (HEC), Switzerland, 2006

University of Montreal, Business School (HEC), Canada, 2005.

CONFERENCE PARTICIPATION-PAPER PRESENTATIONS

2008, 15th International Annual EUROMA Conference, (Production and Inventory Control of a System with Multiple Sources of Supply), University of Groningen, the Netherlands, June 15-18, 2008

2008, Production and Operations Management Society (POMS) Conference (Optimal Control of a Production-Inventory System with both Backorders and Lost Sales), San Diego, CA, May 9-12, 2008

2007 National INFORMS Conference (Optimal Control of a Production-Inventory System with both Backorders and Lost Sales), Seattle, WA, Nov. 3-7, 2007

2007, Production and Operations Management Society (POMS) Conference (Optimal Control of an Assembly Systems with Multiple Stages and Multiple Demand Classes), Dallas, TX, May 4-7, 2007

International Conference on Service Systems and Service Management (ICSSSM'06), (Optimal Control of Inventory Systems with Multiple Supply Sources", University of Technology of Troyes-France. October 25-27, 2006

2005 National INFORMS Conference (Optimal Control of Inventory Systems with Multiple Supply Sources), San Francisco, CA, Nov. 13-16, 2005

Operations Research 2005, International Scientific Annual Conference (Optimal Production and Inventory Control of Assemble-to-Order Systems with Multiple Customer Classes), Bremen, Germany, September 7-9, 2005

2005, Production and Operations Management Society (POMS) Conference (Optimal Control of an Assemble-to-order Systems), Chicago, IL, April 29-May 3, 2005

2004, Multi-Echelon and Manufacturing and Service Operations Management (MSOM) Conference (Optimal Control of an Assemble-to-order System), Eindhoven, Netherlands, June 30 – July 2nd, 2004

2004, 2nd World Conference and 15th Annual POMS Conference (Demand Allocation in Multiple-Product, Multiple-Facility Make-To-Stock Production Systems), Cancun, Mexico, April 30- May3, 2004

OR2003 - SYMPOSIUM ON OPERATIONS RESEARCH (Assignment and Loading of Liquid Chemicals to Ship Compartments), University of Heidelberg, Germany, September 3 - 5, 2003

Eighth Viennese Workshop on Optimal Control, Dynamic Games and Nonlinear Dynamics: Theory and Applications in Economics and OR/MS Vienna (Dynamic Loading of Liquid Chemicals to Ship Compartments), Austria, May 14-16, 2003

OR2002 - International Conference on Operations Research (Demand Allocation in Multiple-Product, Multiple-Facility Make-To-Stock Production Systems), University of Klagenfurt, Austria, September 2 - 5, 2002

2001 National INFORMS meeting (Transporting and Managing Inventories of Liquid Chemical products Using Oceangoing Vessels” and Demand Allocation in Multiple-Product, Multiple-Facility Make-To-Stock Production Systems), Miami Beach, Florida, Nov. 4-7, 2001

2001 International Conference, Academy of Business and Administrative Sciences, Brussels (Demand Allocation in Multiple-Product, Multiple-Facility Make-To-Stock Production Systems), Belgium, July 23-25, 2001

2000 National INFORMS Meeting (“Optimal Lead-Time Planning in Serial Production Systems with Earliness and Tardiness Costs”, and “Assignment and Loading of Liquid Chemicals to Ship Compartments”), San Antonio, TX, November 5-8, 2000

17th European Conference on Operational Research (Assignment and Loading of Liquid Chemicals to Oceangoing Vessels), Budapest, Hungary, July 16-19, 2000

2000 International Conference, Academy of Business and Administrative Sciences (Optimal Lead-Time Planning in Serial Production Systems with Earliness and Tardiness Costs), Prague, Czech Republic, July 10-12, 2000

National INFORMS Meeting (“Assignment and Loading of Liquid Chemicals to Oceangoing Vessels” and “The Use of Flowlines to Simplify Routing Complexity in Two-Stage Flowshops”), Salt Lake City, UT, May 7-10, 2000

11th Annual Meeting of the Production Operations Management Society (Scheduling of a Multi-Item-Single-Facility System with Time Varying Demands and Inventory and Backorder Costs), San Antonio, TX, April 1-4, 2000

National INFORMS Meeting (Scheduling of a Multi-Item-Single-Facility System with Time Varying Demands and Inventory and Backorder Costs), Philadelphia, PA, November 7-10, 1999

9th International Conference on Flexible Automation and Intelligent Manufacturing, Tilburg University, The Netherlands, (A Production Planning Model for an Unreliable Production Facility: Case of Finite Horizon and Single Demand) June 23-25, 1999

National INFORMS Meeting, (A Production Planning Model for an Unreliable Production Facility: Case of Finite Horizon and Single Demand), Cincinnati, OH, May 2-5, 1999

National INFORMS Meeting, (An Operational Decision Model for Lead-Time and Price Quotation in Congested Manufacturing Systems), Seattle, WA, October 25-28, 1998

16th European Conference on Operations Research (Negotiating Price/Delivery Dates in a Stochastic Manufacturing Environment), Brussels, Belgium, July 12-15, 1998

National INFORMS Meeting (Optimal and Near Optimal Control of a Two-Part-Type Stochastic Manufacturing System with Dynamic Setups), Dallas, TX, October 26-29, 1997

National INFORMS Meeting (Multi-Period Production Planning and Control with Demand and Cost Fluctuations), San Diego, CA, May 4-7, 1997

Production and Operations Management Society, Eighth Annual Meeting (Scheduling of an Unreliable Manufacturing System with Nonresumable Setup Changes), Miami, FL, April 12-15, 1997

National INFORMS Meeting (The Common Cycle Economic Lot Scheduling Problem with Backorders: Benefits of a Controllable Production Rate), Atlanta, GA, November 3-6, 1996

5th Industrial Engineering Research Conference (Production and Setup Control in a Stochastic Manufacturing System), Minneapolis, MN, May 18-21, 1996

National INFORMS Meeting (Production Scheduling in a Price Competition) New Orleans, LO, October 29 – November 1, 1995

National INFORMS Meeting (Optimal Production and Setup Control of a Dynamic Two-Product Manufacturing System: Analytical Solution), Los Angeles, CA, April 23-26, 1995

National ORSA/TIMS Meeting (Optimal Production Control of a Dynamic Two-Product Manufacturing System with Setup Costs and Setup Times), Boston, MA, April 24-27, 1994