

# GEORGE LIBEROPOULOS

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## Professor of Stochastic Methods in Production Management

University of Thessaly (UTH) | School of Engineering | Department of Mechanical Engineering  
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## PERSONAL INFORMATION

Date of Birth: 29 April 1963  
Place of Birth: Athens, Greece  
Family Situation: Married, two children

## SCIENTIFIC INTERESTS

Systems analysis with the use of operations research, applied probability and automatic control methods, and applications in production/operations planning/control, supply chain management, design of electricity markets, et al.

## EDUCATION

### Earned Degrees

- Ph.D., Manufacturing Engineering, Boston University, USA, 1993.  
[Advisor: Professor Michael Caramanis]
- M.Eng., Mechanical Engineering, Cornell University, USA, 1986.
- B.S., Mechanical Engineering, Cornell University, USA, 1985.

### Fellowships/Scholarships

- Award of an International Collaboration Package Module 2.1 – Strategic Meetings at KIT. Karlsruhe Institute of Technology (KIT), 2018.
- Training & Mobility of Researchers Fellowship, Commission of the European Communities, 1996.
- Human Capital & Mobility Research Fellowship, Commission of the European Communities, 1994-1996.
- Postdoctoral Fellowship in Science and Engineering, National Science Foundation – NATO, 1995-1996 (not used).
- Research Fellowship, National Science Foundation, 1988-1992.
- Graduate Research & Teaching in Engineering Fellowship, Boston University, 1991-1992.
- Karsten Fellowship, Boston University, 1988.
- Engineering Graduate Honor Scholarship, Boston University, 1988, 1989.

## ACADEMIC POSITIONS

- Professor, Department of Mechanical Engineering, University of Thessaly, Greece, 2008-present.
- Associate Professor, Department of Mechanical Engineering, University of Thessaly, Greece, 2003-2008.
- Assistant Professor, Department of Mechanical Engineering, University of Thessaly, Greece, 1996-2003.
- Visiting Research Scientist, Laboratoire de Méthodologie et Architecture des Systèmes Informatiques (currently Laboratoire d'Informatique de Paris 6), CNRS-Université Pierre et Marie Curie (Paris 6), France, 1994-1996.
- Lecturer, Department of Manufacturing Engineering, Boston University, USA, 1993.

- Teaching and Research Assistant, Department of Manufacturing Engineering, Boston University, USA, 1988-1992.

## PROFESSIONAL ACTIVITIES

### Editorial Appointments

- Guest Editor, 1 book volume, 9 journal special issues/volumes, and 1 conference proceedings volume, 2000-present (see “Publications”).
- *Flexible Services & Manufacturing Journal*: Editor 2009-2017, Associate Editor 2017-present.
- *OR Spectrum*: Editor 2001-2009, Advisory Board Member 2010-present.
- *IIE Transactions (Design and Manufacturing)*: Editorial Board Member 1997-2006, Chairman of Selection Committee for “Best Papers” 2006-2007, Area Editor 2006-present.

### Conference Organization

- Member of Scientific Committee, *11<sup>th</sup> Conference on Stochastic Models of Manufacturing and Service Operations (SMMSO 2017)*, Acaya (Lecce), Italy, June 4-9, 2017.
- Chairman of Organizing Committee and Member of Scientific Committee, *10<sup>th</sup> Conference on Stochastic Models of Manufacturing and Service Operations (SMMSO 2015)*, Volos, Greece, June 1-6, 2015.
- Co-chairman of Organizing Committee, *3<sup>rd</sup> International Symposium and 25<sup>th</sup> National Conference of the Greek Society for Operations Research on OR in Transportation, Research and the Environment*, Volos, Greece, June 26-28, 2014.
- Member of Program Committee, *Joint Meeting of the GOR and the EURO Working Group on Stochastic Modeling (StochMod14)*, Mannheim, Germany, June 29-July 2, 2014.
- Member of Scientific Committee, *9<sup>th</sup> Conference on Stochastic Models of Manufacturing and Service Operations (SMMSO 2013)*, Kloster Seeon, Germany, May 25-30, 2013.
- Member of Scientific Committee, *5<sup>th</sup> International Workshop on Freight Transportation and Logistics (ODYSSEUS 2012)*, Myconos Island, Greece, May 21-25, 2012.
- Member of Scientific Committee, *8<sup>th</sup> Conference on Stochastic Models of Manufacturing and Service Operations (SMMSO 2011)*, Kuşadası, Turkey, May 28-June 2, 2011.
- Member of Program Committee and Associate Editor, *2010 IEEE Conference on Automation Science and Engineering (CASE 2010)*, Toronto, Canada, August 21-24, 2010.
- Member of Scientific Committee, *2009 World Congress on Engineering Asset Management (WCEAM 2009)*, Athens, Greece, September 28-30, 2009.
- Member of Program Committee and Associate Editor, *2009 IEEE Conference on Automation Science and Engineering (CASE 2009)*, Bangalore, India, August 22-25, 2009.
- Member of Scientific Committee, *7<sup>th</sup> Conference on Stochastic Models of Manufacturing and Service Operations (SMMSO 2009)*, Ostuni, Italy, June 7-12, 2009.
- Member of Scientific Committee, *19<sup>th</sup> National Conference of the Greek Society for Operations Research on OR in Supply Chain Management*, Arta, Greece, June 21-23, 2007.
- Member of Scientific Committee, *6<sup>th</sup> International Conference on Analysis of Manufacturing Systems*, Lunteren, The Netherlands, May 11-16, 2007.
- Member of Scientific Committee, *5<sup>th</sup> International Conference on Analysis of Manufacturing Systems–Production Management*, Zakynthos Island, Greece, May 20-25, 2005.
- Member of Scientific Committee, *4<sup>th</sup> Aegean International Conference on Analysis of Manufacturing Systems*, Samos Island, Greece, July 1-4, 2003.
- Member of Scientific Committee and Session Chairman, *16<sup>th</sup> National Conference of the Greek Society for Operations Research on Project Management*, Larissa, Greece, Sept. 25-27, 2003.
- Session Chairman, *EURO/INFORMS Joint International Meeting*, Istanbul, Turkey, July 6-10, 2003.

**Referee/Reviewer**

- Referee for scientific journals: *Annals of Operations Research* • *Applied Mathematical Modelling* • *Applied Mathematics & Computation* • *Automatica* • *Central European Journal of Operations Research* • *Computers & Industrial Engineering* • *Computers & Operations Research* • *Discrete Event Dynamic Systems* • *European Journal of Operational Research* • *IEEE Transactions on Automatic Control* • *IEEE Transactions on Automation Science and Engineering* • *IEEE Transactions on Robotics & Automation* • *IEEE Transactions on Power Systems* • *IIE Transactions* • *International Journal of Flexible Manufacturing Systems* • *International Journal of Production Economics* • *International Journal of Production Research* • *International Journal of Quality & Reliability Management* • *International Journal of Systems Science* • *Journal of Advanced Manufacturing Technology* • *Journal of Energy Engineering* • *Journal of Manufacturing Systems* • *Operational Research: An International Journal* • *Operations Research* • *OR Spectrum* • *Management Science* • *Manufacturing and Service Operations Management* • *Production and Operations Management* • *Production Planning & Control* • *Stochastic Models*.
- Reviewer of books: Axsäter, S. 2006. *Inventory Control, 2E*. International Series in Operations Research and Management Science, Springer, New York, NY. • Li, J, S. M. Meerkov. 2009. *Production Systems Engineering* (Preliminary edition), Springer, New York, NY.
- Referee of manuscripts submitted to international conferences: *1995 INRIA/IEEE Symposium on Emerging Technologies and Factory Automation* • *31<sup>st</sup> IEEE Conference on Decision and Control* (1992) • *32<sup>nd</sup> IEEE Conference on Decision and Control* (1993) • *12th IFAC Symposium on Information Control Problems in Manufacturing* (2006) • *2008 IEEE International Conference on Robotics and Automation*.

**Invited Talks**

- Center for Operations Research and Econometrics, Université Catholique de Louvain, Belgium, 2 May 2017.
- Chair of Production Management, Business School, Mannheim University, Germany, 4 May, 2016.
- Beta Research School for Operations Management and Logistics/Department of Technology Management, Technical University of Eindhoven, Netherlands, 4 February, 2008.
- Department of Mathematics, Kapodistrian University of Athens, Greece, 4 June 2004.
- Department of Industrial Engineering, Koç University, Turkey, 4 January 2004.
- Department of Mechanical Engineering, Aristotle University of Thessaloniki, Greece, 3 May 2003.
- Laboratoire Génie Industriel, École Centrale Paris, France, 2000, 2002.

**Other Activities**

- Reviewer of a research grant proposal to be funded by the Research Council of KU Leuven, Belgium, 2014.
- Reviewer of research grant proposals to be funded by Greece's General Secretariat for Research & Technology within the Action "Cooperation" of the Operational Program "Competitiveness & Entrepreneurship" of the National Strategic Reference Framework (ΕΣΠΑ) 2007-2013, 2010.
- Member of Audit Committees for research projects funded by Greece's General Secretariat for Research & Technology within the Operational Program "Competitiveness", 2004-2007.
- Reviewer of a research grant proposal to be funded by the Research Committee of the University of Ioannina, Greece, 2007.
- Member, EURO Working Group on Stochastic Modeling, 2004-present.
- Member, Coordinating Committee, E-Business Forum, GSRT, 2000-2001.
- Member of INFORMS, Greek Society for Operations Research, Technical Chamber of Greece.

## ADMINISTRATIVE ACTIVITIES

### Department of Mechanical Engineering

- Chairman, 2007-2009.
- Vice Chairman, 2005-2007.
- Director, Graduate Studies Program, 2005-2007.
- Director, Division of Production Management and Industrial Administration, 2000-2005, 2010-2014, 2017-present.
- Director, Production Management Laboratory, 1998-present.
- Academic Responsible, Practical Training of Students Program, 1998-2009.
- Coordinator, Academic Issues Committee, 2000-2003 (member, 1996-2000).

### University of Thessaly

- Member, Quality Assurance Unit, 2013-2017.
- Member, Committee for Central Webpage, 2009-present.
- Member, Committee for Postgraduate Studies, 2008-2015.
- Member, University Senate, 2001-2003, 2007-2009.
- Vice President, University Research Committee, 2005-2008.
- Academic Responsible (University-level), Practical Training of Students Program, 2001-2005.
- Member, Temporary Council, Department of Computer, Telecommunications and Networks Engineering, 2000-2003.
- Member, Temporary Council, Department of Applied Economics, 2000-2002.
- Acting Member, University Research Committee, 1999-2002.

### Outside the University of Thessaly

- Member, Regulatory Authority for Railways, Greece, 2011-2017.
- Member of Examination Board, Professional Practice Licensing for Mechanical Engineering Graduates, Technical Chamber of Greece, 2005.
- Member of Examination Board, Graduate Scholarship Programs, State Scholarships Foundation of Greece, 2003-2005.
- Acting Member, Scientific Advising Committee for Mechanical & Aeronautical Engineering Graduates of Foreign Universities, Hellenic National Academic Recognition & Information Center, 2000-2009.
- Acting Member, Temporary Council, Department of Industrial Engineering, Democritus University of Thrace, Greece, 2000.

## TEACHING AND SUPERVISION

### Courses Taught

#### *Undergraduate Courses*

Department of Mechanical Engineering, University of Thessaly.

- Operations Management, 1997-1998.
- Production Planning and Control, 1996-2016.
- Optimization Theory, 1996.
- Stochastic Models in Operations Research, 1998-2016.

Department of Manufacturing Engineering, Boston University, HIIA.

- Statistics & Quality Engineering, 1993.

#### *Graduate Courses*

Department of Mechanical Engineering, University of Thessaly.

- Production Systems, 1999-2015.
- Computer Integrated Systems for Production, 1999-2000.
- Stochastic Processes, 2000-2016.
- Dynamic Programming, 2002.

Program of Graduate Studies in Business Mathematics, jointly organized by the University of Athens (Department of Mathematics and Department of Economics) and the Athens University of Economics and Business (Department of Informatics).

- Mathematical Models in Production Systems, 2000-2001.

Department of Manufacturing Engineering, Boston University, HIIA.

- Probability with Statistical Applications, 1992-1993.

### **Thesis Supervision**

*Completed PhD Theses, Department of Mechanical Engineering, University of Thessaly.*

1. Koukoumialos, S. 2003, *Performance Evaluation and Properties of Kanban-Type Policies for the Coordination of Multistage Production/Inventory Systems.*
2. Tsarouhas, P. 2005. *Quantitative Analysis of the Reliability, Quality, and Performance of Automated Production Systems.*
3. Tsikis, I. 2007. *Quantitative Analysis of the Impact of Stockouts in Inventory Management.*
4. Hatzikonstantinou, O. 2009. *Production Scheduling Optimization in a PET Resin Chemical Industry.*
5. Andrianesis, P. 2016. *Analysis and Evaluation of Pricing Mechanisms in Markets with Non-Convexities with Reference to Electricity Markets.*

*In-process PhD Theses, Department of Mechanical Engineering, University of Thessaly.*

6. Deligiannis, M. 2021 (expected). *Stochastic Modelling of Production-Inventory Systems.*

*Completed M.Sc. Theses*

40 M.Sc. Theses in the Department of Mechanical Engineering, University of Thessaly and one M.Sc. Thesis (DEA) in the Laboratoire de Méthodologie et Architecture des Systèmes Informatiques, Université Pierre et Marie Curie, France.

*Completed Diploma Theses*

51 Diploma Theses in the Department of Mechanical Engineering, University of Thessaly.

### **RESEARCH GRANTS**

- Title: Modeling, analysis, and coordination of multi-stage manufacturing systems. Funding: EU – Human Capital and Mobility. Position: Principal Researcher. Budget: 95 268 ecu. Duration: 1994-96.
- Title: Development of effective material flow control mechanisms in multi-stage manufacturing systems. Funding: EU – Training and Mobility of Researchers. Position: Principal Researcher. Budget: 36 432 ecu. Duration: 1996.
- Title: New methods for the organization, management, and strategic planning of SMEs in the metal industry. Funding: Greek Ministry of Labor & Social Security – ADAPT – Phase 2. Position: Principal Investigator at UTH. Budget: € 10 477. Duration: 1998-99.
- Title: The effect of lot sizing on the performance of production control systems. Funding: UTH Scientific Committee. Position: Principal Investigator Budget: € 2 201. Duration: 1999.
- Title: Production management and product quality in SMEs. Funding: EOMMEX – Regional Directorate of Thessaly. Position: Principal Investigator. Budget: € 1 761. Duration: 1999.

- Title: Hellenic enterprise resource management & information technology advancement network in Greek enterprises. Funding: GSRT – OPRT II – Human Networks. Position: Principal Investigator at UTH. Budget (UTH): € 1 937. Duration: 2000-01.
- Title: Production-inventory control policies with advance demand information. Funding: UTH Scientific Committee. Position: Principal Investigator. Budget: € 1 467. Duration: 2001.
- Title: Development of a system for the inspection and identification of the static sufficiency of the primary bridges at the Egnatia (National) Road. Funding: Egnatia Odos, S.A. Position: Investigator. Budget: € 58 694. Duration: 2001-02.
- Title: Study of stockout costs in inventory control. Funding: Greek Ministry of Education – Heraklitus: Fellowships for Basic Research. Position: Principal Investigator. Budget: € 32 820. Duration: 2002-06.
- Title: Development of web-based collaborative tools for complex industrial products. Funding: GSRT – Concerted Program for Electronic Business. Position: Principal Investigator at UTH. Budget: € 60 000. Duration: 2004-06.
- Title: Development of a data base for resource planning and performance evaluation of operations at DEPA (Greece’s Public Gas Corporation), S.A. Funding: DEPA, S.A. Position: Principal Investigator. Budget: € 20 000. Duration: 2004-05.
- Title: Optimization of production planning and product distribution of a PET resin chemical plant. Funding: GSRT – PENED, Artenius Hellas S.A. Position: Principal Investigator. Budget: € 42 045. Duration: 2005-08.
- Title: Mapping of the material handling system at IMAS, S.A. Funding: IMAS, S.A. Position: Investigator. Budget: € 4 900. Duration: 2006.
- Title: Investigation of the interaction between the energy and reserves markets. Funding: Regulatory Authority for Energy. Position: Principal Investigator. Budget: € 8 395. Duration: 2007-08.
- Title: Improving the material handling system at IMAS, S.A. Funding: IMAS, S.A. Position: Investigator. Budget: € 12 000. Duration: 2007-08.
- Title: Improving the inventory management system at IMAS, S.A. Funding: IMAS, S.A. Position: Investigator. Budget: € 12 000. Duration: 2007-08.
- Title: Service systems with strategic customers: Equilibrium analysis and the value of information. Funding: GSRT – Joint Research and Technology Programmes (Greece-Turkey). Position: Investigator. Budget: € 15 000. 2010-11.
- Title: GreenRoute: A web based platform which helps individuals and companies move commodities with the most environmentally friendly way, minimizing emissions and transportation costs. Funding: EU–FP7–PEOPLE–2011–Marie Curie–Career Integration Grant. Position: Principal Investigator. Budget: € 75 000. Duration: 2011-14.
- Title: Development of a mathematical optimization model and a decision support system for solving the problem of unit commitment and dispatch in EAC. Funding: Electricity Authority of Cyprus (EAC). Position: Principal Investigator. Budget: € 15 000. Duration: 2011-12.
- Title: EnvRouting - Environmentally Friendly Vehicle Routing. Funding: GSRT – Education and Lifelong Learning – Supporting Postdoctoral Researchers. Position: Principal Investigator. Budget: € 75 000. Duration: 2012-15.
- Title: ODYSSEUS – A holistic approach for managing variability in contemporary global supply chain networks. Funding: GSRT – Education and Lifelong Learning – THALES: Reinforcement

of interdisciplinary and/or inter-institutional research and innovation. Position: Responsible of UTH Team. Budget (UTH): € 118 343. Duration: 2012-15.

- Title: SOFON – Stochastic optimization framework for architecting complex wireless networks. Funding: GSRT – Education and Lifelong Learning – ARISTEIA: Supporting the Human Capital in order to Promote Research and Innovation. Position: Researcher. Budget: € 420 000. Duration: 2012-15.
- Title: StochOptPartialInfo – Optimization of stochastic systems under partial information and applications. Funding: GSRT – Education and Lifelong Learning – ARISTEIA II: Supporting the Human Capital in order to Promote Research and Innovation. Position: Researcher. Budget: € 50 000. Duration: 2014-15.
- Title: Productive4.0 – Electronics and ICT as enabler for digital industry and optimized supply chain management covering the entire product lifecycle. Funding: ECSEL JU Horizon 2020. Position: Responsible of UTH Team. Budget (UTH): € 325.000. Duration: 2017-20.

## PUBLICATIONS

### Dissertations

1. Liberopoulos G (1993) *Flow Control of Failure Prone Manufacturing Systems: Controller Design Theory and Applications*. PhD Dissertation, Department of Manufacturing Engineering, Boston University.

### Edited Book Volumes and Special Issues of Scientific Journals

1. Dallery Y, Liberopoulos G, Zijm WHM (2000) Editorial (special issue of Design and Manufacturing on Decentralized Control of Manufacturing Systems). *IIE Transactions* 32(10): v-vi.
2. Liberopoulos G, Tan B, Gershwin SB, Papadopoulos CT, Smith JM (2004) Preface (double volume on Stochastic Models of Production-Inventory Systems, Parts I-II). *Annals of Operations Research* 125(1-4):17-19, 126(1-4):17-19.
3. Liberopoulos G, Papadopoulos CT, Tan B, Smith JM, Gershwin SB (2005) Editorial: Stochastic Models for the Design, Coordination, and Control of Manufacturing Systems. *OR Spectrum* 27(2-3):167-169.
4. Liberopoulos G, Papadopoulos CT, Tan T, Smith JM, Gershwin SB (2006) Editorial – Stochastic Modeling of Manufacturing Systems: Advances in Design, Performance Evaluation and Control Issues, *Stochastic Modeling of Manufacturing Systems: Advances in Design, Performance Evaluation and Control Issues* (expanded reprint of *OR Spectrum* 27(2-3):2005), Springer, Berlin, ISBN: 978-3-540-26579-5, v-viii.
5. Buzacott J, Gershwin SB, Liberopoulos G, Meerkov SM, Papadopoulos C, Tan B, Smith JM (2008) Foreword (special issue on Stochastic Models for the Evaluation, Design, and Operation of Manufacturing Systems). *IIE Transactions* 40(3):161-161.
6. van Woensel T, Buzacott J, Gershwin S, Liberopoulos G, Smith JM, Meerkov S, Tan B (2011) Introduction to the special issue on Advances in Manufacturing Systems. *Annals of Operations Research* 182(1):1-3.
7. Liberopoulos G, Papadopoulos CT, Smith JM, Tolio T (2013) Editorial: Stochastic models of manufacturing and service system operations. *Annals of Operations Research* 209(1):1-3.
8. Liberopoulos G (2015) Preface. *Proc. 10<sup>th</sup> Conference on Stochastic Models of Manufacturing and Service Operations*. University of Thessaly Press, Volos, Greece, ISBN: 978-960-9439-33-6, vii-viii.

9. Tan B, Gershwin SB, Liberopoulos G, Meerkov SM, Papadopoulos CT (2015) Advances in stochastic models of manufacturing and service operations. *Annals of Operations Research* 231(1):1-3.
10. Liberopoulos G, Papadopoulos CT, Smith JM, Tempelmeier H, Tolio T (2016) Editorial: New Developments in Stochastic Models of Manufacturing and Service Operations. *International Journal of Production Research* 54(2):6102-6104.
11. Liberopoulos G, Heavey C, Helber S, Karaesmen F, Matta A (2018) Editorial: Contributions to stochastic models of manufacturing and service operations. *IIEE Transactions* 50(3):141-142.

### Book Chapters

1. Karaesmen F, Liberopoulos G, Dallery Y (2003) Production/inventory control with advance demand information. Shanthikumar JG, Yao DD, Zijm WHM, eds. *Stochastic Modeling and Optimization of Manufacturing Systems and Supply Chains*, International Series in Operations Research and Management Science, Vol. 63, Kluwer, Boston, MA, Ch. 10, 243-270.
2. Liberopoulos G, Tsikis I (2003) Unified modeling framework of multi-stage production-inventory control policies with lot-sizing and advance demand information. Shanthikumar JG, Yao DD, Zijm WHM, eds. *Stochastic Modeling and Optimization of Manufacturing Systems and Supply Chains*. International Series in Operations Research and Management Science, Vol. 63, Kluwer, Boston, MA, Ch. 11, 271-297.
3. Koukoumialos S, Liberopoulos G (2005) An analytical method for the performance evaluation of echelon kanban control systems. Liberopoulos G, Papadopoulos CT, Tan B, Smith JM, Gershwin SB, eds. *Stochastic Modeling of Manufacturing Systems: Advances in Design, Performance Evaluation and Control Issues* (expanded reprint of *OR Spectrum* 27(2-3) 2005), Springer, Berlin, Ch. 9, 193-222.
4. Liberopoulos G (2013) Production release control: Paced, WIP-based, or demand-driven? Revisiting the push/pull and make-to-order/make-to-stock distinctions. Smith JM, Tan B, eds. *Handbook of Stochastic Models and Analysis of Manufacturing System Operations*. International Series in Operations Research and Management Science, Vol. 192, Springer, New York, NY, Ch. 7, 211-247.

### Articles in Scientific Journals

1. Caramanis M, Liberopoulos G (1992) Perturbation analysis for the design of flexible manufacturing system flow controllers. *Operations Research* 40(6):1107-1125.
2. Liberopoulos G, Caramanis M (1994) Production control of manufacturing systems with production rate dependent failure rates. *IEEE Transactions on Automatic Control* 39(4):889-895.
3. Liberopoulos G, Caramanis M (1994) Infinitesimal perturbation analysis for second derivative estimation and design of manufacturing flow controllers. *Journal of Optimization Theory and Applications* 81(2):297-327.
4. Liberopoulos G, Hu J-Q (1995) On the ordering of optimal hedging points in a class of manufacturing flow control models. *IEEE Transactions on Automatic Control* 40(2):282-286.
5. Liberopoulos G, Caramanis M (1995) Dynamics and design of a class of parameterized manufacturing flow controllers. *IEEE Transactions on Automatic Control* 40(6):1018-1028.
6. Liberopoulos G, Caramanis M (1997) Numerical investigation of optimal policies for production flow control and set-up scheduling: Lessons from two-part-type, failure-prone FMSs. *International Journal of Production Research* 35(8):2109-2133.
7. Liberopoulos G, Dallery Y (2000) A unified framework for pull control mechanisms in multi-stage manufacturing systems. *Annals of Operations Research* 93(1-4):325-355.



8. Dallery Y, Liberopoulos G (2000) Extended kanban control system: Combining kanban and base stock. *IIE Transactions* 32(4):369-386.
9. Chaouiya C, Liberopoulos G, Dallery Y (2000) The extended kanban system for production coordination of assembly systems. *IIE Transactions* 32(10):999-1012.
10. Liberopoulos G, Tsarouhas P (2002) Systems analysis speeds up Chipita's food-processing line. *Interfaces* 32(3):62-76.
11. Liberopoulos G, Dallery Y (2002) Base stock versus WIP cap in single-stage make-to-stock production-inventory systems. *IIE Transactions* 34(7):627-636.
12. Liberopoulos G (2002) Production capacity modeling of alternative, nonidentical, flexible machines. *International Journal of Flexible Manufacturing Systems* 14(4):345-359.
13. Liberopoulos G, Dallery Y (2003) Comparative modelling of multi-stage production-inventory control policies with lot sizing. *International Journal of Production Research* 41(6):1273-1298.
14. Karaesmen F, Liberopoulos G, Dallery Y (2004) The value of advance demand information in production/inventory systems. *Annals of Operations Research* 126(1-4):135-157.
15. Tsarouhas P, Liberopoulos G (2004) Determining quality inspection frequency in an automated production line based on field failure data analysis. *Operational Research: An International Journal* 4(3):305-315.
16. Liberopoulos G, Tsarouhas P (2005) Reliability analysis of an automated pizza processing line. *Journal of Food Engineering* 69(1):79-96.
17. Liberopoulos G, Koukoumialos S (2005) Tradeoffs between base stock levels, numbers of kanbans and production lead times in production-inventory systems with advance demand information. *International Journal of Production Economics* 96(2):213-232.
18. Koukoumialos S, Liberopoulos G (2005) An analytical method for the performance evaluation of echelon kanban control systems. *OR Spectrum* 27(2-3):339-368.
19. Liberopoulos G, Kozanidis G, Tsarouhas P (2007) Performance evaluation of an automatic transfer line with WIP scrapping during long failures. *Manufacturing & Service Operations Management* 9(1):62-83.
20. Liberopoulos G (2008) On the tradeoff between optimal order-base-stock levels and demand lead-times. *European Journal of Operational Research* 190(1):136-155.
21. Liberopoulos G, Koukoumialos S (2008) On the effect of variability and uncertainty in advance demand information on the performance of a make-to-stock supplier. *MIBES Transactions International Journal* 2(1):95-114.
22. Andrianesis P, Liberopoulos G, Sakellaris K, Vlachos A (2009) Impacts of reserve and fixed costs on Greece's day-ahead scheduling problem. *Euro-Asian Journal of Sustainable Energy Development Policy* 2(2):45-53.
23. Liberopoulos G, Tsikis I, Delikouras S (2010) Backorder penalty cost coefficient "b": What could it be? *International Journal of Production Economics* 123(1):166-178.
24. Liberopoulos G, Kozanidis G, Hatzikonstantinou O (2010) Production scheduling of a multi-grade PET resin plant. *Computers and Chemical Engineering* 34(3):387-400.
25. Kozanidis G, Liberopoulos G, Pitsilkas C (2010) Flight and maintenance planning of military aircraft for maximum fleet availability. *Military Operations Research* 15(1):53-73.
26. Andrianesis P, Biskas P, Liberopoulos G (2011) An overview of Greece's wholesale electricity market with emphasis on ancillary services. *Electric Power Systems Research* 81(8):1631-1642.

27. Andrianesis P, Liberopoulos G, Kozanidis G, Papalexopoulos AD (2013) Recovery mechanisms in day-ahead electricity markets with non-convexities – Part I: Design and evaluation methodology. *IEEE Transactions on Power Systems* 28(2):960-968.
28. Andrianesis P, Liberopoulos G, Kozanidis G, Papalexopoulos AD (2013) Recovery mechanisms in day-ahead electricity markets with non-convexities – Part II: Implementation and numerical evaluation. *IEEE Transactions on Power Systems* 28(2):969-977.
29. Liberopoulos G, Pandelis DG, Hatzikonstantinou O (2013) The stochastic economic lot sizing problem for non-stop multi-grade production with sequence-restricted setup changeovers. *Annals of Operations Research* 209(1):179-205.
30. Kozanidis G, Kostarelou E, Andrianesis P, Liberopoulos G (2013) Mixed integer parametric bilevel programming for optimal strategic bidding of energy producers in day-ahead electricity markets with indivisibilities. *Optimization* 62(8):1045-1068.
31. Saharidis GKD, G. Kolomvos G, Liberopoulos G (2014) Modeling and solution approach for the environmental traveling salesman problem. *Engineering Letters* 22(2):70-74.
32. Kozanidis G, Gavranis A, Liberopoulos G (2014) Heuristics for flight and maintenance planning of mission aircraft. *Annals of Operations Research* 221(1):211-238.
33. Liberopoulos G, Andrianesis P (2016) Critical review of pricing schemes in markets with non-convex costs. *Operations Research* 64(1):17-31.
34. Liberopoulos G (2018) Performance evaluation of a production line operated under an echelon buffer policy. *IIE Transactions* 50(3):161-177.
35. Liberopoulos G (2019) Comparison of optimal buffer allocation in glow lines under installation buffer, echelon buffer, and CONWIP policies. *Flexible Services and Manufacturing Journal* <https://doi.org/10.1007/s10696-019-09341-y>.

### Working Papers

1. Liberopoulos G, Tsikis I (2007) Do stockouts undermine current sales and future customer demand? Statistical evidence from a wholesaler's historical data. Working Paper, Department of Mechanical and Industrial Engineering, University of Thessaly.
2. Liberopoulos G, Tsikis I (2007) Competing for customer goodwill on product availability, Working Paper, Department of Mechanical and Industrial Engineering, University of Thessaly.
3. Andrianesis P, Biskas P, Liberopoulos G (2011) The impact of emissions cost on mid-term generation scheduling: The case of the Greek electricity market. Working Paper, Department of Mechanical Engineering, University of Thessaly.

### Articles in Conference Proceedings

1. Liberopoulos G, Caramanis M (1991) Flow control of stochastic manufacturing systems: A simulation-based design approach using perturbation analysis for second derivative estimation. *Proc. 1991 American Control Conference*, IEEE, Boston, Massachusetts, 21-23 June, 455-456.
2. Dallery Y, Liberopoulos G (1995) A new kanban-type pull control mechanism for multi-stage manufacturing systems. *Proc. 3rd European Control Conference (ECC'95)*, EUCA/ IFAC/IEEE, Rome, Italy, 5-8 September, 4(2):3543-3548.
3. Liberopoulos G, Dallery Y (1995) On the optimization of a single-stage generalized kanban control system in manufacturing. *Proc. 1995 INRIA/IEEE Symposium on Emerging Technologies and Factory Automation (ETFA'95)*, Paris, France, 10-13 October, 3:437-444.
4. Liberopoulos G (1997) On pull production control systems in multi-stage manufacturing systems. *Proc. International Workshop on Performance Evaluation and Optimization of Production Lines*, Samos Island, Greece, 19-22 May, 61-72.

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