# SOTIRIOS PAPACHRISTOS

#### 1. PERSONAL DATA

Surname Papachristos
Name Sotirios

Birthplace Megalochari Arta

Work address Ret. Prof. Dept. of Mathematics, University of Ioannina

Section of Prob. Statistics and O.R.

451 10 Ioannina, GREECE

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Home address 8<sup>th</sup>, Papadopoulou Str. 45444 Ioannina, Greece

### 2. EDUCATION

1967 B.Sc In Mathematics (Grade 75 %), Aristotle University of Thesaloniki

Dept. of Mathematics Greece

1974 M.Sc In Probability and Statistics.

University of Sheffield, Department of Probability & Statistics, England

1977 Ph.D. in: Operations Research. Title. "Adaptive Dynamic programming and

Inventory Control". Supervisor: Prof. D.J. White

University of Manchester, Faculty of Economics, Dept. of Decision Theory

England.

## 3 SCH0LARSHIPS/HONOURS

1963 - 1966 National Scholarship Foundation of Greece (I.K.Y.)

1974 - 1977 NATO, Scholarship

2000 Nov. Honored by the Hellenic Operations Research Society, 30, for the excellent

organization of the 1st Special Conference of HELORS

2002 August Honored by the ISIR (International Society for Inventory Research), as

recognition of the "Outstanding service to the society and its members".

#### 4 ACADEMIC POSITIONS

1971 -1979 Research Assistant

1979 -1982 Assistant

1982- 2005. Lecturer Dept. of Mathematics, University of Ioannina, Section of Prob.

Statistics and O.R.

2005-.2009 Associate Prof. Dept. of Business Administration of food and Agricultural

Products, University of Ioannina.

2009-.2011 Prof. Dept. of Business Administration of food and Agricultural

Products, University of Ioannina.

2003-2004 Visiting Prof., Erasmus University of Rotterdam Holland Institute of

**Econometrics** 

2008-.2016 Part time Teaching at the Hellenic Open University (Long distance Learning

University)

## 5 RESEARCH

## **5.1** Thesis

- 1. Papachristos S., "Spectral Representation and Estimation of Spectrum", **MSc Dissertation**, University of Sheffield, UK, 1974. Supervisor Prof. A.M. Walker
- S. Papachristos, "Adaptive Dynamic Programming and Inventory Control", Ph.D Thesis, University of Manchester, UK, 1977. Supervisor Prof. D.J. White.

# **5.2 Publications in peer reviewed Journals:**

- 1. S. Papachristos, "A Note on the Dynamic Inventory Control Problem with Unknown Demand Distribution", *Management Science*, 1977, Vol. 23 (11), pp 1248-1251.
- I. S. Ganas and S. Papachristos, "Analytical Evaluation of Heuristics Performance for the Single Level Lot-Sizing Problem for Products with Constant Demand", *International Journal of Production Economics* 1997, Vol. 48, pp 129-139
- 3. S. Papachristos and I. S. Ganas, "Optimal policy and Stability regions for the Single Product Periodic Review Inventory Problem, with Stationary Demands", *Journal of the Operational Research Society*, 1998, Vol. 49, pp 165-175.
- S. Papachristos and K. Skouri, "An optimal Replenishment Policy for deteriorating Items with Time varying demand and Partial Exponential Type, Backlogging", Oper. Res. Let. 2000, Vol. 27 (4) pp 175-184.
- 5. K. Skouri and S. Papachristos. "A continuous review inventory model, with deteriorating items, time varying demand, linear replenishment cost, partially time varying backlogging", *Applied Mathematical Modelling*", (2002) Vol. 26 (5), pp 602-617.
- 6. S. Papachristos and K. Skouri, "An inventory model, with deteriorating items, time varying demand, and partially time varying backlogging, taking account of time value", *Management Sciences and Regional Development*, 2001, Vol. 3, pp 153-168
- 7. S. Papachristos and K. Skouri. "An inventory model, with deteriorating items, quantity discount, pricing and time dependent partial backlogging". *International Journal of Production Economics*, 2003, Vol. 83, pp 247-256.
- 8. K. Skouri and S. Papachristos. "Note on, Deterministic Inventory Lot-Size Models under Inflation with shortages and Deteriorating for fluctuating demand by Yang et al", *Naval Research Logistics*, 2002, Vol. 49, 527-529
- 9. K. Skouri and S. Papachristos. "Optimal stopping and restarting times for an EOQ model with deteriorating items, and time dependent partial backlogging", *International Journal of Production Economics*, 2003, Vol. 81-82, pp 525-531.

- Ganas I., Papachristos S. Makris V. "Implementation of a Production Planning System for VIKI S.A, a meat processing Industry (case study). Review of Economic Sciences, Published by TEI of Epiros Vol, 3, 2003 pp 149 163.
- K. Skouri and S. Papachristos. "Four inventory models for deteriorating items, with time varying demand, and partial backlogging", Optimal control and applications Methods, 2003 Vol 24, issue 6, pp 315-330
- 12. I. S. Ganas and S. Papachristos. "The single product lot sizing problem with constant parameters and backlogging: Exact results, a new solution and all parameter stability regions". *Operations Research Vol.* 53 (1) pp 170-176.
- 13. Papachristos, S., & Konstantaras (2006) I. "Economic production quantity model for items with imperfect quality". *International Journal of Production Economics (IJPE)*, Vol 100 (2006) pp 148-154.
- 14. I. Konstantaras and S. Papachristos (2006). Lot-sizing for a single-product recovery system with backordering, International Journal of Production Research, 44(10), 2031-2045.
- 15. I. Konstantaras and S. Papachristos (2007). Optimal policy and holding cost stability regions in a periodic review inventory system with manufacturing and remanufacturing options, European Journal of Operational Research, 178, 433-448.
- 16. I. Konstantaras, S.K. Goyal and S. Papachristos (2007). Economic ordering policy for an item with imperfect quality subject to the in-house inspection, International Journal of Systems Science, 38(6), 473-482.
- 17. I. Konstantaras and S. Papachristos (2008). A note on: Developing an exact solution for an inventory system with product recovery, International Journal of Production Economics, 111, page 707-712
- Maw-Sheng Chern, Hui-Ling Yang, Jinn-Tsair Teng, and Sotiris Papachristos "Partial Backlogging Inventory Lot-size Models for Deteriorating Items with Fluctuating Demand under Inflation". European Journal of Operational Research 191 (2008) 127–141
- S. Papachristos and A. Katsaros. (2008) "A periodic inventory model with stochastic demand, variable supplier's capacity and constant lead time operating in a fluctuating environment". IIE Transactions Vol. 40 356-366.
- 20. Konstantaras and S. Papachristos (2008). Note on: "An optimal ordering and recovery policy for reusable items". *Computers & Industrial Engineering*. 55(3), 729-734.
- 21. Skouri K., S. Papachristos and S. K. Goyal (2008) An EOQ model with trade credit period depending on the ordering quantity. *Journal of Information and Optimization Sciences*, 29 (5) 947-961.
- 22. K. Skouri, I. Konstantaras, S. Papachristos and I. Ganas (2009). Inventory models with ramp type demand rate, partial backlogging and Weibull deterioration rate, *European Journal of Operational Research*, 192(1),79-92.
- 23. I. Konstantaras, K. Skouri, S. Papachristos. Optimal pricing, return and modular design policy for Build-To-Order (BTO) products. *IMA Journal of Management Mathematics*, Volume 22 Issue 1 January 2011
- 24. Skouri K., I. Konstantaras, S. Papachristos and J.-T. Teng (2011). Supply chain models for deteriorating products with ramp type demand rate under permissible delay in payments, Expert Systems with Applications, 38, 14861οΩ½14869
- 25. Skouri K., I. Konstantaras, A.G. Lagodimos, S. Papachristos (2014). An EOQ model with rejection of defective batches, International Journal of Production Economics, 155, 148-154.

## **5.2 Publications in peer reviewed Conference Proceedings:**

- 1. K. Skouri, S. Papachristos and I Ganas,, "The state of ship and goat agricultural sector in the area of Hpiros Greece". 15° National Conference of ESI Ioannina, May 2002.
- 2. S. Papachristos and K. Skouri, "An inventory model with deteriorating items, time-varying demand and partially time-varying backlogging, taking into account of time value".  $17^{th}$  International Logistics Congress. Logistics from  $\alpha$  to  $\omega$ . Thessaloniki October 18-20, 2001 Greece. Proceedings –Logistics from  $\omega$  to  $\omega$ . Strategies and Applications, pp 559-571.
- 3. S. Papachristos and Israel David, "An Hybrid (Q, R) System for Delivery-on Demand in Lean Production", 15ov Conference of HELORS Tripoli, October 31 to 2 November 2002.
- 4. K. Skouri, S. Papachristos. "An inventory model with deteriorating products and variable demand".
- 5. S. Papachristos, M. Argyriou. "Project Compression, Linearization of convex time/trade off cost functions". 16ov Conference of HELORS, Larissa, September 25–27, 2003.
- 6. K. Skouri, S. Papachristos and I Ganas, "Forecasting Models of Sheep and Goat milk production in the region of Epirus", 1<sup>st</sup> International Conference on Quantitative Methods in Industry and Commerce (Q.M.I.C) May 26-27 2003, Athens Greece.
- Konstantaras I., K Skouri, S. Papachristos (2006). Optimal policy for pricing, return and modularity level for Build-To-Order (BTO) products. Proceedings of 11<sup>th</sup> ELA workshop pp 21-36, Grainau Germany June 28-30, 2006, p

#### **6 CONFERENCES ATTENDED**

#### **6.1 International with paper presentation:**

- S. Papachristos, "Dynamic Inventory Control Problem with Unknown Bernoulli Distribution". XXIII
   International Meeting of the Institute of Management Sciences, Athens, Greece, July 25-27, 1977.
- 2. S. Papachristos, "Adaptive Dynamic Programming and Inventory Control". 6<sup>th</sup> International Symposium on Inventories, Budapest Hungary, August 27-31, 1990..
- 3. S. Papachristos, "Dynamic Programming Functional Equation for a Class of Inventory Problems" 4<sup>th</sup> International symposium on Mathematical Programming, Amsterdam, The Netherlands, August 5-9, 1991
- 4. S. Papachristos, I. Ganas, "Optimal Solution to the Single Level Lot Sizing Problem (SLSP)", 14<sup>th</sup> European Conference of Operations Research, Jerusalem, Israel, July 3-6, 1995
- 5. I. Ganas, S. Papachristos, , "A Discrete Type Inventory Model with Backlogging". 10<sup>th</sup> International Symposium on Inventories, Budapest Hungary, August, 23-28 1998.
- 6. K. Skouri, and S. Papachristos, "Optimal stopping and restarting times for an EOQ model with deteriorating items, and time dependent partial backlogging". 11th International Symposium on Inventories, Budapest Hungary, August, 2-25, 2000.
- 7. S. Papachristos and K. Skouri, "An inventory model with deteriorating items, time-varying demand and partially time-varying backlogging-taking account of time value". SQM-5 Shipping, Transportation, Commerce and Digital Information Systems, 18-20 April 2001, Chios Greece

- 8. S. Papachristos and K. Skouri, "An inventory model with deteriorating items, time-varying demand and partially time-varying backlogging, taking into account of time value". 17<sup>th</sup> International Logistics Congress. Logistics from α το ω. Thessaloniki Greece, October 18-20, 2001.
- 9. S. Papachristos, S. Ganas, "Stability Regions for the single product lot sizing problem with constant parameters and Backlogging". 12<sup>th</sup> International Symposium on Inventories, Budapest Hungary, August 19-24, 2002.
- S. Papachristos and K. Skouri, "The production Inventory Problem of a product with Time Dependent Partial backlogging". 12th International Symposium on Inventories, Budapest Hungary, August 19-24, 2002.
- 11. S. Papachristos and A. Katsaros. "An inventory model in a fluctuating Environment with Random Demand, Random Yield and Constant lead Time" 12th International Symposium on Inventories, Budapest Hungary, August 22-27, 2004.
- 12. S. Papachristos and A. Katsaros. "An inventory model in a fluctuating Environment with Random Demand, Random Yield and Constant lead Time, some new results". Fifth International Conference on "Analysis and Modelling of Manufacturing Systems", May 20-25 Zakynthos, Greece 2005
- Ganas I., I. Konstantaras, S. Papachristos and K Skouri. Optimal ordering policies for the single level lot-sizing problem with lumpy demand, 14<sup>th</sup> International Working Seminar on Production Economics, Innsbruck, 20 – 24 February 2006.
- 14. K. Skouri, I. Konstantaras, S. Papachristos and I. Ganas, An Order Level Inventory System with Ramp Type Demand Rate, Partial Backlogging and Weibull Deterioration Rate, 12th International Symposium on Inventories, Budapest, August, 21-25, 2006.
- 15. Konstantaras I., K Skouri, S. Papachristos (2006). Optimal policy for pricing, return and modularity level for Build-To-Order (BTO) products. ELA (European Logistics Association) workshop, Grainau Germany June 28-36, 2006.
- 16. Skouri K., I. Konstantaras, S. Papachristos and I. Ganas, An inventory model for deteriorating items with ramp type demand rate, partial backlogging and permissible delay in payments, 22nd European Conference on Operational Research, Prague, July 8-11, 2007

#### **6.2** International: Without paper presentation

- 1 17<sup>th</sup> European meeting of statisticians August 24-28, 1987, Thessaloniki Greece
- 2 1st Balkan conference on Operational Research ,October 17-20 , 1988, Thessaloniki Greece
- 3 12<sup>th</sup> Triennial conference on operations research, June 25-29, 1990, Athens, Greece.
- 4 **Seventh** International Working Seminar on Production Economics, Feb. 17-21, 1992, Igls/Innsbruck, Austria.
- 5 **2**st Balkan Conference on Operational Research, October 18-21, 1993, Thessaloniki Greece
- 6 3st Balkan Conference on Operational Research, October 19-22, 1995, Thessaloniki Greece
- 7 **14**th Triennial Conference on Operational Research (IFORS 1996), July 8-12, 1996, Vancouver, Canada.
- 8 **Second** Aegean International Conference on "Analysis and Modelling of Manufacturing Systems", Tinos Island, May 16 20, 1999.
- 9 **6**<sup>st</sup> Balkan Conference on Operational Research, May 22-24, 2002, Thessaloniki Greece.

10 20<sup>th</sup> European Conference on Operation Research, "OR and the Management of Electronic Services" July 4-7 2004, Rhodes Greece

#### **6.3** National conferences

- 1. I have attended almost all, (nineteen) national conferences of the Hellenic Operations Research Society (HELORS) and I have contributed with papers on various topics.
- 2. I have attended most of the Hellenic Statistical Institute conferences and contributed with papers.
- 3. K. Skouri, I. Kostantaras, S. Papachristos. "An inventory model with Ramp type demand, Partial backlogging and Weibull Deterioration Rate". First National Conference of HSSS (Hellenic Society for Systems Studies) on Knowledge Management and Governing Systems Tripolis June 12-14, 2005 Greece.

# 7 CONFERENCES ORGANIZER/COMMITTEE PARTICIPATION

- Chair person and organizer of the: Third ISIR summer School. Topic "Inventory Modeling in Production and Supply Chains". August 25- 29 1997, Ioannina Greece
- Chair person and organizer of the first special conference of HELORS on the Topic "The contribution of Management in the Expansion of Primary Sector". Ioannina 29-31 October 1999.
- 3. Chair person and organizer of the 19<sup>th</sup> national conference **of HELORS** on the Topic. "**O.R in supply chain Management**" June 21-23 2007, Arta Greece. "
- 4. Member of the scientific committee for the 12<sup>th</sup>, 15<sup>th</sup>, 16<sup>th</sup>,18<sup>th</sup>,19<sup>th</sup>, 20<sup>th</sup> National Conferences of HELORS.
- 5. Member of the scientific committee of the 6<sup>th</sup> Balkan "Conference on Operation Research, a challenge for scientific and business collaboration" 22-25 May 2002 Thesaloniki Greece.
- 6. Member of the scientific committee for the 1<sup>st</sup>, 3<sup>rd</sup>, National Conferences of HSSS (Hellenic Society for Systemic Studies)

## 8 PARTICIPATION TO SUMMERS SCHOOLS/WORKSHOPS

 $1. \ \, \textbf{Second ISIR} \, \, \textbf{Summer School}, \, \textbf{August} \, \, \, \textbf{27-31}, \, \textbf{1995 Portoroz} \, , \, \textbf{Slovenia}.$ 

Topic: Inventory Modelling.

Paper given. "An Optimal Algorithm for the Single Product Periodic Review Inventory Problem, with Stationary Demand".

2. Third ISIR Summer School, August 25-29, 1997, Ioannina, Greece.

Topic: Inventory Modeling in Production and Supply Chains.

Paper given: Open Research Problems at the Inventory Control Field.

3. Workshop on Decision Sciences, Pecs Hungary, August 29-30,1997.

Paper given: "Bayesian Adaptive Control of an Inventory Model with Bernoulli Demand Distribution".

4. **Fifth ISIR** Summer School, August 06-12, 2001, Loftahammar, Sweden.

Paper given: "An inventory Model with deteriorating items, quality discount and time dependent partial backlogging (coauthor K. Skouri).

- 5. **ECOPT** Workshop, February 29<sup>th</sup> 2004, Rotterdam Holland.
- 6. The 6<sup>th</sup> Beta PhD Symposium, April 29 2004. Congrescentrum De Eenhoorn Amersfoort. Holland.
- 7. LIS (Logistics Information Systems). Belgian Dutch Research Seminar on Logistics Management, May 25<sup>th</sup> 2004, Rotterdam Holland.

8. IWDL 2004, International Workshop on Distribution Logistics, May 29<sup>th</sup> –June 04<sup>th</sup> 2004, Den Bosh,

### 9 LONG PERIOD SEMINARS ATTENDED

- Nato Advanced Studies Institute On "Discriminant Analysis and Its Applications", June 8-12, 1972, Athens, Greece.
- International Seminar on. "Computers and their Applications to Industry" Feb.26- March. 18, 1978, University of Patras Greece
- "Reverse Logistics and its effect to Industry", TMR REVLONG Network, 28-29 Νοεμβρίου 1999
   Athens Greece.

## 10 TEACHING EXPERIENCE

#### **Undergraduate level**

Introduction to Probability, Introduction to Statistics, Statistical Inference, Multivariate Analysis,
Discriminant Analysis, Linear Regression, Analysis of Variance, Stochastic Processes, Mathematical
programming, Dynamic Programming, Numerical Analysis, Mathematics for Economists
Calculus, Mathematics for Social sciences (Economists)

#### Postgraduate level

Linear programming, Integer Programming, Dynamic Programming, Project Management, Game Theory.
 Inventory Control, Production Planning, MRP systems.
 Statistical methods and Quality control.

## 11 LECTURE NOTES/BOOKS

Introduction to Numerical Analysis. In Greek. Ioannina 1971

Introduction to Probability and Statistics. In Greek. Ioannina 1980

Introduction to Dynamic Programming. In Greek. Ioannina 1981

Introduction to quantitative Methods. In Greek. Ioannina 2000

Translation into Greek language, of the bulletin "What is a survey" edited by the American Statistical Association. Ioannina Greece 1983

Proceeding of the Third ISIR Summer School. S.Papachristos, I Ganas Editors, Ioannina 1998.

### 12 MEMBERSHIP

- International Society for Inventory Research (ISIR). Member of the executive committee 1998-2002.
- Mathematical Programming Society.(MPS).
- Operational research Society of England.(ORS).
- Hellenic Operational Research Society (EEEE-HELLORS).
- Hellenic Statistical Society (**EΣI**).
- Hellenic Mathematical Society. (EME).

#### 13 A.EDITOR / REVIEWER

Form July 2003 until 2011 I served as an Associate Editor for the <u>International Journal of Systems Science</u>
I have reviewed and continue to review articles for the following Journals

- 1. APJOR- Asia Pacific Journal of Operations Research
- 2. AMM-Applied Mathematical Modeling
- 3. Annals of Operations Research
- 4. Automatica

- 5. COR-Computers and Operations Research
- 6. CC-Control and Cybernetics
- 7. CIE Computers and Industrial Engineering
- 8. Engineering Economics.
- 9. EJOR-European Journal of Operational Research.
- 10. MCM Mathematical and Computer Modelling
- 11. NAVAL-Naval Research Logistics Quarterly
- 12. ITOR-International Transactions of Operational Research
- 13. JORS-Journal of the Operational Research society
- 14. IJPE-International Journal of Production Economics.
- 15. IJIR -International Journal of Inventory Research
- 16. IJSS-International Journal of Systems Science.
- 17. JSSSE- Journal of Systems Science and Systems Engineering
- 18. OCAM-Optimal control and Application Methods.
- 19. Omega.
- 20. O.R Spectrum
- 21. TOR-Transactions in Operations Research
- 22. Zentralblatt fur Mathematik.

## 14 THESIS

#### Ph. D Major Supervisor

Ganas Ioannis. Lot sizing rules applied to MRP Systems

Awarded October 2001

Skouri Konstantina "Replenishment policies for deteriorating items with deterministic

demand and partial backlogging" Awarded May 2002

Konstantaras Ioannis Modified Wagner-Within algorithm in the reverse Logistic Problem

Awarded, May 2006

### Ph. D. Member of the examiners' committee

Katsaros Apostolis 1996 Queuing Systems with priorities and vacations. Completed

Moutzoukis Evagelos. 1997 Queuing Systems with repeated visit. Completed

Dimitriou John 2006 Still in progress.

### **MASTER dissertations**

I have supervised more than 10 dissertations for the Course "Master Degree In Statistics and O.R." offered by the Dept. of Mathematics.

I have also supervised many theses for students at undergraduate level

#### 15 PROJECTS/INDUSTRIAL CONSULTANCY

1/1/1996-

30/3/1998 Project leader of a group for the project: "Development of an automatic production planning and control system for VIKI S.A and Poultry Association of City Arta" Project financed by the Ministry of Development and Commerce of Greece. Budget. USD 350.000

01-12-1998

30-12-2000 Project Leader of a group of the project: "Development an MRP II system for DODONI S.A. Computerizing the Supply and Distribution chain for DODONI S.A." Budget. USD 200.000

I have also participated at many other smaller industrial projects and provided industrial advice to many others.

# 16 SOCRATES/ERASMUS EXCHANGE SCHEME

I have established and operating learning agreements with the following Universities. : Edinburgh England, Linkoping Sweden, Luneburg Germany , Frankfurt Oder Germany, Pecs Hungary. Lodz Poland,

## 17 ADMINISTRATION EXPERIENCE

I Have served and I am Still servicing on many University Committees.

#### 18 COMPUTING EXPERIENCE

Windows 2000, WORD, EXCEL, POWER POINT.

**COREL DRAW** 

LINDO, LINGO, GINO, WHAT IS BEST, BMDP, SPSS,, SOLVER