

**CURRICULUM VITAE**  
**Dr. Panagiotis H. Tsarouhas**  
Mech. Eng., M.Sc., Ph.D  
Associate Professor

**Technological Educational Institute of Central Macedonia, Hellas (Greece)**

Department of Supply Chain Management & Logistics

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**Personal Information**

Date of Birth: 27/08/1967

Place of Birth: Lamia, Greece

Family Situation: Married, three children

**Scientific Interests**

Production & Operations Management, Reliability & Maintainability analysis, Maintenance, Quality Engineering, Performance Evaluation, Operations Research / Management Science, Applied Probability, Automatic Control.

**Education**

2005 Ph.D in Quantitative Analysis of Reliability, Quality, and Performance of Automated Production Systems, Department of Mechanical & Industrial Engineering, University of Thessaly, Greece

2000 M. Eng. In Modern Analysis & Design Methods in Industry, Department of Mechanical & Industrial Engineering, University Of Thessaly, Greece

1991 B.S. in Mechanical Engineering, Universita degli Studi di Napoli, Federico II, Italy

**Professional Activities**

2016 – present: Associate Professor, Technological Educational Institute of Central Macedonia, Department of Logistics

2012 – 2016: Assistant Professor, Technological Educational Institute of Central Macedonia, Department of Logistics

2007 – 2012: Lecturer, Alexander Technological Educational Institute of Thessaloniki, Department of Logistics

2003 – 2007: Hellenic Ministry of Health and Social Solidarity, Technical Department

1994 – 2003: Food Industry Chipita International SA, Technical Department

1992 - 1994 : Hellenic Air Force, Officer of Technical Department

**Teaching and Research Position Held**

2006 – present: Tutor Professor in postgraduate course on Quality Assurance in Hellenic Open University

2014- present: Professor in postgraduate course on Logistics management in Technological Educational Institute of Central Macedonia, Greece

2005 – 2008 Assistant Professor, Department of Electronics Technological Education Institute of Lamia, Greece

2001 – 2004 Lecture, Department of Informatics and Computer Technology, Technological Education Institute of Lamia, Greece

2000 – 2004 Teaching and Research Assistant, Department of Mechanical & Industrial Engineering, University of Thessaly, Greece

## Honors

1. **Reviewer on the international Journals:** IEEE Transactions of Automation Science and Engineering (IEEE Publications), Journal of Manufacturing Science and Engineering (American Society of Mechanical Engineers - ASMA), Critical Reviews in Food Science and Nutrition (Taylor & Francis Group), The Service Industries Journal (Taylor & Francis Group), Journal of Food Science and Technology (Springer), The Total Quality Management Journal (Emerald Group Publishing Ltd), International Journal of Quality and Reliability Management (Emerald Group Publishing Ltd), Reliability Engineering & System Safety (Elsevier), Journal of Applied Polymer Science (Wiley), Journal of Food Engineering (Elsevier), International Journal of Production Research (Taylor & Francis Group), Production Planning & Control (Taylor & Francis Group), Production & Manufacturing Research (Taylor & Francis Group), International Journal of Computer Aided Engineering and Technology (Inderscience).
2. Editorial Board Member of the Journals: *Energy and Power Engineering* (ISSN:1947-3818), and *International Journal of Probability and Statistics* (ISSN: 2168-4871).
3. In charge of Research Committee of the Technological Education Institute of Central Macedonia, Greece, 2008-2010.
4. In charge of Internships ESPA of the Technological Education Institute of Central Macedonia, Greece, 2015 – present.
5. Member of Organizing Committee of 1<sup>st</sup> International Conference on Supply Chain, Katerini, Greece, 1&2 October 2010.
6. Member of Organizing Committee of 2<sup>st</sup> International Conference on Supply Chain, Katerini, Greece, 5&6 October 2012.
7. Member of Organizing Committee of 3<sup>st</sup> International Conference on Supply Chain, Athens, Greece, 7&8 November 2015.

## Book Chapters

1. **P.H. Tsarouhas**, (2018), “Statistical techniques of reliability, availability, and maintainability (RAM) analysis in industrial engineering”, Chapter in *Diagnostic Techniques in Industrial Engineering* (ed. by Mangey Ram and J. P. Davim), Springer International Publishing AG, pp. 207-232.
2. **P.H. Tsarouhas**, (2014), “Application of statistical approaches for analyzing the reliability and maintainability of food production lines: a case study of mozzarella cheese”, Chapter in *Mathematical and Statistical Methods in Food Science and Technology* (ed. by D. Granato and G. Ares), John Wiley & Sons, John Wiley & Sons, Inc., pp. 491-510.
3. I.S. Arvanitoyannis & **P.H. Tsarouhas**, (2010), “Food packaging materials for irradiation”, Chapter in *Irradiation of Food Commodities* (ed. by I.S. Arvanitoyannis), Elsevier, Burlington, MA, pp.43-64.

## Articles Published in Scientific Journals

1. **Tsarouhas P.** (2017). Evaluation of reliability, availability and maintainability of a milk production line. *International Journal of Industrial and Systems Engineering*, in press.
2. **Tsarouhas P.**, Makrygianni M., and Besseris G. (2018). Combat readiness evaluation of a fighter-jet using reliability and cluster analysis, *International Journal of Industrial and Systems Engineering*, in press.
3. **Tsarouhas P.** (2017). Reliability, availability and maintainability (RAM) analysis for wine packaging production line. *International Journal of Quality & Reliability Management*, in press.
4. **Tsarouhas P.** (2017). Reliability, Availability and Maintainability-RAM analysis of Cake production lines: a Case Study, *International Journal of Data Analysis Techniques and Strategies*, in press.
5. **Tsarouhas P.** and Makrygianni M. (2017). A framework for maintenance and combat readiness management of a jet fighter aircraft, *International Journal of Systems Assurance Engineering and Management*, Vol. 8, No. 2, pp. 1895-1909.

6. **Tsarouhas P.** and Besseris G. (2016). Maintainability analysis in shaving blades industry: a case study, *International Journal of Quality & Reliability Management*, Vol. 34, No 4, pp. 581-594.
7. **Tsarouhas, P. H.** and Fourlas, G. (2016). Mission reliability estimation of mobile robot system. *International Journal of Systems Assurance Engineering and Management*, Vol. 7, No 2, pp. 220-228.
8. **Tsarouhas, P. H.** (2015). A practical approach for reliability and maintainability analysis of repairable systems: a case study of polypropylene production for food packaging applications,” *International Journal of Reliability and Safety*, Vol. 9, No 4, pp. 255-271.
9. **Tsarouhas, P. H.** and Fourlas, G. (2015). Reliability and Maintainability Analysis of a Robotic System for Industrial Applications: A Case Study. *International Journal of Performability Engineering*, Vol. 11 (5), pp. 453-462.
10. **Tsarouhas, P. H.,** Achillas, Ch., Aidonis, D., Folinas, D., Maslis V. (2015), “Life Cycle Assessment of olive oil production in Greece”, *Journal of Cleaner Production*, Vol. 93, pp. 75-78.
11. **Tsarouhas P. H.** (2015), “Performance evaluation of the croissant production line with reparable machines: a case study”, *Journal of Industrial Engineering International*, Vol.11, pp. 101-110.
12. **Tsarouhas P. H.** (2015), "Maintainability analysis in the yogurt industry", *International Journal of Systems Assurance Engineering and Management*, Vol. 6, issue 2, pp. 119-128.
13. **Tsarouhas, P. H.,** Arvanitoyannis I. S. (2014), “Yogurt production line: Reliability analysis”, *Production & Manufacturing Research*, Vol. 2(1), pp. 11-23.
14. **Tsarouhas P. H.** (2015), “Evaluation of maintenance management through the overall equipment effectiveness of a yogurt production line in a medium-sized Italian company”, *International Journal of Productivity and Quality Management*, Vol. 16 (3), pp 298-311.
15. **Tsarouhas P. H.** (2013), “Equipment performance evaluation in a production plant of traditional Italian cheese”, *International Journal of Production Research*, Vol. 51 (19), pp.5897-5907.
16. **Tsarouhas P. H.** (2013), “Reliability analysis into hospital dialysis system: a case study”, *Quality and Reliability Engineering International*, Vol. 29 (8), pp 1235-1243.
17. **Tsarouhas P. H.** (2013), “Evaluation of overall equipment effectiveness in the beverage industry: a case study”, *International Journal of Production Research*, Vol. 51(2), pp. 515-523.
18. **Tsarouhas P. H.** (2012), “Reliability, Availability, and Maintainability (RAM) analysis in food production lines: a review”, *International Journal of Food Science & Technology*, Vol. 47(11), pp. 2243-2251.
19. **Tsarouhas, P. H.,** Arvanitoyannis, I. S. (2012), “Reliability and maintainability analysis to improve the operation of the limoncello production line”, *International Journal of Food Science & Technology*, Vol. 47(8), pp. 1669-1675.
20. **Tsarouhas, P. H.,** Arvanitoyannis, I. S. (2011), “Quantitative analysis for peach production line management”, *Journal of Food Engineering*, Vol. 105(1), pp. 28-35.
21. **Tsarouhas, P.** (2011), “A comparative study of performance evaluation based on field failure data for food production lines”, *Journal of Quality in Maintenance Engineering*, Vol. 17(1), pp. 26-39.
22. **Tsarouhas, P.,** Arvanitoyannis, I. (2010), “Reliability and Maintainability analysis of bread production line”, *Critical Review in Food Science and Nutrition*, Vol. 50(4), pp. 327-343.
23. **Tsarouhas, P. H.,** Arvanitoyannis, I. S. (2010), “Assessment of operation management for beer packaging line based on field failure data: a case study”, *Journal of Food Engineering*, Vol. 98(1), pp. 51-59.
24. **Tsarouhas P.H.** (2010), “Measuring the efficiency of Medical Equipment”, *International Journal of Applied Science, Engineering and Technology*, Vol. 6(1), pp. 15-20.
25. **Tsarouhas, P.H.,** Arvanitoyannis, I. S., Ampatzis Z. D. (2009), “A case study of investigating Reliability and Maintainability in a Greek Juice bottling Medium Size Enterprise (MSE) ”, *Journal of Food Engineering*, Vol. 95, pp. 479-488.

26. Arvanitoyannis, I., Stratakos, A. and **Tsarouhas P.** (2009), "Irradiation Applications in vegetables and fruits: A review", *Critical Review in Food Science and Nutrition*, Vol. 49, pp. 427-462.
27. **Tsarouhas, P.**, Arvanitoyannis, I., Varzakas T. (2009), "Reliability and Maintainability analysis of cheese (Feta) production line in a Greek medium-size company: A case study", *Journal of Food Engineering*, Vol. 94, pp. 233-240.
28. **Tsarouhas, P.**, Varzakas, T., Arvanitoyannis I., (2009), "Reliability and Maintainability Analysis of Strudel Production line with experimental data; A case study", *Journal of Food Engineering*, Vol. 91, pp. 250-259.
29. **Tsarouhas, P.** (2009), "Classification and Calculation of Primary Failure Modes in Bread Production Line", *Reliability Engineering & System Safety*, Vol. 24, pp. 551-557.
30. **Tsarouhas, P.** (2007), "Implementation of Total Productive Maintenance in Food Industry: a case study", *Journal of Quality in Maintenance Engineering*, Vol. 13, No.1, pp. 5-18.
31. Liberopoulos, G., Kozanidis, G., **Tsarouhas, P.** (2007), "Performance Evaluation of an Automatic Transfer Line with WIP Scrapping during Long Failures", *Manufacturing & Service Operations Management*, Vol. 9, No. 1, pp. 62-83.
32. Avlonitis, S., Pappas, M., Moutesidis, K., Pavlou, M., **Tsarouhas, P.**, Vlachakis, V., (2007), "Water Resources Management by a Flexible Wireless Broadband Network", *Desalination*, Vol. 206, pp. 286-294.
33. **Tsarouhas, P.**, Nazlis, D. (2006), "Industrial Systems Maintenance under the Light of Reliability", *Information Technology Journal*, Vol. 5, No. 1, pp. 13-17.
34. **Tsarouhas, P.** (2005), "Analysing Event Data from a Repairable Automated Systems: A Case Study", *Information Technology Journal*, Vol. 4, No. 3, pp. 228-232.
35. **Tsarouhas, P.** (2005), "Reliability and Maintenance Management for Industrial Systems", *Asian Journal of Information Technology*, Vol. 4, No. 5, pp. 498-501.
36. Liberopoulos, G. and **Tsarouhas, P.**, (2005), "Reliability Analysis of an Automated Pizza Processing Line", *Journal of Food Engineering*, Vol. 69, No. 1, pp. 79-96.
37. **Tsarouhas, P.**, and Liberopoulos, G., (2004), "Determining Quality Inspection Frequency in an Automated Production Line Based on Field Failure Data Analysis", *Operational Research - An International Journal*, Vol. 4, No. 3, pp. 305-315.
38. Liberopoulos, G., and **Tsarouhas, P.**, (2002), "Systems Analysis Speeds Up Chipita's Food Processing Line", *INTERFACES, International Journal of the Institute for Operations Research and the Management Sciences*, Vol. 32, No. 3, pp. 62-76.

**Articles Published in International Conference Proceedings**

1. **Tsarouhas, P.** & Furlas, G. (2015), "Maintainability analysis of the mobile robot", 16th IEEE International Symposium on Computational Intelligence and Informatics, 19–21 November, Budapest, Hungary, pp. 47-52.
2. **Tsarouhas, P.** & Makropoulou, M. (2015), "Life cycle analysis of pomegranate juice production based on ISO 14040", 3<sup>rd</sup> International Conference on Supply Chain, Athens, Greece, 7&8 November.
3. **Tsarouhas, P.** & Sapounas, A. (2015), "Performance analysis and quality in a tomato production line: Case study", 3<sup>rd</sup> Olympus International Conference on Supply Chain, Athens, Greece, 7&8 November.
4. **Tsarouhas, P.** & Keramidaris, D. (2015), "Survival analysis and performance evaluation of a paper bags production line", 3<sup>rd</sup> International Conference on Supply Chain, Athens, Greece, 7&8 November.
5. **Tsarouhas, P.** & Vergidis, Ch. (2014), "Application Standard ISO 22000:2005 in a Bread Manufacturing", The 11th Student Conference on Management Science and Technology, Athens, Greece, May 13.
6. **Tsarouhas, P.** & Furlas, G. (2014), "Reliability analysis of the mobile robot: a case study", 2014 International Conference on Mechanical Engineering (ME '14), Venice, Italy, March 15-17, Vol. 1, pp. 151-155.

7. **Tsarouhas, P.** & Xatzikraniotis D. (2012), “Application of ISO 22000:2005 and comparison with HACCP on a company manufacturing and packaging of frozen cooked bean”, *2<sup>nd</sup> International Conference on Supply Chain*, Katerini, Greece, 5&6 October.
8. **Tsarouhas, P.** & Avramidou, A. (2012), “Estimation of the overall equipment effectiveness and the operation management for plastic window frames”, *2<sup>nd</sup> International Conference on Supply Chain*, Katerini, Greece, 5&6 October.
9. **Tsarouhas, P.**, Trokanas, A & Eukarpidou, M. (2012), “Total quality management systems with the use of quality tools in a Greek 3PL company”, *2<sup>nd</sup> International Conference on Supply Chain*, Katerini, Greece, 5&6 October.
10. **Tsarouhas, P.**, LEMONIA, M (2011), “Estimation of performance measurement and operation in a low voltage insulate conductors production line”, *7<sup>th</sup> Maintenance Forum*, Athens Greece, 13-15 October.
11. **Tsarouhas, P.**, Arampatzaki, D. (2010), “Application of Failure Modes and Effects Analysis (FMEA) of a Ceramic Tiles Manufacturing Plant”, *1<sup>st</sup> International Conference on Supply Chain*, Katerini, Greece, 1&2 October.
12. Manola, V. and **Tsarouhas, P.** (2010), “Application of Total Quality Management (TQM) in Educational Organisms. A Case Study: Secretariat of Logistics’ Department”, *1<sup>st</sup> International Conference on Supply Chain*, Katerini, Greece, 1&2 October.
13. **Tsarouhas, P.**, Kokkinogoulis, Ch. (2010), “Reliability Analysis and Performance Evaluation of Polypropylene Production Line”, *1<sup>st</sup> International Conference on Supply Chain*, Katerini, Greece, 1&2 October.
14. **Tsarouhas, P.**, LEMONIA, M. (2010), “Measurement of the Overall Equipment Effectiveness (OEE) and estimation of operation management for isolate conductor production line”, *1<sup>st</sup> International Conference on Supply Chain*, Katerini, Greece, 1&2 October.
15. **Tsarouhas, P.**, Voudouroglou, G. (2010), “Practical Methods of Reliability and Availability Analysis of Reparable Production Systems”, *1<sup>st</sup> International Conference on Supply Chain*, Katerini, Greece, 1&2 October.
16. **Tsarouhas, P.** (2006), “Reliability of Complex Systems”, *18<sup>th</sup> Conference on Operations Research - Planning, Information Retrieval and Knowledge Management*, Kozani, Greece, 15-17 June, Vol. II, pp. 971-981.
17. Liberopoulos, G., Kozanidis, G. and **Tsarouhas, P.** (2005), “Analysis of a Bufferless, Paced, Automatic Transfer Line with Massive Scrapping of Material during Long Failures”, *5<sup>th</sup> International Conference on ‘Analysis of Manufacturing Systems - Production Management’*, Zakynthos Island, Greece, May 20-25, Vol. 1, pp. 119-126.
18. **Tsarouhas, P.**, Liberopoulos, G. (2005), “Reliability, Quality & Maintenance of Automatically Production Systems”, *4<sup>th</sup> International Congress on Food Technology, entitled: Accessing Useful Technologies...Optimizing Food Safety and Nutrition*, Piraeus, Greece, February 18-19, Vol. 1, pp. 359-371.
19. **Tsarouhas, P.**, Liberopoulos, G. (2003), “Reliability data analysis and quality control in an Automated Production Line Based on Field Failure Data Analysis”, *16<sup>th</sup> Conference of the Greek Society for Operations Research on Project Management*, Larissa, Greece, September 25-27, Vol. B’, pp. 205-214.

#### **Funded R&D Projects**

1. **Reliability, availability and maintainability (RAM) analysis for wine packaging production line.** Research program from the Technological Education Institute of Central Macedonia Greece, Research Committee under grant SMF/LOG/080217-15/06.
2. **Evaluation of reliability, availability and maintainability of a milk production line.** Research program from the Technological Education Institute of Central Macedonia Greece, Research Committee under grant SMF/LOG/161116-248/05.
3. **Reliability, Availability and Maintainability-RAM analysis of Cake production lines: a Case Study.** Research program from the Technological Education Institute of Central Macedonia Greece, Research Committee under grant SMF/DL/220916-195/04.

4. **Combat readiness evaluation of a fighter-jet using reliability and cluster analysis.** Research program from the Technological Education Institute of Central Macedonia Greece, Research Committee under grant SMF/LOG/030915-156/03.
5. **Maintainability analysis in shaving blades industry: a case study.** Research program from the Technological Education Institute of Central Macedonia Greece, Research Committee under grant SMF/DL/070716-170/02.
6. **A framework for maintenance and combat readiness management of a jet fighter aircraft.** Research program from the Technological Education Institute of Central Macedonia Greece, Research Committee under grant SMF/DL/200116-1/01.
7. **Fault Diagnosis and accommodation of wheeled mobile Robots.** Research program «Archimedes III» funded by grants from the European Social Fund (ESF) and the Ministry of Education & Religious Affairs, Culture & Sports through the operational program «Education and Lifelong Learning».
8. **Securing transit containers (setracon),** (code: 2.1.1.77205.364, mis etc 2264) Program: black sea basin joint operational programme. Duration: 12.07.2013-11.07.2015.

#### **Theses Student Advising**

- Master's advising: graduated 54 MS students, currently advising 5 MS students
- Diploma advising: graduated 46 Diploma students, currently advising 4 Diploma students