

Curriculum Vitae

Name: Vassilis S. Kouikoglou

Address: Technical University of Crete
Department of Production Engineering and Management
University Campus, Chania 73100, GREECE

Tel.: +30 28210 37238

Fax: +30 28210 37539

Email: kouik@dpem.tuc.gr

EDUCATION

- Diploma in electrical engineering, National Technical University of Athens, Athens, Greece, 1985
- Ph.D. in production engineering and management, Technical University of Crete, Chania, Greece, 1989

EXPERIENCE

Dec. 2004–present: Professor, Department of Production Engineering and Management (DPEM), Technical University of Crete, Greece

Dec. 2017–present: Director of the Computer Aided Manufacturing (CAM) Laboratory, DPEM

Sep. 2005–Aug. 2007: Chairman, DPEM

Aug 2000–Dec. 2004: Associate Professor, DPEM

Sep. 1995–Aug 2000: Assistant Professor, DPEM

Sep. 1991–Aug. 1995: Adjunct Faculty, DPEM

1990–Sep. 1991: Mechanical Engineer, Engineer Corps, Greek Army

1986–1989: Teaching Assistant, DPEM

ORGANIZATIONS

- IEEE, senior member
- Technical Chamber of Greece, member
- Sigma Xi, member

TAUGHT COURSES

- Production systems (inventory control, demand forecasting, scheduling)
- Production networks (queueing theory)
- Simulation (discrete-event modeling)
- Stochastic processes

- Quality control
- Material requirements planning
- Systems reliability, maintenance, and replacement
- Production scheduling (graduate)

DISTINCTIONS

- Best paper award, 2012 World Automation Congress, Puerto Vallarta, Mexico, 2012
- Award for Excellence in Teaching 2017, Technical University of Crete

RESEARCH INTERESTS

- Production systems analysis, simulation, and optimization
- Sustainable development

EDITORIAL RESPONSIBILITIES

- Journal of Intelligent and Robotic Systems, Springer; Editor-At-Large (2015–), Senior Editor (2009–2014), Associate Editor (2008)
- ISRN Industrial Engineering, Hindawi; member of editorial board (2013–2014)
- 5th (2009) and 6th (2010) IEEE Conference on Automation Science and Engineering; Associate Editor
- 4th (2005), 5th (2007), 6th (2009), 7th (2011) International Conferences on Management of Technological Changes; member of the Scientific Committees
- 4th International Symposium and 26th National Conference on Operational Research, Chania, Crete, Greece, June 4-6, 2015; member of the Scientific Committee
- 21st (2013), 24th (2016), 25th (2017) Mediterranean Conference on Control and Automation (MED); member of the International Program Committees

PUBLICATIONS

Books

1. V. S. Kouikoglou and Y. A. Phillis, *Hybrid Simulation Models of Production Networks*, Kluwer, 2001
2. R. Zhang, Y.A. Phillis, and V. S. Kouikoglou, *Fuzzy Control of Queuing Systems*, Springer, 2005
3. Y. A. Phillis and V. S. Kouikoglou, *Fuzzy Measurement of Sustainability*, Nova Science Publishers, 2009
4. V. S. Kouikoglou and D. Konstantas, *Simulation of Discrete Event Systems* (in Greek), DISIGMA Publications, 2016

Research Papers

1. Y. A. Phillis and V. S. Kouikoglou, "Minimax estimation and control of multiplicative systems," *Control and Dynamic Systems*, C. T. Leondes (Ed.), 31, pp. 93–124, 1989
2. V. S. Kouikoglou, "A model for two-stage production lines with scrapping,"

- Foundations of Computing and Decision Sciences**, 15(2), pp. 77–93, 1990
3. V. S. Kouikoglou and Y. A. Phillis, "An exact discrete-event model and control policies for production lines with buffers," **IEEE Transactions on Automatic Control**, 36(5), pp. 515–527, 1991
 4. Y. A. Phillis and V. S. Kouikoglou, "Techniques in modeling and control policies for production networks," *Control and Dynamic Systems*, C. T. Leondes (Ed.), 47, pp. 1–50, 1991
 5. V. S. Kouikoglou and Y. A. Phillis, "Trace bounds on the covariances of continuous-time systems with multiplicative noise," **IEEE Transactions on Automatic Control**, 38(1), pp. 138–142, 1993
 6. V. S. Kouikoglou, "A note on the design of k-out-of-n systems," **Microelectronics and Reliability**, 33(3), p. 445, 1993
 7. V. S. Kouikoglou and Y. A. Phillis, "Minimax design of two-state k-out-of-n systems," **Applied Stochastic Models and Data Analysis**, 9(3), pp. 245–250, 1993
 8. N. C. Tsourveloudis, V. S. Kouikoglou, and Y. A. Phillis, "Fuzzy regression for the prediction of Paraquat poisonings in Crete," **Systems Analysis Modeling Simulation**, 13(3-4), pp. 239–245, 1993
 9. V. S. Kouikoglou, "Single sampling plans for attributes satisfying an arbitrary set of constraints—a graphical approach," **Microelectronics and Reliability**, 34(6), pp. 1071–1077, 1994
 10. V. S. Kouikoglou and Y. A. Phillis, "Discrete event modeling and optimization of production lines with random rates," **IEEE Transactions on Robotics and Automation**, 10(2), pp. 153–159, 1994
 11. V. S. Kouikoglou and Y. A. Phillis, "An efficient discrete-event model for production networks of general geometry," **IIE Transactions**, 27(1), pp. 32–42, 1995
 12. V. S. Kouikoglou and N. C. Tsourveloudis, "Eigenvalue bounds on the solutions of coupled Lyapounov and Riccati equations," **Linear Algebra and Its Applications**, 235, pp. 247–259, 1996
 13. Y. A. Phillis and V. S. Kouikoglou, "A continuous-flow model for unreliable production networks of the finite queue type," **IEEE Transactions on Robotics and Automation**, 12(4), pp. 505–515, 1996
 14. V. S. Kouikoglou and Y. A. Phillis, "A continuous-flow model for production networks with finite buffers, unreliable machines, and multiple products," **International Journal of Production Research**, 35(2), pp. 381–397, 1997
 15. Y. A. Phillis, V. S. Kouikoglou, D. Sourlas, and V. Manousiouthakis, "Design of serial production systems using discrete event simulation and nonconvex programming techniques," **International Journal of Production Research**, 35(3), pp. 753–766, 1997
 16. V. S. Kouikoglou and Y. A. Phillis, "Review of a fast simulation method for the analysis of queuing networks," **Applied Stochastic Models and Data Analysis**, 13(2), pp. 73–83, 1997
 17. V. S. Kouikoglou, "Sensitivity analysis and decomposition of unreliable production lines with blocking," **Annals of Operations Research**, 93, pp. 245–264, 2000
 18. V. S. Kouikoglou, "Optimal rate allocation in unreliable, assembly/disassembly production networks with blocking," **IEEE Transactions on Robotics and Automation**, 16(4), pp. 429–434, 2000

19. V. S. Kouikoglou and Y. A. Phillis, "Design of product specifications and control policies in a single-stage production system," **IIE Transactions**, 34, pp. 591–600, 2002
20. V. S. Kouikoglou, "An efficient discrete event model of assembly/disassembly production networks," **International Journal of Production Research**, 40(17), pp. 4485–4503, 2002
21. L. A. Andriantiatsaholiniaina, V. S. Kouikoglou, and Y. A. Phillis, "Evaluating strategies for sustainable development: Fuzzy logic reasoning and sensitivity analysis," **Ecological Economics**, 48(2), pp. 149–172, 2004
22. Y. A. Phillis, V. S. Kouikoglou, and L. A. Andriantiatsaholiniaina, "Sustainable development: a definition and assessment," **Environmental Engineering and Management Journal**, 2(4), pp. 345–355, 2003
23. S. Ioannidis, V. S. Kouikoglou, and Y. A. Phillis, "Coordinating quality, production, and sales in manufacturing systems," **International Journal of Production Research**, 42(18), pp. 3947–3956, 2004.
24. S. Ioannidis, V. S. Kouikoglou, and Y. A. Phillis, "Analysis of admission and inventory control policies for production networks," **IEEE Transactions on Automation Science and Engineering**, 5(2), pp. 275–288, 2008.
25. S. Ioannidis and V. S. Kouikoglou, "Revenue management in single-stage CONWIP production systems," **International Journal of Production Research**, 46(22), pp. 6513–6532, 2008
26. Y. A. Phillis, V. S. Kouikoglou, and V. Kouloumpis, "Sustainability ranking and critical sustainability factors of nations," in *Ecological Economics Research Trends*, C. C. Pertsova (Ed.), Nova Science Publishers, ISBN 1-60021-941-1, pp. 149–170, 2008.
27. V. D. Kouloumpis, V. S. Kouikoglou, and Y. A. Phillis, "Sustainability assessment of nations and related decision making using fuzzy logic," **IEEE Systems Journal**, 2(2), pp. 224–236, 2008.
28. Y. A. Phillis, V. S. Kouikoglou, and X. Zhu, "Fuzzy assessment of material recyclability and its applications," **Journal of Intelligent and Robotic Systems**, 55(1), pp. 21–38, 2009
29. G. K Saharidis, V. S. Kouikoglou, and Y. Dallery, "Centralized and decentralized control policies for a two-stage stochastic supply chain with subcontracting," **International Journal of Production Economics**, 117(1), pp. 117–126, 2009
30. V. S. Kouikoglou and Y. A. Phillis, "On the monotonicity of hierarchical sum-product fuzzy systems," **Fuzzy Sets and Systems**, 160(24), pp. 3530–3538, 2009
31. G. Giannakis, V.S. Kouikoglou, and S. Nikitas, "Workflow analysis of production lines with complete inspection and rework loops," **International Journal of Production Research**, 48(24), pp. 7321–7336, 2010
32. Y. A. Phillis, V. S. Kouikoglou, and V. Manousiouthakis, "A review of sustainability assessment models as system of systems," **IEEE Systems Journal**, 4(1), pp. 15–25, 2010
33. A. A. Economopoulos and V. S. Kouikoglou, "Lead-time analysis and a control policy for production lines," **International Journal of Production Research**, 49(7), pp. 2019–2034, 2011
34. V. S. Kouikoglou and Y. A. Phillis, "Application of a fuzzy hierarchical model to the assessment of corporate social and environmental sustainability,"

Corporate Social Responsibility and Environmental Management, 18(4), pp. 209–219, 2011

35. A. A. Economopoulos, V. S. Kouikoglou, and E. Grigoroudis, "The base stock/base backlog control policy for a make-to-stock system with impatient customers," **IEEE Transactions on Automation Science and Engineering**, 8(1), pp. 243–249, 2011
36. Y. A. Phillis, E. Grigoroudis, and V. S. Kouikoglou, "Sustainability ranking and improvement of countries," **Ecological Economics**, 70(3), pp. 542–553, 2011
37. E. Grigoroudis, V. S. Kouikoglou, and Y. A. Phillis, "Approaches for measuring sustainability," in *Global Sustainable Development and Renewable Energy Systems*, P. Olla (Ed.), Information Science Reference (IGI Global), ISBN 978-1-4666-1625-7, pp. 101–130, 2012
38. Y. A. Phillis and V. S. Kouikoglou, "System-of-Systems hierarchy of biodiversity conservation problems," **Ecological Modelling**, vol. 235-236, pp. 36–48, 2012. doi: 10.1016/j.ecolmodel.2012.03.032
39. E. Grigoroudis, V. S. Kouikoglou, and Y. A. Phillis, "A fuzzy paradigm for the sustainability evaluation of energy systems," in *Assessment and Simulation Tools for Sustainable Energy Systems*, F. Cavallaro (ed.), Green Energy and Technology 129, Springer-Verlag London, pp. 205–224, 2013. doi: 10.1007/978-1-4471-5143-2_10
40. S. Ioannidis, O. Jouini, A. A. Economopoulos, and V. S. Kouikoglou, "Control policies for single-stage production systems with perishable inventory and customer impatience," **Annals of Operations Research**, 209(1), 115–138, 2013. doi: 10.1007/s10479-012-1058-9
41. Y. A. Phillis, A. M. Madni, E. Grigoroudis, F. Kanellos, V. S. Kouikoglou, S. Papaefthimiou, "Why climate action is urgent," **The Bridge**, 44(3), 30–37, 2014
42. E. Grigoroudis, V. S. Kouikoglou, and Y. A. Phillis, "SAFE 2013: Sustainability of countries updated," **Ecological Indicators**, vol. 38, pp. 61–66, 2014. doi: 10.1016/j.ecolind.2013.10.022
43. E. Grigoroudis, V. S. Kouikoglou, and Y. A. Phillis, "Energy sustainability of countries," in *Handbook of Research on Sustainable Development and Economics*, K. D. Thomas (ed.), pp. 96–117, IGI Global, 2015. doi: 10.4018/978-1-4666-8433-1.ch006
44. F. D. Kanellos, E. Grigoroudis, C. Hope, V. S. Kouikoglou, and Y. A. Phillis, "Optimal GHG emissions abatement and aggregate economic damages of global warming," **IEEE Systems Journal**, forthcoming. doi: 10.1109/JSYST.2014.2376493
45. E. Grigoroudis, F. D. Kanellos, V. S. Kouikoglou, and Y. A. Phillis, "Optimal abatement policies and related behavioral aspects of climate change," **Environmental Development**, vol. 19, pp. 10–22, 2016. doi: 10.1016/j.envdev.2016.04.002
46. E. Grigoroudis, F. D. Kanellos, V. S. Kouikoglou, and Y. A. Phillis, "The challenge of the Paris Agreement to contain climate change," **Intelligent Automation and Soft Computing**, forthcoming. doi:10.1080/10798587.2017.1292716
47. Y. A. Phillis, V. S. Kouikoglou, and C. Verdugo, "Urban sustainability assessment and ranking of cities," **Computers, Environment and Urban Systems**, 64, pp. 254–265, 2017. doi: 10.1016/j.compenvurbsys.2017.03.002
48. D. Konstantas, S. Ioannidis, V. S. Kouikoglou, and E. Grigoroudis, "Linking product quality and customer behavior for performance analysis and

optimization of make-to-order manufacturing systems," **International Journal of Advanced Manufacturing Technology**, forthcoming. doi: 10.1007/s00170-017-1225-x

49. E. Gkika, D. Chochlakis, Y. Tselentis, C. Zopounidis, V. S. Kouikoglou, K. Gkikas, A. Psaroulaki, "A retrospective data analysis of Legionella pneumophila diagnostic procedures and their impact on patients' management: The experience of a rapid point-of-care test," **International Journal of Data Science**, accepted.