Dr.S.Vinodh

Associate Professor

Department of Production Engineering

National Institute of Technology Tiruchirappalli

Tiruchirappalli - 620015

Tamil Nadu, India.

Landline: 0431-2503520 Phone: +91-9952709119

Email: vinodh_sekar82@yahoo.com

Fax: +91-431-2500133

International Journal Publications: 61

LIST OF PUBLICATIONS

- 1. Aadithya, B. G., Asokan, P., & Vinodh, S. (2020). Application of interpretive structural modelling for analysis of lean adoption barriers in heavy industry. International Journal of Lean Six Sigma.
- 2. Vinodh, S. (2020). Sustainable Manufacturing: Concepts, Tools, Methods and Case Studies. CRC Press.
- 3. Agrawal, R., & **Vinodh, S**. (2020). Life Cycle Assessment of an Additive Manufactured Automotive Component. In *Advances in Additive Manufacturing and Joining* (pp. 219-228). Springer, Singapore.
- 4. **Vinodh, S.**, & Agrawal, R. (2019). Application of Interpretive Structural Modelling for analysis of factors influencing Sustainability in Higher Education. In *Higher Education and Sustainability* (pp. 117-131). CRC Press.
- 5. Kumar, S. S., & **Vinodh, S**. (2019). Application of interpretive structural modelling for analysis of factors influencing composite fabrication using additive manufacturing. *International Journal of Materials Engineering Innovation*, 10(3), 218-245.
- 6. Agrawal, R., & **Vinodh, S**. (2019). State of art review on sustainable additive manufacturing. *Rapid Prototyping Journal*.
- 7. Agrawal, R., & **Vinodh, S**. (2019). Application of total interpretive structural modelling (TISM) for analysis of factors influencing sustainable additive manufacturing: a case study. *Rapid Prototyping Journal*.
- 8. Ruben, R. B., **Vinodh, S.**, & Asokan, P. (2019). Application of multi-grade fuzzy and ANFIS approaches for performance analysis of Lean Six Sigma system with sustainable considerations. *International Journal of Services and Operations Management*, 33(2), 239-261.
- 9. **Vinodh, S.**, & Asokan, P. (2019). State of art perspectives of lean and sustainable manufacturing. *International Journal of Lean Six Sigma*.
- 10. Thirupathi, R. M., **Vinodh, S.**, Ben Ruben, R., & Antony, J. (2019). Application of environmentally conscious manufacturing strategies for an automotive component. *International Journal of Sustainable Engineering*, *12*(2), 95-107.
- 11. **Vinodh, S.**, & Manjunatheshwara, K. J. (2019). 16 ChAPtEr Models and Approaches for Sustainable Performance Measurement. *Sustainable Material Forming and Joining*, 367.
- 12. Thirupathi, R. M., **Vinodh, S.**, & Dhanasekaran, S. (2019). Application of system dynamics modelling for a sustainable manufacturing system of an Indian automotive

- component manufacturing organisation: a case study. Clean Technologies and Environmental Policy, 1-17.
- 13. Vimal, K. E. K., **Vinodh, S**., & Jayakrishna, K. (2019). Application of fuzzy QFD for improving the process sustainability characteristics: a case study. *International Journal of Services and Operations Management*, 32(2), 173-201.
- 14. Manjunatheshwara, K. J., & **Vinodh, S**. (2018). Grey-based decision-making method for sustainable material selection of tablet device enclosure. *Clean Technologies and Environmental Policy*, 20(10), 2345-2356.
- 15. Manjunatheshwara, K. J., & **Vinodh, S**. (2018). Application of TISM and MICMAC for analysis of influential factors of sustainable development of tablet devices: a case study. *International Journal of Sustainable Engineering*, 11(5), 353-364.
- 16. Muruganantham, G., **Vinodh, S**., Arun, C. S., & Ramesh, K. (2018). Application of interpretive structural modelling for analysing barriers to total quality management practices implementation in the automotive sector. *Total Quality Management & Business Excellence*, 29(5-6), 524-545.
- 17. Anand, M. B., & **Vinodh, S**. (2018). Application of fuzzy AHP–TOPSIS for ranking additive manufacturing processes for microfabrication. *Rapid Prototyping Journal*.
- 18. **Vinodh, S.**, & Asokan, P. (2018). ISM and Fuzzy MICMAC application for analysis of Lean Six Sigma barriers with environmental considerations. *International Journal of Lean Six Sigma*.
- 19. Ruben, R. B., **Vinodh, S.**, & Asokan, P. (2018). Lean Six Sigma with environmental focus: review and framework. *The International Journal of Advanced Manufacturing Technology*, 94(9-12), 4023-4037.
- 20. Bharathi, S. K., **Vinodh, S**., & Gopi, N. (2018). Development of software support for process FMEA: a case study. *International Journal of Services and Operations Management*, 31(4), 415-432.
- 21. **Vinodh, S.**, & Patil, D. (2018). Modelling Factors Influencing Lean Concept Adoption in a Food Processing SME for Ensuring Sustainability. In *Sustainable Operations in India* (pp. 93-111). Springer, Singapore.
- 22. **Vinodh, S.**, & Dhakshinamoorthy, A. M. (2018). Application of structural equation modeling for analysis of lean concepts deployment in healthcare sector. In *Progress in Lean Manufacturing* (pp. 91-103). Springer, Cham.
- 23. **Vinodh, S.**, & Shinde, P. (2018). Parametric Optimization of 3D Printing Process Using MCDM Method. In *Precision Product-Process Design and Optimization* (pp. 141-159). Springer, Singapore.
- 24. Ben Ruben, R., **Vinodh, S.**, & Asokan, P. (2017). Implementation of Lean Six Sigma framework with environmental considerations in an Indian automotive component manufacturing firm: a case study. *Production Planning & Control*, 28(15), 1193-1211
- 25. **Vinodh, S.**, Ruben, R. B., & Asokan, P. (2017). A Framework for Performance Evaluation of Pull Systems. In *Production Management* (pp. 103-120). Productivity Press.
- 26. **Vinodh, S.**, & Vimal, K. E. K. (2017). A Decision Support for Prioritizing Process Sustainability Tools Using FAHP. In *Fuzzy Analytic Hierarchy Process* (pp. 253-270). Chapman and Hall/CRC.
- 27. Vimal, K. E. K., **Vinodh, S.**, & Raja, A. (2017). Optimization of process parameters of SMAW process using NN-FGRA from the sustainability view point. *Journal of Intelligent Manufacturing*, 28(6), 1459-1480.

- 28. **Vinodh, S.**, Devarapu, S., & Siddhamshetty, G. (2017). Application of Lean approach for reducing weld defects in a valve component: a case study. *International journal of lean six sigma*.
- 29. Ruben, R. B., Asokan, P., & **Vinodh, S**. (2017). Performance evaluation of lean sustainable systems using adaptive neuro fuzzy inference system: a case study. *International Journal of Sustainable Engineering*, 10(3), 158-175.
- 30. Agrawal, R., Asokan, P., & **Vinodh, S**. (2017). Benchmarking fuzzy logic and ANFIS approaches for leanness evaluation in an Indian SME: a case study. *Benchmarking: An International Journal*, 24(4), 973-993.
- 31. **Vinodh, S.**, Manjunatheshwara, K. J., Sundaram, S. K., & Kirthivasan, V. (2017). Application of fuzzy quality function deployment for sustainable design of consumer electronics products: a case study. *Clean Technologies and Environmental Policy*, *19*(4), 1021-1030.
- 32. Vasanthakumar, C., **Vinodh, S**., & Vishal, A. W. (2017). Application of analytical network process for analysis of product design characteristics of lean remanufacturing system: a case study. *Clean Technologies and Environmental Policy*, *19*(4), 971-990.
- 33. Singh, A. K., & **Vinodh, S**. (2017). Modeling and performance evaluation of agility coupled with sustainability for business planning. *Journal of Management Development*, 36(1), 109-128.
- 34. Mohan, N., Senthil, P., **Vinodh, S.**, & Jayanth, N. (2017). A review on composite materials and process parameters optimisation for the fused deposition modelling process. *Virtual and Physical Prototyping*, *12*(1), 47-59.
- 35. Jayakrishna, K., & **Vinodh**, **S**. (2017). Application of grey relational analysis for material and end of life strategy selection with multiple criteria. *International Journal of Materials Engineering Innovation*, 8(3-4), 250-272.
- 36. Veeramanikandan, R., Nithish, S., Sivaraj, G., & Vinodh, S. (2017). Life cycle assessment of an aircraft component: a case study. *International Journal of Industrial and Systems Engineering*, 27(4), 485-499.
- 37. **Vinodh, S.**, & Manjunatheshwara, K. J. (2017). Application of Fuzzy QFD for Environmentally Conscious Design of Mobile Phones. In *Green and Lean Management* (pp. 149-160). Springer, Cham.
- 38. **S Vinodh,** R Ben Ruben, P Asokan, 2016, Life cycle assessment integrated value stream mapping framework to ensure sustainable manufacturing: a case study, Clean Technologies and Environmental Policy, 18 (1),279-295.
- 39. **S Vinodh,** K Ramesh, C.S. Arun,2016 Application of interpretive structural modelling for analysing the factors influencing integrated lean sustainable system, Clean Technologies and Environmental Policy, 18 (2), 413-428.
- 40. **S Vinodh,** TS Sai Balagi, Adithya Patil, 2016, A hybrid MCDM approach for agile concept selection using fuzzy DEMATEL, fuzzy ANP and fuzzy TOPSIS, International Journal of Advanced Manufacturing Technology, 83 (9-12), 1979-1987.
- 41. RM Thirupathi, **S Vinodh**, 2016, Application of interpretive structural modelling and structural equation modelling for analysis of sustainable manufacturing factors in Indian automotive component sector, International Journal of Production Research, 54 (22), 6661-6682
- 42. C Vasanthakumar, **S Vinodh**, K Ramesh, 2016, Application of interpretive structural modelling for analysis of factors influencing lean remanufacturing practices, International Journal of Production Research, 54 (24), 7439-7452.

- 43. KEK Vimal, **S Vinodh,** A Raja, 2015, Modelling, assessment and deployment of strategies for ensuring sustainable shielded metal arc welding process—a case study, Journal of Cleaner Production, 93, 364-377.
- 44. Sonu Rajak, **S Vinodh**, 2015, Application of fuzzy logic for social sustainability performance evaluation: a case study of an Indian automotive component manufacturing organization, Journal of Cleaner Production, 108, 1184-1192.
- 45. Vikas Swarnakar, **S Vinodh**, 2016, Deploying Lean Six Sigma framework in an automotive component manufacturing organization, International Journal of Lean Six Sigma, 7 (3), 267-293.
- 46. R Vidyadhar, R Sudeep Kumar, **S Vinodh**, Jiju Antony, 2016, Application of fuzzy logic for leanness assessment in SMEs: a case study, Journal of Engineering, Design and Technology, 14 (1), 78-103.
- 47. K Jayakrishna, S **Vinodh, S** Anish, 2016, A Graph Theory approach to measure the performance of sustainability enablers in a manufacturing organization, International Journal of Sustainable Engineering, 9 (1), 47-58.
- 48. Kumbhar Mahesh Suresh, P Asokan, **S Vinodh,** 2016, Application of design for Six Sigma methodology to an automotive component, International Journal of Six Sigma and Competitive Advantage, 10(1), 1-23
- 49. **S Vinodh,** Vikas Swarnakar, 2015, Lean Six Sigma project selection using hybrid approach based on fuzzy DEMATEL-ANP-TOPSIS, International Journal of Lean Six Sigma, 6 (4), 313-338
- 50. **S Vinodh**, T Selvaraj, Suresh Kumar Chintha, Vimal KEK, 2015, Development of value stream map for an Indian automotive components manufacturing organization, Journal of Engineering, Design and Technology, 13 (3), 380-399.
- 51. Jayakrishna, K., Vimal KEK, Sekar Vinodh, 2015, ANP based sustainable concept selection, Journal of Modelling in Management , 10 (1), 118-136.
- 52. **S Vinodh,** V Kamala, K Jayakrishna, 2015, Application of fuzzy axiomatic design methodology for selection of design alternatives, Journal of Engineering, Design and Technology, 13 (1), 2-22.
- 53. KEK Vimal, **S Vinodh**, R Muralidharan, 2015, An approach for evaluation of process sustainability using multi-grade fuzzy method, International Journal of Sustainable Engineering, 8 (1), 40-54.
- 54. **S Vinodh,** C Vasantha Kumar, KJ Manjunatheshwara, 2015, Development of a methodology to evaluate lean remanufacturing characteristics in a manufacturing organization, International Journal of Services and Operations Management, 21 (2), 187-199.