# Prof. (Dr.) Girish Thakar

| 1. Personal Information |               |                            |  |
|-------------------------|---------------|----------------------------|--|
| (i)                     | Name          | Dr Girish Thakar           | de la companya de la |
| (ii)                    | Qualification | B.E., M.Tech., Ph.D. , DMM |  |
| (iii)                   | Designation   | Professor, IPE Department  |  |
| (iv)                    | Email-id      | thakargirish@yahoo.com     | 1  |
| (v)                     | Employee No.  | 0600054                    | 193  |
| (Vi)                    | Department    | Industrial and Production  |  |
|                         |               | Engineering                |  |
| (vii)                   | Experience    | 35 Years                   |  |



| 2. Educational Qualification |         |                                       |      |                  |
|------------------------------|---------|---------------------------------------|------|------------------|
| S. No.                       | Degree  | Specialization                        | Year | University/Board |
| 1                            | B.E.    | Mechanical Engineering                | 1983 | DAVV, Indore     |
| 2                            | M.Tech. | Mechanical Engineering (Mfg.Sc. & IE) | 1988 | IIT Kanpur       |
| 3                            | Ph.D.   | Mechanical Engineering (Product       | 2011 | DAVV, Indore     |
|                              |         | Design for Environment)               |      |                  |

### 3. Research Interests

Industrial Engineering, Marketing Management

## 4. Research Paper Publications

## (I) International/National Journal Publications

| (a) | International Journals (14):  |  |  |
|-----|---|--|--|
| (i) | "An Integrated Process Planning and Part Programming System for Rotational Components", Computers in Industry, Elsevier Science, North Holland, Vol.21. No.3, Feb., 1993, pp 341-357. |  |  |

| (ii)   | "An AHP Approach for Comparing Multi Criteria Assembly Line Balancing Heuristics", International Journal of Industrial Engineering & Technology (IJIET), ISSN 2277-4769, Vol.2, Issue 3 Dec 2012 pp 15-26.  |
|--------|---|
| (iii)  | "Determinants of Supply Chain Performance of Indian Manufacturing Organizations" International Journal of Business Research and Management (IJBRM), Vol.4, No.2, 2013.  |
| (iv)   | "Interpretive Structural Modelling of Functional objectives (Criteria) of Assembly Line Balancing Problem" International Journal of Computer Applications (IJCA) December 2013.   |
| (v)    | "Evaluation Of Assembly Line Balancing Methods Using An Analytical Hierarchy<br>Process (AHP) And Technique For Order Preferences By Similarity To Ideal<br>Solution (Topsis) Based Approach" International Journal for Quality Research<br>(IJQR) January 2014 |
| (vi)   | "Evaluation of Multi Criteria Assembly Line Balancing by MCDM Approaches – A Conceptual Review" International Journal for Quality Research (IJQR) February 2014.  |
| (vii)  | " A Confirmatory Study of Supply Chain Performance and Competitiveness of Indian Manufacturing Organizations" International Journal for Quality Research (IJQR) March 2014.   |
| (viii) | "Evaluation of Multi Criteria Assembly Line Balance by MCDM Approaches: A Conceptual Review" International Journal for Quality Research 8(1) 87–106, ISSN 1800-6450, Jan, 2014  |
| (ix)   | "A Confirmatory Study of Supply Chain Performance and Competitiveness of Indian Manufacturing Organization" International Journal for Quality Research 8(1) 23–38, ISSN 1800-6450, Feb, 2014  |
| (x)    | "Determinants of Supply Chain Performance of Indian Manufacturing Organization" International Journal of Business Research and Management (IJBRM), Volume (5): Issue (1): 2014, 2014  |
| (xi)   | "Identification of Factors Affecting Lean Manufacturing Implementation of Pump Manufacturing Companies in India – A Case Study" International Journal of Quality Research 10(3) pp 495-510, ISSN 1800-6450, Feb, 2016.  |
| (xii)  | "Productivity Enhancement at an Indian Iron & Steel Re-Rolling Mill Performance Improvement Vol. 56 No. 7 PP 25-34, Aug. 2017.  |
| (xiii) | "Prediction of Demand for Supply Chain using Time Series Predictive Models" International Journal of Computer Applications, Volume 175– No. 22, P 33-39, ISSN (0975 – 8887) October 2020.   |
| (xiv)  | "A Sector Wise Prioritization of Vendor Selection in Supply Chain using Multi-Criteria Decision-Making Methods" International Journal of Computer Applications, Volume 174 – No. 18, February 2021, (0975 – 8887).  |

| (b)    | National Journals (23):  |
|--------|--|
| (i)    | "Quality Enhancement by Implementation of Layered Process Audit in Engine Component Manufacturing" Industrial Engineering Journal, Vol. XIV & Issue No.02 pp 5-9 February - 2021                   |
| (ii)   | Enhancement of productivity in an iron and steel re-rolling mill using TPM approach, Industrial Egg. Journal Vol. X Issue 3 pp 5-10 March-18   |
| (iii)  | Green Mfg. practices in SME's of India-A Literature review Industrial Egg. Journal Vol. X Issue 3 pp 5-10 March 18   |
| (iv)   | Automation of visual inspection using image processing, Industrial Egg. Journal vol. X Issue 2 pp 9-14 Feb. 18   |
| (v)    | Job Evaluation in PCV pipe Manufacturing Company -A Case Study Industrial Egg. Journal Vol. X Issue 1 pp 10-16 Jan. 18   |
| (vi)   | Unknowingly Accepting health Hazards in Daily Routine Life, a Survey in Small Town of Madhya Pradesh", Industrial Egg. Journal Vol. X Issue 6 pp 29-33 June 17                                     |
| (vii)  | "Use of Personal Protective Equipment for Safety- A Case Study of a Leading Pump Manufacturing Industry" Industrial Engineering Journal, Vol 9 No.7, July 2016 pp 17-22.                           |
| (viii) | "Use of Personal Protective Equipment's for Safely – A Case Study of a Leading Pump Manufacturing Industry" Industrial Engineering Journal, Vol. IX & Issue 7, pp 17-22, July 2016.                |
| (ix)   | "The Effect of Lean, Green, and Six Sigma Practices in SMEs of India – A Literature Review", Industrial Engineering Journal, Vol 9 No.3 March, 2016  |
| (x)    | "A review of Six Sigma Implementation Practices in Indian SMEs Particularly in State of Gujrat" Industrial Engineering Journal, Vol VIII No.4, April 2015.   |
| (xi)   | "A review of lean implementation practices in Indian SMES particularly in Gujrat". Industrial Engineering Journal, Vol VII No.12, Dec 2014.  |
| (xii)  | "Performance evaluation of value stream analysis (VSA): A case study of a manufacturing unit" Industrial Engineering Journal Vol VII No.10, Oct 2014,  |
| (xiii) | "Supplier – buyer relations and human metrics affecting supply chain Performance: An empirical study of Indian manufacturing organizations" Industrial Engineering Journal Vol.38 No.3, Sept 2014. |
| (xiv)  | "Assessment of Safety Life Cycle Model (SLC) Model to Overcome the Safety Hazards – A Case Study" Industrial Engineering Journal April 2014.   |

| (xv)    | "Identification of Factors Affecting the Choice of Automobile in 1200 cc Passenger Car  |
|---------|---|
|         | Segment- An Empirical Study of Central India" Udyog Pragati, Vol. 36, No. 4, pp 1-11,   |
|         | October - December, 2012.   |
| (xvi)   | "Addressing Packaging Defects in a Chocolate manufacturing Company – A Case study"  |
| ,       | Industrial Engineering Journal, Vol. II, No.03, March 2012, pp 25-30.   |
| (xvii)  | "A critical study of quality of health care services: Using SERVQUAL" IMT Business  |
|         | Review, Greater Noida, Vol. 3, 2011, 96-104.  |
| (xviii) | "Evaluation of End-of-Life Strategies for Certain Automobile Components   |
|         | Using ELSEIM Model" Industrial Engineering Journal, Vol. II, No.25, July 2011, pp 31-36.  |
| (xix)   | "Prioritizing Cleaner Production Strategies and Sub Strategies for Certai   |
|         | Automobile Component Categories Using AHP – A Case Study" (Received Best Cas Study Award) Industrial Engineering Journal, Mumbai, Vol. II |
|         | Study Award) industrial Engineering Journal, Multibal, Vol. II  |
|         | No.7, pp 41-45, January 2010.   |
| (xx)    | "An Investigation of Customer Awareness with Reference to Green Marketing of  |
| (201)   | Automobiles: An Empirical Study Conducted at Indore, MP" Indian Journal of  |
|         | Marketing, New Delhi Vol. XXXIX, No. 09, pp 11-21 September 2009.   |
| (xxi)   | "Assessment of Environmental Impact and Prioritizing DfE Strategies for a Sport   |
|         | Utility Vehicle - A Case Study", Journal of Indian Institution of Industrial Engineers  |
|         | Mumbai, Vol.36. No.11, pp 8-15, November 2007.  |
| (xxii)  | "An Assessment of Environmental Impact and Determination of Optimal DFE Strateg   |
|         | for Automobile Components-A Case Study" Udyog Pragati, Vol.30 No.1 pp 34-47 Jan-Mar 2006.   |
| (xxiii) | "Online Customer Management – Issues and Challenges in Changing Scenario" SRI   |
| , ,     | Management Digest, April 2005 Vol.3 pp 27-29.   |
| (xxiv)  | "Integrated Product Policy: An Emerging Trend for Sustainable Development -   |
|         | Review" SRM Management Digest, pp 35-48, April 2004.  |

# (II) International/National Conference Publications

| (a)   | International Conferences (22):   |
|-------|---|
| (i)   | "Elimination of Non- Value-Added Activities in Assembly Line at Cummins Turbo Technology, Pithampur" 5 <sup>th</sup> ICIE Conference, pp 357-372, ISBN 978-93-86238-81-8, December 12-14, 2019. |
| (ii)  | "A study of association of lean manufacturing Implementation and safety in a pump manufacturing company: A case study" 4th ICIE, conference pp 970-975 - 2017 ISBN 978-93-86238-39-9 Dec. 17    |
| (iii) | "Integrated Approach for Job Scheduling in a Production System 4th ICIE, conference", pp 350-353 -2017 ISBN 978-93-86238-39-9 Dec. 17   |

| (iv)   | "Identification of Critical Success Factors of Lean, Green and Six Sigma Practices in SMEs of Gujrat – An Observation from Pilot Study" Proceedings of ICIE 2915, SVNIT Surat. ISBN: 978-93-84935-56-6, November 26-28, 2015.  |
|--------|--|
| (v)    | "Influence of External Supply Chain on Supply Chain Performance: A Structural Equation Modelling Approach", Proceedings of ICIE 2915, SVNIT Surat. ISBN: 978-93-84935-56-6. November 26-28, 2015.  |
| (vi)   | "Supplier Selection and Evaluation in Automobile Industry: Application of AHP Approach", 2 <sup>nd</sup> International Conference on Industrial Engineering (ICIE 2012), Surat, Nov.20-22, 2013.   |
| (vii)  | "Application of Grey Relational Analysis (GRA) to Material Selection for Sustainable Product Design: A multi–Attribute Decision Making (MADM) Approach" 2 <sup>nd</sup> International Conference on Industrial Engineering (ICIE 2012), Surat, Nov.20-22, 2013.                |
| (viii) | "Design of an Optimal Kanban System: Case Study of a Mixed Model Assembly Line", 2 <sup>nd</sup> International Conference on Industrial Engineering (ICIE 2012), Surat, Nov.20-22, 2013.   |
| (ix)   | "An Empirical Study of Supply Chain Performance of Indian Manufacturing Organizations", 2 <sup>nd</sup> International Conference on Industrial Engineering (ICIE 2012), Surat, Nov.20-22, 2013.  |
| (x)    | "End of Life Management of Cell Phones in India", 55th National Convention of Indian Institution of Industrial Engineering & International conference on "Managing Supply Chain for Global Competitiveness", Nagpur October 25- 26, 2013.                                      |
| (xi)   | "Enhancement of Customer Satisfaction by QFD in Bus Service", International Conference on Advances & Development in Engineering & Technology, ISBN: 978-93-81693-88-8, 8th Feb.2013, Indore.   |
| (xii)  | "Recycling of End-of-Life Vehicles in Indian Scenario", International Conference on Industrial Engineering (ICIE-2011), Surat, Nov.17-19, 2011.  |
| (xiii) | "Comparative Study between Public Sector and Private, Sector Banks using Quality Function Deployment", International Conference on Industrial Engineering (ICIE-2011), Surat, Nov.17-19, 2011.   |
| (xiv)  | "Automobile Solid Waste in the Indian Scenario - A Survey of End-of-Life Vehicles", International Conference on Solid Waste Management (IconSWM-2011), Nov. 9-11, 2011, Kolkata.   |
| (xv)   | "Elimination of Consumer Complaints of packaging in a Leading Confectionary Unit", ICOQM — 10, 10 <sup>th</sup> International Conference on Operations and Quantitative Management, Nasik / June28-30, 2011.   |
| (xvi)  | "Determination of Environmental Impact of Various End of Life Strategies for Cylinder Head of a Petrol Engine Using ELSEIM and Eco-Indicator 99", Indo-US Workshop on Designing Sustainable Products, Services and Manufacturing Systems, IISc Bangalore / August 18-20, 2009. |

| (xvii)  | "Systems-Approach to Orientation and Training – Key to Organization Effectiveness", ICPQR-2005, International Conference, IIT Delhi/December 12-15, 2005.   |
|---------|---|
| (xviii) | "Design for Environment Approach of Product Refinement – an Evaluation of End-or Life Strategies", ICPQR-2005, International Conference, IIT Delhi/December 12-15 2005.   |
| (xix)   | "The Distance Learning Model for Management Education Practice Tools, and Performance Parameters", International Conference on Reshaping Management Education in Global Context, IMS, DAVV, Indore/ 15-16, Nov 2003.  |
| (xx)    | "Application of Quenching theory to planning of Kanban in a JIT System", ICAUTC 95, Indore / December 1995.   |
| (xxi)   | "Graphical Simulation of NC Part Programs", INCARF 1993, IIT Delhi / December 1993.   |
| (xxii)  | "Contour Roll Forming of Steel Tubes and Pipes", PVPT 93, Singapore / May 1993.   |
| (b)     | National Conferences (15):  |
| (i)     | "Analytic Network Process for Supplier Evaluation and Selection: A Literature Review", Paradigm for Sustainable Business: People, Planet, and Profit IIT Roorkee March 8-9, 2013.   |
| (ii)    | "Analysis of MOST" technique in 3-Phase Assembly Line in Pump Manufacturing Industry", Paradigm for Sustainable Business: People, Planet, and Profit IIT Roorkee, March 8-9, 2013.  |
| (iii)   | "Implementation of an optimal Kanban System in a Mixed Model Pump Assemb<br>Line", Paradigm for Sustainable Business: People, Planet, and Profit March 8-9, Il<br>Roorkee.  |
| (iv)    | "Sustainability Analysis of Ageing Vehicles- An Indian Perspective". Proceedings of the National Conference on Emerging Challenges for Sustainable Business (ECSE 2012)", EPH, Vol.1, pp. 1847-1859, June 1-2, IIT Roorkee.   |
| (v)     | "Comparison of Classical Fuzzy Analytic Hierarchy Process and Extended Fuzz Analytic Hierarchy Process for Vendor Selection in Automobile Supply Chain "Proceedings of the National Conference on Emerging Challenges for Sustainable Business (ECSB-2012)", EPH, Vol.1, pp.1647-1662, June 1-2, IIT Roorkee. |
| (vi)    | "Implication of Performance Measurement Approaches on Supply Chair Performance", ECSB – 2012, Emerging Challenges for Sustainable Business, II Roorkee/ June 1-2, 2012.   |
| (vii)   | "QFD for DFE with Reference to Motorbikes in Indian Context", National Seminar or Eco-friendly Technologies and challenges for Mechanical Engineers, Indore / 27-28 Jan 2006.   |
| (viii)  | "Carrying the Energy Future – Comparison of Hydrogen Electricity as Fuels to Vehicles of Future" National Seminar on Eco-friendly Technologies and challenges for Mechanical Engineers, Indore / 27-28, Jan 2006.   |

| (ix)   | "Prioritizing DFE strategies for Crankcase of An Automobile using AHP" (Received Best Paper Presentation Award), RTDMT-2005, National Conference, Coimbatore/ 17-18, Mar-2005. |  |
|--------|--|--|
| (x)    | "Greening the Supply Chain Application Areas: Implementation Tools and Performance Parameters", ECDM-2004 Conference, Coimbatore/ 23-24, July, 2004.                           |  |
| (xi)   | "Integrating Environment into Product Design", National Conference on Changing Trends in Management: Challenges and Opportunities, Indore/30-31, Jan-2003.                     |  |
| (xii)  | "Optimal Allocation of Kanbans in a JIT System", 36th Annual Convention of Industrial Engineers, Bangalore / Oct.'1994.  |  |
| (xiii) | "On Line Quality control of Production System using Taguchi Methods", AIEPT, Seminar of Institute of Industrial Engineers, Allahabad / 1995.                                   |  |
| (xiv)  | "Role of ISTE Sub centers in industry Institute Interaction", Proceedings of, S.G.S.I.T.S., Indore, 1992, XXII, ISTE Convention, Indore / 1992.                                |  |
| (xv)   | "On the Machining of Curved Tooth Bevel Gears Determination of Set up Conditions", 14th AIMTDR Conference, IIT Bombay / 1990.  |  |

### 5. List of Conferences/Workshops/Seminars Organized

- 1. Co-Coordinator: National Workshop on "Product Life Cycle Engineering and Management", held at SGSITS, 12-13 Sept., 2007.
- 2. Member organizing Committee: "E-Foundry Workshop" held in the IPE Department of SGSITS, Indore on August 3, 2013.
- 3. Coordinator for STTP on "Research methodology" during 26-30 June 2018.
- 4. Worked as a committee member in COPEN -2019, held jointly with IIT Indore during December 12-14, 2019.
- 5. Member of organizing committee of SAE India, Western Section Student Convention 2021.

### 6. Invited Lectures/Expert Talks/Chairmanships at Conferences

#### **Invited Lectures/Expert Talks**

(i) Delivered a Talk at IEI, Indore Chapter on "Sustainable Product Design" on April 14, 2017 (T.N. Kutumbale Memorial Lecture).

| (ii)  | Delivered an Expert Talk on "Sustainable Product Design" during STTP on New Trends in Industrial Engineering (NTIE 2016), organized by Mechanical Engineering Department SVNIT, Surat during July 1- 5, 2016.                      |
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| (iii) | Delivered an Expert Talk on "Product Design for Environment" during STTP on organized by Mechanical Engineering Department MANIT, Bhopal on May 25 <sup>th</sup> 2014.   |
| (iv)  | Delivered a Talk at Institute of Engineering and Technology, DAVV, Indore on "Green Engineering", during PHOENIX-09.   |
| (v)   | Delivered an expert lecture on 29 <sup>th</sup> March, 2013 at UEC, Ujjain in one day National Seminar on "Quality Management in Technical Education", on the topic "Quality of Technical Education in India: A State of the Art". |

#### **Chairmanships at Conferences**

- (i) Chaired a session on "S5 (Industrial Engineering and System Design) Track" on March 5,2021 between 3to 4.30 PM, in the International Conference on "Innovations in Product, Process and System Design (ICIPPSD 2021)"
- (ii) Member National Advisory Committee, in the International Conference on "Innovations in Product, Process and System Design (ICIPPSD 2021)" March 05-06, 2021, held online by Department of Mechanical Engineering, Shri Vaishnav Vidyapeeth Vishwavidhyalaya, University Indore.
- (iii) Member, Organizing Committee, ICIE 2019, December 12-14, 2019, SVNIT Surat
- (iv) Chaired two Technical Sessions in COPEN-2019, jointly held at IIT Indore during December12-14, 2019.
- (v) Member, International Advisory Committee of 4<sup>th</sup> International Conference in Industrial Engineering Digital India, Smart India, make in India: Innovative Role of Industrial Engineering Organized by Department of Mechanical Engineering, SVNIT, Surat during December 21-23, 2017.
- (vi) Chaired a Session on 4rd International Conference in Industrial Engineering (ICIE 2017), held at SVNIT, Surat during December 21-23, 2017.
- (vii)Member, International Technical Committee of 59 th National Convention of IIIE and International Conference on "Manufacturing and Industrial Engineering (ICMIE 2017)", held at MGM's Jawaharlal Nehru Engineering College, Aurangabad, during September 14-16, 2017.
- (viii) Chaired a Session on 3rd International Conference in Industrial Engineering (ICIE 2015), held at SVNIT, Surat during November 26-28, 2015.
- (ix) Member, International Advisory Committee of 3rd International Conference in Industrial Engineering (ICIE 2015), held at SVNIT, Surat during November 26-28, 2015.

- (x) Member, International Advisory Committee of 2<sup>nd</sup> International Conference in Industrial Engineering (ICIE 2013), held at SVNIT, Surat during November 20-23, 2013.
- (xi) Member, Technical Committee of international Conference on "Managing Supply Chain for Global Competitiveness" held at RCEM, Nagpur during October 25-26, 2013.
- (xii)Member, Organizing Committee of E-Foundry Workshop held at SGSITS, Indore on August 3, 2013.
- (xiii) Chaired a session on "Logistics and Supply Chain management" during International Conference on Industrial Engineering (ICIT-2011), Nov.17-19, 2011 held at SVNIT Surat.
- (xiv) Invited as subject expert for the National Level Doctoral Consortium for Research Scholars in on 11th January 2013 Organized by the Department of Production and Mechanical Engineering at VJTI, Mumbai.