



Dinesh Kumar, Professor, Department of Mechanical and Industrial Engineering IIT Roorkee, Roorkee, India-247667

Academic Achievements:

B.Sc Engineering (Hons) in Mechanical Engineering from Punjab engineering college Chandigarh, 1980,

ME (Hons) in Mechanical engineering from University of Roorkee (now IIT Roorkee) in 1984 and

PhD (Mechanical with specialization in industrial engineering) from University of Roorkee (now IIT Roorkee) in 1991.

Experience: 28 years of teaching and research

Area of research: Supply Chain Management. Process Planning and Optimization, Maintenance Management,

Subjects of interest: Financial management, Industrial engineering & management, capital budgeting and value engineering, Diagnostic analysis and Maintenance management, reliability and safety engineering etc.

Publications: Int. Journals/ conferences: **130**; National Journals/ conferences : **70**

Administrative experience:

1. Head, Department of Continuing Education.
2. Chairman Department Research Committee
3. Chairman Department Academic Scheme Committee, 2010-2012.
4. Coordinator Workshop, 2007- 2012.
5. Chief coordinator of B.Tech Project, 2006-2012.
6. Member of Institute library committee, 2007-2012.
7. Coordinator of Department library committee, 2007-2012
8. Member of finance& purchase, store committee, 2007-2012.
9. Coordinator COGNIZANE-2010.
10. OIC of machine tool lab.
11. Member of BOS and Research Board, Punjab University.
12. Expert member of many research committees at different Institute.
13. Expert member for the evaluation of AICTE project and other proposals.

PhD Supervised:

1. Secondary Processing of Polymer Matrix Composites, Pawan kumar, 2009-2012.

2. Design and Analysis of Supply Chain for Transport Distributions Risk Using System Dynamics, Atul Sidola, 2008-2011
3. A study on modeling of selection issues in third and fourth party logistics service providers, Rajbir Singh Bhatti, 2007-2010.
4. Reliability analysis using fuzziness of real time based industrial processes, Komal, 2005-2010.
5. Reliability analysis of industrial systems using GA and Fuzzy Approach, Ajay Kumar, 2005-2009.
6. Planning, design and optimization for the selection of 3PL service providers, M.N. Qureshi, 2005-2008.
7. RAM analysis of industrial systems using PETRI NETS, Anish Kumar Sachdeva, 2005-2008.
8. Analysis, design and optimization of QRM aspects in production system, Rajeev Sharma, 2004-2007.
9. Design & development of performance evaluation system in process industries, Puran Chand Tiwari, 1996-2001.
10. Optimization of machining parameters for turned parts through Taguchi's Technique, Hari Singh, 1997-2000.
11. Process design, maintenance planning and resource allocation in process industries, Sunand Kumar, 1994-1998.
12. Availability and profit analysis of systems in paper and thermal power plant, Navneet Arora, 1994-1997.

M.Tech Dissertation Supervised:

1. Reliability analysis of coal handling system in **thermal power plant**, S.K. divedi, 1989.
2. Maintenance planning of a system in a process industry, vinod yadav, 1991.
3. Computer aided design and analysis of **quality control charts**, Hari singh, 1994.
4. Behavioural analysis and maintenance planning of trichloro-ethylene production system in a chemical industry, sanjeev mittal, 1996.
5. **Inventory management in paper industry**, Brij Bhushan Mishra, 1998.
6. Scheduling of projects with resource restrictions, , BV, Nageswara Rao, 1999.
7. **Neural network approach for analysis of control chart pattern**, Rohit chourasia, 2000.
8. **A structural analysis of material requirements planning systems under combined demand and supply uncertainty**, Sameer Joshi, 2000.
9. Tool path simulation for NC part program, Rajeev Lalwani, 2000.
10. Knowledge base system for the automation and optimization of machining process, Anil Kumar Mourya, 2001.
11. Modeling of transfer line and its behavioral analysis, KK Katiyar, 2001.
12. Process plan generation for milled parts- A CAPP system, Ravi Kumar, 2002.
13. A new inventory strategy subjected to peak market demand, quantity discount & finite range stochastic lead time, Meshram Suresh D , 2002.
14. Modeling & simulation of inventory system in Army workshop, Maj. Vishwa Mohan Kumar, 2003.
15. Optimum maintenance policy for equipment subject to break down, SKV parasad, 2003.

16. A decision support system for milling parameter optimization, MS Niranjana, 2003.
17. Development of an optimal preventive maintenance model based on reliability assessment for a system of BHEL, Purnendra Kumar, Parkar, 2005.
18. Development of a database for maintenance management system in an industry, Lokesh Singh Pangtey, 2005.
19. Investigation of effect of filler materials in Zircon four coating used in EPC process, Rupak Kanungo, 2006.
20. Investigation of process parameters affecting the quality of castings produced by lost wax process, Rahul Kumar Gautam, 2006.
21. To select best maintenance strategy for the construction equipments, Hary Martono, 2007.
22. Effect on shoulders in overhead drilling with shoulder support, Prem Kumar Garapati, 2007.
23. Performance analysis of industrial systems using petri Nets, A Satish Chandra Goud, 2008.
24. Maintenance strategy selection, Divekar Uday Devidas, 2008.
25. Modeling of select issues in third party service providers under L.L.P. scenarios, Varun Unnikrishanan, 2009.
26. A study of selection issues of integrated service providers, Chirra Sricharan, 2009.
27. Improving overall equipment effectiveness and utilization through real time application and APC, Sanjeet Singh, 2009.
28. Logistics Chain Re- Engineering Using Dynamic Modeling, Vivek K., 2010.
29. Reliability and failure Analysis of Transmission system of New Generation Vehicles, Sunil Dutta, 2010.
30. Green Supply chain: analysis and performance measurement driven by environmental pressure consideration, Sachin Kumar Mangla, 2011.
31. Grade transition study in combined Tundish Mold arrangement in continuous casting process, Ankush Kumar, 2012.
32. Process parametric study of rotary electric discharge machining, Sudip Biswas, 2012.

B.Tech projects supervised:

1. Decision support system for paper production in a paper industry, 2002.
2. Supply chain management for ACC limited, 2003.
3. Analysis of inventory policy in paper industry, 2004.
4. Economic scheduling of production system, 2005.
5. Supply chain management in a process industry, 2005.
6. Analyzing the working of American Depository Receipt, 2006.
7. Mathematical modeling to manage risk in financial instrument, 2008.
8. Development of an Investor Confidence Index based on Credit Default Swap Spreads for portfolio management, 2009.
9. Development of market confidence & health index (MCHI) based on credit default spread for strategic investment, 2010.
10. System dynamic application in facility location of a supply chain, Gholap Gaurav Anil, Piyush Kumar Joshi and Upinderjeet Singh, 2010

11. Development of market confidence& health index (MCHI) based on credit default spreads for strategic investment, Sumit Dhingra, Rajshree Bazaari and Digvijay Narolia, 2010.
12. Maintenance strategy selection for an Industry, Ankush Agarwal and Mohith Reddy, 2011.
13. Analysis of Dynamic planning parameters on Supply chain Performance, Ansul Nasa and Piyush Tariyal, 2011.
14. Resistance spot welding of stainless steel using adhesive bending, rajesh kumar natwadiya& shivansh srivastava, 2012.
15. Multicriteria decision modeling and analysis of sustainable supply chain systems, aditya singhrachit gauran and vivek sankar, 2012.
16. Time value of product return in closed loop supply chain, kaustubh, kartikeya khatri and siddharth kasbekar, 2012.