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## Present Position

Professor, Department of Industrial Engineering, College of Engineering Guindy, Anna University, Chennai from January-2009.

## Present Additional Responsibility

- Director, Centre for Entrance Examinations, Anna University, Chennai from March-2016.

## Previous Positions

- Associate professor, , College of Engineering Guindy, Anna University, Chennai during January-2006 and December-2008.
- Assistant Professor, Department of Industrial Engineering, College of Engineering Guindy, Anna University, Chennai during March-2002 and January-2006.
- Lecturer Sl.Grade, Department of Industrial Engineering, College of Engineering Guindy, Anna University, Chennai during March-2001 and March-2002.
- Lecturer Sr. Grade, Department of Industrial Engineering, College of Engineering Guindy, Anna University, Chennai during April-1996 and March-2001.
- Lecturer, Department of Industrial Engineering, College of Engineering Guindy, Anna University, Chennai during September-1989 and March-1996.
- Teacher Trainee, Department of Industrial Engineering, College of Engineering Guindy, Anna University, Chennai during September-1986 and August-1989.

## Previous Additional Responsibility

- Deputy Director, Student Affairs, Anna University, Chennai during August-2002 and August-2005.
- Resident Counselor, Girls Hostel, Anna University, Chennai during September-1986 and August-1989.

## Other Employment

- > Nil, .

## Degree

- ❖ M.E. in INDUSTRIAL ENGINEERING , College of Engineering, Guindy, Anna University (1986 - 1989).
- ❖ B.E. in MECHANICAL ENGINEERING , Government College of Technology, Coimbatore, Madras University (1981 - 1985).

## Research Degree

- ❖ Ph.D. in Quality Management from Faculty of Mechanical Engineering, College of Engineering, Guindy, Anna University (1996 - 2002).  
Title: Impact of ISO 9000 Certification on Productivity in Indian Industries.

## Area of Specialisation

- > Industrial Engineering
- > Facility Design
- > Applied Ergonomics
- > Total Quality Management
- > Safety Engineering and Management
- > Productivity and Re-Engineering
- > Supply Chain Management

## Membership in Professional Organization

- > Indian Society for Technical Engineers - Life Member
- > Operations Research Society of India - Life Member
- > Indian Society of Mechanical Engineers - Life Member
- > Indian Institution of Industrial Engineering - Life Member
- > International Association of Engineers - Life Member

## Research Guidance

Number of Ph.D Scholars Guided	: 4
Number of Ph.D Scholars Guiding	: 5
Number of M.S (By Research) Students Guided	: 1
Number of M.S (By Research) Students Guiding	: 1
Number of M.E./ M.Tech. Projects Guided	: 45
Number of M.E./ M.Tech. Projects Guiding	: 4
Number of Ph.D Scholars Guided as Joint-Supervisor	: 1
Number of Ph.D Scholars Guiding as Joint-Supervisor	: 1

## Papers Published in Journals

Research Papers Published in International Journals	: 21
Research Papers Published in National Journals	: 0

1. P.Malliga, P.Malliga, "The Stock Service Improvement by the Deployment of Six Sigma ", International Journal of Six Sigma and Competitive Advantage, published by InderScience . Vol. 3, Issue 2, pp. 103-119 (2007).
2. S.P.Srinivisan, P.Malliga, K.Thiagarajan, "An Algorithmic Graphical Approach for Ground Level Logistics Management of Jatropha Seed Distribution", International Journal of Physical Sciences, published by Ultra Science. Vol. 20, Issue 3, pp. 605 - 612 (2008).
3. S.P.Srinivisan, P.Malliga, K.Thiagarajan, " Optimal Utilization of Cultivable wastelands using Desicion Support System", International Journal of Engineering Research and Industrial Applications, Vol. 2, Issue 7, pp. 43-56 (2009).
4. S.P.Srinivisan, P.Malliga, "A Fuzzy Logic Based Decision Support System to Forecast the yield of Jatropha in Cultivable wastelands", IEEE, (2009).
5. S.P.Srinivisan, P.Malliga, M. Chandrasekaran, "A 3PL Supply Chain Network of Jatropha Oil for the production of Biodiesel in India", International Journal of Production Technology and Management Research, published by international Science Press. Vol. 1, Issue 1, pp. 43-47 (2010).
6. S.P.Srinivisan, P.Malliga, "An Optimal Line Balancing for a Multiple Assembly System of a Batch Production Unit", International Journal of Materials Maintenance and Optimization, Vol. 1, pp. 27-33 (2010).
7. Nirmal Raj, P.Malliga, "Airline Emission Forecast through Empirical Analysis of its Contributing factors", International Journal of Environmental Science and Development, Vol. 2, Issue 1, pp. 12-16 (2011).
8. S. K. Rajesh Kanna, P.Malliga, "Multi-Constrained Optimization of Rectangular BIN Packing Problem using Binary Coded Evolution Algorithm", International Journal of Materials, Manufacturing and Optimization, published by international Science Press. Vol. 3, Issue 1, pp. 27-36 (2012).
9. S. K. Rajesh Kanna, P.Malliga, K. Sarukesi, " 3 D - Multi Constrained Heterogeneous Packing Using Genetic Approach", Advanced Materials research, published by Trans Tech publications, Switzerland. Vol. 479, pp. 1825-1830 (2012).

10. S.P.Srinivasan, P.Malliga, M.Chandrasekar, "An overview of fracture analysis in functionally graded materials", European journal of scientific research, Vol. 68, Issue 3, (2012).
11. S.P. Srinivasan, P. Malliga, "A Conceptual framework for Jatropha seed yield estimation using adaptive neuro-fuzzy inference system (ANFIS) modelling", International Journal of Sustainable Engineering, (2013).
12. Deenadayalan G, P. Malliga, " An exploratory study on the barriers to BTO Supply chains", International journal of Engineering Research and Technology, (2013).
13. Deenadayalan G, P. Malliga, "Fuzzy modeling of a build to order supply chain for optimization", European journal of Scientific Research, (2013).
14. B.Rajkumar, P. Malliga, "Prioritisation of Buyers in selling by-product of a Sugar Plant by Analytical Hierarchy Process", International Journal of Applied Engineering Research, (2014).
15. N. Raja Rajeswari,P.Malliga, "Design of MEMS Bases Microneedle for Drug Delivery System", Global Congress on Manufacturing and Management, Vol. 97, (2014).
16. Rara Rajeswari.N, P.Malliga, "Insertion of Microneedle Array into Soft Tissue for Transdermal Drug Delivery", A Science and Technology ISI Indexed Journal, Vol. 29, pp. 10 (2014).
17. B.K.Gnanavel, " Design and Simulation of Microactuator using Phase Change Liquid for Drug Delivery System", International Journal of ChemTech Research, Vol. 8, Issue 11, pp. 271-276 (2015).
18. A.Rajkumar, P. Malliga, "Quality improvement of sugar by two factor factorial experimentation in optimization of quality of lime and sulphur added in the juice ", Applied Mechanics and materials, (2015).
19. A.Rajkumar, P. Malliga, " A Fuzzy analytical hierarchy process approach for prioritizing the buyers in selling by-product of a sugar plant", International Journal Logistics Systems and Management, (2015).
20. "Analytical approach for optimization design of MEMS based microneedles in drug delivery system", Journal of Mechanical Science and Technology, published by Springer. Vol. 29, Issue 8, pp. 3405-3415 (2015).
21. N. Raja Rajeswari,P.Malliga,B.K.Gnanavel, " Hollow Microneedle for Drug Delivery Applications to Improve Patient Compliance", Asian Journal of Research in Social Sciences and Humanities, published by Asian Research Consortium. Vol. 6, Issue 11, pp. 519-530 (2016).

## Papers Presented in Programmes

Research Papers Presented in International Programmes	: 19
Research Papers Presented in National Programmes	: 5

1. "Supply chain network of Jatropha oil for the production of Biodiesel in India" presented in a International level conference on Energy in a world of changing costs and technologies, organised by USAEE/ IAEE North America Conference, Ann Arbour, Michigan .

2. Rajkumar A and Malliga P, "Issues in Sugar Industry-Indian Perspective" presented in a International level conference on Issues in Sugar Industry-Indian Perspective, organised by National conference on Promising Research and Innovations in Mechanical Engineering 2015, India .
3. Rajkumar A and Malliga P, "Optimization of quantity and temperature of hot water in the imbibition at milling section of a sugar plant using design of Experiment" presented in a International level conference on Optimization of quantity and temperature of hot water in the imbibition at milling section of a sugar plant using design of Experiment, organised by advances in design and manufacturing national institute of technology 2014, India .
4. Rajkumar A and Malliga P, "Quality improvement of sugar by two factor factorial experimentation in optimization of quality of lime and sulphur added in the juice sulphitation process of a sugar plant" presented in a International level conference on Quality improvement of sugar by two factor factorial experimentation in optimization of quality of lime and sulphur added in the juice sulphitation process of a sugar plant, organised by Advances in materials and manufacturing Engineering, India .
5. "Special Process Identification using Taguchi Technique" presented in a National level conference on IMS, organised by Coimbatore, India .
6. Dr. P.Malliga, V.Jayabalan, "Quality Systems - ISO 9000, Industrial Experience" presented in a International level conference on CAD/CAM, organised by Coimbatore, India .
7. P.Malliga, V.Jayabalan, "Implementation of ISO 9000 in Indian Industries" presented in a International level conference on POMS,IIT, organised by New Delhi, India .
8. P.Malliga, V.Jayabalan, "Special Process Qualification for Spot Welding " presented in a International level conference on IFAMS 2000, organised by Coimbatore, India .
9. "Supply chain network of Biodiesel in India" presented in a International level conference on International Conference & Workshop on Operational Research as competitive Edge ORSI, organised by IIT Kharagpur, India from 03-Jan-2007 to 04-Jan-2007.
10. S. P. Srinivasan, P. Malliga, "A graphical approach for decision making in the logistics of Jatropha seed distribution" presented in a National level conference on SCIMS 2008, India from 08-Dec-2008 to 10-Dec-2008.
11. S. P. Srinivasan, P. Malliga, "A 3PL supply chain network of Jatropha oil for the production of Biodiesel in India" presented in a National level conference on SCIMS 2008, India from 08-Dec-2008 to 10-Dec-2008.
12. P.Malliga, "Safety Performance of a manufacturing industry using ANOVA" presented in a International level conference on 5th International Professional Development Conference on Safety, Environment and Loss prevention, organised by American Society of Safety Engineers, Kuwait from 17-Mar-2009 to 19-Mar-2009.
13. S. P. Srinivasan, P. Malliga, "An Optimal demand forecasting of Jatropha cultivation for the rural land development" presented in a International level conference on International Conference on Operations Research in Engineering and Management, organised by Anna University-Trichy, India from 29-May-2009 to 29-May-2009.

14. S. P. Srinivasan, P. Malliga, "An Optimal Supply chain Model of Biofuel using Fuzzy logic" presented in a International level Short Course on AICTE Sponsored staff development program on Genetic algorithm and Optimization techniques, organised by Rajalakshmi engineering College, India from 19-Aug-2009 to 19-Aug-2009.
15. S. P. Srinivasan, P. Malliga, "A fuzzy logic based decision support system to forecast the yield of Jatropha in cultivable lands" presented in a International level conference on International conference on Industrial Engineering and Engineering Mangement, Beijing, PR, China from 21-Oct-2009 to 23-Oct-2009.
16. S. P. Srinivasan, P. Malliga, "Decision support system for optimal location of Jatropha facilities in the Production of Biodiesel" presented in a International level conference on International conference on advanced Energy research, organised by IIT Bombay, India from 09-Dec-2009 to 11-Dec-2009.
17. S. P. Srinivasan, P. Malliga, "Anew approach of Adaptive Neuro Fuzzy Inference System(ANFIS) modeling for yield prediction in supply chain of Jatropha" presented in a International level conference on International Conference on Industrial engineering and Engineering Management, Beijing, PR, China from 29-Oct-2010 to 31-Oct-2010.
18. P.Malliga, Jagadeesh, "Synchronization approach of fire evacuation simulation for complex building" presented in a International level conference on 7th International Health, Safety, Safety, Environment and Loss Prevention Professional Development Conference and Exhibition , organised by American Society of Safety Engineers, Kuwait from 26-Nov-2011 to 27-Nov-2011.
19. "Vibration Analysis of Aluminium Metal Using Anova" presented in a National level conference on RESEARCH TRENDS IN MECHANICAL ENGINEERING -RTME 2015, organised by SRI RAMAKRISHNA ENGINEERING COLLEGE, India from 10-Apr-2015.
20. "Preventive Measures For Final Inspection Quality Issues Using G8D Approach In Special Heavy Vehicles" presented in a National level conference on RESEARCH TRENDS IN MECHANICAL ENGINEERING -RTME 2015, organised by SRI RAMAKRISHNA ENGINEERING COLLEGE, India from 10-Apr-2015.
21. P.Malliga, "PROCESS ACCIDENT PREVENTION MODEL USING MARKOV THEORY" presented in a International level conference on 7th International Professional Development Conference on Safety, Environment and Loss prevention, organised by American Society of Safety Engineers, Kuwait from 26-Nov-2015 to 28-Nov-2015.
22. P. Malliga, N Raja Rajeswari , B.K. Gnanavel, "Buckling Analysis of Hollow Microneedle in Transdermal Drug Delivery" presented in a International level conference on International Mechanical Engineering Congress & Exposition, organised by ASME, Phoenix USA from 11-Nov-2016 to 17-Nov-2016.
23. Kamala, P. Malliga, Priyanka,, "Criteria Based Ergonomic Assessment in a Manufacturing Industry" p" presented in a International level conference on nternational level conference on IEEE International Conference on Industrial Engineering and Engineering Management (IEEM2016), organised by IEEE Indonesia Section IEEE TEMS Singapore Chapter, Indonesia from 04-Dec-2016 to 07-Dec-2016.

24. P.Malliga, R.Gowri, R.Kala, "Development of Risk Assessment Model for Farmers in Tomato Supply Chain" presented in a International level conference on International Conference on Industrial Engineering and Engineering Management, organised by IEEE IEEM 2016, INDONESIA from 04-Dec-2016 to 07-Dec-2016.

### Sponsored Projects Completed

1. "Assessment of the Impact of quality Systems ISO 9000 in Small and Medium Industries", funded by AICTE (R&D) (January-2001 - December-2002). Project Cost: 300000.00.

### Programme Organized

1. Co-ordinator, National level Short Course on "Quantitative Techniques for Research in Engineering and management" from 05-Dec-2005 to 07-May-2005.
2. Co-ordinator, National level seminar on "Research issues in Operations management" from 22-May-2008 to 23-May-2008.
3. Organiser, International level seminar on "Emerging trend in Process safety and Risk Management" from 07-Oct-2009 to 08-Oct-2009.
4. Organising Committee member, International level conference on "International conference on Advances in Industrial Engineering Applications" from 06-Jan-2010 to 08-Jan-2010.
5. Organizer, National level seminar on "Issues in Preparing Research Thesis and Project Proposal" from 16-Mar-2012 to 17-Mar-2012.
6. Convenor, International level conference on "International conference on Advances in Industrial Engineering Applications" from 06-Jan-2014 to 08-Jan-2014.
7. PAPER PRESENTED, National level conference on "RESEARCH TRENDS IN MECHANICAL ENGINEERING -RTME 2015" from 10-Apr-2015.
8. PAPER PRESENTED, National level conference on "RESEARCH TRENDS IN MECHANICAL ENGINEERING -RTME 2015" from 10-Apr-2015.

### Special Repräsentations

1. Syllabus committee member in TNPSC

### Experience Abroad

1. . Purpose of visit :NRI student admission.