

National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty/ Staff Members

Curriculum Vitae



1. Name: **R. JEYAPPAUL**
2. Designation: **Associate Professor**
3. Office Address: **Department of Production Engineering, NIT, Trichy**
4. Telephone (Direct) (Optional): **0431-2503517**
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5. Email (Primary): **jeyapaul@nitt.edu** Email (Secondary) :
6. Field(s) of Specialization: **Industrial Engineering**
7. Employment Profile

Job Title	Employer	From	To
Teaching Research Associate	Anna University, Chennai	2001	2005
Lecturer	Anna University, Chennai	2005	2006
Lecturer	NIT Trichy	2006	2008
Assistant Professor	NIT Trichy	2008	2011
Associate Professor	NIT Trichy	2011 onwards	

8. Academic Qualifications (From Highest Degree to High School):

Examination	Board / University	Year	Division/ Grade	Subjects
Ph.D	Anna University, Chennai	2006	-	Industrial Engineering
M.E.	TCE, Madurai	1999	First	Industrial Engineering
B.E.	REC(NIT), Trichy	1998	First	Production Engineering
H.S.C	Tamilnadu State Board	1994	First	MPC
S.S.L.C	Tamilnadu State Board	1992	First	

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9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department/Centre/Institution	From	To
Associate Dean	Academic Section	2015 onwards	
Associate Dean	Academic Section	2012	2015
Associate Dean	Students Section	2009	2010
Member Secretary	Institute Accreditation Committee	2013 onwards	
Member-UG Admissions Committee	Academic Section	2012 onwards	
QIP Selection	Production Engineering	2013 onwards	

10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	To
Treasurer	RECAL – Alumni Association	2008	2010

11. Awards, Associateships etc.

Nil

12. Fellowships

Nil

13. Details of Academic Work

- (i) Developed an exclusive Industrial Engineering laboratory under TEQIP fund
- (ii) Introduced two elective subjects for B.Tech. (Production Engineering) and M.Tech. (Industrial Engineering and Management) Programmes

Courses taught at UG Level:

1. Design and Analysis of Experiments
2. Quality and Reliability Engineering
3. Operations Management
4. Resource Management Techniques

Courses taught at PG Level:

1. Design and Analysis of Experiments

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2. Quality and Reliability Engineering

LIST OF M.Tech. PROJECT GUIDANCE

S.No.	Name	Branch	Title
1	Sivasankar S	Manufacturing Technology	Machinability Study on Aluminium-Silicon Carbide Composite
2	Nidhin Ram Kunnath	Industrial Engineering	Optimization of Taguchi Multi Response Problems using Grey Relational Analysis and Simulated Annealing
3	Sivasankar S	Manufacturing Technology	Optimization of Turning Process for Aluminium-Silicon Carbide Composite using Artificial Neural Networks Models
4	Nidhin Ram Kunnath	Industrial Engineering	Reliability Prediction of Software Products using Non Homogeneous Poisson Process Models
5	Kasi Viswanadh N	Industrial Engineering	Modeling and Optimization of Supply Chain Performance Measures (Phase I)
6	Kasi Viswanadh N	Industrial Engineering	Modeling and Optimization of Supply Chain Performance Measures (Phase II)
7	Singam Maneedhar Reddy	Industrial Engineering	Modeling of Extended Supply Chain Management with Emphasis on Product Cost
8	Singam Maneedhar Reddy	Industrial Engineering	Modeling and Optimization of Multiple Quality Characteristics using Artificial Neural Networks and Genetic Programming
9	Krishna Mohan P	Industrial Engineering	A Set Covering Formulation for Agile Capacity Planning
10	Krishna Mohan P	Industrial Engineering	Design of Capacity Plans for Equipment in an Industry using Capacity Planning Techniques
11	Pandit Nitin Bhagawat	Industrial Engineering	Design and Analysis of Patient Lifting Device
12	Kamarapu Santhosh Kumar	Industrial Engineering	A Quality Function Deployment Approach by Combining MILP Model and KANO Model for Product Development
13	Sravan Vaitla	Industrial Engineering	A Systematic Approach for Quality Function Deployment under Uncertainty
14	Krishnan Katta S M	Industrial Engineering	A Strategic Planning of Supply Chain using Stochastic Model Approach in Recycling of Paper
15	Kamarapu Santhosh Kumar	Industrial Engineering	Modeling and Multi Response Optimization using Response Surface Methodology
16	Sravan Vaitla	Industrial Engineering	An Integrated Approach for Rating Engineering Characteristics in Product-Service System Development

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17	Krishnan Katta S M	Industrial Engineering	Ergonomics Design of Amusement Products
18	Naresh Neeli	Industrial Engineering	Modeling and Optimization of Process Parameters for Machining Glass Fibre Reinforced Plastics (GFRP)
19	Kunhahamed P K	Industrial Engineering	Optimization of EDM Process Parameters for Zirconium Diboride
20	Rahul Goyal	Industrial Engineering & Management	Reduction of Bullwhip effect in Supply chain by Lib-SVM
21	Rahul Goyal	Industrial Engineering & Management	Selection of Reverse Logistics Operating Channel for Electronics Industries – by ANP Approach
22	Tarun Singh Rajput	Industrial Engineering & Management	Application of Value stream Mapping Outdoor Cabinet
23	Ritesh Chandrakar	Industrial Engineering & Management	An Integrated approach to Solve Multi Response Problems in Taguchi Method

14. Details of Major R&D Projects

Nil

15. Number of PhDs guided

LIST OF Ph.D GUIDANCE

S.No.	Name	Year of Completion	Title
1	Mr. B. SHAHUL HAMID KHAN	2008	Some Investigations on Flow Shop Scheduling Problems with Single and Multiple Objectives
2	Mr. A. SENTHIL KUMAR	2010	Performance Evaluation of Supply Chain Designs in Manufacturing Industries
3	Mr. M. P. JENARTHANAN	2013	Study of machinability characteristics of GFRP composites with different fibre orientations during Endmilling
4	Mr. S. SIVASANKAR	2014	Machinability Studies on Electrical Discharge Machining (EDM) of Hot pressed ZrB ₂ -SiC composites

LIST OF M.S. (RESEARCH) GUIDANCE

Name	Year of Completion	Title
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Yadunath R Varma	2014	Reduction of Fall and Injuries in Elderly – An Ergonomic Product design Perspective
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16. Participation in Workshops/ Symposia/ Conferences/ Colloquia /Seminars/ Schools etc. (mentioning the role)

LIST OF SHORT TERM COURSES ATTENDED

Sl. No.	Title	Organization/Place	Duration
1	Recent trends in Quality and Reliability systems	Anna University, Chennai	4-5 January, 2002
2	Quality Control and Reliability Engineering	Anna University, Chennai	7-12 June, 2004
3	Quantitative Techniques for Research in Engineering and Technology	Anna University, Chennai	June 17-18, 2004
4	Web Resources for R & D Acceleration	Anna University, Chennai	November 19, 2003
5	Software Quality and Reliability	Anna University, Chennai	November 25, 2005
6	Quantitative techniques for research in Engineering and Management	Anna University, Chennai	December 5-7, 2005
7	Total Quality Management	Anna University, Chennai	December 12-17, 2005
8	Effective Teaching	Anna University, Chennai	17 March 2006
9	Software Quality	Anna University, Chennai	August 25-26, 2006
10	Recent advances in logistics and supply chain management	NITT	12-16 March, 2007
11	Design and analysis of lean production systems	NIT, CALICUT	26-03-2007 to 06-04-2007
12	Recent trends in Advanced Welding Processes	NITT	18-30 June, 2007
13	Metallurgy and Materials: Today and Tomorrow	NITT	11-15 February 2008

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14	Laser Processing of Materials	NITT	6-7 March, 2008
15	Applications of IT tools in manufacturing	NITT	11-12 March, 2008
16	Recent trends in advanced manufacturing	NITT	18-22 March 2008
17	Recent advances in Industrial Engineering	NITT	7-11 April 2008
18	Fuzzy Logic: Theory and Engineering Practices	NITT	16-28 June 2008
19	Advances in Materials Processing	NITT	30 June -12 July 2008
20	Instructional Design and Delivery System	NITTTR, Chennai	05-10 January 2009
21	Engineering practices on Fuzzy Logic, neural Networks and Hybrid Intelligent Systems	NITT	15-27 June 2009
22	Composite Materials: Processing Challenges and Opportunities	NITT	13-24 July 2009
23	1 st World Summit on Accreditation	NBA, New Delhi	25-28 March 2012
24	Outcome based accreditation process and parameters	NBA, New Delhi	21-22 September 2012
25	Training of evaluators / Resource Persons on Outcome Based Accreditation	NBA, New Delhi / Bannari Amman Institute, Erode	7 June 2014 & 14-16 June 2014

17. Workshops/ Symposia/ Conferences/ Colloquia/Seminars Organized (as Chairman/ Organizing Secretary/ Convenor / Co-Convenor)

LIST OF CONTINUING EDUCATION PROGRAMMES ORGANIZED

S.No	Details
1	Organized a one day workshop on “Experimental Design in Manufacturing” under TEQIP-TDP on 19-01-2008 at NIT, Trichy
2	Organized an AICTE-QIP sponsored short term course on “Advanced tools and

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	techniques for research in engineering problems” during 25-29 February 2008 at NIT, Trichy
3	Organized an MHRD-QIP sponsored short term course on “Quality through six sigma concept and its implementation” during 14-18 December 2009 at NIT, Trichy

18. Invited Talks delivered

Topic	Date	Inviting Organization

19. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life Member)	Organization	Membership No. with date
Life Member	IEI	M139567-4

20. Academic Foreign Visits

Training Abroad – 1 Month at National University of Singapore, Singapore under TEQIP from 30-07-2008 to 29-08-2009.

21. Publications

List of Publications

1. L Selvarajan, CS Narayanan, R JeyaPaul (2016), “Optimization of EDM Parameters on Machining Si₃N₄-TiN Composite for Improving Circularity, Cylindricity, and Perpendicularity”, Materials and Manufacturing Processes 31 (4), 405-412
2. MP Jenarathanan, AA Subramanian, R Jeyapaul (2016), “Comparative analysis of surface roughness prediction using DOE and ANN techniques during endmilling of glass fibre reinforced polymer (GFRP) composites”, Pigment & Resin Technology 45 (2), 126-139

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3. S Mahendran, A SenthilKumar, R Jeyapaul (2016), “Lean manufacturing in a manufacturing industry through value stream mapping and simulation study”, *International Journal of Advanced Engineering Technology*, Vol. VII, Issue I, Jan.-March, 554, 558
4. L Selvarajan, C Sathiya Narayanan, R Jeyapaul (2015), “Optimization of EDM Hole Drilling Parameters in Machining of MoSi₂-SiC Intermetallic/Composites for Improving Geometrical Tolerances”, *Journal of Advanced Manufacturing Systems*, 14 (04), 259-272
5. MP Jenarthanan, S Ramesh Kumar, R Jeyapaul (2015), “Modelling of machining force in end milling of GFRP composites using MRA and ANN”, *Australian Journal of Mechanical Engineering*, 1-11
6. MP Jenarthanan, R Jeyapaul, S Ramesh Kumar (2015), “Comparative analysis of delamination factor prediction using RSM and ANN during endmilling of GFRP composites”, *Australian Journal of Mechanical Engineering*, 1-14
7. MP Jenarthanan, AR Prakash, R Jeyapaul (2015), “Modeling and analysis of process parameters on metal removal rate (MRR) in machining of aluminium titanium diboride (Al-TiB₂) composite”, *Multidiscipline Modeling in Materials and Structures* 11 (3), 372-385
8. L Selvarajan, C Sathiya Narayanan, R Jeyapaul (2015), “Optimization of process parameters to improve form and orientation tolerances in EDM of MoSi₂-SiC composites”, *Materials and Manufacturing Processes* 30 (8), 954-960
9. M Maniraj, V Pakkirisamy, R Jeyapaul (2015), “ An ant colony optimization–based approach for a single-product flow-line reconfigurable manufacturing systems”, *Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture*, DOI: 10.1177/0954405415585260
10. MP Jenarthanan, R Jeyapaul (2015), “Analysis and optimisation of machinability behaviour of CFRP composites using fuzzy logic”, *Pigment & Resin Technology* 44 (1), 48-55
11. B Singaravel, T Selvaraj, R Jeyapaul (2014), “Multi objective optimization in turning of EN25 steel using Taguchi based utility concept coupled with principal component analysis”, *Procedia Engineering* 97, 158-165
12. M Manohar, T Selvaraj, D Sivakumar, R Jeyapaul, J Jomy (2014), “Application of experimental design and analysis of mathematical models for turning Inconel 718 using coated carbide tools”, *Experimental Techniques*, 38 (6), 61-71

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13. L Selvarajan, C Sathiya Narayanan, R Jeyapaul (2014), "Multi-Objective Optimization on Electric Discharge Machining Using by Grey Relational Analysis", *Applied Mechanics and Materials*, 592, 550-554
14. L Selvarajan, C Sathiya Narayanan, R Jeyapaul (2014), "Optimization of Machining Characteristics in EDM of Si₃N₄-TiN Composites by Taguchi Grey Relational Analysis", *Applied Mechanics and Materials*, 592, 600-604
15. MP Jenarathanan, R Jeyapaul (2014), "Evaluation of machinability index on milling of GFRP Composites with different fibre orientations using solid carbide endmill with modified helix angles", *International Journal of Engineering, Science and Technology* 6 (4), 1-10
16. MP Jenarathanan, R Jeyapaul (2013), "Machinability study of carbon fibre reinforced polymer (CFRP) composites using design of experiment technique", *Pigment & Resin Technology* 43 (1), 35-44
17. MPJP Mugundhu, R Jeyapaul (2013), "Machinability Study of carbon fibre reinforced polymer (CFRP) composites Using Design of Experiment Technique", *Pigment & Resin Technology* 43 (1), 5-5
18. J Mugundhu, R Jeyapaul, N Neeli (2013), "Analysis of factors influencing delamination in milling process of glass fibre reinforced plastic (GFRP) composite materials", *Multidiscipline Modeling in Materials and Structures* 9 (3), 293-306
19. JP Mugundhu, R Jeyapaul (2013), "Evaluation of Milling Characteristics of Resin Hybrid GFRP Laminates Using Taguchi Approach", *Pigment & Resin Technology* 42 (5), 2-2
20. MP Jenarathanan, R Jeyapaul (2013), "Evaluation of milling characteristics of resin hybrid GFRP laminates using Taguchi approach", *Pigment & Resin Technology* 42 (5), 288-297
21. M Santhi, R Ravikumar, R Jeyapaul (2013), "Optimization of process parameters in electro chemical machining (ECM) using DFA-fuzzy set theory-TOPSIS for titanium alloy", *Multidiscipline Modeling in Materials and Structures* 9 (2), 243-255
22. YR Varma, R Jeyapaul (2013), "A Novel Step towards Fall Prevention; Initial Research and Development of a "Safe Walk Carpet" for Lateral Postural Stability, with Special Attention to the Elderly", *Proc. of Int. Conf. on Advances in Mechanical Engineering, AETAME*
23. S Sivasankar, R Jeyapaul, PK Kunhahamed (2013), "Performance study of tool materials and optimisation of pulse duration on EDM of zirconium di boride", *International Journal of Machining and Machinability of Materials* 14 (2), 123-141

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24. S Sivasankar, R Jeyapaul (2013), "Performance study of tool Materials and optimization of Process parameters during EDM on ZrB₂-SiC composite through Particle swarm optimization Algorithm", International Journal of Engineering Science and Technology 5 (1), 133-159
25. MP Jenarthanan, R Jeyapaul (2013), "Optimisation of machining parameters on milling of GFRP composites by desirability function analysis using Taguchi method", International journal of Engineering, science and Technology 5 (4), 23-36
26. S Sivasankar, R Jeyapaul (2012), "Application of Grey Entropy and Regression Analysis for Modelling and Prediction on Tool Materials Performance During EDM of Hot Pressed ZrB₂ at Different Duty Cycles", Procedia Engineering 38, 3977-3991
27. S Sivasankar, R Jeyapaul, VV Bhanu Prasad (2012), "Performance study of various tool materials for electrical discharge machining of hot pressed ZrB₂", Multidiscipline Modeling in Materials and Structures 8 (4), 505-523
28. MP Jenarthanan, R Jeyapaul, N Naresh (2012), "Modelling and analysis of factors influencing surface roughness and delamination of milling of GFRP laminates using RSM", Multidiscipline Modeling in Materials and Structures 8 (4), 489-504
29. S Sivasankar, R Jeyapaul, S Kolappan, NM Shaadil (2012), "Procedural study for roughness, roundness and waviness measurement of EDM drilled holes using image processing technology", Comput Model Inf Process 16, 49-63
30. P Senthil, T Selvaraj, G Kannan, R Jeyapaul (2012), "Multi response optimisation of turning operation parameters on Al-Cu/TiB₂ in-situ metal matrix composites using desirability function", International Journal of Manufacturing Technology and Management 25 (1-3), 1-18
31. R Jeyapaul, S Sivasankar (2011), "Optimization and modeling of turning process for aluminium-silicon carbide composite using artificial neural network models", IEEE International Conference on Industrial Engineering and Engineering Management (IEEM), 773-778
32. P Sathiya, S Aravindan, R Jeyapaul, PM Ajith, A Noorul Haq (2010), "Optimizing the weld bead characteristics of super austenitic stainless steel (904L) through grey-based Taguchi method", Multidiscipline Modeling in Materials and Structures 6 (2), 206-213
33. BSH Khan, K Govindan, R Jeyapaul (2010), "Optimisation of genetic algorithm parameters in flow shop scheduling using grey relational analysis", International Journal of Advanced Operations Management 2 (1-2), 25-45
34. S Sivasankaran, R Narayanasamy, R Jeyapaul, C Loganathan (2009), "Modelling of wrinkling in deep drawing of different grades of annealed commercially pure

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- aluminium sheets when drawn through a conical die using artificial neural network”, *Materials & Design* 30 (8), 3193-3205
35. AS Kumar, R Jeyapaul, AN Haq (2009), “Analysing the performance of supply chain designs”, *International Journal of Business Performance Management* 11 (1-2), 72-95
36. P Asokan, RR Kumar, R Jeyapaul, M Santhi (2008), “Development of multi-objective optimization models for electrochemical machining process”, *The International Journal of Advanced Manufacturing Technology* 39 (1-2), 55-63
37. AN Haq, P Marimuthu, R Jeyapaul (2008), “Multi response optimization of machining parameters of drilling Al/SiC metal matrix composite using grey relational analysis in the Taguchi method”, *The International Journal of Advanced Manufacturing Technology* 37 (3-4), 250-255
38. R Jeyapaul, P Shahabudeen, K Krishnaiah (2006), “Simultaneous optimization of multi-response problems in the Taguchi method using genetic algorithm”, *The International Journal of Advanced Manufacturing Technology* 30 (9-10), 870-878
39. R Jeyapaul, P Shahabudeen, K Krishnaiah (2005), “Quality management research by considering multi-response problems in the Taguchi method—a review”, *The International Journal of Advanced Manufacturing Technology* 26 (11-12) 1331-1337
40. J MP, R Jeyapaul, “Taguchi Analysis of surface roughness and delamination associated with solid carbide end mills with different helix angles in milling of GFRP composites” *International Journal for Science, Technology and Research*
41. M Maniraj, V Pakkirisamy, R Jeyapaul, “Genetic algorithm approach for minimizing capital cost in reconfigurable manufacturing systems”