RESUME

1. Preview ••

Preview Personal Details Name of the Staff Official Address with E-mail Id	: Dr.D.Ravindran : Principal Thamirabharani Engineering College, Chidambaranagar, Thatchanallur Tirunelveli – 627 358 Email : <u>ravinec85@gmail.com</u> , <u>principal@tec.edu.in</u>	
	Mobile : +91 /39/061880, +91 8/7	8890591
Date of Birth and Age	: 12-March-1963, 59 Years	
Address for Communication	: No51, Housing Board Colony,	
	3 rd Street, Sankar nagar,	
	Tirunelveli - 627357	
Passport Details	: N9601558 valid till 18.04.2026	

2. Career Profile: Total teaching experience 36 years 5 months

Institution	Duration		Designation	Service in Yrs/Mont	
Institution	From	rom To Designation			
Thamirabharani					
Engineering	02.05.2022	Till Date	Principal	0Y 1 M	
College					
Tagore					
Engineering	14.06.2021	04.03.2022	Principal	0Y 8M	
College					
National Engineering College	02.05.2014	30.04.2021	Professor		
	26.05.2007	01.05.2014	Professor and	15Y 4M	
			Head		
	28.12.2005	25.05.2007	Professor		
	23.06.1995 27.12.2005	27 12 2005	Assistant	10 V 6 M	
		Professor	10 1 0 101		
	01.07.1985	22.06.1995	Lecturer	9 Y 11 M	
	Total Experience			36 Y 5 M	

(as professor 15 years 8 months as on 13.05.2022)

3. Educational Qualification:

Degree	Year	College/University	Percentage/ CGPA	Class/ Division
B.E. (Mech.)	1984	P.D.A. College of Engineering, Gulbarga	64.85	First Class with Distinction
M.E.(Prod.)	1991	Annamalai University	73.37	First Class

Ph.D.	2005	Manonmaniam Sundaranar University	-	-
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4. Guidance of Research

Number of Ph.D. scholars completed	:	14 (Supervised Independently)
Number of Ph.D. scholars submitted thesis	:	02
Number of scholars pursuing	:	02

5. Major Research Projects undertaken as Principle Investigator

Sponsored Agency	Title of the Project	Period	Cost of the Project
BRNS	Prediction and control of distortion in components during hard facing	2006-2009	19.6 lakhs
BRNS	Optimization of grain size for improving the creep properties of 304HCu stainless steel	2013-2019	33.52 lakhs

6. Patents Details:

- 1. Title: Multipurpose Domestic Cleaner"
 - a. Application No. 201841037690A
 - b. Name of the Inventors: Dr.D.Ravindran, S.Shunumga Sundaram
 - c. Published Date: 12.10.2018.
- 2. Title : Heat Resisting Intermediate panel for cold items container produced through

charcoal waste of water treatment plant

- a. Application No. 5533/CHE/204 A
- b. Name of Inventors : I Sankar, Dr.D.Ravindran, S.Muthukumar, R. Muthuraj, R.Rajesh and S.Ram Prakash
- c. Publication Date: 01.07.2016.

7. Book Publication:

1. Title: Simultaneous Minimization of Objectives in SRFLP (2016)

Authors : Lenin Nagarajan, Siva Kumar Mahalingam and Ravindran Durairaj

Publishers : Lambert Academic Publishing

8. Administrative Experience:

- 1. Currently occupying the post of Principal, Tagore College of Engineering, Chennai -127.
- 2. Served as Head of the Department of Mechanical Engineering, National Engineering College for the period of 7 years and brought NBA accreditation two times and organized many seminars and conferences for faculties and students.
- 3. Member of Governing Council member of National Engineering College for three years.
- 4. Academic Council member of National Engineering College for more than 12 years and till now.
- 5. Selection Board member for staff selection from 2007 -2014 for National Engineering College.
- 6. Board of Studies member for more than 15 years and chairman of board of studies for 7 years at national Engineering College.

- 7. Presently convener of Multi-Disciplinary Product Development forum of National Engineering College.
- 8. Coordinated Smart India Hackathon 2020 for the college and three teams participated in the national level in software category and one selected for next round in hardware category.
- 9. Coordinated Student's symposium for the Institution during the year 2019.
- 10. Elected and served as a National Executive Council member for ISTE for 5 years from 2014-2019.
- 11. Board of studies member for Anna University Chennai for two years and Sethu Institute of Technology Karriapatti.
- 12. Advisory Board member for the Department of Mechanical Engineering, Francis Xavier Engineering College, Tirunelveli and AAA College of Engineering, Sivakasi

9. Web link for research contribution:

- Google Scholar website link: <u>https://scholar.google.com/citations?user=pGQmZ18AAAAJ</u> Citations total 1211; h-index -18; i10 –index -25
- Scopus link: <u>https://www.scopus.com/authid/detail.uri?authorId=15042756500</u>, Citations ; 926; h- index -16.
- 3. Orcid Id: <u>https://orcid.org/0000-0002-4790-3210</u>
- 4. Web of Science ID: E-4390-2016

10. International Publications:

- Arul Marcel Moshi, A., Ravindran, D., Sundara Bharathi, S.R., Padma, S.R., Indran, S., Divya, D., "Characterization of natural cellulosic fiber extracted from Grewia damine flowering plant's stem", International Journal of Biological Macromolecules, 164, pp. 1246-1255, (2020)
- Arul Marcel Moshi, A., Ravindran, D., Sundara Bharathi, S.R., Indran, S., Suganya Priyadharshini, G., "Characterization of surface-modified natural cellulosic fiber extracted from the root of Ficus religiosa tree", International Journal of Biological Macromolecules, 156, pp. 997-1006, (2020)
- 3. Maharajan, S., Ravindran, D., Rajakarunakaran, S., Gururaj, C.," Experimental investigation of erosion and corrosion behavior of HVOF sprayed WC + 50% Cr3 C2 composite coatings on sustainable austenitic stainless steel (SS316)", Journal of Green Engineering,(2020)
- Moshi, A.A.M., Ravindran, D., Sundara Bharathi, S.R., Rex, F.M.T., Kumar, P.R.," TIG Welding Process Parameter Optimization for Aluminium Alloy 6061 Using Grey Relational Analysis and Regression Equations", Advances in Intelligent Systems and Computing, 979, pp. 413-425, (2020)
- Moshi, A.A.M., Ravindran, D., Bharathi, S.R.S., Indran, S., Saravanakumar, S.S., Liu, Y.," Characterization of a new cellulosic natural fiber extracted from the root of Ficus religiosa tree", International Journal of Biological Macromolecules, 142, pp. 212-221, (2020)
- Arul Marcel Moshi, A., Ravindran, D., Sundara Bharathi, S.R., Suganthan, V., Kennady Shaju Singh, G.," Characterization of New Natural Cellulosic Fibers-A Comprehensive Review", IOP Conference Series: Materials Science and Engineering, 574(1), (2019)
- Sundara Bharathi, S.R., Ravindran, D., Arul Marcel Moshi, A., Rajeshkumar, R., Palanikumar, R., "Multi objective optimization of CNC turning process parameters with Acrylonitrile Butadiene Styrene material", Materials Today: Proceedings, 27, pp. 2042-2047 (2019)
- 8. Maharajan, S., Ravindran, D., Rajakarunakaran, S., Adam Khan, M., "Analysis of surface properties of tungsten carbide (WC) coating over austenitic stainless steel (SS316) using plasma spray process", Materials Today: Proceedings, 27, pp. 2463-2468, (2019)

- Arul Selvan, S., Ravindran, D., Arul Marcel Moshi, A., Prince, D., "Optimization of surface roughness, material removal rate and taper error for wirecut electrical discharge machined taper parts of inconel 825 alloy", Journal of the Balkan Tribological Association, 25(4), pp. 1028-1037 (2019)
- Venkatkumar, D., Ravindran, D., "Effect of Boundary Conditions on Residual Stresses and Distortion in 316 Stainless Steel Butt Welded Plate", High Temperature Materials and Processes, 38(2019), pp. 827-836, (2019).
- Vignesh Kumar, D., Ravindran, D., Lenin, N., Siva Kumar, M., "Tolerance allocation of complex assembly with nominal dimension selection using Artificial Bee Colony algorithm", Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 233(1), pp. 18-38,(2019).
- 12. Venkatesan, S., Ravindran, D., "Comprehensive analysis and optimization of wire electric discharge machining of graphite reinforced aluminium metal matrix composite", Journal of the Balkan Tribological Association, 233(1), pp. 18-38, (2018).
- 13. Venkatkumar, D., Ravindran, D., Selvakumar, G., "Finite Element Analysis of Heat Input Effect on Temperature, Residual Stresses and Distortion in Butt Welded Plates", Materials Today: Proceedings, 5(2), pp. 8328-8337, (2018).
- Irullappasamy, S., Ravindran, D., "Combined effect of nano clay and fibre surface treatment on mechanical behaviours of Palmyra fruit fibre/MMT clay reinforced polyester hybrid composite", International Journal of Computer Aided Engineering and Technology,10(1-2), pp. 26-34, (2018).
- 15. Chenthil Jegan, T.M., Ravindran, D., "Electrochemical machining process parameter optimization using particle swarm optimization", Computational Intelligence, 33(4), pp. 1019-1037, (2017).
- 16. Rex, F.M.T., Ravindran, D., "An integrated approach for optimal fixture layout design", Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 231(7), pp. 1217-1228, (2017).
- Rajakumar, S., Ravindran, D., Sivakumar, M., Venkatachalam, G., Muthukumar, S., "Optimization of Power Coefficient of Wind Turbine Using Genetic Algorithm", Journal of The Institution of Engineers (India): Series C, 98(2), pp. 111-118, (2017).
- Vignesh Kumar, D., Ravindran, D., Siva Kumar, M., Islam, M.N., "Optimum tolerance synthesis of simple assemblies with nominal dimension selection using genetic algorithm", Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 230(19), pp. 3488-3508, (2016).
- 19. Sankar, I., Ravindran, D., "Fiber loading and treatment effects on dry sliding wear of Palmyra fruit fiber composites", Science and Engineering of Composite Materials,23(2), pp. 217-226, (2016).
- Venkatkumar, D., Ravindran, D., "3D finite element simulation of temperature distribution, residual stress and distortion on 304 stainless steel plates using GTA welding", Journal of Mechanical Science and Technology, 30(1), pp. 67-76, (2016).
- Geetha, K., Ravindran, D., Kumar, M.S., Islam, M.N., "Concurrent tolerance allocation and scheduling for complex assemblies", Robotics and Computer-Integrated Manufacturing, 35, pp. 84-95, (2015).
- 22. Chenthil Jegan, T.M., Ravindran, D., Dev Anand, M., "Process parameter influencing on electrochemical machining: An experimental study", International Journal of Applied Engineering Research, 10(45 Special Issue), pp. 31905-31911, (2015).
- Chenthil Jegan, T.M., Ravindran, D., Dev Anand, M., "Intelligent modeling and optimization of ECM process parameters", Advances in Intelligent Systems and Computing, 324, pp. 533-541, (2015).

- 24. Raj, J.A., Ravindran, D., Saravanan, M., Prabaharan, T., "Simultaneous scheduling of machines and tools in multimachine flexible manufacturing systems using artificial immune system algorithm", International Journal of Computer Integrated Manufacturing, 27(5), pp. 401-414, (2014).
- 25. Jegan, T.M.C., Ravindran, D., Anand, M.D., "Material characterization study on aluminium metal matrix composites by enhanced stir casting method", Advanced Materials Research,984-985, pp. 326-330, (2014).
- 26. Rajkumar, S., Ravindran, D., Sharma, R.S., Raghupathy, V.P., "Evaluation of elastic constants of A3003 honeycomb core with varying hexagonal cell geometries through finite element approach, "Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 228(10), pp. 1689-1700, (2014).
- Lenin, N., Kumar, M.S., Ravindran, D., Islam, M.N., "A tabu search for multi-objective single row facility layout problem", Journal of Advanced Manufacturing Systems, 13(1), pp. 17-40, (2014).
- 28. Jegan, T.M.C., Ravindran, D., Anand, M.D., "ECM parameters modeling and optimization using WSGA", Applied Mechanics and Materials, 423-426, pp. 925-930, (2013).
- 29. Lenin, N., Siva Kumar, M., Islam, M.N., Ravindran, D., "Multi-objective optimization in single-row layout design using a genetic algorithm", International Journal of Advanced Manufacturing Technology, 67(5-8), pp. 1777-1790,(2013).
- Geetha, K., Ravindran, D., Siva Kumar, M., Islam, M.N., "Multi-objective optimization for optimum tolerance synthesis with process and machine selection using a genetic algorithm", International Journal of Advanced Manufacturing Technology, 67(9-12), pp. 2439-2457,(2013).
- Rajakumar, S., Ravindran, D., "Optimization of Wind Turbine Power Coefficient Parameters using Hybrid Technique", Journal of The Institution of Engineers (India): Series C, 93(2), pp. 141-149, (2012).
- 32. Sreenivasan, V.S., Ravindran, D., Manikandan, V., Narayanasamy, R., "Influence of fibre treatments on mechanical properties of short Sansevieria cylindrica/polyester composites", Materials and Design, 37, pp. 111-121,(2012).
- Rajkumar, S., Ravindran, D., Arul Raj, P.K., Hariprasath, V., "Compression behavior of adhesive butt joints of aluminum hexagonal core sandwich panels with different edging configurations", Advanced Materials Research, 488-489, pp. 737-741, (2012).
- Vigraman, T., Ravindran, D., Narayanasamy, R., "Effect of phase transformation and intermetallic compounds on the microstructure and tensile strength properties of diffusionbonded joints between Ti-6Al-4V and AISI 304L", Materials and Design, 36, pp. 714-727, (2012).
- 35. Vigraman, T., Narayanasamy, R., Ravindran, D., "Microstructure and mechanical property evaluation of diffusion-bonded joints made between SAE 2205 steel and AISI 1035 steel", Materials & Design 35, 156-169, (2012).
- 36. Vigraman, T., Ravindran, D., Narayanasamy, R., "Diffusion bonding of AISI 304L steel to lowcarbon steel with AISI 304L steel interlayer", Materials and Design, 34, pp. 594-602, (2012).
- 37. Rajakumar, S., Ravindran, D., "Iterative approach for optimising coefficient of power, coefficient of lift and drag of wind turbine rotor", Renewable Energy, 38(1), pp. 83-93, (2012).
- Jegan, T.M.C., Dev Anand, M., Ravindran, D., "Determination of electro discharge machining parameters in AISI202 stainless steel using grey Relational Analysis", Procedia Engineering, 38, pp. 4005-4012, (2012).
- 39. Kumar, M.S., Islam, M.N., Lenin, N., Vignesh Kumar, D., Ravindran, D., "A simple heuristic for linear sequencing of machines in layout design", International Journal of Production Research, 49(22), pp. 6749-6768, (2011).

- 40. Sreenivasan, V.S., Ravindran, D., Manikandan, V., Narayanasamy, R., "Mechanical properties of randomly oriented short Sansevieria cylindrica fibre/polyester composites", Materials and Design, 32(4), pp. 2444-2455, (2011).
- 41. Sreenivasan, V.S., Somasundaram, S., Ravindran, D., Manikandan, V., Narayanasamy, R., "Microstructural, physico-chemical and mechanical characterisation of Sansevieria cylindrica fibres - An exploratory investigation", Materials and Design, 32(1), pp. 453-461, (2011).
- 42. Manickam, I.N., Ravindran, D., Subramanian, P., "Biomass densification methods and mechanism", Cogeneration and Distributed Generation Journal, 21(4), pp. 33-45, (2006).
- 43. Ravindran, D., Selvakumar, S.J., Sivaraman, R., Haq, A.N., "Flow shop scheduling with multiple objective of minimizing makespan and total flow time", International Journal of Advanced Manufacturing Technology, 25(9-10), pp. 1007-1012, (2005).
- 44. Haq, A.N., Ravindran, D., Aruna, V., Nithiya, S., "A hybridisation of metaheuristics for flow shop scheduling", International Journal of Advanced Manufacturing Technology, 24(5-6), pp. 376-380, (2004).

11. Int. and National Conference Publications

- S.Prasanth Kitchley, D.Ravindran and A. noorul Haq, "Hybrid Algorithm for flow shop Problems" National Conference on Global Technologies in Manufacturing and Thermal Sciences (GTMTS -2004) organized by Sethu Institute of Technology Pulloor, Kariapatti, 9th and 10th July 2004.
- S.Rajakumar and D.Ravindran, "Aerodynamic Analysis of different NACA4 Series Airfoils" International conference on Recent advances in Mechanical Engineering (ICRAME 2010) organized by Department of Mechanical Engineering, Noorul Islam University, Kumarcoil 8th and 9th April 2010.
- D.Ravindran, T.M.Chentil Jegan and Dr, M,Dev. Anand, Determination of EDM Machining Parameters in AISI202 stainless steel using Grey Relational Analysis" International Conference on Modeling Optimization and Computing, Noorul Islam Centre for Higher Education (NICHE) Kumracoil Tamilnadu India on 10th and 11th Aril 2012.
- S.Sudhagar, D.Ravindran and A. Noorul Haq, "Minimizing the total tardiness in flow shop problems using memetic Algorithm" National Conference on Global Technologies in Manufacturing and Thermal Sciences (GTMTS -2004) organized by Sethu Institute of Technology Pulloor, Kariapatti, 9th and 10th July 2004.
- Rajkumr S, Ragupathy V.P. and Ravindran D, "Evaluation of Stiffness of aluminum hexagonal honeycomb Core Sandwich Panels By FE Methods", 2nd International Conference on Simulation Modeling and Analysis –COSMA 2011, 14-16 December 2011. Organized by Amritha School of Engineering, Coimbatore.
- S.Rajkumr, D.Ravindran, K.Arulraj and K.Pramod Shettty, "Experimental Investigation of Stiffness characteristics of Tee Joints of aluminum Honeycomb core sandwich panels with different edging configurations", International conference on Application s and design in Mechanical Engineering 2012 (ICADME 2012)27-28 Feburary 2012, Penang, Malaysia.
- S.Rajkumar, D. Ravindran and V.P. Raghupathy, "short Beam testing on Adhesive Butt Joints for Aluminum Hexagonal Core Sandwich Panels with Different edging Configurations" Proceeding of the Conference on Advances in Mechanical Engineering 2012, AMAE, Gurgon, Indi 28th -29th December 2012.
- Participated and successfully completed the online workshop on Universal Value on the Theme "Inculcating Universal Human Values in Technical Education during 5th to 9th October, 2020 organized by All India Council for Technical Education (AICTE)

12. Training program attended:

- 1. A short term training program attended on "Recent Trends in Modeling and Analysis of manufacturing Systems (sponsored By AICTE &ISE) organized by the Department of Production Engineering, Regional Engineering College, Tiruchirappalli from 16th to 27th December 2002.
- Participated in the International Conference on "Recent Advances in Material Processing Technology" (RAMPT'05 organized by Department of Mechanical Engineering, National Engineering College, 23-25th February 2005.
- 3. Participated in 7th International conference on Creep, Fatigue and Creep-Fatigue Interaction, held at Indira Ganshi Centre for Atomic Research, Kalpakkam India during January 19-22. 2016.
- 4. Participated in the Structure and Thermodynamics of Emerging Materials (STEM-2011) BRNS Theme Meeting on "Diffusion, Mass transfer and its consequences in Materials organized by Indira Gandhi Centre for Atomic Research, Kalpakkam and the Indian Institute of metals, Kalpakkam Chapter during November 24-26, 2011.
- 5. Participated in NPTEL workshop organized by IIT Madras on 24th April 2015.

13. Training offered :

- 1. Training offered to faculty members in the Manufacturing Technology Laboratory at the Department of Mechanical Engineering, Francis Xavier Engineering College. 29th Dec 2016.
- 2. Expert lecture delivered on the topic "Conservation of Energy and Global Warming" in the Regional Workshop on Science Writing / Journalism organized by MTS Academy, Rainbow HRD Chennai and National Engineering College from 17.02.2014 to 21.02.2014.
- **3.** Training offered to Faculty member of Different Institutions on Outcome based Education" at national Engineering College.

14. Professional Recognition

Name of the award	Year	Organization
Sir Rajendra Nath Mookerjee Memorial Prize/India	2013	The Institution of Engineers (India)

15. Membership in Professional bodies

Name of Society	Grade of Membership
ISTE	• Life Member (LM 21018)
	• Elected as Section managing committee member for ISTE (TN &P section) for the term 2009-2011
	• Elected as Executive council member for ISTE(TN& P section) for the term 2015 to 2017
IE	Fellow member (F-112981-5)
SME	Life Member (FMSME 00405) and also Executive Committee member

16. Research scholars completed Ph.D.

- 1. Mr.V.Sreenivasan, Anna University Chennai (2006289706), "Studies on characterization of Sansevieria Cylindrica fibers and mechanical properties of sansevieria cylindrical / polyester composites" 2012.
- 2. Mr.T.Vigraman, Anna University Chennai (2006289113), "Diffusion Bonding of dissimilar Metals" 2012.
- 3. Mr.S.Rajakumar, Anna University Chennai (2006289705) "Optimization of power coefficient of horizontal axis wind turbine" 2012.
- 4. Mr.S.Rajkumar, Anna University Chennai (20072062003) "Investigation of joint configurations and joint characteristics of A3003 honey comb sandwich panels" 2014.
- 5. Mr.N.Lenin, Anna University Chennai (2010720107) "Simultaneous minimization of objectives in single row facility layout problems" 2015.
- 6. Mr.J.Aldrinraj, Anna University Chennai (20072042001) "Heuristic approaches to FMS scheduling problems" Aug.2015.
- 7. Mr. D.Venkatkumar, Anna University Chennai (1408201011) "Prediction of Thermal Histories, Residual Stresses and Distortion in welded Components" Aug. 2017.
- 8. Mr.C.Centhil Jegan, Anna University Chennai (2009720103) "ECM Process Parametric Optimization with Aluminum Metal Matrix Composites" Aug 2017
- 9. Ms.K.Geetha, Anna University Chennai (1408201004) "Multi-objective Optimization with Optimum Tolerance Synthesis" Dec.2017
- 10. Mr.I.Sankar, Anna University Chennai, (2010720114)"Fabrication and characterization of Palmyra fruit fiber / nano-clay reinforced polymer composite" June 2018.
- 11. Mr.D.Vigneshkumar, Anna University Chennai, (1113289127) "Minimization of Total Manufacturing Cost for Simple and Complex Assemblies"
- 12. Mr.F.Michael Thomas Rex, Anna University Chennai, (20117201042) "Design and Optimization of Fixture layout fro milling operations" May 2019.
- 13. Mr. S.Venkatesan Anna University Chennai, (1113289127) "Micro Machining of aluminum based composites using Wire Electrical Discharge Machining" July 2019.
- 14. Mr.M.Mohammed Mohaideen, Anna University Chennai (1218289794) "Fabrication and characterization of Multi-layer Kevlar reinforced composites" Dec.2020.

Dr.D.Ravindran