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<i>Designation</i>	Associate Professor
<i>Contact details (Phone number & Official Mail ID)</i>	thangapandiann@stjosephstechnology.ac.in
<i>Date of birth</i>	05.03.1987
<i>Qualification:</i>	M.E, Ph.D.,
<i>Years of Experience:</i>	Total of 13 Years
	Teaching: 08
	Research: 05
<i>Subjects handled:</i>	Engineering Graphics, Engineering Mechanics, Fluid Mechanics and Machinery, Hydraulics and Pneumatics, Engineering Materials and Metallurgy, Computer Aided Drawing and Manufacturing, Automobile Engineering, Total Quality Management
<i>Area of research:</i>	Severe Plastic Deformation; Metals structure – Property relations, Composites, Additive Manufacturing
<i>Guide ship Details:</i>	Anna University (No. 3020032)
<i>Research Guidance:</i>	2 (On-Going)
<i>Awards and Achievements(Journal editors):</i>	1. Reviewer of Material Science Book for AICTE project of Technical Books Translation in Tamil Language for 2nd year BE/B.Tech and Diploma courses.
<i>Journal Publication Details:</i>	<ol style="list-style-type: none"> 1. K Gnanasekaran, N Thangapandian, D Elil Raja, Tushar Sonar, S Vinoth Kumar, Ramesh Krishnan, “A comprehensive analysis of the EDM parameters of cryogenically treated EN8 steel in accordance with the Taguchi method”, (2025). 2. Poongavanam GaneshKumar, N Thangapandian, Seong Cheol Kim, Vanaraj Ramkumar, Saravanan Pandiaraj, Abdullah N Alodhayb, “Enhancing the solar still performance with nano-coated seashells and surface-modified absorber plates for clean water production”, (2025), 285 3. N Sathishkumar, G Arumaikkannu, N Thangapandian, EA Hem Anand, “Exploring the impact of cryogenic treatment on detonation spray coated M2 high speed steel”, (2024), 39 4. Satthiyaraju Mani, Ananthakumar Kasi, Thangapandian Nagamalai, Vivekananda Annamar Subramani, Arul Natarajan, Asiful H Seikh, Muthukumar Krishnan, Sathish Kumar

	<p>Ramachandran, "Enhancement of piezoelectric responses of electrospun PVDF nanofibers through mechanical stretching and annealing process", <i>Materials Science and Engineering: B</i>, (2024), 307</p> <p>5. J. Jenix Rino, A.S. Vivekananda, N.Thangapandian, S. Balasivanandha Prabu, "Mechanical and wear behaviour of Al-Si5Cu3/ ZrB2 in-situ reinforced metal matrix composite", <i>Journal of Metalcasting</i> (2024).</p> <p>6. V.Babu, N. Thangapandian, A. Chidambaram, Balasivanandha Prabu Shanmugavel, "Optimization of process parameters of cyclic expansion extrusion process for effective grain refinement of Al-Mg-Si alloy" <i>Journal of Materials Engineering Performance</i>, (JAN 2024) (SCI I.F-2.6) ISSN- 1059-9495</p> <p>7. N. Thangapandian*, M. Sathiyaraju, P. Ganesh Kumar, S. Vinoth Kumar, "Investigation of vibration, flexural, tribological and flame retardant properties on rubber crumb reinforced polymer composites" <i>Progress in Rubber Plastics and Recycling Technology</i>, (DEC 2023) (SCI I.F-2.6) ISSN – 1477-7606</p> <p>8. P. Ganesh Kumar, N. Thangapandian, V.S. Vigneswaran, P. Sundaram, A. Sathishkumar, Sung Chul Kim and Rajendran Prabakaran "Energy, exergy, economic and environmental evaluation of solar desalination system comprising different enhanced surface absorber plates" <i>Desalination</i>, (JULY 2023) Vol. 565, pp - 116842 (SCI I.F- 9.9) ISSN - 0011-9164</p> <p>9. Vinothkumar Sivalingam, Qian Zhou, Ganesh Manickajothi, Nimel Sworna Ross, Jie Sun, Munish Kumar Gupta, Mehmet Erdi Korkmaz, Thangapandian Nagamalai "Understanding the machining characteristics of Al6082 hybrid metal matrix composites milled under cryogenic cooling conditions" <i>The International Journal of Advanced Manufacturing Technology</i>, (OCT 2023), 129, pp 3387–3402 (SCI I.F- 3.4) ISSN - 0268-3768</p> <p>10. P. Ganesh Kumar, N. Thangapandian, V.S. Vigneswaran, S. Vinothkumar, B. Mouli Prasanth, and Sung Chul Kim* "Heat transfer, pressure drop, and exergy analyses of a shot-peened tube in the tube heat exchanger using Al2O3 nanofluids for solar thermal applications" <i>Powder Technology</i>, (MAR 2022), vol. 401, pp 117299 (SCI I.F- 5.134) ISSN - 0032-5910</p> <p>11. N.Thangapandian, J. Jenix Rino*, S. Balasivanandha Prabu, "Strain Inhomogeneity and grain refinement in AA6063 aluminum alloy subjected to Repetitive Corrugation and Straightening: comparison of experimental and Finite Element Analysis" <i>International Journal of Material Forming</i>, (FEB 2022), vol. 15, pp 1-13 (SCI I.F- 2.4) ISBN – 1960-6206</p> <p>12. Tarun John Thomas, N Thangapandian, D Sakthivel, Syed Mihad Syed Fakhir Mohideen, kathirvel Brindhadevi, Sakeenabi Basha, Ramya Ganesan*, "Experimental analysis of C.I. Engine using plastic oil blended with aluminium oxide nanoparticle", <i>Fuel</i>, (MAR 2022), vol. 312, (SCI I.F- 6.609) ISSN- 0016-2361</p>
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13. G. Karthik Pandiyan*, T. Prabakaran, D. Jafrey Daniel, Vinothkumar Sivalingam, **N. Thangapandian**, “**Improvement on the machinability characteristics of AA6061-T6/15 wt. % SiC composites by Response Surface methodology**”, **Surface Topography: Metrology and Properties**, (SEP 2021), Vol.9, pp 1-15 (SCI I.F – 2.038) ISSN : 2051-672X
14. P. Ganesh Kumar, D. Sakthivadivel, **N. Thangapandian**, Mohammad Salman, Sung Chul Kim, Amrit Kumar Thakur “**Effects of ultrasonication and surfactant on the thermal and electrical conductivity of water - solar glycol mixture based Al₂O₃ nanofluids for solar-thermal applications**”, **Sustainable Energy Technologies and Assessments**, (Oct 2021), Vol. 47, pp 1-11 (SCI I.F – 8) ISSN: 2213-1396
15. Vinothkumar Sivalingam, Yanzhe Zhao, Ramkumar Thulasiram, Jie Sun*, **N Thangapandian**, “**Machining Behaviour, surface integrity and tool wear analysis in environment friendly turning of Inconel 718 alloy**”, **Measurement**, (APR 2021), Vol. 174 (SCI I.F – 5.131). ISSN: 0263-2241
16. P Ganesh Kumar*, R Prabakaran, D Sakthivadivel, **N Thangapandian**, R Velraj, Sung Chul Kim, “**Effect of shot blasting on droplet contact angle of carbon aided phase change nanocomposites**”, **Surface Engineering**, (JAN 2021), Vol. 37(8), pp 1002-1011 (SCI I.F – 2.23). ISSN: 02670844
17. Sung Chul Kim, Prabhakaran R, D Sakthivadivel, **Thangapandian N**, Arpit Bhatia, P. Ganesh Kumar* “**Thermal Transport Properties of Carbon-Assisted Phase Change Nanocomposite**” **Fullerenes, Nanotubes and Carbon Nanostructures**, (July 2020), Vol 28, pp 925-933 (I.F – 1.648) ISSN: 1536-383X
18. **N. Thangapandian**, S. Balasivanandha Prabu, K.A. Padmanabhan, “**Effect of temperature on grain refinement in AA6063 aluminium alloy subjected to repetitive corrugation and straightening**”, **Acta Metallurgica Sinica**, (Jan 2019), Vol 32, pp 835-844 (SCI I.F – 3.5) ISSN: 1006-7191
19. **N. Thangapandian**, S. Balasivanandha Prabu “**Effect of combined Repetitive Corrugation and Straightening and rolling on the Microstructure and Mechanical properties of pure aluminium**”, **Metallography, Microstructure, and Analysis**, (Oct 2017), Vol 6, pp 481-488 ISSN: 2192-9270
20. **N. Thangapandian**, S. Balasivanandha Prabu, K.A. Padmanabhan, “**Effect of Temperature and Velocity of Pressing on Grain Refinement in AA5083 Aluminum Alloy During Repetitive Corrugation and Straightening Process**”, **Metallurgical and Materials Transactions A**, (Oct 2016), Vol 47A, pp 1-10 (SCI I.F – 2.8) ISSN: 1073-5623
21. **N. Thangapandian**, S. Balasivanandha Prabu, K.A. Padmanabhan, “**Effects of die profile on grain refinement in Al-Mg alloy processed by repetitive corrugation and straightening**”, **Materials Science and Engineering A**, (Jan 2016),

	<p>Vol 649, pp 229-238 (SCI I.F – 6.4) ISSN: 0921-5093</p> <p>22. N. Thangapandian, S. Balasivanandha Prabu, "The role of corrugation die parameters on the mechanical properties of Aluminium alloy (AA 5083) processed by repetitive corrugation and straightening", Journal of Materials Science and Chemical Engineering, (2015), Vol 3, pp 208-212</p> <p>23. N. Thangapandian, S. Balasivanandha Prabu, K.A. Padmanabhan, "On the role of Experimental variables in the repetitive corrugation and straightening", Procedia Engineering, (Sep 2017), Vol 207, 1457-1462 ISSN: 1877-7058</p>
Book and Chapter Publications:	<p>1. N Thangapandian and M.Satthiyaraju "Effect of reinforcements on the tribological properties of Polymer composites", in Composite and Composite Coatings: Mechanical and Tribology Aspects, ISBN - 9780367625672 (Editor : Md. Thariq Bin Haji Hameed Sultan, S. Arulvel, K. Jayakrishna), CRC Press, 2022, USA</p> <p>2. Monsuru Ramoni, Ragavanantham Shanmugam. N.Thangapandian, M.Vishnuvarthanan "Challenges in Additive Manufacturing for Metals and Alloys", in Innovations in Additive Manufacturing" ISBN - 978-3-030-89400-9 (Editor : Adam Khan M, JT Winowlin Jappes), Springer, 2022</p>
International Conference:	<p>1. N. Thangapandian, S. Balasivanandha Prabu, "Synthesis and Characterization of MWNTs and EPOXY/MWNTs Nanocomposites" International Conference on Nano Science & Nano Technology (ICONN-2010), SRM University, Kattankulathur during February 24-26, 2010,</p> <p>2. N. Thangapandian, A. Preetam, S. Balasivanandha Prabu, S. Senthil Kumaran, "Mechanical Properties of commercially pure copper after Repetitive Corrugation and straightening", Proceedings of the second International conference on advances in materials processing and characterization (AMPC2013) Organised by the Department of Mechanical Engineering, Anna University, Chennai-25, during 6-8 February 2013, Allied Publishers, ISBN:978-81-8424-819-7, pp.288-292</p> <p>3. N. Thangapandian, S. Balasivanandha Prabu, R. Paskaramoorthy, "Synthesis and Characterization of High Performance Polymer Nanocomposite Using Carbon Nanotubes as Fillers" ASME 2013 Manufacturing Science and Engineering Conference (MSEC2013), University of Wisconsin-Madison, during June 10-14, 2013, ASME Proceedings, ISBN: 978-0-7918-5545-4, pp. V001-1A070</p> <p>4. N. Thangapandian, S. Balasivanandha Prabu, "Effect of pressing speed on AA 5083 Aluminium alloy processed by repetitive corrugation and straightening" International Conference on Mechanical Materials and Manufacturing</p>

	<p>Sytems, Sri Sairam Engg College, Chennai, Jan 27-28, 2016</p> <p>5. N. Thangapandian, S.Balasivanandha Prabu, “The role of corrugation die parameters on the mechanical properties of Aluminium alloy (AA 5083) processed by repetitive corrugation and straightening” International Conference on Metal Materials and Engineering, Shangai, China, July 19-21, 2015</p> <p>6. N. Thangapandian, S. Balasivanandha Prabu, K.A. Padmanabhan, “On the role of Experimental variables in the repetitive corrugation and straightening” 12th International Conference on Technology of Plasticity (ICTP2017), University of Cambridge, UK, 17-22 Sep 2017</p> <p>7. N. Thangapandian, S. Ragavanandham, M. Thirumal Azhagan, Mohanavel Vinayagam, Seth Dennison “A Study on the Effect of Graphene on the Vibrational and Flame Retardant Characteristics of the GFRP Composites” ASME 2022 International Mechanical Engineering Congress and Exposition (IMECE2022) Oct 30 - Nov 03, 2022, Columbus, Ohio, USA</p> <p>8. N. Thangapandian, R. Manivannan, S. Ragavanandham, A. S. Vivekanandha, V. Rangarajan, “Influence of heat treatment on the microstructural properties of wire arc additively manufactured Inconel 625 alloy” ASME 2023 International Mechanical Engineering Congress and Exposition (IMECE2023) Oct 29 - Nov 02, 2023, New Orleans, Louisiana, USA</p>
National Conference:	Nil
Patent:	Nil

<i>FDP/Workshop/STTP attended:</i>	<ol style="list-style-type: none"> 1. Participated in ATAL Sponsored FDP on “3D Printing and Design” Organized by Dr.Mahalingam College of Engineering and Technology, 06-07-2021 to 10-07-2021 2. Participated in UGC and NAAC Sponsored FDP on “NAAC Revised Guidelines - A Paradigm Shift in Quality Initiatives” Organized by Carrer College, Bhopal, NAAC UGC 26-07-2021 to 01-08-2021 3. Participated in TEQIP Sponsored FDP on “Applications of Finite Element Analysis (FEA) and Computational Dynamics (CFD) using ANSYS”, Organized by Government College of Engineering, Karad, June 13- 17, 2020 4. ATAL Sponsored FDP on “Technological Advancement in Manufacturing and Industry 4.0” 5. ATAL Sponsored FDP on “Engineering Solutions for Sustainable Future” 6. ATAL Sponsored FDP on “ADVANCES IN METAL ADDITIVE MANUFACTURING”
<i>FDP/Workshop/STTP Conducted:</i>	<ul style="list-style-type: none"> • Organised a workshop on 29 & 30th November, 2019 entitled “Nanotechnology – Mechanical Engineers Perspective” along with Tamilnadu State Council for Science and Technology.
<i>Online Courses:</i>	<p><u>NPTEL Courses</u></p> <ul style="list-style-type: none"> • NBA Accreditation and Teaching-Learning in Engineering (NATE) • Metal Additive Manufacturing • Fundamentals of Additive Manufacturing • Rapid Prototyping <p><u>Coursera</u></p> <ul style="list-style-type: none"> • Introduction to Additive Manufacturing Processes • Material Extrusion • Selective Laser Sintering and Metal Laser Powder Bed Fusion
<i>Funded Projects:</i>	-
<i>Consultancy work:</i>	01
<i>Professional Body Membership:</i>	Life Member, Indian Institute of Metals (No. 56660)