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<i>Date of birth</i>	16.06.1992
<i>Qualification:</i>	M.E., (Ph. D).
<i>Years of Experience:</i>	Total of 9 Years
	Teaching: 9
	Industry: -
<i>Subjects handled:</i>	Design of Machine Elements Design of Transmission Systems Engineering Graphics Robotics Professional Ethics Basic Civil and Mechanical Engineering
<i>Area of research:</i>	Functionally Graded Materials (FGMs), Machining, Tribology, Optimization
<i>Journal Publication Details:</i>	<p>MA Prasanth, S Rani, S Prathap Singh, D Elil Raja, Praveen Barmavatu, Formulation and evaluation of bio-grease from the blend of chemically modified rice bran oil and Calophyllum inophyllum oil, Journal of Engineering and Applied Science, Volume 71, Issue 1, Pages 80, 2024. https://doi.org/10.1186/s44147-024-00414-w</p> <p>S Prathap Singh, RP Rohith, S Franklin Nirmal, D Elil Raja, P Ravichandran, Improvement in Manufacturing of Aluminium-Based Functionally Graded Materials through Centrifugal Casting-A Review, Engineering Proceedings, Volume 61, Issue 1, 2024, Pages 1-16. https://doi.org/10.3390/engproc2024061016</p> <p>S Prathap Singh, D Ananthapadmanaban, Effect of Silicon Nitride Particles on the Sliding Wear Characteristics of Functionally Graded Aluminium Composite, Journal of Materials Engineering and Performance, Volume 33, 2023, Pages 2875–2896. https://doi.org/10.1007/s11665-023-09011-z</p> <p>S Prathap Singh, S Suresh Kumar, D Elil Raja, Tushar Sonar, Mikhail Ivanov, G Velmurugan, A Perumal, Machinability studies on AA-SiC-TiO₂ based heat treated HMMC with negative polarity electrode using EDM, International Journal on Interactive Design and Manufacturing, 2023, pages 1-12. https://doi.org/10.1007/s12008-023-01605-0</p> <p>T Prabhuram, S Prathap Singh, D Elil Raja, J Immanuel Durairaj, M Chrispin Das, P Ravichandran, Development and mechanical characterization of jute fibre and multi-walled carbon nanotube-reinforced unsaturated polyester resin composite, Materials Today: Proceedings, 2023. https://doi.org/10.1016/j.matpr.2023.08.302</p> <p>S Prathap Singh, M Gerald Arul Selvan, P Jose Aloysius, P Ravichandran, K Vinoth Babu, Effect of acidic solution and immersion duration on the corrosion</p>

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M Chrispin Das, **S Prathap Singh**, V Rangarajan, T Prabhuram, Characterization of pineapple leaf fiber, areca fiber and egg shell powder reinforced phenolic resin composites and finding optimal parameters for sustainable machining, *Materials Today: Proceedings*, 2023. <https://doi.org/10.1016/j.matpr.2023.04.023>

S. Prathap Singh, D.X. Tittu George, M. Maria Jebin, Optimization of WEDM control parameters for machining of functionally graded Today: *Proceedings*, Volume 63, 2022, Pages 607-612, <https://doi.org/10.1016/j.matpr.2022.04.190>.

Ramesh Krishnan, K. Gnanasekaran, D. Elil Raja, S. Jagadeesh, **S. Prathap Singh**, Experimental study of micro-EDM on EN24 steel with normal brass, tin coated brass, cryogenic treated brass tool by varying the machining parameters, *Materials Today: Proceedings*, Volume 66, Part 4, 2022, Pages 2062-2069, <https://doi.org/10.1016/j.matpr.2022.05.495>.

M. Chrispin das, D. Arthur Jebastine Sunderraj, K. Arun Vasantha Geethan, D. Elilraja, T. Prabhuram, **S. Prathap Singh**, Mechanical and moisture absorption behaviour of Woven pineapple leaf phenol formaldehyde composites, *Materials Today: Proceedings*, Volume 62, Part 2, 2022, Pages 1303-1307, <https://doi.org/10.1016/j.matpr.2022.04.680>.

S. Prathap Singh, D. Ananthapadmanaban, K. Arun Vasantha Geethan, P. Ravichandran, Microscopical and corrosion studies on Al6061 - 10% Al₂O₃ functionally graded metal matrix composites, *Materials Today: Proceedings*, Volume 62, Part 2, 2022, Pages 459-462, <https://doi.org/10.1016/j.matpr.2022.03.567>.

T. Prabhuram, **S. Prathap Singh**, J. Immanuel Durairaj, D. Elilraja, M. Chrispin Das, D. Arthur Jebastine Sunderraj, Optimization of operation parameters in machining of functionally graded metal matrix composite using TOPSIS, *Materials Today: Proceedings*, Volume 62, Part 2, 2022, Pages 429-433, <https://doi.org/10.1016/j.matpr.2022.03.562>.

Prathap Singh, S., Prabhuram, T., Elilraja, D., Immanuel Durairaj, J. (2022). Influence of Drilling Operation Variables on Surface Roughness and Thrust Force of Aluminium Reinforced with 10% Al₂O₃ Functionally Graded Metal Matrix Composite. In: Natarajan, S.K., Prakash, R., Sankaranarayanan, K. (eds) *Recent Advances in Manufacturing, Automation, Design and Energy Technologies. Lecture Notes in Mechanical Engineering*. Springer, Singapore. https://doi.org/10.1007/978-981-16-4222-7_8

D. Elil Raja, K. Gnanasekaran, K. Ramesh, **S. Prathap Singh**, S. Jagadeesh, Investigation of machining parameters of super hardened tool in micro electrical discharge machining, *Materials Today: Proceedings*, Volume 47, Part 19, 2021, Pages 6965-6970, <https://doi.org/10.1016/j.matpr.2021.05.216>.

Nathan, D., Elilraja, D., Prabhuram, T., **Prathap Singh, S.** (2021). Experimental Investigation of Surface Roughness in End Milling of AA6061 Alloy with Flooded Cooling and Minimum Quantity Lubrication (MQL) Technique. In: Vijayan, S., Subramanian, N., Sankaranarayanan, K. (eds) Trends in Manufacturing and Engineering Management. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-15-4745-4_58

S. Jagadeesh, K. Narayanamoorthy, K. Ramesh, K. Gnanasekaran, **S. Prathap Singh**, Experimental study on modified water injected four stroke petrol engine, Materials Today: Proceedings, Volume 45, Part 2, 2021, Pages 1119-1122, <https://doi.org/10.1016/j.matpr.2020.03.229>.

M. Chrispin Das, A. Athijayamani, K. Arun Vasantha Geethan, D. Santhosh, **S. Prathap Singh**, Effects of length and content of natural cellulose fiber on the mechanical behaviors of phenol formaldehyde composites, Materials Today: Proceedings, Volume 45, Part 2, 2021, Pages 516-521, <https://doi.org/10.1016/j.matpr.2020.02.111>.

Prabhuram, T., Elilraja, D., **Prathap Singh, S.**, Durairaj, I. (2021). Investigation of Mechanical and Chemical Properties of the Coir Fiber and Wood Powder Reinforced Hybrid Polymer Composite. In: Vijayan, S., Subramanian, N., Sankaranarayanan, K. (eds) Trends in Manufacturing and Engineering Management. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-15-4745-4_26

Ramesh, K., Gnanasekaran, K., **Prathap Singh, S.**, Thayumanavan, M. (2020). Optimization of Turning Process Parameters in Machining of Heat-Treated Ductile Iron Bar Using TiC/TiCN/Al₂O₃-Coated Tungsten Carbide Tool. In: Yang, L.J., Haq, A., Nagarajan, L. (eds) Proceedings of ICDMC 2019. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-15-3631-1_43

Vinoth Babu, K., **Prathap Singh, S.**, Marichamy, S., Ganesan, P., Uthayakumar, M. (2020). Optimization of Drilling Process in Heat-Treated Al-20% SiC Functionally Graded Composite Using Grey Relational Analysis. In: Yang, L.J., Haq, A., Nagarajan, L. (eds) Proceedings of ICDMC 2019. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-15-3631-1_44

K. Ramesh, **S. Prathap Singh**, K. Gnanasekaran, A.Sathish Kumar, Optimization of turning process parameters in machining of heat treated ductile iron bar using Taguchi technique, Materials Today: Proceedings, Volume 22, Part 4, 2020, Pages 2316-2323, <https://doi.org/10.1016/j.matpr.2020.03.353>.

S. Prathap Singh, K. Arun Vasantha Geethan, D. Elilraja, T. Prabhuram, J. Immanuel Durairaj, Optimization of dry sliding wear performance of functionally graded Al6061 / 20% SiC metal matrix composite using Taguchi method, Materials Today: Proceedings, Volume 22, Part 4, 2020, Pages 2824-2831, <https://doi.org/10.1016/j.matpr.2020.03.414>.

International Conference:	<p>The International Conference on Processing and Performance of Materials (ICPPM 2023)</p> <p>3rd Indo-Japan Bilateral Symposium on Futuristic Materials and Manufacturing for Sustainable Development Goals (IJBSFMM 2022).</p> <p>1st International Conference on Materials and Manufacturing for Sustainable Development (ICMMS-22)</p> <p>International Conference on Engineering Materials, Metallurgy and Manufacturing (ICEMMM 2021)</p> <p>International Conference on Future Technologies 2020 (ICOFT 2020) in Manufacturing, Automation, Design and Energy</p> <p>International Conference on Recent Advances in Design, Materials and Manufacturing ICRADMM - 2020</p> <p>International Conference on Advances in Materials Research ICAMR – 2019</p> <p>International Conference on Advances in Materials Processing and Characterization ICAMPC-2019</p> <p>International Conference on Mechanical Engineering Design ICMechD 2019</p> <p>2nd International Conference on Materials Manufacturing and Modelling, ICMMM - 2019.</p> <p>ICAMME2018 - International Conference on Automobile, Marine and Mechanical Engineering</p>
National Conference:	<p>RIAMS'19 – National Conference on Recent Innovations in Advanced Material Science</p>
Patent:	<p>Published “CHAIN TRENCHER FOR AGRICULTURAL APPLICATION” Application Number : 202341071207 A on 26/01/2024</p> <p>Published “INFLUENCE OF NANO FLORAL PARTICLES ON THE MECHANICAL BEHAVIOUR OF POLYMER COMPOSITES” Application Number : E-2/244/2022-CHE</p>
FDP/Workshop/STTP attended:	<p>FDP on “Research oriented project work” at National Institute of Technical Teachers Training and Research, Chandigarh from 24th to 28th Feb 2020</p> <p>FDTP on “ME8692 / Finite Element Analysis” at Sri Sairam Institute of Technology from 18th to 23rd Nov 2019</p> <p>FTP on “Hybrid Casting approach for fabricating metal matrix nanocomposites” at SSN College of Engineering from 13th to 14th Dec 2019</p> <p>FDP on “Engineering Graphics” at Rajalakshmi Engineering College from 25th to 27th July 2019</p> <p>Workshop on “Avenues in Composite Materials - Processing and Characterization” at Rajalakshmi Engineering College from 6th to 8th June 2019</p>
Online Courses:	<p>NPTEL</p> <p>Smart materials and Intelligent system design (4 Weeks)</p> <p>Introduction to research (4 Weeks)</p> <p>Accreditation And Outcome Based Learning (8 Weeks)</p>
Professional Body Membership:	<p>ISTE</p> <p>IAENG</p>