



SRI RANGANATHAR
INSTITUTE OF ENGINEERING AND TECHNOLOGY
(An Autonomous Institution)



(Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai)
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NEWS LETTER

DEPARTMENT OF

MECHANICAL ENGINEERING



DEPARTMENT OF MECHANICAL ENGINEERING (MECH)

ABOUT THE DEPARTMENT:

Department of Mechanical Engineering brings innovation in every aspect of activity and developing the students into superior graduates in order to meet industrial needs by adopt effective methods of teaching with highly qualified and experienced Faculty members and Technicians. Industrial oriented teaching and well equipped laboratories enable the students to achieve a goal in Mechanical Engineering Domain. Product development strategy and industry connectivity within the department explore a new path in the current trends.

VISION:

Our vision is to be a distinguished centre of excellence in Mechanical Engineering, fostering continuous learning, advanced skilling, and research collaboration, dedicated to advancing mechanical education and scientific exploration for societal betterment.

MISSION:

- Enlightening students with effective pedagogies, hands-on practice and advanced skills.
- Stimulating students' interest through add-on courses for better collaborative learning and employability.
- Providing guidance on innovative research and leadership proficiency.
- Nurture entrepreneurship, human values and ethics, team work along with social skills.



MECH NEWSLETTER

Jan'-June 2024

SRIET Profile:

Sri Ranganathar Institute of Engineering and Technology (SRIET) came into existence in 2011, out of an ardent desire of Dr. V. Narayanasamy to contribute manifold to the society that nurtured him. SRIET is an Innovative Educational Institution where the curiosity, creativity and intellectual joy of students all drive to academic excellence. Our Institution provides complex problem-solving skill and imbibes service to the public good. SRIET is defined by strong association and working in ways that excel in traditional boundaries.

SRIET's academic excellence is rooted in a student-centered model of learning. The Curriculum is an accurate approach to education that pushes the students to be creative thinkers, intellectual risk-takers and entrepreneurial problem-solvers. SRIET leaves students prepared to thrive as independent and innovative leaders and equipped with the tools they need to become the next generation of leaders in their respective fields.

LIST OF CONTENT:

- Journals Publication (National/International)
- Conference Presented (National/International)
- Seminar/Workshop Attended
- FED/STTP Attended
- Interaction with outside world
- Student's Achievements



Journal Publication Details

- Dr. T.M. Chenthil Jegan, HOD/Mech, have published a journal paper on “Experimental Determination of Gyroscopic Couple” in the AIP Conference Proceedings (Scopus) with impact factor 0.189, Jan 2024.
- Dr. T.M. Chenthil Jegan, HOD/Mech, have published a journal paper on “Experimental determination of radius of gyration of an object using compound pendulum technique” in the AIP Conference Proceedings (Scopus) with impact factor 0.189, Jan 2024.
- Mr. M. Natrayan, AP /Mech, have published a journal paper on “Evaluation of Coated and Uncoated Inserts of the Cutting Tool for Improved Machinability of Inconel 825 Alloy” in the SAE International with impact factor 0.638, Feb 2024.
- Dr. J. D. Nallasivam, ASP /Mech, have published a journal paper on “A Comprehensive Review on Surface Engineering” in the Tattva- Sindhu with impact factor 7.4, Feb 2024.
- Dr. J. D. Nallasivam, ASP /Mech, have published a journal paper on “Evaluating the Mechanical Properties of Maize Fiber and Prosopis Juliflora Reinforce Polyester Resin Composites” in the International Journal of Creative Research Thoughts with impact factor 7.97, March 2024.
- Dr. T. M. Chenthil Jegan, HOD /Mech, have published a journal paper on “Mechanical Behavior of Aluminum based Metal Matrix Composites” in the International Research Journal on Advanced Engineering Hub, April 2024.
- Dr. J. D. Nallasivam, ASP /Mech, have published a journal paper on “Experimental Study on the Mechanical Behavior of Polyamide 6 with Glass Fiber Composites Fabricated through Fused Deposition Modeling Process” in the SAE International Technical Paper with impact factor 1.2, April 2024.
- Mr. A. R. Sivanesh, AP /Mech, have published a journal paper on “Experimental Study on the Mechanical Behavior of Polyamide 6 with Glass Fiber Composites Fabricated through Fused Deposition Modeling Process” in the SAE International Technical Paper with impact factor 1.2, April 2024.
- Mr. A. R. Sivanesh, AP /Mech, have published a journal paper on “Effect of Diverse Raster Angle in FDM Processing on Mechanical Performance of PETG” in the International Journal of Research and Analytical Reviews with impact factor 7.17, April 2024.
- Mr. M. Natrayan, AP /Mech, have published a journal paper on “Experimental Study on the Mechanical Behavior of Polyamide 6 with Glass Fiber Composites Fabricated through Fused



Deposition Modeling Process” in the SAE International Technical Paper with impact factor 1.2, April 2024.

- Mr. S. M. Deivasikamani, AP /Mech, have published a journal paper on “Enhancing Mechanical Characteristics of PETG Carbon Fiber Composite through Various Shell Thickness in FDM Processing” in the International Research Journal on Advanced Engineering Hub, April 2024
- Mr. A. R. Sivanesh, AP /Mech, have published a journal paper on “Statistical Analysis on Wear Behavior of Aluminum Alloy 2024 – Silicon Carbide – Fly Ash Metal Matrix Composites” in the SAE International Technical Paper with impact factor 1.2, May 2024.

Conference (International/National Level) Paper presentation Detail:

- Mr. A.R. Sivanesh, AP/Mech, has presented a paper on “Enhancing the E – Vehicle Battery Power by Widdey Circuit” in Fourth International Conference On Advancements In Research & Development (ICARD 2024) conducted by Indira Priyadarshini Govt. Degree College For Women, Coimbatore on 30.01.2024.
- Mr. A.R. Sivanesh, AP/Mech, has presented a paper on “Effect of Diverse Raster Angle in FDM Processing on Mechanical Performance of PETG” in International Conference on Futuristic Trends in Science, Engineering and Management (ICFTSEM-2024) conducted by St. Xavier’s College of Management and Technology (SXCMT), Coimbatore from 23.02.2024 to 24.02.2024.
- Dr. J. D. Nallasivam, ASP/Mech, has presented a paper on “The Art of Material Removal: An Overview of Subtractive Manufacturing” in International Conference on Recent Advances in Science, Engineering, Technology and Management (ICRASET – 2024) conducted by Sanjay Bhokare Group of Institutions, Miraj on 22.03.2024.
- Dr. S. Aravinth AP/Mech, has presented a paper on “The Art of Material Removal: An Overview of Subtractive Manufacturing” in International Conference on Recent Advances in Science, Engineering, Technology and Management (ICRASET – 2024) conducted by Sanjay Bhokare Group of Institutions, Miraj from 22.03.2024 to 23.03.2024.
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- Dr. T. M. Chenthil Jegan, HOD/Mech, has presented a paper on “Mechanical Behavior of Aluminum based Metal Matrix Composites” in 2nd International Conference on



Multidisciplinary Research & Innovation (ICMRI – 2024) conducted by Radhakrishna Institute of Technology and Engineering, Bhubaneswar from 27.03.2024 to 28.03.2024.

- Dr. T. M. Chenthil Jegan, HOD/Mech, has presented a paper on “1 CFD Optimization of Sedan Car Aerodynamics based on Various Indian Geographic Conditions” in 2nd International Conference on Multidisciplinary Research & Innovation (ICMRI – 2024) conducted by Radhakrishna Institute of Technology and Engineering, Bhubaneswar from 27.03.2024 to 28.03.2024.
- Dr. J. D. Nallasivam, ASP/Mech, has presented a paper on “Evaluating the Mechanical Properties of Maize Fiber and Prosopis Juliflora Reinforce Polyester Resin Composites” in 2nd International Conference on Multidisciplinary Research & Innovation (ICMRI – 2024) conducted by Radhakrishna Institute of Technology and Engineering, Bhubaneswar from 27.03.2024 to 28.03.2024.
- Mr. A. R. Sivanesh, AP/Mech, has presented a paper on “Effect of FDM – 3D Printing Parameters on Mechanical Properties and Microstructure of CF - PEEK” in 2nd International Conference on Multidisciplinary Research & Innovation (ICMRI – 2024) conducted by Radhakrishna Institute of Technology and Engineering, Bhubaneswar from 27.03.2024 to 28.03.2024.
- Mr. A. R. Sivanesh, AP/Mech, has presented a paper on “Mechanical Properties Characterization of Olefin Block Co-Polymer Polyethylene by FDM Process” in 2nd International Conference on Multidisciplinary Research & Innovation (ICMRI – 2024) conducted by Radhakrishna Institute of Technology and Engineering, Bhubaneswar from 27.03.2024 to 28.03.2024.
- Mr. A. R. Sivanesh, AP/Mech, has presented a paper on “Influence of AWJ Parameters on Material Removal Rate, Surface Roughness, and Kerf Angle During Machining of Prosopis Juliflora Bark Fibres/Carbon Reinforced Hybrid Polymer Composites” in 2nd International Conference on Multidisciplinary Research & Innovation (ICMRI – 2024) conducted by Radhakrishna Institute of Technology and Engineering, Bhubaneswar from 27.03.2024 to 28.03.2024.
- Mr. S. M. Deivasikamani, AP/Mech, has presented a paper on “Enhancing Mechanical Characteristics of PETG Carbon Fibre Composite through various Shell Thickness in FDM Processing” in 2nd International Conference on Multidisciplinary Research & Innovation



(ICMRI – 2024) conducted by Radhakrishna Institute of Technology and Engineering, Bhubaneswar from 27.03.2024 to 28.03.2024.

- Mr. M. ManiAP/Mech, has presented a paper on “Experimental Investigation of INCONEL 718 by using a DMLS method” in 2nd International Conference on Multidisciplinary Research & Innovation (ICMRI – 2024) conducted by Radhakrishna Institute of Technology and Engineering, Bhubaneswar from 27.03.2024 to 28.03.2024.
- Mr. M. Mani AP/Mech, has presented a paper on “Effect of FDM – 3D Printing Parameters on Mechanical Properties and Microstructure of CF - PEEK” in 2nd International Conference on Multidisciplinary Research & Innovation (ICMRI – 2024) conducted by Radhakrishna Institute of Technology and Engineering, Bhubaneswar from 27.03.2024 to 28.03.2024.
- Mr. M. Natrayan AP/Mech, has presented a paper on “Influence of AWJ Parameters on Material Removal Rate, Surface Roughness, and Kerf Angle During Machining of Prosopis Juliflora Bark Fibres/Carbon Reinforced Hybrid Polymer Composites” in 2nd International Conference on Multidisciplinary Research & Innovation (ICMRI – 2024) conducted by Radhakrishna Institute of Technology and Engineering, Bhubaneswar from 27.03.2024 to 28.03.2024.
- Dr. S. Aravinth AP/Mech, has presented a paper on “The Art of Material Removal: An Overview of Subtractive Manufacturing” in International Conference on Recent Advances in Science, Engineering, Technology and Management (ICRASET – 2024) conducted by Sanjay Bhokare Group of Institutions, Miraj from 22.03.2024 to 23.03.2024.

Seminar/Workshop Attended:

- Mr. A. R. Sivanesh AP/Mech has attended Virtual Faculty Development Program on “Modern Research Convergence in Next Generation Computing”, Organized by Bright Talk on 22.01.2024.
- Mr. S. M. Deivasikamani AP/Mech has attended Faculty Development Program on “Simplify Lakehouse Operations with Zero-Copy Clones and Multi-Table Transactions”, Organized by Bright Talk on 28.01.2024.
- Mr. A. Mohan AP/Mech has attended Faculty Development Program on “How to build digital-first enterprise with Connected and Data Driven Apps”, Organized by Bright Talk on 30.01.2024.
- Dr. S. Aravinth AP/Mech has attended Faculty Development Program on “AI Data Quality, Compliance, and Infrastructure Requirements”, Organized by Bright Talk on 30.01.2024.



- Dr. S. Aravinth AP/Mech has attended Faculty Development Program on “How to build digital-first enterprise with Connected and Data Driven Apps”, Organized by Bright Talk on 30.01.2024.
- Mr. D. Arivazhakan AP/Mech has attended Value Added Course on “MSME – Technology Development Centre on Solid works”, Organized by Mr. Manojkumar, Trainer, EDUME New Technologies Private Limited from 24.01.2024 to 02.02.2024.
- Mr. M. Mani AP/Mech has attended Value Added Course on “HVAC Design”, Organized by Mr. R. Vignesh, HVAC Design Engineer, AGHORA Design Academy, Coimbatore from 24.01.2024 to 30.01.2024
- Mr. D. Arivazhakan AP/Mech and Mr. M. Mani AP/Mech has attended Six Day FDTP on Digital Manufacturing and IOT”, Organized by Centre for Faculty & Professional Development, Anna University, Chennai at KGISL from 05.02.2024 to 10.02.2024
- Dr. T.M. Chenthil Jegan HOD/Mech has attended FDP on “Innovative Strategies for Creative Classroom Teaching”, at VIT Chennai (Virtual) from 19.02.2024 to 23.02.2024.
- Mr. S. M. Deivasikamani AP/Mech has attended FDP on “Electric Vehicle Design using MATLAB”, Organized by Naan Mudhalvan at PANTECH from 29.02.2024 to 03.03.2024
- Mr. A. Mohan AP/Mech and Dr. S. Aravinth AP/Mech has attended Virtual Seminar on “What’s New in Automic Automation v24”, Organized by Bright Talk through virtual on 21.02.2024.
- Dr. S. Aravinth AP/Mech has attended Virtual Seminar on “Additive Manufacturing (Past, Present & Future)”, Organized by Mastering Up on 27.02.2024.
- Dr. T. M. Chenthil Jegan HOD/Mech, Dr. J. D. Nallasivam ASP/Mech, Mr. M. Natrayan AP/Mech and Mr. A. Mohan AP/Mech has attended 5 days FDP on “Recent Trends and Advances in Manufacturing Engineering”, at Sri Sairam Engineering College, Chennai from 25.03.2024 – 29.03.2024.
- Dr. T. M. Chenthil Jegan HOD/Mech and Mr. A. R. Sivanesh AP/Mech has attended 5 days FDP on “Skill India – Field Technician Other Home Appliances”, Organized by on 22.03.2024.
- Mr. D. Arivazhakan AP/Mech has attended 5 days FDP on “Energy Sustainability through Renewable Energy Systems (ESRES – 2024)”, at Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur, India from 18.03.2024 to 22.03.2024.
- Dr. J. D. Nallasivam ASP/Mech and Mr. A. R. Sivanesh AP/Mech has attended Skill Training workshop on “Efficient Project Management & Documentation: Modern Tools usage for Projects



and Paper Writing”, organised by Xavier’s College of Management & Technology on 16.04.2024.

- Dr. T. M. Chenthil Jegan HOD/Mech, Mr. D. Arivazhakan AP/Mech, Dr. J. D. Nallasivam AP/Mech, Mr. A. Mohan and Dr. S. Aravinth has attended One day workshop on “Virtual Labs” organised by SRIET in collaboration with Amrita Virtual Labs through virtual on 03.04.2024.
- Dr. J. D. Nallasivam ASP/Mech has attended 5 days FDP on “Recent Advancements in Materials and Manufacturing”, at SAIRAM Institutions from 22.04.2024 to 26.04.2024.
- Dr. J. D. Nallasivam ASP/Mech and Mr. M. Natrayan AP/Mech has attended 5 days FDP on “Recent Advancements in Materials and Manufacturing”, at SAIRAM Institutions from 22.04.2024 to 26.04.2024.
- Dr. J. D. Nallasivam ASP/Mech has attended National Level webinar on “Product Development Process”, organised by Kings College of Engineering on 29.04.2024.
- Dr. S. Aravinth AP/Mech has attended Seminar on “Intro to Observability with AWS & Datadog”, organised by Bright Talk on 23.04.2024.
- Dr. S. Aravinth AP/Mech has attended Seminar on “Revolutionize your Approach to Data with AI”, organised by Bright Talk on 23.04.2024.
- Mr. D. Arivazhakan AP/Mech, Mr. A. R. Sivanesh and Dr. J. D. Nallasivam ASP/Mech has attended Six-day FDP on “Recent Advances in Sustainable Materials and Developments in 3D Printing Technologies”, organised by IIC & REC through Virtual mode from 20.05.2024 to 25.05.2024.
- Mr. D. Arivazhakan AP/Mech has attended Workshop on “How to Plan for Start-up and Legal & Ethical Steps””, organised by IIC & REC through Virtual mode on 23.05.2024.
- Dr. J. D. Nallasivam ASP/Mech has attended Workshop on “Skill Training Workshop on “Empowering Academia Success: Leveraging Modern AI Tools, Understanding DOI’s and Navigating Google Scholar Indexing”, organised by RSP Science Hub through Virtual mode on 18.05.2024
- Dr. J. D. Nallasivam ASP/Mech, Mr. M. Natrayan AP/Mech and Mr. A. R. Sivanesh AP/Mech has attended One Week Online FDP on “Frontiers in Mechanical Sciences: Innovations in Contemporary Development and Trends”, IIC & RIT through Virtual mode from 06.05.2024 to 11.05.2024.



- Dr. J. D. Nallasivam ASP/Mech has attended Skill Training Workshop on “Navigating Academic Conference, Journal Publications, Digital Object Identifiers (DOI’s): A Comprehensive Workshop”, organised by RSP Science Hub on 03.05.2024.
- Mr. A. R. Sivanesh AP/Mech and Mr. M. Natrayan AP/Mech has attended Webinar on “Bridging the Chasm: How Heritage Empowers Modern Education”, organised by SR University on 24.05.2024.
- Mr. S. M. Deivasikamani AP/Mech has attended Webinar on “Improving DevOps Productivity & Security with Private Content Delivery”, organised by Bright Talk through virtual on 23.05.2024.
- Mr. M. Natrayan AP/Mech, Mr. M. Mani AP/Mech and Mr. A. Mohan AP/Mech has attended 6 days online FDP on “Robotic Process Automation”, organised by Sri Sairam Engineering College from 06.05.2024 to 11.05.2024.

Interaction with outside world:

- Mr. M. Mani AP/MECH, participated as a Speaker and delivered lecture on “Seminar on Additive Manufacturing” conducted by industrial interaction cell (IIC), Hindusthan Polytechnic College on 04.01.2024. Mr. M. Mani AP/MECH, Jury in the 1st International Conference on Innovative Research in Engineering Services (ICIRES – 2024), at Christ The King Engineering College on 10.04.2024
- Mr. M. Mani AP/MECH, Guest Speaker in the seminar on “Recent Trends on Additive Manufacturing”, at Pollachi Institute of Engineering and Technology on 25.04.2024

Student’s Achievements:

- Selvakumar P, Thavaselvam B, Vigneshwaran M, Yaswanth R, Students of SRIET has attended two days’ Workshop on “Fourth International Conference On Advancements In Research & Development (ICARD 2024)” organized by RSP Conference Series at Indira Priyadarshini Govt. Degree College For Women on 30.01.2024.
- S. Arulpandi, S. Selvinthiran, A. Selvaganesh, Yaswanth R, Students of SRIET has attended two days’ Workshop on “International Conference on Futuristic Trends in Science, Engineering and Management (ICFTSEM-2024)” organized by Global Conference Hub at St. Xavier’s College of Management and Technology (SXCMT) from 23.02.2024 to 24.02.2024.



- M. Sriram, P. Venkatesh, R. Sathish, S. Udhaya kumar, Students of SRIET has attended two days' Workshop on "Evaluating the Mechanical Properties of Maize Fiber and Prosopis Juliflora Reinforce Polyester Resin Composites" organized by RSP Conference Hub at Radhakrishna Institute of Technology and Engineering, Bhubaneshwar from 27.03.2024 to 28.03.2024.
- A. Arun, P. B. Arunpandian, G. Saravanakumar, Students of SRIET has attended two days' Workshop on "Effect of FDM – 3D Printing Parameters on Mechanical Properties and Microstructure of CF – PEEK" organized by RSP Conference Hub at Radhakrishna Institute of Technology and Engineering, Bhubaneshwar from 27.03.2024 to 28.03.2024.
- J. Jothish, S. Midhun, V. Vignesh, Students of SRIET has attended two days' Workshop on "Influence of AWJ Parameters on Material Removal Rate, Surface Roughness, and Kerf Angle During Machining of Prosopis Juliflora Bark Fibres/Carbon Reinforced Hybrid Polymer Composites" organized by RSP Conference Hub at Radhakrishna Institute of Technology and Engineering, Bhubaneshwar from 27.03.2024 to 28.03.2024
- M. Adaikalraj, K. Manikandan, R. Ramkumar, M. Sibivanan, Students of SRIET has attended two days' Workshop on "Mechanical Properties Characterization of Olefin Block Co-Polymer Polyethylene by FDM Process" organized by RSP Conference Hub at Radhakrishna Institute of Technology and Engineering, Bhubaneshwar from 27.03.2024 to 28.03.2024
- D. Kiran, M. Sathish kumar, M. Yogesh, S. Dev Ashwin, Students of SRIET has attended two days' Workshop on "1 CFD Optimization of Sedan Car Aerodynamics based on Various Indian Geographic Conditions" organized by RSP Conference Hub at Radhakrishna Institute of Technology and Engineering, Bhubaneshwar from 27.03.2024 to 28.03.2024.
- M. Jagadeesh, S. Prakash, P. Ranjithkumar, V. Vignesh, Students of SRIET has attended two days' Workshop on "Experimental Investigation of INCONEL 718 by using a DMLS method" organized by RSP Conference Hub at Radhakrishna Institute of Technology and Engineering, Bhubaneshwar from 27.03.2024 to 28.03.2024.
- K. R. Dhandapani, M. Praveen, S. Manoj Kumar, S. Samuel, Students of SRIET has attended two days' Workshop on "Mechanical Behavior of Aluminum based Metal Matrix Composites" organized by RSP Conference Hub at Radhakrishna Institute of Technology and Engineering, Bhubaneshwar from 27.03.2024 to 28.03.2024.
- Mathiyazhagan K, Mugesh Kannan G, Sridhar D, Pranesh M, Students of SRIET has attended two days' Workshop on "Enhancing Mechanical Characteristics of PETG Carbon Fiber



Composite through Various Shell Thickness in FDM Processing” organized by IRJAEH on 04.04.2024.

- Samuel S, Dhandapani K R, Manoj kumar S, Praveen M, Students of SRIET has attended two days’ Workshop on “Mechanical Behavior of Aluminum based Metal Matrix Composites” organized by IRJAEH on 04.04.2024.
- Selvaganesh A, Selventhiran S, Arulpandi S, Abimanyu M, Students of SRIET has attended two days’ Workshop on “Effect of Diverse Raster Angle in FDM Processing on Mechanical Performance of PETG” organized by IRJAEH on 04.04.2024.