AAA COLLEGE OF ENGINEERING & TECHNOLOGY

Accredited by NAAC with "A" Grade, Accredited by NBA (CIVIL, CSE, ECE, EEE, MECH) (An ISO 21001: 2018 Certified Institution) (Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai) Amathur, Sivakasi - 626 005.

Department of Mechanical Engineering

(Approved research center by Anna Univesity)

NEWS LETTER 2025-2026

December 2025- May 2025

Volume 10



Mahendra Giri







Electric Vechile





Innovation and Adaptability

The Department of Mechanical Engineering promotes Innovation and Adaptability through sustainable engineering projects, advanced material research, additive manufacturing, renewable-energy initiatives, electric-vehicle conversion, biodiesel production, and hands-on technical training. Students and faculty are encouraged to adapt emerging technologies and apply innovative engineering approaches to real-world challenges



NEWSLETTER INDEX

- Vision & Mission of the Institution and Department.....03
- Program Outcome, PSO, PEO.....05
- Sustainable Development Goal.....07
- Message from Principal.....08
- Message from Head of the Department.....09
- Faculty Achievements.....10
- Faculty Publications.....11
- Guest Lecture Delivered by Faculty.....15
- NPTEL certificate.....15
- Faculty Development Program (FDP).....16
- Department Activities.....17
- Students Achievements 18
- Students Participations.....20
- Industrial Visit.....23
- Editorial Board.....25



Institutions vision mission

VISION of AAACET

Emerge as a Premier Institute for Quality Technical Education and Research with social responsibilities.

MISSION of AAACET

- To offer state of the art infrastructure for under graduate, postgraduate and doctoral programs.
- To provide holistic learning ambience blended with professional ethics, leadership qualities and social responsibilities.
- To disseminate knowledge and undertake research in field of Engineering and technology.
- To inculcate innovation and creativity among student community to become successful entrepreneurs.
- To undertake collaborative projects with academic, research centres and industries to provide cost–effective solutions.



Department vision mission

VISION OF MECHANICAL

Emerge as an eminent center of excellence in Mechanical Engineering for quality technical education and scientific research leading to social development.

MISSION OF MECHANICAL

- To impart quality education to create efficient Mechanical Engineers through eminent faculty.
- To provide the state-of-the art infrastructure to facilitate the cutting edge research in emerging field of Mechanical Engineering.
- To undertake multidisciplinary and collaborative projects with industries and research organizations.
- To serve the society by developing competent engineers and entrepreneurs with outstanding leadership qualities and moral values.



Program Outcome

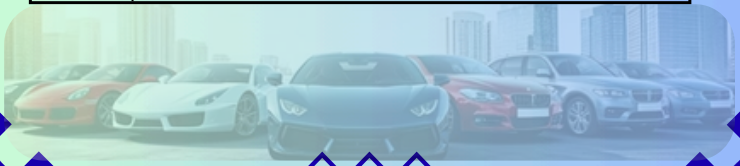


PO-1	*Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals and Engineering to the solution of complex engineering problems.*
PO-2	*Problem analysis – Identify, formulate, review research literature, and analyze complex Engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.*
PO-3	*Design/development of solutions – Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.*
PO-4	*Conduct investigations of complex problems – Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.*
PO-5	*Modern tool usage – Create, select, and apply appropriate techniques, resources, and modern engineering and computer aided tools including prediction and modeling to complex engineering activities with an understanding of the limitations.*
PO-6	*The Engineer and Society- Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.*
PO-7	*Environment and sustainability- Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.*
PO-8	*Ethics- Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.*
PO-9	*Individual and team work – Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.*
PO-10	*Communication- Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive*
PO-11	*Project management and finance- Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.*
PO-12	*Life-long learning- Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.*

Program specified Outcome
&
Program Educational Outcome

Program Educational Objectives (PEOs)	
PEO 01	The graduates will possess in-depth knowledge in the field of Mechanical Engineering and have a successful professional career in industry or by becoming an entrepreneur or by pursuing higher education and research.
PEO 02	The graduates will demonstrate profound problem solving skills and improved ability to design, develop economic and environment friendly Mechanical systems for multi-disciplinary societal needs.
PEO 03	The graduates will have ethical attitude and leadership quality to work efficiently with diverse teams, adapt to recent technologies by lifelong learning to solve real life problems.

PROGRAM SPECIFIC OUTCOMES (PSOs) :	
PSO 01	Ability to apply the basic knowledge to identify, formulate and solve problems in the domains of thermal, machine design, manufacturing and industrial engineering.
PSO 02	Ability to provide solutions to complex Mechanical Engineering problems by acquiring technological inputs and managerial skills and utilizing advanced technology with the help of modern CAD/CAM/CAE tools
PSO 03	Ability to develop mechanical and allied products with socio-economic concern by applying innovative ideas under ethical and professional constraints leading to a successful career.





Sustainable Development Goal



SDG No.	SDG Goal
SDG 1	No Poverty
SDG 2	Zero Hunger
SDG 3	Good Health and Well-being
SDG 4	Quality Education
SDG 5	Gender Equality
SDG 6	Clean Water and Sanitation
SDG 7	Affordable and Clean Energy
SDG 8	Decent Work and Economic Growth
SDG 9	Industry, Innovation and Infrastructure
SDG 10	Reduced Inequalities
SDG 11	Sustainable Cities and Communities
SDG 12	Responsible Consumption and Production
SDG 13	Climate Action
SDG 14	Life Below Water
SDG 15	Life on Land
SDG 16	Peace, Justice and Strong Institutions
SDG 17	Partnerships for the Goals







Message from the Principal...



It gives me immense pleasure to present the Department Newsletter for the period December 2025 to May 2026, showcasing the academic, research, innovation, and professional achievements of our Mechanical Engineering Department. During this period, our faculty members made significant contributions through quality research publications, conferences, faculty development programmes, and knowledge-sharing activities. Our students actively participated in technical events, paper presentations, workshops, industrial visits, and innovative projects supported through Seed Grants. The successful projects and exposure to advanced industries such as the ISRO Propulsion Complex reflect our commitment to experiential learning, sustainability, and emerging technologies. I congratulate all faculty members and students for their dedicated efforts and wish the department continued excellence, innovation, and success in the years ahead.

Dr. M. Sekar

Principal



MESSAGE FROM THE HOD...







It is a great pleasure to present the Department Newsletter for the period December 2025 to May 2026, highlighting the academic achievements, research contributions, and innovative activities of the Department of Mechanical Engineering. Our faculty members have actively contributed to research publications, international conferences, and professional development programmes, while our students have demonstrated their technical skills through paper presentations, symposiums, workshops, and innovative projects. The successful implementation of Seed Grant projects reflects our commitment to creativity, sustainable technologies, and practical learning. Industrial visits, hands-on training programmes, and technical activities have further enhanced students' knowledge and industry readiness. I sincerely appreciate the dedication of our faculty members and students and encourage everyone to continue striving for excellence, innovation, and professional growth.

Dr. S. S. Saravanakumar
Professor & Head
Department of Mechanical Engineering



Faculty Achievements

18 SCI/SCIE Journal Publications

During December 2025 to May 2026, the faculty members of the Department of Mechanical Engineering made significant contributions to research and academic development, publishing 18 research papers in reputed international journals. Their publications appeared in journals such as Results in Engineering, Renewable and Sustainable Energy Reviews, Materials Testing, Journal of Materials Engineering and Performance, and Canadian Metallurgical Quarterly. Their research focused on advanced materials, composite materials, additive manufacturing, surface engineering, renewable energy, and sustainable technologies. Faculty members also presented 13 research papers at the International Conference on Emerging Trends in Mathematical, Physical, Chemical Sciences and Literature for Sustainable Development (ETMPCSL-2026). In addition, they actively participated in various Faculty Development Programmes and professional development activities, strengthening the department's research culture and academic excellence.





Faculty Puplications



Dr. M. Sekar Principal

- Curvelet Denoising Firewall for Universal Removal of Steganographic Image Content — Results in Engineering, February 2026.
- Advances in Additive Manufacturing for Skin Regeneration Through Materials, Techniques and Biomedical Applications — Polymer-Plastics Technology and Materials, Vol. 65, Issue 9, April 2026.

Dr. S. S. Saravanakumar H0D/Mech

- A Comprehensive Review of the Sustainable Utilization of Cellulosic Fruit Peel Biomass for Advanced Applications — Renewable and Sustainable Energy Reviews, May 2026.

Dr. G. Vairamuthu, ASP/Mech

- Facile Synthesis and Characterization of Chitosan-Antimony Trioxide Nanocomposite and Its Thermal Properties — Materials Research Express, Vol. 12, Issue 1, November 2025.
- A Comprehensive Review of Chitosan-Composite Materials and Their Applications — Polymer-Plastics Technology and Materials, Vol. 65, Issue 1, January 2026.
- Insights into the Role of Natural Fibers in Brake Pad Composite Development — Journal of The Institution of Engineers (India), Vol. 107, Issue 2, February 2026.

Mr. M. Karthikeyan AP/Mech

- Influence on Microstructure and Surface Properties of FeCrMo Filler-Nickel Based Alloy by Wire Arc Additive Manufacturing with Severe Shot Peening and Physical Vapour Deposition Coating — Canadian Metallurgical Quarterly, Vol. 65, Issue 1, January 2026.



Faculty Puplications



Dr. P. S. R. Senthil Maharaj, ASP/Mech

- Fabrication and Characterization of Novel Tinospora cordifolia Fiber Composites with Biochar Filler — Journal of Macromolecular Science, Part B, Vol. 63, Issue 4, January 2026.
- Enhancing Flax Fabric Composites by Reinforcement of Sea Shell Filler and Epoxy Matrix Integration — Journal of the Textile Institute, Vol. 117, Issue 4, January 2026.
- Comparative Evaluation of Microstructural, Mechanical and Tribology Properties of ER4043 and ER4047 Aluminum Alloys Fabricated by TIG-Based Wire Arc Additive Manufacturing — Journal of Materials Engineering and Performance, Vol. 35, Issue 6, February 2026.
- Sustainable Valorisation of End-of-Life Solar Panel EVA into Super-Hydrophobic Coating for Construction Applications — Results in Engineering, February 2026.
- Curvelet Denoising Firewall for Universal Removal of Steganographic Image Content — Results in Engineering, February 2026. (Co-authored)
- Development and Analysis of Biodegradable PVA Biofilms Reinforced with Benincasa hispida Peel Powder for Sustainable Packaging Applications — Journal of Adhesion Science and Technology, Vol. 40, Issue 5, March 2026. (Co-authored)
- Enhancing Mechanical and Tribological Behaviour of Al7075 Hybrid Composites Reinforced with Boron Carbide and Molybdenum Disulphide — Canadian Metallurgical Quarterly, May 2026.
- Advances in Additive Manufacturing for Skin Regeneration Through Materials, Techniques and Biomedical Applications — Polymer-Plastics Technology and Materials, Vol. 65, Issue 9, April 2026. (Co-authored)



Faculty Puplications



Dr. M. Kaliraj, AP (SG)/Mech

- Curvelet Denoising Firewall for Universal Removal of Steganographic Image Content — Results in Engineering, February 2026. (Co-authored)
- Photocatalytic Degradation of Malachite Green Using Nickel—Cerium Coloaded ZnO under Sustainable Sunlight Irradiation and Its Biological Implications — ACS Omega, Vol. 11, Issue 10, March 2026.
- Development and Analysis of Biodegradable PVA Biofilms Reinforced with Benincasa hispida Peel Powder for Sustainable Packaging Applications — Journal of Adhesion Science and Technology, Vol. 40, Issue 5, March 2026. (Co-authored)

Dr. R. Meby Selvaraj., AP (SG)/Mech

- Microstructure and Tribo-Corrosion of NiCuFe Alloy by Laser Surface Texture and Double Layer Glow Plasma Surface with FeCrAlY Coating — Canadian Metallurgical Quarterly, Vol. 64, Issue 4, December 2025.
- Effect of Benzoylation Surface Treatment on the Physical, Mechanical and Thermal Properties of Aloe Vera Fiber Reinforced Polyester Composites — Materials Testing, Vol. 67, Issue 12, March 2026.
- Fatigue, Creep, DMA and Flammability Behaviour of Beet Root Stem Fibre and Rice Husk Powder Epoxy Composite — Journal of Mechanical Engineering Science, May 2026.



Faculty publications in Conference

The following faculty members presented research papers at the International Conference on Emerging Trends in Mathematical, Physical, Chemical Sciences and Literature for Sustainable Development (ETMPCSL-2026), organized by the Department of Science and Humanities, AAA College of Engineering and Technology, Sivakasi, on 6 and 7 March 2026.

S.No.	Faculty Name	Title of the Paper
1	Dr. M. Sekar	Evaluation of Hot Erosion Resistance of Carbide Coatings Applied by HVOF on Inconel 625
2	Dr. S. S. Saravanakumar	Industrial Project: Failure Analysis of Gear Box and Main Bearing in Wind Turbines
3	Dr. G. Vairamuthu	Industrial Project: Performance Improvement of Gas Turbine Air Inlet System through Optimized Filtration and Maintenance Scheduling
4	Dr. P. S. R. Senthil Maharaj	Explicit Dynamic Analysis on Collision between Aircraft Airfoil and Bird
5	Dr. R. Meby Selvaraj	Sustainable Aloe Vera Powder Coating on Monel Alloy
6	Dr. M. Kaliraj	Fabrication and Mechanical Characteristics of Natural Fibre Reinforced PLA Composite Plates Using Filament Extrusion Method Corrosion Inhibition of Magnesium Alloy Using Pomegranate Peel Extract and Nano-Silica via Immersion Technique
7	Mr. P. C. Rajarajan	Laser Surface Hardening of EN8 Steel for Enhanced Wear Performance in Automotive Components
8	Mr. S. Balamurugan	Effect of Controlled Micro-Pattern Fabrication on the Wettability of Titanium Surfaces
9	Mr. A. Vignesh Moorthy Pandian	Wear-Resistant Surface Engineering of Maraging Steel Using HVOF-Deposited WC–CoCr Coatings
10	Mr. M. Nagendran	Fabrication and Experimental Validation of TiO_2-Strengthened Glass Fiber Composite Pipes
11	Mr. M. Karthikeyan	Facile Route to Fabricate Anticorrosive Coating for AA6082
12	Mr. V. S. Chakravarthy	In-Situ Growth Corrosion Inhibitor Coating via One-Step Hydrothermal Treatment for AA2014

GUEST LECTURE DELIVERED BY FACULTY

Mr.M.Nagendran, AP /Mech, delivered a guest lecture on the topic "Advanced trends in Sustainable Energy" at Ultra College of Engineering and Technology, Madurai on 31.08.2018.







NPTEL COURSE COMPLETED BY FACULTY

- Mr. S.Balamurugan, AP / Mech, completed NPTEL Certification Course on "Learning Analytics Tools" conducted by IIT- Madras.
- Mr. A.Vignesh Moorthy Pansian, AP/ Mech, sucessfully completed NPTEL Certification course with grade of Elite with Silver on "Engine System and Performance" conducted by IIT- Guwahati.

NPTEL™

FDP / SEMINARS / WORKSHOPS ATTENDED BY FACULTY

Dr. G. Vairamuthu, ASP/Mechanical, attended the one-day regional meet titled “IIC Regional Meet 2025,” hosted by Francis Xavier Engineering College, Tirunelveli, on 02.12.2025.

Mr. M. Karthikeyan, AP/Mechanical, attended the one-week online Faculty Development Programme on “Sustainable Innovative Techniques for Better Future,” conducted by the Department of Mechanical Engineering, K.L.N. College of Engineering, Pottapalayam, from 22.12.2025 to 27.12.2025.

Mr. A. Vignesh Moorthy Pandian, AP/Mechanical, participated in the Professional Development Programme on “Innovative Pedagogies for Outcome-Based Teaching and Learning,” conducted by the National Institute of Technical Teachers Training and Research, Chennai, in association with AAA College of Engineering and Technology, Sivakasi, from 22.12.2025 to 27.12.2025.

Mr. V. S. Lakshmi Priya, AP/Mechanical, participated in the Professional Development Programme on “Innovative Pedagogies for Outcome-Based Teaching and Learning,” conducted by the National Institute of Technical Teachers Training and Research, Chennai, in association with AAA College of Engineering and Technology, Sivakasi, from 22.12.2025 to 27.12.2025.

Mr. V. S. Chakravarthy, AP/Mechanical, participated in the Professional Development Programme on “Innovative Pedagogies for Outcome-Based Teaching and Learning,” conducted by the National Institute of Technical Teachers Training and Research, Chennai, in association with AAA College of Engineering and Technology, Sivakasi, from 22.12.2025 to 27.12.2025.

Dr. R. Meby Selvaraj, AP(SG)/Mechanical, participated in the five-day online Faculty Development Programme on “Integrated Approaches to Composite Processing, Characterization and Applications Enabled by Effective Utilization of Modern Research Tools,” organized by the Department of Mechanical Engineering, Sethu Institute of Technology, Pulloor, Kariapatti, from 23.02.2026 to 27.02.2026.

Mr. A. Vignesh Moorthy Pandian, AP/Mechanical, participated in the five-day online Faculty Development Programme on “Integrated Approaches to Composite Processing, Characterization and Applications Enabled by Effective Utilization of Modern Research Tools,” organized by the Department of Mechanical Engineering, Sethu Institute of Technology, Pulloor, Kariapatti, from 23.02.2026 to 27.02.2026.

Mr. M. Karthikeyan, AP/Mechanical, participated in the five-day online Faculty Development Programme on “Integrated Approaches to Composite Processing, Characterization and Applications Enabled by Effective Utilization of Modern Research Tools,” organized by the Department of Mechanical Engineering, Sethu Institute of Technology, Pulloor, Kariapatti, from 23.02.2026 to 27.02.2026.

Mr. P. C. Rajarajan, AP/Mechanical, participated in the Faculty Development Programme on “Research Excellence in Academia: Writing Tools and Ethical Standards,” organized by the Departments of Chemistry, Physics and Mathematics, Noorul Islam Centre for Higher Education (Deemed to be University), Kumaracoil, Tamil Nadu, from 06.04.2026 to 11.04.2026.

KNOWLEDGE DELIVERY AT VARIOUS DEPARTMENTS

Hands-on Training Program on Car AC & Wheel Balancer

The Department of Mechanical Engineering, AAA College of Engineering and Technology, Sivakasi, in association with the SAE INDIA Collegiate Club, organized a three-day Hands-on Training Program on Car AC & Wheel Balancer on 27.02.2026, 28.02.2026, and 02.03.2026 at Thomas Alva Edison Hall. The program aimed to provide practical knowledge on automobile air conditioning systems and wheel balancing techniques used in modern vehicles. The sessions covered the fundamentals, components, and working principles of car AC systems, along with the importance of wheel balancing and types of wheel imbalance affecting vehicle performance. The Chief Guest, Mr. Karthick from MR. Black Automotive, VNR, shared industry insights on automobile AC servicing and maintenance practices. The program provided students with valuable hands-on learning and industry exposure. The event was successfully coordinated by Mr. A. Vignesh Moorthy Pandian and Mr. M. Nagendran, Assistant Professors, Department of Mechanical Engineering.









STUDENTS' ACHIEVEMENTS



- Mr.Kamalesh, Velmurugan.S, III Year Mechanical Students won the first prize in the paper presetation event in the national level technical symposium "Mechatronz- 2K26" organized by Department of Mechanical Engineering, Syed Ammal Engineering College, Ramanathapuram on 13.02.2026.
- Arul D. and Karuppaiah alias Vignesh M., III Year Mechanical Engineering students, won the First Prize in the CAD Modeling event at the National-level technical symposium "Mechatronz-2K26," organized by the Department of Mechanical Engineering, Syed Ammal Engineering College, Ramanathapuram, on 13.02.2026.
- Santhakumar R III Year Mechanical Students won the Second prize in the paper presetation event in the national level technical symposium "TECHNOVANZA 2K26" organized by Department of Mechanical Engineering, Shree Venkateswara Hi-Tech Engineering College, Erode on 13.03.2026.

SEED GRAND FUND

- The Institution is pleased to announce that a Seed Grant has been awarded for the student project titled "Design and Fabrication of Waste Cooking Oil Biodiesel Transesterification Setup." The project was successfully carried out by III Year Mechanical Engineering students Rajarathinam M, Suryakannan M, and Ajay Karthick J under the guidance of Mr. A. Vignesh Moorthy Pandian, AP/Mech. The Institution congratulates the students and the guide for this achievement and appreciates their contribution towards research, innovation, and sustainable energy development.



SEED GRAND FUND

- The Institution is pleased to announce that a Seed Grant has been awarded for the student project titled “Design and Conversion of IC Engine Vehicle into E-Vehicle.” The project was successfully carried out by III Year Mechanical Engineering students Sachin D, Mukesh M, Anbu Selvam K, Alagubalakumar A, Sudhakar L, Mohammad Shafadeen M, Muganeswaran K, and Ragavan M under the guidance of Mr. A. Vignesh Moorthy Pandian, AP/Mech. The Institution congratulates the students and the guide for this achievement and appreciates their efforts in promoting innovation and sustainable transportation technologies.
- The Institution is pleased to announce that a Seed Grant has been awarded for the student project titled “Design and Fabrication of Waste Cooking Oil and Wood Fueled Rocket Stove.” The project was successfully carried out by III Year Mechanical Engineering students Vel Murugan S, Arul D, and Karuppaiah @ Vignesh M under the guidance of Mr. A. Vignesh Moorthy Pandian, AP/Mech. The Institution congratulates the students and the guide for this achievement and appreciates their efforts in developing sustainable and eco-friendly cooking technologies.
- The Institution is pleased to announce that a Seed Grant has been awarded for the student project titled “Design and Fabrication of a Biodiesel Production System Using an Omni Car Engine.” The project was successfully carried out by III Year Mechanical Engineering students Ajay Karthick J, Rajarathinam M, and Suryakannan M under the guidance of Mr. A. Vignesh Moorthy Pandian, AP/Mech. The Institution congratulates the students and the guide for this achievement and appreciates their efforts in promoting renewable energy technologies and sustainable fuel production through innovative engineering solutions.





Participation in Symposium / Workshop / Quiz / NPTEL

- M.Balavignesh, B.Sakthisaravanan, J.Sujith, S.Srimathi, N.Nagapandi, K.Marimuthu Kathirvel, S.Murali, K.Mahesh Pandi, S.Marishankar, M.Gopinath, R.Muthu vijay manikandan, M.Pandiyarajan, C.Guru saravana kumar, A.Muneeswaran, P.Mugesh kumar, T.Gurusamy, G.Sathish kumar, J.Benedict joyson, S.Sathish kumar, S.Surya, S.Saravana kumar, P.Mathavan., II Year Mechanical Engineering Students, Attend the National Level Project Model Display Contest "Mexhibit", Organised by the Department of Mechanical Engineering, Karpagam College of Engineering, Coimbatore,on 18.02.2026.
- M.Mariselvam, S.Rakul, S.Vignesh, P. Mahendra Pandian III Year Mechanical Engineering Students, Attend the National Level Technical Symposium "Evatar'26", Organised by the Department of Electrical and Electronics Engineering, Kamaraj College of Engineering and Technology, Madurai on 17.02.2026.
- M.Mohamed Sahafdeen, K.Anbuselvam, D.Sachin, L.Sudhakar, K.Shenbagamoorthy III Year Mechanical Engineering Students, Attend the Two days workshop on 3D Printet/Addtitive manufacturing, Organised by the Center for Automotive materials, Department of Automobile Engineering, SRM instutute of Science and Technology, Kattankulathur,on 12.02.2026 and 13.02.2026.
- J.Petchi Murugan, D.Arul, M.karuppaiah alias Vignesh, K.Ajay, D.Yogesh, A.Hari Haran,G.Kamalesh., III Year Mechanical Engineering Students, Attend the National Level workshop, Organised by the Department of Mechanical Engineering, Karpagam College of Engineering, Coimbatore,on 12.03.2026 – 14.03.2026.
- V.Rajarathinam, K.Raj Kumar, S.Rakul, S.Vignesh, M.Mariselvam, III Year Mechanical Engineering Students, Attend the National Level workshop, Organised by the Department of Mechanical Engineering, Karpagam College of Engineering, Coimbatore,on 12.03.2026 – 14.03.2026..
- K.Muganeshwaran, R.Sakthi pravin, S.Vel Murugan, N.Iman, I.Stephen paul, III Year Mechanical Engineering Students, Attend the National Level Technical Workshop , Organised by the Department of Mechanical Engineering, SNS College of Engineering and Technology, Coaimbatre on 12.03.2026 and 13.03.2026.
- S. Ezhilarasan, S. Saravana Kumar, S. Alagarsamy, IV Year Mechanical Engineering Students, presented a paper titled "Evaluation of Hot Erosion Resistance of Carbide Coatings Applied by HVOF on Inconel 625" at the International Conference on Emerging Trends in Mathematical, Physical, Chemical Sciences and Literature for Sustainable Development (ETMPCSL-2026), organized by Science and Humanities of AAA College of Engineering and Technology, Sivakasi on 06.03.2026 and 07.03.2026.
- Z. Ahamed Kabeer, A. Antony Raja, K. Guru Vignesh, IV Year Mechanical Engineering Students, presented a paper titled "Industrial Project: Failure Analysis of Gear Box and Main Bearing in Wind Turbines" at the International Conference on Emerging Trends in Mathematical, Physical, Chemical Sciences and Literature for Sustainable Development (ETMPCSL-2026), organized by Science and Humanities of AAA College of Engineering and Technology, Sivakasi on 06.03.2026 and 07.03.2026.

Participation in Symposium / Workshop / Quiz / NPTEL

- S. Mohamed Ashif, C. Neethiselvan, K. Suriya Prakash, IV Year Mechanical Engineering Students, presented a paper titled “Industrial Project: Performance Improvement of Gas Turbine Air Inlet System through Optimized Filtration and Maintenance Scheduling” at the International Conference on Emerging Trends in Mathematical, Physical, Chemical Sciences and Literature for Sustainable Development (ETMPCSL-2026), organized by Science and Humanities of AAA College of Engineering and Technology, Sivakasi on 06.03.2026 and 07.03.2026.
- V. Subash, S. Sugadeva, T. Bharathmathan, IV Year Mechanical Engineering Students, presented a paper titled “Explicit Dynamic Analysis on Collision between Aircraft Airfoil and Bird” at the International Conference on Emerging Trends in Mathematical, Physical, Chemical Sciences and Literature for Sustainable Development (ETMPCSL-2026), organized by Science and Humanities of AAA College of Engineering and Technology, Sivakasi on 06.03.2026 and 07.03.2026.
- Y. Mayalagu, S. Suresh Kumar, T. Vanaraja, IV Year Mechanical Engineering Students, presented a paper titled “Sustainable Aloe Vera Powder Coating on Monel Alloy” at the International Conference on Emerging Trends in Mathematical, Physical, Chemical Sciences and Literature for Sustainable Development (ETMPCSL-2026), organized by Science and Humanities of AAA College of Engineering and Technology, Sivakasi on 06.03.2026 and 07.03.2026.
- S. Deva Dharshini, S. Tanuja, M. Yuvaraj, IV Year Mechanical Engineering Students, presented a paper titled “Fabrication and Mechanical Characteristics of Natural Fibre Reinforced PLA Composite Plates Using Filament Extrusion Method” at the International Conference on Emerging Trends in Mathematical, Physical, Chemical Sciences and Literature for Sustainable Development (ETMPCSL-2026), organized by Science and Humanities of AAA College of Engineering and Technology, Sivakasi on 06.03.2026 and 07.03.2026.
- G. Nagaraj, M. Prakash, T. Muthu Mugunthan, IV Year Mechanical Engineering Students, presented a paper titled “Corrosion Inhibition of Magnesium Alloy Using Pomegranate Peel Extract and Nano-Silica via Immersion Technique” at the International Conference on Emerging Trends in Mathematical, Physical, Chemical Sciences and Literature for Sustainable Development (ETMPCSL-2026), organized by Science and Humanities of AAA College of Engineering and Technology, Sivakasi on 06.03.2026 and 07.03.2026.
- S. Illayaraja, B. Rohith Gurubala, S. Shanmugaraj, IV Year Mechanical Engineering Students, presented a paper titled “Laser Surface Hardening of EN8 Steel for Enhanced Wear Performance in Automotive Components” at the International Conference on Emerging Trends in Mathematical, Physical, Chemical Sciences and Literature for Sustainable Development (ETMPCSL-2026), organized by Science and Humanities of AAA College of Engineering and Technology, Sivakasi on 06.03.2026 and 07.03.2026.

Participation in Symposium / Workshop / Quiz / NPTEL

- P. Mareeswaran, M. Ripudhaman, A. K. Dhurkesh Arumugaa, IV Year Mechanical Engineering Students, presented a paper titled “Effect of Controlled Micro-Pattern Fabrication on the Wettability of Titanium Surfaces” at the International Conference on Emerging Trends in Mathematical, Physical, Chemical Sciences and Literature for Sustainable Development (ETMPCSL-2026), organized by Science and Humanities of AAA College of Engineering and Technology, Sivakasi on 06.03.2026 and 07.03.2026.
- R. Sundar, G. Taj Mukriesh Gani M., R. Sridharraj, IV Year Mechanical Engineering Students, presented a paper titled “Wear-Resistant Surface Engineering of Maraging Steel Using HVOF-Deposited WC–CoCr Coatings” at the International Conference on Emerging Trends in Mathematical, Physical, Chemical Sciences and Literature for Sustainable Development (ETMPCSL-2026), organized by Science and Humanities of AAA College of Engineering and Technology, Sivakasi on 06.03.2026 and 07.03.2026.
- B. Kaleeswaran, K. Kodeeswaran, K. Sanjay, IV Year Mechanical Engineering Students, presented a paper titled “Fabrication and Experimental Validation of TiO_2-Strengthened Glass Fiber Composite Pipes” at the International Conference on Emerging Trends in Mathematical, Physical, Chemical Sciences and Literature for Sustainable Development (ETMPCSL-2026), organized by Science and Humanities of AAA College of Engineering and Technology, Sivakasi on 06.03.2026 and 07.03.2026.
- S. Manojkumar, V. Muthumanikandan, S. Sakthivel, IV Year Mechanical Engineering Students, presented a paper titled “Facile Route to Fabricate Anticorrosive Coating for AA6082” at the International Conference on Emerging Trends in Mathematical, Physical, Chemical Sciences and Literature for Sustainable Development (ETMPCSL-2026), organized by Science and Humanities of AAA College of Engineering and Technology, Sivakasi on 06.03.2026 and 07.03.2026.
- M. Bharathiraja, J. Rajesh Kumar, J. Veerakkanna, IV Year Mechanical Engineering Students, presented a paper titled “In-situ Growth Corrosion Inhibitor Coating via One-Step Hydrothermal Treatment for AA2014” at the International Conference on Emerging Trends in Mathematical, Physical, Chemical Sciences and Literature for Sustainable Development (ETMPCSL-2026), organized by Science and Humanities of AAA College of Engineering and Technology, Sivakasi on 06.03.2026 and 07.03.2026.
- K. Mahesh Pandi, M.Mari Raja, Sakthibala P, II Year Mechanical Engineering Students, Participated various technical events and Non technical at the national level symposium “Technova’26” at the Kmaraj College of Engineering and Technology, Kattankulathur,on 17.03.2026



INDUSTRIAL VISITS



ARAS KIA Motors

The industrial visit was organized to provide students with practical exposure to the automobile industry and to bridge the gap between theoretical knowledge and real industrial practices. The visit was conducted at ARAS KIA Motors, Virudhunagar, under the guidance of Mr. Parameswaran, Manager of the organization. The visit was accompanied and coordinated by the faculty members of the Mechanical Engineering Department, including Mr. M. Nagendran, Assistant Professor and Mr. A. Vignesh Moorthy Pandian, AP/Mech, who guided and supervised the students throughout the program. During the visit, students observed various automobile servicing and maintenance activities carried out in the workshop. They gained knowledge about modern equipment such as hydraulic lifts, wheel alignment machines, and engine diagnostic tools used in service centers. The staff explained the workflow involved in vehicle servicing, quality control procedures, and safety practices followed in the workshop. Students also learned about customer handling and after-sales service in automobile dealerships. The visit provided an opportunity to interact with industry professionals and understand career opportunities in the automobile sector. Around 50 students participated in the visit and benefited from the real-time industrial exposure. Overall, the industrial visit enhanced students' technical knowledge, practical understanding, and awareness of industry practices.







INDUSTRIAL VISITS

ISRO Power Propulsion (ISRO)

The Department of Mechanical Engineering of AAA College of Engineering and Technology organized an Industrial Visit to the ISRO Propulsion Complex on 09th April 2026 for the II and III Year Mechanical Engineering students. The visit aimed to provide students with practical exposure to advanced rocket propulsion systems, testing facilities, and real-time applications of aerospace engineering. A total of 90 students along with 6 faculty members participated in the visit. The program was coordinated and accompanied by Mr. A. Vignesh Moorthy Pandian, Mr. M. Nagendran, Dr. R. Meby Selvaraj, Mr. S. Balamurugan, Mr. M. Karthikeyan, and Mrs. Lakshmi Priya. The students reached the facility as per the scheduled time and completed the necessary security procedures before entering the premises. The session began with an informative orientation on the overview of India's space propulsion systems, including liquid propulsion, cryogenic engines, and solid propulsion technologies. Experts from the facility explained the working principles, design aspects, and operational significance of these systems in launch vehicles. Students were then introduced to various testing facilities, where they observed how rocket engines are tested under controlled and extreme conditions. The engineers elaborated on performance evaluation, thrust measurement, thermal stresses, and safety protocols followed during testing. The visit also provided insights into advanced instrumentation, control systems, and quality assurance practices adopted in space missions.





EDITORIAL BOARD

Role	Name	Designation
Editors	Dr.S.S.Saravanakumar	Professor/ Head
Associate Editors	Mr.M.Nagendran	AP/Mechanical
	Mr.A.Vignesh Moorthy Pandian	AP/Mechanical
Student Members	G. Kamalesh	IV - Mech
	S. Saravanakumar	III-Mech
	C. Thirupathi	II- Mech

WITH THE BLESSINGS OF
Shri. P. Panjurajan
Founder, AAA Group of Institutions

IN THE PRESENCE OF

Dr. P. Karvannan
Chairman & Secretary

Dr. P. Ganesan
Correspondent

Dr. M. Sekar
Principal

Dr. K. Vignesh Kumar
Joint Secretary

© AAACET. All Rights Reserved.