



Dr. NGP INSTITUTE OF TECHNOLOGY COIMBATORE-641048

Affiliated to Anna University, Chennai

Approved by AICTE, New Delhi, Accredited by NAAC

**Chief Patrons: Dr. Nalla G Palaniswami, Chairman,
Dr. Thavamani D Palaniswami, Secretary, Dr. N.G.P. IT**

DEPARTMENT OF MECHANICAL ENGINEERING



The Mech Book 2020-2021

This issue covers

News from Technical Associations

Notable Events

Faculty Achievements

Students Participation

Editorial Board Chief Editors:

Dr.K.Porkumaran, Principal
Dr.S.Nandhakumar-
HOD(i/c)/Mech

• **Editors:**

• Mr.A.G.Karthikeyan(AP/Mech)

Student Coordinator

- Mr. R.Ebinraj
- Mr. N.Sheikh Ismail
- Mr. K. Koushik raj
- Mr.B.Gokulkrishnan



News Letter: Volume 9 Issue 1 (Dec 2020)

ABOUT THE DEPARTMENT

The Department of Mechanical Engineering possesses good infrastructural facilities, 12-equipped laboratories, 26 highly qualified and dedicated teaching faculties, 10 experienced Lab technicians and the atmosphere conducive for research activities. Out of 26 teaching faculties 9 of them have completed their Ph.D. and 11 faculties are pursuing their Ph.D. Mechanical Engineering includes design, development, manufacture, management, and control of engineering systems, subsystems and their components. Typically, manufacturing, power, aerospace, automotive, materials, and processing industries employ Mechanical Engineers. As a result of the recent rapid expansion of technology, Mechanical Engineers also have become increasingly involved in computer aided design and visualization; robotics; bioengineering; environmental engineering; solar, wind, ocean energy sources and space exploration.

VISION OF THE DEPARTMENT

To produce qualified, self-driven Mechanical Engineers with moral values

MISSION OF THE DEPARTMENT

The Stated Vision will be achieved by

- MD1:** Enriching technical knowledge through value added courses, interaction with professional societies and research activities.
- MD2:** Imparting quality education by competent faculty through learning tools.
- MD3:** Providing industry connect opportunities for the students to enhance their talents, innovative ideas and entrepreneurial skills.
- MD4:** Developing technical expertise with latest technologies through state-of-the-art laboratories.
- MD5:** Encouraging the students to meet the challenges of industry and society with moral values.

Program Educational Objectives (PEOs)

The Graduates of Mechanical Engineering Programme will

PEO1: Apply technical knowledge and skills in their career to find effective solutions for the problems in Mechanical Engineering and other related disciplines.

PEO2: Contribute in technological advancements through continual learning in the field of Mechanical Engineering.

PEO3: Exhibit leadership qualities with moral and ethical values for the socio technological development.

Program Specific Outcomes (PSOs)

PSO1: Apply modern tools for product design and development.

PSO2: Analyse complex Engineering problems in the areas of Thermal, Design and Manufacturing Engineering.

PSO3: Practice moral and ethical values in engineering career to adapt techno-environmental changes.

FACULTY LIST

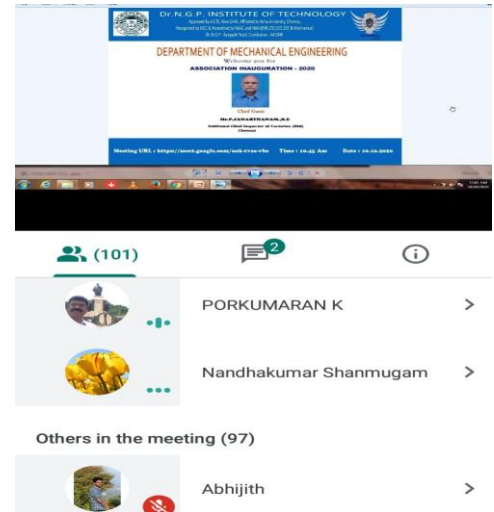
TEACHING STAFF NON TEACHING STAFF

| S.No. | NAME | DESIGNATION | S.No | NAME | DESIGNATION |
|-------|------------------------|------------------------|------|-----------------------|----------------|
| 1 | Dr.S.Nandhakumar | Professor & Head (i/c) | 1 | Mr.S.Jayakumar | Lab.Technician |
| 2 | Dr.K.Kalaiselvan | Professor | 2 | Mr.R.MeenachiSundaram | Lab.Technician |
| 3 | DrR.Thirumalai | Professor | 3 | Mr.S.Kuppuraj | Lab.Technician |
| 4 | Dr.P.Sivaprakash | Professor | 4 | Mr.S.Thangavelu | Lab.Technician |
| 5 | Dr.V.Sivaraman | Associate Professor | 5 | Mr.P.Shanmugaprabhu | Lab.Technician |
| 6 | Mr.M.Nallusamy | Assistant Professor | 6 | Mr.A.Murugesan | Lab.Technician |
| 7 | Mr.B.Shreeram | Assistant Professor | 7 | Mr.S.Gurusamy | Lab.Technician |
| 8 | Mr.A.Jaganathan | Assistant Professor | 8 | Mr.A.Vijayakumar | Lab.Technician |
| 9 | Dr.P.Gopi Krishnan | Assistant Professor | 9 | Mr. Santhosh | Lab.Technician |
| 10 | Mr.N.Manikandan | Assistant Professor | 10 | Mr.Nivethan | Lab.Technician |
| 11 | Mr.R.Vijayakumar | Assistant Professor | 11 | Mrs.Aruna | Office P.A. |
| 12 | Mr.M.Mani | Assistant Professor | | | |
| 13 | Mr.D.Vasanthkumar | Assistant Professor | | | |
| 14 | Mr.V.P.Pradeep | Assistant Professor | | | |
| 15 | Mr.P.Ashokkumar | Assistant Professor | | | |
| 16 | Mr.A.G.Karthikeyan | Assistant Professor | | | |
| 17 | Mr.K.Kiran | Assistant Professor | | | |
| 18 | Mr.S.Rajkumar | Assistant Professor | | | |
| 19 | Mr.M.Suriyaprakash | Assistant Professor | | | |
| 20 | Mr.C.Selvakumar | Assistant Professor | | | |
| 21 | Mr.R.Karthikeyan | Assistant Professor | | | |
| 22 | Mr.S.DharagaVineeth | Assistant Professor | | | |
| 23 | Mr.P.Janarthanan | Assistant Professor | | | |
| 24 | Mr.MGokul Priyadharsan | Assistant Professor | | | |

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| 25 | Mr.V.Prabhakaran | Assistant Professor | |
| 26 | Mr.V.P.Sathiya Moorthy | Assistant Professor | |

Association Inauguration

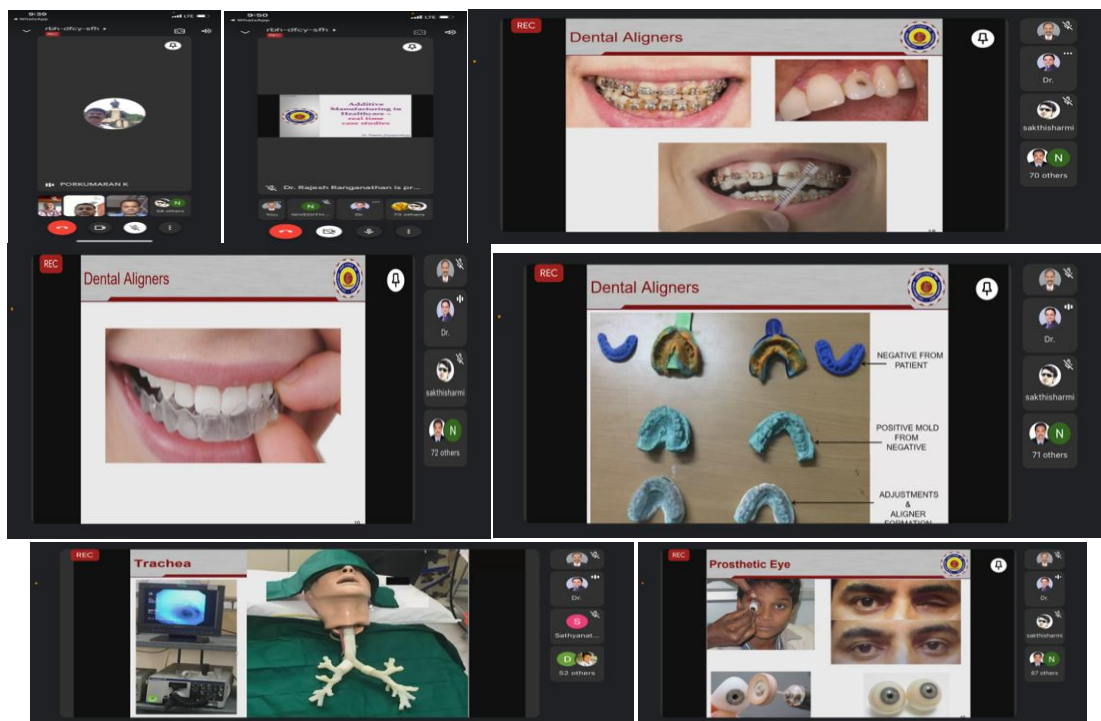
The mechanical association (MECHLADOZ) inauguration was organized on 10.10.2020. Mr.PJanarthanam, Tamilnadu Govt. Factories Inspectorate Service was the chief guest. New office bearers were introduced. The chief guest delivered a Guest lecture on ‘Industrial Safety’.

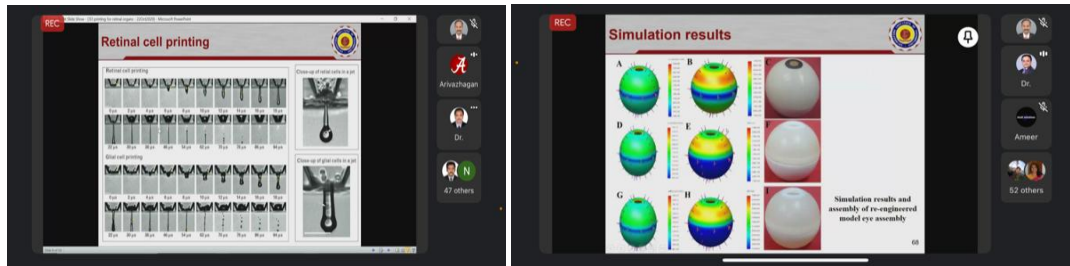


AICTE Training and Learning (ATAL) Academy Sponsored Faculty Development Program on “Exploring Additive Manufacturing in healthcare Applications” from 19.10.2020 to 23.10.2020.

Five Days faculty development program has been conducted virtually on the topic “Exploring Additive Manufacturing in healthcare Applications” in association with AICTE Training and Learning (ATAL) Academy. The chief guests were delighted with the presence of Dr. Thavamani D. Palaniswami, Secretary, Dr.N.G.P. Institute of Technology, Dr.O.T.Bhuvaneshwaran, Chief Executive Officer, KMCRET, Dr.K. Porkumaran, Principal, Dr.N.G.P. Institute of Technology, Dr.S.NandhaKumar, Professor & Head, Department of Mechanical Engineering, Dr.N.G.P. Institute of Technology through online platform. The main objective of the event has to develop knowledge and awareness on scope and growth of Additive Manufacturing in Healthcare Applications. Distinguished chief guests like Dr.RajeshRanganathan (Department of Mechanical Engineering, Coimbatore Institute of technology, Coimbatore), Dr.M.Senthilkumar (Bharath Institute of Higher Education & Research, Chennai), Dr.L.Ashok Kumar (PSG College of Technology, Coimbatore), Mr.Arivazhagan Pugalendhi (Department of Mechanical Engineering, Coimbatore

Institute of technology, Coimbatore), Dr.A.Pasupathy (Department of Electronics & Communication Engineering Kumaraguru College of Technology, Coimbatore), Dr.Y.Ravikumar (Department of Mechanical Engineering NIT Warangal), Dr.G.Sivakumar (Department of Mechanical Engineering ,Coimbatore Institute of Technology, Coimbatore), Mr.D.Mahesh (VDENT LABS,Erode), Dr.R.Annadurai (Department of Physical Education, Bharathiar University) were discussed various innovative topics such as Additive Manufacturing in HealthCare - with Live Case Studies, Future Technology in 3D Printing, Data Collection and Analysis for Healthcare Applications, Application of 3D printing for Dentistry & 3D Printing for Retinal Organs, Printing Technology for Medical Applications & 3D Printing Technology for Presurgical Applications, Additive Manufacturing in Complex Oral & Maxillofacial Surgeries, Looking at Additive Manufacturing in a different dimension, Additive Manufacturing for Diabetic Foot, Additive Manufacturing in Dental Prosthetics and Fitness Modifications for Bodily Processes. Therefore various internal and external participants were able to understand the scope in Additive manufacturing in Healthcare applications, 3D Printing Technology for future and role of Engineers, precautions and safety measures in Additive Manufacturing and explain the importance of 3D printing.

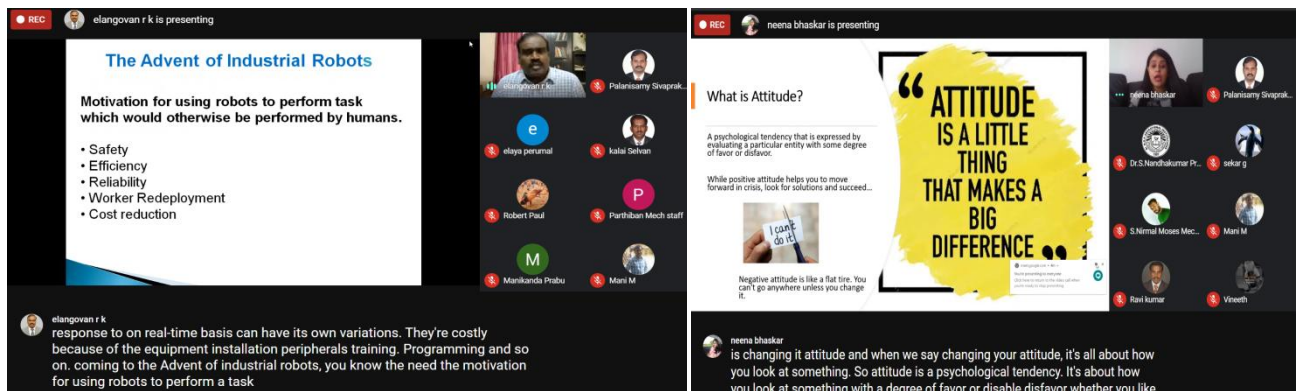
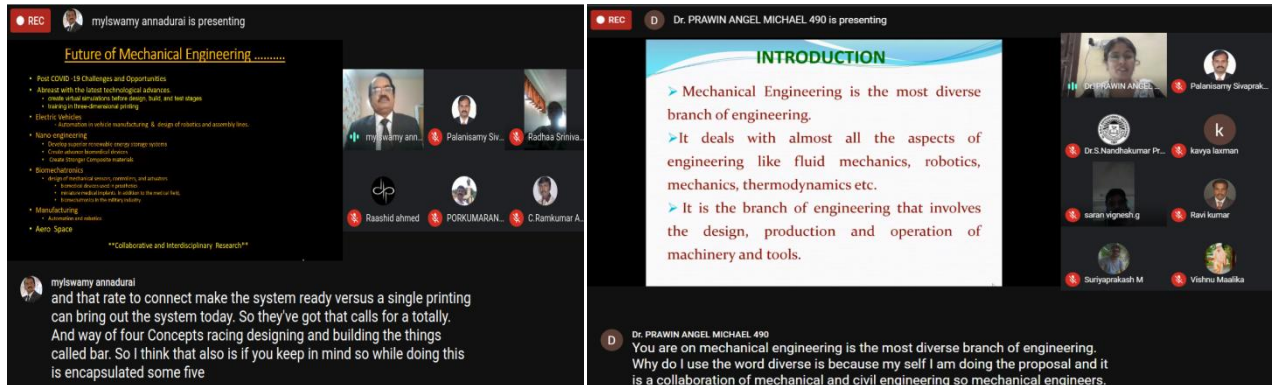




International Virtual Conference on “Future Journey of Mechanical Engineering” organized by Mechanical Department”, Dr.N.G.P. Institute of Technology from 09.07.2020 to 11.07.2020.

Three Days International conference has been conducted virtually through online platform on the topic “Future Journey of Mechanical Engineering” in association with Mechanical Department, Dr.N.G.P. Institute of Technology, Coimbatore. The chief guests were delighted with the presence of Dr. Thavamani D. Palaniswami, Secretary, Dr.N.G.P. Institute of Technology, Dr.O.T. Bhuvaneshwaran, Chief Executive Officer, KMCRET, Dr.K. Porkumaran, Principal, Dr.N.G.P. Institute of Technology, Dr.S.NandhaKumar, Professor & Head, Department of Mechanical Engineering, Dr.N.G.P. Institute of Technology through online platform. The main objective of the event has to develop knowledge and awareness on scope and growth of Mechanical Engineering in Future. Distinguished chief guests such as Dr.Mylsamy Annadurai (Tamilnadu State Council for Science and Technology, Chennai), Dr.Prawin Angel Michael (Department of Electrical and Electronics Engineering Karunya Institute of Technology and sciences Coimbatore), Dr R.K Elangovan (Ministry of Labour and Employment, Government of India), Mr K Nagarajan (Tata Consultancy Services, Chennai), Ms.Neena Bhaskar (Greater Asia Becton Dickinson, Singapore) were discussed various innovative topics such as Future Journey of Mechanical Engineering, Role of Sustainable energy in the Present Indian Context and Opportunities for mechanical Engineers, Safety with Robots, Applied Machine Learning in the field of Mechanical Engineering and Positive Thinking. Therefore various internal and external participants were able to understand the advances of mechanical applications in space engineering, the sustainable energy for future and role of

mechanical Engineers, precautions and safety measures with robots in Manufacturing environment, explain the importance of Machine Learning and improve their Productivity with Positive Thinking.



One Day WEBINAR on Energy Auditing in Industry on CSIR Sponsored One Day National Level Workshop on “Recycling and Industrial Waste Management for Sustainable Waste Management” on 01st August 2019

One Day National Workshop has been conducted in Dr.N.G.P. Institute of Technology on the topic “Recycling and Industrial Waste Management for Sustainable Waste Management” in association with The Council of Scientific & Industrial Research (CSIR), New Delhi. Resource persons from reputed academia and industry were present to deliver the speech. The venue was delighted with the presence of Dr. Thavamani D. Palaniswami, Secretary, Dr.N.G.P. Institute of Technology, Dr.O.T. Bhuvanewaran, Chief Executive Officer, KMCRET, Dr.K. Porkumaran, Principal, Dr.N.G.P. Institute of Technology, Dr.S.NandhaKumar, Professor & Head, Department of Mechanical Engineering, Dr.N.G.P. Institute of Technology.

First session was on the topic “Advances in Recycling Industrial Waste Management” covered by Dr.ShankarCongeevaram, CEO - VP Integrated Waste Management Association, Chennai.He detailed about the advance technique in recycling and waste management techniques. areas.

Grants Received

| Co-ordinator/ Investigator | Events | Funding Agency | Amount |
|---------------------------------------|--|---|---------------|
| Dr.K.Kalaiselvan | STTP onInnovation in Materials and Industrial Automation | All India Council for Technical Education (AICTE) | Rs. 290000 |
| Dr.P.Sivaprakash | FDP on Exploring Additive Manufacturing in Healthcare Applications | AICTE Training and Learning (ATAL) | Rs. 93000 |

Alumni Lecture Series organised

| Sl.No | Name & Designation | Date & Time | Topic | Target Audience |
|--------------|--|--------------------------------|---|--|
| 1. | Mr.Kevin Jose (2012 – 2016) & Project Manager at IBM, Bangalore. | 31.07.2020 & 04.00 to 5.30 pm | Where Engineering Meets Business | II, III , IV year Mechanical Engineering students & 89 |
| 2. | Mr.S.Suresh Kumar (2013 – 2017) & MEP Project Engineer, LIWA Electro mechanical Works, Dubai. | 31.07.2020 & 04.00 to 5.30 pm | Career Planning Perspectives | II, III , IV year Mechanical Engineering students & 74 |
| 3. | Mr.A.Aadhik (2012 – 2016) & Research Scholar, Ultra Sound Institute, Kaunas. | 01.08.2020 & 04.00 to 5.30 pm | Research in Non Destructive Ultrasound Testing Technique on Aerospace Components. | II, III , IV year Mechanical Engineering students & 69 |
| 4. | Mr.JawagarShrehari (2013 – 2017) & Business Analyst Intern Amazon, France. | 01.08.2020 & 04.00 to 5.30 pm | Career in Supply Chain Management | II, III , IV year Mechanical Engineering students & 80 |
| 5. | Mr.M.Vasanth Kumar (2013 – 2017) & Associate Executive, Costing and Control, VKC FOOTPRINTS GLOBAL PVT. LTD Coimbatore, TamilNadu. | 17.10.2020 & 09.30 to 11.30 am | An Overview of SAP and its application in automation sector | II, III , IV year Mechanical Engineering students & 75 |
| 6. | Mr.S.SreeKumar (2013 – 2017) & Safety Engineer, Imco Engineering and Contracting Company, | 17.10.2020 & 09.30 to 11.30 am | Advanced Safety Engineering& Management | II, III , IV year Mechanical Engineering students & 85 |

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RESEARCH PUBLICATIONS

Paper Published in Journal/ Conference

| S. No | Author Name | Title of the Paper | Publisher | Name of the Journal | International / National | Month/Year | ISSN | Abstract/ Indexing |
|-------|------------------|---|-----------|---|--------------------------|------------|-----------|---------------------|
| 1 | Dr.S.Nandhakumar | Effect of process variables on MRR and Overcut in Electrochemical Micro machining of Al-6063-10% wt of SiC-5% wt of B4C composites using grey relational analysis | | International Journal of Disaster Recovery and Business Continuity & SERSC, Nadia Australia | International | July 2020 | 2005-4289 | WoS, ESCI |
| 2 | Dr.S.Nandhakumar | Experimental analysis of aluminium matrix composite material for braking application | Elsevier | Materials Today: Proceedings & Elsevier | International | Aug 2020 | 2214-7853 | Scopus, UGC care II |
| 3 | Dr.S.Nandhakumar | Experimental Investigation on Natural Fiber Reinforced Composites | Elsevier | Materials Today: Proceedings & Elsevier | International | Aug 2020 | 2214-7853 | Scopus, UGC care II |
| 4 | Dr.S.Nandhakumar | Optimal orientation of injectors for efficient spray pattern of fuel flow in a diesel engine | Elsevier | Materials Today: Proceedings & Elsevier | International | Aug 2020 | 2214-7853 | Scopus, UGC care II |
| 5 | Dr.S.Nandhakumar | Gain Enrichment of Wideband Antenna Utilized on Artificial Magnetic Conductor Surface | Elsevier | Materials Today: Proceedings & Elsevier | International | Aug 2020 | 2214-7853 | Scopus, UGC care II |
| 6 | Dr.S.Nandhakumar | Artificial & Composite Materials based on Wideband Structure for Antenna Profile Reduction | Elsevier | Materials Today: Proceedings & Elsevier | International | Aug 2020 | 2214-7853 | Scopus, UGC care II |
| 7 | Dr.S.Nandhakumar | Wideband Antennas on Glass Reinforced Epoxy Materials | Elsevier | Materials Today: Proceedings & Elsevier | International | Aug 2020 | 2214-7853 | Scopus, UGC care II |
| 8 | Dr.S.Nandhakumar | Trajectory Tracking Control Of Industrial Robot | Springer | Lecture Notes in Electrical | International | Dec 2020 | 1876-1100 | Scopus |

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| | | Manipulator Using VS Control System With STHWS Method | | Engineering Springer | | | | |
| 9 | Dr.S.Nandhakumar | Investigation Of Mechanical Properties Of Luffa And Coconut Fibres Reinforced Composite | Springer | Lecture Notes in Electrical Engineering Springer | International | Dec 2020 | 1876-1100 | Scopus |
| 10 | Dr.S.Nandhakumar | Influence of ALCoCrCUFe high entropy alloy particles on the micro structural, Mechanical and tribological properties of copper surface composite made through friction stir processing | Sage | The Journal of Mechanical Engineering Science – Part C | International | Dec 2020 | 2289-4659 | SCI, Scopus |
| 11 | Dr.K.Kalaiselvan | Tensile and Microstructural Behaviour of AMC Reinforced with Metallic Particle Pre and After Friction Stir Processing | Extension Media, United States | Solid State Technology | International | 2020 | 0038111 X | Scopus |
| 12 | Dr.K.Kalaiselvan | Predicting the tensile strength and deducing the role of processing conditions of hot wire gas tungsten arc welded pure nickel tubes using an empirical relationship | Elsevier | International Journal of Pressure Vessels and Piping | International | 2020 | ISSN: 0308-0161 | SCI |
| 13 | Dr.R.Thirumalai | Experimental analysis of thermal barrier coating for al ₂ o ₃ -tio ₂ ceramic material coated ci engine operating on calophylluminophyllu m oil | MIT | Materials and Technology | International | Nov 2020 | 1580-3414 | SCI Indexed |
| 14 | Dr.R.Thirumalai | Performance analysis encryption networking model for cyber physical system environment | Extension Media, United States | Solid state technology | International | Nov 2020 | 0038-111X | Scopus indexed |
| 15 | Dr.R.Thirumalai | Experimental and investigation on combustion chamber coated with Mo and Al ₂ O ₃ in Diesel engine | | Solid state technology | International | Nov 2020 | | Scopus indexed |

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| 16 | Dr.R.Thirumalai | Trajectory Tracking Control Of Industrial Robot Manipulator Using VS Control System With STHWS Method | Springer Publication | Lecture Notes in Electrical Engineering | International | Dec 2020 | 1876-1100 | Scopus indexed |
| 17 | Dr.R.Thirumalai | Investigation Of Mechanical Properties Of Luffa And Coconut Fibres Reinforced Composite | Springer Publication | Lecture Notes in Electrical Engineering | International | Dec 2020 | 1876-1100 | Scopus indexed |
| 18 | Dr.R.Thirumalai | Instrument Cluster Iot Enclosure Design & Production Implementation In Self Driven Vehicles | Springer Publication | Lecture Notes in Electrical Engineering | International | Dec 2020 | 1876-1100 | Scopus indexed |
| 19 | Dr.R.Thirumalai | Effect of process variables on MRR and Overcut in Electrochemical Micro machining of Al-6063-10% wt of SiC-5% wt of B4C composites using grey relational analysis | | International Journal of Disaster Recovery and Business Continuity & SERSC, Nadia Australia | International | July 2020 | 2005-4289 | WoS, ESCI |
| 20 | Dr.P.Sivaprakash | Trajectory Tracking Control of Industrial Robot Manipulator Using VS Control System with STHWS Method | Springer | Lecture Notes in Electrical Engineering Springer | International | Dec 2020 | 1876-1100 | Scopus |
| 21 | Dr.P.Sivaprakash | Investigation of Mechanical Properties of Luffa and Coconut Fibres Reinforced Composite | Springer | Lecture Notes in Electrical Engineering Springer | International | Dec 2020 | 1876-1100 | Scopus |
| 22 | Dr.P.Gopikrishnan | Taguchi parametric optimization on Stellite metal matrix using metal inert gas weld | | AIP Conference Proceedings | International | October 2020 | 1551-7616 | SCOPUS |
| 23 | Dr.P.Gopikrishnan | Response analysis on synthesized aluminium-scandium metal matrix composite using unconventional machining processes | Elsevier | Materials Today: Proceedings | International | September 2020 | 2214-7853 | SCOPUS |

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|----|--------------------|---|----------|--|---------------|-----------------------|-----------|---|
| 24 | Dr.B.Shreeram | Trajectory tracking control of industrial robot manipulator using VS control system with STHWS method | Springer | Lecture Notes in Electrical Engineering Springer | International | Dec 2020 | 1876-1100 | Scopus |
| 25 | Dr.B.Shreeram | Investigation of mechanical properties of luffa and Coconut fibres reinforced composite | Springer | Lecture Notes in Electrical Engineering Springer | International | Dec 2020 | 1876-1100 | Scopus |
| 26 | Mr.A.G.Karthikeyan | Medical Assistive Robot (MAR) | IRJASH | International Research Journal on Advanced Science Hub (IRJASH) | International | Oct 2020 | 2582-4376 | Google Scholar, Academia, Cross REF DOI |
| 27 | Mr.A.G.Karthikeyan | Optimization of Multiple Input Process Parameters of WEDM on Titanium Ti 6Al-4v (Grade 5) By Taguchi Analysis | IRJASH | International Research Journal on Advanced Science Hub (IRJASH) | International | Oct 2020 | 2582-4376 | Google Scholar, Academia, Cross REF DOI |
| 28 | Mr.A.G.Karthikeyan | Medical Assistive Robot (MAR) | IRJASH | International Conference on Advancement in Management, Engineering and Technology (IC-AMET online) | International | October 10 & 11, 2020 | 2582-4376 | Scopus Indexed Conference proceedings |

Faculty Participation in TRAINING/ CONFERENCE / SEMINAR / WORKSHOP/FDP/WEBINAR

| Name of the Faculty | Type | Name of the Program | Venue | Duration | Period | |
|---------------------|---------|--|-----------------------------------|----------|------------|-----------|
| | | | | | From | To |
| Dr.K.KALAISELVAN | Webinar | Welding in pipeline industry and weldment corrosion Technology | Sethu Institute of Technology | 1 Day | 21.09.2020 | |
| Dr.P.SIVAPRAKASH | STTP | Internet of Things in Healthcare Application | Dr.N.G.P. Institute of Technology | 5 Days | 24.8.2020 | 29.8.2020 |
| Dr.P.SIVAPRAKASH | FDP | Recent Trends in Management | GATES Institute of Technology | 5 Days | 13.7.2020 | 17.7.2020 |
| Dr.P.SIVAPRAKASH | FDP | Digital Initiatives for | G.Venkatasamy | 14 Days | 4.6.2020 | 17.6.2020 |

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| | | Higher Education | Naidu College | | | |
| Dr V.SIVARAMAN | Webinar | Funding opportunities - proposals and research projects for faculty | Online Cambridge institute of technology | 3 days | 18.06.2020 | 20.06.2020 |
| Dr V.SIVARAMAN | FDP | Nano science and Technology | Online Sathyabama Institute of Technology & IITD M | 7 days | 29.06.2020 | 07.07.2020 |
| Dr V.SIVARAMAN | FDP | DIGITAL TEACHING TECHNIQUES | Online by ICTACT | 5 days | 03.08.2020 | 05.08.2020 |
| Dr.P.GOPI KRISHNAN | Workshop | Two Day Workshop on "Aligning Yourself to the Publishing Process" on 23rd & 24th July | Online | 2 Days | 23.07.2020 | 24.07.2020 |
| Dr.M.NALLUSAMY | International E-Conference | Impact on Irrigation and Drainage on Rural Landscapes of North East Region of India | Nandha College of Technology, Erode | 1 day | 15.09.2020 | - |
| Dr.M.NALLUSAMY | AICTE Sponsored One Week Short Term Training Programme | 3-D Printing Merges with Nanomaterials in Medical Applications | Guru Nanak Institute of Technology, Hyderabad | 6 days | 03.08.2020 | 08.08.2020 |
| Dr.M.NALLUSAMY | Webinar | Outcome Based Education (OBE) – Competency Profile Mapping with Courses and Course Outcomes (COs) | Sri Eshwar College of Engineering, Coimbatore | 1 day | 30.07.2020 | - |
| Dr.M.NALLUSAMY | Short Term Training Programme Through ICT Mode | Fundamental and Applications of Nanomaterials | National Institute of Technical Teacher's Training and Research (NITTTR), Kolkata | 5 days | 27.07.2020 | 31.07.2020 |
| Dr.M.NALLUSAMY | AICTE Sponsored One Week Short Term Training Programme | Application of Intelligent Optimization Techniques for Engineering Research (Phase – 1) | Bannari Amman Institute of Technology, Sathyamangalam | 6 days | 10.08.2020 | 15.08.2020 |
| Mr.N.MANIKANDAN | webinar | IEEE Explore webinar | Dr.N.G.P.Institute of Technology, Coimbatore | 1 day | 20.07.20 | 20.07.20 |
| Mr.A.JAGANATHAN | Webinar | Industrial Automation and Practices | Dr.NGP Institute of Technology | 1 day | 15.07.20 | 15.07.20 |
| Mr.A.JAGANATHAN | Webinar | "Research Perspective in Additive Manufacturing" | Dr.N.G.P.Institute of Technology, Coimbatore | 3 days | 22.07.20 | 24.07.20 |
| Mr. D.VASANTH KUMAR | Webinar | "Research Perspective in Additive Manufacturing" | Dr.N.G.P.Institute of Technology, Coimbatore | 3 days | 22.07.20 | 24.07.20 |
| Mr. D.VASANTH KUMAR | Coursera Online | COVID-19 Contact | Coursera Online course | 1 Week | July 2020 | |

| | course | Tracing | | | | |
|---------------------|------------------------|---|---|-----------|------------|------------|
| Mr. D.VASANTH KUMAR | Coursera Online course | Digital Manufacturing & Design | Coursera Online course | 2 Weeks | July 2020 | |
| Mr. D.VASANTH KUMAR | Coursera Online course | Supply Chain Planning | Coursera Online course | 4 Weeks | July 2020 | |
| Mr.R.VIJAYAKUMAR | Webinar | “Research Perspective in Additive Manufacturing” | Dr.N.G.P.Institute of Technology, Coimbatore | 3 days | 22.07.20 | 24.07.20 |
| Mr.R.VIJAYAKUMAR | Webinar | Industrial Automation and Practices | Dr.NGP Institute of Technology | 1 day | 15.07.20 | 15.07.20 |
| Mr.R.VIJAYAKUMAR | Certificate Course | one week on line Certificate Course on DIGITAL TEACHING TECHNIQUES | ICT Academy | One Week | 10.8.2020 | 15.08.2020 |
| Mr.M.MANI | Webinar | Industrial Automation and Practices | Dr.NGP Institute of Technology | 1 day | 15.07.20 | 15.07.20 |
| Mr.V.P.PRADEEP | Webinar | “Research Perspective in Additive Manufacturing” | Dr.N.G.P.Institute of Technology, Coimbatore | 3 days | 22.07.20 | 24.07.20 |
| Mr.K.KIRAN | STTP | Hybrid Manufacturing Processes: Opportunities and Challenges | Dr. B. R. Ambedkar National Institute of Technology, Jalandhar. | Five Days | 06.07.2020 | 10/07/2020 |
| Mr.K.KIRAN | STTP | Industry 4.0 and Smart Manufacturing: Opportunities and Challenges | Dr. B. R. Ambedkar National Institute of Technology, Jalandhar. | Five Days | 20.7.2020 | 24/07/2020 |
| Mr.K.KIRAN | STTP | Lost Foam Castings | Sree Chaitanya College Of Engineering ,Karimnagar . | Five Days | 20.07.2020 | 25/07/2020 |
| Mr.K.KIRAN | STTP | A Vision Towards Materials Manufacturing | KPR Institute of Engineering and Technology, Coimbatore. | Five Days | 20.07.2020 | 25/07/2020 |
| Mr.K.KIRAN | STTP | Reliability, Maintainability and Quality Issues in Process Industries | Dr. B. R. Ambedkar National Institute of Technology, Jalandhar | Five Days | 04.08.2020 | 08/08/2020 |
| Mr.K.KIRAN | STTP | Fundamental and Applications of Nanomaterials | NITTTR, Kolkata. | Five Days | 27.07.2020 | 31/07/2020 |
| Mr.K.KIRAN | Webinar | Industrial Automation and Practices | Dr.N.G.P Institute of Technology, Coimbatore. | One Day | 15.7.2020 | - |
| Mr.K.KIRAN | Webinar | Leadership talk on Impact COVID19 Impact on Higher Studies | UNITIEUP | One Day | 17.07.2020 | - |
| Mr.K.KIRAN | Webinar | Welding of Nickel based super alloys | KPR Institute of Engineering and | One Day | 20.07.2020 | - |

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| | | | Technology | | | |
| Mr.K.KIRAN | Webinar | Value of IEEE Publications in Research and Career Development | Dr.N.G.P Institute of Technology, Coimbatore. | One Day | 20.07.2020 | - |
| Mr.K.KIRAN | Webinar | Research perspective in Additive Manufacturing | Dr.N.G.P Institute of Technology, Coimbatore. | Two Days | 22.07/2020 | 24/07/2020 |
| Mr.K.KIRAN | Webinar | Gender Equality and Women's Rights | National Institute of Technology, Kurukshetra | One Day | 16.7.2020 | - |
| Mr.K.KIRAN | Webinar | Ancient Indian Science and Technology | NITTR, Kolkata. | One Day | 13.07.2020 | - |
| Mr.S.RAJKUMAR | Webinar | "Research Perspective in Additive Manufacturing" | Dr.N.G.P.Institute of Technology, Coimbatore | 3 days | 22.07.20 | 24.07.20 |
| Mr.S.RAJKUMAR | Webinar | Industrial Automation and Practices | Dr.NGP Institute of Technology | 1 day | 15.07.20 | 15.07.20 |
| Mr.M.SURIYAPRAKASH | STTP | FUNDAMENTAL AND APPLICATIONS OF NANOMATERIALS | NITTR, KOLKATA | 1 WEEK | 27.07.2020 | 31.07.2020 |
| Mr.M.SURIYAPRAKASH | Online webinar | A VISION TOWARDS MATERIALS AND MANUFACTURING | KPRIT, COIMBATORE | 6 DAYS | 20.07.2020 | 25.07.2020 |
| Mr.M.SURIYAPRAKASH | Online Training | VALUE OF IEEE PUBLICATIONS IN RESEARCH AND CAREER DEVELOPMENT | DR.N.G.P.IT | 1 DAY | 24.07.2020 | - |
| Mr.M.SURIYAPRAKASH | Webinar | FUTURE TRENDS IN AUTOMOTIVE INDUSTRIES | SRI ESWAR COLLEGE OF ENGINEERING | 1 DAY | 12.08.2020 | - |
| Mr.R.KARTHIKEYAN | FDP | Six days online FDP on "Teaching and Learning on Additive Manufacturing Technology: Emphasis on Metal 3D Printing" | NIT, Warangal | 6 | 13.07.2020 | 18.07.2020 |
| Mr.R.KARTHIKEYAN | Webinar | The scope of 3D Printing as a startuo in India | 3D Exter, TEQIP sponsored | 1 | 09.08.2020 | |
| Mr.R.KARTHIKEYAN | STTP | AICTE sponsored One week STTP on "3D printing merges with Nano Materials in Medical Applications" | Guru Nanak Institute of Technology, Hyderabad | 6 | 03.08.2020 | 08.08.2020 |
| Mr.R.KARTHIKEYAN | FDP | AICTE & ATAL Online FDP on "3D Printing & Design" | Sathyabama Institute of Science and Technology | 5 | 24.08.2020 | 28.08.2020 |
| Mr.R.KARTHIKEYAN | Webinar | "Research Perspective in Additive Manufacturing" | Dr.N.G.P.Institute of Technology, Coimbatore | 3 days | 22.07.20 | 24.07.20 |
| Mr.S.DHARAGA VINEETH | Webinar | Design Patents: Asset for Innovators | SNS College of Engineering | 1 | 3.7.2020 | |
| Mr.S.DHARAGA VINEETH | Webinar | Efficient Fault Tolerant schemes for Electric Vehicles | Tagore Engineering college | 1 | 6.7.2020 | |

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|----------------------|---------|---|-----------------------------------|---|-----------|---------|
| Mr.S.DHARAGA VINEETH | Webinar | IOT Trends in Industry | Gnamani College of Technology | 1 | 10.7.2020 | |
| Mr.S.DHARAGA VINEETH | Webinar | Industrial Automation and Practices | Dr.N.G.P. Institute of Technology | 1 | 15.7.2020 | |
| Mr.S.DHARAGA VINEETH | Webinar | Research opportunities in IC Engines | Gnamani College of Technology | 1 | 18.7.2020 | |
| Mr.S.DHARAGA VINEETH | Webinar | Manufacturing Process in Sheet metals | Gnamani College of Technology | 1 | 17.7.2020 | |
| Mr.S.DHARAGAVINE ETH | Webinar | E-Bike Conversion Techniques | Tagore Engineering college | 1 | 27.7.2020 | |
| Mr.S.DHARAGA VINEETH | Webinar | Research Perspectives in Additive Manufacturing | Dr.N.G.P. Institute of Technology | 3 | 22.7.2020 | 24.7.20 |
| Mr.S.DHARAGA VINEETH | Webinar | Design Failure Mode & Effective Analysis | SNS College of Engineering | 1 | 1.8.2020 | |

Programmes Organized (FDTP, STTP, Workshop, Symposium, Seminar, Conference etc.) From July 2020 – Dec 2020

| S.No | Program | Program Coordinator | Title | Period | | National/ International | Major Sponsors if any |
|------|-----------------------|---------------------|--|------------|------------|-------------------------|---|
| | | | | From | To | | |
| 1. | STTP | Dr.K.Kalaiselvan | Innovation in Materials and Industrial Automation | 19.10.2020 | 24.10.2020 | National | |
| 2. | Virtual Conference | Dr.P.Sivaprakash | Future Journey of Mechanical Engineering | 9.7.2020 | 11.7.2020 | International | |
| 3. | FDP | Dr.P.Sivaprakash | AICTE TRAINING AND LEARNING (ATAL) sponsored Faculty Development Program on "Exploring Additive Manufacturing in Healthcare Applications" | 19.10.2020 | 23.10.2020 | National | |
| 4. | Workshop | Mr.S.Rajkumar | Two Days Translational Research Workshop on "Design and Fabrication of Patient Friendly Custom Medical Products by Additive Manufacturing Process" | 19.09.2020 | 20.09.2020 | National | Indian Council of Medical Research (ICMR) |
| 5. | Association Innagural | Mr.A.Jaganathan | ASSOCIATION INAUGURATION MECHLADOZV.9.0 | 10.10.2020 | | | NGPIT |

FACULTY MEMBERS COMPLETED ONLINE COURSES JULY – DECEMBER 2020

| Sl. No. | Name of the faculty | Course Name | Platform (Coursera/ Udemy/ Udacity etc.,) | Period | Date of completion | Certificate No. with link |
|---------|---------------------|--|--|---------|--------------------|---|
| 1. | Dr.S.NANDHAKUMAR | Digital Manufacturing & Design Certificate | Coursera | 2 weeks | July 13, 2020 | https://www.coursera.org/account/accomplishments/verify/EQBUXPVLSE2 |
| 2. | | Intelligent Machining | Coursera | 4 weeks | July 12, 2020 | https://www.coursera.org/account/accomplishments/verify/K4XAR6ZZE5QY |
| 3. | Dr.R.THIRUMALAI | Leadership and Emotional Intelligence | Coursera | 4 weeks | 07/07/2020 | coursera.org/verify/R3W8DKGZ47FH |
| 4. | Dr.P.SIVAPRAKASH | Design Thinking for Innovation | Coursera | 4 Weeks | 19.8.2020 | https://www.coursera.org/account/accomplishments/verify/SPLYCBPDGF96 |
| 5. | | Understanding Research Methods | Coursera | 4 Weeks | 20.8.2020 | https://www.coursera.org/account/accomplishments/verify/SPLYCBPDGF96 |

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|-----|--------------------|--|----------|---------|------------|---|
| | | | | | | ments/verify/4NWDBLVXLN7D |
| 6. | Dr.V.SIVARAMAN | Advanced Manufacturing Enterprise | Coursera | 4 weeks | 21/07/2020 | coursera.org/verify/38FNWH62QVQV |
| 7. | | Digital Manufacturing & Design | Coursera | 4 weeks | 22/07/2020 | coursera.org/verify/VPE527XUY3F6 |
| 8. | Dr.P.GOPI KRISHNAN | Introduction to Thermodynamics: Transferring energy from here to there | Coursera | 8 week | 12.09.2020 | coursera.org/verify/RT2VC53BFQ9D |
| 9. | | Learning how to learn: Powerful mental tools to help you master tough subjects | Coursera | 4 week | 14.09.2020 | coursera.org/verify/YAJYGJQZWCUE |
| 10. | Mr.MANIKANDAN N | Natural Gas | Coursera | 4 weeks | 15.09.2020 | Verify at coursera.org/verify/AFZG8JSKSMJ8 |
| 11. | | Advanced Manufacturing Enterprise | Coursera | 4 weeks | 15.09.2020 | Verify at coursera.org/verify/L8TUST95H3JM |
| 12. | Mr. A.JAGANATHAN | Advanced Manufacturing Enterprise | Coursera | 4 Weeks | 13.09.2020 | coursera.org/verify/9PLPCDY6R9XT |
| 13. | | Cyber Security in Manufacturing | Coursera | 4 Weeks | 13.09.2020 | coursera.org/verify/GYYHOKRM839S |

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|-----|--------------------|--|----------|-------------|------------|---|
| 14. | Mr.M.Mani | Introduction to thermodynamics: Transferring Energy from Here to There | Coursera | 8 Weeks | 31.07.2020 | coursera.org/verify/URWVZL2WGF8U |
| 15. | | Wind Energy | Coursera | 4 weeks | 28.07.2020 | coursera.org/verify/JP9LAM49U9TG |
| 16. | Mr.R.VIJAYA KUMAR | Advanced Manufacturing Process Analysis | Coursera | Three Weeks | 14.09.2020 | https://www.coursera.org/account/accomplishments/verify/DXBJNZDKBV3L |
| 17. | | Advanced Manufacturing Enterprise | Coursera | Four Weeks | 14.09.2020 | https://www.coursera.org/account/accomplishments/verify/KUKFF5ZJX2FZ |
| 18. | Mr.D VASANTH KUMAR | Six Sigma Principles | Coursera | 4 Weeks | July 2020 | DU9V3N4QJRO9 https://www.coursera.org/account/accomplishments/certificate/DU9V3N4QJRO9 |
| 19. | | Introduction to Thermodynamics: Transferring Energy from Here to There | Coursera | 8 Weeks | July 2020 | FBZP8CFV7PJ9 https://www.coursera.org/account/accomplishments/certificate/FBZP8CFV7PJ9 |
| 20. | Mr.V.P.PRAD EEP | SAFETY IN THE UTILITY INDUSTRY | Coursera | 4 WEEKS | 02.07.2020 | coursera.org/verify/GGUHR7SMJXZM |

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|-----|-------------------|---|----------|---------|------------|--|
| 21. | | SIX SIGMA PRINCIPLES | Coursera | 4 WEEKS | 15.09.2020 | coursera.org/verify/WXZ3LVSQW6VV |
| 22. | | COVID-19 Contact Tracing | Coursera | 4 Weeks | 14.07.2020 | Verify at coursera.org/verify/W4MGB9JFKCWK |
| 23. | Mr. ASHOK KUMAR P | Introduction to Thermodynamics : Transferring Energy from here to there | Coursera | 4 Weeks | 04.08.2020 | Verify at coursera.org/verify/QHH59J84AE6K |
| 24. | Mr. K.KIRAN | Advanced Manufacturing Enterprise | Coursera | 4 Weeks | 05-10-20 | YXDZA2CTBUT2 - https://www.coursera.org/account/accomplishments/certificate/YXDZA2CTBUT2 |
| 25. | | 3D Printing Hardware | Coursera | 6 Weeks | 10.08.2020 | coursera.org/verify/ZNQ26V4GDYD3 |
| 26. | Mr.R.KARTHI KEYAN | How to Write and Publish a Scientific Paper (Project-Centered Course) | Coursera | 6 Weeks | 07.10.2020 | coursera.org/verify/7WGEPCXXF4D |
| 27. | Mr.S.RAJKUMAR | Cyber Security in Manufacturing | Coursera | 4 Weeks | 14.09.2020 | https://www.coursera.org/account/accomplishments/verify/Y6Y9XE2PXAEQ |

| Details of Membership in Professional Activities | | | | |
|---|----------------------------|--------------------------------------|--------------------------------------|--------------------------------|
| Sl.No | Name of the Faculty | Name of the Professional Body | Membership Number with period | National/ International |
| 1. | Dr.S.Nandhakumar | ISTE | Life time | National |
| 2. | Dr.K.Kalaiselvan | ISTE/IWS | Life time/Annual | National |
| 3. | DrR.Thirumalai | ISTE/IE(I) | Life time | National |
| 4. | Dr.K.Ravikumar | ISTE | Life time | National |
| 5. | Dr.P.Sivaprakash | ISTE/IIIE/MRSI /IWS | Life time | National |
| 6. | Dr. V.Sivaraman | ISTE | Life time | National |
| 7. | Mr.M.Nallusamy | ISTE | Life time | National |
| 8. | Mr.B.Shreeram | ISTE | Life time | National |
| 9. | Mr.A.Jaganathan | ISTE | Life time | National |
| 10. | Dr.P.Gopi Krishnan | ISTE/ SAE | Life time/Annual | National |
| 11. | Mr.N.Manikandan | ISTE | Life time | National |
| 12. | Mr.R.Vijayakumar | ISTE | Life time | National |
| 13. | Mr.M.Mani | ISTE | Life time | National |
| 14. | Mr.D.Vasanthkumar | ISTE | Life time | National |
| 15. | Mr. V.P.Pradeep | ISTE | Life time | National |
| 16. | Mr.P.Ashokkumar | ISTE | Life time | National |
| 17. | Mr.A.G.Karthikeyan | ISTE | Life time | National |
| 18. | Mr.K.Kiran | ISTE | Life time | National |
| 19. | Mr.S.Rajkumar | ISTE | Life time | National |
| 20. | Mr.M.Suriyaprakash | ISTE | Life time | National |
| 21. | Mr.R.Karthikeyan | ISTE | Life time | National |
| 22. | Mr.S.Dharagavineeth | ISTE | Life time | National |

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