



MANAKULA VINAYAGAR INSTITUTE OF TECHNOLOGY

KALITHEERALKUPPAM, PUDUCHERRY-605107

DEPARTMENT OF MECHANICAL ENGINEERING

NEWSLETTER 2020 – 2021 (ODD SEM)

DEPARTMENT ACTIVITY

PATENT PUBLISHED

In academic year 2020-21, 13 PATENTS were filed and published. The details are furnished below.

- + **Dr. B. Radjaram** published the patent “MODERNIZATION OF TIRE REPLACEMENT IN CAR USING PNEUMATIC JACK” on August, 7th 2020.
- + **Dr. P. Sivasankaran** published the patent “INVESTIGATION ON WASTE PLASTIC TO FUEL BY PYROLYSIS PROCESS” on July, 17th 2020.
- + **Mr. K. Selvam** published the following patents as listed below
 - “MODERNIZATION OF WATER PUMPING SYSTEM USING HYDRAULIC TURBINE” on August, 7th 2020.
 - “MODERNIZATION OF LATHE TAIL STOCK USING PNEUMATIC POWER SOURCE” on August, 7th 2020.
- + **Mr. A. Thiagarajan** published the patent “FABRICATION OF PELTIER AIR CONDITIONING OF VEHICLES” on July, 31st 2020.
- + **Mr. M. Thirunavukarasu** published the following patents as listed below
 - “DESIGN AND FABRICATION OF MULTIPURPOSE MACHINE FOR AGRICULTURAL OPERATIONS” on July, 3rd 2020.

- “WASTE HEAT RECOVERY FROM HOME USING PELTIER MODULE” on July 31st 2020.

+ **Mr. R. Karthikeyan** published the following patents as listed below

- “DESIGN AND FABRICATION OF OXY-HYDROGEN GAS WELDING BY CHEMICAL REACTION METHOD” on July, 24th 2020.
- “DESIGN AND FABRICATION OF OXY-HYDROGEN GAS WELDING BY CHEMICAL REACTION METHOD” on July, 31st 2020.
- “DESIGN AND FABRICATION OF HOVER CRAFT USING PROPELLER THRUST FORCE” on August 7th 2020.

+ **Mr. S. Ganesh Kumar** published the following patents as listed below

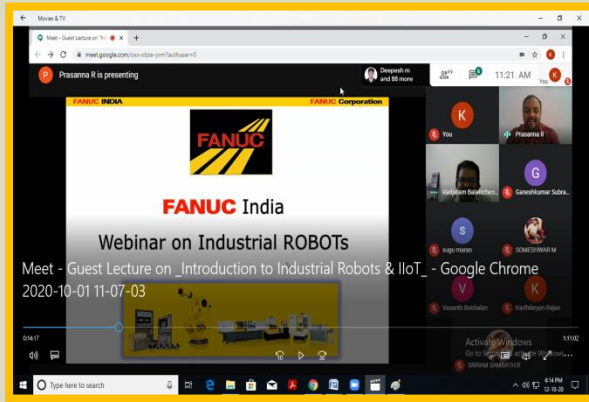
- “FABRICATION OF NATURAL COMPOSITE MATERIAL WITH EPOXY RESIN AS MATRIX AND CORN FIBER, CHICKEN FEATHER” on August, 7th 2020.
- “EXPERIMENTATION AND OPTIMIZATION OF MONO CYLINDER HYDRAULIC SHOCK ABSORBER USING RSM AND TAGUCHI MET” on August, 7th 2020.

+ **Ms. R. Viji** published the patent “MULTI SLOPE SOLAR STILL WITH PCM AND WITH AND WITHOUT FRESNEL LENS” on August, 7th 2020.

GUEST LECTURE

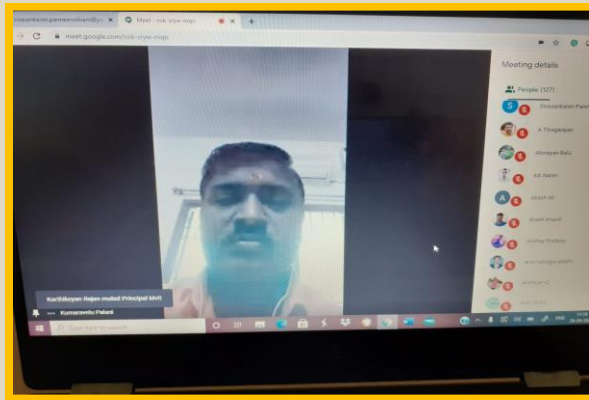
A Guest Lecture was organized by the Department of Mechanical Engineering

on the topic of “INTRODUCTION TO INDUSTRIAL ROBOTS & IIOT” for the students on 1st October 2020. Mr. R. Prasanna, Asst. Manager, Training School, FANUC INDIA, Bangalore was the chief guest of the guest lecture program.

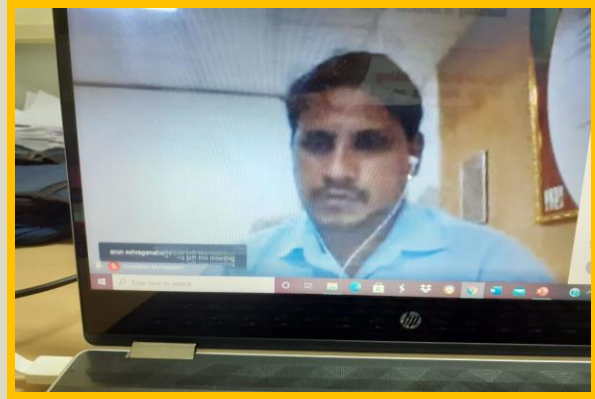


WORKSHOP

Two Days Workshop was conducted by the Department of Mechanical Engineering for the students on 28th & 29th September 2020.



Mr. K. Palani, Manager for Safety & Environment, Ashok Leyland, Chennai was one of the resource person of the Workshop program on “ENGINEERING TECHNOLOGY & MANAGEMENT” and Mr. R. Mariappan, Process Planning Head, LUCAS TVS, Puducherry was another resource person of the Workshop program on “CELLULAR MANUFACTURING”. It was a great exposure and very useful lecture to the students.



NIQR

National Institution for Quality & Reliability, Chennai organized a Virtual Convention with the theme “ROBUST QUALITY FOR SURVIVAL & GROWTH” on 5th September, 2020. The objective of this Convention is converting every challenge into an opportunity is the imperative task that lies in front of us. This virtual convention will enable us to learn the tools & techniques of doing the right things to sustain and grow our business environment.

The four sessions held on the topics are “Sustainable Growth of MSME's through Corporate Handholding”, “Challenges to Quality in Disruptive Era”, “Exploring Opportunities for GDP Growth through Innovation” & “Emerging Opportunities in Virtual World”.

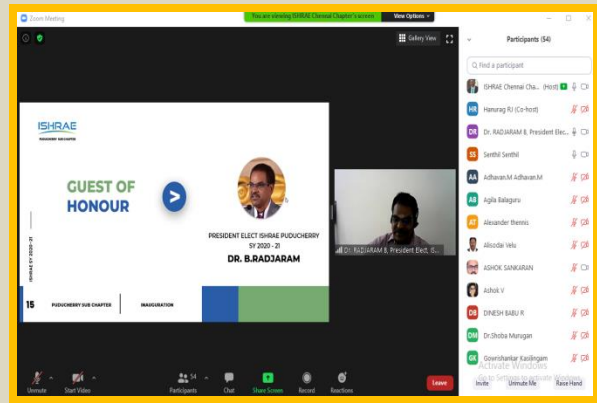
National Institution for Quality & Reliability, Thiruvananthapuram organized a Webinar on “MONOZUKURI & HITOZUKURI” by Shri K R Mohan Ananthanarayanan, Retd. Head Quality Division Mechanical VSSC, Vice Chairman NIQR Trivandrum Branch on 16th September 2020.

These sessions were attended by our staff & students.

ISHRAE

✚ Dr. B. Radjaram, Professor and Head, Department of Mechanical Engineering & President Elect Puducherry ISHRAE Subchapter was a Guest Of Honor for “ENGINEER’S DAY CELEBRATION” on the topics “Outcome Based Learning of Engineering”, “Engineers Certainty Principle”, “Givers Gain” & Tech Curiosity” on September 15th 2020, conducted by ISHRAE Puducherry Subchapter.

✚ Dr. B. Radjaram, Professor and Head, Department of Mechanical Engineering & Honorary Secretary, IEIPSC as Guest of Honor addressed “ENGINEER’S DAY” celebration by NIT Puducherry, Karaikal through ONLINE on September 15th 2020.



✚ Dr. B. Radjaram, Professor and Head, Department of Mechanical Engineering & President Elect Puducherry ISHRAE Sub Chapter was Guest Of Honor for “WORLD OZONE DAY CELEBRATION” on the topics of “Ozone for Life: 35 Year of Ozone Layer Protection” on September 16th 2020, organized by ISHRAE Puducherry Subchapter.

IEI

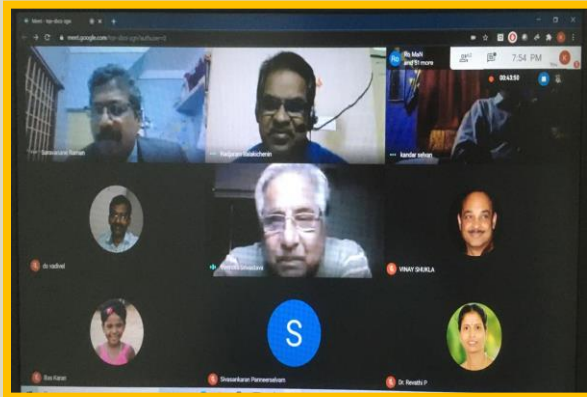
✚ THE INSTITUTION OF ENGINEERS, PUDUCHERRY MIT Students Chapter Mechanical organized “53rd ENGINEER’S DAY CELEBRATION” on September 15th 2020 in commemoration of 160th Birth Anniversary of Sir Mokshagundam Visvesvaraya on the theme “**Engineers for a Self – Reliant India**”.



✚ Er. R. Mananathan, Chairman Manatec India Pvt Ltd, was the Chief Guest and delivered a lecture on the above theme. The event was organized in association with IEI PSC for the staff & students of MVIT.

✚ “WORLD HABITAT DAY” was celebrated on the theme “Housing for All – A Better Urban Future” Er. M. Kandar Selvam was the chief guest & delivered lecture on the above theme to the students & staffs of MIT on October

10th 2020 in association with IEI PSC and Mechanical Engineering Students chapter of IEI.



STAFF ACTIVITIES

- ✚ The faculty members have participated in **218** Online CERTIFICATION COURSES, **174** Online FDPs & **635** Online WEBINARS during the month of April, May and June 2020, lockdown periods of COVID'19.
- ✚ Dr. B. Radjaram is appointed as **Technical Advisory Committee Member** of PUDUCHERRY SMART CITY DEVELOPMENT LIMITED, Puducherry.

JOURNAL PUBLICATIONS

- ✚ Dr. B. Radjaram, Dr. P. Sivasankaran & Mr. K. Karthigayan have presented a paper on “Maximizing Machine Capacity by Improving Efficiency Using Linear Programming Model” in INTERNATIONAL JOURNAL OF RECENT TECHNOLOGY & ENGINEERING on September 2020.
- ✚ Dr. P. Sivasankaran presented a paper on “Study & Analysis Of Micro Level Examination Of Robot Arm Using Simulation For Improving The Path Motion Of Arm With Reduced Time And DOF” in INTERNATIONAL JOURNAL OF NEW INNOVATION IN ENGINEERING & TECHNOLOGY on September 2020.
- ✚ Mr. M. Thirunavukarasu presented a paper on “Study on Effectiveness of Thermoelectric Generators for Waste

Heat Recovery from Boiled Rice Water” in MAT Journals on August 2020.

- ✚ Dr. P. Sivasankaran & Mr. K. Karthigayan have presented a paper on “Simulation of Robot Kinematic Motions Using Collision Mapping Planner Using Robo DK Solver” in INTERNATIONAL JOURNAL OF INNOVATIVE TECHNOLOGY & EXPLORING ENGINEERING on September 2020.

TECHNICAL LECTURE SERIES

Dr. B. Radjaram & Dr. P. Sivasankaran, have contributed their experiences on “COBOT TECHNOLOGY” & “OPTIMIZATION OF SCHEDULING PROBLEMS IN INDUSTRIAL APPLICATIONS” effectively to their colleagues on 28th September & 10th October 2020 respectively. Here the quality of teachers has been highlighted as the most important factor in determining the effectiveness of a system.

FDP COURSE

- ✚ Mr. R. Karthikeyan, Mr. B. Vasanth, Mr. R. Ranjit Kumar, Mr. M. Thirunavukarasu & Mr. J. Sugumaran have participated in AICTE Training & Learning Academy (ATAL) FDP on “Mechanics of Composite Materials & Supports” by AICTE.
- ✚ Mr. R. Karthikeyan, Mr. M. Thirunavukarasu & Mr. R. Ranjit Kumar have participated in AICTE Training & Learning Academy (ATAL) FDP on “Solar Energy Technology & Applications” by AICTE.
- ✚ Mr. K. Karthigayan, Mr. B. Vasanth, Mr. J. Sugumaran have participated in AICTE Training & Learning Academy (ATAL) FDP on “Novel Materials” by AICTE.
- ✚ Mr. A. Thiagarajan, Mr. S. Ganesh Kumar, Mr. E. Suresh & Mr. K. Selvam have participated in AICTE Training & Learning Academy (ATAL) FDPs on

“Green Energy & Sustainability” by AICTE.

- ✚ Mr. S. Ganesh Kumar, Mr. E. Suresh & Mr. K. Selvam have participated in AICTE Training & Learning Academy (ATAL) FDP on “Alternate Fuels” by AICTE.
- ✚ Ms. R. Viji & Mrs. S. Suganya have participated in AICTE Training & Learning Academy (ATAL) FDP on “Internet of Things” by AICTE.
- ✚ Mr. A. Thiagarajan has participated in AICTE Training & Learning Academy (ATAL) FDP on “Computational Fluid Dynamics” by AICTE.
- ✚ Mr. K. Karthigayan has participated in AICTE Training & Learning Academy (ATAL) FDP on “Recent Advances in Materials & Manufacturing” by AICTE.

STTP COURSE

Mr. K. Karthigayan, Mr. M. Thirunavukarasu, Mr. B. Vasanth, Mr. R. Ranjit Kumar, Mr. R. Karthikeyan, Ms. R. Viji & Mrs. S. Suganya have participated in 6-Day AICTE Sponsored Short Term Training Programme (STTP) Series on RECENT ADVANCES IN TRIBOLOGY AND SURFACE ENGINEERING: Series 1,2&3 of 4 on the topics of “Introduction to Tribology and Surface Engineering”, “Tribology of Machine Components and Applied Tribology” & “Introduction to special topics like Nanotribology, Biotribology, Space tribology” held on 17-22 August, 14-19 September & 12-17 October, 2020 respectively.

WORKSHOP

Dr. P. Sivasankaran has attended an one day Workshop on “DESIGN OF THUMBNAILS & LOGOS” organised by Shree Sai Engineering solutions on 11th October 2020.

WEBINAR

Dr. P. Sivasankaran has attended a Webinar on “DEMISTIFYING PRODUCT DEVELOPMENT” organised by IIPHG-TIB Indian Institute of Public Health Gandhinagar on 8th October 2020.

STUDENTS ACTIVITIES

- ✚ The seven batch of students have participated in KRITAGYA AGRI TECH HACKATHON, a platform to showcase and recognize an innovative and disruptive farm mechanization solution preferably to promote “Women Friendly Farm Machinery & Equipment” by IGARC , Govt. of India.
- ✚ The Students have participated in “53rd ENGINEER’S DAY CELEBRATION” conducted by THE INSTITUTION OF ENGINEERS, PUDUCHERRY STATE CENTRE on September 15th 2020 in commemoration of 160th Birth Anniversary of Sir Mokshagundam Visvesvaraya on the theme “Engineers for a Self – Reliant India”.



- ✚ The Students have participated in a Virtual Seminar on “Energy Management” organized by Social Entrepreneurship; SWACHHTA & Rural Engagement Cell of our college on 30th September 2020. This programme was delivered by Mr. G. Deepak Kumar,

Independent Consultant – Sustainability,
Chennai.

- ✚ The Students have participated in “Observance of 21st World Sight Day 2020” by Dr. P. Nallamuthu, Professor & Head – Ophthalmology, SMVMCH, Puducherry, organized by our college on 8th October 2020.
- ✚ The Students have participated in a Webinar “Glimpses of UAV & its Applications” by AIROS SPACE on 9th September 2020.
- ✚ The Students have attended a one day Workshop on “Design of Thumbnails & Logos” organised by Shree Sai Engineering solutions on 11th October 2020.
- ✚ The Students have attended a programme “be the CHANGE” presents by YI Puducherry on the divine occasion of Gandhi Jayanthi by Mr. Rahul Alwal, IPS & Mr. Sraddalu Ranade, Scientist, Educator & Scholar on 2nd October 2020.
- ✚ Anugrah.A of 3rd Year applied for ATAL Incubation Center- PEC Facility product development fund and selected as top 25 among 75 projects applied to it. Further, AIC-PECF, CEO ensured continuous support for his project based on drone.