NSIT

NEWS LETTER (2019-2020)



Department of Mechanical Engineering

S. No.	Date	Event Title
1.	20200806	Webinar on "Scope of BIM - Building Information Modeling in Engineering"
2.	20200620	Webinar on IPR Patents and Drafting
3.	20200429 to 20200503	5 Days Online Workshop S01 Innovating with 3D Printing S02 A link in Chain S03 Exams after Exam S04 My Journey to F1 motor Sports S05 Future of Mobility Engineering
4.	20200224	A one day workshop on "Additive Manufacturing Technology (3D Printing)"
5.	20200214	Webinar on "Electrical Vehicles"
6.	20200211	Industrial Visit to "Nilgiris, Larsen & Turbo Switch Gear Limited"
7.	20200125	Symposium- SPANDANA 2020
8.	20200103	Importance of IPR
9.	20191231	Industrial Visit to "TRACO CABLE COMPANY LIMITED"
10.	20191231	Industrial Visit to "KERALA ELECTRICAL AND ALLIED ENGINEERING LIMITED"
11.	20191023	TNSCST Sponsored One Day Seminar on "Nanotech Based Sensor to Car Crash Detection"
12.	20190923	A Seminar on "Non Destructive Testing and its Applications"

NARASU'S SARATHY INSTITUTE OF TECHNOLOGY Department of Mechanical Engineering

20200806 - Webinar on "Scope of BIM - Building Information Modeling in Engineering"

The Department of Mechanical Engineering associated with IIC- MHRD Cell organized a Webinar on "IPR: Patents and Drafting Techniques". The session was addressed by Dr.M.Senthil, Prof/Head, Mechanical and special address by Dr.Munusami Vishwanathan, Principal, NSIT. The Resource person Mr.Aswin P, BIM Modeler, Bangalore and Mr.Sidhaartha, BIM Modeler, Chennai, had delivered valuable information about the features of the Building Information Modeling Engineering and Revit software. Both discussed the various applications of the Revit software. The session was useful to discuss the importance of patents and procedure for drafting techniques and their benefits among the students.



NARASU'S SARATHY INSTITUTE OF TECHNOLOGY Department of Mechanical Engineering

20200620 - Webinar on "IPR Patents and Drafting Techniques"

The department of Mechanical Engineering associated with IPR Cell NSIT organized a Webinar on "IPR: Patents and Drafting Techniques". The session was addressed by Dr.M.Senthil, Prof/Head, Mechanical special address by Dr.Munusami Vishwanathan, Principal, NSIT. The Resource person Mr.Arvin Tamilarasu, Head of business Intelligence and technology transfer, Stellarix Consultancy Services Pvt. Ltd., India and China had delivered valuable information about the essentials of Intellectual Property Rights, patents and Drafting techniques. The session was useful to discuss the importance of patents and procedure for drafting techniques and their benefits among the students.



NARASU'S SARATHY INSTITUTE OF TECHNOLOGY Department of Mechanical Engineering

20200429 to 20200503 - 5 Days Online Workshop

The Department of Mechanical Engineering, Narasu's Sarathy Institute of Technology, Salem associated with MaxCADD, Coimbatore have organized a 5 Day Online Workshop on a theme of "For Mechanical Engineers by Mechanical Engineers".

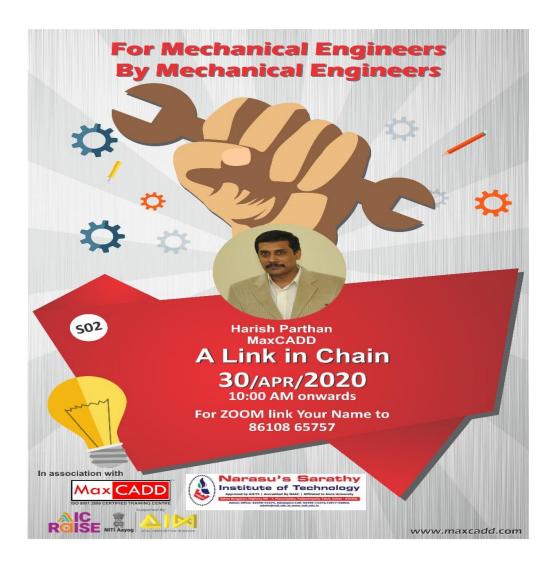
20200429 - "Innovating with 3D Printing"

Session 01 – The session was facilitated by the resource person Mr. Charath Chander Natarajan, MaxCADD, with valuable information about the 3D printing technology. It was inspiring session with the knowledge sharing of the trends in 3D printing techniques and their real world applications. He explored various new product development methods with real products printed the 3D Printed Machine. It was an informative session for our students to gain more ideas in new product development.



20200430 - "A link in Chain"

Session 02 – The session was facilitated by the resource person Mr. Harish Parthan, MaxCADD, on the general topic "A link in Chain". It was inspiring session with the knowledge sharing of the how the real world scenario connected to one another in aspects like education and job, job and family. He explored various new solutions to handle tough situation during this transformation in everyone career. It was an informative session for our students to gain more knowledge.



NARASU'S SARATHY INSTITUTE OF TECHNOLOGY Department of Mechanical Engineering

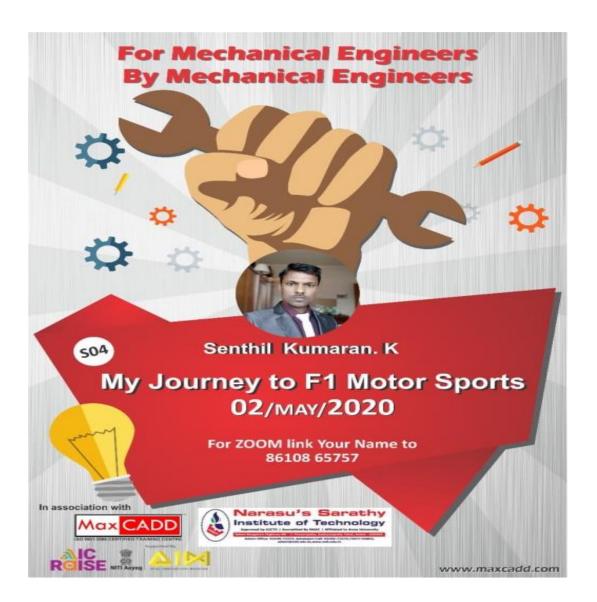
20200501-<u>"Exams after Exam"</u>

Session 03 – The session was facilitated by the resource person Mr. Raja S, MaxCADD, on the general topic "Exams after exam". It was a wonderful session with useful information shared about the difficulties that are faced by the recent generation young graduates while placed in an industry or searching some technical jobs around. He also added solutions and strategic role to overcome those situations. It was an informative session for our students to gain new experience on real exams after exams.



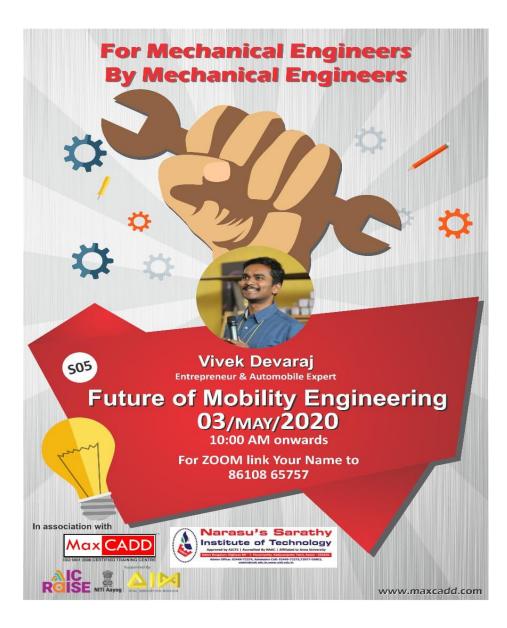
20200502 - "My Journey to F1 motor Sports"

Session 04 – The session was facilitated by the resource person Mr. Senthil Kumaran K, F1 Motor Sports, on the general topic "My Journey to F1 Motor Sports". It was a wonderful session with useful information shared about his experience on joining in F1 Motor Sports. He shared valuable information of skills sets required to place in a firm like F1 Motor Sports. It was an informative session for our students to gain new experience in enhancing their placement activities.



20200503 - "Future of Mobility Engineering"

Session 05 – The session was facilitated by the resource person Mr. Vivek Devaraj, Entrepreneur and Automobile Expert, on the general topic "Future on Mobility Engineering". It was a wonderful session with useful information shared about his experience to become an entrepreneur in Mobility Engineering. He shared valuable information about the growth of mobility engineering in future. It was an informative session for our students to gain new experience.



20200214 - Webinar on "Electrical Vehicles"

The Department of Electrical and Electronics Engineering and The Department of Mechanical Engineering of Narasu's Sarathy Institute of Technology, Salem associated with CADD Centre Salem conducted a Webinar on **"Electrical Vehicles"** on 14.02.2020.

The Speaker Mr.P.K.Venkataramana, Technical Head, Industrial Institute of Designing, CADD Centre, started the session with the Introduction to EV Technology & Operations and their importance and needs. The disruptions in the automotive industry were discussed in that session. He explained the major difference between the IC Engines and Electrical vehicles by clear pictures and animations along with technical and technology changes involved with electrification. He detailed the changing demands and opportunity for engineers to look for better and brighter career. The difference in the frame, parts, performance etc. of an IC Engine and electrical vehicle have been discussed in that session. The type of battery, the type of traction motor and the motor controller design vary according to the size, power and proposed application had elaborated with perfect pictures. Electric motorcycles and scooters, neighbourhood electric vehicles, industrial fork-lift trucks and including many hybrid vehicles and more had been explained by him. He briefed about the battery construction used in Tesla Car in the session. The sessions were completed with feedback and speaker cleared their doubts and queries regarding the webinar through online live chat.



20200211 - Industrial Visit to "Nilgiris, Larsen & Turbo Switch Gear Limited

Students reached to Industrial Visit to "Larsen & Turbo Switch Gear Limited" Nilgiris, Tamil Nadu. The Plant Head welcomed our students and gave brief introduction about the company. Students visited the plant shop floor along with assigned plant supervisor got benefitted with the knowledge in manufacturing of gears. The technical person explained the industry process effectively and interacted with students to deliver the process fabrications in different plants and divisions.



20200125 - SYMPOSIUM ON "SPANDANA-2020"

The Department of Mechanical Engineering has been organizing "**SPANDANA**" intra and inter department technical symposium every year. A National level Technical symposium with disparate events was conducted through the societies functioning in the department. Competitions are conducted with focus on the various streams of mechanical engineering such as Design, Materials, Thermal and Manufacturing to improvise student technical knowledge. These events are also found to be useful to develop the leadership and team working skills among the students to meet the global competition.

Technical events like Paper presentation on "Recent Trends in Mechanical", CAD Modeling, Engine Assembly, Technical Quiz, Water Rocketry, etc. were conducted in this symposium which augments non-theoretical skills among students. Student participants from various colleges around 150 members involved energetically in this technical festival. Different committees are formed among the students to execute the festival in a virtuous manner. Supporting stand and faculty members work together to conduct the symposium. Cash prizes and awards were accorded to the winners and gratitude certificates for runners of each event to motivate the young minds.



Inauguration

NARASU'S SARATHY INSTITUTE OF TECHNOLOGY Department of Mechanical Engineering



Event 1: Paper Presentation



Event 2: 3D Modelling

NARASU'S SARATHY INSTITUTE OF TECHNOLOGY Department of Mechanical Engineering



Event 3: Technical Quiz



Event 4: Water Rocketry

NARASU'S SARATHY INSTITUTE OF TECHNOLOGY Department of Mechanical Engineering



Prize Distribution

20200103 – Importance of IPR

The department of Mechanical Engineering associated with IPR Cell NSIT organized an FDP on "Importance of IPR" on 25.01.2020 at college premises. The session was addressed by Dr.M.Senthil, Prof/Head, Mechanical .Special address by Dr.Munusamy Vishwanathan, Principal, NSIT. The Resource person Mr.T.Sudhakar, Assistant Professor, Department of Mechanical Engineering, NSIT had delivered valuable information about the essentials of Intellectual Property Rights, patents and copyrights. The session was useful to discuss the procedure for drafting techniques and their importance among the faculties.



20191231 - Industrial Visit to "TRACO CABLE COMPANY LIMITED"

An Industrial visit to **Kerala** was arranged by Mechanical Engineering Department of **Narasu's Sarathy Institute of Technology** on 30/12/19 & 31/12/19. Third year Mechanical Engineering Students accompanied by two staff members had visited **TRACO CABLE COMPANY LIMITED**, Ernakulum, Kerala. The technical staff Mr.Sreekumar gladly received us, briefed about the company policies and safety precautions for students during plant visit. In Plant-1 he explained the process of forming the metal rods into wires of required diameters through extrusion forming. He classified the usage of aluminum wires and steel wire fabricated in outer core and inner core of the casing. The students were explained about the process of spinning extruded wires by spinning machine in Plant- 2. The process of insulating PVC material coated with three colors at the outer part of the wire has been lively explained to the students in the shop floor. Tensile and Compression testing of the wires in quality inspection floor were viewed by the students and gained the knowledge of parameters inspected and inspection techniques involved in good quality wire were detailed by the technician. He deliberately explained every process carried out in the plant and cleared the doubts.



NARASU'S SARATHY INSTITUTE OF TECHNOLOGY Department of Mechanical Engineering



Fig. Industrial visit to Traco Cable Co Ltd

NARASU'S SARATHY INSTITUTE OF TECHNOLOGY Department of Mechanical Engineering

20191231 - Industrial Visit to "KERALA ELECTRICAL AND ALLIED ENGINEERING LIMITED"

Students reached to KERALA ELECTRICAL AND ALLIED ENGINEERING LIMITED, Ernakulum, and Kerala. The Plant Head welcomed our students and gave brief introduction about the company. Students visited the plant shop floor along with assigned plant supervisor got benefitted with the knowledge in manufacturing of electrical transformer and fabrication of heavy electrical power transformers and transformer components. The technical person, explained the industry process effectively and interacted with students to deliver the process fabrications in different plants and divisions.



20191023 - One Day Seminar on "Nanotech Based Sensor to Car Crash Detection"

The Department of Mechanical Engineering of Narasu's Sarathy Institute of Technology, Salem conducted a TNSCST Sponsored One Day National level seminar titled "Nanotech Based Sensor to Car Crash Detection" on 23.10.2019. Dr.N.Surumbarkuzhali, Assistant Professor, Department of Physics, Government Arts College, Salem and Prof.M.Sridhar Panday, Assistant Professor, Department of Nano Science & Technology, K.S.Rangasamy College of Technology, Trichengode were the Chief Guests.

The Speaker **Dr.N.Surumbarkuzhali**, **Assistant Professor**, **Department of Physics**, **Government Arts College**, **Salem** started the session with an important and needs of Sensors and significance of Nano Sensors. She started well with explaining about the sensors initially and explained the basics of sensors and its application. A brief explanation was given to students to understand the difference between the sensors and nanosensors with perfect examples. The manufacturing and properties of nano sensors have been detailed with suitable pictures. She added more about the application of nanosensors in automobiles like nanopowders and coatings for more durable paints, nanofilms for water repelling windshields. Then finally classified the details nano sensors used in automobiles and how they incorporate in saving the human lives with more examples and pictures and videos.

The sessions were completed with student's feedback and speaker cleared their doubts and queries regarding the seminar.

The Speaker **Prof.M.Sridhar Panday**, **Assistant Professor**, **Department of Nano Science & Technology**, **K.S.Rangasamy College of Technology**, **Trichengode** started the session with significance of Nano Sensors and applications in automobiles. He gave a detailed description about the types of nanosensors used in automobile applications. Traffic monitoring, accident detection and recovery assistance were explained in detail with suitable examples. He clearly explained how nanosensors incorporate in ABS technology and airbag inflation during accidents with video animations.

The sessions were completed with student's feedback and speaker cleared their doubts and queries regarding the seminar.

NARASU'S SARATHY INSTITUTE OF TECHNOLOGY Department of Mechanical Engineering



20190923 - A Seminar on "Non Destructive Testing and its Applications"

The Department of mechanical engineering conducted a seminar on "Non Destructive Testing and its Applications" on 23.09.2019at our college premises. **Mr.C.Ramasamy,M.E., Technical Director, Dr.AbdulKalam Educational Institutions**, Salem graced the function as the Resource Person. He commenced his session with brief explanation about how Nondestructive testing (NDT) is a widely used in group of analysis techniques in science and technology industry to evaluate the properties of a material, component or system without causing damage. He detailed about the most frequently methods used in NDT commonly in the all Engineering fields.Significant hazard or economic loss, such as in transportation, pressure vessels, building structures, piping, and hoisting equipment caused by failure of a component in industries was elaborated with perfect examples.Various methods and latest techniques used due to their particular natures, to certain applications were discussed with case studies. Students and Faculties interacted with the Speaker and valuable information was shared in that session.

