

ASSOCIATION EVENTS 2017-2018

NATIONAL LEVEL TECHNICAL WORKSHOP ON “3D PRINTING”

Rohini College of Engineering and Technology, the Department of Mechanical Engineering organized “A National Level Workshop on 3D Printing” on 11.08.2017 for Mechanical Engineering students. Department of Mechanical Engineering takes pride in providing experiential learning processes at the grass root level through 3D Printing Technology. It aims at revolutionizing the classrooms by making students aware of this futuristic technology.

The Board of Directors, Chief Guest Dr. S. Rajakumar, Head, Department of Mechanical Engineering, Anna University, Tirunelveli graced the occasion. Student Visalatchi of III Mechanical Engineering delivered the welcome address and introduced the Chief Guest. The Principal delivered speech on “The importance of 3D printing to the Engineers”. He congratulated the Department of Mechanical Engineering for organizing this workshop and welcomed the participants. The opening remark was made by Dr. S. Indran, Head of Mechanical Engineering, Convener of the workshop. Chief Guest Dr. S. Rajakumar, Head - Dept. of Mechanical Engineering, started the session with the introduction on 3D Printing highlighted the key features of 3D Printing.

He explained the basic principle involved in 3D Printing, evolution of 3D Printing. 3D Printing refers to processes in which material is joined or solidified under computer control to create a three- dimensional object with material being added together (such as liquid molecules or powder grains being fused together). 3D printing is used in both rapid prototyping and additive manufacturing (AM).

Session 2 started with the Hands-on session on using Sketch up basic Geometrical shapes & a customized mini project; Demos of Tinker CAD, Open SCAD, Designing Code, various types of 3D Printers. He started the session with Live demo of Printing, STL principles, Print Bed Calibration, Object placement. The 3D

Printing workshop is first of its kind in the arena of creativity; computerized manufacturing techniques designed especially for students to advance learners. Several students from other colleges participated and got benefited from this workshop. Certificates were distributed to all the participants.

This workshop on 3D printing helps the participants to understand the design, functioning and operation of a basic 3D Printer. The Resource person and the Principal congratulated the organizing committee and the participants for making the workshop a grand success one.



ONE DAY SEMINAR ON “WE IGNITE YOU THROUGH MOTIVATIONAL TALK

Department of Mechanical Engineering organized a program on Counseling and Motivation for the freshers on August 21, 2017 with the initiation of the management. The program started at 10am with the Tamil thai Vazhthu. The light and brightness are always equated with positivity and motivation. Therefore, in the outset of the program the traditional lamp was lit by the Chief Guest, Principal, HODs and students. The Chief Guest certainly needed introduction so Dr. S Indran, HOD, Mechanical Engineering introduced the guest speaker Prof. J.JENIX RINO, Prof – AU - Chennai .

Our Vice Principal delivered the presidential address. He inspired the students with his golden words. Then the program was taken over by the guest speaker Prof. J.JENIX RINO. He motivated the students by introducing innovative methods to inculcate the students. His session was both interactive and inspiring. He insisted the students to set goals in everyday life. He motivated them to have leadership qualities and to have a strong foundation in what they choose to do in life also shared the 4

pillars of a successful, happy and healthy life. “True success comes when you achieve success in health, wealth, relation and spirituality” said Prof. J.JENIX RINO.

Interactive session was carried out after the formal meet for the students on “Fight with fear”. He made the students to understand the barrier that cause them from achieving success through ice breaker and team building activities. During the session he stated that fear is a phenomenon which coils inside your mind. Fear of failure doesn't make you proceed towards your goal. It makes you feel depressed like ‘If I fail what will happen?’. If you want to turn your dream into reality then you have to learn the art of fighting fear. Fear can frustrate you before moving a step forward. It has the capacity to shatter you. Ward off the fear and rekindle the courage inside you. If you develop the hidden power of courage then you can demolish a mountain also. You can make impossible to possible.

At the end of the session, “He instructed them to look for only positive things in and around themselves. He advised them to love themselves and the subjects they have chosen to study”. After listening the success story of the chief guest the students felt ecstatic. At the end of the program, the students promised to follow his valuable instructions and guidance. The program was wrapped up with the National Anthem.

ONE DAY NATIONAL LEVEL SYMPOSIUM [MACH'18]

The Department of Mechanical Engineering organizes intra and inter department technical symposium every year. This year it conducted a National Level Technical Symposium MACH 2018 on March 1st, 2018 which was presided over by Honorable Chairman, Vice Chairman, Managing Director, Chief Financial Officer, Principal, Heads of the Department, Event Coordinators. Dr.J.SELWIN RAJADURAI, Professor, Faculty of Mechanical Engineering Government College of Engineering, Tirunelveli kindly consented to host the MACH 2018.

Chief Guest address was given by Er.Seshagopalan, Deputy General Manager (HR & Admin) and Dr.P.Arul Franco, Faculty of Mechanical Engineering, University College of Engineering, Nagercoil about recent trends in Automobile field and motivated the audience to gain more knowledge. Through their way of presentation, they made an impact in engineering education among students. Also, Er.

Seshagopalan, Deputy General Manger (HR & Admin), TVS -Madurai encouraged students to elicit innovative ideas and develop their skills by participating in various events to emerge successfully in their focused areas.



In most of the events, students participated in large number with enthusiasm. Different committees comprising of students, supporting faculty members formed to conduct the symposium. Prizes and Certificates were issued for winners and runners of each event. More than 200 students participated in this technical festival. The certificates for winners were given in the end of the day by the Principal and Head of the Department.



TWO-DAYS NATIONAL LEVEL TECHNICAL WORKSHOP ON KTM ENGINE EXPLORE

“Mr. ENGINE” in association with KTM

The Department of Mechanical engineering organizes workshops every year to spread the knowledge to the local community by the guest lectures and hands-on experience. A workshop can introduce a new concept, spurring participants to investigate it further on their own, or can demonstrate and encourage the practice of actual methods. Especially for people who work together, a workshop can help to create a sense of community or common purpose among its participants.

In the row, a two-day workshop was organized by the Department of Mechanical engineering on 5 th and 6 th January 2018 in the presence of our eminent chief guest Dr. Bruce Ralphine Rose, Prof – AU - Tirunelveli. The gathering was welcomed by Student Visalakshi, third year Mech. Two sessions were planned to be conducted on the same day to facilitate the students to gain knowledge in their specific areas of interest. KTM Engine Tuning Workshop is a motorsports focused training, to understand the engine performance maps, behaviour, performance technicalities, tuning on PE standalone systems, manifold design, common errors and how to walk around them. KTM is a leader in the motorcycle

industry, with riders on KTM motorcycles winning numerous championships around the world. Aim of the workshop is to provide state-of-the-industry motorcycles, training aids, tools and more to prepare students for successful careers in the motorcycle industry.

During the training session, Day 1 training covered the Engine selection - Duke 390 vs CBR600 (Power and torque curves, Track layout and requirements), Understanding Duke 390 stock performance curves (Duke on the dyno) Intake manifold design (Restrictor design, Intake manifold runner length and volumes). Day 2 session concentrated on Stand-alone ECU options (Power Electronics).



Mechanical Engineers who are looking to develop engineering projects on drones can take up this course to understand the innovative technology from basics. By doing this mechanical workshop you will practically learn the concepts behind the engine control unit, sensors, and actuators and you will also learn to assemble & dismantle IC engines so as to know the internal working mechanisms. Thus, the workshop concluded with the Vote of Thanks by Student Ms.Sinuja, III Year Mechanical Engineering.

SEMINAR ON ADVANCED RESEARCH IN MATERIALS SCIENCE ARMS'18

On 5 th February 2018, Department of Mechanical Engineering organised a seminar on “Advanced research in Materials Science”. Mechanical engineering is a very broad field of engineering that involves the application of physical principles for analysis, design, manufacturing, and maintenance of mechanical systems. The Board of Directors, Resource Person Dr. V.Sambath, Department of Materials and Metallurgy, IIT – Madras were present on the dais. The gathering was welcomed by Student Bala Murugan of III Mechanical, Presidential address was given by respected Principal Dr.R.Rajesh, and chief guest was introduced by Dr.Indran, Head of Mechanical Engineering. The door of knowledge was opened by the Dr. V.Sambath. The interdisciplinary field of materials science, also commonly known as materials science and engineering, involves the discovery and design of new materials, with an emphasis on solids. The intellectual origins of materials science stem from the Enlightenment, when researchers began to use analytical thinking from chemistry, physics, and engineering to understand ancient, phenomenological observations in metallurgy and mineralogy.

To discuss the advancements in the field of Materials Science, these seminars has taken the initiation to gather information through experts both from academic and industry. The Materials Science seminar serves as good platforms for the student’s community to meet experts with each other and to exchange thoughts. The Workshops and Symposiums started as an investigative meeting with an underlying mission to prepare students to differ controls with the aptitudes and capabilities required to diverse disciplines with the skills and competencies needed to face the challenges of a quick evolving world. Keeping pace with quickly developing thoughts and advances through quality session has been the fountainhead of the

development of this seminar. The seminar focused on ability to apply knowledge of mathematics, science, and engineering, an ability to identify, formulate, and solve engineering problems, an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice. Mechanical Engineering seminar series provides an unparalleled opportunity to an individual to increase the depth of his scientific knowledge. The seminars are held every week, and also offer an ideal platform to initiate inter-disciplinary work cutting across boundaries. The department maintains a very vibrant academic atmosphere through various academic initiatives. There is a regular stream of visitors to the department, both for long term and short term, resulting in collaborative research, interactions and seminars.

