

ASSOCIATION EVENTS 2018- 2019

ECONOMICAL GO KART ENGINEERING PROJECT

Rohini College of Engineering and Technology offers more than just the typical classroom experience. Students can participate in unique learning opportunities, enhancing their education and providing them with skills to succeed in their future careers. Final year UG students of Mechanical Engineering Department developed an Innovative Product Go-kart. Go-Kart is a type of open-wheeled, small engine, single seated racing car. Go-kart comes in all forms from motor fewer models to high powered racing machines. The go-kart prepares the driver for high speed wheel to wheel racing by helping and develops guide reflex, precision car control and decision making skills. In a go-kart there are mainly six parts were used, they are Chassis, Engine, Steering system, Transmission systems, Tiers accompanied with Brake and Electric Starter.

Our present work is to design and analyse the rear wheel of the scorpion cart. A seat belt is provided for the protection of the driver. The rear-wheel is suspended to a mono-suspension shock-absorber. The front wheels are normally used wheel for light vehicles and the rear wheel is used for balancing the kart. Here an air cooled motor cycle engine is used and it is placed at the back side of the seat. The design of the vehicle is based on various engineering aspects depending upon Safety and Ergonomics, Market Availability, Cost of the Components, Safe Engineering Practices. The role of suspension in our vehicle is to make the ride less bumpy during long travels. The go-kart of simple three-wheel, among these two wheels on the front of the kart and one as a rear wheel, small engine, single seated car using Creo - 2. This designed scorpion cart has to be analysed using the ANSYS software to find the various stresses acting in different directions.

The entire project was coordinated by Amal James and Abish team of Final Year Mechanical. So, RCET takes pride to encourage a mindset of continuous learning,

creative thinking and increased innovation and that will in turn increase the chances of retaining quality, commitment and gives an opportunity to try out new ideas, and new ways of thinking and problem-solving.



WORKSHOP ON MR.ENGINE

Department of Mechanical Engineering (the oldest and broadest engineering discipline), Rohini College of Engineering and Technology in association with Honda (South Region) Inaugurated a two-day workshop on “Mr.Engine” which is co-sponsored by ISME(Indian Society of Mechanical Engineers)

The session started with the august presence of Honourable Chairman Shri K.NeelaMarthandan, Respected Vice Chairman Dr.Mohan Neela Judith, Venrable Maanging Director Dr.Neela Vishnu N,Chief Financial Officer Dr.Blessy Geo, Respected Principal Dr.R.Rajesh, Heads of the Department ,The chief guest Er.D.VelMurugan, Sr.Service Manager, Southern Honda.

The gathering was whole heartedly welcomed by the Student Representative of III MechAshwin. Respected Principal gave an inspirational talk to the students stating that” it is very important to get hands-on experience and training to get a good job in a reputed firm. This provides the insights and tips and tricks of using these new emerging technologies”. Dr.Indran, Head of the Department, Mechanical Engineering, introduced the Chief Guest and welcomed the gathering. The session was handed over to the resource person. Engine components were explored and both Theory and Practical Session was conducted.

Er.D.VelMurugan talked about the chassis design, working of Suspension unit, Steering system, Braking unit, Transmission, Fuel Supply System, IC Engine “Engineering students should develop a multi-disciplinary approach to achieve proficiency”, said Er.D.VelMurugan, Sr.ServiceManager,Southern Honda.

A total of 200 students attended the workshop. This workshop has been designed to be practical with lectures, examples and exercises to provide skills, encourage participation and exchange information. Finally certificates were distributed and Head of Department shared his heartfelt thanks to the Students and Management for experiencing a sense of achievement and satisfaction. Therefore, workshop will

provide not only essential knowledge but also a great opportunity to share experiences both technical and regulatory issues.



NATIONAL LEVEL TECHNICAL SYMPOSIUM

The Department of Mechanical Engineering organizes intra and inter department technical symposium every year. This year it conducted a National Level Technical Symposium MACH 2019 on March 1st, 2019 which was presided over by Honorable Chairman, Vice Chairman, Managing Director, Chief Financial Officer, Principal, Heads of the Department, Event Coordinators. **Er.Seshagopalan, Deputy General Manager (HR & Admin), Er. S.Tharun Kumar, R&D Department, TVS Sri Chakra Ltd, Madurai and Dr.P.Arul Franco, Faculty of Mechanical**

Engineering, University College of Engineering, Nagercoil kindly consented to host the MACH 2019.

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.



INTERNATIONAL CONFERENCE ON ARMS 19

International Conference on Advances in Mechanical Engineering and Research organised by Dept. of Mechanical Engineering and University of Bayreuth, Germany. As a sign of positivity, The International Conference started with the auspicious Lamp lighting ceremony and the gathering was welcomed by Prof.RethnaSiga.The luminaries on and off the dais was given a warm traditional welcome. The guest of this event was Dr.ANDRII KHOKHLENKO, PROFESSOR, DEPT. OF AUTOMOTIVE AND MECHATRONICS, and UNIVERSITY OF BAYREUTH, GERMANY who was introduced by Head of the department. The guest of the day gave an excellent presentation about the Advances in Mechanical Engineering and Research. This is an eye-opening for our students which made them explore into the field of Automotive. The entire gathering was lead to action from learning by the distinguished chief guest. Distinguished Chief Guest of the day was honoured for his valuable presence and thought provoking intellectual presentation.



A boatload of technical experts on the dais who empowered the student community was appreciated. The chief guest released a book of abstract, comprising of the papers presented during the International Conference. CD on the proceedings of the ICAMER 2K19 was released in the presence of the dignitaries Dr.AndriiKhokhlenko, Dr.J.S.Binoj, Associate Professor, SreeVidhyanbikethan College of Engineering,Tirupati ,Dr.F.Micheal Raj, Associate Professor ,Stella Marys College of Engineering ,Nagercoil, the respected Principal, the Heads of

various department. The technical session happened smoothly with good number of participation from neighbouring colleges. At the end of the session as per Dr.A.P.J. Kalam words, Students has been rewarded for their hard work and perseverance. Students and faculties got aware of environmental pollution by technology improvements around the globe and the preventive measures taken in various countries to control the pollution.



Two days FDP on Steps to do research with Origin Software

Two days FDP on Steps to do research with Origin Software - Hands On Training was conducted by Dept. of Mechanical Engineering under the guidance of Dr.S.Indran,Head- Dept of Mechanical Engineering,RCET.

Followed by the traditional welcome, the guest was introduced by head of the department. Dr.J.S.BINOJ, Associate Professor, Department of Mechanical Engineering, SreeVidyanikethan Engineering College (Autonomous), Tirupati, Andhra Pradesh accepting the invitation guided the faculty team to do research with Origin software. Investing in research creates and disseminates knowledge that benefits industry, government and society. Such kind of development programme improves the existing education system, enhance teaching and learning relationship at multiple levels.

Dr.J.S.Binoj concentrated on writing quality research paper.Live examples were shared by the guest. The outcome of the programme was faculties were able to understand how to write a quality research articles using origin software.The session got concluded by question and answer session followed by that, Dr.J.S.Binoj has been honoured for conducting an FDP on Research Development .Dr.F.Micheal Raj has been honoured for the heritage he left behind.



