

## **A Two Day National Workshop on “ADVANCED MANUFACTURING SYSTEMS SIMULATION: HANDS-ON-TRAINING”**

**08<sup>th</sup> – 09<sup>th</sup> September, 2014**

**(Under TEQIP-II)**

Department of Mechanical Engineering organised a Two Day National Level Workshop on “**ADVANCE MANUFACTURING SYSTEMS SIMULATION: HANDS-ON-TRAINING**” and was inaugurated by the Chief Guest Sri. Mano Kanthanathan, Managing Director, Commercial Consultancy Services, Bangalore on 08.09.2014 at 9.20 AM. A total of 28 external participants and 38 internal participants registered for the program.



**Dignitaries on the dais during Inaugural Session**

In the morning session on 08.09.2014, Sri. Mano Kanthanathan, Managing Director, Commercial Consultancy Services, Bangalore delivered a keynote address on “introduction to advanced manufacturing systems”. He emphasized on the basics of manufacturing systems and also the importance of simulation in Indian industries.

After the first session in the forenoon, Sri. G.N.V.Maruthi Kasyap, Director, Sun Vision Technologies, Hyderabad delivered a lecture on “Introduction to Discrete event simulation and building a simple simulation model”. Many case studies have been

presented during his lecture. He also discussed on the use of Discrete Event Simulation in manufacturing systems. Considering several functions applicable to a manufacturing system, Discrete Event Simulation roles were presented.

In the afternoon session on 08.09.2014, Sri. Ch.Phani Kumar, Senior Application Engineer, Sun Vision Technologies, Hyderabad delivered a lecture on "A review of some applications in simulation and analysis of simulation model results". Many case studies were illustrated to highlight the practical aspects. Real time applications were also discussed emphasizing on the real time issues encountered in a manufacturing system.

After the first session in the afternoon, Sri. D. Sai Niranjan, Product Specialist, Sun Vision Technologies, Hyderabad delivered a lecture on "Simulation applications in the Indian industry in manufacturing". Several interesting industrial applications and their analyses were presented to emphasize the use of simulation of manufacturing systems.

The second day of the Workshop provided rigorous and comprehensive hands-on practice on simulation of manufacturing systems using FlexSim software. The case studies considered during the lecture sessions were revisited during the hands-on simulation practice sessions. Sri.Mano Kanthanathan, Sri. G.N.V.Maruthi Kasyap, Sri. Ch.Phani Kumar, and Sri. D.Sai Niranjan interacted with the participants and provided insightful help in building accurate simulation models of the case studies considered.



**Sri.Mano Kanthanathan, Managing Director, Commercial Consultancy Services, Bangalore delivering keynote address**



**Sri. G.N.V. Maruthi Kasyap, Director, Sun Vision Technologies, Hyderabad delivering lecture on "Introduction to Discrete event simulation and building a simple simulation model"**



**Sri. Ch. Phani Kumar, Senior Application Engineer, Sun Vision Technologies, Hyderabad delivering lecture on "A review of some applications in simulation and analysis of simulation model results"**



**Sri. D.Sai Niranjan, Product Specialist, Sun Vision Technologies, Hyderabad delivering lecture on "Simulation applications in the Indian industry in manufacturing"**



**Sri.Mano Kanthanathan, Managing Director, Commercial Consultancy Services, Bangalore illustrating case studies**



**Participants were given hands-on-training on various case studies**



**Valedictory Session**



**Participants were presented certificates by the Chief Guest**



**Group photo with participants**

**A report on**  
**“PROFESSIONAL ETHICS AND HUMAN VALUES”**  
*(Skill Development Programme)*  
**9th April, 2015**

The skill development programme on “Professional Ethics and Human Values” helped the students to understand and appreciate both soft and hard skills. Dr. Brijesh Nair, Professor & Director (International Relations) VIT University, Vellore enlightened the students of Mechanical Engineering about the expectations of employers and tools and techniques to enhance employability by throwing light on the Code of ethics to be followed at the workplace.

The programme, conducted on 9th April, 2015, was attended by faculty and students of Mechanical Engineering. This programme is mainly about issues related to our happiness, our welfare, our aspirations, our goals and success in life.

The objective of the programme was to draw attention towards the problems and challenges being faced by the people at individual, family, society and environmental levels and how to handle these. Issues related to the happiness, welfare, aspirations, goals and success in life were explored and dealt with. The need of self exploration and self investigation within oneself was considered and the participants were smoothly guided through the processes for these and how to practice them in daily life.

Human values are a set of consistent behaviors and measures that guide human beings in doing what is right and acceptable by the society. They attract dignity, respect and appropriateness among people. It helps in achieving the Self-Direction, stimulation, hedonism, security, conformity, benevolence and other skills.

The resource person Dr. Brijesh Nair emphasized that

- Engineering ethics concerns one’s conduct of behaviour and practice when carrying out engineering work.

- Such work may include consulting, researching, teaching, manufacturing, servicing and writing.
- The institutionalization of codes of conduct and codes of practice is common with many professional bodies for their members to observe.
- Bodies like Indian Medical Council, Bar Council have brought code of ethics to their respective professional people.

Codes of Ethics are concerned with a range of issues, including:

- Academic honesty
- Adherence to confidentiality agreements
- Data privacy
- Handling of human subjects
- Impartiality in data analysis and professional consulting
- Professional accountability
- Resolution of conflicts of interest
- Software piracy, etc.

Code of ethics enables to:

- Set out the ideals and responsibilities of the profession
- Exert a de facto regulatory effect, protecting both clients and professionals
- Improve the profile of the profession
- Motivate and inspire practitioners, by attempting to define their raison d'être (reason that accounts for)
- Provide guidance on acceptable conduct
- Raise awareness and consciousness of issues
- Improve quality and consistency

He also acquainted the learners with the basic concepts of Intellectual Property Rights to develop expertise in the learners in IPR related issues and sensitize the learners with the emerging issues in IPR and the rationale for the protection of IPR and also highlighted the need for capacity building and necessity to work as a platform for development, promotion, protection, compliance, and enforcement of Intellectual Property and knowledge.

Dr. Brijesh Nair at the end delivered a talk on Job opportunities for graduates and he addressed about industry expectation from a graduate, and the necessary skills required to students for getting in to job.

Students enthusiastically interacted with the resource person and clarified their doubts.



**Dr. Brijesh Nair Addressing Students of Mechanical Engineering**



**Students of Mechanical Engineering taking Participation in the Program.**