

**A Two Day National Workshop on**  
**“COMPUTATIONAL FLUID DYNAMICS (CFD)”**  
(Under TEQIP-II)  
**11<sup>th</sup> - 12<sup>th</sup> April 2014**

Department of Mechanical Engineering organised a Two Day National Level Workshop on “**COMPUTATIONAL FLUID DYNAMICS**” and was inaugurated by the Chief Guest **Dr. R THUNDIL KARUPPA RAJ**, Professor & Division Chair of Energy Division in the School of Mechanical and Building Sciences, VIT University, Vellore on 11-04-2014 at 10.00 AM. A total of 21 external participants and 37 internal participants registered for the program.

In the Morning session on 11-04-2014, **Dr. R THUNDIL KARUPPA RAJ**, Professor & Division Chair of Energy Division in the School of Mechanical and Building Sciences, VIT University, Vellore delivered lecturer on various issues related CFD and further conveyed the significance of CFD tools to the participants through illustrative examples. He Discussed CFD TOOLS and their importance. He also emphasized on the method of utilizing the CFD tools, Fundamentals of CFD, Governing equations, Discretization Schemes, Finite Difference Method.

In the afternoon session on 11-04-2014, **Dr. R THUNDIL KARUPPA RAJ** delivered the significance of finite volume method to the participants through ICEMCFD. During the session, the participants were given Hands-on-Training on various operations on ICEMCFD. After the demonstration, participants performed the job on their own. He shared few very significant aspects to be considered while meshing the jobs on different Meshing tools

In the morning, first session on 12-04-2014, **Dr. Kulasekharan Narasingamurthi**, Professor & Head, Mechanical Engineering Department, Saveetha Engineering College, Chennai, delivered lecturer on various issues related to Numerical Simulation of conjugate heat transfer in a shell and tube heat exchanger, turbine blade cooling using FLUENT and the next sessions was given hands on experience on Numerical Simulation of multiphase flows –

different case studies like cyclone separator, Diesel Fuel Injectors using FLUENT code by **Dr. Kulasekharan Narasingamurthi**.

In the Afternoon, First session on 12-04-2014, **Balaji R**, CFD specialist, FLSmidth Private Limited, Chennai, delivered lecturer on various issues related to Numerical Simulation of heat and fluid flow in turbo-machinery components using ANSYS CFX and the next sessions was given hands on experience on Numerical Simulation of Compressible flows in a supersonic convergent divergent nozzle by ANSYS CFX.



**Dignitaries on the Dais during Inaugural Session**



**Dr. R THUNDIL KARUPPA RAJ, Professor & Division Chair of Energy Division in the School of Mechanical and Building Sciences, VIT University, Vellore delivering the Lecture.**



**Dr. R THUNDIL KARUPPA RAJ, Professor & Division Chair of Energy Division in the School of Mechanical and Building Sciences, VIT University, Vellore in his session in the Lab.**



**Dr. Kulasekharan Narasingamurthi, Professor & Head, Mechanical Engineering Department, Saveetha Engineering College, Chennai delivering the Lecture.**





**Dr. Kulasekharan Narasingamurthi, Professor & Head, Mechanical Engineering Department, Saveetha Engineering College, Chennai in his session in the Lab.**



**Balaji R, CFD Specialist, FLSmith Private Limited, Chennai delivering the Lecture.**



**Balaji R, CFD Specialist, FLSmidth Private Limited, Chennai in his session in the Lab.**



**Valedictory Session**