A report on two-day national workshop on
"ADVANCED FINITE ELEMENT APPLICATIONS IN DESIGN"

1st - 2nd September, 2016

(Under TEQIP-II)

Two Day National Workshop on **"Advanced Finite Element Applications in Design"** was conducted during 1st – 2nd September, 2016 in Mechanical Engineering Department. The workshop was inaugurated by lightening lamps by the Chief Guest **Dr.P.Ravinder Reddy,** Professor, CBIT**,** on 1st Sept 2016 at 9.00 AM. The convener of the program Mr. M Gangaraju had given the brief introduction of the workshop. A keynote speech was delivered by the Chief Guest on FEM applications and its importance. The course work started at 9:30 am after the completion of inauguration.

The Chief Guest Dr.P.Ravinder Reddy started his valuable lecture with entitle of "Dynamic analysis of structural problems" and some important concepts which mainly focused on stress strain diagrams, theory of failures, mechanical behavior of materials, structural and dynamics of analysis, continuum mechanics and plane stress and plane strain. He also explained the concepts related to industrial and research oriented problems.

Continuity of the morning session, Mr. M.Vijay Sekhar Babu, Associate Professor, Department of Mechanical Engineering, GMRIT, given his valuable lecture on classifications of methods available for field FEA problems, major steps for using FEA analysis. He also covered the concepts on 2D- Idealizations, solids of revolutions and plane stress problems in ANSYS with procedure of solving simple problems.

The second day of the course started by Dr.V.V. Subba Rao, Professor Mechanical Engineering, JNTUK, Kakinada. Dr.V.V. Subba Rao started his valuable lecture with basic steps of FEM which includes Material Modelling of laminated composite plates having different layups in ANSYS and validation of results in static case. He also delivered the concepts related to research oriented in composites and related softwares available for analysis.

Continuity of the morning session Dr. K.C.Varaprasad, Professor & Head, Dept. of Mechanical Engineering, SVEC, delivered his lecture on modeling of

structural problems using Hypermesh, import and export of models in to Hypermesh. Certificates are distributed in the valedictory function

Dr. P.Ravinder Reddy, Professor, CBIT Hyderabad, inaugurating the programme

Dr. P.Ravinder Reddy, Professor, Department of Mechanical Engineering, CBIT Hyderabad delivering a Lecture on dynamic analysis of structural problems.

**Mr. M. Vijay Sekhar Babu, Associate Professor, GMRIT
Delivering lecture on Plane stress problems.**

**Dr. V V Subba Rao, Professor, Department of Mechanical Engineering,
JNTUK, Kakinada, delivering a lecture on composite modeling**

Dr.K.C.Varaprasad, Professor & Head, Dept. of Mechanical Engineering, clarifying the doubt expressed by the participants

Valedictory Session

Certificates Distribution to the participants

Group Photo with participants of the Program