

## SREE VIDYANIKETHAN ENGINEERING COLLEGE (AUTONOMOUS)

Sree Sainath Nagar, Tirupati - 517 102, A.P.

## DEPARTMENT OF MECHANICAL ENGINEERING

## A report on three day Faculty Development Program on "DIGITAL MANUFACTURING IN THE GLOBAL ERA"

7<sup>th</sup> - 9<sup>th</sup> March 2013

A three day Faculty Development Programme (FDP) on "DIGITAL MANUFACTURING IN THE GLOBAL ERA" was organized under TEQIP-II for the Faculty of Mechanical Engineering in Seminar hall of Mechanical Engineering building from 7<sup>th</sup> to 9<sup>th</sup> March 2013.





Dr. C.S.P.Rao with his keynote address

Dr. C.S.P. Rao delivered keynote address on the topic "Digital factories and digital manufacturing – An overview". He highlighted history and developments in manufacturing, product life cycle management, simulation and virtual manufacturing. Through a case study, he illustrated the application of digital manufacturing.



Dr. V. Venugopal Reddy addressing the participants

Dr. V. Venugopal Reddy gave a lecture on "Design automation of robotic structure". He explained the design of known robot manipulator for its five axis movement and checking its compatibility for any other unknown kind of robot.



Dr. L. Sivaramakrishna addressing the participants

Dr. L. Sivaramakrishna talked about "Web based rapid prototyping". His talk included web based manufacturing system fundamentals, rapid prototyping fundamentals and several live case studies.



Dr. O.V.K.Chetty addressing the participants

Dr. O.V.K. Chetty lectured on "Petrinets modeling and simulation". He elucidated how petrinets can be applied to manufacturing systems.



Dr.K.Prahlada Rao addressing the participants

While delivering lecture on "Knowledge based manufacturing", Dr. K. Prahlada Rao emphasized the use of expert systems in manufacturing.



Dr. K.Janardhan Reddy addressing the participants

Dr. K. Janardhan Reddy, while delivering a lecture on "Product design and life cycle management" highlighted the importance of product life cycle management and elaborated on new product development and product development process.



Sri. G.V. Dasarathi addressing the participants

Sri G.V. Dasarathi, while talking about "5 Ms of Digital Manufacturing- the CNC Angle" explained the 5Ms of manufacturing, cleared some misconceptions of CNC machining and highlighted the skills required by the industry and how to get students industry ready.



Dr. C.S.Chetan Kumar addressing the participants

Dr. C.S. Chetan Kumar delivered a lecture on "Lean manufacturing". He explained basic elements of lean and elaborated principles of lean and Toyota way.



Dr.C.N.V.Sridhar addressing the participants

Dr. C.N.V. Sridhar talked on "e-manufacturing d-manufacturing: Research potential". He illustrated e-manufacturing case studies, explained web based rapid prototyping system and highlighted scope of digital manufacturing besides giving a good number of research topics in digital manufacturing.



Dr. K.C. Varaprasad addressing the participants

Dr. K.C. Varaprasad delivered a lecture on "Reconfigurable manufacturing systems". He highlighted manufacturing paradigms, flexible manufacturing systems, computer integrated manufacturing besides explaining components, principles and characteristics of reconfigurable manufacturing systems. He also highlighted design issues in reconfigurable manufacturing systems.



**Guests on the dais during Valedictory function** 

Certificates were distributed to the participants.