Report on
3rd National Conference on Innovations in Mechanical Engineering
NCIME’ 15
Organized by Dept. of Mechanical Engg. - MITS
23 - 24 December 2015

Submitted by: Dr. T. Vishnu Vardhan, Associate Professor, Dept. of Mechanical Engineering

Introduction
The Third National Conference on Innovations in Mechanical Engineering (NCIME’ 15) is a Two Day National Conference conducted by the Department of Mechanical Engineering at Madanapalle Institute of Technology and Science during 23rd and 24th of December 2015. The Department has successfully conducted the NCIME for two times in 2013 and 2014. In the continuation of NCIME series and as a recurrent event the department has conducted NCIME for the third time and has attracted participants from various parts of the country.

The objective of NCIME is to provide a common platform for academicians, industrialists, research scholars and students of the country to share and exchange their knowledge, expertise and experience of recent trends and innovations in the broad area of Mechanical engineering. The conference is meant to be an occasion for the participants to disseminate the findings of their scientific investigations among the mechanical engineering fraternity and to expand their awareness of contemporary research thrust areas and methodologies in various aspects of mechanical engineering. Following its formal announcement and subsequent advertising through mailing of brochures, email communications and the conference website, the NCIME’15 was able to attract more than 95 research paper submissions in different areas of mechanical engineering.

In addition to the technical sessions, two keynote lectures were planned as a part of the conference. Renowned academician, Prof. Mohan Jagadeesh Kumar M, Thermal & Automotive Division, School of Mechanical and Building Sciences (SMBS), VIT Vellore, was invited to deliver the keynote lecture. Additionally a trip to Horsley Hills, a local tourist destination, was arranged for all the participants of the conference.

Registration
Registration forms were mailed to prospective participants along with the conference brochures. About 10 participants registered for the conference by mailing the registration forms. A registration booth was arranged during the entire duration of the conference to check in the registered participants and hand them the conference kit includes a souvenir bag with the proceedings book, conference schedule, a note pad and a pen in it. Other participants who did not pre-register could also spot register at the booth upon arrival. Mr. Manu Ravuri and Mr. M. Subbarao, faculty members of the Department coordinated the registration affairs and they were helped by M.Tech students in the department. Over 60 participants registered for the conference out of which 40 were from external organizations. More than 20 different organizations were represented at the conference.

Inaugural Ceremony
The conference started with an inaugural ceremony which was conducted in the main seminar hall. The Principal, Vice Principal, Deans of various disciplines, HoDs of various departments and other officials of the institute were in attendance at the inaugural ceremony along with the graduate and undergraduate students and faculty of the Department of Mechanical Engineering. Dr. M. M. M. Sarcar, Vice-Chancellor, JNT University Anantapur, was the chief guest of the program for the Inaugural ceremony. The Secretary & Correspondent Sri. N.Vijaya Bhaskar Choudary and The Chairman Sri N. Krishna Kumar have graced the occasion.

Ms. Hashitha, a final year student, acted as the presenter of the ceremony. The Programme Coordinator, HoD of Department of Mechanical Engineering, Principal, the Secretary & Correspondent, the Chairman and the chief guest were invited on to the dais and presented with flower bouquets. This was followed by lighting of lamps by the dignitaries on the dais and then invocation by students of 4th year B.Tech in the department. In his opening remarks, the Program Coordinator presented a brief background about the conference. The HoD Dr. G. Harinath Gowd and Principal Dr. C. Yuvaraj gave an overview of the department of mechanical engineering and MITS respectively in their addresses. Dr. Surya Narayana Raju. P, professor in the department, presented a brief bio of the chief guest to the audience. In his address, chief guest Dr. M. M. M. Sarcar noted that the NCIME’15 conference is being conducted very methodically and conveyed his best wishes to all the participants. He congratulated the department for conducting a conference like this and wished that in future this would become an international conference. Sri. N. Vijaya Bhaskar Choudary, the Correspondent and Secretary have conveyed his best wishes to participants and insisted the members to strengthen the research activities through collaborative research. The Chairman Sri. N. Krishna Kumar appreciated the department for conducting such a nice conference and conveyed his best wishes to the participants. The conference proceedings book and the CD were then officially released by the Dignitaries on the dais. The chief guest was felicitated by the other dignitaries on the dais by presenting him with a shawl and a memento. Dr. KVP Chakradhar, faculty member of the department presented the vote of thanks. High tea was arranged for all the attendees at the end of the ceremony.

Keynote Lecture
The keynote lecture titled “Energy and Its Sustainability” was delivered by Dr. Mohan Jagadeesh Kumar M on the first day of the conference. The talk started with an introductory talk on Different Sources of Energy Production, Conventional Sources of Energy, Fossil Fuels, Non-Fossil Fuels and Non-Conventional Sources of Energy. He explored on various areas of interest for research projects like, Design, Fabrication and Testing of Heat Exchangers,

- Design of Turbo Machinery: Turbines, Compressors and Pumps.
- Design, Fabrication and Testing of Solar Collectors,
- Thermal Analysis and Design by CFD simulations.

On the second day one more keynote lecture titled “Effect of Entry Temperature on Forced Convection Heat Transfer with Viscous Dissipation in Thermally Developing Region of Concentric Annuli” was presented by M. M. J. Kumar which was authored by V.V. Satyamurty, Professor, Department of Mechanical Engineering, I. I. T. Kharagpur.

Technical Sessions
Technical sessions were conducted in the mini seminar hall and the board room. Each session had one external session chair and one internal session chair. Each participant is given 12 min for presentation and 3 min were allotted for question and answers after each talk. A total of 44 presentations were made in Design, Thermal and Production Engineering streams. Prof. V. Venkata Ramana, Professor from Ballari Institute of Technology & Management and Dr. Mohan Jagadeesh Kumar M from VIT, Vellore were the adjudicators for the Production & Design and Thermal divisions respectively.

Valedictory
The valedictory function was conducted on the final day of the conference in the mini seminar hall. The Principal, HoD Of Mechanical Department, Dr. T. Vishnu Vardhan (Program coordinator), Dr. Mohan Jagadeesh Kumar M, Key note speaker on the dais for the valedictory function. Along with dignitaries, all the faculty members of the Department of Mechanical Engineering, participants of the conference and the graduate and undergraduate students attended for the valedictory function.

Dr. T. Vishnu Vardhan, the Program Coordinator gave concluding remarks about the conference. This was followed by the feedback from the participants. There were three participants who gave their feedback about the way the conference is being conducted and the hospitality at MITS. The feedback was in highly positive outlook. The certificates were handed to all the participants by the Principal, Dr. Mohan Jagadeesh Kumar M, Session Chair, HoD of Mechanical Engineering Department, and Dr. T Vishnu Vardhan. The ceremony concluded with presenting the vote of thanks. High tea was arranged for all the attendees at the end of the valedictory function.