

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE

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Report on

2nd National Conference on Innovations in Mechanical Engineering NCIME' 14

Organized by Department of Mechanical Engineering

18-19 December 2014



Submitted by: **Dr. Suryanarayana Pakalapati, Professor, Dr. Eswara Kumar Bandi, Professor & Mr. A. Balaraju, Associate Professor - Department of Mechanical Engineering.**

Introduction

The Second National Conference on Innovations in Mechanical Engineering (NCIME' 14) is a two day national conference conducted by the Department of Mechanical Engineering at Madanapalle Institute of Technology and Science during 18th and 19th of December 2014. In July of 2013 the department conducted the National Conference on Innovations in Mechanical Engineering (NCIME' 13) which attracted a number of participants from across the state and from other states as well. In the wake of stupendous success of NCIME' 13, the Department of Mechanical Engineering at MITS, chose to make NCIME into a recurrent event.

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' 14 was able to attract more than 70 research paper submissions in different areas of mechanical engineering. The submitted manuscripts were put through a peer review process which included checking the originality of the papers using Turnitin software.

In addition to the technical sessions, a keynote lecture was planned as a part of the conference. Renowned technocrat, scientist, and academician, Dr. M. Nageswara Rao, who is currently Professor Emeritus at School of Mechanical and Building Sciences at the VIT University 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.

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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 materials which include 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 35 were from external organizations. More than 20 different organizations were represented at the conference.

Inaugural Ceremony

The conference kicked off 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. Nageswara Rao, Professor Emeritus, VIT, and Dr. Kiran Aithal, Professor, Nitte Meenakshi Institute of Technology, were the chief guest and guest of honor respectively for the Inaugural ceremony.

Ms. Sindhu, a PG scholar in the department, acted as the presenter of the ceremony. The Programme Coordinator, HoD of Department of Mechanical Engineering, Principal, the chief guest and the guest of honor 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 1st 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. Y. Amarnath, professor in the department, presented a brief bio of the guest of honor to the audience. In his address, guest of honor Dr. Kiran Aithal noted that the NCIME'14 conference is being conducted very methodically. He suggested that tying up with a renowned publisher like Elsevier could further improve the appeal of the conference and attract even more participants. He congratulated the department for conducting a conference like this and wished that in future this would become an international conference. Dr. B. Eswara Kumar, faculty member of the department, introduced the chief guest to the audience. In his brief address chief guest Dr. M. Nageswara Rao also expressed his happiness regarding the way the conference is being conducted and he reiterated the point made by Dr. Aithal about tying up with renowned publishers. The conference proceedings book and the CD were then officially released by the chief guest and guest of honor. The chief guest and the guest of honor were felicitated by the other dignitaries on the dais by presenting them with a TTD shawl and a memento. Dr. T. Vishnuvardhan, 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 "An Overview of Mechanical Engineering Scenario, with Emphasis on Manufacturing," was delivered by the Dr. M. Nageswara Rao. The talk started with a bird's eye view of some current hot areas in the field of mechanical engineering like nanotechnology, their potential applications, benefits, and future prospects. The rest of the lecture was about the role of manufacturing sciences in the development of the nation and the world at large. Manufacturing is especially critical for success of our nation's current initiative of 'Make in India'. While much of the resources like manpower and raw material are readily available in India much attention to research and development is needed in various aspects of manufacturing to make our nation's manufacturing sector competent in the global market.

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.

Valedictory

The valedictory function was conducted on the final day of the conference in the main seminar hall. The Principal, HoD of Mechanical Department, Dr. P. Suryanarayana Raju (Program coordinator), Dr. M. Raja Reddy (Dean Academics, MITS), Dr. Ch. Rama Prasada Rao (Dean IIIC, MITS) and Dr. K. G. Basava Kumar, Professor in Mechanical Engineering, Center for Emerging Technology, Jain University, Bangalore were on the dais for the valedictory function. Along with dignitaries, Deans of various disciplines, HoDs of various departments, 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. P. Suryanarayana Raju, 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 generally highly positive. The certificates were handed to all the participants by the Principal, Dr. Raja Reddy, Dr. K. G. Basava Kumar, the session chair, HoD of Mechanical Engineering Department, and Dr. P. Suryanarayana Raju. The ceremony concluded with Dr. Y. Amarnath, faculty member of the Civil Engineering Department presenting the vote of thanks. High tea was arranged for all the attendees at the end of the valedictory function.

