INDIAN INSTITUTE OF METALS KANPUR CHAPTER

Annual Report (2006-2007)

by

Dr. Bikramjit Basu Secretary, IIM Kanpur Chapter

Dear Members of the IIM-Kanpur chapter and Friends,

At the outset, I take this opportunity to welcome all members to this meeting. It also gives me immense pleasure to present before you the Annual Report of the Kanpur Chapter of The Indian Institute of Metals.

The current council took over in May 2006 and during the last one year, we have organized several activities including a series of technical talks and the 'Metals and Materials Quiz' for local schools. In addition to the above, we continued our efforts to further increase the membership of the local chapter. However, I must emphasize here that we have to increase the membership to a great extent in the days to come. On behalf of the local chapter, I will appreciate your efforts towards aiming this goal.

EXECUTIVE COMMITTEE

In the last Annual General Body meeting of IIM Kanpur Chapter (held on April 30, 2006), the following members were elected for the executive committee of the Kanpur Chapter of The Indian Institute of Metals for the year 2006-2007:

Prof. Rajiv Shekhar	Chairman (& Council Member)
Prof. A. Upadhyaya	Vice-Chairman
Dr. B. Basu	Secretary
Dr. Gouthama	Treasurer
Mr. TVVKK Bangara Raju	Member
&	
(HOD, MME)	Member (Ex-Officio)

TECHNICAL TALKS

During the last financial year, the following technical talks were delivered under the joint auspices of the Kanpur Chapter of the IIM and the Department of Materials & Metallurgical Engineering, IIT Kanpur.

Sl.No. Date	Speaker	Title of Talk
1)*. 27.8.2006	Prof. G. N. Mathur <i>IIT Kanpur</i>	Nanotechnology - A new Perspective
2). 02.02.2007	Prof. Srinivasa Ranganathan Emeritus Professor, IISc, Bangalore	Bulk Metallic Glasses: A New Class of Engineering Materials
3). 16.02.2007	Dr. Dileep Singh Argonne National Laboratory, USA	Microstructure and Properties of Ceramics and Composites Joined by Plastic Deformation

^{*} (All talks except #1 were held in the Pioneer Batch Conference Room, Visitor's Hostel at IIT Kanpur. Prof. Mathur's lecture was held in L-7, IIT Kanpur. Talk # 5 was held at FB-421).

METALS & MATERIALS QUIZ 2006

The Indian Institute of Metals, Kanpur Chapter and the Department of Materials & Metallurgical Engineering, IIT Kanpur jointly organized the <u>Metals & Materials Quiz 2006</u> on 27.08.2006. This is the seventh time in a row that the metals and materials quiz has been organized at IIT Kanpur. This year, altogether 12 teams from 10 different schools/inter colleges from in and around Kanpur participated in the competition. Following an initial elimination around, six teams were short-listed for the final rounds. In the final round, the team from Sir Padampat Singhania School represented by Kapil Yadav and Parnika Agarwal was declared winner. The winning team was awarded Prof. N.K. Batra Memorial Trophy by Prof. Rajiv Shekhar, Chairman IIM Kanpur local chapter. This is the third time that Sir Padampat Singhania School has been the winner of N. K. Batra Metals & Materials Quiz. The team from Kendriya Vidyalaya, IIT Kanpur comprising of Ankita Sarkar and Subham Awasthi was first runner up, while the team from Dr. Virendra Swarup Education Centre, Avadhpuri was the second runner up. The team from Sir Padampath Singhania School have participated in the National level Prof. Brahm Prakash Memorial Quiz competition, held at the Indira Gandhi Center for Atomic Research (IGCAR), Kalpakkam on September 30, 2006.

On the occasion, Professor G. N. Mathur, ex-director, DMSRDE, Kanpur and visiting professor, Dept. of Chemical Engineering, IIT Kanpur delivered an invited lecture on "Nanotechnology - A new Perspective". Besides explaining the concept of Nanotechnology, Dr. Mathur also explained the impact of Nanotechnology in various areas like defense, space, and biomedical as well as various other areas of engineering disciplines. Dr. Mathur also discussed the various issues of such an emerging area, that remain to be explored in the future. At the end of his talk, a large number of enthusiastic students have participated in the discussion session.

VSR MURTHY MEMORIAL SYMPOSIUM

VSR Murthy memorial symposium was organized on 8th December, 2006, jointly by Department of Materials and Metallurgical Engineering (MME), Advanced Center for Materials Science (ACMS), IIT-Kanpur and Indian Institute of Metals (IIM)-Kanpur Chapter at IIT-Kanpur. Dr. Bikramjit Basu was the convener of this symposium. It can be recalled here that Prof. Murthy, an active IIM member as well as an illustrious faculty member, passed away on July 10 2004. During the symposium, the extraordinary

contributions made by Prof. VSR Murthy in the field of Metallurgy and Materials Science, in particular, ceramics and composites, was remembered by a galaxy of experts of Metallurgy and Materials Science. Besides a group of very eminent speakers from abroad, one of the important aspects of this symposium was the talks by Late Prof. Murthy's research collaborators of IIT-Kanpur as well as his former students. During VSR Murthy symposium, six foreign invited speakers, three Indian collaborators and four of his former students delivered talks in three focussed sessions. In particular, the symposium focused on a wide spectrum of topics, including metal matrix composites, glass-ceramics, high temperature ceramic composites, functionally graded materials, metallic foams was discussed. More than 50 participants, including the family members of Late Prof. VSR Murthy, attended the symposium.

NEW COUNCIL OF THE IIM KANPUR CHAPTER

The IIM members of the Kanpur Chapter will be electing a new council of the executive for the year 2007-2008 during this general body meeting. It was decided in the previous executive committee meeting (held on 12th April, 2001) that for effective performance, the tenure of the council should be of two years instead of one. However, the head-office insisted that we have the election year, even if the same council has to continue.

I have been the Secretary of the chapter for the last one year. I am confident that under the leadership of the new council members, IIM Kanpur Chapter will attain new heights. To this end, I recommend that we should strongly involve the participation of both the undergraduate and postgraduate students of Department of Materials and Metallurgical Engineering, IIT-Kanpur as well as students of Materials Science Department, IET, Kanpur University. We also have to evolve some planning of how to increase interests towards chapter activity among scientists of DMSRDE as well as engineers/technical personnel from industries around Kanpur, Lucknow and neighboring areas. This may require us to hold small workshops, which may be highly relevant towards the industry. Also, we need to organize more programmes involving the participation of the student community. In the past, attempts were made to demonstrate the school students some interesting experiments, related to basic principles/applications of materials. I hope that such exercise will be performed more frequently in the coming year. At last, I must mention that I have been immensely helped by the executive committee members, departmental colleagues and students in organizing the various activities of the local chapter throughout the past year. I wish to take this opportunity to place on record my sincere thanks to all of them.

Thank you all for your participation in IIM activity and I do hope that our activities will grow in the days to come!

Bikramjit Basu Secretary, IIM Kanpur Chapter 08.05.2007