



**The Materials
Information Society**

ANNUAL REPORT OF THE CHAPTER 2010-2011

BY THE CHAIRMAN

ASM International Chennai Chapters Annual Report (2010-2011)

1. Preface

ASM International Chennai Chapter has performed very well during 2010-2011 with multifaceted activities. We are able to establish fruitful collaborations with the other professional societies in and around Chennai and organized several technical talks and workshop and seminars of significant interest. ASM Chennai Chapter, Madras Metallurgical Society, The Indian Institute of Metals, Chennai Chapter and Indian Welding Society, Chennai Chapter have jointly organized several technical talks during the year. The technical evenings enabled to develop a deeper understanding between these four professional societies and to foster friendship amongst the members. We have opened up a consultancy cell for providing solutions for industrial problems and the this year response was encouraging. *The expanded network with industries attracted more delegates for our workshops and as well as for the technical meetings.* The chapter organized several social and cultural events. The activities of the Chapter have led to its receiving the **Five Star Award for the Eight Consecutive Year**. The six Materials Advantage Student chapters at IIT Chennai, IIT Kharagpur, Mailam Engineering College, Manakula Vinayaka Engineering College, PSG College of Technology and National Engineering College, Kovilpatti have also performed well. **A new Materials Advantage Chapters from Vellore Institute of Technology and Rajalakshmi Engineering college are under formation.**

ASM International Chennai Chapter presented awards to young metallurgists, and to Medium and Small Scale Industries for their outstanding contributions in the fields of metallurgical education, research and industry. During 2010-2011, we have organized three focused workshops and one in-house workshop. A Two-day workshop on Metallurgy for non-metallurgist was organized on 17th & 18th December, 2010 at Hotel Comfort Inn Marina Chennai and 98 delegates have participated in the workshop. One more Two-day workshop on Materials Characterization and Failure analysis was conducted on 4th and 5th March, 2011 at Indian Institute of Technology, Chennai and another One-day workshop conducted on Welding on 4th June, 2011. All these activities were made possible because of the excellent teamwork of the executive committee and wholehearted support of the enthusiastic members. We have plans to organize a number of such focused workshops during 2011-2012. We are proud to announce that the Chapter will always be looking forward to receive innovative ideas from its members to increase the number of activities of the Chapter. We are glad for two of our members were conferred with FASM.

2. Awards and Honours

(Received by the Members of ASM International, Chennai Chapter)

- **Dr. Baldev Raj**, MASM, Director, Indira Gandhi Centre for Atomic Research, Kalpakkam has been awarded Fellow of ASM International for the year 2010-11.
- **Prof. B.S. Murty**, MASM, Professor of Indian Institute of Technology, has been awarded Fellow of ASM International for the year 2010-11.
- The ASM International **Chennai Chapter** received the FIVE STAR AWARD as well as CHAPTER OF EXCELLENCE AWARD from the ASM International for the seventh successive year.
- **Mr. M. Vasudevan**, MASM, **Prof. B.S. Murty**, MASM and **Prof. K. Prasad Rao**, MASM have been serving as Key Readers of the Metallurgical and Materials Transactions A.
- **Dr.P.Sivakumar**, MASM has been appointed as Director of Combat Vehicle Research and Development Establishment, Defence Research and Development Organization, INDIA
- **Dr.U.Kamachi Mudali** has been promoted as Associate Director of Indira Gandhi Centre for Atomic Research, Department of Atomic Energy, INDIA.

3. Seminars/Technical meetings organized by ASM Chennai Chapter alone and jointly with other professional bodies during 2009-2010.

26 Sep10	Dr. V. Subramanya Sarma,	Indian Institute of Technology, Madras	Improving the ductility of ultra fine grained / nanostructured materials – recent developments
14-15 Oct 11		Tractor and Farm Equipments (TAFE) Ltd, Chennai	In-house training course on Metallurgy Non-Metallurgists
22 Oct10	Dr. V. Sampath,	Indian Institute of Technology, Madras	Smart Materials
26 Nov 10	Dr.G.Raghava	Head, Fatigue and Fracture lab, SERC, Chennai	Fatigue & Fracture: Experimental investigations on large size structural components
17-18, Dec 10		Hotel Comfort Inn Marina, Chennai	Two day workshop on Metallurgy for Non-Metallurgist 17th & 18 th Dec. 2010 at Marina Towers,
on 6th Jan 2011	Dr. Dhanya M. Nambiar	Centre for Environment Education. & Developments Pvt .Ltd, Mumbai	Carbon Credit - An Overview
03 Mar 11	Prof. V.S. Nemkov	Director R&D, Fluxtrol Inc, USA.	Induction Heating and Hardening, Challenges in Induction Design and Optimum Use of Flux Concentrators
4-5 Mar, 11		Indian Institute of Technology, Madras	Two day workshop on Material Characterization and Failure Analysis
08 Apr 11	Dr.Baldev Raj	Director and Distinguished Scientist, Indira Gandhi Centre for Atomic Research, Kalpakkam	Energy Ethics and Equity
28 Apr 11	Dr.T.Sundararajan	Wheels India limited, Chennai,	Selection of Materials and Coating for Improved Tool performance
26 th May 11	Mr.V. Balaguru	Combat Vehicles Research & Development Establishment, Chennai	MATERIALS FOR ARMoured FIGHTING VEHICLES
4 th Jun 11		Hotel Comfort Inn Marina, Chennai	One day Workshop on Welding Held Chennai

4. Report on Annual General Body Meeting at Hotel Beverly International

Annual General body meeting (AGM) was held on 11th July 2010 at Hotel Beverly at Chennai. The program was started with welcome address by the Mr.V.L. Sridharan, chairman ASM International Chennai Chapter. Financial statement and Annual reports were presented by Hony. Tresurer and Secretary respectively,

Announcement of Elected Office bearers & E.C.Members for the year 2010-11 was made by D.G.Sastry. The meeting was entertained with Light Music by one of the leading music party "DEV'S KARA OKE' and the dinner. Members were attended along with their families the meeting was a grand get –together.

5. ASM International Excellence award to Chennai Chapter & Attending Leadership Program

We are happy to inform that our ASM Chennai Chapter is the winner for the Chapter Excellence award for year 2009-2010. Our chapter bagged this distinction for the **eight year** in succession.

Chapters of Excellence awards was presented during the Friday evening dinner at Leadership Days 2010 in Cleveland, Ohio. Dr.T.Sundararajan, Hony Secretary, attend Leadership days on behalf our chapter received the award consisting of \$1200 and a walnut plaque from Dr.F.Lisy, President, ASM International.

6. Report on In-house training course on Metallurgy for Non-Metallurgists at Tractor and Farm Equipments (TAFE) Ltd, Chennai

This course is specifically designed to suit the need of the Tractor and Farm Equipments (TAFE) Ltd. Around 50 young engineering professionals from various functions such as Design, Development, manufacturing, Supply Chain and Marketing are participated in the program. Pre and Post course assessments were made for the attendees to evaluate their learning from the course. The results showed that the 35% increase in the knowledge and understanding on Metallurgy.

7. Report on Two day workshop on Metallurgy for Non-Metallurgist held at Hotel Comfort Inn Marina Towers, Egmore, Chennai.

The state-of-art workshop was conducted on 17th & 18th Dec. 2010 at Marina Towers, Chennai. Dr.K.Sivakumar, Director, Combat Vehicle Research and Development Establishment inaugurated the workshop. In his inaugural speech Dr.Sivakumar emphasized the importance of materials knowledge for mechanical engineers who deals Design, process and procurement. . Also, he commended the initiatives taken by ASM International Chennai Chapter towards the continuous knowledge up gradation to the metallurgy professional in Chennai region. The workshop was attended by 96 participants from various industries, research institutions and engineering colleges. Experts from both academia and industry gave lectures on fundamental and advanced topics on Basic Metallurgy, Principles of heat treatment, Surface Engineering, Casting and Forgings, welding and recent advances in Nano materials.

8. Report on India National Council meet held at Madras Race Course Club

ASM International Chennai Chapter hosted the India National council meet on 03-12-2010 at Race Course Club. Mr.Venkatesh, Vice Chairman of our Chapter welcomed the office bearers of National council and chapter representatives. Members from Pune, Bengaluru, India and Gujarat were attended along with Chennai chapter members. The meeting was ended with Dinner hosted by our Chapter.

9. Report on Felicitation Program for ASM Fellows from Chennai Chapter

ASM Chennai Chapter facilitated two its distinguished member Dr.Baldev Raj, Director and Distinguished Scientist Indira Gandhi Centre for Atomic Research and Prof. B.S.Murty, of Indian Institute of technology for elected as the fellow of ASM international. The award is the recognition to members for their

distinguished contributions to materials science and engineering and to develop a broadly based forum of technical and professional leaders to serve as advisors to the society.

Chennai chapter organized the felicitation program for both the fellows on 08th April 2011. Mr.V.L. Sridharan, Chairman of Chennai Chapter welcomed the gathering and highlighted the active contribution to the chapter by both elected fellows. Mr.V.Parthasarathy, Past President of India National council, in his felicitation address applauded Prof. Murty for his outstanding contribution in the field of Nano materials and his active role in establishing several student chapter activities for Chennai chapter.

Mr.B.K.Venkatesh, Vice Chairman recalled his association with Dr.Baldev Raj as the scientist at Bhabha Atomic Research Centre (BARC) and elaborated his valuable contribution in the field of Non destructive testing and nuclear technology. Both Prof.B.S. Murthy and Dr.Baldev raj thanked Chennai chapter for the felicitation function and regarded the chapter activities. Subsequently, Dr. Raj addressed the gathering with special Technical lecture "Energy, Ethics and Equity". The meeting is concluded with vote of thanks from Dr.T.Sundararajan, Hony. Secretary and followed by cocktail dinner.

10. Report on Two day workshop on Material Characterization and Failure Analysis held on 4th & 5th March, 2011 at Indian Institute of Technology, Madras

A Two-Day Course on Materials Characterization and Failure Analysis was conducted on March 4-5, 2011 at Central Lecture Theatre, IIT Madras by ASM International Chennai Chapter in association with Kalpakkam-Chennai HRDC of IIM. Prof. B.S. Murty and Dr. A.S. Gandhi, IIT Madras are the coordinators for the course. The course was attended by about 70 participants from industry, research laboratories and academia.

The topics covered in the course were Metallography and Microstructure, Scanning Electron Microscopy, Mechanical Testing, Strengthening Mechanisms, Chemical Characterization, Corrosion and its Protection, Principles of X-ray Diffraction, Residual studies measurements by X-ray diffraction – case studies, Non Destructive Evaluation, Principles of Fractography, Failure analysis – case studies.

11. Report on One day workshop on Welding

The one day workshop on welding was conducted on June 4th 2011 at Hotel Comfort Inn Marina, Chennai. Mr. V.P.Parthasarathy and Dr.T.Sundararajan are the coordinators of the workshops. The course was attended by 40 participants mostly from Industries. The topics covered were Fundamental and Metallurgical aspects of welding and their transformation, Arc, resistance and solid state welding, Weld defects and evaluation. The recent innovation in the weld technologies such as Magnetic Impulse Arc Welding (MIAB) is covered in the one day program. The speakers are mostly from industries who got hands on experience in welding process for more than 20 years of experience in their respective welding processes.

12. Exécutive committee Meetings

ASM International Chennai Chapter strongly believes in executive committee meeting which always shapes our planned events into success. In this year we have assembled 9 times for taking several actions and succeeded as a team. Following are the details of our meetings :

- 1st E.C. Meeting held at Madras Cricket Club on 21st August 2010
- 2nd E.C. Meeting held at Queensway park Hotel 24th September 2010
- 3rd E.C. Meeting held at Anna Nagar Towers Club on 26th October 2010.
- 4th E.C. Meeting held at Anna Nagar Towers Club on 6th December 2010
- 5th E.C. Meeting held at Anna Nagar Towers Club on 27th January 2011
- 6th E.C. Meeting held at Anna Nagar Towers Club on 22nd February 2011
- 7th E.C. Meeting held at Anna Nagar Towers Club on 02nd April 2011

- 8th E.C. Meeting held at Anna Nagar Towers Club on 10th May 2011
- 9th E.C Meeting held at Madras Cricket Club on 12th June 2011

ASM Chennai Chapter Web Site

ASM Chennai chapter web site is operational and regular updates are being done. The URL for the website is <http://asmintl-chennaichapter.org>

Dr.T.Sundararajan
Secretary, ASM International Chennai Chapter