

THE INDIAN INSTITUTE OF METALS

BY

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The Indian Institute of Metals (IIM) is a highly reputed and the foremost professional organisation in the country for promoting and advancing Metallurgical Sciences and Technology. The activities and scope of the Institute, since its establishment in 1946, have steadily expanded. The Institute serves its members through its various Chapters and Divisions by organising technical lectures, seminars, symposia, conferences and through publications to cater to the needs of the profession. The activities are mostly conducted through honorary office-bearers and council members. Had it not been for this voluntary co-operation and contributions from many members and the support of the industry, the Institute would not have been able to provide these most efficient and useful services which it renders at surprisingly low subscription rates.

The spirit of dedication exemplified by Dr Dara P. Antia, the illustrious founder of the Institute, was promoted by successive Presidents and Secretaries. During the first 12 years, Dr Antia, as Secretary and Editor of the Transactions, established high standards of performance and made the Institute not only financially viable but also world famous. He has continued to be its guiding spirit as Vice-President, President and as Hony. Member of the Institute and its Council.

Chapters and Divisions

In order to maintain the highest standards, the requirements for membership of the Institute are rigid. The Membership now stands at 4,300 including students and other categories of members drawn from different fields of metallurgical activity. It is gratifying to note that, on an average, IIM has been able to establish one Chapter a year, the total number now being 35. With the envisaged rapid growth of the metallurgical industries and educational facilities throughout the country in the decade ahead, the Institute hopes to extend its Chapter activities to new areas and centres.

To cater to the needs of the members in specialised fields and industry, the Institute's programme has been organised under three Divisions—the Iron Steel Division, the Industrial Metallurgy Division and the Metal Sciences Division. Each Division is headed by a Divisional Chairman, who is a Vice-President of the Institute. These Chapters and Divisions in collaboration with other institutions organise and promote the objectives of the Institute. During the last 35 years, IIM has organised numerous special symposia and international conferences on various subjects of interest to the metallurgical community and industry.

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Publications

The Institute serves its members through the Transactions, a bi-monthly publication. Original research work and review articles of a high standard appear in the Transactions. The Transactions not only provide a compilation of work on metallurgical research but also help the members to exchange information and organise professional activities. The Transactions enjoys a high reputation among research workers, universities and technical societies both in India and abroad.

From January 1979, the Institute has started another publication, entitled 'Metal News', in which articles of general interest and news about members, Divisions and Chapters are included for the benefit of the industries and the student community. In addition, proceedings of important seminars and conferences organised by the Institute are also published regularly.

Annual Technical Meeting and National Metallurgists' Day Awards

The Annual Technical Meeting of IIM is held in the month of November. The event has a special significance to all metallurgists in the country, as it is linked up with the celebration of the National Metallurgists' Day and organisation of a special symposium. (Details of the Symposia held so far are given in Annexure I.

On the recommendations of the Institute, the Ministry of Steel & Mines, Government of India, established in 1963, celebration of the National Metallurgists' Day on November 14 every year, the birthday of Pandit Jawaharlal Nehru. On this occasion, awards are presented to young Metallurgists, who have made outstanding contributions to metallurgy in India. IIM provides the necessary base for the selection of National Metallurgists and advises the Government on such and other metallurgical matters.

At the Annual Technical Meeting, on an average, more than 150 original research papers on diverse aspects of metallurgy are presented. The meeting provides a forum for research workers and industry personnel to meet and exchange ideas to mutual advantage.

Examinations

The Institute holds Associate Membership Examinations for the benefit of the persons employed in industry, laboratories and educational institutions. IIM examinations are recognised by the Government of India for purposes of recruitment to the posts requiring metallurgical qualifications. A large number of persons have been benefited by acquiring the Associate Membership of the Institute.

Collaborations

The Institute maintains close liaison and collaboration with foreign Institutes, allied institutions in the country and with the Government of India. The Institute and

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its office-bearers have represented the country in many international meetings and conferences. IIM Transactions are exchanged for the journals of various international societies.

Medals/Awards

In keeping with the objectives of promotion and advancement of metallurgical science and technology, the Institute awards a number of medals, certificates and prizes for outstanding contributions in the field of metallurgical sciences.

Gold Medals instituted by the Houses of Tisco, Bralco, Kamani and Binani and the Pandya Silver Medal are awarded to the authors of the best papers published in the Transactions.

In addition, the Institute awards certificates of merit and special medals—Sir Padamji Ginwala Gold Medal, the Nalin Behari Sen Memorial Award, Dr A. K. Bose Medal and Vidya Bharati Cash Award for the best candidates securing the highest marks in the AMIIM, B. Tech, and M. Tech Examinations. Details of the recipients are given in annexure II.

Future Activities

The Institute proposes to introduce documentation facilities for the benefit of members.

It is also proposed to expand the library services so that all the members are benefited. The Chapters will also be encouraged to have their own library facilities in due course.

The Institute proposes to start the project for publication of text books by eminent authorities in the field.

It is intended to organise more International Symposia and Seminars for better exchange of knowledge and experience.

During the past 35 years, IIM has organised special symposia on the following subjects of topical interest:

- 1 Aluminium industry in India
- 2 Heat Treatment of Steel
- 3 Statistical quality control and its application to metallurgical industries
- 4 Ferrous and Non-ferrous founding
- 5 Modern trends in cast alloys
- 6 Electrometallurgy
- 7 Rare metals
- 8 Testing and standaridisation of foundry materials
- 9 Metallurgical requirements of Indian defence industries
- 10 Indian ferro-alloys industry

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- 11 Structural changes in metals and alloys
 - 12 Oxygen in steelmaking
 - 13 Metallurgical training and education in India
 - 14 Iron and Steelmaking in India
 - 15 International symposium on recent developments in iron and steelmaking with special reference to Indian conditions
 - 16 Powder metallurgy
 - 17 Reducing costs in steelmaking with special reference to yields, fuel consumption and labour productivity
 - 18 Evaluation of steelmaking processes
 - 19 Some aspects of defence metallurgy
 - 20 Manufacture of flat products
 - 21 Economics of installation and operation of steel plants in developing countries
 - 22 Aluminium
 - 23 Use of non-ferrous metals in engineering and in the economy
 - 24 Lead and Zinc
 - 25 Recent developments in Metallurgical Science and Technology
 - 26 New horizons in steelmaking
 - 27 Gap between research and development and commercial exploitation
 - 28 Aluminium and zinc die castings
 - 29 Energy crisis and the metallurgical industries
 - 30 Problems in technology transfer from R&D laboratories to industry
 - 31 Technology of materials in light engineering industries
 - 32 Special Fabrication Technique for metallic metals
 - 33 Special Metals and Alloys
 - 34 Corrosion and Metallurgical Failures in Chemical Industries
 - 35 International Conference on Metal Sciences—The Emerging Frontiers

LIST OF MEDAL WINNERS

Co-Authors

IIM Medal	1966	Dr. Dara P. Antia	
John Taylor	1956	Late Prof N. P. Gandhi	
Gold Medal	1962	Late Mr. P. H. Kutar	
	1972	Dr. M. N. Parthasarathi	
Tata Gold Medal	1980	Mr. S. K. Nanavati	
Bralco Gold Medal	1972	Dr. R. H. Tupkary	Mr. P. V. S. Pillai Mr. K. V. Nair & Mr. T. K. Mukherjee
	1973	Dr. C. K. Gupta	
	1979	Dr. L. R. Vaidyanath	

Kamani Gold
Medal

1948	Late Mr. A. D. Wilks	
1949	Mr. S. C. Jain	
1950	Mr. A. S. Sharma	
1951	Late Dr. H. Schrader	
1952	Dr. V. G. Paranjpe	Prof Morris Cohen
1953	Dr. M. N. Parthasarathi	Dr. B. R. Nijhawan
1954	Dr. E. G. Ramachandran	Mr. N. Srinivasan
1955	Dr. G. P. Chatterjee	
1956	Mr. S. Visvanathan	Mr. N. J. Wadia and Dr. V. G. Paranjpe
1957	Dr. R. C. Deshpande	
1958	Mr. S. M. Arora	Mr. P.K. Gupta & Dr. B. R. Nijhawan
1959	Mr. H. R. S. Rao	Mr. S. N. Mookerjee Dr. V. G. Paranjpe & Mr. S. Visvanathan
1960	Dr. T. R. Anantharaman	
1961	Mr. P. K. Chakravarty	Mr. T. V. Mannarswamy
1962	Mr. P. G. Mukunda	Prof P. R. Dhar
1963	Dr. R. V. Raghavan	
1964	Mr. R. N. Misra	Mr. P. P. Bhatnagar & Mr. V. S. Sampath
1965	Mr. M. N. Khanna	Mr. G. S. Tudekar & Mr. C. S. Tiwari
1966	Mr. C. V. Sundaram	Mr. R. B. Subramanyam
1967	Dr. V. A. Altekhar	Dr. A. S. Athwale
1968	Dr. A. K. Seal	Dr. R. K. Ray & Mr. R. Ganguly
1969	Dr. A. K. Lahiri	Dr. V. Seshadri
1970	Dr. P. Rama Rao	Mr. V. V. P. K. Rao and Mr. D. M. R. Taplin
1971	Dr. S. Ranganathan	Dr. M. N. Chandrasekharaiah
1972	Dr. K. Tangri	Dr. Toronchuk & Lloyds
1973	Mr. V. K. Gupta	Dr. V. Seshadri
1974	Mr. S. A. Paranjpe	Mr. S. Banerjee & Mr. N. M. Shah
1975	Mr. S. N. Wazir	Mr. G. Venugopal
1976	Mr. P. Mukhopadhyaya	
1977	Mr. A. K. Lahiri	
1978	Dr. H. S. Ray	Mr. D. G. Bhat Mr. G. S. Reddy and Mr. A. K. Biswas
1979	Dr. K. A. Natarajan	

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Binani Gold Medal

1959	Dr. S. K. Biswas	Dr. S. C. Dasgupta
1960	Late Dr. A. A. Krishnan	Dr. V. Ramachandran
1961	Prof A. K. Mallik	
1962	Mr. P. P. Bhatnagar	
1963	Dr. B. N. Chakravarti	Late Mr. D. K. Pal Choudhury
1964	Dr. G. S. Tendolkar	Mr. P. Ramakrishnan
1965	Dr. Rajendra Kumar	
1966	Dr. Manjit Singh	Dr. Rajendra Kumar
1967	Dr. Somnath Mishra	Mr. S. K. Shee & Mr. R. P. Wahi
1968	Prof R. Mallikarjunan	Mr. C. V. Sundaram & Mr. K. Venkataramani
1969	Dr. R. Krishnan	Mr. Lalit Kumar
1970	Dr. N. Dhananjayan	
1971	Dr. C. K. Gupta	Mr. D. K. Bose & Mr. S. C. Jain
1972	Dr. S. H. Ghude	Mr. C. M. Sellars
1973	Dr. K. V. Viswanathan	Dr. K. M. Majumdar
1974	Mr. S. Pattanaik	Dr. V. S. Arunachalam Mr. M. L. Bhatia and Mr. V. A. Swaroop
1975	Dr. P. Kantarao	
1976	Dr. G. N. K. Iyengar	Dr. V. Sivan
1977	Dr. C. K. Gupta	Mr. C. Narayanan Mr. D. K. Bose and Mr. T. K. Mukherjee
1978	Dr. P. M. Prasad	T. R. Mankhund and Mr. G. Singh
1979	Dr. J. Singh	

Pandya Medal

1954	Dr. S. N. Anant Narayan
1958	Dr. A. K. Seal
1959	Prof A. K. Mallik
1961	Dr. P. Rama Rao
1972	Dr. C. Suryanarayana
1973	Dr. K. A. Padmanabhan
1975	Dr. Shamsuddin
1976	Mr. P. K. Mitra
1977	Dr. S. Ashok

Sir Padamji Ginwala Gold Medal

1963	Mr. T. K. Subramaniam
1964	Late Mr. S. D. Sehgal
1965	Mr. H. Ramamurthy
1966	Mr. M. K. Chakraborty
1967	Mr. K. Subramanyam
1968	Mr. C. Ghosh

	1969	Mr. A. Ghosh
	1970	Mr. A. K. Banerjee
	1971	Mr. T. V. Ramana Rao
	1972	—
	1973	Mr. P. Krishna Rao
	1974	Mr. P. Nageswara Rao
	1975	Mr. M. L. Sharma
	1976	Dr. U. S. Ram
	1977	Mr. S. K. Lahiri
	1978	Md. Quayamuddin
	1979	Mr. D. N. Singh
Dr. A. K. Bose Gold Medal	1972	Mr. J. K. Chaudhuri
	1973	Mr. M. C. Pandey
	1974	Mr. H. Chandrasekhar
	1975	Mr. Jagdish Lal
	1976	Mr. K. R. Reddi
	1977	Mr. D. K. Basa
	1978	Mr. Indranil Chakraborty
	1979	Mr. Anil Kumar Bhargava
N.B.Sen Memorial Medal & Prize	1967	Mr. S. C. Kallianpur
	1968	Mr. R. P. Ghosh
	1969	Mr. Vinod Behari
	1970	Mr. A. Ghosh
	1971	Mr. A. K. Jain
	1972	Mr. K. Seshavatham
	1973	Mr. M. K. Bhattacharyya
	1974	Mr. A. K. Raha
	1975	Mr. G. Jothinathan
	1976	Mr. A. K. Saha
	1977	Mr. C. Ravindran
	1978	Mr. Ch. Viswanadham
	1979	Mr. T. S. Ghosh
Vidya Bharati Prize	1977	Mr. V. Ramesh
		Mr. P. V. Goyal
		Mr. M. N. Guha
		Mr. S. Banerjee
	1978	Mr. A. K. Jain
		Mr. K. R. Venkatachari
		Mr. G. K. Dey
		Mr. P. Nandi
	1979	Mr. R. D. Pendse
		Mr. Madhav Mehra
		Mr. S. Elangovan
		Mr. S. V. Bhatt