

**Address of Welcome by Dr. A.K. Chattopadhyay, Chairman IRMA,
at the Annual General Meeting 2010 on 19th August 2010**

Respected Prof. Manna, distinguished invitees, and my colleagues from the refractory industry,

1. It is my proud privilege as Chairman of IRMA, the national body for the refractories industry in India, to extend a warm welcome to Prof. Manna, Director of Central Glass & Ceramic Research Institute to our 49th Annual General Meeting as the Chief Guest.

Prof Manna is a celebrated metallurgical engineer, a renowned educator and a researcher by his own rights. As a teacher, he has developed several new courses and taught subjects related to phase transformation, materials engineering, surface engineering, thermodynamics etc. His research interest spans from structure-property correlation in engineering materials including synthesis/application of nano-materials to mathematical modeling. Prof Manna worked as a guest scientist in several institutions of excellence and universities abroad such as Max Planck Institute at Stuttgart, Technical University of Clausthal, Nanyang Technological University, Liverpool University, University of Ulm, etc. He has published about 225 peer-reviewed papers, supervised 14 Ph.D, 35 M. Tech. and 50 B. Tech. theses, carried out 32 sponsored projects worth over Rs. 16 crore and also obtained a patent on amorphous AlCuTi alloy.

Prof. Manna is also a Fellow (FNAE) of the Indian National Academy of Engineering, New Delhi; a Fellow (FNASc) of The National Academy of Sciences of India, Allahabad; and a Fellow (FASc) of the Indian Academy of Sciences, Bangalore. I thank him for kindly sparing his valuable time in spite of his numerous preoccupations to attend the IRMA AGM today.

Indian Refractory Makers Association shares a very strong interface with Central Glass & Ceramic Research Institute and his august presence would further cement our relationship.

2. I will take this occasion to make a quick review of the domestic refractory industries' performance during 2009-10. The net sales turnover which was Rs 3640 crores in 2008-09 rose to approximately Rs 4480 crores in 2009-10 which means approximately 21% growth in sales volume compared to last year's 16% growth. The import of refractories which stood at Rs 1421 crores in 2008-09 came down to around Rs 1277 crores in 2009-10. Although it means a decrease of around 11%, the figure is still astounding. The main import items were silica, mag-carbon bricks and few value added items. Simultaneously, there has been significant decrease in import of fireclay and high alumina bricks. Most of these items were under OEM contracts. The total exports for the year was approximately Rs 446 crores, down from Rs 519 crores in the previous year. This decrease has been due to the persisting meltdown in the European and US markets.

3. Crude steel production in India which was approximately 58.43 million tonnes in 2008-09 went up to 64.88 million tonnes in 2009-10. Oxygen route contributed to 29.33 mill. tonnes, EAF route contributed to 15.69 mil. tonnes while IF route contributed to 19.86 mil. tonnes. In spite of cut in production in the first quarter, the total production of crude steel is expected to surpass 72 mil. tonnes for the financial year 2010-11. Discussing about the future steel production, we need to take a practical and realistic viewpoint leaving aside the media hoopla

created in a frenzy to sign up MoUs. Recently 53 MoUs were signed in Karnataka, the number in Jharkhand is 71 while there are a several dozens each in Orissa and West Bengal. Yet many questions remain unanswered especially land acquisition, captive mine linkage, availability of coking coal, water, environmental clearance and logistic support. I would like to spell a few words about our infrastructural bottlenecks which can really throttle the ambitious steel expansion plan. Production of 100 mil. tonnes of crude steel amounts to 350 mil. tonnes of material handling and our choke-a-block infrastructure is in no position to handle the enormous load. The progress of the pending infrastructure projects has remained extremely tardy. The backlog of rail projects runs 10 pages and is short of astounding \$17 billion in required financing. The result has been clogged railroads, lack of rakes and high freight tariff. India charges four times what American companies charge for rail freight and thrice as much as in China. Regarding road transport, after the successful completion of the golden quadrilateral project, the country expected the next phase of roadways expansion to gain momentum. However, statistics released by the government indicates huge slippage in road building activities, inordinate delay in land acquisition being the key reason. Regarding sea-route, it is estimated that India will need port traffic handling capacity of around 1,000 million tpa by the turn of 2015. Although the 240-odd projects lined up are adequate to meet the requirement, only a fraction is under execution. Needless to say, it has had prominent impact on all core sector industries including our sector as we have to compete in a globalized market with China and other European countries with their well developed infrastructure. Keeping all these constraints in mind, the Association has started the initial spadework to prepare a detailed report on demand supply position of the refractory industry over a period of next 4-5 years vis-a-vis the availability of indigenous raw materials.

4. We need to take a look at a key issue being faced by our industry, i.e. the payment system. At present, the refractory makers mostly get paid after completion of the desired lining life thereby blocking up the vital working capital of the company. As we all know, refractory being an industry where cash flow is not in big quantum, the blockage of capital creates even more difficult situation whence all the input materials are to be bought on cash basis. To overcome the problem, a series of periodic payments needs to be placed and we need to open communication channels with the steel makers using IRMA's platform to drive home our difficulties. Prior to it, the member companies need to develop a common understanding on payment terms taking into account the concerns of the steel makers. As a responsible organization, IRMA has never encouraged fly-by-night operators or non-serious players, while consistently pointing out the need for sustainable returns and equitable supply and commercial terms on a win-win basis.
5. We in IRMA believe that many a small thing has been made large by right kind of thinking. While our SME sector is beleaguered by lack of infrastructure including proper testing facilities, lack of skilled manpower and advanced technology etc, in my personal opinion, the crux of the matter lies in changing the thought process of the entrepreneur. IRMA had been consistently working to help the SME sector shred its traditional thought process and take advantage of various Government initiatives available to them. I am very happy to inform you that following the successful representation of the Association, Ministry of MSME,

Govt. of India has sanctioned the cluster development scheme in Chirkunda where soft intervention scheme (including awareness programmes, exposure visits to various large scale units etc) is already being planned and implemented by Jharkhand Small Refractory Association with active support from IRMA. I thank Mr H.P. Biyani, Mr Bajrang Jalan, Mr. Binod Agarwal, Mr. Arun Agarwal and other members of Chirkunda who lend their steadfast support and encouragement to the cause. I also thank Mr. S.G. Rajgarhia who set the ball rolling by meeting the DC-MSME, Mr Madhav Lal at his office in September 2009.

IRMA is also in the verge of bringing out a white paper for the SME units about modern refractory management practices from production to marketing of finished items which would indeed be of great help to the industry.

6. A key activity of IRMA has been human resource development when the skills, knowledge and abilities available in the industry are assessed over a period of time and training modules are accordingly designed. Keeping in mind the need to induct fresh blood in the industry, the Association has for the first time initiated a 10 week intensive training programme at JJ Irani Centre for Learning, Belpahar comprising details of refractories properties, production and applications. In order to encourage dissemination of knowledge, the course was offered to members at an at-cost basis with 50% discount to SME sector. Although there were participants from 7 companies, I expected a few more participations not because considerable time and energy was devoted to run the 10 week course but the opportunity to learn new skills and knowledge from the best of the minds in the industry in an acclaimed infrastructure. I had been repeatedly mentioning that we need to have a different thought process and start investing in infrastructure, technology and skill development without which not much headway could be made in the increasingly challenging market.
7. Our inhibition to invest in these three vital components stems from the fact that our returns have been meagre for which only ourselves are to be blamed. To explore the possibility of creating a different type of model where the key focus would be on innovative ideas, competence and building relationships rather than cost cutting and product re-engineering, the Association organized a one day marketing session on 6th July 2010 at Kolkata where Avenir Consultants made a presentation based on Theory of Constraints. A number of companies in our country are implementing TOC and have reportedly received some positive outcome and our industry may take a cue from them with its own assumptions and limitations.
8. Moving over to the recently concluded IREFCON10, it has been a phenomenal success in bringing together the best minds of the refractory industry for three consecutive days and wading through the sea of knowledge and information. The participation of the sponsors, exhibitors and delegates both from India as well as overseas has been truly overwhelming. I must appreciate the efforts of IREFCON10 Technical Committee under the Chairmanship of Dr. G. Banerjee who did an excellent job of meticulously selecting the Theme Lecturers and the technical papers to serve the purpose of an international event. I am confident that IREFCON12, the venue of which would be announced shortly would similarly serve as a

global platform for knowledge dissemination and building relationship amongst the stakeholders.

During the deliberations of IRECON10, a series of speakers had been repeatedly focussing on the need for ensuring raw material security for the country. We have got some raw materials in our country and most importantly we have a battery of talents who can really work on value addition, development of synthetic aggregates etc. In the august presence of Prof. Manna, may I request CGCRI to take a lead in this regard? As an Association, IRMA is ready to extend all possible help, as this concerns the very sustenance of our industry.

Knowledge is the key factor in our industry and IRMA plans to have its own building in Kolkata which would act as a learning centre for the entire industry and disseminate information on the crucial yet conspicuously unvoiced role played in keeping the core sector moving. The Association has been interacting with the Govt. of West Bengal to get land for this purpose.

In the end, I would like to thank my friends and colleagues in the refractory industry and particularly those who have spared their valuable times to share their knowledge and experience in the IRMA General Committee. I would like to thank Mr. B.N. Ghosh, Chairman of the IRMA Technical Sub-Committee, Dr. G. Banerjee, Chairman of IREFCON 10 Technical Committee for giving their valuable time for the betterment of the industry. I take this opportunity to thank to the Secretariat and Technical Officers of the Ministry of Steel, Govt. of India for their persistent interest in the overall growth and development of the industry. Many thanks are due to the Ministry of Small –Scale Industry, official of the Directorate of MSME, Ranchi for their persistent support. I would also like to thank all the major consuming industries like steel, cement, aluminium, copper, glass etc for their patronage and support.

The next phase of India's growth is critically linked to unlocking value at the bottom of the pyramid through planned urban growth, resuscitating the rural economy, rapid infrastructure development and administrative reforms. No growth can be inclusive unless it takes care of the social causes of exclusivity and the development paradigm will be further skewed if our economic development is not matched with corresponding human development. India is the second fastest growing economy of the world which is starkly contrasted by the fact that some of its social indicators are below the sub-Saharan countries. The higher echelons should work for creating a fair and transparent India and ensure the benefits of globalization trickle to the underdogs who are not yet a significant part of India's growth story but have dreams to live a life of dignity and self actualization. This is the essence of 'inclusive growth' and we the refractory makers may humbly say that we play a miniscule socially responsive role in employing people in some of the most backward pockets of the country. It is time we as a country stop squandering our advantage as we did in the last 50 years and make the most of what most countries can never even dream to have. Borrowing from an American saying, "*Our country has far more problems than it deserves and far more solutions than it applies.*" Thank you very much.