

Vote of Thanks

Dr. RAJENDRA KUMAR

Scientist Director
National Metallurgical Laboratory



Hon'ble Minister Sri Salve, Sri Mody, Sri Samarapungavan, Dr. Altekar, Dr. Dastur, Dr. Irani,

On behalf of the National Metallurgical Laboratory and on behalf of the Indian Institute of Metals, it is my privilege to bring this Inaugural Session to a close through a Vote of Thanks. We, the scientists at the NML, are gratified that the Laboratory is again playing a host to a Symposium on Ferro-Alloys after a lapse of about 2 decades. It is a matter of satisfaction for us that our efforts to indigenise the production of many of the ferro-alloys through the alumino-thermic route have been widely accepted by the industry and much of the production of ferro-alloys other than ferro-silicon and ferro-manganese is through the widespread commercialisation of our technology.

To such a few as are using our technology, we offer our salutation and express a sense of gratitude for having placed confidence in indigenous R & D efforts. The other producers of ferro-alloys deserve our thanks and appreciation too for making the country more or less independent of imports. It was your vision which had foreseen that the requirements of ferro-alloys would increase in the country as the country

industrialises itself and goes in for the production of steels meant for sophisticated and precise applications at ambient as well as higher temperatures. I refer to a large variety of structural steels, pipe line steels and the boiler grade steels for use in thermal power plants etc. The growth of the chemical and the petrochemical industries, including those connected with the production of fertilisers and the increased thermal power generation would demand increasing availability of ferro-alloys and I fore-see a good future for a rapid and expeditious continued growth of the industry in India.

The coming years would no doubt see an intensification of efforts to claim those elements which are required by the ferro-alloy industry such as that of vanadium from the wastes of aluminium industry or of molybdenum from the copper industry and in these areas our Laboratory is working and I do hope that in the near future the industries based on the technologies developed would also grow. The ferro-alloy industry is also one amongst those which cause industrial pollution of environment and this is true for a large number of ferro-alloys because of the emissions of toxic metals, such as, manganese, silicon and other chemicals and in this respect I know possibly the Tisco have carried

out studies and good data is available. So the consciousness about the pollution hazards to health are known to the industries and it is a very gratifying feature and towards this consciousness on the part of the industry, we would like to express our gratitude. I feel that as the country goes in for the production of alloy steels for sophisticated applications, greater attention will have to be paid to the quality considerations of ferro-alloys in terms of the residual impurities, such as, the quantity of aluminium just as an example.

On behalf of all of us present here, I would first of all like to thank our Hon'ble Minister for Steel & Mines Sri Salve for his gracious presence amongst us. Whilst the presence of Parliamentarians amidst us encourages us, provides us reassurance that the voice of professionals present here has a role to play in the national affairs, there is no doubt that the system is unique in India, because it was happily started by Pandit Jawaharlal Nehru through ensuring his presence at scientific national events. I hope, Sri Salve will also feel that the valuable time spent by him in our midst has been usefully spent and is to mutual advantage. We are grateful to you Sir for your gracious presence amongst us. Your presence is a source of inspiration to us in the R&D area as well as to those of us who have assembled here from industrial production sector of these alloys.

To Sri Mody, Vice-Chairman & Managing Director, Tisco, we owe indeed a debt of gratitude for having presided over the function today and for the massive support we, the organisers, received from his Company and through his officers, most notably through Dr. Irani, who is very well internationally known as a professional Metallurgist and is concurrently Chairman of the Iron & Steel Division of the Institute of Metals, who are the co-sponsors of this Seminar.

We are grateful to Sri Samarapungavan for kindly agreeing to be amongst us and to address

us at a very short notice. He is a man of steel and is the largest consumer of ferro-alloys. Rightly he is concerned with the quality aspects of the ferro-alloy production, an aspect which is also of concern to some of our R & D activities in this Laboratory. A steel producer is magnanimous and as far as the ferro-alloys are concerned, I think, technically we use the word that the ferro-alloys kill the steel and it is in this context of characteristic magnanimity of the steel that Sri Samarapungavan has accepted our invitation and we are extremely grateful to him.

We are gratified that professional engineer of the eminence of Dr. Dastur has delivered a very stimulating lecture at this Inaugural Session. He delivered his lecture in a manner which is characteristic of him and we have heard him on a number of occasions delivering Key-Note lectures on matters of steel industry. Whilst our minds have already received generous technological philosophy of Dr. Dastur, he is also providing us renewable energy through hosting a Lunch today. Whilst a lot of other professional activity goes on during the course of any Seminar there is no doubt that the core strength is provided by presentation and discussion of technical papers. We are very grateful to all the authors who have contributed key-note, scientific and technical papers at the Seminar because without their efforts, the Seminar, despite the presence of glittering personalities, would have remained a hollow one. Our salutations to all of them.

We are grateful to a number of organisations, both from the public and the private sectors, who have generously contributed both financially or otherwise through facilities towards the success of the Seminar by way of contribution towards the cost of publication, organisational expenses, cost of seminar documents and nice folders to contain these documents. The Cultural programme in the evening is being hosted by MECON. All the other hospitalities, tea, lunches and dinner are fully hosted and we

would like to express our gratitude to all the organisations.

On behalf of the Indian Institute of Metals, I would like to voice these sentiments to express our gratitude to Prof. Altekari who has spear-

headed the organisational work and through him to his team of devoted workers, who have made this Seminar a success. With these words, Ladies and Gentlemen, may I request you to kindly pass the Vote of thanks with usual acclamation.