

In summation

H. K. Mitra

Mr. Chairman and my Good Friends

I thought, it was the prerogative of our politicians to talk at the slightest provocation (laughter). But here, I find myself talking in and out of turn almost from the time I entered this magnificent auditorium. I thought, atleast the concluding session would be a listening session for me; but our stern Chairman has decreed otherwise (laughter) and here I am again.

Mr. Chairman, you ask for my impression of this Seminar. As I sat through the sessions of this and many other similar ones, a question constantly cropped up in my mind: What is it that make us—our leaders of and even a great many of the Scientific and Technical men of our industries, cling almost worshipfully to Ideas old, processes anti-dated and methods long discarded by industrially advanced countries. There seems to be a mortal fear, of the word change.

I wonder, if our brains are differently constructed—different from those of others who inhabit Europe and America. A Japanese scientist recently claimed that Japanese ones are different from those of the rest of the

mankind. And that tends to lend support to my suspicion!

Last week, my son-in-law was paying us a visit. He delves deep into Molecular biology. From science and technology of refractories to that discipline of science is a big jump. But I thought I would try to educate myself, even if a little bit—about his "hardware" 'Gene' and 'genetic code', about which we hear so much nowadays.

I learnt from him—atleast I think I have—that everyone of us is born with a "gene" which has a secret, which our Scientists are trying to decode. It is tough, top secret code much more tough than the German one which the Allied Military Intelligence succeeded in unravelling only after long and arduous labour, during the last world war.

This mysterious 'gene' have been handed down from generation to generation from our early ancestors and pre-determine everything about us, e.g. our personality whether we will be argumentative, whether we will passionately defend 'Diffusivity factor' (laughter) or feel quite non-challant about it like our friend E. S. Langridge

(renewed laughter) for he can take care of it by modifying design.

But I suppose God Almighty, known for dispensing even handed justice, thought when designing the brain of our ancestor that Diffusivity Cell cherished by Alloy Steel Bose and Tisco Lab K. K. Mitra (loud laughter) has to be protected so that it is not exposed to attack by ever changing new fangled ideas which others propose from time to time (laughter). What could be a better material for the purpose than Roy Brown's Fused Cast Refractories (laughter)—virtually non-porous, and seemingly impervious to anything and certainly to new ideas (renewed laughter).

By this time God Himself was perhaps getting the contagion from the species, he was creating. He was skeptical (laughter). What about the inevitable voids in Fused Cast material A brilliant idea flashed through his mind. Why not take advantage of Wesman Engineering's 'All-Insulation' construction (laughter). And up went a layer of Malhan Ceramics 1500°C Insulation Brick (renewed laughter).

Still Almighty was ill at ease. How to make the Brain structure arrangement fool proof or strictly speaking "ideaproof" (Laughter).

By that time had arrived on the Indian scene a new material and He at once grabbed Brian Langridge Rolls of Ceramic Fibre Blankets (renewed laughter). There you have it Gentlemen, —what we heard and seen during the

last two days. There lies the answer to my poser made earlier. Why timidity and hesitancy are the hall marks of Indian industries (renewed laughter).

But He made one miscalculation. He forgot to reckon the fact, that here is our Chairman Swaminathan who maintains and periodically augments a powerful force known as the Tearing Out Gang. Many of you may not know what a Tearing out Gang is or what its functions are. When one of Swaminathan's open hearth furnaces are off gas for general repairs, he lets loose this army of husky men to tear down the furnace to build a new one over its ashes.

This time he has hired a new kind of Tearing Out Gang—you and me, and all the speakers and authors who participated in this wonderfully arranged Seminar, which has successfully demolished I hope the old concept of building reheat, heat treatment and similar furnaces with dense brick. (laughter).

Here, Mr. Chairman please add on top priority basis, to the list of suggestions received in response to your request just made, the one I make now: When a reheat furnace of any plant is due for major repair, programme to convert it to all-insulation construction. Once you do so for one furnace, I know you will want to do for other ones. This would be a sure way to implement the massive conversion programme advocated in the keynote address. The expertise and insulation brick are at your disposal. It is for you to utilise

it and that without delay I assure our overseas delegate from England that the day Ceramic fibre blanket becomes freely available in India, Wesman Engineering will not hesitate to switch on to this marvellous material.

Dr. Rao, you mentioned in your first circular, something about future development. May I remind fellow delegates, that for you and me **THAT FUTURE BEGINS TOMORROW** (applause) when we all are back on our shop floors, laboratory desks or in our offices.

And now a word about an aspect of the seminar for future guidance. I would request authors of papers to come prepared to present these within the time allowed. It can be done if in the privacy of your office or home you have, shall I say, a dress rehearsal.

Push-button control is a great gift of science and technology to modern living, but do not make your presiding officer, an expert push button controller during the brief period of two hours that he occupies the chair (laughter).

And now a word of sincere appreciation for our hosts the Jamshedpur Section of Indian Ceramic Society and the National Metallurgical Laboratory. Wonderful has been your liaison between the two.

As one who had a hand in the formation of this section and was its first president, I feel proud to tell you that you are the most active of all the local sections of the Indian Ceramic Society (loud applause).

You have now held seminar, for the entire gamut of iron and steel furnaces. Hold one, before long for lining problems for L. D. and like vessels. You do not have this problem here in Jamshedpur but it is one for my friend Narayan from Bokaro. It is a national problem.

And now I know I am voicing the feeling of every one of the delegates. When I tell you Mr. Swaminathan and Dr. M. R. K. Rao what a magnificent job you and your associates have done for the seminar. We have enjoyed every minute of the two days here. Will the delegates, join me in expressing our sincerest thanks by giving them a big hand (loud applause).

And finally, my good friends assembled here from overseas and far corners of our own country, my grateful thanks for the infinite patience you have shown everytime I have been on my feet, and as a reward I spare you now of having to hear this voice, further (laughter) but only till we rest again, perhaps in another seminar in Delhi or Calcutta. **THANK YOU** once again (laughter and applause).