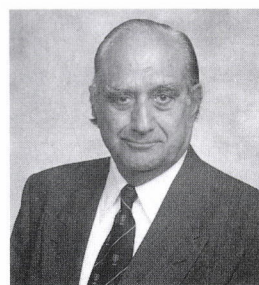


名誉会員からのメッセージ

The Iron and Steel Institute of Japan - World Renowned Institute. A Tribute and a Challenge

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It is indeed a pleasure and a great privilege for me to send the following Message to ISIJ.

The Iron and Steel Institute of Japan is today acknowledged to be world renowned not only because of its substantive technical supremacy but also by virtue of its outstanding technical journals and publications in English and in Japanese as also for its convening International Conferences / Congress / Conventions on important technical subjects pertaining to the iron and steel industry on a global basis; the outstanding publications resulting therefrom are masterpieces.

In particular the monthly journals of the Iron and Steel Institute of Japan both in English and Japanese represent synergy of fundamental researches and basic metallurgical technologies of superlative academic value. The substantive technical depth of the papers published covers a wide spectrum of basic fundamental kinetics, researches and developments in multiple fields of ferrous metallurgy authored by not only leading Japanese scientists and metallurgists but also leading metallurgical scientists from many countries highly developed and others developing.

In this Message I would like to pay my tribute to the Iron and Steel Institute of Japan and its organizers for consistently upholding superbly high standard of technical exposition of fundamental and basic researches covering vast spectra of iron and steel production metallurgy and processing placing high premium on research ingenuity.

The Iron and Steel Institute of Japan has effectively succeeded in attracting and compiling the valuable results of iron and steel research projects on a global basis and presenting them to global reception centres and readers on an almost flawless pattern of high standard and efficiency. Likewise, the published Proceedings of International Conferences / Conventions / Congress organized by ISIJ condense the results of fundamental technologies and academic research papers on metallurgical reactions and

processing of iron and steel including their diverse raw materials and by products.

The differences between fundamental researches and applied industrial research and development work including the operations of pilot plants and demonstration prototype plants are perceptible; the former aim at the discovery of new knowledge and the latter encompass the translation of new knowledge into plans and design for a new product and associated relevant innovative technologies which find eventual applications on industrial scale. Thus successful adaptation of scientific discoveries into technical innovation and industrial implementation directly contribute to economic growth and market development.

It is in such multiple fields of applied research and development work and application of their results on industrial and commercial scale that the Iron and Steel Institute of Japan has to align and focus its efforts for the global innovators and metallurgists. The industrial scale developments and innovations for the Japanese iron and steel industry and indeed globally are the areas posing future challenges for the Iron and Steel Institute of Japan.

The restructuring of the global steel industry in the wake of restructured global boundaries, while driving annual global steel output up or down, will eventually lead to the re-orientation of the industry based on the elimination of obsolete capacity and still more obsolete technologies on the one hand to the industrial scale implementation of the latest technological innovations and processes on the other resulting in a market oriented balance of the steel industry.

In the global economy, where the only certainty is uncertainty, gathering and dissemination of technical information and data are key factors in maintaining a competitive edge and that exactly is where the Iron and Steel Institute of Japan has to play a dominant role not only nationally for Japan but also internationally for developing and developed countries. This is the CHALLENGE facing

the Iron and Steel Institute of Japan.

During the 20th century, industrial developments that have been evolved and applied globally on commercial scale in iron and steel making, secondary refining, degassing, ladle metallurgy, continuous casting to produce billets, beam blanks and thin slabs, automation and computerization, new steel alloys and superalloys particularly in the technology and production of low carbon, low residual and micro-alloyed HSLA and high strength steels, have resulted in specialized processes and products that required abnormal foresight at the end of the 19th century.

Likewise, equal foresight is required at the end of the 20th century since the challenges for the steel industry in the 21st century will be much more dramatic, intense and competitive and since the development of new, substitute and advanced materials and composites will threaten to overtake and supersede many industrial applications and products currently based on steel and its alloys. The automobile industry is one area where steel is currently facing acute competition such as depicted in the new German AUDI - A8 car which displays the advantages of the wholly aluminum car body. Thus the requirements for higher performance steels and lighter weight products epitomize the need for changed industrial outlook world wide.

The continual emergence of advanced materials such as composites and other hybrid materials, makes it difficult to predict what global steel output during the 21st century and what steel technologies will be dominant and what the product-mix will be. The intense competition from alternate and substitute materials not only provides formidable challenges but also offers high premium for technological ingenuity and initiative.

Thus the Iron and Steel Institute of Japan has to widen

and broaden its projections and expositions to cover the steel spectra not only for and in Japan but world wide. Japan is undoubtedly a leading steel producer. At the same time, however, current steel developments taking place world wide will have to be closely studied and followed such as in the case of mini steel mills, continuous thin slab casting and strip technologies and in the near-net shape casting, direct hot slab charging and subsequent in-tandem processing, accelerated cooling, direct quenching, pickling, annealing and coating etc. The Iron and Steel Institute of Japan will have to face the renewed challenge to highlight developments and strides in these and allied fields world wide and open its citadels to these epoch making technologies and breakthroughs. Comprehensive industrial review articles in these and allied arenas of topical developments, will need to be stepped up, enlarged and masterly presented for global study by the Iron and Steel Institute of Japan through its monthly journals and related publications. No doubt the ISIJ deals with and embraces these subjects in relation to their fundamental researches and theoretical basis. Now the ISIJ will need to expand its coverage and presentation to industrial scale developments and applications within and outside Japan through industrial review articles and this is the challenge before the world renowned Iron and Steel Institute of Japan and this is the Message I wish to convey to ISIJ to catalyze new industrial ventures based on synergies with fundamental researches and industrial development studies.

In conclusion, it is hoped that this Message will be taken in the constructive spirit in which it has been offered in all sincerity to uphold the Iron and Steel Institute of Japan as a paradigm of Japanese supremacy in the domains of the iron and steel industry.

(1996年9月20日受付)