

## Welcome address

**P. C. Jain**

Vice-President,  
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*Hon'ble Shri Shivraj V. Patil, Minister of State for Science and Technology, Mr. President, Ladies and Gentlemen,*

This is my privilege to welcome you all to the steel city of Jamshedpur, built by the greatest Indian pioneering industrialist Jamshedji Tata, its adjacent area abundant with valuable minerals and ores. At NML the first flowsheet of a modern mineral beneficiation plant was being attempted successfully in the early sixties. Thus, the seminar on crushing and grinding-practices, problems and prospects is a fitting tribute to the city and NML. The IIME is deeply honoured and encouraged by your presence here today and Sir, we extend a very hearty welcome to you. Nothing can be more exciting than to have the Ninth Annual Technical Convention of IIME and the seminar on crushing and grinding practices, problems and prospects to be inaugurated by Shri Shivraj V. Patil, Minister of State for Science & Technology. Under your leadership, the nation has to its credit outstanding achievements in the developments of Science and Technology. Just to name a few are the successful Antarctica expedition, sea-bed mining of nodules and space research. We sincerely hope, Sir, that your interest in the activities will grow deeper further.

In any mineral beneficiation plant, the first activity is "liberation". This is normally achieved by comminution, which consumes approximately

50% of the total energy requirements. Thus, any effort to reduce this consumption and improve the efficiency of its operation is not only welcome but also necessary. With the depletion of the richer ore bodies we have little choice but to tackle the poorer grades. Thus the subject of the seminar assumes greater importance. We look forward to some fresh thinking in the area. Phenomenal development is taking place to tackle the low grade ores in the countries like Canada, Russia, America, Australia and South Africa. Pre-concentration to avoid un-necessary power consumption is rapidly taking over to be established in the proposed plants. Computer control systems have helped eliminating human weaknesses in operation. You will hear more about this in the learned papers that will be presented shortly. Environmental control of the processing plants is given due importance by the government. And this becomes another major problem for the technologists.

This seminar has received a tremendous response from specialists in mineral preparation, scientists, technologists, managers, planners, designers, constructors, producers and users. We welcome them all with hope that they find the proceedings will be profitable. With the limited resources of the Institute, we thank the organisers for the marvellous job done and hope their responsible effort will continue further in future. Thank you !