

FOREWORD

There has been considerable thinking in recent times on the nature of the scientific and technological experiments to be carried out in space. And many important issues are being debated; should the experiments be technologically oriented?; should appreciable quantities of materials be processed in space?; should these experiments be oriented towards understanding phenomena which will advance the field of materials science? it has been argued for example that experiments on earth may not be enough to reliably forecast behaviour in a gravity-free or microgravity environment. But the most important argument in favour of carrying out experiments in space is that once an initial breakthrough is made, it will as usual be much easier afterwards to achieve the same result by another and simpler route.

To introduce this new and exciting field to scientists and engineers in India, the Indian Institute of Science and the Indian Space Research Organisation under their joint education programme organised a Workshop on Materials and Materials Processing in Space in Bangalore from 24 to 29 September 1979. A fairly large group of scientists from India and abroad participated in this Workshop to deliver lectures and to have mutual discussions. Special mention should be made of Dr Simon Ostrach from Case Western Reserve University, Dr J. M. Haynes from Bristol and Dr Y. Malmejae from European Space Agency who contributed much to the Workshop.

To make the benefit of this Workshop available to a wider group of scientists in the country and elsewhere, many of the lectures delivered there are being published in two special issues of the *Bulletin of Materials Science* (Nos. 2 and 3 of Volume 4, 1982).

We thank all the speakers and participants, and others who were involved in the organisation of the Workshop especially the authorities of the Indian Institute of Science. Financial assistance received from Indian Space Research Organisation through the ISRO-IISc Education Programme is also gratefully acknowledged.

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