

Preface

The International Conference on Crystal Lattice Defects, organized by the Physical Society of Japan, was held under the auspices of the International Union of Pure and Applied Physics (IUPAP) on the 3rd and 4th of September 1962 in Tokyo and from the 7th to the 12th of September 1962 in Kyoto. This International Conference consisted of the following two parts:

First part: Symposium on Mechanical Aspects of Lattice Defects (Tokyo Symposium).

Second part: Conference on Crystal Lattice Defects (Kyoto Conference).

The Tokyo Symposium included subjects relating to the mechanical aspects of lattice defects, namely motion of dislocations, work hardening and internal friction. On the other hand, the mechanical aspects were excluded from the Kyoto Conference, where emphasis was especially placed on point defects. The Three Divisions of the Kyoto Conference were: (I) Fundamental properties of lattice defects, (II) Interaction between lattice defects and (III) Production and annealing of lattice defects, which may show the general trend of topics included. The Conference was divided into fifteen sessions. The programs of the Symposium and the Conference were prepared by the Scientific Program Subcommittee, chaired by Prof. T. Suzuki.

The Tokyo Symposium, held at the Tokyo Shoko Kaigisho (Tokyo Chamber of Commerce and Industry), and the Kyoto Conference, at the Kyoto Kaikan (Kyoto Assembly Center) were opened with addresses by Prof. T. Fujiwara, Chairman of the Organizing Committee. Oversea attendants counted 89 (Tokyo) and 118 (Kyoto) scientists from 13 countries. 258 (Tokyo) and 402 (Kyoto) Japanese scientists joined the Symposium and the Conference respectively. The International Conference as a whole was concluded with a closing address by Prof. Y. Uchida, Vice-Chairman of the Executive Committee.

The Organizing Committee of the International Conference was financially supported by donations from a large number of industrial and commercial organizations in Japan and by a subvention from UNESCO through IUPAP. Without these financial aids the International Conference would certainly not have been possible.

The Proceedings of the International Conference, now being prepared by Publication Subcommittee chaired by Prof. A. Ookawa, will be divided into three parts as follows:

Part I: Tokyo Symposium.

Part II: Kyoto Conference, Division I.

Part III: Kyoto Conference, Divisions II and III.

All the papers presented orally by the authors at the Symposium or the Conference are included in the Proceedings. Although the Executive Committee did not in principle accept papers to be presented *in absentia*, three papers exceptionally read by proxy were included in the Proceedings, because particular circumstances occurring just prior to the Conference prevented these authors from attending. The discussions and comments were compiled by the co-chairmen of the respective sessions and were submitted to the Publication Subcommittee, where they were edited by the editorial members concerned.

The writers would like to express their gratitude to all participants of the International Conference for their cooperation in making the International Conference so successful.

They would also like to take this opportunity to thank the Solid States Commission of IUPAP for their kind offices in bringing about the subvention. The writers are also indebted to all members of the Organizing Committee, the Executive Committee and the Subcommittees for their cooperation in the various aspects of the International Conference including the publication of the Proceedings.

December 1962

Chairman of the Organizing Committee

T. FUJIWARA

Chairman of the Executive Committee

R. R. HASIGUTI