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## PREFACE

This book is based on the Second Seminar on Science Policy under the U.S.-Japan Cooperative Science Program. It was jointly sponsored by the Division of International Programs of the National Science Foundation (NSF) and the Japan Society for the Promotion of Science (JSPS). The conference was held in Honolulu, Hawaii, in August 1981 and was preceded by an exchange of papers from the participants of each country.

The philosophy behind this volume is that there is much to be learned between Japan and the United States by exchanging ideas on each other's science policies. This exchange built on the previous conference. Individual papers were not limited to government policies but rather to different aspects of each country's systems for issues affecting scientific and technological progress.

Donald E. Stokes points out that deeply rooted in the American scientific community is the belief that basic and applied scientific research are fundamentally distinct. However, the viewpoint presented in this chapter is that the tendency to think of these types of research as mutually exclusive has created difficulties. Abe and Tezuka explain that in Japan basic research is carried on in universities, applied research is carried on in national research institutes, and research and development is carried on in the private sector. Langenberg's chapter emphasizes the point that to categorize research on two dimensions (basic or applied) can be misleading.

Inose *et al.* explain the pattern of research support in Japan and the allocation by sectors. Radnor shows the relationship between national goals and R&D programs in the U.S. government agencies. This chapter particularly examines the question as to how closely the R&D portfolios reflect the goals for which the agencies are responsible.

Bartocha and Czesla focus on the U.S. government role in supporting research. This is contrasted with Japanese government support systems as explained by Abe *et al.* Schlie examines the fundamental basis for governments supporting R&D activities.

In the chapter by Senich and Kaatz, the role of American college and university faculty in the industrial innovation process is described, pointing particularly to the changing relationships of U.S. colleges and universities to the nation's business environment. The issues of university-industry cooperation are addressed by Gerstenfeld and Colton.

The issues of the U.S. patent policy for inventions made under government funding are reviewed by Ganz. This is followed by Toyama and Hasegawa's chapter explaining the current patent system in Japan. Bremer focuses on inventions performed under U.S. government contracts. The final chapter written by The Science Council discusses the handling of patents in Japan for the inventions of university professors.

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