Preface

This is the Proceedings of the second International Conference on "Towards Innovation in Superplasticity", which was held on 21-24, September 1998 in Kobe city, Japan. The two Conferences of this title are the major social activities of the national project, which is one of the priority areas of Grant-in-Aid from the Ministry of Education, Science and Culture, Japan. The project started on April 1996 and will finish on March 1999. The first Conference was held at the beginning of the project and was a good chance to advertise our research targets in this project activity. The Conference Proceedings including 42 original papers was published as Materials Science Forum Volumes 233-234, and has commonly been referred in many recent papers. This must be the evidence that the Proceedings includes important papers in the field of superplasticity keeping a high scientific level. Since the second Conference was settled in the final fiscal year, this was an occasion to summarize our project results in the International meeting. The 35 leading scientists and engineers from outside Japan met at the second Conference, and participated in fruitful discussions to evaluate the results obtained by our project members and to find future directions in superplasticity research. As described in the introductory paper of this volume, we settled three major targets in our project; (1)to get new phenomena on superplasticity, (2)to extend superplasticity research into an atomistic level of grain boundary analysis and (3)to find a way for the collaboration between scientists and industry engineers. We keenly discussed these points throughout the duration of the Conference. The Conference volume includes almost all the results obtained by the project members as well as the important contributions by foreign and domestic participants. I hope this volume will be read by many scientists all over the world and will contribute to the future advancement in the field of superplasticity. Finally, I wish to thank the financial support of the Grant-in-Aid for Scientific Research on the Priority Area "Towards Innovation in Superplasticity"(08242102) from the Ministry of Education, Science and Culture, Japan. Thanks are also due to the additional supports from Kobe city, the Japan Society for Research on Superplasticity, Amada Foundation for Metal Work Technology, USARO-FE and USAFOSR/AOARD. This Conference was organized as JIMIS-9 Conference under the auspices of the Japan Institute of Metals.

December 2, 1998 T. Sakuma