Preface

The International Conference on Shape Memory and Superelastic Technologies and Shape Materials (SMST-SMM 2001) was held at Bank Hotel in the “Ever-spring City”- Kunming, China, September 2 to 6, 2001. It followed and integrated the following two influential international conference series. One is the SMST series: SMST-94, SMST-97 and SMST-2000, all in Asilomar, USA, with its scope focusing on the applications of Shape Memory and Superelastic Technologies-SMST. Another one is the SMM series: SMA’86 (Guilin, China), SMM’94 (Beijing, China), C-J SMA’97 (Hangzhou, China) and SMM’99 (Kanazawa, Japan), having a wide scope centering around the development of Shape Memory Materials (Alloys)-SMM from fundamental issues to fabrication, characterization and its applications, but recently putting more and more emphasis on the applications. The goal of combination of SMST and SMM is to make the present conference more internationalized and realize the cross-fertilization to promote developments both in the materials itself and its applications.

It is a great pleasure that the conference has been an informative and enjoyable grand get-together of the international shape memory materials community. A total of 131 papers including 16 invited papers and 115 contribution papers presented at the conference both in oral and postal presentations are collected in this proceedings, which are grouped into the following 8 parts:

1. Medical applications of shape memory alloys (12 papers);
2. Industrial applications of shape memory alloys (16 papers);
3. Bioperformance and surface modification of NiTi alloys (10 papers);
4. Fundamentals of shape memory effect and superelasticity (24 papers);
5. NiTi-based shape memory alloys (20 papers);
6. Cu-based, Fe-based and high-temperature shape memory alloys (23 papers);
7. Thin films, porous and composite shape memory materials (14 papers);
8. Magnetic and other shape memory materials (12 papers).

Under the common effort of the International Advisory Committee, International Organizing Committee and Executive Organizing Committee, as well as all the participants the conference has met a great success. Thanks to the invited speakers for their informative lectures and section chairmen for their excellent management. Thanks are due to the supporters and sponsors for their generous financial support. Acknowledgements go to the International Culture and Technology Center in CSIT for their outstanding secretarial works. Thanks are given to the members of Editorial Board of the Proceedings for their earnest pre-review of the papers.

Hoping to have another grand get-together of the international SMM community in the near future!

Y.Y. Chu
SMST-SMM 2001 Conference Chairman