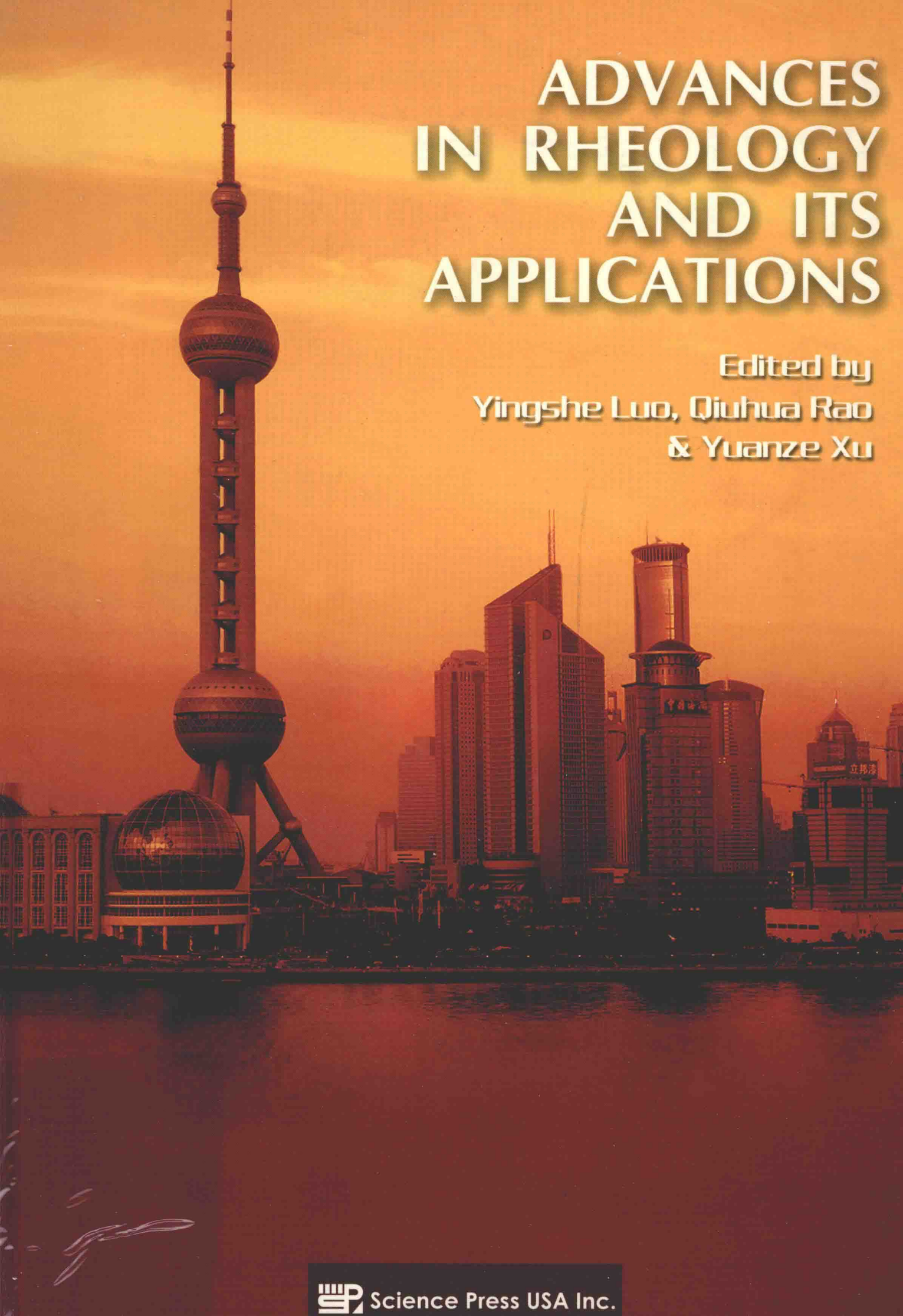


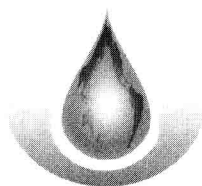


ADVANCES IN RHEOLOGY AND ITS APPLICATIONS

Edited by
Yingshe Luo, Qiuhua Rao
& Yuanze Xu

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PROCEEDINGS OF THE 4th PACIFIC RIM CONFERENCE ON RHEOLOGY



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Edited by

Yingshe Luo, Qiuhua Rao & Yuanze Xu



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PREFACE

After three successful and fruitful events in Kyoto (1994, PRCR1), in Melbourne (1997, PRCR2) and in Vancouver (2001, PRCR3), the 4th Pacific Rim Conference on Rheology (PRCR4) has been organized jointly by the Chinese Society of Theoretical and Applied Mechanics (CSTAM), Chinese Chemistry Society (CCS) and Chinese Society of Rheology (CSR), co-sponsored by Xiangtan University, East China University of Science and Technology, Fudan University, China University of Petroleum (Beijing), Langfang Branch Research Institute of Petroleum E&D PetroChina Co.Ltd. and International Journal of Applied Rheology, on August 7-11, 2005 at Purple Mountain Hotel, central downtown of Shanghai, China. It is the most significant event for every colleague from around the globe as it provides a free forum for exchanging the new ideas, communicating the research information and presenting the most up-to-date advances to the researchers and the engineers in this field. It is also the most exciting event for the whole of Chinese Society of Rheology (CSR) since this year is the 20th anniversary of the founding of the CSR. In China, there is an old saying: "It is always a pleasure to greet a friend from afar", let alone so many colleagues and friends came from the Pacific Rim countries even from all over the world.

This proceedings contains 253 papers selected from 331 submissions, covering a wide range of topics including constitutive theory and modeling of complex fluids; non-Newtonian fluid mechanics and computational rheology; rheometry and novel techniques; polymer and multi-phase melts; polymer solution and gels; suspensions, emulsions and foams; electro-magneto-rheology and high technological materials; rheology of solids and composites; rheology in material processing; rheology for rock-soil and engineering; rheology of natural and bio- materials. Each paper was subjected to a careful review by the experts in the relevant area.

The Organizing Committee and the Local Committee wish to sincerely thank all the members of the International Advisory Board for their warm guidance, thank all the referees including all the organizers of mini-symposia for their strong supports and reviewing. In addition to the above three committees as listed, I would like to especially acknowledge Dr. Rongguo Zhao, Zhichao Wang, Min Yu, Yinhui Qin, Wenbin Liu and Shuiping Yin and the other graduated students, Mr. Yuehui Chen and Chun Liu for their continual assistance for the preparations in organizing this conference. Thanks are also due to all the plenary lecturers, keynote lecturers, authors, exhibitors and participants for their support.

The conference was also sponsored by the National Nature Science Foundation of China, China Association for Science and Technology.

It is a pleasure to welcome you all to PRCR4. We wish you a rewarding conference and an enjoyable stay in Shanghai, China.



Yingshe Luo

Conference Chairman of PRCR4

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