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Circulating Fluidized Bed Technology VIII



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on Circulating Fluidized Beds
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PREFACE

The year 2005 marks the 20th anniversary of the International Conferences on Circulating Fluidized Beds, after its first conference in Halifax, Canada in 1985. Since then, six conferences were organized at various locations around the world, 1988 in Compiègne, France, 1990 in Nagoya, Japan, 1993 in Hidden Valley, USA, 1996 in Beijing, China, 1999 in Würzburg, Germany and 2002 in Ontario, Canada. CFB8 is the eighth of this series of successful conferences and is also the second time it was held in China. The series brings together all of the major CFB research groups from around the world and has served as a major focal point for information exchange and has helped the strong growth of research and developments for circulating fluidized bed technology.

This volume compiles a total of 131 papers presented at the 8th International Conference on Circulating Fluidized Beds (CFB-8) held in Hangzhou, China, May 10-13, 2005. It includes four invited plenary lectures which provide overviews on three important aspects of CFB: the fundamentals and the applications of CFB in fluid catalytic cracking (FCC) and combustion (CFBC). Authors from twenty-two countries contributed to this proceedings and over hundred reviewers helped to ensure the quality of the presentations. I and the Organizing Committee would like to express our sincere appreciation for the valuable contributions by the authors and our indebtedness to the reviewers for their invaluable work.

CFB-8 provides a forum for presentation of the latest findings and for discussion about circulating fluidized beds, turbulent fluidized beds and other related fluid-particle systems. New developments, industrial applications, practical issues and recent technology advances are emphasized. Together with the seven previous proceedings, each volume represents a major source of information on circulating fluidized beds and related topics. The current volume focuses on three major subjects: combustion and gasification, fluid dynamics and numerical simulation. While CFB coal combustion has been widely used, CFB combustion and gasification technology is now being extended to other fuels such as biomass, industrial and municipal wastes. In addition, other applications such as flue gas scrubbing, calcination, roasting of ores, spray granulation and phenolic pollutant treatment are all active subjects of discussion. Meanwhile, a number of papers are presented on the topics such as measurement techniques, components development, heat and mass transfer that have been featured also in previous volumes.

I would like to express our gratitude to a number of people who have been very helpful in organizing the conference and in producing this volume. In particular, this proceedings would not be possible without the tremendous help from the four assistant editors:

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Professor Martin Rhodes, Monash University, Australia

Professor Ernst-Ulrich Hartge, Technical University Hamburg-Harburg, Germany

Professor Zhongyang Luo, Zhejiang University, China.

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We also like to thank the conference sponsors, whose contribution has made it possible for many students and some international attendees to participate in the conference activities. These sponsors are listed below and are also fully recognized at the conference itself. We are also grateful for the International Academic Publishers for their valuable work in printing this excellent volume.

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