



Proceedings of the 11th International Conference on Fluidized Bed Technology

May 14-17, 2014 Beijing, China

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Chemical Industry Press

Preface

Dear Colleagues and Friends,

You are welcome to Beijing to attend CFB-11. This is the second time for this series of conference to be held in Beijing. We are honored to be the host, particularly, welcome you to the Institute of Process Engineering.

CFB-11 is the eleventh conference in a series following the success of the previous International Conferences on Circulating Fluidized Beds:

- CFB-1, Halifax, Canada, 1985
- CFB-2, Compiègne, France, 1988
- CFB-3, Nagoya, Japan, 1990
- CFB-4, Hidden Valley, USA 1993
- CFB-5, Beijing, China, 1996
- CFB-6, Würzburg, Germany, 1999
- CFB-7, Niagara Falls, Canada, 2002
- CFB-8, Hangzhou, China, 2005
- CFB-9, Hamburg, Germany, 2008
- CFB-10, Sunriver, USA, 2011

CFB-11 addresses both fundamental and applied aspects of circulating fluidized beds and fluidized bed systems, which covers e.g.,

- Hydrodynamics of gas-solid flow
- Computational fluid dynamics
- Modeling and computation
- Heat and mass transfer
- Fine particle and nano-particle systems
- Process design and scale-up
- Measurement and instrumentation
- Fluid catalytic cracking and other catalytic processes
- Combustion, pyrolysis and gasification
- Chemical looping processes

In comparison to the themes of CFB-1, Halifax, 1985, we can easily recognize the development of CFB understanding. Thirty years ago, we debated whether or not clusters exist in CFBs while this phenomenon can be reproduced by computer simulation now. On the other hand, applications of CFB have been, and continue to be extended due to its super performance in gas-solid contacting.

Including four plenary lectures, 146 papers from 26 countries are selected in this book after peer review. These provide us a comprehensive overview on the various aspects of current fluidization research.

We would like to thank all the contributors who have authored and/or reviewed the manuscripts. Your efforts helped us to record this important event with good memories and quality. Finally we would like to acknowledge our sponsors for their generous support.

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March 12, 2014