



## Preface

This special issue contains peer-reviewed manuscripts presented at the 10th International Conference on CO<sub>2</sub> Utilization (ICCDU-X), Tianjin, China, May 17–21, 2009.

The ICCDU conferences, held every other year (alternating between Asia, Europe and North America), aim to promote the research and development of utilization of carbon dioxide. As ICCDU-X was held during a special period of world economic difficulty, in order to make a successful conference we arranged more plenary (17 finally) and invited (11 finally) presentations than previous ICCDU conferences. The Conference Organizers and Guest Editors are grateful to Tianjin University, the National Natural Science Foundation of China, Tianjin Key Laboratory of Catalysis Science & Technology, Agilent, Quantachrome, Frontier of Chemical Engineering in China, and Energy & Environmental Science for their support.

Carbon dioxide is a big issue now. How to deal with carbon dioxide is still a significant challenge to governments, industry and society worldwide. On the other hand, it has been well known that carbon dioxide is the largest carbon resource for various syntheses. The utilization or chemical fixation of carbon dioxide should be a potential long-term solution of the so-called carbon dioxide problem.

The special issue focuses on the utilization of carbon dioxide. We arranged four review articles and 26 research articles, contributed by the leading scientists in this field, including plenary or invited speakers in the conference. The topics contain carbon dioxide reforming, utilization of CO<sub>2</sub> as oxidant, enhanced

conversion by membranes, hydrogenation, photo- or electro-chemical conversion, conversions with ionic liquids, conversions under thermal or supercritical conditions, plasma promoted conversion, and plasma assisted catalyst preparation. The Guest Editors believe that the papers presented here will be very helpful for the future development of this truly international field.

The Guest Editors thank all the authors for their excellent contributions and also for their understanding and collaboration. The Guest Editors also acknowledge with thanks all the referees for their reviews that have made this quality issue possible.

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