

Preface

This volume contains a unique collection of papers collected at 2023 7th International Workshop on Renewable Energy and Development (IWRED 2023), which took place in Guangzhou, China from July 21st to 23rd, 2023 (virtual conference). Each paper recognizes the seminal contributions to renewable energy and development made by every author, and acknowledges their impact on their own researches.

All the scientific participants, many of whom were students, had many fruitful discussions and exchanges that contributed to the success of the Conference. Participants from countries all over the world made the Conference truly international in scope.

There were 5 plenary keynote speeches covering different topics of the Conference theme: Prof. Buxiang Zhou (Sichuan University, China) talked on Research on “Electricity-Carbon-Ecology” Collaborative Planning Technology in Desert and Gobi Area, Prof. Qiang Lu (North China Electric Power University, China) on R&D and Application of Multi-source Organic Solid Wastes Pyrolysis, Prof. Qinhui Wang (Zhejiang University, China) on Development on Biomass Combustion and Gasification Technologies Based on Fluidized Bed Process, Prof. Donghai Xu (Xi’an Jiaotong University, China) on Research on Sewage Sludge Hydrothermal Liquefaction and Its Products Utilization, and Prof. Qibin Li (Chongqing University, China) on The Working Fluid Improvement and Optimization for Organic Rankine Cycle. The speakers gave very illuminating speeches that drew many people’s full attention. These speeches, held on Saturday morning, were very accessible to the general audience. In addition, there were many other oral reports and poster presentations on ongoing current research. These presentations cover the full range of the Conference topics, which include Solar Thermal Power Generation, Geothermal Energy, Hydrogen and Fuel Cell, Distributed Energy System Technology, Energy Security and Clean Use, etc.

All in all, the 7th International Workshop on Renewable Energy and Development held in Guangzhou was very successful. The plenary speeches and the progress and oral reports bridged the gap between different fields related to renewable energy and development, making it possible for non-experts in a given area to gain insight into new areas. Also, included among the speakers were several young scientists, who brought new perspectives to their fields.

We would like to acknowledge the authors of the papers collected in this present volume, the members of the Technical Program Committee for their guidance and support, and the referees for their generous work. Our thanks also go to the editors and other staff of E3S Web of Conferences, for their time and kindness in waiting for the final submission of the papers.

Given the rapidity with which science is advancing in all the areas covered by IWRED, we expect that these future series conferences of IWRED will be as stimulating as this most recent one was, as indicated by the contributions presented in this Proceedings volume.

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