## Preface

The 8<sup>th</sup> International Conference on Energy Science and Applied Technology (ESAT 2023) was held in Yichang City of China during March 10-12, 2023. ESAT 2023 organized by Wuhan University of Technology, co-organized by China Three Gorges University, Northeast Petroleum University, Huazhong University of Science and Technology, and sponsored by Asian Union of Information Technology.

ESAT conference is started in 2014, the aim of ESAT series conference is to provide a platform for researchers, engineers, and academicians, as well as industrial professionals, to present their research results and development activities in energy science, and its applied technology. It provides opportunities for the delegates to exchange new ideas and application experiences, to establish business or research relations and to find global partners for future collaboration.

This three-day conference was organized in technical association with the Asian Union of Information Technology and included invited keynote talks and oral paper presentations from both academia and industry. Each keynote speakers lasted for 30 minutes, including 5 minutes for Q&A. and for other sessions, there was 20 minutes for each presentation, including 5 minutes for Q&A. The themes covered in this proceedings are: Fossil Energy & Geological Engineering; Clean Energy and Electric Energy; Energy Sustainability & Energy-Related Environmental Science. The book is useful to professionals and scientists involved or interested in energy science and applied technology. Hopefully, all participants and other interested readers would benefit scientifically from the proceedings and also find it stimulating in the process.

We would like to thank all the author submitted papers to the conferences and thank all the reviewers for their time and effort in reviewing articles. Especially we would like to thank the organizing committee for their valuable advices in the organization and helpful peer review of the papers.

This 8<sup>th</sup> ESAT received 179 manuscripts, and 102 submissions had been accepted by our reviewers. By submitting a paper to ESAT conference, the authors agreed to the review process and understood that papers would undergo a peer-review process. Manuscripts were reviewed by appropriately qualified experts in the field selected by the conference committee, who took detailed comments and-if the submission was accepted-the authors would submit a revised version that took into account this feedback. All papers were reviewed using a double-blind review process: authors declared their names and affiliations in the manuscript for the reviewers to see, but reviewers did not know each other©identities, nor did the authors receive information about who had reviewed their manuscript. The committees of ESAT 2023 invested great efforts in reviewing the papers submitted to the conference and organizing the sessions to enable the participants to gain maximum benefit.

Conference Organizing Committee