

## Preface

Due to recent pandemic, the 2021 3rd International Conference on Geoscience and Environmental Chemistry (ICGEC 2021) which was planned to be held in Xining, China, was held virtually online during June 18-20, 2021. The decision to hold the virtual conference was made in compliance with many restrictions and regulations that were imposed by countries around the globe. Such restrictions were made to minimize the risk of people contracting or spreading the COVID-19 through physical contact. There were 120 individuals who attended this online conference, represented many countries including Algeria, Cameroon and China.

The primary goal of the symposium is to promote research and developmental activities in geoscience and environmental chemistry, and another goal is to promote scientific information interchange between researchers, developers, engineers, students, and practitioners working all around the world. An ideal platform for seeking global partners had been established. We sincerely invited you to attend the forum to share views and experiences in geoscience, environmental chemistry and related areas.

During the conference, the conference model was divided into three sessions, including oral presentations, keynote speeches, and online Q&A discussion. In the first part, some scholars, whose submissions were selected as the excellent papers, were given about 5-10 minutes to perform their oral presentations one by one. Then in the second part, keynote speakers were each allocated 30-45 minutes to hold their speeches. In the second part, we invited three professors as our keynote speakers. Prof. Xinyong Li, from Dalian University of Technology, performed a speech on *In Situ Spectroscopy Investigation of the Surface-Interface Charge-Transfer Process over Catalysis Reactions*. And then we had Prof. Guoan Wang, from China Agricultural University. He talked about *Effects of Arbuscular Mycorrhizal Fungi on Plant Nitrogen Uptake Strategy Under Different Soil Water Conditions*. Lastly, we were glad to invite Prof. Lei Chen, from Shandong University of Science and Technology as our finale keynote speakers. He shared a speech on *An assemblage of macroscopic and diversified carbonaceous compression fossils in the Tonian Period*. Their insightful speeches had triggered heated discussion in the third session of the conference. Every participant praised this conference for disseminating useful and insightful knowledge.

The proceedings are a compilation of the accepted papers and represent an interesting outcome of the conference. Topics include but are not limited to the following areas: Geophysics & Geochemistry, Environmental Chemistry, Geography & Geology, Hydrology & Ocean Science, Geodesy & Cartography, Atmospheric Sciences, Earth Science History and more related topics. All the papers have been through rigorous review and process to meet the requirements of international publication standard.

We would like to acknowledge all of those who supported ICGEC 2021. The help and contribution of each individual and institution was instrumental in the success of the conference. In particular, we would like to thank the organizing committee for its valuable inputs in shaping the conference program and reviewing the submitted papers.

We sincerely hope that the ICGEC 2021 turned out to be a forum for excellent discussions that enabled new ideas to come about, promoting collaborative research. We are sure that the proceedings will serve as an important research source of references and knowledge, which will lead to not only scientific and engineering findings but also new products and technologies.

Committee of ICGEC 2021

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