

## Preface

The 2021 5th International Conference on Advances in Energy, Environment and Chemical Science (AEECS 2021) was held on February 26-28, 2021 as a virtual conference due to the growing concerns over the coronavirus outbreak (COVID-19), and in order to protect the well-being of our attendees, partners, and staff as our number one priority. AEECS 2021 is to bring together innovative academics and industrial experts in the field of energy, environment and chemical science to a common forum. The primary goal of the conference is to promote research and developmental activities in energy, environment and chemical science and another goal is to promote scientific information interchange between researchers, developers, engineers, students, and practitioners working all around the world. The conference will be held every year to make it an ideal platform for people to share views and experiences in energy, environment and chemical science and related areas.

This scientific event brings together more than 120 national and international researchers in energy, environment and chemical science. On top of the local participants coming from different national universities, international participants are also registered from different countries, namely Malaysia, Bulgaria, India and Germany. 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. Qing Liu, from Shandong University of Science and Technology performed a speech: *Development of Nickel Phyllosilicate Derived Ni/SiO<sub>2</sub> Catalysts for Methanation Reaction*. And then we had Prof. Nur Islami from University of Riau, Indonesia. He presented an insightful speech: *Application of geoelectrical resistivity method for the assessment of shallow aquifer quality in landfill areas*. In his study, a valuable approach utilizing the relationship between select physical water and soil characteristics and geoelectrical resistivity data was used to recognize and trace groundwater contamination by using the geoelectrical resistivity data of a landfill area. Prof. Caixia Chen, from East China University of Science and Technology. He delivered a wonderful speech: *Computational Fluid Dynamic Model of Moving Grate MSW Incinerators*. 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: Energy Science and Engineering, Chemical Engineering and Technology, Environmental Science and Environmental Engineering 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 AEECS 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.

The Committee of AEECS 2021

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