

**THE THIRD INTERNATIONAL CONFERENCE OF CHEMICAL ENGINEERING SCIENCES AND APPLICATIONS**

**(The 3<sup>rd</sup> ICChESA 2017)**

September 20-21, 2017, Banda Aceh - INDONESIA

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## Preface

The Third International Conference on Chemical Engineering Sciences and Applications 2017 (The 3<sup>rd</sup> ICChESA 2017) taking place in Banda Aceh, the Province of Aceh, Indonesia during 20-21 September 2017 was organized by the Chemical Engineering Department, Syiah Kuala University, Indonesia together with the Faculty of Chemical Engineering, Universiti Teknologi MARA (UiTM), Shah Alam, Malaysia in cooperation with the other two institutions: Chemical Engineering Department, Malikussaleh University and Lhokseumawe State Polytechnics of which both are from North Aceh, Indonesia. The conference addressed the important theme in supporting the sustainable development: “Strengthening Chemical Engineering Education, Research, and Innovation for Sustainable Development”. The objective of the 3<sup>rd</sup> ICChESA 2017 was to gather scientists, researchers, scholars, educators, professionals, and students in different fields of chemical engineering from ASEAN and beyond to share knowledge, exchange ideas, and explore possibilities of building cooperation networking.

The Proceedings consists of accepted papers and presented by researchers from different countries, among others, Indonesia, Malaysia, Thailand, Pakistan, Iran and Japan. The papers are categorized under seven topics in the area of chemical engineering, namely: Energy Resources, Control System and Computational Fluid Dynamics, Environmental Engineering, Nanotechnology, Chemical Engineering Fundamental, Food and Biochemical Engineering, and Chemical Reaction Engineering, Polymer and Composite Materials.

It is fair to conclude that the conference was a great success! So many people and organizations have contributed in so many ways to turn this event into a smoothly running meeting with many very interesting presentations and a very good atmosphere for discussion and networking. I would like to take this opportunity to express my deep gratitude to all parties who have made this event a success, particularly to Syiah Kuala University and partner universities, keynote speakers, sponsors, reviewers, participants, members of organizing committee, and volunteers of Chemical Engineering students of Syiah Kuala University.

We sincerely hope the 3<sup>rd</sup> ICChESA 2017 Conference would provide a good opportunity to share experiences and ideas as well as to establish new academic collaborations among participants leading to exchange program and joint research and publication for the benefit of all.

Yunardi  
Chairman of the 3<sup>rd</sup> ICChESA 2017  
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**Keynote Speakers**

1. Professor Said Irandoust, Accelerated Innoveation AB Sweden; “ Innovations and Universities: How to Reduce the Gap Between Knowledge and Innovations”
2. Professor T. M. Indra Mahlia, Mechanical Engineering Department, Universiti Tenaga Nasional, Malaysia; “Potential Fuel Savings and Emissions Reduction by Implementing Fuel Economy Standards and Labels for Motor Vehicles In Indonesia”