e-ASIA Joint Research Program (e-ASIA JRP) Joint Research Project in the field of "Alternative Energy" on the topic of "Bioenergy".

It is our great pleasure to announce the selected projects of the e-ASIA Joint Research Program (e-ASIA JRP)*¹7th Call for Proposals in the field of "Alternative Energy" on the topic of "Bioenergy".

A total of 8 proposals was submitted in response to the 7th joint call for proposals. After careful consideration based on the peer review results by the 7 funding organizations from 7 countries participating in the call*², the following 2 collaborative projects were selected for support with the approval of the e-ASIA JRP Board. Support to the projects will continue for three years.

"Integrated biorefinery of sugarcane trash" to be conducted jointly by:

Japan: Takashi Watanabe, Director, Professor, Research Institute for Sustainable Humanosphere, Kyoto University

Thailand: Verawat Champreda, Principal Researcher, Research Unit Leader, Microbial Biotechnology and Biochemicals Research Unit, National Center for Genetic Engineering and Biotechnology

Indonesia: Euis Hermiati, Group Leader, Research Center for Biomaterials, Indonesian Institute of Sciences (LIPI)

Lao PDR: Keonakhone Khounvilay, Division Head, Chemical Engineering Division, Faculty of Engineering, National University of Laos

This cooperative project aims to study an integrated biorefinery model for efficient utilization of sugarcane trash for conversion to advanced biofuels and biochemical using bio- and chemical processing. Social LCA will be studied to show a social impact of the proposed model.

"Development of Algal Bioenergy Systems for Green and Sustainable ASEAN Region" to be conducted jointly by:

Japan: Armando Quitain, Professor, College of Cross-Cultural and Multidisciplinary Studies, Kumamoto University Thailand: Suttichai Assabumrungrat, Professor, Department of Chemical Engineering, Chulalongkorn University Philippines: Raymond Tan, Professor, Center for Engineering and Sustainable Development Research, De La Salle University Indonesia: Siti Zullaikah, Assistant Professor, Department of Chemical Engineering, INSTITUT TEKNOLOGI SEPULUH NOPEMBER

For a sustainable ASEAN region, this cross-cultural and multidisciplinary research collaboration aims to develop third-generation algal bioenergy systems by

non-conventional approaches utilizing green sustainable technologies such as microwave, hydrothermal and supercritical fluid aided with novel functional catalysts. The integration of such technologies into biomass processing networks will then be optimized using process systems engineering (PSE) models.

On behalf of the e-ASIA JRP, we would like to offer our sincerest congratulations to the project teams, and look forward to the significant impact their results will bring to the energy situation of the future.

*1 The e-ASIA Joint Research Program (e-ASIA JRP)

Through the acceleration of science and technology research exchange and collaboration in the East Asian region, the e-ASIA Joint Research Program (e-ASIA JRP) aims to strengthen research and development capabilities towards resolution of shared challenges across the region, including those associated with materials, alternative energy, agriculture, health research, disaster risk reduction and management, advanced interdisciplinary research towards innovation, and environment. As part of that objective, the e-ASIA JRP is intended to support collaborative research implemented among 3 or more of its member countries. Through the implementation of joint research among participating countries in agreed fields of research, it is the goal of the e-ASIA JRP to contribute to economic and human resource development, as well as the resolution of various challenges in the region.

e-ASIA JRP's homepage: http://www.the-easia.org/jrp/

- *2 The list of organizations participating in the 7th joint call for proposals in the field of "Alternative Energy":
 - Ministry of Research, Technology and Higher Education (RISTEKDIKTI), Indonesia URL: <u>https://ristekdikti.go.id/</u>
 - Japan Science and Technology Agency (JST), Japan URL: <u>http://www.jst.go.jp/EN/index.html</u>
 - Ministry of Science and Technology (MOST), Lao PDR URL: <u>http://www.most.gov.la/index.php/en</u>
 - Department of Science and Technology (DOST-PCIEERD), Philippines URL: <u>http://pcieerd.dost.gov.ph/</u>
 - Russian Foundation for Basic Research (RFBR), Russia URL: <u>http://www.rfbr.ru/rffi/eng/</u>
 - National Science and Technology Development Agency (NSTDA), Thailand URL: <u>https://www.nstda.or.th/</u>en/index.php

• Ministry of Science and Technology (MOST), Vietnam URL: https://www.most.gov.vn/en/Pages/home.aspx

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