

Opening Address

Welcome Message from Advisory Chair

On behalf of King Mongkut's University of Technology North Bangkok (KMUTNB). We are greatly honored and pleased to welcome you all to "Research, Invention, and Innovation Congress (RI2C2022)", during 4-5 August 2022 in a Virtual Platform. I would like to begin by thanking KMUTNB colleagues for providing us with such a beautiful and impressive conference which one of the important features of the KMUTNB is that we will be able to bring all researchers together in a public private partnership. R&D involvement is of utmost importance when it comes to network and information exchanges. I would like also to express my appreciation to all speakers such as Prof.Dr. Sakdirat Kaewunruen from University of Birmingham, UK, Prof.Dr.-Ing. Edmund Haberstroh from RWTH Aachen University, GERMANY, Prof.Dr. Surin Khomfoi from King Mongkut's Institute of Technology Ladkrabang, THAILAND, and the last one Dr. Sadayuki Sato, Director Engineering Division of Yaskawa Electrics (THAILAND), and also I would like to thank all of International Advisory Board for the efforts and believing in cooperation this year conference.

KMUTNB was established from the constructive cooperation between the Thai Government and the Federal Republic of Germany, it was initially known as the beginning of "Thai-German Technical School," where the objective was focused on producing highly skill technicians and engineers for Thailand. To expand the capacity, we established the Faculty of College of Industrial Technology, which is mainly focused on the practice related professions for industrials similar to the university of applied science in Germany. Our success is reflected by the German teaching style that has embedded in most of practice engineers throughout the country.

As we know, KMUTNB welcomes many visiting academics from overseas every year and arranged numerous seminars and conferences per year. This was an extensive network of educational and research institutions at our university. Such academic Conference is major step forward in promoting and enhancing cooperation in Education and I believe that your scientific contributions in this conference are valuable source for other researchers and educators to study and eventually influences the educational method or policy in the future.

We are sure that this Conference will be a memorable, highly educational, and "not-to-be-missed" event. We hope that this Conference will help you better understand and obtain the Knowledge on the Engineering Science and Innovative Technology. I hereby acknowledge and appreciate the efforts and cooperation from everyone. Thank you so much for coming and for your attention. So please enjoy the conference and have a good day. Thank you and Welcome. Development between KMUTNB and you all.

Professor Dr.-Ing.habil. Suchart Siengchin

President, King Mongkut's University of Technology North Bangkok

Advisory Chair, Ri2C2022