

CLARE

Cluster of Logistics
and Rail Engineering

Events

PASIA Web Conference on Global Vaccine Supply Chain Management

On 28 January 2021, Dr. Rawinkan Srinon was invited to be one of panelists for the Vaccine Supply Chain Management Web-Conference (Series 1). The topic was “Supply Chain Visibility and Traceability, and the implications for the COVID-19 Vaccine Distribution”. This Web-Conference was PASIA's first in the series, Global Web Conference on Vaccine Supply Chain that took place on 28-29 January 2021 with the theme “Global Vaccine Supply Chain Management: Mobilizing to a responsive and effective immunization supply chain.” It was organised by the Procurement and Supply Institute of Asia (PASIA) and the Management Association of the Philippines.

Dr. Rawinkan's talk touched on challenges related to COVID-19 vaccine distribution. Some countries might receive different vaccines which require different storage and distribution temperatures. It is imperative to appraise and prepare a country's vaccine cold chain network structures and capabilities. It is critical to ensure supply chain visibility: locations, and the amounts of vaccines. Additionally, a traceability system for a vaccine distribution network should be properly designed and implemented. Track and trace should not only be about logistics processes, but also the patient vaccination process. It is necessary to validate the effectiveness of the immunization progress of the nation. Influencing factors and challenges were discussed.

Congratulations to TAIST-Tokyo Tech's New Graduates

This year, The Thailand Advanced Institute of Science and Technology and Tokyo Institute of Technology (TAIST-Tokyo Tech), in cooperation with the NSTDA, KMITL, KMUTT, SIIT, KU, and MU, organized a Virtual Graduation Ceremony.

The ceremony took place online on 3 March 2021 from 09.00-10.00 a.m. under the Program of the Virtual Graduation Ceremony 2020. Dr. Natachai Wongchavalidkul, Dr. Somsiri Siewwuttanagul and Asst. Prof. Dr. Wareesara Weerawat, from CLARE, Mahidol University, joined this event.

Prof. Banchong Mahaisavariya, MD, President of Mahidol University gave a speech congratulating the new graduates from The Rail Transportation Certificate Program.

CLARE also congratulated all thirteen students who received our Rail Transportation Certificate. We wish you the best of luck in your future careers and life.

Newsletter



Welcome to 2021, We hope that you will enjoy this year with CLARE. We would like to share our activities from the past few months. We hope you will enjoy news about our major events in this e-newsletter.

Vol.1/2021

PASIA
GLOBAL VACCINE SUPPLY CHAIN MANAGEMENT
Mobilizing towards a responsive and effective immunization supply chain

Supply Chain Visibility and Traceability, and the implications for the COVID-19 Vaccine Distribution

Rawinkan Srinon
Mahidol University - University Lecturer, Cluster of Logistics and Rail Engineering

zoom

Zoom meeting interface showing a grid of participants. The top row includes participants: Bancho...Mahaisavariya, Pruettha Nanakorn, Ryusei Yamashita, Somyot Kaitwanidvilai, suvit.tia, and Tetsuya Mizumoto. The bottom row shows a grid of many smaller participant windows, including names like Waresara, Anata Siewwuttanagul, Deochai Wassonwate, Duat Thapaplay, and others. The interface includes controls for speaking, muting, and video.

Events

The second public participation seminar on Railway Electrification and Signalling Standards: 1st Phase (Thailand's Main line Network)

On 19 February 2021 at the Sukosol Hotel, Bangkok, Assoc. Prof. Dr. Phumin Kirawanich, Dr. Siradol Siridhara, and Asst. Prof. Dr. Thamvarit Singhavilai from CLARE, with the Department of Rail Transport, Ministry of Transport, held the second public participation seminar on Railway Electrification and Signalling Standards: 1st Phase (Thailand's Main line Network).

The objectives of the event were to present draft Electrification and Signalling Standards and to learn the needs and expectations of the railway organizations. Mr. Kittiphan Panchan, Director General of Department of Rail Transport gave the opening speech.

The Electrification Standards comprised:

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| 1. Electrification Standards | 2. Protection and Insulation Standards | 3. Earthing and Bonding Standards |
| 4. Transformer Configuration Standards | 5. SCADA Standards | 6. Power Quality Standards |

The Signalling System Standards comprised:

1. Wayside Signal Standards
2. Interlocking Standards
3. Central Train Control Standards
4. Point Machine Standards
5. Axle Counter Standards
6. Track Circuit Standards
7. Level Crossing Barrier Standards
8. Automatic Train Protection Standards
9. Frequency Standards



Meeting with Ministry of Transport and OTP

On 16 March 2021, Assoc. Prof. Dr. Jackrit Suthakorn, Dean of the Faculty of Engineering, Mahidol University and Assoc. Prof. Dr. Yodchanan Wongsawat, Vice Dean for Research and International Relations, with the CLARE team, Assoc. Prof. Dr. Phumin Kirawanich, Asst. Prof. Dr. Waessara Weerawat, Asst. Prof. Dr. Wasaporn Techapeeraparnich and Dr. Somsiri Siewwuttanagul, met with Dr. Chayathan Promsorn, Permanent Secretary for the Ministry of Transport, Dr. Pichet Kunadhamraks, Deputy Director General of the Department of Rail Transport, Ministry of Transport and Mr. Panya Chupanich, Director of the Office of Transport and Traffic Policy and Planning (OTP).

This meeting featured two topics:

1. The development of the BKK Rail application that was initiated by CLARE and the Ministry of Transport to provide information for people about railway service systems in Bangkok and its suburbs. This application collects information from BTS, MRT and ARL: the three major railway operators in Bangkok and its suburbs.
2. The Salaya project will become a Transit-Oriented Development (TOD) model with support from The Ministry of Transport. The project is focused on the land utilization and development around the future Light Red Line Salaya Railway terminal station.



Events

Railway Signalling and Operations Course

The "EGRS505 Railway Signalling and Operations" course started on 15 March 2021 at CLARE Lab, Faculty of Engineering, Mahidol University, Nakhon Pathom. It is taught by Dr.-Ing. JÖrn Pachl from TU Braunschweig and Dr. Waersara Weerawat from CLARE, Mahidol University. This course organizes training for our students and researchers via online classes. This year, the students have opportunities to become train dispatchers for both German and Thai virtual railway simulation networks. The Thai virtual railway network includes six different railway stations: Bangkok, Bang Sue Grand, Bang Sue Junction, Taling Chan, Thonburi and Salaya station. The Thai simulation network is developed by a Mahidol Team using the "Signalsoft" virtual railway platform based in Canada. The Virtual Railway Operations Laboratory has been established both at TU Braunschweig, Germany and Mahidol University, Thailand to assist students and researchers to understand more about the principles of railway operations and signalling.

This course included the topics: basic terms and definitions, safe train separation, fixed block systems, lineside signals, manual block systems, automatic block systems, interlocking routes, point locking, flank protection, overlaps, interlocking systems, control tables, Automatic Train Protection (ATP) systems, and ETCS levels.



CLARE and LogHealth visit to Samutprakarn Hospital

CLARE with LogHealth visited Samutprakarn Hospital for the Development of the Cold Chain Logistics Management System Vaccine Products Project on 2 March 2021 to interview the hospital's vaccine manager and staff. Hospitals regularly manage vaccines, especially, those for the expanded program on Immunization (EPI). EPI vaccines are typically supplied by The Government Pharmaceutical Organization (GPO). They also have to manage other vaccines including COVID-19 vaccines. Hospital staff forecast, plan, and manage stock. Additionally, they keep track of vaccines and ensure the cold chain is intact until the point of immunization. When vaccines are at the hospital, the staff count the number of vaccines and keep them in the refrigerator with a monitoring system. Vaccine distribution to the Health Promotion Hospital is carried out once a month. The Vaccine traceability system is quite important to the vaccine cold chain.



Japan Freight Railway Company visited CLARE

On 24 March 2021, Mr. Shima Hiroaki, Manager and Mr. Koji Nishimura, General Manager from Overseas Business Department, Railway Business Headquarters, Japan Freight Railway Company (JR-FREIGHT) along with Mr. Shuichi Tanimoto and Mr. Wachira Jongkittipong from NIPPON KOEI Co.,LTD. visited CLARE to discuss academic and research cooperation on Rail transportation in Thailand and neighbouring countries.

