

Name : .....

Surname : .....

Organization : .....

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Address : .....

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Phone : .....

Fax : .....

E-mail : .....

**Maximum Attendees : 60 (limited number of seats)**

**Registration Fee :**

**3,000 Baht per person (paid after 21 Feb or on-site)**

**2,500 THB for early-bird (paid by 21 Feb)**

Bank transfer to Kasikorn Bank Bang-Po Branch (บางโพ)

Account: Nisai Fuengwarodsakul (นิสัย เฟื่องเวโรจน์สกุล)

Saving Account No. 033-2-61140-2

The participants will receive the official receipt issued by KMUTNB on the seminar day.

**Seat Reservation :**

Please kindly reserve your seat in advance by phone or e-mail and then sending your registration form with your transaction slip via fax or e-mail to:

**Ms. Pattama Mookhiruntara**

**E-mail [pattama.m@tggs.kmutnb.ac.th](mailto:pattama.m@tggs.kmutnb.ac.th)**

**Fax. 02 555 2937**

**The unpaid reservation will be void after 5 days.**

**Contact for More Information:**

**Ms. Pattama Mookhiruntara**

**[pattama.m@tggs.kmutnb.ac.th](mailto:pattama.m@tggs.kmutnb.ac.th)**

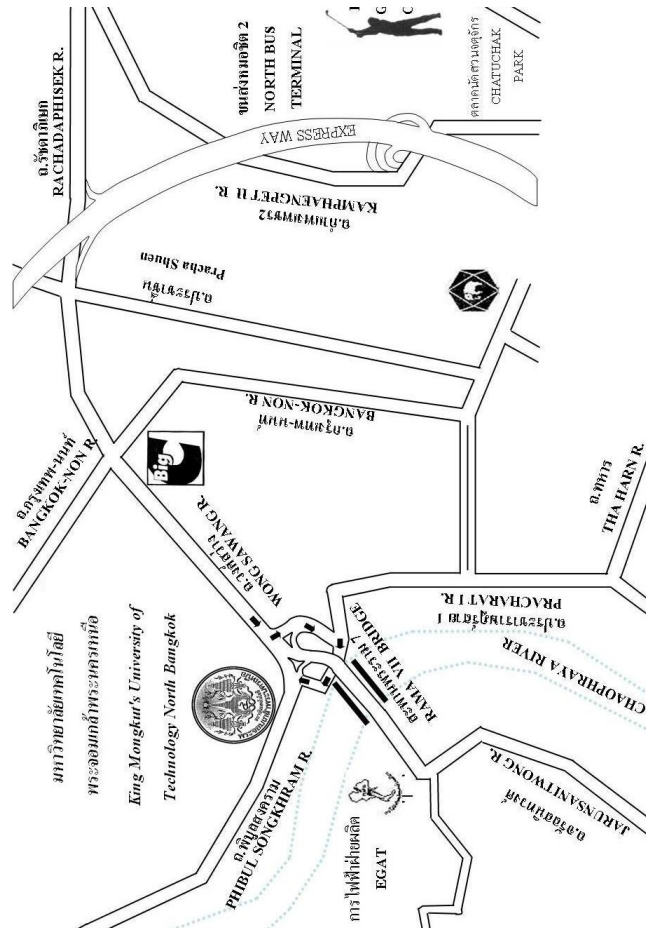
**Phone: 02 555 2926**

**Fax: 02-555-2937**

**Schedule:** 8:30-16:30, Thursday 27 Feb 2020

**Venue:** TGGs Conference room 3<sup>rd</sup> Floor  
TGGs Building  
King Mongkut's University of  
Technology North Bangkok

**Map of the Venue:**



**15<sup>th</sup> Anniversary of The Sirindhorn International Thai-German Graduate School of Engineering**

**A TGGs Seminar**

**Electromobility and Battery Technology**

**Co-sponsored by**

**IEEE Joint IAS/IES/PELS Thailand Chapter**



**Thursday 27 February 2020**  
**The Sirindhorn International Thai-German Graduate School of Engineering (TGGs)**  
**8.30-16.30, TGGs-Building**  
**King Mongkut's University of Technology North Bangkok**

# Electromobility and Battery Technology

## Topics

### Electromobility

- Vehicle concepts,
  - o HEC, PHEV, EV, FCEV
  - o Parallel hybrid vs. Series hybrid
- Passenger vehicle, commercial vehicle, busses
- CO2-free concept for heavy trucks (battery energy vs. fast charge, FCEV, synthetic fuel, overhead line)
- CO2 life footprint
- Charging
  - o Infrastructure
  - o Smart charging (V2G)
  - o Impact on battery

### Battery technology

- Fundamentals
- Trends (with Si, LTO, Li-air, Li-S)
- Lifetime and ageing
- Safety (cell level, pack level)
- Battery recycle & disposing

## Who should attend?

The content of the seminar is designed for engineers and scientists, who are interested in the present development of electromobility and battery systems. The seminar also provides overviews in different aspects for executives and policy-makers about the electromobility and its impact to the environment and the society.

## Program schedule

### 27 February 2020

08.30-09.00	Registration
09.00-10.30	Part 1
10.30-10.45	Coffee Break
10.45-12.00	Part 2
12.00-13.00	Lunch
13.00-14.15	Part 3
14.15-14.30	Coffee Break
14.30-16.30	Part 4

\* All successful participants receive a seminar certificate.

## Organizer

**The Sirindhorn International Thai-German Graduate School of Engineering (TGGS)**  
KMUTNB, Thailand

**Electrochemical Energy Conversion and Storage Systems Group, Institute for Power Electronics and Electrical Drives (ISEA)**  
RWTH Aachen University, Germany

**Co-sponsored by**  
**IEEE Joint IAS/IES/PELS Thailand Chapter**

## Speaker:

**Prof. Dr. rer. nat. Dirk-Uwe Sauer**  
**RWTH-Aachen University, Germany**

1989-1994	Study at University of Darmstadt Dipl. Phys. (physics)
1994-2003	Research scientist and senior scientist at Fraunhofer Institute for Solar Energy Systems ISE, Freiburg, Germany
2000-2003	Head of group "Storage systems"
2001-2003	Head of interdisciplinary working group on "Off-grid and rural Electrification"
2001-2003	Managing director of "Club for rural electrification"
2003	Ph.D. at University of Ulm
2003	Appointment for Junior-Professorship at RWTH Aachen University for "Electrochemical Energy Conversion and Storage Systems"
2009	Appointment for university professorship W2 at RWTH Aachen University for "Electrochemical Energy Conversion and Storage Systems"
2010	Founder of Spin-off company "P3 energy & storage GmbH" for testing and consultancy service in area of battery and power grid
2012	Appointment for university professorship W3 at RWTH Aachen University for "Electrochemical Energy Conversion and Storage Systems"
2015	Founder of Spin-off company "BatterieIngenieure GmbH" for testing, development and consultancy service for battery systems
2015	Founder of Spin-off company "e-Busplan GmbH" for testing, for planning and implementation of public transport with electric busses
Present	- Full professor at RWTH-Aachen University with about 70 research associates - Member of scientific advisory board of the German national ministry of science for the "Energiewende"