

The Sirindhorn International Thai-German Graduate School of Engineering (TGGS) King Mongkut's University of Technology in North Bangkok (KMUTNB), Bangkok

1518 Pracharaj sai 1 Road, Bangsue, Bangkok 10800, Thailand



RWTH Aachen Main Building with new "Super C"-Building

TGGS is a joint institution of RWTH Aachen University and her Thai partner King Mongkut's University of Technology in North Bangkok (KMUTNB) to transfer the RWTH Aachen Model of Graduate Industry-oriented Engineering Education, Technology Transfer and Innovation as well as Business Development to South East Asia. TGGS currently offers 8 international M.Sc. Programs and 2 Doctorate Programs based on the RWTH Aachen Model.



TGGS Building in Bangkok on KMUTNB Campus

TGGS Technical Fields and Programs

Mechanical and Materials Eng.

Mech. Eng. S&D

Automotive Eng. **Production Eng**

Chem. Process Eng. Mat. and Metall. Eng. Flectrical and Computer Eng.

Communications Eng. Electrical Power Eng.

Software Systems Eng.

Textile Eng. (planning status)

Topical Focus

Medical Eng.

Agricultural Eng.

Energy/Environn. Eng.

First TGGS Med. Eng. Research Project approved in July 2009

"TGGS is a catalyst in our common efforts to enhance mutual understanding and cooperation in scientific and technological involvement." Dr. Schumacher, German Ambassador, Bangkok

June 2010: ca. 220 students at TGGS Bangkok ca. 100 Thai, M.Sc. and Ph.D. Candidates at RWTH Aachen

Excellent TGGS M.Sc. students get a chance to go 1 year to Germany for industry internship and master thesis

TGGS Milestones

1996 Letter of Intent signed by RWTH Aachen University, Project Start

2001 TGGS started first M.Sc. courses

2004 Contractual agreement to build up TGGS with own building, staff and **R&D** laboratories

2007 Completion of TGGS building and move into new offices

2008 TGGS Autonomy in June, TGGS Council established; extension of labs and start with R&D projects

2009 Delivery of significant R&D equipment to TGGS, intake of South-East Asia (Vietnam, Malaysia, Indonesia, ...) students

2010 First German-ASEAN (GAST) Conference on Mass Transport **Technologies**



TGGS Doctorate Programs

es RWTH Co-Supervisor and 1 year research in Aachen

SAP Lecture in Software Systems Engineering

TGGS - Economic Links

TGGS has a broad network of partner companies in Thailand and Germany, e.g. Siemens, BMW, Bayer, ABB, SAP, DAIMLER, FESTO, TÜV Rheinland, etc. TGGS Co. Ltd, Bangkok, registered Oct. 2007, Bol Certificate/Privileges since February 2008

TGGS Company Ltd. is a joint venture of RWTH Aachen (50%) and KMUTNB (50%). It is the legal platform for international accounting, management and contracting, transfer of R&D lab equipment and for flexible handling of R&D projects with financial and IP issues, particularly for projects with the industry. The TGGS Contract of October 2004 is an integral part of the Shareholders Contract of TGGS Co.Ltd.. The TGGS Thai and German Directors are also directors of TGGS Co. Ltd providing the mechanisms to allow TGGS to act without the bureaucratic ties of the Thai Government System, and to implement the RWTH Aachen Model with all its entrepreneurial aspects in Thailand. TGGS Co. Ltd. is located in the TGGS Building, 3rd floor.



Lecture in Chemical Process Engineering

"TGGS combines rigorous academic training and industry experience a combination we seek and value highly in our future work force." Mr. Lothar Hermann.

former President & CEO Siemens Thailand, now CEO Siemens ASEAN Singapore

German-Thai Engineering Technology Alliance (G-TETA)

G-TETA, an alliance between TGGS/RWTH, Siemens and the Thai-German Institute (TGI), aims to increase the participation of German companies in technology and infrastructure projects and to enhance in a sustainable manner the development of local know how in manufacturing and engineering in Thailand. Possible technology areas in the focus of this alliance are transportation, drives and automotive; renewable energies (wind turbines, solar, new fuels); wireless communications, ICT and medical technology. A first project proposal, handed out to the Royal Thai government in 2009, is the participation in the governmental infrastructure/mass transit plan for Bangkok, where Siemens has already a proven record and long experience of building and maintaining mass transit systems. In conjunction with this project, TGGS plans to build up a 4-semester M.Sc. Course of "Mass Transit Engineering" based on the practice- and research-oriented M.Sc. Course "Traffic Engineering" already implemented at RWTH Aachen.

TGGS Mainstreams of Activities

- Industry-oriented engineering education following the RWTH Aachen Model
- Technology Transfer/Innovation
- **Business Development**

Networking in South East Asia / GAST (German-ASEAN Science and Technology Network)

www.gast.rwth-aachen.de TGGS develops joint activities with other German institutions in South East Asia like the German Institute of Science and Technology (GIST) in Singapore, the Swiss-German University (SGU) in Indonesia and the Vietnamese German University (VGU) in Vietnam to enhance the scientific networking in this region. Since November 2009, the 3 institutions TGGS, GIST and SGU are organized in the German-ASEAN Science and Technology Network (GAST) in order to establish the German TU9 Model of Education and Research in the Asia-Pacific Region. A common German-ASEAN Conference on Mass Transport Technologies (focus on railway technology) was arranged for Bangkok, Jakarta and Singapore in May 2010, supported by the German Federal Ministry of Education and Research (BMBF).

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