

Water Doctoral Network of Engineering and Management

Mạng lưới Đào tạo Tiến sỹ về Kỹ thuật và Quản lý ngành Nước

Short Communication

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The lack of highly qualified labour force in the Vietnamese water and environmental sector as well as the problems in the mutual admission of doctoral students between German and Vietnamese Universities have motivated the Institute of Environmental Engineering and Management (IEEM) at the University of Witten/Herdecke to initiate the Water Doctoral Network (WDN). This network shall not be limited to tuition and conferral of doctorates in water sciences, engineering and economics, but serve as nursery for new, innovative research potentials and projects within the international academic co-operation. Applied learning and research, rather than basic research and pure science, are the main focuses of this project.

Sự thiếu hụt lực lượng lao động chất lượng cao trong lĩnh vực nước và môi trường ở Việt Nam cũng như các vấn đề trong việc tiếp nhận nghiên cứu sinh tiến sỹ giữa các trường Đại học của Đức và Việt Nam đã tạo động lực để Viện Kỹ thuật và Quản lý Môi trường (IEEM) của trường Đại học Witten/Herdecke đề xuất mạng lưới đào tạo Tiến sỹ nghiên cứu về ngành nước (WDN). Mạng lưới này không chỉ giới hạn ở việc giảng dạy và cấp bằng tiến sỹ trong lĩnh vực khoa học, kinh tế và kỹ thuật về ngành nước, mà nó như là vườn ươm đối với các dự án và tiềm năng nghiên cứu sáng tạo mới trong hợp tác hàn lâm quốc tế. Học tập và nghiên cứu ứng dụng thực tế là các trọng tâm chính của dự án này chứ không đơn thuần là nghiên cứu cơ bản và khoa học thuần túy.

Keywords: water, doctoral programme, engineering, management

1. Introduction

Due to the advancing industrialization, there is a rapidly increasing demand on well-qualified labour force in Vietnam. This applies particularly for the water and environmental sector and especially for personal trained on the highest academic level, the doctoral studies. There is already some exchange of doctoral students and teaching staff between Germany and Vietnam but individually organized with high personal effort and still depending on individual decisions. Therefore, this project, funded by the International Bureau of the German Federal Ministry of Education and Research (IB BMBF), intends to establish a legalized German-Vietnamese university network for doctoral graduation in water engineering and management, the Water Doctoral Network – WDN (www.water-doctoral-network.org).

2. About the project

This network shall not be limited to tuition and conferral of doctorates in water sciences, engineering and economics, but serve as nursery for new, innovative research potentials and projects within the international academic co-operation. Mutual knowledge exchange between Germany and Vietnam shall encourage international capabilities, while trans-disciplinary subjects between management and engineering will convey interdisciplinary expertise in order to cover the whole sector of water and sanitation. The involvement of practitioners from outside the universities shall secure a practical orientation.

The strengthened fundament for effective academic and business co-operation shall support the development of applied technological and managerial innovations with the potential to promote German export industries as well as the development of local businesses in Vietnam.

The WDN-Project may well cover related fields, like regenerative energy, public health, utility management for supply and disposal, environmental infrastructure and services, further more space planning and land use.

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The first four network partners who already signed the co-operation agreement are two from Vietnam (HUS – Hanoi University of Science, a member of the VNU – Vietnamese National University, and NEU – National Economics University, Hanoi) and two from Germany (TUD – Technische Universität Dresden and IEEM – Institute of Environmental Engineering and Management at the University of Witten/Herdecke). TUD and HUS cover the fields of sciences and engineering while IEEM and NEU are responsible for economics and finance. This is the mini-



Figure 1: Prof. Rudolph (IEEM) and Prof. Cam (HUS) signing the co-operation agreement in March 2011

3. Further activities

The network partners will now seek for acknowledgement of the agreement with the responsible ministries and for clarification of internal procedures and study regulations in order to embed them into the common organizational structure of the WDN. Main objectives for the next year are the mutual acknowledgement of admission requirements and degrees as well as the creation of an institutional framework for the exchange of professors, tutors

and doctoral students within all universities participating the WDN.

Nevertheless, there are several more universities invited and interested in joining the agreement, like the partners of the AKIZ research project (www.akiz.de); first of all, the HUCE from Vietnam, being involved in the elaboration of the WDN from the very beginning. So, the intention of WDN is to expand the agreement and partners network.



Figure 2: Prof. Nam (NEU), Prof. Rudolph (IEEM) and Prof. Cuong (NEU) after signing the co-operation agreement in March 2011

and doctoral students within all universities participating the WDN.

4. Acknowledgement

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