

# FINAL REPORT

## PROJECT

Title:	Enhancement of education and research in energy and environmental engineering
Code:	80p5
Program:	AKTION Czech Republic - Austria
Approval:	DZS/20140/2017
Implementation:	1.1.2018 – 31.12.2018
Budget:	3924-Eur and 94100-Kc

## COORDINATING INSTITUTION

Country:	Czech Republic
Name of sending institution:	University of Chemistry and Technology Prague (VSCHT Praha)
Faculty/Department:	Institute of Gaseous, solid fuels and air protection (UPKOO)

## PARTICIPATING INSTITUTION

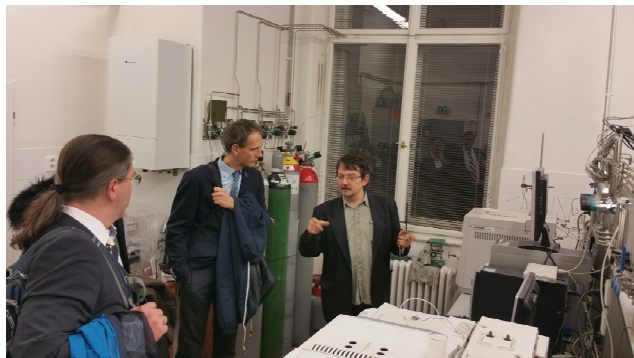
Country:	Austria
Name of receiving institution:	University of Natural Resources and Life Sciences, Vienna (BOKU Wien)
Faculty/Department:	Institute for Chemical and Energy Engineering (IVET)

### 1. Information:

Scheduled in the calendar year 2018, VSCHT Praha together with BOKU Wien had successfully exchanged knowledge, views and concerns about common activities and key competences of the partner university. Both participating institutions carried out research work, developed course work in the fields of energy and environmental engineering. This project enhanced the mutual relation between VSCHT Praha and BOKU Wien.



### 2. Goals: achieved



Research network was established during expert meetings and guest lectures between Czech and Austrian participants across all scientific levels. It connected the scientists, researcher, academics and postgraduates to share their common viewpoints and interests concerning energy and environmental issues. The cooperation had obviously been strengthened through specific activities to obtain sustainable platforms at both institutions

### 3. Scientific objectives: achieved



The scientists from both partner institutions had opportunities to exchange their excellent scientific values. Particularly, expert meetings and research short stays created excellent platforms for researchers to deliver their ideas and update their current progress in specific fields. In addition, research stays with joint experiments were wonderful chances to exchange practical experience in thermochemical biomass conversion technologies.

### 4. Pedagogic objectives: achieved

Academics from both institutions distributed visiting lectures on existing subjects accredited at the partner university. The integrated teaching modules were beyond the normal curricula of the partner; provide a comprehensive understanding in related topics. Therefore, in short-term, the exchange lectures enhanced the quality of current environmental engineering lectures in BOKU Wien, and energy processing related issues in VSCHT Praha.



Students in postgraduate programs in energy & environmental engineering fully participated in series of visiting lectures in VSCHT Praha and BOKU campuses during the academic semesters. Integrated learning modules provided students fundamental knowledge and practical experience in specific issues, technological and management measures. They were ideal chances for students to meet higher European studying standard.

### 5. Language:

Participants from both institution were eligible for the proficiency level of academic English with constructive communication. All materials were provided in standard academic English versions. Textbooks, handbooks, workbooks were suggested to participants. Students receive PowerPoint presentations and handouts for their self-studying and exams. Prepared examples & exercise, exam sets were perfectly matched to the level of knowledge.



## 6. Facilities & logistic arrangement:

Receiving institutions were responsible for logistic arrangements (experimental setup, measurement devices, analytical facility, large auditorium registered, modern lecture hall, multimedia facilities, soft drinks during the lectures and coffee breaks) of every visit and stay.



Both university campuses have a cafeterias, not far from the meeting rooms, laboratories, auditoriums, where were possible to have meals, or participants might sometimes had comfortable lunch breaks in the nearby restaurants. The project coordinators always kindly accompanied with hotel pick-up and lunch breaks. Other employees, staff members and local experts were always willing to help with any technical or logistic related issues.

## 7. Financial support and costs:

All the costs were s fully funded by the program AKTION Czech Republic - Austria. These total supported amount successfully covered all estimated costs (cost of stay for researchers and academics, international travel, lecturing costs, local transport in Prague).

There was a minor change in the local transport in Vienna (the actual Wiener Linien online rate changed to 8-Eur/24-h ticket since 2018, instead of 7.6-Eur/24-h ticket estimated in 2017. Therefore participants flexibly used one-day tickets or 24-h tickets for the convenience.

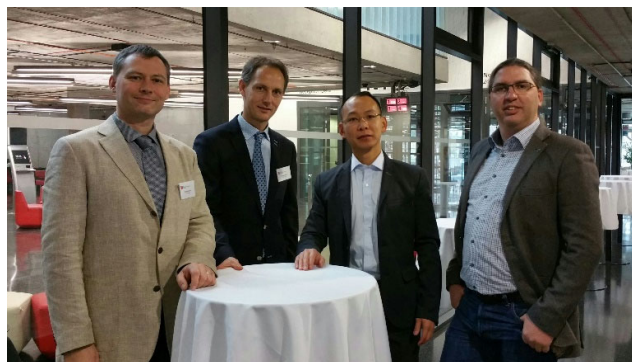
The approved amounts in -Eur had been successfully providing in regional offices OeAD-GmbH in Vienna and approved amounts in -Kc in the form of a special grant from the Ministry of Education, Youth and Sports were managed efficiently by the Economic department of VSCHT Praha, complying the standard procedures.

## 8. Rolling-up activities:

Further rolling-up activities will continue in the calendar year 2019. Hence, participants from Czech Republic and Austria would have more opportunities to exchange their excellence values. Extensive lectures with updated case studies from Czech Republic, Austria, and elsewhere around central Europe would surely provide students with an in-depth understanding of the complex links between energetic utilization and environmental protection.



Therefore, two partners would propose a follow-up AKTION program's project that serves for long-term cooperation (to be continued and developed in 2019) with detailed goals:



- + Strengthen of capacities in teaching at all graduation levels with integrated modules
- + Develop the network among energy and environmental engineering research groups;
- + Publishing of scientific outputs from completed cooperation projects AKTION 2018;
- + Joint bilateral scientific events, symposia, expert meetings and workshops on specific issues;
- + Research short stays for the acquisition of thermo-chemical biomass conversion technologies;
- + Continue exchanging academics to carry out educational activities beyond the current curricula.

#### 9. Acknowledgments:

An acknowledgement should be given to the AKTION Czech Republic - Austria, cooperation in science and education for their excellent contributions. The beneficial institutions would express their great appreciations to partners for the excellent coordination.

Date: 28.1.2019

A handwritten signature in black ink, appearing to read 'Duong Van Minh', written over a horizontal line.

Signature: \_\_\_\_\_

(Project coordinator in the Czech Republic)

Duong VAN MINH

-----

University of Chemistry and Technology Prague (VSCHT Praha)

Address: A273, Technicka 5, 166 28 Praha 6 Dejvice

Tel: +420 220 444 229 / Fax: +420 220 445 010

Mobil: +420 607 293 243

Email: [Duong.Van.Minh@vscht.cz](mailto:Duong.Van.Minh@vscht.cz)

Web: [www.vscht.cz](http://www.vscht.cz)