Clustering with the networks – the EIT RM Hub Centrum Kosice at a glance

Castilla y León – EU Cluster Matchmaking Event

Castilla y León, 8 - 10 April 2019

Igor Ďuriška
Project department FBERG; Institute of Geosciences

Faculty of Mining, Ecology, Process Control and Geotechnologies
Technical University of Kosice, 2019
• TUKE

• FBERG (Faculty of Mining, Ecology, Process Control and Geotechnologies)

• EIT Regional HUB Center Košice
Faculty of Mining, Ecology, Process Control and Geotechnologies (FBERG),
Technical University of Kosice – 9 faculties:

1. Mining, Ecology, Process Control and Geotechnologies - FBERG (1952)
2. Materials, Metallurgy and Recycling (1952)
3. Mechanical Engineering (1952)
4. Electrical Engineering and Informatics (1969)
5. Civil Engineering (1977)

TUKE has (in 2018):

• 9 013 students, approximately 10 % foreign
• 808 pedagogical staff (professors, assoc. prof., assistant prof.
• 750 other employees (administration, technicians)
Faculty of Mining, Ecology, Process Control and Geotechnologies (FBERG),
Technical University of Kosice

- Refers to heritage of the Mining Academy in Banská Štiavnica, promoted to academic level in 1762 by the Austro-Hungarian monarch Maria Theresa.
- Since 2015 FBERG (TUKE) participates in the EIT RawMaterials as an Associated Partner.
- Since 2018 in the EIT RawMaterials as a Core Partner
- Strategic partner of the Ministry of Environment and Ministry of Economy of the SR for defining new Slovak RM Policy.
Faculty of Mining, Ecology, Process Control and Geotechnologies (FBERG), Technical University of Kosice

- Has a long-time cooperation with numerous mining and RM processing companies, regional and state authorities dealing with RM problematics.

- In Slovakia FBERG is 1 of 2 partners of EIT (the other is STU in BA)

- a member of European Innovation Partnership, General Assembly of EIT RM, ECLC Partners Steering Committee and ESEE Education Committee
Faculty of Mining, Ecology, Process Control and Geotechnologies (FBERG), Technical University of Kosice

Institute of Geodesy, Cartography and Geographical Information Systems
Institute of Geosciences
Institute of Logistics
Institute of Control and Informatization of Production Processes
Institute of Earth Resources
Establishment EIT RM Regional Center Košice in January 2018

Initiated and operated by Technical University of Košice, Faculty BERG

Based in Košice/Slovakia

Addressing in first instance:
- the local ecosystem of Slovakia and in second instance
- neighbouring (mainly Carpathian) regions of Czech Republic, Hungary, Romania, Ukraine
Geographical position
• **RCK establishment:** January 2018, managed by Faculty BERG, TUKE

• **Main objective:** to mobilize all stakeholders of the Knowledge Triangle, to support local ecosystem and to increase the innovation potential of our region

• **Target group:** all the value chain of RM, not only the mining sector
2018 activities - Networking

- Slovak Chamber of Commerce and Industry meeting (03/2018),
- Kosice Self-Governing Region meeting (04/2018),
- Matchmaking and Networking event in High Tatras (05/2018) – successful event highly positive rated by our Innovation Hub General Manager CLC East Krzysztof Kubacki
- 84% satisfaction of attendees, 77% found new contacts
2018 activities - Networking

• Meeting with STU (09/2018),

• HUB and Climate KIC meeting – possibilities of Cross-KIC cooperation (10/2018),

• Brokerage event Berlin (10/2018),

• RawMaterials Week Brussels (11/2018),

• Bilateral meeting in (11/2018) with Western Slovakia Stakeholders (Industry, Academia, Research) Bratislava,
2018 activities - Networking

• Slovak Chamber of Commerce and Industry - InnoService event (11/2018)
• Meeting in Ostrava (ČR) academia – VŠB TU Ostrava, FBERG TUKE, local authorities - Ministry of Industry and Trade Czech Republic and industrial stakeholders (11/2018),
• Meeting with Climate-KIC representatives (joint event in December in Košice),
• Sharing the events and practical information from EIT RM to local stakeholders (throughout 2018)
Activities 2018 - Other

• Survey of the Regions needs in the Education field (for ESEE Education Committee)

• Online Marketing and external communication to relevant stakeholders
  • Facebook: https://www.facebook.com/hubkosice/
  • LinkedIn: https://www.linkedin.com/company/hubkosice/
  • Webpage: http://hub.fberg.tuke.sk
  • Promo video: https://www.youtube.com/watch?v=5j8FtuL_e8Y

• World Café sessions – Travel lectures on TUKE – with focus on RM awareness increasing (3 times so far)
• Elementary and secondary school workshops and lectures
World Café sessions – Travel lectures on TUKE – with focus on RM awareness

- Lecturers from our faculty are speaking about their travel experiences – focus on RM
- Iceland
- Latin America
- Madeira
• in the hall of Geoscience exposure of FBERG
• spreading awareness of RM importance
Successes 2018

• Ekolive startup success (top 10) in EIT Jumpstarter Competition
• company is finding solutions for low-cost bioremediation and heavymetals removal from tailing piles
Successes 2018

- establishing project and education cooperation with industry partner euroTalc s.r.o.
- upscaling project proposal with them as a key partner
- one of the richest global deposits of talc located Gemerska Poloma (Košice selfgoverning region)
- estimated minimum deposit reserves of 85 million t. of high purity talc
- Cooperation concluded from the meeting with Western Slovakia stakeholders

Mr. Rettka from the company **UNICOM-POWER** is going to submit the project proposal with acronym **PuriGram** under the leadership of UNI Leoben in cooperation with Technical University of Kosice (proposal number 19031). The project is aimed at purification of the Graphite using the membrane system with a purity level higher than 95%.

Also, STU (Mr. Cuninka) is submitted the RIS KAVA project aimed at the treatment of the water using zeolites. They have included there Zeocem company. RCK has provided them guidance on the project consortium building and also help with registration of the proposal.

- Cooperation concluded from the meeting with **KOVOZBER** company

Joint project proposal within Slovak grant scheme from Slovak Research and Development Agency (APVV). The project is concerning on recovery of the preparation process for the treatment of used catalysts. KOVOZBER was also attending the Matchmaking and Networking event in the High Tatras where they agreed with the U.S. Steel Kosice on a sampling.

- Cooperation concluded from the meeting with **EuroTalc** company

Joint project proposal with acronym **MineTalc** is going to be submitted in cooperation with the Technical University of Kosice. The project is aimed at backfill mining optimization for low-strength deposits (proposal number 19007). Thanks to bilateral meetings we have also opened a question of cooperation with EuroTalc in educational activities, which is currently in the process.

- Cooperation concluded from the meeting with **Koral** company

2018 outputs
Networking 2019

- 04/2019 - Mladá Boleslav meeting with ŠKODA AUTO University
- established by automobile manufacturer Škoda Auto
- helping them establish contact with EIT RM for the future project corporations
Plans for 2019

- Continuation of the **networking activities/Bilateral meetings** not only in **SK** (Ministry of Economy, Kosice-Self Governing Region, EuroTalc, Kovozber, other relevant SMEs or policymakers) and **CZ** (Ministry of Industry and Trade, Czech Geological Survey, Ostrava VŠB)

- Year 2020 extending of networking activities to other RIS countries (**Hungary, Ukraine and gradually to Romania and Bulgaria**)

- 05/2019 Joint session of **RC Adria, RC Košice, RC Greece** under EIT RM. Date: May in Berlin (besides Raw Materials Summit)

- Further contribution to the **KIC RM ESEE Education Strategy**

- **Summer school of Innovative Technologies in the field of RM** (for PhD. students from RIS countries) in Banská Štiavnica

- Continuation of **World Café discussions on Raw Materials** in the hall of Geoscience exposure

- **Transfer of applied science to business** – two weeks training in High Tatras for 12 students in RM field (RIS countries)

- Business creation - Business Idea Accelerator (for RIS startups)
• Promo video: https://www.youtube.com/watch?v=5j8FtuL_e8Y