RawMaterials Academy

EIT RawMaterials strives to educate the raw materials game-changers of the future, ensuring Europe cultivates a society of learners contributing to a strong and resilient EU raw materials base. Four domains of learning and education are addressed by EIT RawMaterials, namely

- PhD Education
- Master Education
- Lifelong Learning
- Wider Society Learning

The RawMaterials Academy is the overarching brand and coordinating body of all the learning & education activities of the EIT RawMaterials.

Most EIT RawMaterials learning & education activities are carried out through innovative education projects launched via open Calls for Proposals with funded projects managed and implemented by the EIT RawMaterials partners. Additionally the RawMaterials Academy supports partner universities in the EIT-Labelling of Master and PhD programmes as well as administers a number of centrally operated, strategic projects.

Activities across the entire ecosystem of learners – PhD students, Master students, industrial partners, professionals within the raw materials sector, policymakers, school pupils, Bachelor students and civil society – foster new pedagogical approaches to learning and teaching through the application of the Knowledge Triangle, linking critical knowledge and stakeholders in academia, industry and research. Resulting from this model is a de-siloing of raw materials disciplines and knowledge whereby learners obtain a holistic overview of the raw materials value chain complemented by robust innovation & entrepreneurial education.

EIT RawMaterials, initiated by the EIT European Institute of Innovation and Technology and funded by the European Commission, is the largest and strongest consortium in the raw materials sector worldwide. Its vision is a European Union where raw materials are a major strength. It unites over 100 partners – academic and research institutions as well as businesses – from more than 20 EU countries.

EIT RawMaterials – bridging **business, research** and **education**

Contact & Registration

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The EIT RawMaterials Regional Center Freiberg is a cooperation office of TU Bergakademie Freiberg, Helmholtz Institute Freiberg for Resource Technology and EIT.

TECHNISCHE UNIVERSITÄT BERGAKADEMIE FREIBERG
The University of Resources. Since 1765.

Helmholtz Institute Freiberg for Resource Technology
HELMHOLTZ ZENTRUM DRESDEN ROSSENDORF

eit RawMaterials
Connecting matters

Comminution of Minerals

26.9. - 27.9.2017 Freiberg, Germany

eit RawMaterials ACADEMY

EIT RawMaterials is supported by the EIT, a body of the European Union

Comminution of Minerals

Efficient comminution processes require a careful process design and presume a deep understanding of the grinding fundamentals as well as the appropriate machinery. This machinery includes comminution devices from crushing to fine grinding as well as different kinds of classifiers like sieves, hydro cyclones, static and dynamic air classifiers.

In the seminar „Comminution of Minerals" you will learn about the principles of comminution, how to apply these for the selection of crushing and grinding equipment, and how to optimize existing grinding circuits in order to increase product yield along with low specific production costs.

Course description

The course has the following objectives and outcomes:

- material characterization in crushing and grinding circuits
- understanding and influencing the fracture behavior in comminution processes
- basic knowledge of machinery selection: application, design, working principles, and basic engineering of the different types of crushers and mills in mineral processing
- process related know how: design, evaluation, and optimization of crushing and grinding circuits

Format

The course is combining both classroom lectures as well as lab visits.

Course Dates

26th – 27th September 2017

Course Contents

Module 1: **Characterization of disperse systems**
Module 2: **Breakage fundamentals**
Module 3: **Equipment**
Module 4: **Crushing and grinding circuits**

Lecturers:

- **Prof. Dr.-Ing. Urs A. Peuker** – Director of the Institute of Mechanical Process Engineering and Mineral Processing, TU Bergakademie Freiberg
- **Dr.-Ing. Thomas Mütze** – Institute of Mechanical Process Engineering and Mineral Processing, TU Bergakademie Freiberg
- **Dr.-Ing. Thomas Leißner** – Institute of Mechanical Process Engineering and Mineral Processing, TU Bergakademie Freiberg
- **Alphonce Wendelin Wikedzi** - M.Sc., DAAD fellow
- **Dr.-Ing. Guido Kache** - Process Engineer, ThyssenKrupp Industrial Solutions (Research and Development)

Location

TU Bergakademie Freiberg
Krügerhaus
Schlossplatz 3
09599 Freiberg
Germany

Target Audience

- engineers, technicians and scientific users in the field of mineral processing, process, mechanical, environmental and chemical engineering or metallurgy
- production, sales, maintenance, laboratory, R&D and related fields

Course fee

€ 980 per person, plus statutory VAT
EIT RawMaterials members: **€ 735** per person, plus statutory VAT