





Montanuniversität Leoben

Location & History



-  **1840** founded as „Styrian Corporate School of Mining & Metallurgy“
-  **1849** promotion to „Imperial and Royal School of Mining & Metallurgy“
-  **1904** doctoral degree programmes introduced, renamed as „University of Mining and Metallurgy“
-  Since **1955**: new degree programmes added
-  **2003** bachelor's/ master's system introduced

City of Leoben



Fields of Research at the Montanuniversität

Mineral Resources Production and Processing

Metallurgy

High-Performance Materials

Process and Product Engineering

Environmental Technology and Recycling

Energy Technology and Resources Management

Safety Engineering and Risk Management

Mathematics, Natural Sciences and Engineering, Business and Economics

Value-added Chain

Mineral Resources Materials Component/Plant Recycling

Strategic Fields of the Montanuniversität

Mineral Resources Production and Processing

Fields of Research

- geology, geophysics, geochemistry, mineralogy
- mining and tunnelling
- oil and gas
- mineral processing
- building materials and ceramics



Study Programmes

- Mineral Resources Engineering (Mining-Tunnelling-Mineral Processing-Building Materials& Ceramics)
- Petroleum Engineering
- Applied Geosciences

Strategic Fields of the Montanuniversität

Metallurgy

Fields of Research

- steel technology
- non-ferrous metallurgy
- forming technology
- casting technology
- recycling



Study Programmes

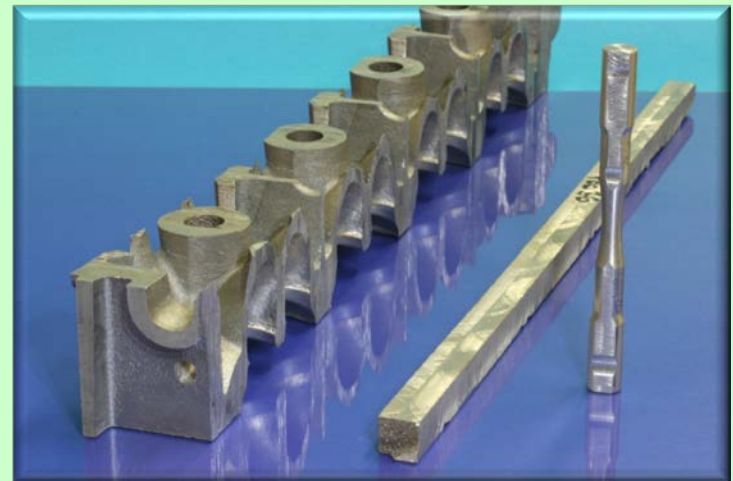
- Metallurgy (Ferrous and Non Ferrous Metallurgy)

Strategic Fields of the Montanuniversität

High-Performance Materials

Fields of Research

- metals
- ceramics
- polymers
- functional materials
- surface technology, corrosion
- materials for electronics



Study Programmes

- Materials Science
- Polymer Engineering and Science

Strategic Fields of the Montanuniversität

Process and Product Engineering

Fields of Research

- mechanical engineering
- lightweight design
- fatigue strength
- tribology
- automation
- process engineering
- logistics



Study Programmes

- Mechanical Engineering
- Industrial Logistics

Strategic Fields of the Montanuniversität

Environmental Technology and Recycling

Fields of Research

- waste processing technology
- waste management
- waste treatment technologies and landfilling
- recycling



Study Programmes

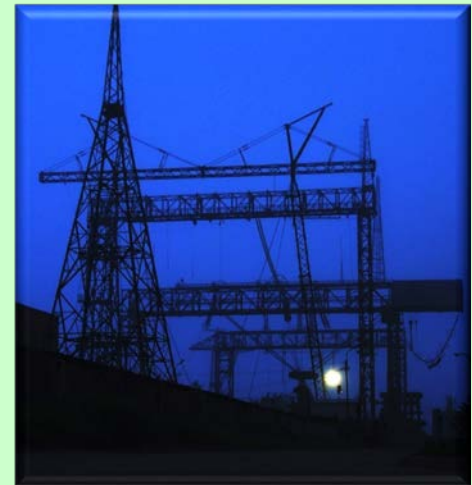
- Industrial Environmental Protection, Waste Disposal Technology and Recycling

Strategic Fields of the Montanuniversität

Energy Technology and Resources Management

Fields of Research

- energy systems
- geothermal energy
- energy process technology
- energy conversion and storage
- Carbon Capture and Utilisation (CCU)
- renewable energies
- security of supply



Study Programmes

- Industrial Energy Technology

Strategic Fields of the Montanuniversität

Safety Engineering and Risk Management

Fields of Research

- safety of industrial facilities and processes
- test centre for subsurface facilities, traffic tunnels, underground rail systems, subsurface power plant facilities as well as mining operations (Underground Research Center)



Strategic Fields of the Montanuniversität

Mathematics, Natural Sciences and Engineering, Business and Economics

Fields of Research

- virtual reality
- real time embedded inverse problems
- information technology
- symmetries in nature and their modelling in mathematical objects
- agile manufacturing

Structure of Studies

3 semesters

Master Programme
Specialization, Master Thesis
Degree: Dipl.-Ing. (MSc)

7 semesters

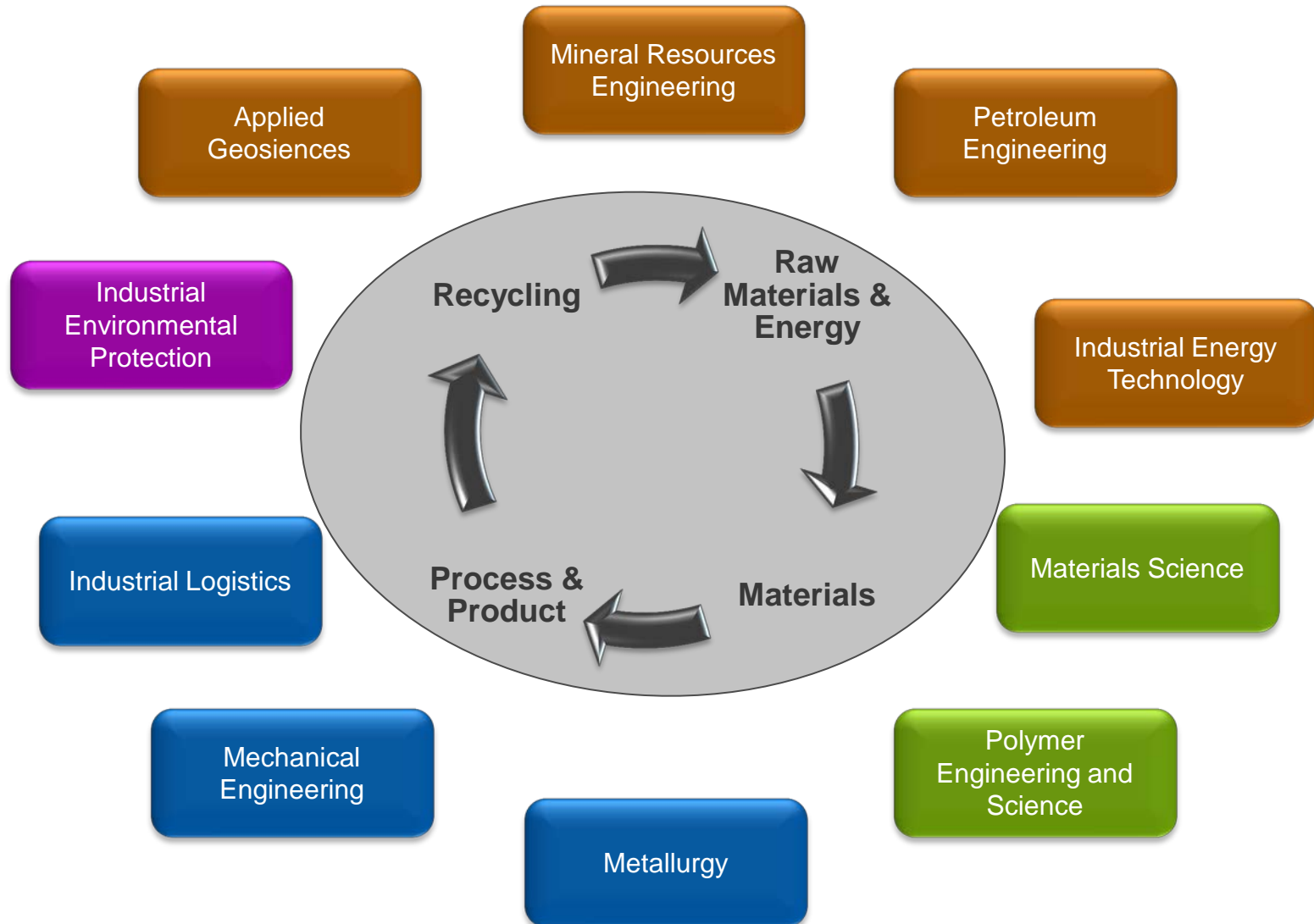
Bachelor Programme

Introduction into subjects
Degree: BSc.

First Common Year
(Maths, Physics, Chemistry, EDV)

6-month internship

Study Programmes of the Montanuniversität



Further degree options

6 semesters

PhD Programme

1 full semester of lectures

Scientific work,
PhD thesis

Degree: Dr.mont.(PhD)

Advanced training, postgraduate courses and counselling

Advanced Level

Weiterbildung an der Montanuniversität Leoben

MBA in Generic
Management

Product Development

Industrial Liason
Department

Quality Assurance in
Laboratory

International Mining
Engineer

Technology Academy
(short courses)

Recycling

Quality Management

Business Incubator

Master of Engineering
Resource Mgt. and Recycling

Sustainability
Management

Intellectual Property &
Innovation and Technology
Counselling

NATM Master of
Engineering & certificate

Blasting Engineering

Montanuniversitaet Leoben – organisation and staff

10	departments and 6 institutes
46	professors
701	academic staff
374	non-academic staff



Studying at the Montanuniversität

- 3512 students, including 344 doctoral students (as of November 2012)
- 24 % female students
- 545 first-year students (2012/2013)
- 13 % international students
- 291 MSc graduates (2011/12)
- 58 PhD graduates (2011/12)



International Students

- Students from 75 nations:

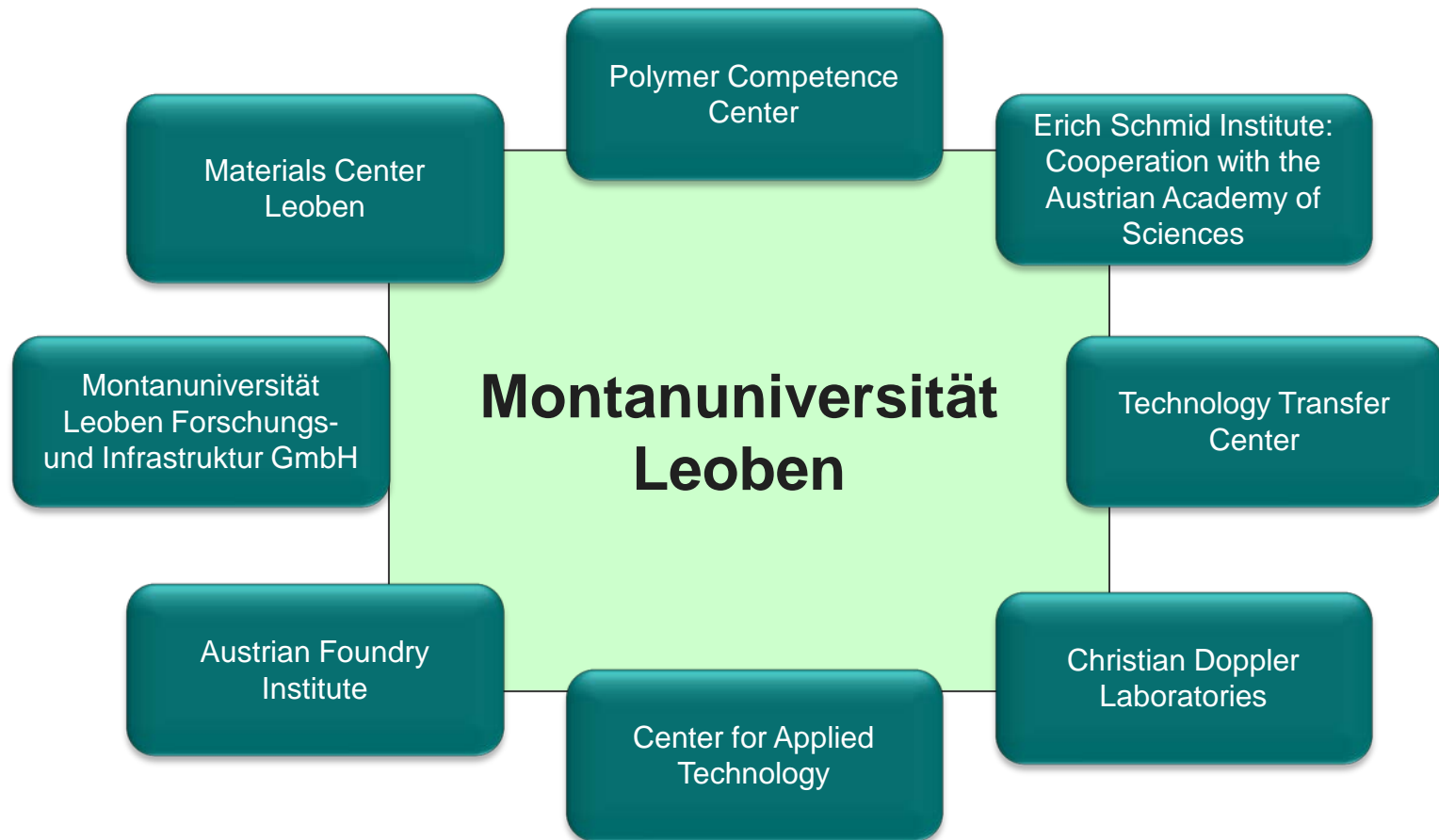
Egypt ■ Albania ■ Algeria ■ Angola ■ Azerbaijan ■ Australia ■ Belarus ■ Belgium ■ Bosnia and Herzegovina ■ Brasil ■ Bulgaria ■ Chile ■ China ■ Costa Rica ■ Cote d'Ivoire ■ Denmark ■ Germany ■ Ecuador ■ Finland ■ France ■ Ghana ■ Greece ■ India ■ Indonesia ■ Iraq ■ Iran ■ Irland ■ Italy ■ Japan ■ yemen ■ Jordan ■ Cameroon ■ Canada ■ Kazakhstan ■ Kenia ■ Columbia ■ Korea ■ Kosovo ■ Croatia ■ Latvia ■ Libya ■ Malaysia ■ Morocco ■ Macedonia ■ Mexico ■ Mongolia ■ Montenegro ■ Nepal ■ Nigeria ■ Pakistan ■ Peru ■ the Philippines ■ Poland ■ Portugal ■ Romania ■ Russia ■ Sambia ■ Sweden ■ Switzerland ■ Serbia ■ Slovakia ■ Slovenia ■ Spain ■ South Africa ■ Syria ■ Thailand ■ Czech Republic ■ Tunisia ■ Turkey ■ Ukraine ■ Hungary ■ Uzbekistan ■ United States of America ■ United Kingdom

- Number of students EU: 187

- Number of students Non-EU: 250



Public Private Partnership



Public Private Partnership: Comet-Centers and Christian Doppler Laboratories

CD-Lab
Functional and Polymer
Based Ink-Jet Inks

CD-Lab
Optimization and
Biomass Utilization in
Heavy Metal Recycling

K2-Centre
„Integrated Research in
Materials, Processing
and Product Engineering“

CD-Lab
Application Oriented
Coating Development

CD-Lab
Early Stages of
Precipitation

K1-Centre
„Advanced Metallurgical
and Environmental
Process Development“

CD-Lab
Advanced Process
Simulation of
Solidification and Melting

**Cooperation with CD-
Labs not based at the
Montanuniversität
Leoben:**

K1-Centre
Polymer Competence
Center Leoben
(PCCL)

CD-Lab
Localized Corrosion

CD-Lab
Surface Chemical and
Physical Fundamentals
of Paper Strength

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