
VICE CHANCELLOR'S TALKING NOTES ON THE OCCASION OF THE SIGNING OF A MEMORANDUM OF UNDERSTANDING BETWEEN BIUST AND MONTANUNIVERSITAT LEOBEN (UNIVERSITY OF LEOBEN)

1. The Vice Rector of Montanuniversitat and your delegation, the Executive Management Team of BIUST, Deans, Directors and Heads of Departments here present; Ladies and Gentlemen, good morning.

2. Allow me to start by extending a warm welcome to our guests who come all the way from Austria. We are happy to have you here at our University and deeply honored to host you again within a space of four months. We hosted Mr. Gustav Hanke and another delegation from Montan University here in October 2022 where upon we agreed to meet again in early 2023. As such, this visit signifies the growing bond of friendship between our two institutions, which I strongly believe that it will facilitate our efforts to expand and realize our internationalization agendas through meaningful collaborations and partnerships.

3. To our visitors, I wish to state that our university in comparison to yours, it is still in its infancy. Just to give you a brief background, our academic functions were inaugurated in 2012 with two (2) Colleges, namely, the College of Engineering and Technology (CET), and the College of Science (CoS). The two Colleges were later renamed as Faculties so CET became known as the Faculty of Engineering and Technology (FET) and CoS became the Faculty of Sciences.

4. At inception FET had three (3) Departments namely the Department of Mining, Energy and Geological Engineering (MEGE) with 3 programmes (Mining Engineering, Energy Engineering and Geological Engineering); Department of Telecommunications Engineering (TELE) and Department of

Information Technology (IT). MEGE was later split into 2 departments: Mining and Geological Engineering and Mechanical & Energy Engineering.

5. The Department of Mining and Geological Engineering runs two 5-year Bachelor of Engineering programmes in Mining Engineering and Geological Engineering. The programmes are aimed at providing a solid foundation in concepts of Mining and Geological Engineering disciplines and related courses to meet the requirements of the industry in Botswana in particular and the world in general. The main objectives are to train competent first-degree graduates; prepare first-degree graduates to take up jobs in the mining and allied industries and prepare candidates for postgraduate degrees in mining, geological and related programmes.

6. Complimentary to the Department the University established the Mining Center in August 2020. This was a strategic move to respond to identified gaps regarding training programmes and research efforts. The Mining Center intends to close the gaps and offer a wide array of services to the mining industry. The Mining Center is dedicated to the principle that innovation occurs when research and creativity are applied to mining industry challenges and opportunities. Through the center the University submits a contention in the national economic agenda that focus on innovation, research and building industry partnerships will be a powerful economic engine.

7. The difference between the Department of Mining and Geological Engineering and the Centre for Mining and Mineral Beneficiation is one of approach and emphasis. A Centre for Mining and Mineral Beneficiation being broader and more applied in its training objectives, more flexible in its programming, and incorporating a higher level of direct stakeholder involvement than is normal in academic departments. However, The Centre

for Mining and Mineral Beneficiation and the Department of Mining and Geological Engineering will complement each other in terms of training, teaching, learning and research. A Centre for Mining and Mineral Beneficiation will create an environment that promotes applied research and development through a strong emphasis on providing appropriate services to the mining sector and the nation.

6. Additionally the University also boasts, the Department of Chemical, Materials and Metallurgical Engineering which has a strong focus on research and teaching in the areas of sustainable and circular process engineering, mineral processing and the development of novel materials. The research is anchored on the fact that Botswana is a country richly blessed with abundant mineral resources such as base metals (Cu, Ni and Co), salt, diamonds, and coal. The focus of the department's work is to achieve sustainable utilization of these resources to drive Botswana's goal of being a knowledge-based economy and to achieve the sustainable development goals (SDG) set by the United Nations.

7. The focus also extends to the use and utilization of secondary resources such as mine tailings and industrial by-products which are also abundant in Botswana, in order to maximize the utilization of natural resources and reduce environmental impacts. Since Botswana, is a semi-arid country, research in water treatment is also a core component of the departmental research activities since the availability of potable water is a key driver of economic development and healthy communities. Sustainable and renewable energy sources are also an area of focus for the department's

research activities as Botswana and the world needs to migrate to a “net zero carbon economy” target by 2050.

8. It is my belief that all our research themes cutting across the Department of Mining and Geological Engineering, Department of Chemical, Material and Metallurgy Engineering and the Mining Center fit well within the major research themes of Montan University (Leoben), particularly the Departments of Metallurgy, Mineral resources, Environmental and Energy Process Engineering, and Polymer Engineering and Science. I was reliably informed that some specific projects of common interest that have already been identified and discussed with the Chair of Nonferrous Metallurgy including;

- Pyrolysis of biomass, coal, and methane
- Treatment of Cu ores and tailings
- Characterization, evaluation, and beneficiation of mine dumps

10. This list is not exhaustive given that Montan University has a number of Chairs and Institutes in the core areas of all our mining-related departments. There is scope for a wider collaboration besides that already discussed with the Chair of Nonferrous Metallurgy and as a University, we are more than excited to be starting this working relationship with you.

I thank you all for your attention!!