

**Center Title and Acronym:** The Copperbelt Africa Centre of Excellence in Sustainable Mining (CBUACESM)

**Host University and Country:** The Copperbelt University, Zambia

**Center Website Address:** <https://www.cbu.ac.zm>

**Center Director and email address:** Dr. Phenny Mwaanga, [phenny.mwaanga@cbu.ac.zm](mailto:phenny.mwaanga@cbu.ac.zm)

**Primary Thematic Discipline of Center:** Extractive Industry (Mining)

**Brief Description of Center**

Mining is a major economic sector in Africa and in Zambia, for example, it contributes 9-10 % of the country’s GDP. This major economic contribution of the mining sector however, is associated with the region’s serious environmental liabilities and impacts on human health and the entire ecosystems, and thus to address these issues requires a “sustainable mining” approach. Sustainable mining is carried out in a manner consistent with sustainable development so that it preserves the environment, protects indigenous cultures, and promotes the welfare, health and safety of miners, and the rights of local communities. These challenges resulting from mining require education and training of a critical mass of human resources to research and develop solutions that lead to sustainable mining.

**Key Objectives and Expected Outcomes**

The CBU ACESM will pursue five objectives:

- (i) Re-orientation of existing teaching and research programmes to address sustainable mining as a crosscutting issue.
- (ii) Develop appropriate MSc, PhD and post-doctoral research programmes to tackle the sustainable development challenges.
- (iii) Develop partnerships and collaborations between the CBU ACESM, mining and allied industries, and the private sector to enhance research, entrepreneurship and corporate social responsibility.
- (iv) Upgrade the qualifications and competences of teaching, research and support staff to strengthen institutional capacity in sustainable mining.
- (v) Upgrade research and teaching infrastructure and equipment to enhance CBU ACESM capacity to implement sustainable mining initiatives locally and in the region.

**Major Accomplishments to Date:** Yet to effective

**Primary Regional and Global Partners:**

University of Cape Town, University of Zimbabwe, University of Stellenbosch, University of Adelaide, University of Zambia

**Research/industry**

Mintek, Council for Scientific and Industrial Research, SA (CSIR), National Institute of Occupational Safety and Health, USA, and British Geological Survey (BGS).

Senior Faculty	Email Address	Research Area
Dr. Phenny Mwaanga	Phenny.mwaanga@cbu.ac.zm	Environmental Chemistry/Toxicology
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