









ROUNDTABLE

«Shaping the Future of the Mining Industry: Relevant Competencies and a New Standard»

Date: October 31, 2025 **Time:** 14:00 **Venue:** Mining University, Main Building

Organizers: International Center of Competence in Mining Engineering Education under the auspices of UNESCO, National Association of Mining Engineers (Russia)

Concept

The roundtable will discuss the competencies required for the mining engineer of the future, the role of international standards in shaping national qualification systems, and the creation of equal opportunities for professional recognition and career growth. Particular attention will be given to the involvement of young professionals and the joint development of an international competency standard for mining engineers that enhances education quality and professional mobility worldwide.

Together, we will shape the image of the Future Mining Engineer.

Discussion Topics

- The Profile of the Future Mining Engineer: Competencies for a New Reality. What professional skills and competencies are critically important for a mining engineer in Africa under modern conditions? The challenges of the global industry transformation.
- The Impact of International Standards on National Systems. How are global competency requirements changing approaches to mineral extraction at the level of individual countries?
- Equal Opportunity in the Mining Industry. The role of internationally recognized standards in creating a level playing field for professional recognition and career growth.
- Young Professionals in Shaping the Industry's Future. Defining key skills and knowledge for the new generation of engineers and the joint formation of a global professional agenda.
- Development of an International Competency Standard for Mining Engineers.

Roundtable results

- Announcement of the signing of a Memorandum of Cooperation between the *National Association of Mining Engineers (Russia)* and the *Institution of Engineers of Kenya (IEK)*, represented by its President **Dr. Shammah Kiteme**.
- Presentation of the Roundtable Declaration (in English and Russian) to the Chairman of the Dialogue's Organizing Committee, outlining the shared vision and objectives for developing the international competence framework for mining engineers.
- Submission of the proposed composition of the Working Group for the development of the International Mining Engineer Standard to the Chairman of the Dialogue's Organizing Committee.
- Promotion of the Declaration and the roundtable outcomes to national regulators, the African Union, and the African Continental Free Trade Area (AfCFTA) to encourage harmonization of professional qualification systems and support engineering mobility across Africa.











Moderators:

- **Dr. Francis Davis** Director-General, TCC International Centre for Innovation, Manufacturing, Technology Transfer and Entrepreneurship (UNESCO Category II Centre for Engineering Education) (Ghana)
- **Dr. Vyacheslav O. Zyrin** Executive Director, National Association of Mining Engineers (Russia)

| Opening | |
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| 14:00 - 14:10 | • |
| | Welcome remarks by the organizers |
| 14:10 - 14:20 | Dr Mustafa Shehu – President, WFEO Tbc |
| | The global vision of the engineering profession: towards harmonized |
| | competencies and shared responsibility. |
| 1. Main Presentations and Discussions | |
| 14:20 – 14:30 | Dr Francis Davis – Director-General, TCC — International Centre for |
| | Innovation, Manufacturing, Technology Transfer and Entrepreneurship |
| | (UNESCO Category II Centre for Engineering Education) (Ghana) |
| | Engineering Capacity and Skills Development in Africa: Overcoming the |
| | Challenges of Workforce Qualification. |
| 14.30-14.40 | Dr. Shammah Kiteme - President, The Institution of Engineers of Kenya |
| | The Kenyan Experience: Engineering Standards and Professional |
| | Regulation for Sustainable Mining in Africa. |
| 14.40-14.50 | Dr. Margaret Aina Oguntala - President, the Nigerian Society of |
| | Engineers |
| | Regional Cooperation and National Regulation: The Nigerian Experience |
| | in Strengthening the Engineering Profession Across Africa. |
| 14.50-15.00 | Dr. Enyonam Kpekpena - Chair of the Women in Engineering |
| | Committee, World Federation of Engineering Organisations |
| | Women in Engineering and Leadership: Promoting Diversity and Inclusion |
| 15001510 | in Africa's Mining Sector. |
| 15.00-15.10 | Dr. Hadi Ly – Vice President, "Geoprim" (Mali) |
| | Technology Transfer and Industrial Collaboration in Africa's Mining |
| 15 10 15 20 | Industry. |
| 15.10-15.20 | Mr. Divine Edem Kwadzodeh – Political Consultant on Education Policy |
| | and Advocacy, All-Africa Students' Union (Ghana) |
| 15.20-15.30 | Youth in engineering: expectations and new learning models. Dr Yurii Zhukovskiy – The head of the electrical energy department, |
| 15.20-15.30 | Empress Catherine II St. Petersburg Mining University (Russia). |
| | Digital transformation in mining and its impact on engineering skills. |
| 15.30-15.40 | Eng Linda Moseki –Letswhiti – Immediate Past President of Southern |
| 13.30-13.40 | Africa Federation of Engineering Organizations (SAFEO) and Past |
| | President of Botswana Institution of Engineers (BIE) |
| | Southern Africa experience- overview of SADC MRA and Brief overview of |
| | IEA qualification, Botswana Experience |
| | 1211 qualification, Doubtraina Experience |











| 15.40-15.50 | Dr. Oigiagbe Tina Emwinghare - Chairman, Benin Branch, Nigerian |
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| | Society of Engineers |
| | Regional experience in professional certification and capacity building. |
| 15.50-16.00 | Mr. Gibridu Oppong -Director of Administration and General Services, |
| | TCC - International Centre for Innovation, Manufacturing, Technology |
| | Transfer and Entrepreneurship (UNESCO Category II Centre for |
| | Engineering Education in Africa) |
| | Building Institutional Frameworks for Engineering Excellence in Africa: |
| | The Role of UNESCO and TCC in Developing Competence Standards. |
| 16.00-16.10 | Dr Salawu Abdulrahman Asipita -Nigerian Society of Engineers |
| | Chairman of the Metallurgical & Mining Materials Division |
| | Professional integrity and competence in metallurgical and mining |
| | engineering. |
| 16.10-16.20 | Tbc Russian energy company |
| | Competences for technological Excellency |
| 16.20-16.30 | Dr. Christopher Maina - Professor, Murang'a University of Technology |
| | Higher education and research as the foundation of competence |
| | development. |
| 2. International Standard for Mining Engineers | |
| 16.30-16.45 | Presentation of the concept of the International Competence Standard for |
| | Mining Engineers. |
| | Dr Vyacheslav O. Zyrin - Executive Director, National Association of |
| | Mining Engineers (Russia) |
| 16.45-17.35 | Regional overview |
| | • Dr. Mustafa Shehu - WFEO |
| | • Dr. Francis Davis – Director General, TCC — International Centre for |
| | Innovation, Manufacturing, Technology Transfer and Entrepreneurship |
| | (UNESCO Category II Centre for Engineering Education) (Ghana) |
| | • Dr. Shammah Kiteme – President, Institution of Engineers of Kenya |
| | • Dr. Margaret Aina Oguntala – President, Nigerian Society of |
| | Engineers |
| | • Dr. Hadi Ly – Vice President, «Geoprim» (Mali) |
| | • Dr. Enyonam Kpekpena – Chair of the Women in Engineering |
| | Committee, World Federation of Engineering Organisations |
| | • Mr. Divine Edem Kwadzodeh – Political Consultant on Education |
| | Policy and Advocacy, All-Africa Students' Union (Ghana) |
| | Additional contributions from roundtable participants |
| 17.35-18.00 | Signing of the Cooperation Agreements |
| 17,000 10,000 | Closing Remarks and Adoption of the Resolution |
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