3rd International Workshop on Minerals Processing and Beneficiation

Harare, Zimbabwe 11- 14 September 2014





Centre for Science and Technology of the Non-Aligned and Other Developing Countries (NAM S&T Centre)



Ministries of
Higher and Tertiary Education,
Science and Technology Development,
and
Mines and Minerals Development,
Zimbabwe

1. Introduction

Minerals are an essential component of the nation's material and economic base. The reason why mining and minerals hold such significance is because of the support it provides to the downstream industries which in fact hold key to the entire industrial development of a nation. There has been increasing concern in recent years about the ability of the countries with emerging economies to secure the financial resources necessary to bring non-fuel mineral deposits into production. Economic liberalisation has been taking place relaxing all possible hindrances to attract the much needed foreign investment for exploration and exploitation of mineral deposits. While the developing countries require much needed funds for this purpose, the developed world finds it cheaper to source the raw material from the developing nations where the labour and other costs are quite low. Therefore mining has provided mutual benefit to the industries located in every region of the world.

Historically the mining industry has been an important source of foreign exchange and tax revenue earnings, infrastructure creation and employment generation in developing countries. However over the last few decades it has been observed that with technological changes and cost cutting measures, the emphasis has shifted to develop large scale mines to derive economy of scale. Developing countries will play an important role in that expansion on the demand side, as well as on the supply side, given shifts in exploration and mining development investments. In reality, however, the developing countries need help for exploitation of their resources for national development in view of the modern and innovative researches and technology advances, environment and sustainability consciousness, new world trade regime, etc.

For this reason, there is a need for policy makers, scientists, technologists, academics and other industry experts to come together and assess ways and means to realize the potential of the mineral resource base in developing countries and its contribution to industrial development.

In this context, the Centre for Science & Technology of the Non-Aligned and Other Developing Countries (NAM S&T Centre) had organised an International Workshop on 'Minerals Processing and Beneficiation' in Johannesburg, South Africa jointly with the Department of Science and Technology of South Africa in September 2012, which was followed by the adoption of a Johannesburg Resolution on Minerals Processing and Beneficiation. The NAM S&T Centre now announces the organisation of the 3rd International Workshop on 'Minerals Processing and Beneficiation' in Harare, Zimbabwe from 11 to 14 September 2014. The workshop will be jointly hosted by the Ministries of Mines and Mining Development, and Higher & Tertiary Education, Science and Technology Development of the Republic of Zimbabwe.

2. Objectives of the Workshop

The 3rd International Workshop will provide a platform for the participants to deliberate on various aspects of mineral processing and beneficiation with the following objectives:-

(i) Identifying international best practices and policies for developing countries to address human capital challenges in mineral processing and beneficiation;

- (ii) Exchange of continental approaches to Mining and Mining processes eg Africa Mining Vision and African Union Agenda 2063;
- (iii) Exchanging country specific information regarding mineral policies, resources and production across the whole value chain;
- (iv) Implementation of mining plans for adoption of proper mining methods and optimum utilization of minerals, safety and health of human resources;
- (v) The existing conditions of trade and technology flows amongst developing nations, impact of regionalisation and prospects for production, trade and technical cooperation;
- (vi) Better understanding of the use and opportunities for the development of a mineral based economy in developing countries.

3. Programme of the Workshop

A tentative programme of the Workshop is given below:

Wednesday, 10 September 2014	Arrival at Harare, Zimbabwe		
Thursday, 11 September 2014	Inauguration	Technical Session	
Friday, 12 September 2014	Technical Session	Technical Session	
Saturday, 13 September 2014	Technical Session	Technical Session and Discussion on Zimbabwe Resolution	
Sunday, 14 September 2014	Concluding Session and Adoption of Zimbabwe Resolution	Field Visits	
Monday, 15 September 2014	Departure		

A detailed Session-wise Programme will be made available before the Workshop.

4. Venue

The international workshop will be organised at Harare International Conference Centre, Harare, Zimbabwe.

5. Resource Persons

Resource persons for the workshop will comprise eminent experts from various countries.

6. About the Organisers

6.1 NAM S&T Centre

The Centre for Science and Technology of the Non-Aligned and Other Developing Countries (NAM S&T Centre; www.namstct.org) is an inter-governmental organisation with a membership of 47 countries spread over Asia, Africa, Middle East and Latin America. The Centre was set up in 1989 in New Delhi, India in pursuance of recommendations of various NAM Summit meetings for the promotion of South-South

cooperation in science and technology. The Centre undertakes a variety of programmes, including organisation of workshops, symposiums, meetings and training courses and implementation of collaborative projects. It also offers short-term research fellowships to scientists from developing countries in association with the Centres of Excellence in various countries. The Centre also produces technical books and other scientific publications in different subjects. These activities provide opportunity for scientist–to–scientist contact and interaction; familiarising participants on the latest developments and techniques in the subject areas; identification of the requirements of training and expert assistance; locating technologies for transfer between the members and other developing countries, dissemination of S&T information etc. In addition, the Centre encourages academic-R&D-industry interaction in the developing countries through its NAM S&T-Industry Network.

6.2 Ministry of Mines and Mining Development, Zimbabwe

Africa is the world's top producer of numerous mineral commodities and has the world's greatest resources of Platinum Group Minerals (PMG), Gold and diamonds etc. With limited systematic geological mapping to optimize the full potential of this sector, there remain many grand challenges to development – human capital development, infrastructure, energy, food/feed and water. The opportunity presented at this workshop to interact with experts from both developing and developed countries and exchange knowledge on the available minerals processing and beneficiation best practices comes at an opportune time. Africa is redefining her role as a global partner by building her competitiveness in many sectors of which the mining sector guided by the African Mining Vision and the provisions contained in the AU Agenda 2063 remain a priority. Through these grand initiatives, Africa's minerals need not be exported as ores, concentrates or metals without significant value-addition and beneficiation thus extending their value chain. The Ministry of Mines looks forward to fruitful engagement by all stakeholders in the mining sector be they from national, regional and global levels.

6.3 <u>Ministry of Higher and Tertiary Education, Science and Technology</u> <u>Development, Zimbabwe</u>

The Ministry responsible for Science and Technology has been central to the coordination of NAM S&T Centre activities since 2012. To date, some ten experts have benefited from this capacity building initiative. In Zimbabwe, the Mining sector is the second largest employer after agriculture. As such, government is keen to ensure that the development of the mining sector fully exploits science, technology and innovation - particularly given the entry of new and emerging technologies including related outcomes from research efforts.

Under the second Science, Technology and Innovation Policy 2012, Government is guided by six Primary Goals – a) Strengthen capacity Development; b) exploitation of New and Emerging Technologies; c) Commercialization of research outcomes; d) search for scientific solutions to global environmental challenges; e) foster international collaborations including f) science advocacy and resources mobilization.

This workshop responds well to the Ministry's Vision to achieve an Empowered Human Capital for a science and technology-led economy for growth and socio-economic

transformation anchored on exploitation of the minerals and their beneficiation for sustained economic growth.

7. Participants

The Workshop is primarily designed for researchers, technologists, industry representatives, minerals and mining practitioners, government officials, policy makers and NGOs from member states of the NAM S&T Centre, as well as other developing countries engaged in activities related to mineral processing and beneficiation.

8. Submission of Application

All experts and scientists desirous of participating in the Workshop are required to submit their nomination forms directly to the NAM S&T Centre as early as possible but latest by Monday, 11th August 2014.

However, for Zimbabwean participants not presenting technical papers, registration should meet the same deadline, and their applications should be sent to the Chair of the National Preparatory Committee, **R Karimanzira**, at the **Ministry of Higher and Tertiary Education**, Science and Technology Development, Zimbabwe. Contacts are Email: rungano.pu@gmail.com or Tel: +263 714046412.

The filled-in Nomination Form along with the following documents must be submitted as e. mail attachments:

- i) An extended (**about 2 pages**) abstract (**in MS Word format**) of the paper that would be presented at the Workshop
- ii) A short (maximum two pages) CV (in MS Word format)
- iii) Copy of the relevant pages of the passport

PLEASE Note that documents referred to under (i) and (ii) above must be in MS Word Format; .Pdf or image files will NOT be accepted.

Hard copies of the Nomination Form and above attachments are NOT required to be submitted.

9. Presentation of Papers

Each participant will be required to present a country status report and / or a research / scientific paper on any of the themes appropriate to the Workshop.

10. Publication as a Follow up of the Workshop

A publication edited by one or more international experts and based on the papers presented during the Workshop and also containing papers contributed by other invited experts in the field will be brought out in the form of a book as a follow up of this scientific programme. Therefore all participants are required to submit the manuscripts of their full country reports / scientific or research papers in **MS-word** format well in advance, but at least 15 days before the commencement of the Workshop.

11. Local Hospitality, Travel etc. within Zimbabwe

All foreign participants will be received at the Harare International Airport, Zimbabwe

and will be transported to the venue of the Workshop. Local hospitality, including accommodation, meals and local transport will be arranged jointly by the Ministries of Higher and Tertiary Education Science and Technology Development; Mines and Mining Development, Zimbabwe from September 10 to September 15 (i.e. commencing from one day before the workshop and for an additional day after its conclusion).

**PLEASE NOTE THAT participants will have to make their own arrangements for stay beyond these dates and therefore they are requested to book their flights accordingly.

12. Financial Arrangements for Travel

This is being conveyed separately to each member country of the NAM S&T Centre and other developing countries.

13. Entry Formalities, Immigration and Health

Participants of the workshop must be in possession of a current passport and valid visa for entry into Zimbabwe. The embassies / diplomatic mission of Zimbabwe located in the country of the participants should be approached for obtaining an entry visa. If required, the organisers will facilitate the issuance of visa by providing the participants with an official letter of invitation.

14. Other Useful Information about Zimbabwe

Climate: Average temperature ranges from 11 to 27°C.

Currency: United States dollar, Yuan, Pula, British Pound, SA Rand (under the

multi-currency arrangement of 2009)

International Country Code: +263

Zimbabwean Standard Time Zone: GMT +2 hours. Banking Hours: Monday - Friday is 0800 to 1500h

Electricity: British 3 pin plug on 240V

Note

- The governments / institutions of all foreign participants will be required to bear the following costs:
 - All expenses in the home country incidental to travel abroad, including expenditure for passports, required medical examinations, vaccinations and miscellaneous expenses such as internal travel to the airport of departure in the home country.
 - Salary and other related allowances for the participants during the period of the Workshop.
 - Cost of medical insurance to cover the period of participation in the workshop.
- The organisers will not assume responsibility for the following expenditure in connection with the participant's attendance in the Workshop:

- Expenses incurred with respect to any insurance, medical bills or hospitalisation fees.
- Compensation in the event of death, disability or illness of participants.
- Loss of personal belongings or compensation for damage caused to them by climatic or other conditions.
- Other costs, including airport tax and excess baggage.

Contact Details

NAM S&T CENTRE

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Website: www.namstct.org

Mr. M. Bandyopadhyay, Senior Expert & Administrative Officer Address, Tel. and E-mail: (O) as above.

FOR ZIMBABWEAN APPLICANTS

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CENTRE FOR SCIENCE AND TECHNOLOGY OF THE NON-ALIGNED AND OTHER DEVELOPING COUNTRIES

3rd INTERNATIONAL WORKSHOP ON

MINERALS PROCESSING AND BENEFICIATION

Harare, Zimbabwe 11-14 September 2014

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SECTION -A

(To be filled in by the nominee)

1	Name (Prof/Dr/Mr/Mrs/Ms):(As in Passport)	
2.	Father's/Spouse Name:	
3	Designation (Position held):	
4.	Nationality:	
5	Date of Birth: Place of Birth (City)(0	Country)
6	Passport No:Place of issue:	
	Date of Issue:	
7	Name of the Parent Institution (Employer):	
	Full Address (Office):	
	Phone: Mobile:	
	Fax: E-mail:	
8	Full Address (Home):	

	Phone: Mobile:
	Fax: E-mail:
9	Educational Qualifications: Highest Degree.
	Year of Award: University:
	Field of Study:
10	Brief Bio data:
11	What in your opinion qualifies you for the participation in this Workshop? (To be attached on separate sheet)
12	Abstract of your paper proposed to be presented in the Workshop. (About 1-2 pages , <u>in MSWord</u> ; to be attached on separate sheet)
	Date: Signature:
SECT	<u>ION -B</u>
ENDO	DRSEMENT BY NOMINATING AUTHORITY
endors advant	Applicant in a member country of the NAM S&T Centre may get the following sement signed by the Focal Point of the Centre in his/her country, if he/she wishes to take tages accrued to the official nominee of the country. For the list of member countries and addresses of the Focal Points please visit Centre's website www.namstct.org)
Signa	ture:
Name	(in full):
Desig	nation:
Date:	
SE	ZAL