

***PanAfGeo WP-E Geohazards and environmental management of mines,***

training course programme, Blantyre, Malawi ,

6th – 12th November 2022

Venue: Hotel Victoria, Chichiri, Blantyre 3

Organisers:

Dr Jonas Satkunas, Leader of WP- E, Lithuanian Geological Survey.

Mr Kondwani Dombola, Director Geological Survey of Malawi

Dr Annock Gabriel Chiwona, Chief geologist, Geological Survey of Malawi

Mr Hassan Mdala, Chief seismologist, Geological Survey of Malawi

Dr Souleymane Diop, Co-leader WP-E, Council for Geoscience of Republic of South Africa

Mrs. Florence Tchoffo, Deputy co- leader WP-E, Ministry of Mines, Industries and Technological Development, Republic of Cameroon.

Lecturers/instructors :

1. Jonas Satkunas, Lithuanian Geological Survey (LGT)
2. Souleymane Diop,  Council for Geoscience of Repubic of South Africa (CGS)
3. Giuseppe Delmonaco, Geological Survey of Italy (ISPRA)
4. Francesco Traversa Geological Survey of Italy (ISPRA)
5. Luca Maria Puzzilli, Geological Survey of Italy (ISPRA)
6. Duska Rokavec, Geological Survey of Slovenia (GeoZs)
7. Petra Gostincar,  Geological Survey of Slovenia (GeoZs)
8. Wołkowicz Stanisław, Polish Geological Institute (PGI)
9. Annock Gabriel Chiwona, Geological Survey of Malawi (GSM)
10. Hassan Mdala, Geological Survey of Malawi (GSM)

**Programme**

6th November, Sunday, arrivals, accomodation in the Hotel Victoria. Introductory instructions.

7th November, Monday

8:00 – 8:30 Opening:

Welcome by Principal Secretary.

Welcome by Kondawani Dombola.

8:30 - 9:30 Life with geohazards: Jonas Satkunas and Souleymane Diop

9:30-10:00 UNESCO and geohazards.

10: 00-10:15 Tea/coffee

10:15- 11:00 Mining and geohazards in Malawi. Annock Gabriel Chiwona, Hassan Mdala

11-00-12 :00  Ground fissures in rift valleys : Luca Maria Puzzili

12 :00-13:00 Lunch

13 :00-15 :00 (2h) Slope stability/landslides in mines: Giuseppe Delmonaco/Francesco Traversa

15 :00-15 :15 Tea coffee

15:15-16 :00 Geohazards in the region, introduction for field trip: Annock Gabriel Chiwona, Hassan Mdala

16 :00-18 :00 Introduction of participants (5 min each)

8th November, Tuesday STOP 1: Wiev point Thabwa, fault scarp facing the Shire river. STOP 2:  Gneiss quarry in Chikwawa; STOP 3 Bridge on river Shire; Erosion geohazard, sand extraction; STOP 4: outcrop of gneiss, Tromino passive seismic measurement. STOP 5: Kamuzu bridge, erosion phenomena. STOP 6: Kapichira dam. Back to Blantyre.

9th November, Wednesday,:  STOP 1: Njuli quarry, training on slope stability measurements. STOP 2: Changalume quarry. Return to Blantyre.

10 November, Thursday

8:00–10:00 (2h) Geohazards in South Africa. Souleymane Diop

10:00-10:15 Tea/coffee

10:15-12:15 (2h) Geocontamination, impacts on human health. Stanislaw Wołkowicz.

12:15-13:00 Lunch

13:00-15:00 (2h) Desk top excercises on slope stability. Giuseppe Delmonaco/Francesco Traversa

15:00-15:15 Tea/coffee

15:15-17:00 Attending First Capital Bank PLC

17:00-19:00 Evening lectures in the case of availability

11th November, Friday

8:00–10:00 (2h): Post-mining as care for the environment. Duska Rokavec.

10:00-10:15 Tea/coffee

10:15-12:15 (2h) Valorisation of mining and post-processing waste; conflict metals (Au, Ta, W, Sn) and ASM Stanislaw Wołkowicz

12:15-13:00 Lunch

13:00-15:00 (2h) Slope mass movements and the possibilities of using remotely sensed data in geohazard management. Petra Gostinčar, GeoZs.

15:00-15:15 Tea/coffee

15:15-17:00 (2h) Practical methods of analysis of earthquake-induced effects on the ground (including field applications). Luca Maria Puzzili.

17:00-19:00 (2h) Climate neutral and circular economy. Duska Rokavec.

Questionnaires, certificates and closing.

12th November Saturday

Dissemination of materials. Departures,