

Mosaad Ali Hussein Ali

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Summary

I am an assistant professor at the Mining Department, Faculty of Engineering, Assiut University, Egypt, where I supervise the development of the environmental, mining, and engineering geophysics program. My current research involves developing electrical resistivity/IP tomography for mineral exploration and monitoring infiltrations in porous media over time. Additionally, I am working on utilizing geophysical methods for the characterization of eco-systems, such as groundwater pollution, waste storage centers, infiltration areas, and the impacts of climate change. My recent research also focuses on mineral exploration, groundwater contamination, remote sensing, GIS, and climate change.



Experience

Careers

- Assistant Professor 11/2021 to Present
- Assistant teacher 2014 to 2021
- Demonstrator 2010 to 2014.

Mining Department, Faculty of Engineering, Assiut University, Assiut, Egypt.

- Survey engineer then project manager 2008 to 2010

Nile Company for Roads and Bridges, Egypt.

Teaching experiences

- Geological Engineering
- Geophysical exploration
- Geological Mining1, Geological Mining2
- GIS, Remote sensing
- Geo-statistics
- Images and data analysis
- Survey and mapping, Mines Survey Project
- Introduction to Mining Engineering
- Mines Development
- Underground Mining Engineering
- Mines ventilation
- Ore dressing 1, Ore dressing 2

Scientific Research

- Scientific Publishing Skills, I published 14 peer-reviewed papers since 2013 to date, see the publications listed below.
- Participation and contribution to three research projects during the PhD period.
- I work as a reviewer for several scientific journals affiliated with the publishers Elsevier and Springer Nature.
- Attended conferences to network with professionals and stay updated on the latest developments.

Education

Doctor of Philosophy Geological Resources and Geological Engineering (Environmental and Engineering Geophysics) 2021 Hohai University, Nanjing, China.

Academic Achievement Award

- B.Sc. Honor Graduation Award, Assiut University, Assiut, Egypt, 2008.
- El-Tahlawi's Award for Mining Engineering and Geology Structural MSc, Assiut University, Assiut, Egypt, 2014.
- CSC Scholarship for PhD at Hohai University, China, 2016

Skills

- Python, Matlab programming
- RockWorks software
- 3D visualization
- GIS, Remote Sensing
- Res2dinv/mod & Res3dinv/mod software
- Images and data analysis
- Surfer software
- ORIGIN software
- AutoCAD software
- Microsoft office (ICDL certificate)
- Ability to learn any software.
- Module reviews
- Funding proposal development
- Personal tutoring

Publications list

1. **Mosaad Ali**, Farag M. Mewafy, Wei Qian, Fahad Alshehri, Mohamed S. Ahmed, and Hussein A. Saleem. "Integration of Electrical Resistivity Tomography and Induced Polarization for Characterization and Mapping of (Pb-Zn-Ag) Sulfide Deposits." *Minerals* 13, no. 7 (2023): 986. <https://doi.org/10.3390/min13070986>
2. **Mosaad Ali**, Shulin Sun, Wei Qian, Abdou Dodo Bohari. Electrical resistivity imaging for detection of hydrogeological active zones in karst areas to identify the site of mining waste disposal. *Environmental Science and Pollution Research* (2020). <https://doi.org/10.1007/s11356-020-08738-9> (SCI).
2. **Mosaad Ali**, Shulin Sun, Wei Qian, Abdou Dodo Bohari, Dusabemariya Claire, Yan Zhang. Application of Resistivity Method for Mining Tailings Site Selection in Karst Regions. *E3S Web Conf.* 144, 1002 (2020) DOI: <https://doi.org/10.1051/e3sconf/202014401002> (Ei).
3. **Mosaad Ali**, Shulin Sun, Wei Qian, Abdou Dodo Bohari, Dusabemariya Claire, Yan Zhang. Geoelectrical tomography data processing and interpretation for Pb-Zn-Ag mineral exploration in Nash Creek, Canada. 2nd International Conference "Essays of Mining Science and Practice", National Academy of Sciences of Ukraine. <https://doi.org/10.1051/e3sconf/202016800003> (Ei).
4. **Mosaad Ali**, Shulin Sun, Wei Qian, Abdou Dodo Bohari, Dusabemariya Claire, Ajibola Richard Faruwa, Yan Zhang. Borehole resistivity and induced polarization tomography at the Canadian Shield for Mineral Exploration in north-western Sudbury. 2nd International Conference "Essays of Mining Science and Practice", National Academy of Sciences of Ukraine. <https://doi.org/10.1051/e3sconf/202016800002> (Ei).
5. Bohari, A.D., Harouna, M. and **Mosaad Ali**. (2018) Geochemistry of Sandstone Type Uranium Deposit in Tarat Formation from Tim-Mersoï Basin in Northern Niger (West Africa): Implication on Provenance, Paleo-Redox, and Tectonic Setting. *Journal of Geoscience and Environment Protection*, 6, 185-225. <https://doi.org/10.4236/gep.2018.68014> (Ei).
6. Dusabemariya C, Qian W, Bagaragaza R, Faruwa AR, **Mosaad Ali**. Some Experiences of Resistivity and Induced Polarization Methods on the Exploration of Sulfide: A Review. *J Geosci Environ Prot*, 2020, 8:68–92. <https://doi.org/10.4236/gep.2020.811004> (Ei).
7. Dusabemariya C, Jiang F, Qian W, Faruwa AR, Bagaragaza R, **Mosaad Ali**. Water seepage detection using resistivity method around a pumped storage power station in China. *J Appl Geophys*, 2021, 188:104320. <https://doi.org/10.1016/j.jappgeo.2021.104320> (SCI).
8. Faruwa AR, Qian W, Obafunmilayo OS, Daramola BB, **Mosaad Ali**, Dusabemariya C, et al. Airborne magnetic and radiometric mapping for litho-structural settings and its significance for bitumen mineralization over Agbabu bitumen-belt southwestern Nigeria. *Journal of African Earth Sciences*, 2021:104222. <https://doi.org/10.1016/j.jafrearsci.2021.104222> (SCI)
9. Bohari, Abdou Dodo, Moussa Harouna, **Mosaad Ali**, Wei Qian, and Ibrahim Sarki Laouali. "Petrographic and geochemical implications for ore genesis and mineralogical composition studies of the Tarat formation hosted sandstone uranium deposit in the Tamari Prospect from

10. Amira Hamdy Ali Ahmed, Wu Jin, **Mosaad Ali**. Artificial Intelligence Models for Predicting Mechanical Properties of Recycled Aggregate Concrete (RAC): Critical Review. Journal of Advanced Concrete Technology, Vol. 20, No. (6), PP 404-429, June 2022
<https://doi.org/10.3151/jact.20.404> (SCI).
11. **Mosaad Ali**, Imbaby, S.S. and Ibrahim, A.R. Panel Width Affected by Rock Mass Classifications (Abu-Tartur Phosphate Mines). JES, Vol.41, No. (3), PP1364-1379, May 2013.
12. **Mosaad Ali**, Ibrahim, A.R. and Imbaby, S.S. Load Calculations and Selection of The Powered Supports Based on Rock Mass Classification and Other Formulae for Abu- Tartur Longwall Phosphate Mining Conditions. JES, Vol.41, No. (4), PP1728-1742, Jul 2013.
13. **Mosaad Ali**, Ibrahim, A.R. and Imbaby, S S. Application of the Rock Mass Classification Systems to Pillar Design in Longwall Mining for Abu-Tartur Longwall Phosphate Mining Conditions. JES, Vol.41, No. (5), PP2013-2021, Sep 2013.
14. **Mosaad Ali**, Ibrahim, A.R. and Imbaby, S S. Constructing Nomograms and A Computer Program with Rock Mass Classification Systems to Check Pillar Stability for Abu-Tartur Longwall Phosphate Mining Conditions. 12th International Conference on Mining, Petroleum and Metallurgical Engineering (MPM12), Suez, Egypt, 20-22, Oct. 2014.
15. **Mosaad Ali**, Application of Rock Mass Classification in Mine Design (Case Study Abu- Tartur Phosphate Mines). M. Sc. Thesis, Assiut University, Egypt, 2014.