

Dr. Mahmoud M. ELWAHEIDI

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PERSONAL INFORMATION

- Nationality: Italian
- Marital Status: Married (3 children)

EDUCATION

- 11/1994: Università degli Studi Di Genova, Genova-Italy
Ph.D in Environmental and Engineering Geophysics
- 1/1990: University of Jordan - Amman, Jordan
M.Sc. in Applied Geophysics
- 1/1987: University of Yarmouk - Irbid, Jordan
B.Sc. in Earth and Environmental Sciences

WORK EXPERIENCE

- 2012 – present: King Saud University- Riyadh- KSA
Assistant Professor in Environmental & Engineering eophysics
 - Teaching courses in the fields of applied geophysics and environmental & engineering Geophysics.
 - Supervising Master Students
 - Conducting research
 - Member of several academic and administrative committees
 - 2000 – 2011: The Hashemite University- Zarqa - Jordan
Researcher (part time)
 - Research project funded by the Jordanian Higher Council for Science and Technology, and conducted with the cooperation of the Land and Water Institute in the Hashemiyya University. Topic: Geochemical and Geophysical study of the Ruseifa Landfill for groundwater quality evaluation.
 - Project conducted for the purposes of studying lava tubes in the eastern part of Jordan.
- Administrative Employee & Academic coordinator: Italian Embassy- Amman -Jordan**
- coordinate academic affairs
 - follow up students affairs
 - Translation: working languages include Arabic, English and Italian.

- 1997 – 2000: Yarmouk University – Irbid- Jordan
Assistant professor in Applied Geophysics
 - Teaching B.Sc.and M.Sc.courses in the fields of geology, Environmental geology, applied geophysics and environmental & engineering Geophysics.
 - Co Supervising Master Students
 - Member of several M.Sc. discussion committees
 - Conducting research
- 1996 – 1997: Geophysical Services Centre – Amman- Jordan
Senior Geophysicist
 - Conducting training courses in the fields of Environment and applied geophysics for employees of the Jordanian Natural Resources Authority.
 - Conducting training courses in the fields of Environment and applied geology for employees of the Jordanian Ministry of Water.
 - Supervising several exploration projects; including:Artificial Water Recharge for the account of the Jordanian Ministry of Water.
 - Processing and Interpretation of seismic data for the purpose of oil exploration in Jordan.

PUBLICATIONS

Books:

- Saleh S. AL ARNI, **Mahmoud M. ELWAHEIDI, 2016. *Handbook of Waste treatment Technologies***. King Saud University, Riyadh, KSA (under revision).
- **Mahmoud M. ELWAHEIDI, 2014 (Translation). *EARTH: An Introduction to Physical Geology***. Tenth edition, by: J. Tarbuck, F. K. Lutgens. Published by Pearson Publishers.

ISI Papers:

- **Mahmoud ELWAHEIDI, H. GHREFAT, Y. NAZZAL, A. BATAYNEH, T. ZUMLOT, 2016**, Integrated application of geoelectrical techniques for structural investigations: case study of Wadi Marsad Graben, Jordan. *Arabian Journal of Geosciences*, 9(6):1-17. DOI: 10.1007/s12517-016-2466-y
- T. ZUMLOT , A. BATAYNEH , H. ZAMAN , H. GHREFAT , S. MOGREN , Y. NAZZAL , E. ELAWADI and **Mahmoud ELWAHEIDI, 2016**. Statistical Analysis of Different Chemical Elements in Groundwater of Northwestern Saudi Arabia. *Journal Geological Society of India*, Vol.87.
- Habes Ghrefat, **Mahmoud El Waheidi**, A. Batayneh,Y. Nazzal, T. Zumlot, S. Mogren, **2016**. Pollution assessment of arsenic and other selected elements in the groundwater and soil of the Gulf of Aqaba, Saudi Arabia. *Environ Earth Sci.* 75:229 DOI 10.1007/s12665-015-5020-4.

- Ibrahim M. Bahkaly, **Mahmoud M. ELWAHEIDI**, Chokri Jallouli, Awni Batayneh, **2015**. Assessment of Shallow Aquifer Salinity in the Aqaba Coastal Plain Using ERT Method: Case study of Maqna Region, Northwestern Saudi Arabia. *Environ Earth Sci.* 74:2105–2114. DOI: 10.1007/s12665-015-4195-z.
- Yousef Habous Nazzal, Nassir SN Al-Arifi, Muhammad Kamran Jafri, Hossam Kishawy, Habes A Ghrefat, **Mahmoud M El-Waheidi**, Awni T Batayneh, Taisser A Zumlot, **2015**. Study the urban soils contamination by heavy metals for selected industrial locations in the Greater Toronto area, Canada, using multivariate statistical analysis. *Geologia Croatica*, 68, 2, 147-159.
- Awni T. Batayneh, Taisser Zumlot, Habes Ghrefat, **Mahmud M. El-Waheidi**, Yousef Nazzal, **2014**. The use of ground penetrating radar for mapping rock stratigraphy and tectonics: Implications for geotechnical engineering. *Journal of Earth Science*, 25, 5, 895-900
- Yousef Nazzal, Izrar Ahmed, Nassir S. N. Al-Arifi, **Mahmud M. El-Waheidi**, **2014**. A pragmatic approach to study the groundwater quality suitability for domestic and agricultural usage, Saq aquifer, northwest of Saudi Arabia. *Environmental Monitoring and Assessment*, DOI: 10.1007/s10661-014-3728-3.
- Awni T. Batayneh, Habes Ghrefat Taisir Zumlot Eslam Elawadi Saad Mogren Haider Zaman Ahmed A. Al-Taani Yousef Nazzal and **Mahmoud Elwahaidi**, **2014**. Assessing of Metals and Metalloids in Surface Sediments along the Gulf of Aqaba Coast, Northwestern Saudi Arabia. *Journal of Coastal Research*. DOI: 10.2112/JCOASTRES-D-13-00143.1.
- Al-Tarazi, E, Rajab JA, Al-Naqa A, **Mahmoud El-Waheidi**, **2008**. Detecting leachate plumes and groundwater pollution at Ruseifa municipal landfill utilizing VLF-EM method. *Journal of Applied Geophysics*, 65 (3), 121 – 131.
- Al-Tarazi E, El-Naqa A, **Mahmoud El-Waheidi**, Abu Rajab J, **2006**. Electrical geophysical and hydrogeological investigations of groundwater aquifers in Ruseifa municipal landfill, Jordan. *Journal of Environmental geology*, 50 (7), 1095 – 1103.
- **Mahmoud M. El-Waheidi**, Merlanti F, Pavan M, **1992**. Geoelectrical resistivity survey of the central part of Azraq basin (Jordan) for identifying saltwater/freshwater interface. *Journal of Applied geophysics*, 29 (2), 125 – 133.

RESEARCH PROJECTS

- Studying the rifting history of the Red Sea at the Arabian Shield margin using geophysical data –NSTIP funded project- 2014 (Approved).
- Groundwater vulnerability in Saq aquifer, KSA –NSTIP funded project- 2013. (Ongoing).
- Distribution of water recharge areas and deterioration of groundwater resources in the Midyan basin, NW KSA –NSTIP funded project- 2012 (Completed).

- Evaluation of the Ruseifa Municipal Landfill Effects on Groundwater Aquifer using Geochemical and Geophysical Methods Funded by Jordanian Higher Council for Science and Technology-2006. (Completed).
- Groundwater Artificial Recharge project (Funded by the U.S. AID), 1996 (Completed).

ACADEMIC ACTIVITIES

- Co-supervising Master thesis: Use of ERT to study subsurface shallow aquifer and seawater intrusion in Maqnah region, KSA, 2014. King Saud University/ KSA.
- Committee member Master Thesis: Using ERT and GPR methods for mapping cavities south east of Riyadh, KSA.
- Committee member Master Thesis: Application of geophysical Electromagnetic and Geoelectrical methods for determining lava tubes characteristics /North East Jordan, 2006. Yarmouk University/Jordan
- Committee member Master Thesis: Application of geophysical Studies for engineering purposes: dam site investigation in Sailoukah area/Sudan, 2000. Yarmouk University/Jordan
- Committee member Master Thesis: Integrated geoelectrical methods to study the environmental impact of the closed part of Ruseifa landfill, 1999. Yarmouk University/Jordan
- Committee member Master thesis: Seismic refraction and geoelectrical survey for geological and engineering explorations Al Naima Area/Jordan, 1998. Yarmouk University/Jordan

PROFESSIONAL MEMBERSHIPS

- Member of the Saudi Society for Geosciences
- Member of the European Association of Geoscientists & Engineers
- Member of Society of Exploration Geophysicists (USA)
- Member of the Jordanian Geologists Association
- Reviewer for the following international journals:
 - Journal of Asian Earth Sciences
 - Journal of Water Resource and Protection
 - British Journal of Applied Science & Technology
 - Environmental Earth Sciences Journal

CONFERENCES, COMMITTEES AND COURSES

- Member of the following Geology & Geophysics Department Committees, King Saud University, KSA:
 - Evaluation & Academic Accreditation Committee;
 - Postgraduate Studies & Research committee;
 - E-Learning committee.

- 10 training courses certified for the Professional Certificate in Teaching
- 2nd Saudi International Water Technology Conference 2014, 23rd - 25th February, 2014 – Riyadh, KSA.
- 5th International Conference on Water Resources and Arid Environment (ICWRAE), 7-9 January, 2013 – Riyadh, KSA.
- The International Conference on Environmental Performance of Tourist Accommodation Sector in Euro-Med Countries (CEPTA), Petra, Jordan. July 2nd - 4th, 2008.
- Italian Geological Conference: several editions.
- Jordanian Geological Conference: several editions.
- Specialized course on Geological Applications of Statistical methods organized by the Italian National Institute for Scientific Research, 1994.

ADDITIONAL INFORMATION

- ESRI certificate in ArcGIS (December, 2014)
- I.C.D.L. UNESCO certificate.
- Excellent translation capabilities: Certified translator English/Italian/Arabic- by Arab Professional Translators Association (APTA) and Jordanian Department of Press and Publications
- Excellent computer and Internet skills, including: MS Office Package for both PC and Macintosh; Desktop publishing and graphic manipulation packages; AutoCad, geological software packages; internet search, live conferencing etc.
- Languages: Arabic (Native), English and Italian (both fluent)

REFERENCES

A list is available upon request.

TEACHING INTERESTS

I have experience in teaching the following courses:

- Principles of Geophysics
- Applied Geophysics
- Seismic Exploration Methods
- Environmental and Engineering Geophysics
- Electrical and Electromagnetic Methods
- Radiometric & Geothermal methods
- Geophysics Research Project
- Selected topics in geophysics
- Environmental Geology
- Geological data analysis
- Principles of Geology

TEACHING STRATEGY

My teaching strategy is based on facilitating the perception of knowledge by encouraging students to ask questions and seek answers. I do my best to encourage thinking in rational ways. I particularly emphasize learning by thinking about directions and trends rather than memorization. When discussing questions, mistakes are treated as opportunities to find out misconceptions, not as a reflection of a student's abilities.

I also consider students' feedback as a vital issue in the whole process of teaching; it highly contributes in finding the most effective ways to help students and overcoming problems.

Furthermore, personal contact with students is essential in my approach. I emphasize my availability for informal discussions and my willingness to help students overcome problems.