

## Dr. Fahad bin Khudair Alshehri

Earth Science Remote Sensing Research Chair  
King Saud University - Department of Geology  
and Geophysics Building: 4, Office: 149 2B  
P.O. Box 2455 Riyadh 11451 Saudi Arabia

Mobile: 0598232222  
Office Phone: 0114677053 - 0114674446  
Email: [Falshehria@ksu.edu.sa](mailto:Falshehria@ksu.edu.sa)

### 2023

- 1- **Alshehri, F.**, & Abdelrahman, K. (2023). Groundwater Potentiality of Wadi Fatimah, Western Saudi Arabia: Geophysical and Remote Sensing Integrated Approach. *Water*, 15(10), 1828.
- 2- **Alshehri, F.**, & Abdelrahman, K. (2023). Integrated approach for the investigation of groundwater quality using hydro chemical and geostatistical analyses in Wadi Fatimah, western Saudi Arabia. *Frontiers in Earth Science*, 11, 1166153.
- 3- Haider, S., Masood, M. U., Rashid, M., **Alshehri, F.**, Pande, C. B., Katipoğlu, O. M., & Costache, R. (2023). Simulation of the Potential Impacts of Projected Climate and Land Use Change on Runoff under CMIP6 Scenarios. *Water*, 15(19), 3421.
- 4- **Alshehri, F.**, Abuamarah, B. A., & Abd El-Hamid, H. T. (2023). Impact of land use dynamics on land surface temperature using optical remote sensing data integrated with statistical analysis in Riyadh, Saudi Arabia. *Advances in Space Research*.
- 5- **Alshehri, F.**, & Mohamed, A. (2023). Analysis of Groundwater Storage Fluctuations Using GRACE and Remote Sensing Data in Wadi As-Sirhan, Northern Saudi Arabia. *Water*, 15(2), 282.
- 6- Abd El-Hamid, H. T., & **Alshehri, F.** (2023). Integrated remote sensing data and machine learning for drought prediction in Eastern Saudi Arabia. *Journal of Coastal Conservation*, 27(5), 48.
- 7- **Alshehri, F.**, Abuamarah, B. A., & Abd El-Hamid, H. T. (2023). Impact of land use dynamics on land surface temperature using optical remote sensing data integrated with statistical analysis in Riyadh, Saudi Arabia. *Advances in Space Research*.
- 8- **Alshehri, F.**, El-Sorogy, A. S., Almadani, S., & Aldossari, M. (2023). Groundwater quality assessment in western Saudi Arabia using GIS and multivariate analysis. *Journal of King Saud University-Science*, 35(4), 102586. Alshehri, F.; Rahman, A.
- 9- **Alshehri, F.**; Rahman, A. Coupling Machine and Deep Learning with Explainable Artificial Intelligence for Improving Prediction of Groundwater Quality and Decision-Making in Arid Region, Saudi Arabia. *Water* 2023, 15, 2298.
- 10- El-Rawy, M., Batelaan, O., **Alshehri, F.**, Almadani, S., Ahmed, M. S., & Elbeltagi, A. (2023). An Integrated GIS and Machine-Learning Technique for Groundwater Quality Assessment and Prediction in Southern Saudi Arabia. *Water*, 15(13), 2448.
- 11- Gautam, V. K., Pande, C. B., Moharir, K. N., Varade, A. M., Rane, N. L., Egbueri, J. C., & **Alshehri, F.** (2023). Prediction of Sodium Hazard of Irrigation Purpose using Artificial Neural Network Modelling. *Sustainability*, 15(9), 7593.
- 12- Ali, M. A. H., Mewafy, **Alshehri, F.**, Ahmed, M. S., & Saleem, H. A. (2023). Integration of Electrical Resistivity Tomography and Induced Polarization for Characterization & Mapping of Sulfide Deposits.
- 13- El-Rawy, M., Fathi, H., Abdalla, F., **Alshehri, F.**, & Eldeeb, H. (2023). An Integrated Principal Component and Hierarchical Cluster Analysis Approach for Groundwater Quality Assessment in Jazan, Saudi Arabia. *Water*, 15(8), 1466.
- 14- Mishra, A. P., Kumar, S., Patra, R., Kumar, A., Sahu, H., Chandra, N., ... & **Alshehri, F.** (2023). Physicochemical Parameters of Water and Its Implications on Avifauna and Habitat Quality. *Sustainability*, 15(12), 9494.

- 15- Alzahrani, H., El-Sorogy, A. S., Qaysi, S., & **Alshehri, F.** (2023). Contamination and Risk Assessment of Potentially Toxic Elements in Coastal Sediments of the Area between Al-Jubail and Al-Khafji, Arabian Gulf, Saudi Arabia. *Water*, 15(3), 573.
- 16- Abuamarah, B. A., **Alshehri, F.**, Azer, M. K., & Asimow, P. D. (2023). Loveringite from the Khamal Layered Mafic Intrusion: The First Occurrence in the Arabian Shield, Northwest Saudi Arabia. *Minerals*, 13(2), 172.
- 17- El-Rawy, M., Fathi, H., Abdalla, F., **Alshehri, F.**, & Eldeeb, H. (2023). An Integrated Principal Component and Hierarchical Cluster Analysis Approach for Groundwater Quality Assessment in Jazan, Saudi Arabia. *Water*, 15(8), 1466.
- 18- Asmoay, A., Mohamed, A., **Alshehri, F.**, Linh, N. T. T., & Othman, A. (2023). Water quality assessment in dry regions using statistical methods. *Journal of King Saud University-Science*, 35(5), 102665.
- 19- Gautam, V. K., Pande, C. B., Moharir, K. N., Varade, & **Alshehri, F.** (2023). Prediction of Sodium Hazard of Irrigation Purpose using Artificial Neural Network Modelling. *Sustainability*, 15(9), 7593.
- 20- Abuamarah, B. A., **Alshehri, F.**, Azer, M. K., & Asimow, P. D. (2023). Geological and tectonic significance of rodingite in the Ess ophiolite, Arabian Shield, Saudi Arabia. *Lithos*, 448, 107168.
- 21- Remote sensing and statistical analyses for exploration and prediction of soil salinity in a vulnerable area to seawater intrusion ,**Alshehri at el., 2023**
- 22- Environmental assessment of heavy metals in soils around Al-Janabeen Dam, southwest Saudi Arabia, **Alshehri at el., 2023**

## 2022

- 23- Mass Variations in Terrestrial Water Storage over the Nile River Basin & Mega Aquifer System as Deduced from GRACE-FO Level-2 Products and Precipitation Patterns from GPCP Data, **Alshehri at el., 2022**
- 24- Environmental Assessment of Surface Seawater in Al-Uqair Coastline, Eastern Saudi Arabia ,**Alshehri at el., 2022**
- 25- Assessment and Spatiotemporal Variability of Heavy Metals Pollution in Water and Sediments of a Coastal Landscape at the Nile Delta, **Alshehri at el., 2022**
- 26- Detection of Mineralization Zones Using Aeromagnetic Data, **Alshehri at el., 2022**
- 27- Evaluation of sediment and water quality of Ismailia Canal for heavy metal contamination, Eastern Nile Delta, Egypt ,**Alshehri at el., 2022**
- 28- Groundwater quality assessment in Harrat Khaybar, western Saudi Arabia, **Alshehri at el., 2022**
- 29- Integrated Geophysical Assessment of Groundwater Potential in Southwestern Saudi Arabia, **Alshehri at el., 2022**
- 30- Detecting hydrocarbon micro-seepage and related contamination, probable prospect areas, deduced from a comparative analysis of multispectral and hyperspectral satellite images, **Alshehri at el., 2022**
- 31- Hydro-Geochemical Applications and Multivariate Analysis to Assess the Water–Rock Interaction in Arid Environments, **Alshehri at el., 2022**
- 32- The Groundwater Flow Behavior and the Recharge in the Nubian Sandstone Aquifer System during the Wet and Arid Periods, **Alshehri at el., 2022**
- 33- An integrated approach for identifying shallow groundwater potential zones in west-central Saudi Arabia, **Alshehri at el ,2022**
- 34- Groundwater aquifer detection using the time-domain electromagnetic method: A case study in Harrat Ithnayn, northwestern Saudi Arabia, **Alshehri at el ,2022**

## 2021

- 35- Hydrochemical characterization of geothermal and non-geothermal waters from Wadi Fatima, Western Saudi Arabia, **Alshehri et al ,2021**
- 36- Evaluation of groundwater quality in central Saudi Arabia using hydrogeochemical characteristics and pollution indices, Alshehri et al ,2021
- 37- Source rock characteristics of organic-rich shales in the Late Jurassic Lam Member and their contributing to oil and gas generation potential in Al-Jawf exploration region, NW Yemen, **Alshehri et al ,2021**
- 38- Sedimentomorphologic geodiversity in response to depositional environments: RS application along the coastal plain between Ummlujj and Al-Wajh, Red Sea, Saudi Arabia, **Alshehri et al ,2021**
- 39- Groundwater resources exploration of Harrat Khaybar area, northwest Saudi Arabia, using electrical resistivity tomography, **Alshehri et al ,2021**
- 40- Influence of seawater intrusion and heavy metals contamination of groundwater quality, Red Sea coast, Saudi Arabia, **Alshehri et al ,2021**
- 41- Evaluation of groundwater quality in central Saudi Arabia using hydrogeochemical characteristics and pollution indices, **Alshehri et al ,2021**
- 42- Use of Geophysical and Radar Interferometric Techniques to Monitor Land Deformation Associated with the Jizan Salt Diapir, Jizan city, Saudi Arabia, **Alshehri et al ,2021**
- 43- Evaluation of heavy metal contamination and groundwater quality along the Red Sea coast, southern Saudi Arabia, **Alshehri et al,2021**
- 44- Influence of seawater intrusion and heavy metals contamination of groundwater quality, Red Sea coast, Saudi Arabia, **Alshehri et al ,2021**
- 45- Evaluation of groundwater quality in central Saudi Arabia using hydrogeochemical characteristics and pollution indices, **Alshehri et al ,2021**

### 2020-19-18

- 46- Mapping the Distribution of Shallow Groundwater Occurrences Using Remote Sensing-Based Statistical Modeling Over Southwest Saudi Arabia, **Alshehri et al, 2020**
- 47- Statistical Applications to Downscale GRACE-Derived Terrestrial Water Storage Data and to Fill Temporal Gaps **Alshehri et al.2020**
- 48- Aridity trends in the Middle East and adjacent areas. **Alshehri et al ,2020**
- 49- Conceptual and Statistical Models to Map the Distribution of Near-surface Groundwater Occurrences in Al Qunfudah Province, **Alshehri et al.2019**
- 50- Assessment of rising groundwater levels in the coastal zone of Al Qunfudah area, southwest Saudi Arabia **Alshehri et al 2019**
- 51- Assessing the environmental impacts of gold mining activities, Sukari mine, central eastern desert, Egypt **Alshehri et al 2019**
- 52- Assessment of the Distribution and the Factors Controlling the Rise in Groundwater Levels in Mecca Region, Saudi Arabia **Alshehri et al 2018**
- 53- Using remote sensing and GIS technologies to map progressive urbanization and to identify hazardous areas related to sinkholes in Riyadh city and surroundings, Saudi Arabia **Alshehri et al 2018**