Professor: Raid Ramzi Al-Omari

**Department of Civil Engineering** 

**Professor of: Geotechnical Engineering** 

Email: raed.ramzi@alfarabiuc.edu.iq

### **Education:**

PhD, University of Strathclyde/ UK, Year 1984

MSc, University of ....., Year

BSc, University of Baghdad, Year 1977

#### **Profile:**

| 73-81    | <b>B.Sc.</b> in Civil Engineering, Army Service, Civil Engineer in Ministry of Irrigation |
|----------|---|
| 81-84    | Ph.D. in Soil Mechanics and Foundation Engineering.                                       |
| 1985     | Reserve Army Service. Employed as a Foundation Designer                                   |
| 85-89    | <b>SCIENTIFIC RESEARCHER,</b> Building Research Center, Head of Structural Dept.          |
| 89 -2017 | Al-Nahrain University, <b>PROFESSOR</b> from July 2000.                                   |
|          | FIRST PROFESSOR in Engineering for the year 2007-2008.                                    |
|          | FIRST PROFESSOR in Al-Nahrain University for the year 2010.                               |
| 2017-now | RetirementPart time in Al-Farabi University College, Baghdad                              |

# **Teaching**

# **Subject: Engineering Geology:**

- The Earth
- Structural Geology
- Minerals
- Types of Rocks and Soil
- Folds, Faults, Joints and Unconformity
- Engineering Properties of Rocks
- Under Ground Water Geology

### **Research Focus**

- Soil Reinforcement
- Expansive Soil
- Effect of acids on Limestone rocks
- Gypsiferous Soil
- Piled Foundation
- Earthquake Liquefaction of soil
- Bio-cementation of soil



# **Recent Publications**

- Al-Omari, R. R., Fattah M. Y. and Ali, H. A. (2016). Treatment of Soil Swelling Using Geogrid Reinforced Columns. Italian Journal of Geosciences, Vol. 135, No. 1, PP. 83-94.
- Al-Omari, R. R, Khaled Z., Sheer Ali (2016). Strain behavior of geogrids reinforcing sand under a rectangular footing. Japanese Geotechnical Society Special Publication Journal, Vol.2, Issue 67, pp. 2280-2285.
- Al-Omari, R. R., Al-Azzawi, A.I A. and AlAbbas, K. A. (2016). Behavior of piled rafts overlying a tunnel in sandy soil. Geomechanics and Engineering, Vol. 10, No. 5, pp: 599-615.
- Al-Omari, R.R., Al-Kifae, A. A. and Al-Tameemi, S.M. (2018). Earthquake Effect on Single Pile Behavior with Various Factor of Safety and Depth to Diameter Ratio in Liquefiable Sand. International Journal of Civil Engineering and Technology (IJCIET). Volume 9, Issue 4, April 2018, pp. 1253–1262.
- Al-Omari, R.R., Shafiqu, Q.S. and Al-Sammaraey, M.M. (2018). Liquefiable Sand Behavior Under Different Applied Cyclic Strain Amplitude in Cyclic Triaxial Test. International Journal of Civil Engineering and Technology (IJCIET). Volume 9, Issue 4, April 2018, pp. 1290–1297.
- Ibrahim, M. A., Al-Omari, R. R., Ibrahim, M. H. (2018). Experimental Study to Improve the Shear Stress of Silty- Sandy Soils by Using Urease Producing Bacteria. American Scientific Research Journal for Engineering, Technology, and Sciences (ASRJETS). April.
- Al-Omari R.R., Fattah M. Y. and Kallawi A.M. (2018). <u>Laboratory Study on Load Carrying Capacity of Pile Group in Unsaturated Clay</u>. Arabian Journal for Science and Engineering, <a href="https://doi.org/10.1007/s13369-018-3483-9">https://doi.org/10.1007/s13369-018-3483-9</a>, Springer.
- Fattah, M, Al-Omari, R., and Fadhil, S. (2018). Load sharing and behavior of single pile embedded in unsaturated swelling soil. European Journal of Environmental and Civil Engineering, Taylor & Francis, https://doi.org/10.1080/19648189.2018.1495105.
- Raid R. Al-Omari, Madhat S. Al-Soud, Osamah I. Al-Zuhairi (2019). Effect of Tunnel Progress on the Settlement of Existing Piled Foundation, Studia GeotechnicJao uertn Mal excyzh a20n1ic7a; <a href="https://doi.org/10.2478/sgem-2019-0008">https://doi.org/10.2478/sgem-2019-0008</a>.
- Hameedi, M., Fattah, M. and Al-Omari, R. (2019). Creep characteristics and pore water pressure changes during loading of water storage tank on soft organic soil. International Journal of Geotechnical Engineering, <a href="https://doi.org/10.1080/19386362.2019.1682350">https://doi.org/10.1080/19386362.2019.1682350</a>, Taylor & Francis Group.
- Bilal Salih, Mohammed Ibrahim, and Raid Al-Omari (2021). Estimation of the Settlement Components of Municipal Solid Waste. Lecture Notes in Civil Engineering, Modern Applications of Geotechnical Engineering and Construction, pp. 375-387.
- Osamah Al-Zuhairi, Raid Al-Omari, and Madhat Al-Soud (2021). Experimental and Numerical Analysis of an Existing Single Pile Movement Due to Tunneling in Sandy Soil. Lecture Notes in Civil Engineering, Modern Applications of Geotechnical Engineering and Construction, pp. 71-87.

#### Affiliations/Activities

- Member of Iraqi Union of Engineers
- Member of the Iraqi Scientific Society for Soil Mechanics and Foundation Engineering