

## MAHER OMAR

Associate Professor of Civil Engineering (Geotechnical)  
Department of Civil and Environmental Engineering  
University of Sharjah

### EDUCATION

Degree	Specialization	University / Country	Grad. Date
PhD	Geotechnical Engineering	Southern Illinois University, USA	1995
MSc	Civil Engineering (Geotechnical)	Southern Illinois University, USA	1992
BSc	Civil Engineering	Southern Illinois University, USA	1990

### ACADEMIC & ADMINISTRATION APPOINTMENTS

From	To	Title/Rank/Function	With Whom/Where
9/2016	1/2017	Chairman, Department of Civil and Environmental Engineering	University of Sharjah, UAE
1/2015	9/2016	A/Chairman, Department of Civil and Environmental Engineering	University of Sharjah, UAE
9/2007	Present	Associate Professor of Civil/Geotechnical Engineering	University of Sharjah, UAE
9/2014	1/2015	Associate Chair for Academic, Department of Civil and Environmental Engineering	University of Sharjah, UAE
9/2010	9/2014	Chairman, Department of Civil and Environmental Engineering	University of Sharjah, UAE
2006	2010	Assistant to Chairman	University of Sharjah, UAE
9/2000	9/2007	Assistant Professor of Civil/ Geotechnical Engineering	University of Sharjah, UAE
8/1997	7/2000	Visiting Professor	Southern Illinois University, USA

### EDITORIAL/REVIEWER APPOINTMENTS

From	To	Title/Rank/Function	With Whom/Where
2016	Present	Granular Matter	USA
2013	Present	Reviewer, Arabian Journal of Geosciences	USA
2014	Present	International Journal of Geotechnical Engineering	USA
2013	Present	Arabian Journal of Geosciences	KSA
2003	Present	Reviewer, Geotechnical and Geological Engineering Journal	USA
2005	Present	Reviewer, Frontiers in Education Conference (FIE)	USA
2004	Present	Reviewer, Geotechnical Testing Journal	USA
2007	2009	Editorial Board - International Journal of Geotechnical Engineering	USA
2003	2008	Reviewer, Land Contamination & Reclamation	USA
2007	2009	Reviewer, University of Sharjah Journal of Pure & Applied Sciences	University of Sharjah, UAE
2001	2004	Editorial Board, CE Times Magazine	University of Sharjah, UAE

### PROFESSIONAL LICENSURE

Registration/Title	Organization/Country	When
Professional Engineer in Training (E.I.T.), Illinois	Illinois Board of Professional Engineers, USA	1994

### MEMBERSHIP IN HONOR SOCIETIES

Registration/Title	Organization/Country	When
Member, Tau Beta Pi	National Engineering Honor Society	1991- present
Member, Phi Kappa Phi	National Honor Society	1992 - present

**SELECTED SERVICE TO THE PROFESSION**

<b>When</b>	<b>Professional Service/Event/Activity</b>	<b>Role</b>
2017	8 <sup>th</sup> International Forum on Engineering Education (IFEE2017), University of Sharjah.	Organizing Committee Co-Chair
2017	International Conference on Advances in Sustainable Construction Materials & Civil Engineering Systems (ASCMCES-17)	Co-Chair of Scientific and member of Organizing Committees
2017	International Conference on Advances in Sustainable Construction Materials & Civil Engineering Systems (ASCMCES-17)	Steering Committee
2017	Preparation Team, 2 <sup>nd</sup> Science and Engineering Research Groups Forum	Preparation Team
2017	11 <sup>th</sup> UoS Annual Research Forum	Chair of Organizing and member of Preparation Committees
2017	Innovations in Construction, Asphalt & Transportation (ICAT) Conference (30 <sup>th</sup> )	Board Member
2017	Think Science Competition, organized by the Emirates Foundation for Youth Development	Co-Chair of Judging Committee
2017	Workshops in different locations in Sharjah and Abu Dhabi in preparation of the Think Science Competition. The number of beneficiaries was 1000 from high school students and teachers, the following are the titles: ✓ Interactive Session 1: How to make and present your project ✓ Interactive Session 2: Judging criteria & typical questions	Presenter
2016	International Conference on Geotechnical Research and Engineering (ICGRE'17)	International Scientific Committee
2016	Arrowad College's Civil Engineering Undergraduate Program, KSA	Evaluator
2015	7 <sup>th</sup> International Forum on Engineering Education (IFEE2015) "Quality Assurance in Engineering Education" Jointly with 3 <sup>rd</sup> Towards Sustainable Development (3rd TSD2015) Conference "Sustainable Development in Engineering Education, Research and Practice"	Chair of Organizing & Scientific Committees
2015	Think Science Competition organized by the Emirates Foundation for Youth Development May 2015	Co-Chair of Judging Committee
2015	The 5 <sup>th</sup> International Arab Conference on Quality Assurance in Higher Education (IACQA2015)	Member of Organizing Committee
2015	The 14 <sup>th</sup> International Conference on Construction Applications of Virtual Reality in Construction (CONVR 2014)	Member of Organizing Committee
2015	10 <sup>th</sup> Scientific Research Forum and exhibition	Member of Organizing Committee
2014	Think Science Competition organized by the Emirates Foundation for Youth Development April 2014	Co-Chair of Judging Committee
2013	Intel Science Competition- Arab World, World Trade Center, Dubai, December 26 <sup>th</sup> -29 <sup>th</sup> , 2013	Chair of Organizing Committee
2013	Think Science Competition organized by the Emirates Foundation for Youth Development April 2013	Co-Chair of Judging Committee
2012	Intel Science Competition- Arab World, World Trade Center, Dubai, December 16 <sup>th</sup> -19 <sup>th</sup> , 2012.	Chair of Judging Committee
2011	Intel Science Competition- Arab World, University of Sharjah, November 27 <sup>th</sup> -30 <sup>th</sup> , 2011.	Chair of Organizing Committee
2010	5 <sup>th</sup> Forum on Engineering Education (IFEE2006) Jointly with SDPROMO Conference (2010) , UOS, Sharjah, UAE	Chair of Organizing Committee
2001-2006	1 <sup>st</sup> , 2 <sup>nd</sup> , 3 <sup>rd</sup> , and 4 <sup>th</sup> Forum on Engineering Education (IFEE), UOS, Sharjah, UAE	Member of Organizing Committee
2004	International Conference on Geotechnical Engineering 2004, Sharjah, UAE.	Chair of Organizing Committee
2004	International Symposia, "Seismology & Earthquakes in the Arabian Gulf Region", UOS, Sharjah, UAE	Member of Organizing Committee

**SELECTED INTER-DISCIPLINARY RESEARCH PROJECTS**

No	Title of research project	Year	Source of Funding/support
1	Development of Microzonation Map of Liquefaction Potential for Sharjah, United Arab Emirates”	2014-2017	University of Sharjah
2	Estimation of Bearing Capacity of Open-Ended Model Piles in Sand	Collaboration Work 2015-2017	University of Sharjah & University of Technology, Baghdad
3	Predicting Allowable Bearing Capacity and Settlements of shallow foundations using artificial neural networks - Sharjah, United Arab Emirates	2015-2017	University of Sharjah
4	Geotechnical Mapping of seismic risk of Sharjah City, United Arab Emirates	2015-2017	University of Sharjah
5	Change in Suction and Swelling Behavior of Expansive Unsaturated Bentonite-Sand Mixture with Time	Collaboration Work 2015-2017	University of Sharjah & University of Technology, Baghdad
6	Empirical Correlations for Predicting Allowable Bearing Capacity and Elastic Settlement of Shallow Foundation on Granular Soil	2015-2017	University of Sharjah
7	Bearing Capacity of a Footing on an Expansive Unsaturated Bentonite-Sand Mixture	Collaboration Work 2015-2017	University of Sharjah & University of Technology, Baghdad
8	Subsurface characterization of granular soils from dynamic cone penetration test results, United Arab Emirates	2015-2017	University of Sharjah
9	Field plate load test to investigate stress distribution in soil mass with and without reinforcement - United Arab Emirates	2015-2017	University of Sharjah
10	Estimating Rock Strength Parameters From Empirical Correlations - United Arab Emirates	2015-2016	University of Sharjah
11	Potential impact of global warming on whiting in a Semi-Enclosed Gulf	2015-2016	University of Sharjah
12	Member, Sustainable Civil Infrastructure systems	2015-2016	University of Sharjah
13	Member, Sustainable Construction Materials and Structural Systems	2015-2016	University of Sharjah
14	Influence of Particle Morphology on Strength Properties of UAE Carbonate Sands	Competitive Research Grant 2015-2017 AED 93,400	University of Sharjah
15	Development of Weather, Soil, Traffic Database For the Implementation of Mechanistic-Empirical Pavement Design in Sharjah	Seed Research Grant (invited) 2015-2017 AED 40,000	University of Sharjah
16	Evaluation of the Roads and Parking Design to Improve Traffic Safety and Operation in the University City of Sharjah	Seed Research Grant (invited) 2015-2017 AED 40,000	University of Sharjah
17	Quality Assurance in Engineering Education and Programs Linkages between University of Sharjah, UAE and Royal Institute of Technology, Sweden	2015 - 2017	University of Sharjah, UAE and Royal Institute of Technology, Sweden
18	Advanced Characterization of Dynamic Soil Properties in UAE for Enhanced Civil Infrastructures Design	Targeted Research Grant Approved AED 196,000	University of Sharjah
19	Management of Load Transfer to Underground Structures by Using Geocell Soil Reinforcement	Competitive Research Grant 2016-2018 AED 99,400	University of Sharjah
20	Estimation of Earthquake Hazard in Sharjah	Targeted Research Grant Approved AED 199,600	University of Sharjah
21	Joint Project with Ajman Government titled “ Super pave Research and Development Project”	2015	University of Sharjah

No	Title of research project	Year	Source of Funding/support
22	Development of Geospatial Risk Analysis Maps for United Arab Emirates	2013-2015	University of Sharjah
23	Estimating Unconfined Compressive Strength of Sedimentary Rocks of UAE from Generated Empirical Correlations	2013-2014	University of Sharjah
24	Use of Wave Velocity for Determining soil Properties	2013-2014	University of Sharjah
25	Education grant in the amount of AED 560,000, to support the Intel Science Competition for the Arab World (ISC AW) program	2011	Intel Foundation
26	Assessment of Thiopave (Sulphur Based Additive) in Pavements (Initial Agreement Reached – In Process of Finalization)	2009/2010	Shell Oil Company
27	Sea water intrusion and the effects on groundwater quality and desalination processes considering the effects of climate change and sea level rise	2009-2011	British Council
28	Member of the University Research Group “Hazards & Engineering Risk Management”	2006-2009	University of Sharjah
29	Impacts of Soil Contaminants and Contaminants Management on Soils + Physico-Chemical Factors affecting Soils	Ongoing	University of Sharjah
30	Collaboration and Capacity Building in Seismology – Methodology for Assessing Earthquakes Impact on Health, Environment, and Infrastructures in UAE.	2004-2008	University of Sharjah
31	Water Quality Monitoring in Khalid and Khan lagoons	2001- 2007	University of Sharjah + Environment & Protected Areas Authority
32	Earthquake Hazard Zoning and Assessment in the UAE–Structural, Geotechnical and Environmental Risk	2004-2007	University of Sharjah + Jordan University for Science and Technology
33	Member of the University Research Group ”Intelligent Systems and Infrastructure”	2004-2006	University of Sharjah
34	Member of the University Research Group “Energy and Environment Research Group”	2004-2006	University of Sharjah
35	Comprehensive waste Management System for Sharjah	2000-2003	Municipality of Sharjah + Environment & Protected Areas Authority + University of Sharjah
36	Investigation of the Sharjah Old & New Waste Disposal Sites	2000-2002	Municipality of Sharjah + Environment & Protected Areas Authority +University of Sharjah
37	Base-Line Assessment of Water Quality & Circulation Patterns in Khalid and Khan lagoons	2000/2001	University of Sharjah + Environment & Protected Areas Authority
38	“The Effects of Foundation Width and Fiber Stiffness on Model Tests for the Bearing Capacity of Sand with Geogrid Reinforcement”.	2005-2007	University of Sharjah Research center
39	Laboratory tests to study the effect of oil spills on the physical and mechanical properties of soils	2001-2002	University of Sharjah
40	Risk Assessment for Managing the Transport of Hazardous Material and Freight	2004-2005	University of Sharjah

## CONSULTANCIES/ SERVICE TO THE COMMUNITY

Project Title	Granting Organization
Monitoring of water quality and circulation patterns in the Khalid and Al-Khan lagoons	Sharjah University + Sharjah Environment and Protected Areas Authority + Environmental Section of Sharjah Municipality
Landfill closure of Sharjah waste disposal facility and remediation options and alternatives	
Preliminary field investigation of the current waste disposal site in Sharjah and action plan for establishing an integrated waste management program	
Design and Construction of Industrial Liquid Waste Discharge Facility (Prior to Treatment)	

## SELECTED PUBLICATIONS

Type	Details
Edited Book	Quality Assurance in Engineering Education”, Issue No. 150, ISBN 978-9948-10-122-2, University of Sharjah, 2016
Edited Book	Engineering Education in the 21 <sup>st</sup> Century - Quality, Globalization and Local Relevance, College of Graduate Studies and research, UOS. ISBN 9948-10-098-0, 2012
Edited Book	International Conference on Geotechnical Engineering – Soil Exploration, Testing and Foundation Design, University of Sharjah, 2004.
Journal	Maher Omar, Field Plate Load Test to Investigate Stress Distribution in Soil Mass with and without Reinforcement - United Arab Emirates, Jordan Journal of Civil Engineering , Accepted
Journal	Maher Omar (2017) Empirical correlations for predicting strength properties of rocks – United Arab Emirates, International Journal of Geotechnical Engineering, Vol. 11, No. 3, pp 248-261 (DOI: 10.1080/19386362.2016.1214339)
Journal	Maher Omar, Abdallah Shanableh & Marwan Al Zaylaie (2016), “Modification of the Swelling Characteristics and Phosphorus Retention of Bentonite Clay Using Alum”, Soils and Foundations, Vol. 56, No. 5, pp 861- 868
Journal	Maher Omar, Abdallah Shanableh, “Evaluation of Methods Used For Reducing Heavy Metal Leaching From Sandy Soil”, Geotechnical and Geological Engineering, Vol. 34, No. 5 (DOI 10.1007/s12517-015-2194-8)
Journal	A Shanableh, M Imteaz, K Hamad, M Omar, T Merabtene, M Siddique, “Potential impact of global warming on whiting in a Semi-Enclosed Gulf”, International Journal of Global Warming, Accepted
Conference	M. Omar, A. Shanableh, S. Abduljalil, M. Arab, K. Hamad, A. Tahmaz, “Geotechnical Mapping of Seismic Risk For Sharjah City, United Arab Emirates”, Global Civil Engineering Conference (GCEC2017), Faculty of Engineering University, Putra Malaysia, June 2017, Accepted
Conference	Maher Omar, Khaled Hamad, A Shanableh, Ali Tahmaz, Efforts To Maximize The Success Of Students On Probation, 8th International Forum on Engineering Education (8th IFEE2017), April 18-20, 2017
Conference	Khaled Hamad, Ghazi Al-Khateeb and Maher Omar, Senior Design Project Experience at Department of Civil & Environmental Engineering at University of Sharjah, United Arab Emirates, 8th International Forum on Engineering Education (8th IFEE2017), April 18-20, 2017
Conference	Mohamed Arab, Maher Omar and Ali Tahmaz, Numerical Analysis of Shallow Foundations on Geogrid Reinforced Soil, Advances in Sustainable Construction Materials & Civil Engineering Systems International Conference (ASCMCES2017), April 18-20, 2017
Conference	Maher Omar, “Microzonation Map of Liquefaction Potential for Sharjah, United Arab Emirates”, International Conference on Geotechnical Research and Engineering (Icgre'16), Prague, Czech Republic, March 2016
Journal	Mohammed Fattah, Wissam Al-Soudani, Maher Omar, " Estimation of Bearing Capacity of Open-Ended Model Piles in Sand", Arabian Journal of Geosciences, Vol. 9, No. 3, 2016 (DOI 10.1007/s10706-016-0051-5)
Journal	Hussain Salah, Maher Omar, Abdallah Shanableh, " Estimating Unconfined Compressive Strength of Sedimentary Rocks in United Arab Emirates from Point Load Strength Index" Journal of Applied Mathematics and Physics, Vol. 2, No.1, pp 296- 213, 2014
Journal	M. Omar, A. Shanableh, M. Balwan, M.Y. Fattah, K. Hamad, "Influence of Local Soil Conditions on Ground Response - Site Amplification, Sharjah, United Arab Emirates" International Journal of Modern Engineering, Vol. 13, No.2, pp 34- 40, 2013 (ISSN: 2157-8052)
Journal	S. Barakat, R. Al Zubaidi, M. Omar, "Probabilistic-Based Assessment of the Bearing Capacity of Shallow Foundations", Arabian Journal of Geosciences, DOI 10.1007/s12517-014-1581
Journal	K. Hamad and M. Omar, “Evaluation of Texas Incident Detection Algorithm after Years of Implementation”, Journal of Traffic and Logistics Engineering (JTLE), Vol. 1, No.2, pp 249- 253, 2013 (ISSN: 2301-3680)

Conference	Maher Omar, Khaled Hamad and A Shanableh, "Early Warning Indicator at University of Sharjah - Proposed System", 7 <sup>th</sup> International Forum on Engineering Education (IFEE2015) "Quality Assurance in Engineering Education", Sharjah, UAE, March 17-19, 2015
Conference	Khaled Hamad, Maher Omar, Rami Al-Ruzouq, Waleed Zeiada and Rulla Raad, "Sustainable Public Transportation Potential at Sharjah University City", 7 <sup>th</sup> International Forum on Engineering Education (IFEE2015) "Quality Assurance in Engineering Education", Sharjah, UAE, March 17-19, 2015
Conference	A. Shanableh, M. Imteaz, K. Hamad, M. Omar, T. Merabtene, M. Siddiqi, "Potential Impact of Global Warming on Whiting (Lime Suspensions) in a Semi-Enclosed Gulf", Global Conference on Global Warming Focus on Energy-Transport-Greenhouse Effects, GCGW-15, Athens, Greece, May 24-27, 2015
Conference	Alberto Iniesta, Miguel Diago Salah Al-Toubat, Maher Omar, Thomas Delclos, Tariq Shamim and Nicolas Calvet "Mechanical Characterization of Desert Sand and Design of a Conical Hopper for a Solid Particle Solar Receiver", UAE Graduate Students Research Conference 2015, Abu Dhabi, UAE, March 22-24, 2015
Conference	Hussain Salah, Maher Omar, Abdallah Shanableh, " Estimating Unconfined Compressive Strength of Sedimentary Rocks in United Arab Emirates from Point Load Strength Index", Conference on Computational Mechanics (CCM2014), Suzhou, China, May 2014
Conference	K. Hamad and M. Omar, "Evaluation of Texas Incident Detection Algorithm after Years of Implementation" 2 <sup>nd</sup> International Conference on Traffic and Logistic Engineering (ICTLE 2013), Istanbul, Turkey, 2013
Conference	Maher Omar, Abdallah Shanableh, Khaled Hamad, "Thoughts Prior to Introducing Earthquake Engineering to the Civil Engineering Curriculum: Internal & External Efforts", ASEE Southeastern Section Annual Conference-The Global Reach of Engineering, Mississippi, USA, April 1-3, (CD ROM), 2012.
Conference	K. Hamad , M. Omar, A. Shanableh, Yahya Sarraj, "Developing New Technology-Related Bachelor Programs in The Middle East", ASEE Southeastern Section Annual Conference-The Global Reach of Engineering, Mississippi , USA, April 1-3, (CD ROM), 2012.
Journal	A. Shanableh, T. Merabtene, M. Omar, and M. Imteaz, "Impact of Surface Ocean Acidification on The CO2 Absorption Rate", International Journal of Global Warming (IJGW), Vol. 3, Nos.1/2, pp 163- 172, 2011
Journal	M. Fattah, W. Al-Baghdadi, M. Omar & A. Shanableh, "Analysis Of Strip Footing Resting On Reinforced Granular Trench By The Finite Element Method", International Journal of Geotechnical Engineering, Vol. 4, Issue 4, pp 471- 482, 2010
Conference	Omar, M., Shanableh, A. and Hamad, K., "Thoughts on University Industry Relations", Conference for industry and Education Collaboration-American Society for Engineering Education, Palm Springs, CA, USA, February 2010
Conference	A. Shanableh, S. Barakat, M. Omar, K. Hamad, and F. Shadoud, "Accreditation and Program Assessment" 5 <sup>th</sup> International Forum on Engineering Education, Engineering Education in the 21 <sup>st</sup> Century: Quality, Globalization and Local Relevance", UOS, November 2010.
Conference	K. Hamad, M. Omar, and A. Shanableh, "Transportation Engineering Education in Undergraduate Civil Engineering Curricula in The Middle East", 5 <sup>th</sup> International Forum on Engineering Education, Engineering Education in the 21 <sup>st</sup> Century: Quality, Globalization and Local Relevance", UOS, November 2010.
Conference	Omar, M., Shanableh, A. and Barakat, S., "Another Dimension of Student Engagement - Student Satisfaction Survey", Northeast American Society of Engineering Education Conference (ASEE 2009) – Engineering in the New Economy, University of Bridgeport, CT, USA, 3-5 April 2009
Journal	Omer Mughieda & Maher Omar, "Stress Analysis For Rock Mass Failure With Offset Joints", Geotechnical and Geological Engineering Journal, Vol. 1, 2008
Journal	Abdallah Shanableh, Maher Omar, Shaping Engineering Education In The Region – A Report On Four Engineering Education Forums Held At The University Of Sharjah, World Transactions on Engineering & Technology Education, Vol. 6 (2), pp 313-317, 2007
Journal	Maher Omar, Abdallah Shanableh, Ali Tahmaz, "Shear Strength of Compacted Green Clay: Physico-Chemical Factors" Lowland Technology International, Vol. 6, No. 1, pp 9-20, 2004
Journal	Maher Omar, Abdallah Shanableh, Adnan Basma, and Samer Barakat, "Compaction Characteristics of Some Soils in United Arab Emirates" Geotechnical and Geological Engineering Journal, Vol. 21, pp 225-242, 2003
Journal	Abdallah Shanableh, Maher Omar, "Bio-Acidification and leaching of Metals, Nitrogen and Phosphorus from Soil and Sludge Mixtures". Soil and Sediment Contamination: an International Journal, Vol. 12(4), pp 565-589, 2003.

**SELECTED HONORS/AWARDS/SCHOLARSHIPS/SPECIAL RECOGNITION**

<b>Date</b>	<b>Recognition</b>	<b>Organization</b>
2014-2015	Recipient, University of Sharjah Annual Faculty Incentive Award – University and Community Service Category	University of Sharjah
2013-2014	Recipient, University of Sharjah Annual Bonus Award for Outstanding Faculty - Teaching Category	University of Sharjah
2010-2011	Recipient, University of Sharjah Annual Bonus Award for Outstanding Faculty - Teaching Category	University of Sharjah
2007-2008	Recipient, University of Sharjah Annual Bonus Award for Outstanding Faculty - Teaching Category	University of Sharjah
2006-2007	Recipient, University of Sharjah Outstanding Teaching Award	University of Sharjah
2004	Recipient, Sharjah City for Humanitarian Services Award	Sharjah City for Humanitarian Services
2003	Recipient, University of Sharjah Outstanding Research Award sponsored by Bank of Sharjah for “Reliability Based Risk Index for the Design of Reinforced Earth Structures”.	University of Sharjah
1992	Recipient, ASCE Super Achiever Award	ASCE