

Abdallah I. Husein Malkawi, Ph.D.

Professor of Geotechnical and Dam Engineering
Fahad Bin Sultan University
Jordan University of Science and Technology
E-mail: mhusein@fbsu.edu.sa
mhusein@just.edu.jo



PERSONAL DATA

Date of Birth: Feb., 06, 1962
Nationality: Jordanian
Present Position: Professor of Geotechnical and Dam Engineering

SUMMARY OF QUALIFICATIONS

Excellent skills acquired in Civil Engineering supported by a B.S. in Civil Engineering\Geotechnical, M.S. and a Ph.D. in Geotechnical Engineering. Experienced in design, analysis, teaching and research in the field of soil mechanics and foundations with a strong background in dam design, RCC dams, Thermal analysis for RCC Dams, slope stability analysis, earthquake engineering, seismicity, Liquefaction studies, and pile foundation, geophysical Methods, and Safety of dams. Published several papers in International Journals and conference proceedings. Member of the Royal committee for water management, Head of the National Dams Committee and consultant for the Ministry of Water and Irrigations, Jordan Valley Authority. Editors-in-Chief of the International Jordan Journal of Civil Engineering. Member of the Editorial Board of the Geotechnical Testing Journal (ASTM), USA, and Consultant to the World Bank for the Red Sea Dead Sea Canal. Honorary Doctorate in Science and Technology and the Golden Medal of Al-Farabi University, Kazakh National University, December 2013, Chairman of Board of Trustees of Al Isra University, Amman-Jordan and Member of the Board of Trustees of the University of Sharjah, United Arab Emirates, Chancellor for Fahad Bin Sultan University Saudi Arabia. Formerly, President of Jordan University of Science and Technology and Chairman of Board of Trustees of King Abdullah University Hospital.

EDUCATION

Post-Doctorate in Geotechnical Engineering, Virginia Polytechnic Institute & State Univ. with Prof. James M. Duncan, Univ. Distinguished Prof. July, 1992 to Feb.,1993.

Doctor of Philosophy in Geotechnical Engineering: The University of Akron, U.S.A., July 1992. Dissertation: "Determination of Wave Equation Soil-Pile Interaction Model Parameters Using In situ Testing Technique".

Masters of Science in Geotechnical Engineering: The University of Akron, U.S.A., January, 1990. Research: "Determination of Smith soil parameters".

Bachelor of Science in Civil Engineering/Geotechnical: Bucharest Institute of Technology, June 1986.

PROFESSIONAL EXPERIENCE

Feb., 01 2016 to Present University Chancellor for Fahad Bin Sultan University, Tabuk, Saudi Arabia
April, 28 2011 to April 28, 2015 President of Jordan University of Science and Technology
Nov. 11 2017 to June 01 2018 Chairman of Board of Trustees of Al-Isra University Amman, Jordan
April, 28 2011 to April 28, 2015 Chairman of Board of Directors of King Abdullah University Hospital,
Dec. 01 2010 to April, 28 2011 Vice President of the German Jordanian University
Sept. 01 2004 to June 15 2010 Vice President of Jordan University of Science and Technology
Sept. 15 2002 to Sept. 01 2004 Dean of Research
March 01, 2003 to Present Professor of Civil Engineering, Geotechnical and Dam Engineering Division, Jordan University of Science and Technology
August, 1994 to Nov. 2020 Consultant to the Ministry of Water and Irrigation, Jordan Valley authority, and Head of the National Dams Committee. Responsible for the follow-up of design, dam's safety and supervision in collaboration with the consultant and the Contractor. This covers Al wehdah Dam,

Karameh, Kafrein, Mujib, Wala, Tannur, Wadi Yabis, Wadi Kufranja, and Wadi Rajib dams, besides participating in the design and rehabilitation of several small dams with Jordan Valley Authority and Ministry of Agriculture.

March 01, 1998 to March 2003 Associate Professor of Civil Engineering, Geotechnical and Dam Engineering Division, Jordan University of Science and Technology

February, 1993 to March 1998 Assistant Professor, Geotechnical and Dam Engineering Division, Jordan University of Science and Technology

Jan., 1989 to Sept. 1992 The University of Akron Research Assistant sponsored by The Ohio Department of Transportation (ODOT) and U. S. Federal Highway Administration (FHWA)

Jan., 1990 to Jan., 1992 Working on construction sites (about 20 sites within Ohio) to monitor the pile driving response using Pile Driving Analyzer (PDA), and at the same time performing small scale pile tests with both DINASTAR penetrometer and Modified Dynamic Penetrometer for each site

May 1989 to Sept., 1989 Received extensive training to use the WEAP, CAPWAPC computer program and Pile Dynamic Analyzer PDA at the PDA/GRL Pile Dynamics Inc. 4535 Emery Industrial Parkway Cleveland Ohio, 44128

Courses Taught

- CE 202 Strength of Materials
- CE 357 Numerical Analysis
- CE 462 Foundation Engineering I
- CE 564 Foundation Engineering II
- CE 565 Subsurface Exploration
- CE 703 Retaining Structures
- CE 789 Geotechnical Earthquake Eng.
- CE 461 Soil Mechanics I
- CE 463 Soil Mechanics Laboratory
- CE 566 Soil Improvement
- CE 703 Soil Properties
- CE 786 Advance Foundation Eng.
- CE 789 Dam Engineering

Supervised MS Theses

- 1) *Seismic hazard assessment and evaluation of dynamic site period*, by Osama Nusier, Master of Science in Civil Engr., Dec. 1993.
- 2) *Dynamic modeling of low and high velocity projectile penetration of soil*, by Nadiem, Shabib, Master of Science in Civil Engr., May, 1994.
- 3) *Seismic assessment, and evaluation of earthquake hazard for major cities in Jordan*, by Jamal Bataineh, Master of Science in Civil Engr., May. 1994.
- 4) *Use of Static Cavity Expansion to Determine Pile Capacity: Probabilistic Approach*. by Raffi Babayan, Master of Science in Civil Engr., March. 1995. CoS.
- 5) *Evaluation of Seismic Zoning Factor and Local Site Coefficient as Applied to the Jordanian Seismic Code*. by Osama Alzoubi, M.S. in Civil Engr., May. 1995.
- 6) *Reliability-Based Analysis and Design of Laterally Loaded Pile*. by Ra'ed Tahat, Master of Science in Civil Engr., Dec. 1995. CoS.
- 7) *Evaluation of Ductility, Ductility Reduction and Overstrength Factors as Applied to the Jordanian Seismic Code of Practice*. by Anis S. Al-Shatnawi, M.S. in Civil Engineering, May, 1996. CoS.
- 8) *Damageability Prediction Model Based on Seismically Induced Site Effects For Irbid City*. by Nadia Sweedat, M.S. in Civil Engineering, May, 1997.
- 9) *Effect of Organic Matters on Engineering Soil Properties*. by Osama T. Abu-Safagah, M.S. in Civil Engineering, May, 1997.
- 10) *Determination of Soil Elastic Modulus Using Seismic Refraction Method*. by Abdallah Alawneh, Master of Science in Engineering Geology, Yarmouk University, Dec. 1997. CoS.
- 11) *Seismic Analysis of Slope Stability Using Monte Carlo Technique*. by Waleed Falih Hassan, M.S. in Civil Engineering, Aug. 1998.
- 12) *Study of Soil-Pile Model Interaction Under Dynamic Loading*. by Ayasrah, I.M, M.S. in Civil Engineering, Aug. 1998.
- 13) *A Study on the Safety Factor of Slopes Using Limiting Equilibrium Approach*. By Tamara Mubeideen, June 2001.

- 14) *Evaluation and Prediction of Sinkholes at the Eastern Part of the Dead Sea*, M.S. in Civil Engineering by Mohammed Al-Sakran, 2002.
- 15) *Behavior of the Reaction between Certain Jordanian Rock-Aggregate and Cement in (RCC) Dam*”, by Samer Rabab’ah, 2002
- 16) *Effect of Fly ash on the Mechanical Properties of Different Roller Compacted Concrete (RCC) Trial Mixes: Laboratory Study*”, Husein A. Shaia, August, 2003
- 17) *A Study of Temperature Distributions and Thermal Stresses in Roller Compacted Concrete (RCC) Gravity Dam*’, Mohammad Al-Jammal, January 2004.
- 18) *Determination of Temperature Distribution and Thermal Stresses for RCC Dams using two Different Finite Elements Codes (A Comparative Study)*”, Ehab Shatnawi, January 2004.
- 19) *Scale Effect Study on Shear Strength using Large Scale Direct Shear Device*”, Kifah Ewisat, January 2004.
- 20) *Stability Analysis of Slopes using Finite Element Method and Limiting Equilibrium Approach, A Comparative Study*”, Mohammad Yamin, January 2004.
- 21) *Seismic analysis and evaluation of earthquake hazard for Arab Gulf Countries specially United Arab Emirates*, by Wassel, Master of Science in Civil Engr., 2005.
- 22) *Vibration Analysis and Modeling of RCC Dams Using Finite Element Method*, by Mohammad Irshidat April, 2006.
- 23) *Mechanical Properties and Thermal Behavior of RCC Gravity Dam*, Bassam Egilat 2006.
- 24) *Seismic Hazard of the Middle East Region*, Asar Al-Taani, 20011

SUPERVISED Ph.D. THESES

- 1) *Remote Sensing and GIS-Assisted Modeling of Soil Induced Erosion Hazards: A Case Study in the North & Northwest of Jordan*”, by Nezar Al-Hammouri Ph.D. January 2002.
- 2) *Geotechnical Engineering and its Application in the Stabilization of a Landslide at Tayba, Petra*, Ahmed Al-Tal, Ph.D. May 2002.
- 3) *A Contribution to the Thermal Behavior of Roller Compacted Concrete (RCC) Gravity Dams. Field and Laboratory Measurements*. Marco Conrad, Munich Technical University, Germany, Feb. 03 2006.
- 4) *Determination of Discharge Information for Arid Areas with Ephemeral Flow with the Help of Remote Sensing Techniques*. Michael Mett, the University of Innsbruck, Austria, July 04, 2015

PROFESSIONAL AFFILIATION

- Founder and President of ASCE - Jordan International Group, 1996-present.
- TOP International Recruiter for the American Society of Civil Eng. (ASCE), 1996.
- Founder of ASCE-Continuing Education Courses in Civil Engineering, Jordan.

OTHER ACTIVITIES

1. University Council JUST (1997, 2004-2015)
2. Research Department Committee JUST (1997 - 2002)
3. Research Faculty Committee JUST (1998 - 2002)
4. Deans’ Council JUST (2002 – 2015)
5. Deans’ Council GJU (Nov. 2010- April 2011)
5. Head of the Equivalency Certificate Committee, Ministry of Higher Education & Research (2009-2010)
6. Selection and Employees committee at JUST2004-2015.
7. Appointment and Promotion committee at JUST 2011-2015.

TV SHOW

Juror (2013) for the STARS OF SCIENCE (Noujoum El Ouloum) MBC4, Season 5 Sponsored by Qatar Foundation for Education.

MEMBERSHIP

1. American Society of Civil Engineers, ASCE, Associate Member.
2. Earthquake Engineering Research Institute, EERI, Member.
3. International Society of Soil Mechanics and Foundation Engineers, ISSMFE, Member.
4. Editor-in-Chief Jordan Journal of Civil Engineering (JJCE) An International Refereed Research Journal, 2006-2012.
5. Editorial Board Member, Geotechnical Testing Journal (GTJ), ASTM, USA.

HONORS AND OTHER ACTIVITIES

1. **Jan., 1989 to Sept. 1992** Research Assistantship and tuition waiver for graduate studies by the department of Civil Engineering at the University of Akron.
2. **May 1985** Honorary Diploma for presenting a paper titled "Consideration of Wind and Snow Force Actions Based on Probabilistic Approach".
3. Awarded A Trip to the Annual Convention in Washington, D.C. November 1996.
4. **Winner of the 2006 Distinguished Researcher Award offered by the Jordanian Ministry of Higher Education and Scientific Research.**
5. **Honorary Doctorate in Science and Technology and the Golden Medal of Al-Farabi University, Kazakh National University, December 2013.**

IMPOTANT COMMITTEES

1. Member, Board of Trustees of the University of Sharjah, United Arab Emirates (2015 -).
2. Advisory Board of the North African and Mediterranean Center (CANMRE), University of Tsukuba, Japan. June 01 2012 till June 01 2014
3. Member of the Royal Committee for Water Management in Jordan, Headed by HRH Prince Faysal, Feb., 2008 – Present
4. Member of the Board of Trustees at Tafila Technical University (2008-2011)
5. Head of the National Committee for Dams. 2006 – Present
6. Member, National Committee for Dams. 1994 to 2006.
7. Consultant to the Jordan Atomic Energy Commission (JAEC), Oct. 2009 - Present for the selection of the NPP site in Jordan.
8. On the Committee for Reviewing the Egyptian Seismic Code, Royal Sci. Society.

CONSULTING EXPERIENCE

1. Member of the landslide hazard zonation committee in the Royal Jordanian Geographic Center.
2. Consultant for the Ministry of Water and Irrigations, Jordan Valley Authority. 1994 to Present
3. Consultant to the **Government of Costa Rica**, on the Pirrias Dam, 2004-2007
4. Consultant to the **Andriolo Ito Engenharia Ltda. Sao Carlos – SP – BRASIL**, on the Pinalito RCC Dam, Republica Dominicana, 2005-2008
5. Consultant to the SaudiConsult, Saudi Arabia on the DAMAD dam, 2008-present
6. Carrying out geotechnical investigation for the Proposed Ajloun Education Department Building, Prepared for the Ministry of Public Works and Housing, Amman, Jordan. The job includes beside investigations preparation of solution for the in-stable area.
7. Carrying out rehabilitation for the dikes at El-Kader waste water treatment plant. The work includes geotechnical investigation, stability analysis and supervision of the construction. 2000
8. Carrying out rehabilitation of the instability of the slopes along the Dead Sea Shore, the job includes investigation, slope stability analysis and supervision. 2000/2001

9. Rehabilitation of the Wadi Es-sir Waste Water treatment plant, this includes the stabilization of the long time on going slopes instability above the lagoons, Pile foundation was recommended for stabilizing the slopes, the job includes investigation, design and supervision of the work. 2001/2002
10. Carrying out all geotechnical investigation for the dikes at Potash Arab Company at the Dead Sea. The 12 km dikes failed suddenly during impounding and about 2 km was washed in the water. The geotechnical investigation was part of the rehabilitation of the failed dikes. December 2001
11. Carrying out liquefaction study for hotels (Mövempick) and for the Aqaba port tower for the Arab Center and Royal Scientific Society. 1996 and 2001, respectively.
12. Carrying out several seismic refraction studies for Wala and Mujib dams in Jordan.
13. Preparing design documents for the two proposed small dams for water harvesting at Jordan University of Science and Technology Campus, 2000
14. Carrying out thermal and structural analyses for Al Wehdah dam, the study was performed for Harza Consulting Co. USA. 2003.
15. Preparing design and Tender document for several small dams for the Ministry of Agriculture, 2003
16. Carrying out Mix Design for Al Wehdah RCC dam for Harza Consulting Co. USA. 2003.
17. Carrying out a study on the effect of nearby excavation down stream of Wadi Arab Dam for the Ministry of Water and Irrigation, 2003.
18. Carry out comparative study for two different cementitious materials for Jordanian Cement Factory, 2003.
19. Carry out thermal study for Al Wehdah RCC dam for Ozaltin, Turkish Co., 2004, 50 p.
20. Carry out structural analysis for Al Wehdah RCC dam for Ozaltin Turkish Co., 2004, 90 P.
21. Carry out Structural Stability Analysis of PINALITO RCC DAM in Dominican Republic (Static, Pseudo-Static and Dynamic Analysis)". Prepared to PROYECTO HIDROELECTRICO PINALITO LA VEGA, REPUBLICA DOMINICANA, 2005, pp. 195
22. Carry out Probabilistic Seismic Hazard Analysis And Development Of Ground-Motion Parameters For The Two Arab Potash Sites In The Dead Sea And Aqaba City" Submitted to **HATCH**, Oakville, Ontario, Canada and Arab Center for Engineering Studies, Amman. 2006, Pp. 40.

INTERNATIONAL EXPERIENCE

- Consultant to government of Costa Rica and Member of the Panel of Expert for the Pirris RCC Dam Project in Costa Rica, (2004-2007)
- Consultant to Andriolo Ito Engenharia Ltda. Sao Carlos – SP – BRASIL (2004 to 2008)
- Consultant to the SaudConsult, Saudi Arabia, 2008-2009
- Consultant to the World Bank for the Red Sea Dead Sea Canal, (2009 to 2015)

HIGHER EDUCATION TECHNOLOGY EXPERIENCE

1. ABET Evaluator For Jubail University College, Saudi Arabia, 2014.
2. Enforcing Engineering and Medical International Accreditation at JUST such as, ABET, HCAC, WFOT, WCPT, EAEVE, NAAB, ..etc.
3. Enforcing Highest Level of Publications Standards at JUST by using internationally Recognized Indexing System Such as Thomson Reuters (formerly known as ISI)
4. Enhancing JUST library system through the expansion of the university's participation in international publication databases such as Scencedirect, Scopus, Springer, Wiley-Blackwell, Taylor & Francis EBSCO
5. Promoting the use of ICT enabled education such as electronic distance learning, the use of smart boards, virtual learning labs between JUST and North Carolina State University,

ASCE-CONTINUING EDUCATION COURSES IN CIVIL ENGINEERING

1. Design of Dams and Embankments. May, 3rd - 8th 1997, Place: Arab Center for Engineering studies, Amman.
2. Roller Compacted Concrete Dams. Aug. 30th - Sept. 3rd 1997, Place: Arab Center for Engineering studies, Amman.

SOFTWARE PACKAGES

I have developed several packages for enhancing research, development, and education in civil engineering:

1. **Husein Malkawi, A.I.**, and Waleed F. Hassan (2001) "**SAS-MCT 3.0**, Stability Analysis of Slopes Using Monte Carlo Technique" A Software for 2-D and 3-D Slope Stability Analysis with Dynamic effect, including non-circular slip surface. Windows Version.
2. **Husein Malkawi, A.I.**, and Shatnawi, E. (2004) "**Geo-LAB**, Geotechnical Testing Software" Windows Version.
3. **Husein Malkawi, A.I.**, and Waleed F. Hassan (2005) "**SAS-MCT 4.0**, Stability Analysis of Slopes Using Monte Carlo Technique" A Software for 2-D and 3-D Slope Stability Analysis with Dynamic effect, including non-circular slip surface. Windows Version.
4. **Husein Malkawi, A.I.**, and Belakhdar, Kh. (2008) "**SAS-FEM 2.0**, Stability Analysis of Slopes Using Finite Element Method" A Software for Slope Stability Analysis with Dynamic effect, Windows Version.

WORKSHOP

1. Training Workshop on Pile Dynamics (August, 1989), GRL and Associate Cleveland, Ohio
2. Training Workshop on Seismotectonics and Paleoseismicity (Nov. 3-11, 1995, EGYPT) Funded by UNESCO Regional Office For Science & Technology For The Arab States.
3. Towards Democratic Thinking. European Union, MEDA Democracy Project, Debating Workshop organized by the British Council in co-ordination with JUST, Oct. 30 - Nov. 3, 1999.
4. Dam Safety Workshop sponsored by GFA terra system., Germany, between June 2005, for **EC- FSMU-TA**, C/o Ministry of Planning and International Cooperation, Sana'a, Yemen.
5. SAS-MCT 4.0 Workshop sponsored by GFA terra system., Germany, between June 2003, for **EC- FSMU-TA**, C/o Ministry of Planning and International Cooperation, Sana'a, Yemen.
6. International Workshop on **Sustainable Technology for Rural Tourism Development** in Europe and Islamic Countries, 30 Nov.-02 Dec. 2003. In Al Akawayn University in Ifrane, Morocco Title of the lecture "The Importance of Dams in Jordan"
7. **Water- a Crucial Object in the Middle East and North Africa**, Proceedings collection of papers, Editors: Markus Aufleger and Abdallah I. Husein Malkawi, funded by DAAD Germany, 28th – 30th Nov. 2004.
8. **International Workshop on Availability and Quality Management of Water in the MENA Region (Middle East and North Africa)**, Proceedings collection of papers, Editors: Rutschmann (TUM) and Abdallah I. Husein Malkawi, funded by DAAD Germany, 18th – 20th Nov. 2007.

INTERNATIONAL CONFERENCES

1. Chairmen and Organizer of the International Conference in Roller Compacted Concrete Dam Construction in Middle East, 7th – 10th April 2002, Jordan University of Science and Technology (JUST), Irbid Jordan. Sponsored by JUST and MUT Germany.
2. Chairmen and Organizer of the International Conference GEO2004:Advances in Geotechnical Engineering with Emphasis on Dam Engineering, 12th – 15th July 2004, Jordan University of Science and Technology, Irbid Jordan. Sponsored by JUST, Louisiana State Univ., University of Akron and American Society of Civil Engineers (ASCE).

SEMINARS AND LECTURES

1. "Earthquake: An Overview", November, 1994. Invited by the Jordanian Engineering Association, Irbid - Jordan.
2. "Earthquake: An Overview", Feb. 1996. Invited by the Greater Amman Municipality, Amman - Jordan.
3. "Earthquake Effects On Soil-Foundation Systems", Invited by the Ministry of Public Works and Housing, Jordan, April, 1996.
4. "Future Expectations for Dams in Jordan Toward 2020", Conference Organized by the Greater Amman Municipality and the Royal Jordanian Geographic Center, May, 1996.

INVITED LECTURES

1. "An efficient search method for locating circular slip surface using Monte Carlo techniques", International Workshop-cum-Training Programme on Landslide Hazard & Risk Assessment and Damage Control for Sustainable Development. 6-15 Nov. 1998. New Delhi, India.
2. "Mapping of landslide hazard zonation in Jordan using remote sensing and GIS", International Workshop-cum-Training Programme on Landslide Hazard & Risk Assessment and Damage Control for Sustainable Development. 6-15 Nov. 1998. New Delhi, India.
3. "Identification of Soil-Pile Model Interaction Parameters from Recorded Time-Displacement Signals", International Conference on stress Wave Theory, Brazil, Sao Paulo, September, 11, 2000 **Keynote Lecture**.
4. "Stability Analysis of Slopes Using Monte Carlo Technique" Invited lecture by Louisiana State University, Civil Engineering Department, Baton Rouge, Monday, 15, 09, 2003.
5. "Four RCC dams in Jordan: Each is different" Invited lecture by Louisiana State University, Civil Engineering Department, Baton Rouge, Wednesday, 17, 09, 2003.
6. "Stability Analysis of Slopes Using Monte Carlo Technique" Invited lecture by The University of Akron, Ohio, Civil Engineering Department, Baton Rouge, Monday, 19, 09, 2003.

FUNDED PROJECTS

1. Seismic hazard zoning and earthquake risk mapping in Jordan and vicinity, Funded by Deanship of Scientific Research at Jordan University of Science and Technology. Report No. 17/92, 1992-1993.
2. *Seismic hazard assessment and evaluation of dynamic site period in Aqaba city*, Funded by Deanship of Scientific Research at Jordan University of Science and Technology. Joint Research JUST and Yarmouk University. Report No. 39/93, August 1993- 1995.
3. *Instabilities of cut slopes and embankments along highways in northern Jordan and their remedies*, Funded by Deanship of Scientific Research at Jordan University of Science and Technology. Report No. 22/94, April 1994- April 1995.
4. *Geological, Engineering and Hydrological Evaluation of Landslides in Jordan*, Funded by the Higher Council for Science and Technology. Amount 30000 JD. Jan. 1995-Dec. 1997.
5. Geotechnical Team Leader for the project entitled "Earthquake hazards evaluation and methods of mitigating their environmental impact" Funded by the Higher Council for Science and Technology. Amount 150,000 JD (\$250,000 US). Period 1996 to 2000.
6. *Thermal-structural stresses measurement for RCC dam, case study of Mujib and Wala dams*, Funded by the Deutsche Forschungsgemeinschaft (DFG) jointly with Technische Universitat Munchen. Oct. 2000-December 2005. Amount 500000 US\$. Team Leader
7. Collaboration and capacity building in seismology-methodology for assessing earthquakes impact on health, environment, and infrastructures in UAE, funded by the Deanship of the University of Sharjah in UAE 15000.0 US\$. Project Team Leader
8. Improvement of water related cooperation between Jordan University of Science and Technology and Technische Universitat Munchen, Amount 68000 Euros, 2006-2008. Team Leader
9. ICT Learning Program, Project JEP 32162-2006-2009, Funded Project. Amount 447162 € (EUR) by EU, Tempus Project, Project Coordinator.

External University Funded Project during My Presidency at JUST (Million JD).

Project	Donor	Amount (M.JD)	Project Status
Central Library and Classrooms Hall Equipment & Furniture	Japanese Grant	2.25	Completed in 2012
Princess Haya Biotechnology Center Lab Equipment	Princess Haya Bent Alhussien	0.36	Completed in 2012
Dental Educational Clinics (55 chairs)	Saudi Grant for Tech. Education	0.70	Completed in 2013
Engineering Laboratories Equipment	Saudi Grant for Tech. Education	0.70	Completed in 2014
Communication Engineering Labs	Saudi Grant for Tech. Education	0.60	Completed in 2014
Computers and Network equipment	Kuwaiti Grant	0.09	Completed in 2014
Green House Building Model	UNDP	0.62	Completed in 2014
Metrological Station	Jordan Atomic Authority	0.11	Completed in 2014
Pharmaceutical Laboratories	Saudi Grant for Tech. Education	0.16	Completed in 2014
Bio-risk Lab, Princess Haya Biotechnology Center	Sandia (USA), Canada & UK	3.50	Completed in 2015
Dental Educational Clinics (23 chairs)	Saudi Grant for Tech. Education	0.50	In progress
Administration Building (6000 m ²)	Saudi Grant for Infrastructure	2.00	In progress
Medical Waste Treatment Plant	Abu-Dhabi Development Fund	0.70	Contract awarded
PV Solar Energy farm (5 M Watt)	Abu- Dhabi Development Fund	6.00	Contract awarded
University Mosque Renovation	UAE Citizen	0.76	In progress
Vet. Educational Hospital (6000 m ²)	Abu- Dhabi Development Fund	3.00	Design review
Total		23.54	Million JD

Funds Raising during My Presidency at JUST (JD).

1. Poor students' fund 258,000 JD
2. University alumni's contributions 053,700 JD
3. University hosted conferences donations 076,700 JD

BOOKS

1. **Husein Malkawi, A.I.**; Fahmi, Kh.J.; Al-Sheriadeh, M. and Abderahman, N. (1998) "Geological, Engineering and Hydological Evaluation of Landslides in Jordan" Published by the Higher Council for Science and Technology. Pp.16
2. **Husein Malkawi; A. I.**; Markus A.; Strobl, Th. (2002) " Roller Compacted Concrete Dam Construction in the Middle East" Editors, Published by Jordan University of Science and Technology and Munchen Institute of Technology, Germany.
3. **Husein Malkawi, A.I.**, Abed, A and Hammouri, N.A (2002) "Remote Sensing and GIS-Assisted Modeling of Soil Induced Erosion Hazards: A Case Study in Zarqa Basin" Published by the Higher Council for Science and Technology, pp. 105.
4. Alshibli, Kh; **Husein Malkawi, A.I.** and Alsaleh M. (2004) "Advances in Geotechnical Engineering with Emphasis on Dams, Highway Materials, and Soil Improvement" Editors, Geotechnical Practice Publication No. 1, Published by the American Society of Civil Engineers (ASCE).
5. **Husein Malkawi, A.I.**;Barakat, S.; Shanableh, A.; Bdour, A.; Omar, O.; Altoubat, S. (2007) "Seismic Hazard Assessment and Earthquake Risk in the United Arab Emirates" University of Sharjah Publications.
6. **Husein Malkawi, A.I.** and Tsur, Y (2015) "Reclaiming the Dead Sea: Alternatives for Action" "Society-Water-Technology", Book Chapter, Berlin-Brandenburgische Akademie der Wissenschaften Interdisziplinäre Arbeitsgruppe Gesellschaft-Wasser-Technik

REFEREED JOURNALS

1. Akhtar, M. N.; Husein Malkawi, D. A.; Bani-Hani, Kh. A. and **Husein Malkawi, A. I.** (2023) "Durability Assessment of Sustainable Mortar by Incorporating the Combination of Solid Wastes: An Experimental Study" *Civil Engineering Journal* 9(11):2770-2786.
2. Akhtar, M.N., Bani-Hani, Kh.A., Husein Malkawi, D.A., **Husein Malkawi, A.I.** (2023) "Porous asphalt mix design pavement by incorporating a precise proportion of recycled coarse aggregate" *International Journal of Pavement Research and Technology*, Springer, December.
3. Almasri, A.H., Husein Malkawi, D.A. and **Husein Malkawi, A.I.** (2023) "Numerical Analysis to Determine the Optimum Distance of Reaction Piles in A Static Pile Load Test". *Arabian Journal of Geosciences*. Springer (2023) 16.7
4. Husein Malkawi D. A., **Husein Malkawi, A. I.** and Bani-Hani, Kh. A. (2022) "Slope Stability Analysis for the Phosphogypsum Stockpiles: A Case Study for the Sustainable Management of the Phosphogypsum Stacks in Aqaba Jordan" *sustainability Journal*, 14, 15763, MDPI.
5. Husein Malkawi, D.A. and **Husein Malkawi, A.I.** (2021) "Stability Analysis of the New Section in Raising The Existing Composite Wala Dam", *Advances in Civil Engineering Journal*. VI. 2022, Article ID 6989122, 17.
6. Bani-Hani, Kh. A., **Malkawi Husein, A. I.** (2017) "A Multi-step approach to generate response-spectrum-compatible artificial earthquake accelerograms" *Soil Dynamics and Earthquake Engineering* 97 (6), 117-132.
7. Izzaldin Almohd-Ayasrah, Ahmed Ashteyat, **Husein Malkawi, A.I.** (2013) "Design of Geogrid Reinforced Earth Walls: Transition of Limits and Critical Surfaces" *Transportation Research Board 92nd Annual Meeting*, Issue 13-1422.
8. Al-Akhras, N.M.; Attom, M.; Al-Akhras, K.; and **Husein Malkawi, A.** (2008) "Influence of fiber on swelling properties of clayey soil", *Geosynthetics International*, 15, No.4
9. Barakat, S.A., Shanableh, A. and **Husein Malkawi, A.I.** (2008) "A Comparative Earthquakes Risk Assessment Approach Applied to the United Arab Emirates" *JJCE Vol.2*, No. 2.
10. Wael Alkasawneh, W. **Husein Malkawi**, Nusairat, J.H and N. Albataineh. (2008)" A Comparative Study of Various Commercially Available Programs in Slope Stability Analysis" *Computer and Geotechnics Journal*. vol.35, no.3, pp.428-435.
11. Hommouri, N.; **Husein Malkawi, A.I.** and Yamin, M. (2008) "Stability Analysis of Slopes Using Finite Element Method and Limiting Equilibrium Approach" *Bulletin of Engineering Geology and the Environment*, Vol. 67, No. 4.
12. Barakat, S; **Husein Malkawi, A.I.** and M. Omar (2005) "Parametric Study using FEM for the Stability of the RCC Tannur Dam" *Geotechnical and Geological Engineering*, 23:61-78.
13. **Husein Malkawi; A. I.**; Markus A.; Strobl, Th.; Mutasher, S. And Al-Jammal, M. (2004) " Computational of Thermal and Structural Stresses for Roller Compacted Concrete RCC Dams Using Linear and Nonlinear Properties" *International Journal of Hydropower and Dams*, July. 2004.
14. Husein Malkawi; A. I.; Mutasher S.A. and Qiu Tony (2003) "Thermal-Structural stresses Modeling and Temperature Control of RCC Gravity Dam" November 2003, *ASCE Journal of Performance of Constructed Facilities*
15. **Husein Malkawi, A.I.**; Hassan, W.F. and S.K. Sarma (2003) "Reply to Discussion of - An efficient search method for locating circular slip surface using Monte Carlo Technique", By V.R. Greco, *Canadian Geotechnical Journal*., February.
16. **Husein Malkawi, A.I.**; Hassan, W.F. and S.K. Sarma (2002) "Closure to Discussion of - A Global Search Method for Locating General Slip Surface Using Monte Carlo Techniques", by Gautam Bhattacharya, *ASCE Geotechnical and Geoenvironmental Journal*, December.
17. Nusier, O.; Alawneh, Sh. and **Husein Malkawi, A.I.** (2002) "Remedial Measures to Control Seepage Problems in the Kafrein Dam, Jordan" *Bulletin of Engineering Geology and Environment Journal*, 61:145-152.
18. Forbes, B.; Iskander, M. and **Husein Malkawi, A.I.** (2001) "High RCC Standards Achieved in Completing Jordan's Tannur Dam" *The International Journal of Hydropower and Dams*, U.K. June. Volume 8, Issue 3.

19. **Husein Malkawi, A.I.**; Hassan, W.F. and S.K. Sarma (2001) "A Global Search Method for Locating General Slip Surface Using Monte Carlo Techniques", ASCE Geotechnical and Geoenvironmental Journal, August.
20. **Husein Malkawi, A.I.**; Hassan, W.F. and S.K. Sarma (2001) "An efficient search method for locating circular slip surface using Monte Carlo Technique", Canadian Geotechnical Journal., October.
21. Alawneh, A.Sh. Nusier, O. **Husein Malkawi, A.I.**; and Al-Kateeb, M. (2001) "Axial Compressive Capacity of Driven Piles in Sands: A Method Including Post-Driving Residual Stresses" April, Canadian Geotechnical Journal.
22. Alawneh, A.Sh; **Husein Malkawi, A.I.** and Nusier, O. (2001) "Distress of R/C Structure Due to Poor Quality Control and Overloading" ASCE Journal of Performance of Constructed Facilities, February.
23. Alawneh, A.Sh. and **Husein Malkawi, A.I.** (2000) "Estimation of Post-Driving Residual Stresses Along Piles Driven in sand". Geotechnical Testing Journal, Sept.
24. Husein Malkawi, A.I.; **Hassan, W.F** and **Abdulla, F.** (2000) "Uncertainty and Reliability Analysis Applied to Slope Stability" Structural Safety Journal, 22, 161-187.
25. **Husein Malkawi, A.I.**; Saleh, B.; Al-Sheriadeh, M. and Hamza, M. (2000) "Mapping of Landslide Hazard Zones in Jordan Using Remote Sensing and GIS" ASCE Urban Planning Journal, March.
26. **Husein Malkawi, A.I.** and Al-Sheriadeh, M. (2000) "Evaluation and Rehabilitation of dam Seepage Problems. A Case Study: Kafrein Dam". Engineering Geology Journal, Vol. 56, May. 2000.
27. Al-Sheriadeh, M.; **Husein Malkawi, A.I.**, Al-Hamdan, A.Z. and Abderahman, N.S. (2000) "Evaluating Sediment Yield at King Talal Reservoir from Landslides along Irbid-Amman Highway". Engineering Geology Journal, Vol. 56, May. 2000.
28. **Husein Malkawi, A.I.** and Alawneh, A.Sh. (2000) "Paleoearthquake Features As Indicators of Potential Earthquake Activities in the Karameh Dam Site". Natural Hazard Journal, 22: 1-16.
29. Liang, R.Y.; Nusier, O.K. and **Husein Malkawi, A.I.** (1999) "Reliability Based Approach for Evaluating Slope Stability of Embankment Dams" Engineering Geology Journal, July, 1999.
30. **Husein Malkawi, A.I.**; Numayr, K.S. and Barakat, S.A. (1999) "The Aqaba Earthquake of November 22, 1995". Earthquake Spectra, Vol. 15, No. 3, August.
31. **Husein Malkawi, A.I.** and Ottom, M.F. (1999) "Probabilistic Seismogenic Hazard Assessment of Tannur a Roller Compacted Concrete Dam". Indian Geotechnical Journal. Vol 80, November.
32. **Husein Malkawi; A. I.**; Alawneh, A. and Abu-Safaqah, O. (1999) "Effect of organic matter on the physical and the physicochemical properties of an illitic soil" APPLIED CLAY SCIENCE Journal, 14, 257-278.
33. **Husein Malkawi, A.I.**, Abdualla, F.A.; Barakat, S.A., and Al-Sheriadeh, M. (1999) "Application of Extreme Value Statistics to Annual Maximum Magnitudes in Jordan Employing a Mixture Distribution". Earthquake Spectra, Vol. 15, No. 4. November.
34. Barakat, S.A.; **Husein Malkawi, A.I.** and Tahat, R.H.(1999) "Reliability-based optimization of laterally loaded piles" Structural Safety Journal, April, 1999.
35. Alawneh, A.Sh.; **Husein Malkawi, A.I.** and Al-Deeky, H. (1999) "Tension Tests on Smooth and Rough Model Piles in Dry Sand". Canadian Geotechnical Journal, Nov.
36. **Husein Malkawi, A.I.**; Khasawneh, A. and Ayasrah, I.M. (1999) "Effect of penetration rate on bearing capacity of piles driven in dry sand", Mu'tah Lil-Buhooth Wa Al-Dirasat Journal, Mu'tah University, Mu'tah, Jordan. Vol. 14, No. 1. pp. 11-36.
37. **Husein Malkawi, A.I.**; A.A. Basma, and N. Shbib (1999) "Projectile Penetration in Soil: Multivariate Probabilistic Model", Mu'tah Lil-Buhooth Wa Al-Dirasat Journal, Mu'tah University, Mu'tah, Jordan. Vol. 14, No. 1. pp. 59-83.
38. **Husein Malkawi, A.I.**, A.A. Basma, and N. Shbib (1999) "Projectile Penetration in Soil: Theoretical Model", Mu'tah Lil-Buhooth Wa Al-Dirasat Journal, Mu'tah University, Mu'tah, Jordan. Vol. 14, No. 1. pp. 85-113.
39. Al-Homoud, A.S.; **Husein Malkawi, A.I.**; Basma, A.A. and A. B. Tal, A.B. (1998) "Back Analysis Technique for Slope Stabilization Works of Embankment Landslide due to Foundation Instability" Soils and Foundations, Japanese Geotechnical Journal, Vol. 38-2.

40. Fahmi, Kh.; **Husein Malkawi, A.I.** (1998) "Dynamic Site Response Evaluation of Aqaba Port City (Jordan) Employing the Equivalent Linear Method" Canadian Geotechnical Journal, December.
41. Samer A. Barakat, S.A.; **Husein Malkawi, A.I.**; Anis S. Al-Shatnawi (1997) "A step towards evaluation of the seismic response reduction factor in multistory reinforced concrete frames", Natural Hazard Journal, 16: July, pp. 65-80.
42. Saleh, B.; **A.I. Husein Malkawi** and Blum, P. A. (1996) "In-situ determination of average elastic modulus of a rock mass using high resolution tiltmeter" Canadian Geotechnical Journal. April 1996.
43. **Husein Malkawi, A.I.** and Fahmi, Kh. (1996) "Locally derived earthquake ground motion attenuation relations for Jordan and conterminous areas". Quarterly Journal of Engineering Geology. Nov., 29, 309-319.
44. Fahmi, Kh.; **Husein Malkawi, A.I.** and Al-Zoubi, O. (1996) "Seismic engineering ground motion maps for Jordan employing local attenuation relations", Environmental and Engineering Geoscience, Vol II, No. 1, Spring 1996.
45. **Husein Malkawi, A.I.**; and S. Taqieddin, (1996) "Geotechnical study of landslides resulting from a highway construction in Jordan" Natural Hazard Journal, Volume 13, issue 1.
46. **Husein Malkawi, A.I.** and Liang, R. Y., (1996) "Dynamic Soil-Pile Interaction Parameters Identification Using Transfer Function Technique" Soil and Foundation Japanese Geotechnical Journal. Sept. 1996.
47. Basma, A.A.; A.S. Al-Homoud; **Husein Malkawi, A.I.** and M. Bashabshi (1996) "Swelling-Shrinkage Behavior of Expansive Clays", Applied Clay Science, December, 1996.
48. **Husein Malkawi, A.I.**, Al-Homoud, A.S. and J.S. Bataneh (1995) "Probabilistic Seismic Hazard Zonation and Dynamic Site Periods Mapping for Major Cities in Jordan" Earthquake Spectra, November, 1995.
49. Basma, A. A.; A.S. Al-Homoud and **Husein Malkawi, A.I.** (1995) "Laboratory assessment of swelling pressure of expansive soils." Applied Clay Science, Vol. 9, pp. 355-368.
50. A.S. Al-Homoud; Basma, A.A.; **Husein Malkawi, A.I.** and M. Bashabshi (1995) "Cyclic Swelling Behavior of Clays", Geotechnical Engineering Journal, ASCE, Vol. 121, No.7.
51. **Husein Malkawi, A.I.**; A.S. Al-Homoud, and R.Y. Liang (1995) "Seismic hazard mapping of Jordan". Quarterly Journal of Engineering Geology, 28, 75-82.
52. **Husein Malkawi, A.I.**; R.Y. Liang; J.H. Nusairat and A.S. Al-Homoud (1995) "Probabilistic seismic hazard zonation of Syria" Natural Hazard Journal, Vol. 12, issue 2.
53. Al-Homoud, A.S. and **Husein Malkawi, A.I.** (1995) "Probabilistic Assessment of Seismic Hazard of Dam Sites in Jordan" Natural Hazards 11: 123-134.
54. **Husein Malkawi, A.I.**; A.S. Al-Homoud; E.T. Tarazi and O.K. Nusier (1995) "Probabilistic seismogenic ground motion hazard assessment of Karak city in Jordan" Environmental and Engineering Geoscience, Vol.1, No.2.
55. Al-Homoud A.S.; **A.I. Husein Malkawi**, A.A. Basma, and A.B. Tal (1995) "Geotechnical Investigation of Embankment Foundation Instability- A Case Study Landslide at Station 40 + 700 on Irbid Amman Highway", AGR Journal, Vol.2, No.4.
56. Al-Homoud A.S.; **A.I. Husein Malkawi**; E. Salameh; A. Tal; S. Saket; and M. Sadoon (1995) "A Review of twenty years of geotechnical studies at Na'ur landslide no. 4 in Jordan" Bulletin of the International Association of Engineering Geology, Paris-No. 51.
57. Al-Homoud A.S.; Taqieddin, S.A.; **A.I. Husein Malkawi**; E. Salameh; A. Tal; S. Saket; and M. Sadoon (1995) "A Critical overview of the geotechnical studies at the Na'ur landslide No. 4 in Jordan: Causes and measures" Engineering Geology 40, 103-136.
58. **Husein Malkawi, A.I.**; R.Y. Liang and J.H. Nusairat (1994) "Performance of Karameh earth dam under earthquake loading" European Earthquake Engineering, International Journal of Earthquake Engineering and Engineering Seismology, 2/94.
59. Al-Homoud, A.S.; S. Saket and **Husein Malkawi, A.I.** (1994) " Investigation of Failure of Highway Embankment Founded on Colluvium and Suggested Stabilization Measures for Reconstruction". International Journal of Engineering Geology, 38, 95-116.
60. Al-Homoud, A.S., A.B. Tal and **Husein Malkawi, A.I.** (1994) "Instability and stabilization of an embankment on the Irbid-Amman highway in Jordan" Canadian Geotechnical Journal, 31. 1015-1021.

61. Liang, R. Y. and **Husein Malkawi, A.I.** (1993) "Simplified Dynamic Method for Pile Driving Control" J. of Geot., Eng., ASCE Vol. 119 No. 4 April.

CONFERENCES

1. Al-Omari, H., Zabalawi, I., and **Husein Malkawi, A.I.** (2024) "Boosting AI Innovation and Technology Transfer in Arab Higher Education" 22nd annual International Conference of the Arab Academy of Science, Beirut, Lebanon, 22-23 November, 2024. "Higher Education in the Arab World: Artificial Intelligence".
2. Al-Omari, H., Zabalawi, I., and **Husein Malkawi, A.I.** (2024) "Toward AI-Based Curricula in Higher Education in the Arab World" 22nd annual International Conference of the Arab Academy of Science, Beirut, Lebanon, 22-23 November, 2024. "Higher Education in the Arab World: Artificial Intelligence".
3. **Husein Malkawi, A.I.**; Husein Malkawi, D.A. and Ban-Hani, Kh. A. (2024) "Thermal-Structural Modeling and Temperature Control of RCC Gravity Dam: A Parametric Study" CESARE'24 - The 4th International Conference "Coordinating Engineering for Sustainability and Resilience", Timisoara, Romania, 29-31 May 2024
4. **Husein Malkawi, A.I.**, Shatnawi, E. and Malkawi Husein, D.A. (2017)"A Comparative Study of Physical and Chemical Properties of Different Pozzolanic Materials Used for Roller Compacted Concrete RCC Dams" International Conference on Advances in Sustainable Construction Materials & Civil Engineering Systems (Ascmces-17) University of Sharjah, UAE 18-20 April.
5. **Husein Malkawi, A.I.**, Abu-Arabi, M. and Khasawneh, M. (2010) "The Red to Dead Sea Conveyance System; bridging the water shortage and prospects for desalination. INREC'10
6. **Husein Malkawi, A.I.** and Alawneh, A. (2008)" Simplified Engineering Manual for Shallow and Deep Foundation" Prepared for Gulf Engineering House, Riyadh, Kingdom of Saudi Arabia.
7. Abu-El-Sha'r, W.Y.; Al-Sharif, M.M.; **Husein Malkawi, A.I.** and Al-Zoubi, R. (2008) "Integrated Waste Water Management System (IWWMS) at the Campus of Jordan University of Science and Technology (JUST)" ICCBT 2008, Malaysia.
8. Khasawneh, M; Owais ,W. and **Husein Malkawi, A.I.** (2006) "Gearing Academic Research Endeavors towards Achieving Sustainable Development in Third World Countries". UNESCO Forum on Higher Education, Research and Knowledge Colloquium on Research and Higher Education Policy 29 November - 1 December 2006, UNESCO Headquarters.
9. Khasawneh, M; Husein Malkawi, A.I.; Lansari, A.; **Malkawi, M.** Al-Jaraah, O. (2006) "Optimizing Engineering Education in Arab Universities – Towards Industry-Oriented Outcomes." The 4th International Forum on Engineering Education to be held at the University of Sharjah during 25-27 April 2006.
10. Shanableh, A.; Barakat, S. and **Husein Malkawi, A.I.** (2005) "A Frame work for Comparative Risk Assessment of Earthquakes Consequences in the United Arab Emirates" International Symposium Disaster Reduction on Coasts Monash University, Melbourne, Australia 14 – 16 November.
11. Conrad, M.; Kisliakov, D.; Aufleger, M.; Strobl, Th. and **Husein Malkawi, A.I.** (2005) "Simplified Thermo-Mechanical Modelling of A Roller Compacted Concrete (RCC) Dam-Evaluation of the Numerical Model and Influence of Some Concrete Parameters". Proceedings of the Sixth International Congress on Thermal Stresses, TS2005 26-29 May 2005, Vienna University of Technology, Vienna, Austria.
12. Fahmi, Kh. and **Husein Malkawi, A.I.** (2004) "The Bam [M_w 6.6] Earthquake of December 26, 2003, SE Iran: Engineering Seismological Aspects & Implications for the U.A.E." International Forum on Seismology and Earthquakes in the Arabian Gulf Region" 22-25 Feb. 2004, Sharjah, U.A.E.
13. Fahmi, Kh.J.; **Husein Malkawi, A.I.** and Alawneh, A. (2004) 'In-Situ Determination of Young's Modulus at Shallow Depths Using Refraction P-Wave Velocitys, Irbid City, Jordan" International Conference on Geotechnical Engineering, October 3-6, 2004, Sharjah – United Arab Emirates.
14. **Husein Malkawi, A.I.**; Shatnawi, E. and Markus A. (2004) "Temperature Distribution in Roller compacted Concrete RCC Dam Using Two Different Finite Element Codes" International Conference on Geotechnical Engineering, October 3-6, 2004, Sharjah – United Arab Emirates
15. **Husein Malkawi, A.I.**; Markus A. and Al-Jammal, M. (2004) "Temperature Distribution In Al-Mujib Roller Compacted Concrete (RCC) Gravity Dam" International Conference Geo-Jordan 2004: Advances in Geotechnical Engineering with Emphasis on Dam Engineering, 12th – 15th July.

16. Al Saleh M. I.; Alawneh, A. Sh. and **Husein Malkawi, A.I.** (2004) "Complementary Design Methodology for Driven Piles in Sand" International Conference Geo-Jordan 2004: Advances in Geotechnical Engineering with Emphasis on Dam Engineering, 12th – 15th July.
17. **Husein Malkawi, A.I.**; Husein A. Shaia, H.A.; Aridah, M.F. and Mutasher, S.A. (2003) "A Comparative Study of Mechanical Properties of RCC Trial Mix Using two Different Cementitious Materials (Fly Ash and Natural Pozzolan)" 4th International Symposium on Roller Compacted Concrete (RCC) Dams, 17-19 November, Spain.
18. **Husein Malkawi, A.I.** and Mutasher, S.A. (2003) "A Direct Tensile Test for Roller Compacted Concrete (RCC) Gravity Dams" 4th International Symposium on Roller Compacted Concrete (RCC) Dams, 17-19 November, Spain.
19. **Husein Malkawi, A.I.**; Abed, A. and Rababa, S. (2003) "Reaction between certain Jordanian rock-aggregate and cement in roller compacted concrete (RCC) dams. 4th International Symposium on Roller Compacted Concrete (RCC) Dams, 17-19 November, Spain.
20. Conard, M.; Aufleger, M. and **Husein Malkawi, A.I.** (2003) "Investigation on the Modulus of Elasticity of Young RCC" 4th International Symposium on Roller Compacted Concrete (RCC) Dams, 17-19 November, Spain
21. Aufleger, M., Conrad, M. Strobl Th., **Husein Malkawi, A.I.** and Duan Y. (2003) "Distribution fiber optic temperature measurements in RCC dams in Jordan and China" 4th International Symposium on Roller Compacted Concrete (RCC) Dams, 17-19 November, Spain
22. **Husein Malkawi; A. I.**; Mutasher S.A. and Qiu Tony (2002) "Thermal Analysis of Al-Tannur RCC Gravity Dam" Proceeding of the 2002 International Conference on Roller Compacted Concrete Dam Construction in Middle East, April 7th-10th. pp. 303-318, Jordan University of Science and Technology, Irbid, Jordan, Edited by Husein Malkawi, A.I.; Aufleger, M. and Strobl, Th.
23. Barakat, S.A.; **Husein Malkawi, A.I.** and Humadi, A.A. (2002) "Parametric Study Using FEM for the RCC Tannur Dam" Proceeding of the 2002 International Conference on Roller Compacted Concrete Dam Construction in Middle East, April 7th-10th. pp. 303-318, Jordan University of Science and Technology, Irbid, Jordan, Edited by Husein Malkawi, A.I.; Aufleger, M. and Strobl, Th.
24. Conrad, M.; Aufleger, M. and **Husein Malkawi, A.I.** (2002) "An Advanced Temperature Monitoring System at Mujib and Wala Dam –First Results" Proceeding of the 2002 International Conference on Roller Compacted Concrete Dam Construction in Middle East, April 7th-10th. pp. 319-330, Jordan University of Science and Technology, Irbid, Jordan, Edited by Husein Malkawi, A.I.; Aufleger, M. and Strobl, Th.
25. Aufleger, M. and **Husein Malkawi, A.I.** and Duan, Y. (2002) "Distributed Fiber Optic Temperature Measurements in RCC Dams –An International Research Project" Proceeding of the 2002 International Conference on Roller Compacted Concrete Dam Construction in Middle East, April 7th-10th. pp. 483-493, Jordan University of Science and Technology, Irbid, Jordan, Edited by Husein Malkawi, A.I.; Aufleger, M. and Strobl, Th.
26. **Husein Malkawi; A. I.** (2001) "Three RCC Dams in Jordan: Each is Different" Workshop Advanced Technologies in RCC, 28th of June, Obernach, Institute of Hydraulic and Water Resources Engineering, Technische Universitat Munchen (TUM) Germany.
27. **Husein Malkawi, A.I.** and Ayasrah, I.M. (2000) "Identification of Soil-Pile Model Interaction Parameters from Recorded Time-Displacement Signals", International Conference on stress Wave Theory, Brazil, September, Keynote Lecture.
28. **Husein Malkawi, A.I.** and Waleed Hassan (1998) "An efficient search method for locating circular slip surface using Monte Carlo techniques", International Workshop-cum-Training Programme on Landslide Hazard & Risk Assessment and Damage Control for Sustainable Development. 6-15 Nov. 1998. New Delhi, India.
29. **Husein Malkawi, A.I.** (1998) "Mapping of landslide hazard zonation in Jordan using remote sensing and GIS", International Workshop-cum-Training Programme on Landslide Hazard & Risk Assessment and Damage Control for Sustainable Development. 6-15 Nov. 1998. New Delhi, India.
30. **Husein Malkawi, A.I.** (1996) "Evaluation of the Seismic Zoning Factor (Z): A Step Toward Appending This Factor in the Palestinian Seismic Code of Practice", First Palestinian Symposium for Earthquake Hazard Mitigation, Nablus- Palestine, May 27 -29, 1996.
31. **Husein Malkawi, A.I.** and Kh. S. Mohammad (1996) "Estimating Damping Constant of the Pile-Soil System Directly from measured Displacement Using Hilbert Transform Technique" Fifth International

- Conference on the Application of Stress-Wave Theory to Piles. Orlando, Florida, Sept. 11-13, 1996. pp. 37-54.
32. Alawneh, A.S. and **Husein Malkawi, A.I.** (1996) "Residual load concept in pile foundations", Indian Geotechnical Conference - 1996, December 11-14.
 33. **Husein Malkawi, A.I.**; Alawneh, A.S. and Liang, R.Y (1996) "Dynamic cone theory to predict static pile bearing capacity", Indian Geotechnical Conference - 1996, December 11-14.
 34. **Husein Malkawi, A. I.** and Liang, R. Y. and J.H. Nusairat (1995) "Karameh earth dam, A challenging project" Third International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics, April 2-7, 1995, in St. Louis, Missouri USA. pp. 463-468.
 35. **Husein Malkawi, A. I.**, R.Y. Liang and O. Nusier (1995) "Seismicity of Jordan and conterminous countries" Third International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics, April 2-7, 1995, in St. Louis, Missouri USA. pp. 581-585.
 36. **Husein Malkawi, A. I.**, Al-Homoud, A.S. and J.S. Bataineh (1995) "Seismic Hazard Zonation and Dynamic Site Periods Mapping for Greater Amman Municipality" Third National Earthquake Engineering Conference, Istanbul, Turkey
 37. **Husein Malkawi, A.I.**, K.J. Fahmi (1995) "Locally Derived Earthquake Ground Motion Attenuation Relations for Jordan and Vicinity" The International Conference on Earthquake Engineering, Amman, Jordan, 9-11 October.
 38. **Husein Malkawi, A.I.**; K.J. Fahmi and O.Y. Al-Zoubi (1995) "Evaluation of Seismic Zoning Factor (Z): A Step Toward Appending This Factor in the Jordanian Seismic Code of Practice" Housing and Urban Development Corporation Conference, October 2-4, Amman.
 39. Basma, A. A. and **Husein Malkawi, A.I.** (1995) "Assessment of slope stability by artificial neural networks", Second ASCE-SAS 1995 Regional Conference, 16-18 Nov., Beirut - Lebanon.
 40. **Husein Malkawi, A.I.** and M. Nazih Eilouch (1995) "Evaluation of Seismic Zoning Factor (Z): A Step Toward Appending This Factor in the Syrian Seismic Code of Practice" 35th science Week, Tishreen University, Lattakia, Syria, 4-9 Nov, 1995.
 41. Liang, R. Y., and **Husein Malkawi, A. I.**, " Dynamic Cone Penetrometer to Predict Bearing Capacity of Driven Piles" Eighth International Conference of the International Association for Computer Methods and Advances in Geomechanics, May, 22-28, 1994 West Virginia, U.S.A.
 42. **Husein Malkawi, A. I.**, and Liang, R. Y., " **DEEP**: A dynamic Energy Equation Based Computer Program For Field Estimation of Driven Pile Capacity" Eighth International Conference of the International Association for Computer Methods and Advances in Geomechanics, May, 22-28, 1994 West Virginia, U.S.A.
 43. ODOT; **Husein Malkawi, A.I.** and R.Y. Liang (1994) "Dynamic Probing Test to Determine Pile Capacity" International Conference on Design and Construction of Deep Foundations, Orlando, Florida, December. pp. 1231-1336.
 44. **Husein Malkawi, A. I.**, and Taqieddin, S. (1993) " The influence of ground water conditions on slopes instabilities, A case study: Irbid Amman highway" 33rd science Week, Aleppo University, Aleppo, Syrian Arab Republic 6-12 Nov, 1993.
 45. **Husein Malkawi, A. I.**, Ghiocel, D., and Vierescu, R., "Consideration of Wind and Snow Force Action Based on Probabilistic Approach" University Publication, Bucharest, 1985.

TECHNICAL REPORTS

1. **Husein Malkawi, A.I.,** Bani-Hani, Kh and Husein Malkawi, D.A. (2020) “Stability Analysis of the above Ground Slopes for the Stacking Phosphogypsum in Aqaba” FINAL REPORT, Jordan Phosphate Mines Company.
2. **Husein Malkawi, A.I.,** and Alawneh, A.Sh. (2016) Simplified Engineering Design Manual for Shallow and Deep Foundation. Fahad Bin Sultan University, Tabuk, Kingdom of Saudi Arabia.
3. **Husein Malkawi, A.I.,** (2014) Seismic Hazard Study and Site Specific Study for the for Atlantis Site Project in Palm Jumeirah in Dubai, 79 pp. Dec.
4. Allan, J.A., **Husein Malkawi, A.I.,** and Tsur, Y. (2014) “Red Sea–Dead Sea Water Conveyance Study Program; Study of Alternatives” *Final Report*, Executive Summary and Main Report. Published by the World Bank, March 2014, www.worldbank.org/rds, 285 pp.
5. **Husein Malkawi, A.I.,** (2010) Structural Stability Analysis of Metolong RCC Dam, South Africa, Lesotho (Static and Dynamic Analysis), 46 pp.
6. **Husein Malkawi, A.I.,** (2010) Thermal-Structural Modeling and Temperature Control of Metolong RCC Gravity Dam, South Africa, Lesotho, 54pp.
7. **Husein Malkawi, A.I.,** (2010) Seismic Hazard, Liquefaction and Earthquake Engineering Study for two Sites Located in Kabul, AFGHANISTAN, 301 pp.
8. **Husein Malkawi, A.I.,** (2010) Drilled Shaft Static Load Test, Interpretation of the Test Results Batinah Coastal Road (Sohar Port-Hatmat-Malah) in Oman Section 2, Phase 1, ch. 195+930,
9. **Husein Malkawi, A.I.** (2008) “Slope Stability Analysis for the above Ground Storage Tank.” The National Trading and Investment Group (NTIG) ltd.,
10. **Husein Malkawi, A.I.** (2008)” THERMAL ANALYSIS AND THERMAL STRESSES AND TEMPERATURE CONTROL FOR DAMAD DAM IN JIZAN SAUDI ARABIA” Saudi Consulting Services, Riyadh.
11. **Husein Malkawi, A.I.** (2008) Design of Quay Gravity Retaining Wall for King Abdullah University of Science and Technology (KAUST)- Thuwal Town Development, Jeddah, Saudi Arabia.
12. **Husein Malkawi, A.I. and Bani Hani Kh.** (2008) PROBABILISTIC SEISMIC HAZARD ANALYSIS AND DEVELOPMENT OF GROUND PARAMETERS FOR THE JUMEIRAH GARDEN CITY PROJECT. Arab Center for Engineering Studies (ACES), Dubai Branch.
13. **Husein Malkawi, A.I.;** Barakat, S.; Shanableh, A.; Al Bdour, W.; Omar, M. and Altoubat, S. (2007) “Seismic Hazard Assessment and Mitigation of Earthquake Risk in United Arab Emirates (UAE)” Published jointly by Jordan University of Science and Technology and the Dean of Research and Higher Studies, University of Sharjah, United Arab Emirates.
14. **Husein Malkawi, A.I.** (2007) "Probabilistic Seismic Hazard Analysis and Development of Ground-Motion Parameters for the New Main Brine Intake Pumping Station" Submitted to dar al handasah, shair and partners, Amman, Jordan.
15. **Husein Malkawi, A.I.** (2007) “Probabilistic Seismic Hazard Analysis and Development of Ground-Motion Parameters for the QATAR Petroleum Complex Project” Submitted to Arab Center for Engineering Studies (ACES), Doha Branch
16. **Husein Malkawi, A.I.** (2006) “Pirris Hydropower Project, Technical Report (No. 2)” Submitted to ELECTRIC POWER DEVELOPMENT CO., LTD., (J-POWER), JAPAN and INSTITUTO COSTARRICENSE DE ELECTRICIDAD (ICE), Costa Rica. Pp. 128
17. **Husein Malkawi, A.I.** (2006) “Probabilistic Seismic Hazard Analysis And Development Of Ground-Motion Parameters For The Two Arab Potash Sites In The Dead Sea and Aqaba City” Submitted to HATCH, Oakville, Ontario, Canada and Arab Center for Engineering Studies, Amman.
18. **Husein Malkawi, A.I.** (2005) “Structural Stability Analysis of PINALITO RCC DAM in Dominican Republic (Static, Pseudo-Static and Dynamic Analysis)”. PROYECTO HIDROELECTRICO PINALITO LA VEGA, REPUBLICA DOMINICANA. Pp. 195.

19. **Husein Malkawi, A.I.** (2005) "Pirris Hydropower Project, Technical Report (No. 1)" Submitted to ELECTRIC POWER DEVELOPMENT CO., LTD., (J-POWER), JAPAN and INSTITUTO COSTARRICENSE DE ELECTRICIDAD (ICE), Costa Rica. Pp. 58.
20. **Husein Malkawi, A. I.** (2004) "Slope Stability on The Left Abutment Hisban Dam" Prepared for Ministry of Water and Irrigation/Jordan Valley Authority Amman- Jordan.
21. **Husein Malkawi, A. I.** (2004) "Stability of Al-Adasiya Landslide on Amman-Na'ur-Dead Sea Highway-Inclinometer Monitoring Report" Monthly report June, 2004. till June 2005 for the Ministry of Public Works and Housing.
22. **Husein Malkawi, A. I.** (2004) "Structural Stability Analysis of Al-Wehdah RCC Dam (Static, Pseudo-Static and Dynamic Analysis)" prepared for TEMELSU International Engineering Services Inc., Ankara, Turkey.
23. **Husein Malkawi, A. I.** (2004) "Thermal Analysis and Temperature Control of Al-Wehdah RCC Gravity Dam" prepared for TEMELSU International Engineering Services Inc., Ankara, Turkey.
24. **Husein Malkawi, A. I.** (2004) "A Comparative Study of Physical and Chemical Properties of Different Pozzolanic Materials Used for Roller Compacted Concrete RCC Dams" prepared for ÖZALTI CONSTRUCTION TRADE & INDUSTRY Co. Inc., Ankara – Turkey.
25. **Husein Malkawi, A. I.** (2004) "A Comparative Study of Physical and Chemical Properties of Different Pozzolanic Materials including Saudi Pozzolana Used for Roller Compacted Concrete RCC Dams" prepared for Pozzolan Product Factory Ltd. Co., Kingdom of Saudi Arabia.
26. **Husein Malkawi, A.I.** and Eid Al-Tarazi (2004) "Geophysical Tests (Seismic Refraction) for Al-Wehdah RCC Dam Project" Prepared for the Ministry of water and irrigation, Jordan Valley Authority. December, 2004.
27. **Husein Malkawi, A.I.** and Humadi, A.A. (2000) "Static and Dynamic Analysis of Tannur Dam" Prepared for the Ministry of water and irrigation, Jordan Valley Authority, January, 99p.
28. **Husein Malkawi, A.I.** and Humadi, A.A. (2000) "Sesimic Analysis of Al Wehdah Concrete Face Rockfill Dam Project" Prepared for the Ministry of water and irrigation, Jordan Valley Authority, April, 61p.
29. **Husein Malkawi, A.I.** and Humadi, A.A. (2000) "Sesimic Analysis of Al Wala RCC Dam Project" Prepared for the Ministry of water and irrigation, Jordan Valley Authority, April, 49p.
30. **Husein Malkawi, A.I.** and Humadi, A.A. (2000) "Geophysical Tests of Al Mujib RCC Dam Project" Prepared for the Ministry of water and irrigation, Jordan Valley Authority, April, 46p.
31. **Husein Malkawi, A.I.** and Abed, A. M. (2000) "Testing Some Outcrop and Borehole Samples from the Mujib Dam Site" Prepared for the Ministry of water and irrigation, Jordan Valley Authority, Feb., 34p.
32. **Husein Malkawi, A.I.**, Alawneh, A.Sh. and Abed, A. M. (2000) "Evaluation of the Allowable Bearing Capacity Static and Dynamic Analysis for the Proposed Ajloun Education Department Building" Prepared for the Ministry of Public Works and Housing, Amman, Jordan, January, 20p.
33. **Husein Malkawi, A.I.** and Alawneh A.Sh. (2000) "Seismic Repair and Strengthening of Aqaba Port Observation Tower, Geotechnical Consideration" Prepared for Royal Scientific Society, Building Research Center, Amman, April., 101p.
34. **Husein Malkawi, A.I.** and Alawneh, A.Sh. (1999) "Dynamic Site Response Evaluation for the Chimney Located Near the Fertilizer Plant (Aqaba City)". Report Submitted to Royal Scientific Society, May, Jordan, 25p.
35. Al-Tarazi, E. and **Husein Malkawi, A.I.** (1999) "Seismic Refraction Survey in the Proposed Al-Wala Dam Site". Prepared for Arab Center for Engineering Studies (ACES), May.
36. **Husein Malkawi, A.I.** (1999) "Al-Wehdah Dam Project, Updated Economic Feasibility, Chapter 4, Evaluation of the Alternative Dam Type" " Prepared for the Ministry of water and irrigation, Jordan Valley Authority, November.
37. **Husein Malkawi, A.I.** and NCD (1999) "Al-Wehdah Dam Project, Overview, Rider No. 1" Prepared for the Ministry of water and irrigation, Jordan Valley Authority, June.

38. **Husein Malkawi, A.I.**; Numayr, K.S. and Barakat, S.A. (1998) "The Aqaba Earthquake of November 22, 1995". Jordan University of Science and Technology, Dean of Research.
39. **Husein Malkawi, A.I.** (1998) "Geological and Geotechnical Investigation for the Proposed Ajloun Education Department Building" Prepared for the Ministry of Public Works and Housing, Amman, Jordan.
40. **Husein Malkawi, A.I.** (1997) "Assessment of Liquefaction Potential and evaluation of settlements in sands due to earthquake shaking at Aqaba bridge proposed hotel Mövempick Hotel", Prepared for Arab Center for Engineering Studies (ACES), Feb., 86p.
41. **Husein Malkawi, A.I.**; Fahmi, J.Kh. (1996) "Seismic hazard assessment and evaluation of dynamic site response in Aqaba city", Joint Research JUST and Yarmouk University. Report No. 39/93, August 1993- May 1996.
42. **Husein Malkawi A.I.** (1995) "Raising Kafrein Earth Dam Propabilistic Seismic Hazard Assessment" Prepared for Jordan Valley Authority, Mott MacDonald Limited and Consulting Engineering Centre (CEC). pp.17.
43. **Husein Malkawi A.I.** (1995) "Seismic Hazard Assessment of Tannur: A Roller Compacted Concrete Dam." Prepared for Jordan Valley Authority, Howard Humphreys, Studio Pietrangeli and CEC. pp.33.
44. **Husein Malkawi A.I.**, and Basma, A.A. (1995) "Direct Shear test Report-Raising Kafrein Earth Dam Project" Prepared for Matt MacDonald (Mr. Peter Creighton). pp.24.
45. **Husein Malkawi, A.I.**, Masannat, Y. and Abed, A.M. The National Committee for Dams (1995) "Response To: Review Board Visit and Sir Alexander GIBB & Partners" Report No.1, NCD 1.0, April.
46. **Husein Malkawi, A.I.**, Masannat, Y. and Abed, A.M. The National Committee for Dams (1995) "Comments on the Study and Design of Tannur dam, Response TO: Howard Humphreys and Associates" Report No.2, NCD 2.0, April.
47. **Husein Malkawi A.I.** (1995) "Unconsolidated Undrained Triaxial Test Report - Karameh Dam Site" Prepared for Sir Alexander Gibb & Partners Ltd. pp.410.
48. **Husein Malkawi, A.I.**, Masannat, Y. and Abed, A.M. The National Committee for Dams (1995) "Response To: Review Board Visit October 27 to November 04 1995" Report No.4, NCD 4.0, December 1995.
49. **Husein Malkawi A.I.**, and Basma, A.A. (1994) "Rock Testing Report - Al-Tannur, Al-Mujeb and Al-Walleh Dams" Prepared for Equipment Sales and Services (European Community) Mr. John Rippis. pp.78.
50. **Husein Malkawi A.I.**, and Basma, A.A. (1994) "Rock Testing Report II - Al-Tannur, Al-Mujeb and Al-Walleh Dams" Prepared for Equipment Sales and Services (European Community) Mr. John Rippis. pp.19.

<u>Citation indices</u>	All	Since 2019
<u>Citations</u>	3147	1087
<u>h-index</u>	23	15
<u>i10-index</u>	41	19