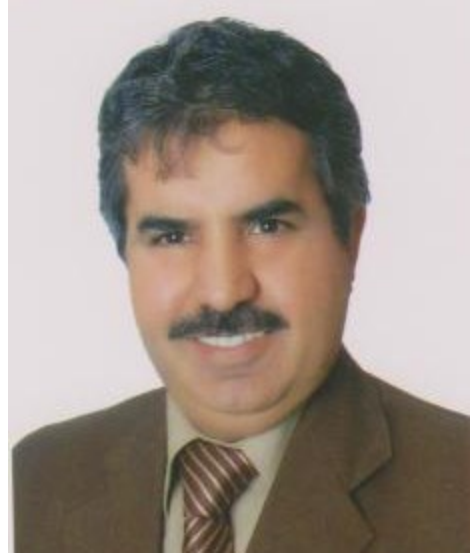


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ACADEMIC QUALIFICATIONS:

Ph. D., Civil, Water Resources and Environmental Engineering, 2007

Louisiana State University (LSU), Baton Rouge, LA
Dissertation Title: "Flow and Distribution of Water in Fractional Wettability Unsaturated Porous Media"

Master of Science, Civil, Water Resources and Environmental Engineering, 1991

Jordan University of Science and Technology, Jordan,
Thesis Title: "Discharge Measurements in Confined Aquifers"

Bachelor of Science, Civil, Water Resources and Environmental Engineering, 1988

Jordan University of Science and Technology, Jordan.

Areas of expertise:

- Water Resources, Hydraulics, Fluid dynamics, Environmental Engineering
- Soil and Geotechnical Engineering.
- Surveying and Geometric Engineering
- Traffic and Transportation Engineering
- Microtomography Applications in Studies of Flow Through Porous Media
- Groundwater modeling and applications
- Watersheds urban planning studies
- Environmental Soil Physics

Professional Experience:

Head and Faculty Adviser of the Civil Engineering and Infrastructure Department, Assistant Professor, Al-Zaytoonah University of Jordan, Amman, Jordan, 8/2015- Now.

Assistant Professor in the Civil Engineering and Infrastructure Department, Al-Zaytoonah University of Jordan, Amman, Jordan, 8/2014- 2015.

Head and Faculty Adviser of the Civil Engineering Department, Assistant Professor, Philadelphia University, Amman, Jordan, 8/2011- 2014.

Dean of the Civil Engineering Department, Assistant Professor, Jerash University. Jerash, Jordan, 8/2010- 2011.

Head and Faculty Adviser of the Civil Engineering Department, Assistant Professor, Jerash University. Jerash, Jordan, 8/2008- 8/2010.

Geotechnical, Water resources and Environmental Engineer in A & R Engineering & Testing Inc., Houston, Texas, USA, 8/2007- 8/2008

Graduate Research Assistant, Louisiana State University, Baton Rouge, LA, 2001-2007

- Used X-ray computed tomography to study fluid flow distribution and porosity in unsaturated porous media in fractional wettability systems.
- Investigate 3-phase flow in unsaturated porous media using x-ray computed tomography.
- Investigate drainage-imbibition of water flow in different fractional wettability porous media using x-ray computed tomography.
- Characterized engineering properties of soils obtained from the East Bank non federal levees in Plaquemines Parish, LA and evaluating the stability of the Levees.
- Evaluation of soil compaction and water content using TDR.
- Evaluation of asphalt and concrete pavement in highways, airports and rural roads.

Graduate Research Assistant in the civil and environmental engineering department, Jordan University of Science and Technology, Jordan, Jordan, 1999-2001.

- Teacher assistant in transportation engineering lab, strength of materials lab, Hydraulic design engineering systems, strength of materials course, traffic engineering course and advanced pavement design (asphalt and concrete).

Consultant civil and environmental engineer in department of environment and rural affairs, Jordan, 1995-1999.

- Consultant in various water resources and environmental engineering aspects.
- Water, air pollution and environment engineer.
- Environmental educational lectures to high schools in corporation with Jordan Environment Association.
- Project manager supervisor on department of environment building in Irbed, Jordan (18 months project).
- Planning, designing and construction asphalt roads, culverts, rainfall drainage systems and retaining walls (2 years project, Development west-part of Irbed city, Jordan).

Field and Supervisor Engineer, Aqaba Ports Corporation, Jordan, 1991-1995.

- Supervised the construction activities of the Royal Yacht Club (3 million Dollar project)
- Project management and budget planning for construction projects
- Supervised the construction activities of reinforced concrete structures, asphalt and concrete roads.
- Field engineer in steel buildings.
- Consultant in various water resources and environmental engineering aspects.

Courses Taught:

- Fluid Mechanics,
- Sanitary Engineering,
- Environmental Engineering and Design,
- Environmental Engineering Lab,

- Hydraulics,
- Groundwater Hydraulics,
- Hydraulic Engineering Lab,
- Infrastructure Networks,
- Water Engineering;
- Hydrology,
- Water and Wastewater Engineering,
- Soil Mechanics,
- Geotechnical Engineering,
- Geotechnical Engineering Lab,
- Surveying
- Surveying Lab,
- Transportation Engineering
- Transportation Engineering Lab,
- Route Surveying and Design,
- Roads Design,
- Pavement Design
- Pavement Lab,
- Contracts, Specifications & Quantity Surveying,
- Dam Engineering,
- Engineering Ethics,
- Engineering Economics,
- Material Science,
- Construction Materials,
- Construction Materials Lab
- Engineering Communication Skills

Previous Works:

Geotechnical Engineering • Evaluation of expansive soils• Preliminary site evaluations• Geotechnical exploration for foundation • Pavement design • Ground water evaluation• Dams/Embankment/slope evaluation and stability design• Evaluation and recommendations for buildings damaged due to expansive soils.

Construction Materials Engineering / Laboratory Testing• Materials Evaluation, Specifications, Testing and Inspection• Quality Assurance / Quality Control• Concrete and Steel Pipe Inspection

Laboratory soils tests include:• Proctor Compaction maximum dry density/optimum moisture • Swell consolidation• Atterberg Limits• Gradation analysis• Specific gravity

Concrete testing includes:• Compressive strength• Mix designs

Construction Observation• earthwork• roadway construction• masonry construction• reinforced steel placement• damp proofing• drainage• open-hole foundation observations• drilled-pier observation

Environmental • Environmental Site Assessments• Soil and groundwater investigation

Computer Skills:

- Programming Languages: MATLAB, MATHCAD, IDL.
- Microsoft Office: Word, Excel, Outlook, and Access.

- AutoCAD, Lpile, ModFlow, A-pile.
- Various commercial civil engineering and groundwater (e.g. MODFLOW, HYDRUS), environmental and geotechnical analysis and design software.

Professional Affiliations & Registration:

- American Society of Civil Engineers.
- Environmental and Water Resources Institute
- Jordanian Engineers Association.
- Jordanian Environmental Association.

Publications:

- **Zaydoun T. Abu Salem**, Taisir S. Khedawi, Raed Abendeh, & Mousa Bani Baker, Effect of Waste Glass on Properties of Asphalt Concrete Mixtures, Jordan Journal of Civil Engineering, Volume 11, No. 1, **2017**.
- **Zaydoun T. Abu Salem**, Taisir S. Khedawi, Raed Abendeh, & Mousa Bani Baker, Mechanical Properties of Concrete Containing Waste Glass, Jordan Journal of Civil Engineering, Volume 12, No. 2, **2017**.
- Nabil Hazim, **Zaydoun Abu Salem**, Hisham Ahmed SALEH, Delay and Cost Overrun in Infrastructure Projects in Jordan - International Conference on Engineering Project, and Production (EPPM2016) - September 19-23, Bialstok, Poland, **2016**.
- Baker, M.B., Abendeh, R., **Salem, Z.A.** Production of sustainable Asphalt Mixes Using Recycled Polystyrene, International Journal of Applied Environmental Sciences, 11(1), **2016**.
- Nabil Al-Hazim, **zaydoun abu salem**, Delay and cost overrun in road construction projects in Jordan, International Journal of Engineering & Technology, Vol 4, No 4, **2015**.
- Ahmad Qasaimeh, Malik Qasaimeh, **Zaydoun Abu Salem**, Khalid Melhem, Falah Bani Hani and Mohammad Raji Abdallah/Qasaimeh. Adaptive Sugeno Fuzzy Clustering System for Intelligent Monitoring of Inorganic Materials in Wastewater Aeration Tanks. Research Journal of Environmental Toxicology, 9: 290-304, **2015**.
- Raed Abendeh, Mousa Bani Baker, **Zaydoun Abu Salem**, Hesham Ahmad, The Feasibility of Using Milled Glass Wastes in Concrete to Resist Freezing-Thawing Action, World Academy of Science, Engineering and Technology International Journal of Civil, Environmental, Structural, Construction and Architectural Engineering Vol:9, No:8, pp.832-835, **2015**.
- **Zaydoun Abu Salem**, Nabil Hazim, Effect of Vehicular Speeds, Traffic Volume, and Road Grades on Air Pollution in Amman City (Case Study), 7th Traffic

Safety Conference, Amman, Jordan,
<http://www.psd.gov.jo/images/jti/images/011.pdf>, **2015**.

- Baker, M.B., Abende, R., **Salem, Z.A.** and Ahmad H. The Engineering Properties of Jordanian Marble, the 17th International Conference of Civil Building Engineering, Montreal, Canada, May 11-12, **2015**.
- Ahmad Qasaimeh, Mohammad Qasaimeh, **Zaydoun Abu Salem**, Mohammad Momani, Solar Energy Sustainability in Jordan, Computational Water, Energy, and Environmental Engineering, Vol.3 No.2(2014), Article ID:44840,7pages, DOI:10.4236/cweee., **2014**.
- **Abu-Salem, Z.** and Willson, C. (2008) Experimental Investigation of Drainage in Fractionally-Wet Sands in mm- and cm-Scale Columns. GeoCongress: pp. 292-299, doi: 10.1061/40972(311)37, **2008**.
- Experimental Investigation of Drainage in Fractionally-wet Sands in mm- and cm-scale Columns. **Zaydoun Abu Salem**, S.M. ASCE. and Clinton S. Willson, A.M. ASCE, P.E., A.M. ASCE pp. 292-299, (doi 10.1061/40972(311)37) conference paper, **2007**.
- **Abu Salem, Z.** Flow and Distribution of Water in Fractional Wettability Unsaturated Porous Media. Zaydoun Abu-Salem¹, S.M. ASCE. and Clinton S. Willson², A.M. ASCE, P.E., conference paper, **2007**.
- **Abu Salem, Z.** Flow and Distribution of Water in Fractional Wettability Unsaturated Porous Media, Ph.D. Dissertation, Louisiana State University, 187 pp, **2007**.
- **Zaydoun Abu Salem** , Theories and experimental studies of the effect of combining Municipals on performance, Yarmouk University Publications, **1999**.
- **Zaydoun Abu Salem** , Discharge Measurements in Confined Aquifers. Jordan University of Science and Technology Publications, **1992**.

***Zaydoun Abu Salem** , Fuzzy Modeling of Inorganic Materials in WWTP in Jordan, in progress.

* **Zaydoun Abu Salem**, Irreducible Water Distribution in Fractional Wettability Systems, in progress.

***Zaydoun Abu Salem**, Impact of Fractional Wettability on Water Drainage and Imbibition in Two-and Three-Phase Systems, in progress.

***Zaydoun Abu Salem**, Flow and Distribution of Water in Unsaturated, Fractionally-Wet Porous Media Systems, in progress.

* تقنيه استخدام الإسفلت في تكتيم السدود والخزانات الأرضية (حالة دراسية) , in,
progress.

References:

- Dr. Hashem Matarneh, Dean of the Civil Engineering Department, Associate Professor,
Jerash University. Jerash, Jordan, Tel 0779252569
Dr. Ahmad Kasaymeh, Head of the Civil Engineering Department, Assistant Professor,
Jerash University. Jerash, Jordan, Tel 0788230564
Dr. Khalid Alshibli, Louisiana State University, Civil Engineering Department, Associate
Professor, Baton Rouge, Loisiaana, alshibli@lsu.edu