
PERSONAL INFO.

Abdulrahman Al-Khomairi, Ph.D.

Associate Professor,

Civil Engineering Department,

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EDUCATION

- 1995 ***Doctor of Philosophy***, Department of Civil Engineering, Colorado State University, Colorado, USA. Dissertation entitled: "Improving Leak Detectability in Long Liquids Pipelines". GPA= 4.00/4.00
- 1992 ***Master of Science***, Department of Civil & Environmental Engineering, Michigan State University, Michigan, USA. GPA = 3.85/4.00
- 1988 ***Bachelor of Science (Second Class Honors)***, Department of Civil Engineering, College of Engineering, King Saud University, Riyadh, Saudi Arabia. Graduation Project: Hot Weather Concreting. GPA= 4.58/5.00

ACADEMIC AWARDS/ HONORS

- 1996 I was awarded the ***Prince Bandar Bin Sultan Al-Saud Award*** for distinguished sponsored Saudi Students (Ph.D. degree).
- 1993 I was awarded the ***Prince Bandar Bin Sultan Al-Saud Award*** for distinguished

sponsored Saudi Students (M.Sc. degree).

1988 I received the Second Class Honors with Excellent grade for the Bachelor Degree at King Saud University.

COMMITTEES

10/03-present Member of the Civil Engineering Department lab committee.

05/07-present Member of the TA interview committee.

05/08-present Member of a committee formed to study the laboratory needs for the Civil Engineering Dept., Al-Kharj University. Also participated in some orientation sessions for new students at the College of Engineering.

TEACHING EXPERIENCE

07/01-present *Associate Professor*, King Saud University, Riyadh, Saudi Arabia.

04/04-09/05 *Associate Professor*, King Saud University, Riyadh, Saudi Arabia.

09/95-08/05 *Assistant Professor*, Umm Al-Qura University, Makkah, Saudi Arabia.

07/88-06/89 *Teaching Assistant*, Umm Al-Qura University, Makkah, Saudi Arabia.

COURSES TAUGHT

Fluid Mechanics: Elementary Fluid Mechanics (Fundamental Concepts Including Properties of Fluids), Fluid Statics, Pressure, Forces on plane and Curved Surface, Buoyancy, Laminar and

Turbulent Flow, Pipe Flow, Conservation of Mass, Energy, and Momentum.

Hydraulics: Basic Conservation Principles of Continuity, Energy and Momentum, Pipe or pressure Flow, Friction and Minor Losses, Connection of Pipes on Series and Parallel, Water Hammer, Pumps, Open Channel Flow including: Characteristics of Open Channel Sections, Critical Flow, Steady Uniform Flow, Design of Open Channel Sections, Gradually Varied Flow, Rapidly Varied Flow, Similitude and Dimensional Analysis.

Graduation Projects: Supervisor of Graduation Projects for Undergraduate Students.

PROFESSIONAL AND WORK EXPERIENCE

07/97-present A thorough field experience in the design, execution and maintenance of residential, commercial and industrial reverse osmosis and water treatment systems.

05/96-present A very good field experience in instrumentation and measurement devices such as discharge, pressure, density, temperature, pH, TDS, conductivity, etc. for different applications.

01/96-present

- A very good and comprehensive field experience in pump selection for conventional and special applications.
- Design and troubleshooting of water filtration systems
- Design and execution of residential, commercial and

- industrial water softening systems.
- Design, execution and troubleshooting of residential, commercial, and industrial reverse osmosis systems.
- Selection of proper water analysis and instruments/products for the different applications of water and water treatment.

RESEARCH

The following is a list of the research work that was published or to be published in international journals and conferences:

1. Al-Khomairi, A. M., "Water Hammer in Residential Buildings with Elevated Storage Tanks," Accepted for publication in The 3rd International Conference on Water Resources and Arid Environments 2008 and the First Arab Water Forum, Nov. 2008.
 2. Al-Khomairi, A. M., "Leak Detection in Long Pipelines Using The Least Squares Method," *Journal of Hydraulic Research*, v 46 n 3, 2008, pp. 392-401.
 3. Al-Khomairi, A. M., "Use of The Steady-State Orifice Equation in The Computation of Transient Flow Through Pipe Leaks," *The Arabian Journal for Science and Engineering*, King Fahd University for Petroleum and Minerals, v 30 n 1B, 2005, pp. 33-45.
 4. Al-Khomairi, A. M., "Use of Steady-State Pump Head-Discharge Curve for Unsteady Pipe Flow Applications," *Journal of Hydraulic Engineering*, ASCE, Reston VA, USA, Volume 129, Number 12, 2003, pp. 1001-1006.
 5. Al-Khomairi, A. M., and Imam, M. H., "Gene Therapy for Improving the Performance of Genetic Algorithm in Pipe Network Optimization," *Computational Engineering Using Metaphors from Nature*, Civil-Comp Press, Edinburgh, United Kingdom, 2000, pp. 105-110.
 6. Al-Khomairi, A. M., "Optimal Selection of Variable-Speed Turbine Pump and Analysis of The Effect of The Rotational Speed," *Kuwait Journal of Science & Engineering*," Academic Publishing Council, University
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of Kuwait, Kuwait, Volume 28, Number 1, 2001, pp. 115-132.

7. Al-Khomairi, A. M., "Turbine Pump Selection for Agricultural Applications in Saudi Arabia," Journal of King Abdulaziz University - Engineering Sciences, King Abdulaziz University, Jeddah, Saudi Arabia, Volume 13, Number 1, 2001, pp. 1-20.
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EXPERIMENTAL SKILLS

- Design of unsteady pipe flow systems for leak detection, water hammer, valve studies, etc.
 - Design and execution of experimental studies on residential plumbing networks.
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COMPUTER SKILLS

- Operating Systems: MS-DOS, MS. Windows.
 - Packages: Word Perfect, MS Excel, MS Word, MS power Point graph.
 - Programming: FORTRAN, Quick Basic.
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LANGUAGES

Arabic/English

CITIZINSHIP

Saudi
