Curriculum Vita

Rasul Mejbel Khalaf



Name: Asst. Prof. Dr. Rasul Mejbel Khalaf Gender: male Date of birth: 1/1/1962 Marital status: married Nationality: Iraqi Current E-mail address: <u>rasulcon@yahoo.com</u>

<u>rasulcon@uomustansiriyah.edu.iq</u> Current mobile number: +9647901369508, +9647705845110

Language: Arabic and English (reading and writing)

Computer ability: I'm good in working on computer and I have many attempts on mathematical models depend upon computer programming.

Qualifications:

- 1. Ph.D. in *Water Resources Engineering*, 1999, University of Baghdad, Iraq.
- 2. M.Sc. in Hydraulics Engineering, 1986, University of Baghdad, Iraq.
- 3. B.Sc. in *Water Resources Engineering*, 1983, University of Baghdad, Iraq.

Fields of Activity:

- Water Resources System analysis
- Water Resource Management
- Hydraulic Engineering
- Earth & Rock fill Dams
- Hydrology
- Ground Water
- Surface and sub-surface water pollution
- Numerical Modeling for Hydraulic & Environmental Problems

Posts Title

- 1. Instructor in Civil Engineering of Tikrit University, Salahddin Governorate, Iraq.1991-2004
- 2. Consultant Engineer in the Bureau of Consultancy Engineering Engineering College Tikrit University.1995-2004.
- 3. Consultant Engineer in the Bureau of Consultancy Engineering Engineering College – Mustansiriyah University.2004-
- 4. External professor (graduate studies) College of Engineering, Baghdad University.2001-2005,as well as university of Technology.
- 5. Asst. Professor in Environmental Engineering Department, Al-Mustansiriyah University.2005-2008
- 6. Asst. Professor in Civil Engineering Department, Al-Mustansiriyah University.2008-
- 7. Editorial Manager of the *Journal of Engineering and Development* Since 2013-

List of a Significant Publishing Papers that I had written

- **1.** Evaluation of selected Models For Tigris River sediment Discharge At Baghdad City,1989.
- 2. Development of Prediction Model for total Transport Load in Tigris River at Baghdad,1990
- 3. Analysis of Sediment Movement in Tigris River at Tikrit City, 1993
- **4.** Flow Resistance Estimation of some alluvial canals in middle Euphrates, 1994
- **5.** Hydraulic Performance of Duckbill weirs under submerged flow condition,2004
- 6. Formula for calculating Normal depth in Open Trapezoidal Channels,2005
- **7.** A computer Expert System for Analysis and Control of Water Hammer problems, 2005.
- **8.** Prediction Downpull Force on Tunnel Gate with Different Gate Lips Geometry ,2009
- 9. Hydraulic Performance of Mandali Dam Spillway in Iraq, 2010
- **10.** Effect of Using Different (k-ε) Turbulent Models on Downpull Coefficients, 2012

- **11.** Modeling of Transient Groundwater Flow Using Fuzzy Approach, 2013.
- **12.** Safe Management for Regional Groundwater Sustainability in Bahr Al- Najaf Using Fuzzy Approach, 2013.
- **13.** Evaluation of Irrigation Water Quality Index (IWQI) For Al-Dammam Confined Aquifer in the West and Southwest of Karbala City, Iraq, 2013.
- 14. Optimum Groundwater Management Using Genetic Algorithm ; Part I: Application of Single Objective Function (SOGA). 2013
- **15.** Optimum Groundwater Management Using Genetic Algorithm; Part II: Application of Multi-Objective Function (MOGA). 2013
- **16.** Experimental and Artificial Neural Networks Modeling for Rivers Bed Morphology Changes near Direct Water Supply Intakes.2014
- **17.**Flow characteristics and energy dissipation over traditional and stepped spillway with semicircular crest.2014

Unpublished Papers(under preparation)

- 1. Direct solution to define the phreatic surface for Heterogeneous inclined Aquifers
- 2. A Novel Semi-analytical solution of Gradually Varied Flow Equation.
- 3. Flow Resistance Estimation of some alluvial canals in middle Euphrates
- 4. Typical Design of equilibrium canals using Numerical Technique.

List of supervised M.Sc. &Ph.D. Theses

- **1. M.Sc.:** "Water Quality Model For Diyala River Using Optimization Technique", Hussam Kadhem Majeed, College of Engineering, Al Mustansiriya University, 2001.
- **2. M.Sc:**" Optimum Design of Cross Regulator Floor by Using Nonlinear Programming ", Yasseen Ali Salih , College of Engineering, Tikrit University, 2001.
- **3. M.Sc:** "Hydraulic performance of Duckbill Weirs Under Submerged Flow Condition ", Aqeel Redhiyo Lamy , College of Engineering, Al Mustansiriya University, 2002.

- **4. M.Sc.:** " A Computer system for Analysis and Control of Water Hammer Problems ", Wisam Jasim Al-Hilo , College of Engineering, Al Mustansiriya University, 2002.
- **5. M.Sc.:** "Hydrodynamic and Water Quality Model for Euphrates River at Al Qadis Dam-Ramadi Barrage Reach" ,Y Hareth Saadi Ayoub, College of Engineering, Tikrit University, 2003.
- **6. Ph.D.** : "Simulation Model For Predicting Downpull On Tunnel Gates with Different Lip Geometries ",Shayma'a Abudl Muttalib, College of Engineering, Al Mustansiriyah University,2008.
- **7. Ph.D.** : "Transient Ground water Flow using Fuzzy Aproach", Thu Fikar R. Mahdi, College of Engineering, Al Mustansiriyah University,2013.
- 8. Ph.D.: "Optimum Management Models for Groundwater Use in Karbala Desert Area" ", Waqed Hameed Hassen , College of Engineering, Al Mustansiriya University, 2013.
- **9. Ph.D.** : " Hydrodynamic Modeling for Rivers Bed Morphology Changes at Water Supply Intakes ", Sana A. T. Al- Osamy, College of Engineering, Al Mustansiriyah University,2014.

Society Activities

- 1. Membership of Iraqi Engineers union
- 2. Membership of Iraqi Society of Engineers
- 3. Membership of Iraqi Scientific Society of Water Resources
- 4. Membership of Iraqi Society of Teachers

Work Experiences

For the period 1991–2004:(Instructor in Department of Civil engineering, College of Engineering, University of Tikrit, Iraq.)

- 1. Working as a member of teaching faculty. Responsibilities include teaching an under graduated courses in Engineering such as Engineering Hydrology ,Sanitary Engineering, Fluid Mechanics, and Hydraulic Structures.
- 2. Teaching graduated course in hydraulic and geotechnique field, such as flow Through porous media ,Finite Element Method, analysis of Numerical method ,water Resources system analysis.
- 3. Consultant Engineering in the Bureau of Engineering Consultancies Engineering College, Tikrit University.

For the period 2004 – 2007:

Faculty member of Department of Environmental Engineering, College of Engineering, Al Mustansiriya University.

- Teaching of many subjects such that: Hydraulics Engineering, Water Resources Engineering, Engineering Hydrology, Plumbing &pipe Network design, and introduction to Ground water pollution.
- Teaching graduated course in hydraulic and Environmental field, such as flow Through porous media ,Finite Element Method, analysis of Numerical method ,water Resources system analysis, advanced Fluid mechanics.
- 3. Working as a supervisor of post graduate studies in Hydraulics & Environmental Engineering Field.
- Consultant Engineer in the Bureau of Consultancy Engineering , Engineering College – Mustansiriyah University.
- 4. Working as a senior designer in water distribution system project.
- 5. Supervision and Consulting of Horan two Dam in Rutba, Al-anbar Governorate.
- 6. Designing and Consulting for the four earth dams named Shirin, Palkhanah, Qarah – Hassan and Zangana in Kirkuk Governorate.
- 7.Performing and Consulting of the Hydraulic Model of Mandali Dam for the avail of AL-Rafidain General Company for Dams Construction .
- 8. Supervision and Consulting of Geotechnical Investigation of Al-Shihabi Dam in Waset Governorate.

For the period 2008 –

Faculty member of Civil Engineering Department, College of Engineering, Al Mustansiriyah University.

For the period 2013 –

Editorial Manager of the Journal of Engineering & Development /College of Engineering- University of Al-Mustansiriyah (JEAD).