## Curriculum Vitae

## Asst. Prof Dr. Sadig Salman Muhsun

Mustansiriyah University - College of Engineering, Water Resources Engineering Dept.

Email: sadiq.aljilizy@uomustansiriyah.edu.iq & dr sadiq71@yahoo.com

#### **PERSONAL SUMMARY:**

Specialize in Water resources engineering, CFD, Mathematics, Statistics, teaching, training, human resources management providing learning and growth opportunities for professional organizational.

#### **EDUCATION:**

- -B.Sc. in civil engineering (branch of water resources), university of Baghdad, 1993 with grade of "good" and in a 3<sup>rd</sup> rank.
- -M.Sc. in Hydraulic, University of Baghdad, College of Engineering, civil engineering (branch of water resources), Iraq, 1997, with grade excellent. The "Clogging of Emitters When Using Saline Water" is the main purpose of the thesis. An extensive circumstance testing program was carried out to achieve the purpose of the study.
- -Ph. D. in Water resources engineering, University of Technology, Civil Engineering Department, Iraq, 2003, with very good grade degree. The "*The effect of under construction reservoirs on the optimum operation of Tigris river system*" is the main purpose of the thesis. An extensive optimization computer program was carried out to achieve the purpose of the study.

#### **ACADEMIC HONORS AND AWARDS:**

Honorary shield of excellent lecturer of 2007-2011 / College of Engineering/ Mustansiriyah University

# **ACADEMIC / TEACHING EXPERIENCE:**

- 1- A teacher in the University of Baghdad, College of Engineering, Water resources Eng. In Computer laboratory, Iraq, during the period of 1997 1998.
- 2- I have been teaching a water resources engineering in the Mustansiriyah University, College of Engineering, Environmental Eng. Dep., Iraq, since 2004.
- 3- I have been teaching a Statistics engineering in the Mustansiriyah University, College of Engineering, Environmental Eng. Dep., Iraq, since 2004 to 2015.
- 4- I have been teaching a Mathematic engineering in the Mustansiriyah University, College of Engineering, Environmental Eng. Dep., Iraq, since 2014.
- 5- Responsible of training computer room and the programmer of construction tests in the national center for construction labs and researches in Iraq from 11/11/2000 until 15/6/2008.

#### **COURSES TAUGHT:**

Undergraduate	graduate
water resources engineering	Optimization
Statistics engineering	Computational fluid dynamic (CFD)
Mathematic engineering	
Fluid mechanic	

### **PROFESSIONAL AFFILIATIONS:**

- Supervisor of hydraulic Laboratory
- membership in Iraqi engineering union registration since 1993.
- Member of the exam committee of Environmental Engineering dept. 2007-2011

#### PUPLICATIONS:

### Scientific research articles published:

- 1-"the effect of type of emitters and operation pressure on the time of emitters' clogging". 4<sup>th</sup> Sc. Conf. of the college of eng. Univ. of Baghdad, 1997.
- 2-"Effect of under construction reservoirs on the optimum operation of Tigris river system during flood and drought periods". 5<sup>th</sup> Sc. Conf. of the college of eng. Univ. of Baghdad, 2002.
- 3- "CBRTest new mathematical statistical model" a report subjected to the national center for construction labs. and researches", 2006.
- 4- " *Numerical Solution of Manning Equation in Prismatic Channel*",2<sup>nd</sup> Sc. Conf. of the college of eng. Univ. of AL-kadisia, 2009.
- 5- "COMPARING OF STANDARD AND RECENT EXTREME PROBABLE DISTRIBUTIONS CORRESPONDING TO IRAQI STREAMS FLOW", ", Sadiq S. M. & Safaa N. H , Journal of Engineering and Sustainable Development, Al-Mustansiriya engineering periodical-Iraq- Baghdad 2010, Volume: 14 Issue: 4 Pages: 93-108.
- 6- "HYDRAULIC PERFORMANCE OF MANDALI DAM SPILLWAY IN IRAQ", Riadh Zuhair Al-Zubaidi, Rasul Mejbel Khalaf, and Sadiq Salman, Journal of Environmental Studies [JES] Vol.5: PP. 35-48 Suhad periodical, Egypt, 2011.
- 7- " CHARACTERISTICS OF THE HYDRAULIC JUMP IN TRAPEZOIDAL CHANNEL SECTION", Sadiq Salman Muhsun, Journal of Environmental Studies [JES] Vol.9: PP. 53-36, Suhad periodical, Egypt, 2012.

- 8- "Variation of Discharge Coefficient of Spillway and Broad Crested Weir Due to the Effective of the Longitudinal Slope in a Non-Horizontal Channel", Journal of Environmental Science and Engineering A 3 (2014) 287-295, doi: 10.17265/2162-5298/2014.05.007
- 9-"Experimental Work and CFD model for Flowrate Estimating Over OGEE Spillway under Longitudinal Slope Effect", International Journal of Civil Engineering and Technology (IJCIET), Volume 9, Issue 13, December 2018, pp. 430–439
- 11- "Removal of Inorganic Contaminants Using Manufacturing Porous Media", International Journal of Engineering & Technology (UAE), 7 (4.20) (2018) 142-145.
- 12- "Theoretical, CFD simulation model and experimental study to predict the flowrate a cross a square edge broad crested weir depending on the end depth as control section", AWAM International Conference on Civil Engineering, Springer Lecture Notes in Civil Engineering 53.
- 13- "Simulation of two Phase Flow Contaminates Transport in Pipe Flow under Transient Laminar Flow Condition", Journal of Green Engineering, Vol. 10\_6, 3861–3883, June 2020.
- 14-"Simulation of 2-D Steady Seepage Flow and Contaminates Transportation through Harawa Dam Using CFD Model and Geo-Slope", Plant Archives Vol. 20, Supplement 2, 2020 pp. 604-612
- 15- "Investigation of transient contaminates transport through piping flow system using Physical and CFD models", Journal of Engineering Research (Jer), Accepted.
- 16- "2-D Steady Seepage Flow Model to Simulate the Contaminates Transportation through Homogeneous Earth Dam Using Geo-Studio Software", First International Conference on Engineering and Advanced Technology, ICEAT 2020, Feb. 2020. IOP Conf. Series: Materials Science and Engineering 870 (2020) 012028 doi:10.1088/1757-899X/870/1/012028, IOP Publishing
- 17- "Tow Phase Flow Experimental Detection Method and CFD models A review", Journal of Engineering and Sustainable Development (JEASD), Vol. 24, No. 05, September 2020, https://doi.org/10.31272/jeasd.24.5.2
- 18- "Mathematical Analysis of 2-D Steady Seepage Flow and the Behavior of Contaminates Transportation through Homogeneous Earth Dam Using Comsol software", Journal of Engineering and Sustainable Development (JEASD), Vol. 24, No. 05, September 2020, https://doi.org/10.31272/jeasd.24.5.3
- 19- "Prediction and CFD Simulation of the Flow over a Curved Crump Weir under Different Longitudinal Slopes", International Journal of Civil Engineering, **18(9)**, pages1067–1076(2020), https://doi.org/10.1007/s40999-020-00527-2
- 20- "Physical and CFD Simulated Models to Analyze the Contaminant Transport through Porous Media under Hydraulic Structures", KSCE Journal of Civil Engineering, <a href="http://link.springer.com/article/10.1007/s12205-020-1767-6">http://link.springer.com/article/10.1007/s12205-020-1767-6</a>.

- 21- "CFD Simulated model and Experimental tests for Critical Depth and Flowrate Estimation over a Broad-Crested Weir under the Longitudinal Slope Effect", International Journal of Environment and Waste Management, Acceptance.
- 22- "CFD Simulation Model and Experimental Study to Implement a New Flowrate Formula for a Rounded Broad Crested Weir Considering the End Depth as Control Section", Periodicals of Engineering and Natural Sciences, Acceptance.

#### PROFFESSIONAL DEVELOPMENT

- working at Consultant Bureau, college of engineering, university of Baghdad, 1997-1997.
- working in Al-Masar Consultant Bureau, 2000-2003.
- working in the national center for construction labs. and researches for more than 8 years.
- a very good experience in the computer with the following fields:
  - 1. Microsoft office: including word, excel, access, power point.
  - 2. Photo Shop, Corel drew, Grapher, statistica
  - 3. Visual basic.
  - 4. AutoCAD
  - 5. Comsol
  - 6. ANSYS



