

CURRICULUM VITAE

Personal Information

Name : Sadeq Oleiwi Sulaiman

Degree : Ph.D. - Professor in Water Resources Engineering

Place and Date of Birth : Anbar, Iraq, 1969

Nationality : Iraq

Languages : Arabic, English

Current Address : Iraq – Anbar - Ramadi

Mobile (Iraq): **+964-783-104-5828**

1st :Email: sadeq.sulaiman@uoanbar.edu.iq

2rd :Email: dr.sadiq1969@yahoo.com



Objectives

I am a dedicated person who wants to use my skills and education to help students achieve using both traditional and modern approaches.

Status

- a) Postdoc from Civil, Environmental, and Natural Resources Engineering, Lulea University of Technology, 97187 Lulea, Sweden
- b) Head of the Department of Dams & Water Resources Engineering in the College of Engineering, University of Anbar.
- c) Lecturer of Undergraduate Studies in Dams and Water Resources Engineering Department, College of Engineering, University of Anbar.
- d) Coordinator of Graduate Studies in the Dams & Water Resources Engineering Department, Engineering College, University of Anbar.
- e) Lecturer of Graduate Studies in Civil Engineering Department, Engineering College, University of Anbar.
- f) President of the Alumni Association in the College of Engineering, University of Anbar.

Educational Qualification

- a) Professor of Engineering Hydrology, Water Resources Management, and Sediment Transport at the Department of Dams & Water Resources in the Engineering College of the University of Anbar, Iraq.
- b) Ph.D. degree in Water Resources Engineering from the Buildings and Constructions Faculty, University of Technology, Iraq (2009).

- c) M.Sc. degree in Water Resources Engineering, from the Civil Engineering Department, College of Engineering, University of Anbar, Iraq (2002).
- d) B.Sc. degree in Civil Engineering from the Civil Engineering Department, College of Engineering, University of Anbar, Iraq (1993).
- e) Consultant Engineer in Civil Engineering at the Iraqi Engineers Union Since 2010.

Fields of Interest

1. Engineering Hydrology: Surface Water, Ground Water Hydrology, and Sediment Transport.
2. Remote Sensing of Catchment Hydrology, Water Harvesting, and Observing the Hydrological Cycle from Space.
3. Numerical modeling of Flood routing, water quality, and sediment transport.
4. Water Resources and Environment: Planning, Management, and Economy.

Professional Responsibilities

Professional Data:

1. July 1994 – October 1995: Ministry of Defense as a Civil engineer in the Iraqi army.

Responsibilities:

- Supervision of civil works within the Habbaniyah air base and prepare the progress report on the work performed.

2. October 1995 – October 1999: Al-Suroor Company - Private sector, working as Site Engineer and Project Manager.

Responsibilities:

- Site engineer for many of the construction work and the work of roads and irrigation systems and sewage works

3. October 1999 – February 2002: Graduate student at university of Anbar _Iraq.

4. February 2002 – Now: Ministry of Higher Education and Scientific Research as a teaching staff in Engineering College – University of Anbar

Responsibilities:

- Assistant Head of Civil Engineering Department – University of Anbar from 2002 to 2003.
- Rapporteur and Assistant Head of Dams and Water Resources Engineering Department – University of Anbar 2004-2005.
- Member of the Scientific Committee at the Department of Engineering of dams and water resources from 2009 to yet.
- Graduate official in Dams & water resources Engineering Department from 2012 to 2015.
- The supervisor of the Alumni Club in the College of Engineering – at the university of Anbar from 2012 to 2016.

- Head of the Department of Dams & Water Resources Engineering in the College of Engineering, the University of Anbar from 2015 to 2019.

-Postdoc in Civil, Environmental and Natural Resources Engineering, Lulea University of Technology, 97187 Lulea, Sweden from 2020 to 2021.

Working Experience

TEACHING EXPERIENCE

1. **Lecturer** at Civil Engineering Department of the University of Al-Anbar, from 2002 to 2004, teaching:

- a) Fluid mechanics for the 2nd year undergraduate**
- b) Hydraulic structures for the 3rd year undergraduate**
- c) 3rd year undergraduate course in Engineering Hydrology.**
- d) Supervisor of 2nd, and 3rd year undergraduate laboratory courses.**
- e) Supervision of many 4th year Graduation projects.**

2. **Lecturer** at Dams & Water Resources Engineering Department of the University of Al-Anbar, from 2004 to yet, teaching:

- a) Engineering Hydrology for the 2nd year undergraduate**
- b) Hydraulic structures for the 3rd year undergraduate**
- c) Water Resources Planning & Management for the 4th year undergraduate.**
- d) Supervision of Fluid Mechanics and Hydraulic laboratory.**
- e) Supervision of many 4th year Graduation projects.**

3. **Lecturer** at Graduate Studies, Department of Civil Engineering, University of Al-Anbar, from 2010 to yet, teaching:

- a) Surface Water Hydrology**
- b) Sediment Transport**
- c) Water Resources Planning & Management**
- d) Ground Water Hydrology**
- e) River Management**
- f) Optimization Engineering**

4. **Supervising** many theses for graduate students in the field of water resources and environmental engineering and addresses of that dissertation:

- a) Experimental tests to evaluate the wastewater treatment by using Sulfate and Phosphate biofilters (2011).**

- b)** Estimate of Sediment Load Transported from Wadis to Haditha-Lake with Aid of GIS (2012).
- c)** Numerical modeling to estimate sediment transport and water quality of the Euphrates River (2015).
- d)** Application of QUAL2K for Water Quality Modeling and Management in the Lower Reach of the Diyala River. (2017)
- e)** Management of Ramadi City Water Resources Using WEAP Model (2021)
- f)** Management of Surface Water Resources in Al Anbar Province West of Iraq (2021)
- g)** Simulation of the Impact of Flood Wave Caused by A Possible Failure of Haditha Dam at The Euphrates River (2021)
- h)** Analysis Of Sediment Incipient Motion in Rigid Boundary Open Channels (Experimental Study) (2022)
- i)** Integration of Field Measurements and Numerical Simulation to Evaluate Sediment Transport in the Euphrates River (2023)

5. Discuss and evaluate many master's and doctoral dissertations from Iraq and international universities.

Participated in the achievement of these projects

- 1- Hydrologic and environmental study for Al Anbar thermal project with Engineering Consultant Bureau, College of Engineering, AL – Anbar University (2008-2009).
- 2- Environmental study for the Rivers and Lakes of Iraq with Engineering Consultant Bureau, College of Engineering, Baghdad University (2011).
- 3- Design of Culverts and Bridge on Al-Hajj Highway from the Hydrological point of view (2012).
- 4- Hydrological and Biological study for the border-crossing tributary with Engineering Consultant Bureau, College of Engineering, Baghdad University (2012-2013).
- 5- Head of Engineering Consultant Team for Design of the Storm Sewer and Sanitary System for Habbaniyah and Saqlawiah Cities In Al Anbar Government with Engineering Consultant Bureau, College of Engineering, University of Anbar (2012-2013).

Awards

Honors and Awards

1. Award for outstanding research in Geo-Tunis International Conference, 2011
2. Award for excellence research in 2nd Arab Water Conference, Qatar 2014.
3. A patent with No 8088 on 9-Aug-2023 from The Central Agency for Planning and Quality Control in Iraq for Modified a Van Veen Grab for Bedload Sampling.

PROFESSIONAL ACTIVITIES

- Iraqi Engineers Union
- Iraqi Academics Syndicate
- Arab Hydrogeologists Association
- Arab Integrated Water Resources Management Network (AWARENET)

Publications

1. Al Suhaily, R., Al Kazwini, M., Sulaiman, S., (2011) **Numerical Modeling of Flood Wave Behavior with Meandering Effects (Euphrates River, Haditha-Hit)**: Eng. and Tech. Journal, Vol.29, No.7.
2. Sulaiman, Sadeq. O. (2012) **Simulation of Flood Wave Behavior in Natural River: The Sixth Session of the International Congress Geotunis**, held from 26th to 30th March 2012 in Tunis.
3. Kamel, A., Sulaiman, S., Sayl, K. (2012) **Hydrologic study for Iraqi western desert to assessment of water harvesting projects**: Iraqi journal of Civil engineering, Vol.7, No. 2.
4. Al Jumaily, M., Sulaiman, S. (2012) **Study the hydromorphometric properties of wadi jbab in Iraqi western plateau**: Iraqi journal of Civil engineering, Vol.7, No. 2.
5. Al Jumaily, M., Sulaiman, S. (2012) **Water characteristics of Al-Tharthar and Al-Habbaniya lakes and their effects in the water characteristics of the Euphrates River**: Anbar University Journal of Human Sciences, Vol.0, No. 2.
6. Kamel, A., Sulaiman, S., Sayl, K. (2012) **Using Remote Sensing Technique for Calculate the Quantities and Study the Hydrologic Properties of Al Gaara Dam**: Anbar Journal for Engineering sciences, Vol.5, Special Issue-Part Three.
7. Kamel, A., Sulaiman, S., Mustafa, A. (2013) **Study the Effects of Water Level Depression in Euphrates River on the Water Quality**: Journal of civil engineering and architecture, Vol.7, No.2.
8. Mustafa, Ayad S.; Sulaiman, Sadeq O.; Khudair, Marwa Y.; (2013), **Application of Bio-filtration Wastewater Treatment Using Iraqi Gypsum and Phosphate Bio-filters**, Journal of Water Resource and Hydraulic Engineering, Vol. 2 Iss. 4, PP. 149-156.
9. Sulaiman, Sadeq Olewi. (2013) **Using of Geographic Information System (GIS) for Design of Culverts and Bridges on Highway**: Iraqi journal of desert studies, Vol. 4, No. 2.
10. Hussain, O., Sulaiman, S., Mustafa, A. (2013) **Estimation of Sedimentation Load that Transport to Haditha Reservoir from Wadis Using GIS**, Journal of remote sensing and GIS, Vol. 1, No. 1.
11. Al-Hashimi; Shaymaa, Sulaiman; Sadeq A., Madloom; Huda M., (2015), **Determination of Discharge Coefficient of Rectangular Broad-Crested Weir by CFD**, The 2nd International Conference on Buildings, Construction and Environmental Engineering- BCEE2, 17-18 October 2015, Beirut, Lebanon.

12. Sulaiman, Sadeq O.; Mustafa, Ayad S.; Hussein, Omar M.; (2015), **Estimation of Runoff and Sediment Yield Using SWAT Model in the Basin of the Haditha Reservoir, Iraq.**, CIENCIA E TECNICA. VITIVINICOLA A SCIENCE AND TECHNOLOGY JOURNAL (ISSN: 0254-0223), Vol. 30 no. 5, P.P. 180-189.
13. Al-Shujairi, S., Sulaiman, S., and Najemalden, Mohamad. (2015), **Variations of Major Ionic Composition and Salinity of Tigris River within Iraq**, Sulaimani Journal for Engineering Sciences, Vol. 1, No. 2, P.P. 64-70.
14. Sulaiman, Sadeq Oleiwi; Mustafa, Ayad Sleibi; Hussein, Omar Manfi; (2016), **Application of SWAT Model for Sediment Loads from Valleys Transmitted to Haditha Reservoir**, Journal of Engineering, Vol. 22, No. 1, P.P. 184-197.
15. Sulaiman, Sadeq O.; Al Shujairi, Sabah O.; Madhloom, Huda M.; Al-Hashimi, Shaymaa; (2016), **Analyzing and Estimating the Highway Drainage Capacity with the Aid of Geographic Information Systems (GIS)**, ZANCO Journal of Pure and Applied Sciences, The official scientific journal of Salahaddin University-Erbil, ZJPAS (2016) 28 (2); s277-287.
16. Mustafa, Ayad Sleibi; Sulaiman, Sadeq Oleiwi; Al-Alwani, Khalid Mahmoud; (2017) **Application of HEC-RAS Model to Predict Sediment Transport for Euphrates River from Haditha to Heet**, Al-Nahrain Journal for Engineering Sciences (NJES), Vol.20 No.3, pp.570-577.
17. Sulaiman, Sadeq O., (2017), **Performance of SWAT Model in Predicting Surface Runoff of Al-Masad Catchment**; The WSTA 12th Gulf Water Conference, 28-30 March 2017, Manama, Kingdom of Bahrain.
18. Mustafa, Ayad S.; Sulaiman, Sadeq O.; Shahooth, Sabreen H.; (2017) **Application of QUAL2K for Water Quality Modeling and Management in the lower reach of the Diyala river**, Iraqi Journal of Civil Engineering Vol. 11,N. 2, pp 66-08.
19. H. Tao, S.O. Sulaiman, Z.M. Yaseen, H. Asadi, S.G. Meshram, M.A. Ghorbani.; (2018) **What Is the Potential of Integrating Phase Space Reconstruction with SVM-FFA Data-Intelligence Model? Application of Rainfall Forecasting over Regional Scale**, Water Resources Management , 32(12) 3935-3959.
20. ZM Yaseen, SO Sulaiman, RC Deo, KW Chau; (2019) **An enhanced extreme learning machine model for river flow forecasting: state-of-the-art, practical applications in water resource engineering area and future research direction**, Journal of Hydrology, Volume 569, February 2019, Pages 387-408.
21. SO Sulaiman, J Shiri, H Shiralizadeh, O Kisi, ZM Yaseen; (2018) **Precipitation pattern modeling using cross-station perception: regional investigation**, Environmental Earth Sciences 77 (19), 709.
22. Yousif, Ali A.; Sulaiman, Sadeq O.; Diop, Lamine; Ehteram, Mohammad; Shahid, Shamsuddin; Al-Ansari, Nadhir; Yaseen, Zaher M. 2019. **"Open Channel Sluice Gate Scouring Parameters Prediction: Different Scenarios of Dimensional and Non-Dimensional Input Parameters."** *Water* 11, no. 2: 353.

23. Sulaiman, S.O., Kamel, A.H., Sayl, K.N. et al., 2019 "**Water resources management and sustainability over the Western desert of Iraq**", Environmental Earth Sciences 78: 495. <https://doi.org/10.1007/s12665-019-8510-y>.
24. Najm, A.B.A., Abdulhameed, I.M., Sulaiman, S.O. (2020). **Water requirements of crops under various Kc coefficient approaches by using Water Evaluation and Planning (WEAP)**. International Journal of Design & Nature and Ecodynamics, Vol. 15, No. 5, pp. 739-748. <https://doi.org/10.18280/ijdne.150516>.
25. Najm, A. B., Al-bayati, I., & Sulaiman, S. (2021). **Improving the Cultivated Area for the Ramadi Irrigation Project By Using Water Evaluation and Planning Model (WEAP)**. Al-Rafidain Engineering Journal (AREJ), 26(1), 105–114. <https://doi.org/10.33899/rengj.2020.128248.1063>
26. Sulaiman, S.O., Al-Ansari, N., Shahadha, A. et al. **Evaluation of sediment transport empirical equations: case study of the Euphrates River West Iraq**. Arab J Geosci 14, 825 (2021). <https://doi.org/10.1007/s12517-021-07177-1>
27. Sulaiman, S.O., Najm, A.B.A., Kamel, A.H., Al-Ansari, N. (2021). **Evaluate the optimal future demand of water consumption in Al-Anbar province in the west of Iraq**. International Journal of Sustainable Development and Planning, Vol. 16, No. 3, pp. 457-462. <https://doi.org/10.18280/ijstdp.160306>
28. Sulaiman, S.O., Abdullah, H.H., Al-Ansari, N., Laue, J., Yaseen, Z.M. (2021). **Simulation model for optimal operation of Dokan Dam reservoir northern of Iraq**. International Journal of Design & Nature and Ecodynamics, Vol. 16, No. 3, pp. 301-306. <https://doi.org/10.18280/ijdne.160308>
29. Isam M. Abdulhameed¹, Sadeq O. Sulaiman, and Abu Baker A. Najm, (2021), **Reuse Wastewater By Using Water Evaluation And Planning (WEAP) (Ramadi City–Case Study)**, IOP Conf. Ser.: Earth Environ. Sci. 779 012104, <https://doi.org/10.1088/1755-1315/779/1/012104>
30. Rasool Kosaj *et al* (2022), **Comparison Between Numerical Flow3d Software and Laboratory Data, For Sediment Incipient Motion**, IOP Conf. Ser.: Earth Environ. Sci. **961** 012031, DOI. 10.1088/1755-1315/961/1/012031
31. Khamis Naba Sayl, Sadeq Olewi Sulaiman, Ammar Hatem Kamel, Nur Shazwani Muhammad, Jazuri Abdullah, Nadhir Al-Ansari, "**Minimizing the Impacts of Desertification in an Arid Region: A Case Study of the West Desert of Iraq**", Advances in Civil Engineering, vol. 2021, Article ID 5580286, 12 pages, 2021. <https://doi.org/10.1155/2021/5580286>
32. Noon, A. M., Ahmed, H. G. I., & Sulaiman, S. O. (2021). Assessment of Water Demand in Al-Anbar Province- Iraq. Environment and Ecology Research, 9(2), 64–75. <https://doi.org/10.13189/eer.2021.090203>
33. Yaseen Z.M., Sulaiman S.O., Sharif A. (2021) **The Nature of Tigris–Euphrates Rivers Flow: Current Status and Future Prospective**. In: Jawad L.A. (eds) Tigris and Euphrates Rivers: Their Environment from Headwaters to Mouth. Aquatic Ecology Series, vol 11. Springer, Cham. https://doi.org/10.1007/978-3-030-57570-0_8

34. Khudair, M. Y., Kamel, A. H., Sulaiman, S. O., & Al Ansari, N. (2022). **Groundwater Quality and Sustainability Evaluation for Irrigation Purposes: A Case Study in an Arid Region, Iraq.** International Journal of Sustainable Development and Planning, 17(2), 413–419. <https://doi.org/10.18280/ijstdp.170206>
35. Kosaj, R., Alboresha, R. S., & Sulaiman, S. O. (2022). **Comparison between Numerical Flow3d Software and Laboratory Data, for Sediment Incipient Motion.** IOP Conference Series: Earth and Environmental Science, 961(1). <https://doi.org/10.1088/1755-1315/961/1/012031>
36. Sulaiman, S. O., & Rajaa, A. I. (2022). Cost-benefit analysis of suggested Ramadi Barrage hydroelectric plant on the Euphrates River. International Journal of Computer Aided Engineering and Technology, 17(1), 34. <https://doi.org/10.1504/IJCAET.2022.124530>
37. Mahmood, N. S., Alboresha, R., Sulaiman, S. O., & Al Ansari, N. (2022). **Seepage Problem Through the Foundation of a Spillway with Selected Treatment Methods.** Mathematical Modelling of Engineering Problems, 9(3), 819–824. <https://doi.org/10.18280/mmep.090331>
38. Mahmood, N. S., Aude, S. A., Abdullah, H. H., Sulaiman, S. O., & Ansari, N. Al. (2022). **Analysis of Slope Stability and Soil Liquefaction of Zoned Earth Dams Using Numerical Modeling.** International Journal of Design and Nature and Ecodynamics, 17(4), 557–562. <https://doi.org/10.18280/ijdne.170409>
39. Abdulhameed, I. M., Sulaiman, S. O., Najm, A. B. A., & Al-Ansari, N. (2022). **Optimising water resources management by Using Water Evaluation and Planning (WEAP) in the West of Iraq.** Journal of Water and Land Development, 53, 176–186. <https://doi.org/10.24425/jwld.2022.140795>
40. Noon, A. M., Ibrahim, H. G., & Sulaiman, S. O. (2022). **Application of water evaluation and planning (WEAP) model for reuse of urban wastewater in Western Iraq.** AIP Conference Proceedings, 2386. <https://doi.org/10.1063/5.0067164>
41. Aude, S. A., Mahmood, N. S., Sulaiman, S. O., Abdullah, H. H., & Al Ansari, N. (2022). **SLOPE STABILITY AND SOIL LIQUEFACTION ANALYSIS OF EARTH DAMS WITH A PROPOSED METHOD OF GEOTEXTILE REINFORCEMENT.** International Journal of GEOMATE, 22(94), 102–112. <https://doi.org/10.21660/2022.94.j2241>
42. Eryiğit, M., & Sulaiman, S. O. (2022). **Specifying optimum water resources based on cost-benefit relationship for settlements by artificial immune systems: Case study of Rutba City, Iraq.** Water Supply, 22(6), 5873–5881. <https://doi.org/10.2166/ws.2022.227>
43. Sulaiman, S. O., Najm, A. B. A., Mhedi, N. M., & Al-Ansari, N. (2022). **Optimal Allocation Model for Sustainable and Economic Water Sources in Rutba City West of Iraq.** IOP Conference Series: Earth and Environmental Science, 1120(1). <https://doi.org/10.1088/1755-1315/1120/1/012001>
44. Hammad, A. A., & Sulaiman, S. O. (2023). **Hydraulic Model Prediction of the Total Load of Sediment Transport in The Euphrates River at The Upstream Ramadi Barrage.** E3S Web of Conferences, 427, 04005. <https://doi.org/10.1051/e3sconf/202342704005>

45. Hammad, A. A., & Sulaiman, S. O. (2023a). **Evaluation of the Formulas of Bed Load Transport Rate Prediction of the Euphrates River in the Upstream Ramadi Barrage**. 2023 9th International Engineering Conference on Sustainable Technology and Development (IEC), 62–67. <https://doi.org/10.1109/IEC57380.2023.10438823>
46. Mohammed, O. A., Sayl, K. N., Sulaiman, S. O., Mahmood, N. S., Allawi, M. F., & Al-Ansari, N. (2023). **GEOINFORMATICS-BASED APPROACH FOR AQUIFER RECHARGE ZONE IDENTIFICATION IN THE WESTERN DESERT OF IRAQ**. International Journal of GEOMATE, 25(110). <https://doi.org/10.21660/2023.110.3448>
47. Harith Hamad Mhmood, Meric Yilmaz & Sadeq Oleiwi Sulaiman (2023) **Simulation of the flood wave caused by hypothetical failure of the Haditha Dam**, Journal of Applied Water Engineering and Research, 11:1, 66-76, <https://doi.org/10.1080/23249676.2022.2050312>
48. Eryiğit, M., Sulaiman, S. O., Najm, A. B. A., & Mhedi, N. M. (2023). **Optimal management of multiple water resources by a heuristic optimization for a water supply in the desert cities of Western Iraq**. DESALINATION AND WATER TREATMENT, 281, 7-14. <https://doi.org/10.5004/dwt.2023.28239>
49. Hai Tao, Mohammed Majeed Hameed, Haydar Abdulameer Marhoon, Mohammad Zounemat-Kermani, Salim Heddami, Sungwon Kim, Sadeq Oleiwi Sulaiman, Mou Leong Tan, Zulfaqar Sa'adi, Ali Danandeh Mehr, Mohammed Falah Allawi, S.I. Abba, Jasni Mohamad Zain, Mayadah W. Falah, Mehdi Jamei, Neeraj Dhanraj Bokde, Maryam Bayatvarkeshi, Mustafa Al-Mukhtar, Suraj Kumar Bhagat, Tiyasha Tiyasha, Khaled Mohamed Khedher, Nadhir Al-Ansari, Shamsuddin Shahid, Zaher Mundher Yaseen, **Groundwater level prediction using machine learning models: A comprehensive review**, Neurocomputing, Volume 489, 2022, Pages 271-308, ISSN 0925-2312, <https://doi.org/10.1016/j.neucom.2022.03.014>
50. Allawi, M.F., Sulaiman, S.O., Sayl, K.N., Sherif, M. and El-Shafie, A., (2023). **Suspended sediment load prediction modelling based on artificial intelligence methods: The tropical region as a case study**. Heliyon, Volume 9, Issue 8, E18506, August 2023. <https://doi.org/10.1016/j.heliyon.2023.e18506>
51. Mahmoud, O. A., Sulaiman, S. O., & Al-Jumeily, D. (2023). **Artificial Neural Network Model for Forecasting Haditha Reservoir Inflow in the West of Iraq**. 2023 16th International Conference on Developments in ESystems Engineering (DeSE), 138–143. <https://doi.org/10.1109/DeSE60595.2023.10468804>
52. Sulaiman, S. O., Najm, A. B. A., Allawi, M. F., Ansari, N. Al, & Kamel, A. H. (2024). **Evaluate sediment transport formulas in the Euphrates river upstream Ramadi barrage in the west of Iraq**. AIP Conference Proceedings, 3009(1), 030067. <https://doi.org/10.1063/5.0190517>
- 53.