

د.علي محتشمي

أستاذ مساعد

Hydrology and Water Resources Engineering Research Team.

كرسي اليونسكو لدراسات الأفلاج وعلم المياه الاجتماعي

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موقع المكتب: G-02 25B.

يعمل في الجامعة: منذ 2022

الحالة الاجتماعية: Married....

Ali Mohtashami is an Assistant Professor at the UNESCO Chair of Aflaj Studies and Socio-Hydrology (UCASAS), University of Nizwa. He received his MSc in Civil Engineering (Water Resources Management) from the University of Birjand in 2017.. He earned his PhD in Civil Engineering from the University of Sistan and Baluchestan, Iran, in 2021, during which he was recognized as the top student by the Faculty of Engineering. Dr. Mohtashami's research interests include hydrology, sustainable water resources management, groundwater modeling, meshless numerical methods, and data assimilation. He serves as a reviewer for more than 20 peer-reviewed journals in civil engineering, water resources, and agricultural sciences. He has authored and co-authored over 35 scientific journal articles, two books, .and has contributed to five research projects

المؤهلات الأكاديمية

PhD of Civil Engineering ، University of Sistan and Baluchestan، 2021

MSc، Civil Engineering, University of Birjand، 2017

BSc، University of Isfahan، 2014

أنشطة التدريس

Lecturer in Birjand University of Technology، Courses: Fluid Dynamics, Hydraulic of Open Channels, Water and Waste water Treatment،، 2021-2022

Lecturer in University of Birjand، Courses: Water Machines، 2022-2023

Lecturer at Bozorgmehr University of Qaenat، Courses: Environmental Engineering, Fluid

Dynamics، 2021-2022

Lecturer in Birjand University of Technology، Courses: Fluid Dynamics, Hydraulic of Open Channels، 2022-2023

Environmental Informatics، Fall 2023

Fundamentals of Air Pollution، Fall 2023

Energy and Environment، Spring 2024

Hydrology and Hydraulic، Spring 2024

Water Supply and Sewer Drainage Systems, Fall 2024

Aflaj Oman for Engineers, Spring 2025

Environmental Informatics, Spring 2025

الأنشطة البحثية

الاهتمامات البحثية –

Groundwater

Numerical Method

Aflaj Knowledge

Quality Modeling

Modeling and Simulation

العرض في المؤتمرات –

Estimation groundwater balance with using meshless local Petrov-Galerkin، ``. 1st National Conference on Modelling and New Technologies in Water Management، 2018

حضور المؤتمرات –

15th GCC Water Conference، Doha, Qatar، 28/04/2024

المنشورات –

مقال:

1. 2026 From Resilience to Collapse: Traditional Water Systems Under Transformational Stress in Meymand
2. 2026 A review and sustainability framework on aflaj systems in Oman
3. 2026 Aquifer-Falaj dynamic modeling using VENSIM: a pathway to sustainable water management
4. 2026 A New Application of WhAEM: Determination of the Quality Border for Qanats as Sustainable Groundwater Resources
5. 2025 Application of the quality border delineation for sustainable protection of groundwater resources, qanats, against contamination using meshless numerical method
6. 2025 Qanats' assistance in reviving groundwater resources using numerical groundwater model

Engineering Thoughts Embedded in Ancient Groundwater Techniques: The Case of Falaj in Oman 2025 .7

Identification of the hydrological model of a runoff-sourced falaj using empirical methods 2025 .8

Simulation of sea water infiltration in coastal aquifer using MLPG numerical method 2024 .9

Quality Prediction of Sustainable Groundwater Resources, a Falaj in Oman 2024 .10

Computation of minimum adjustment factors for sustainable groundwater management using data assimilation and Vensim dynamic model 2024 .11

Hydraulic of sustainable groundwater resources, aflaj in Oman, using meshless numerical method 2024 .12

Presentation of a new decision-making plan for prioritizing the rehabilitation of (sustainable groundwater resources (case study: 9 aflaj of Oman 2023 .13

Data assimilation application in prediction of flowrate for a sustainable groundwater resource: Falaj Al-Khatmain, Oman 2023 .14

Models Are Essential for Water Resource Management 2023 .15

Inverse modeling application for aquifer parameters estimation using a precise simulation–optimization model 2023 .16

Qanat`s hydraulic harim determination by the usage of meshless numerical method 2023 .17

Numerical simulation of groundwater in an unconfined aquifer with a novel hybrid model ((case study: Birjand Aquifer, Iran 2022 .18

Numerical and Experimental Assessment of Suspended Material Effects on Water Loss Reduction from Irrigation Channels 2022 .19

Determination the optimal dimensions of concrete gravity dam by using metaheuristic (algorithms (Comparison of algorithms 2022 .20

Application of random walk algorithm into finite element numerical groundwater model for capture zone depiction 2022 .21

Monitoring Network Design with MLPG-TLBO Hybrid Model (Case study Birjand, Iran 2022 .22

Application of Meshless local Petrov-Galerkin approach for steady state groundwater flow modeling 2022 .23

Numerical Investigation the effect of Groundwater Uplift on the Interface Between Fresh and Saline Water and Mixing Zone in the Aquifers Adjacent Deserts 2022 .24

Determination of Well`s Capture Zones Using Random Walk Algorithm and FeFlow Simulation Model 2021 .25

Leakage Detection in Water Distribution Networks by the Use of Analytical and Experimental Models 2021 .26

Estimation of Parameters in Groundwater Modeling by Particle Filter linked to the meshless local Petrov-Galerkin Numerical Method 2021 .27

Determination of the optimal location of wells in aquifers with an accurate simulation-optimization model based on the meshless local Petrov-Galerkin 2020 .28

Usage of Particle Filter for Exact Estimation of Constant Head Boundaries in Unconfined Aquifer 2020 .29

Numerical Simulation of Groundwater Recharge by Injection Wells with Using Meshless Local Petrov-Galerkin 2019 .30

Experimental and numerical investigation of the effects of muddy water on seepage 2019 .31

reduction in earthen channels and dry zone of qanat

32. 2019 Determination of the capture zone of wells by using meshless local Petrov-Galerkin (numerical model in confined aquifer in unsteady state (Case study: Birjand Aquifer

33. 2019 Computation of Groundwater Balance Using Numerical MLPG Method (Case Study: (Birjand Unconfined Aquifer

34. 2019 Prediction of Groundwater Fluctuations Using Meshless Local Petrov-Galerkin Numerical (Method in a Field Aquifer (Birjand Aquifer

35. 2018 Investigation the effects of muddy water in decreasing seepage in the transition (channels (Case study: Ferdows, South Khorasan province

36. 2017 Development of two dimensional groundwater simulation model using meshless method based on MLS approximation function in unconfined aquifer in transient state

كتاب:

1. Novel Methods for Groundwater Management 2023

2. Introduction to Groundwater Flow Modelling (Finite Element, Isogeometric and Meshless (Methods 2020

الأنشطة الاستشارية

Research Expert، Regional Water Company، 2021- 2022

العضوية في الهيئات المهنية

- Iranian Hydraulic Association • الآن:–2022
- Iranian Water Resources Management • الآن:–2021
- Iranian Rainwater Catchments Systems Association • الآن:–2021
- Iranian Water and Waste Water Association • الآن:–2021

الجوائز والتقدير

Elite Graduate Student of Engineering Faculty in University of Sistan & Baluchestan 2022

Top Student of Engineering Faculty of Univesity of Sistan and Baluchestan 2020

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