



د.علي محتشمي

أستاذ مساعد

Engineering Research Team...

كرسي اليونسكو لدراسات الأفلاج وعلم المياه الاجتماعي

جامعة نزوى، سلطنة عمان

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محول: 871

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موقع المكتب: 25B G-02...

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:

[Application of the quality border delineation for sustainable protection of groundwater resources, qanats, against contamination using meshless numerical method](#) 2025 .1

[Qanats' assistance in reviving groundwater resources using numerical groundwater model](#) 2025 .2

[Engineering Thoughts Embedded in Ancient Groundwater Techniques: The Case of Falaj in Oman](#) 2025 .3

[Identification of the hydrological model of a runoff-sourced falaj using empirical methods](#) 2025 .4

Simulation of sea water infiltration in coastal aquifer using MLPG numerical method 2024 .5

[Quality Prediction of Sustainable Groundwater Resources, a Falaj in Oman](#) 2024 .6

[Computation of minimum adjustment factors for sustainable groundwater management](#) 2024 .7

using data assimilation and Vensim dynamic model	
Hydraulic of sustainable groundwater resources, aflaj in Oman, using meshless numerical method	2024 .8
Presentation of a new decision-making plan for prioritizing the rehabilitation of (sustainable groundwater resources (case study: 9 aflaj of Oman	2023 .9
Data assimilation application in prediction of flowrate for a sustainable groundwater resource: Falaj Al-Khatmain, Oman	2023 .10
Models Are Essential for Water Resource Management	2023 .11
Inverse modeling application for aquifer parameters estimation using a precise simulation-optimization model	2023 .12
Qanat`s hydraulic harim determination by the usage of meshless numerical method	2023 .13
Numerical simulation of groundwater in an unconfined aquifer with a novel hybrid model ((case study: Birjand Aquifer, Iran	2022 .14
Numerical and Experimental Assessment of Suspended Material Effects on Water Loss Reduction from Irrigation Channels	2022 .15
Determination the optimal dimensions of concrete gravity dam by using metaheuristic algorithms (Comparison of algorithms	2022 .16
Application of random walk algorithm into finite element numerical groundwater model for capture zone depiction	2022 .17
Monitoring Network Design with MLPG-TLBO Hybrid Model (Case study Birjand, Iran	2022 .18
Application of Meshless local Petrov-Galerkin approach for steady state groundwater flow modeling	2022 .19
Numerical Investigation the effect of Groundwater Uplift on the Interface Between Fresh and Saline Water and Mixing Zone in the Aquifers Adjacent Deserts	2022 .20
Determination of Well`s Capture Zones Using Random Walk Algorithm and FeFlow Simulation Model	2021 .21
Leakage Detection in Water Distribution Networks by the Use of Analytical and Experimental Models	2021 .22
Estimation of Parameters in Groundwater Modeling by Particle Filter linked to the meshless local Petrov-Galerkin Numerical Method	2021 .23
Determination of the optimal location of wells in aquifers with an accurate simulation- optimization model based on the meshless local Petrov-Galerkin	2020 .24
Usage of Particle Filter for Exact Estimation of Constant Head Boundaries in Unconfined Aquifer	2020 .25
Numerical Simulation of Groundwater Recharge by Injection Wells with Using Meshless Local Petrov-Galerkin	2019 .26
Experimental and numerical investigation of the effects of muddy water on seepage reduction in earthen channels and dry zone of qanat	2019 .27
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	2019 .28
Computation of Groundwater Balance Using Numerical MLPG Method (Case Study: (Birjand Unconfined Aquifer	2019 .29
Prediction of Groundwater Fluctuations Using Meshless Local Petrov-Galerkin Numerical	2019 .30

[\(Method in a Field Aquifer \(Birjand Aquifer](#)

[Investigation the effects of muddy water in decreasing seepage in the transition](#) 2018 .31
[\(channels \(Case study: Ferdows, South Khorasan province](#)

[Development of two dimensional groundwater simulation model using meshless method](#) 2017 .32
[based on MLS approximation function in unconfined aquifer in transient state](#)

کتاب:

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

2022-الآن: Iranian Hydraulic Association

2021-الآن: Iranian Water Resources Management

2021-الآن: Iranian Rainwater Catchments Systems Association

2021-الآن: Iranian Water and Waste Water Association

الجوائز والتقدير

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

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

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