HODA KAHRIZI

Scientific Researcher

PROFILE

Highly motivated, well organized scientific researcher with over 9 years of teaching and research experience, specialising in water engineering with a keen interest in water treatment.

CONTACT

PHONE NUMBER:
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WEBSITE:
https://www.linkedin.com/in/hoda-kahrizi/

REFRENCES

Prof. Rouzbeh Abbassi
Macquarie University, Australia
Rouzbeh.abbassi@mq.edu.au
Website: Prof. R. Abbassi

Prof. Asheesh Kumar Yadav
Institute of Minerals and Materials Technology, India
Asheesh.yadav@gmail.com
Website: Prof. A. K. Yadav

Prof. Seyyed Ebrahim Hashemi Garmdareh
The University of Tehran, Iran
sehashemi@ut.ac.ir
Website:Prof. S. E. Hashemi Garmdareh

EDUCATION

Doctoral degree in Water engineering/ Abourayhan college, University of Tehran Tehran, Iran

Sep 2016-Jun 2022
Thesis:
"Enhanced bioremediation of heavy metals and bioelectricity generation in constructed wetland combined with microbial fuel cell (CW-MFC)"
Supervisor: Prof. Seyyed Ebrahim Hashemi Garmdareh
Co-Supervisors: Prof. Rouzbeh Abbassi, Prof. Asheesh Kumar Yadav
Advisor: Prof. Maryam Varavi pour
Total GPA: 19.10/ 20 (Ranked 1st)

Master's degree in Water engineering: Agriculture college/ Razi University, Kermanshah, Iran

Sep 2013-Sep 2015
Thesis:
"Removal of heavy metals by using nano technology"
Supervisor: Prof. Ali Bafkar, Prof. Masoumeh Farasati
Total GPA: 16.60/ 20

Bachelor's degree in Water engineering/ Agriculture college/ Razi University, Kermanshah, Iran

Sep 2008-Sep 2012
Thesis:
"Examining the effective parameters in hydroponic culture"
Supervisor: Prof. Houshang Ghamarnia

RESEARCH INTERESTS

Water quality, Wastewater, Contaminations, Water pollutions, Microbial Fuel Cells, Water Salinity, Sediment, Water Availability, Heavy Metals, Hydrology, Wireless Sensor Networks, Environments, Modeling, Software Engineering.

PUBLICATIONS

International Journals: 2 National Journals: 4
National Conference Papers: 2

OTHER EXPERIENCES

Lecturer since 2009, Senior expert in NAWSRC since 2022, No. of National Registered Patents = 3, Under the support of "The Elite National Foundation" of Iran, More than 200 hours of Participation Certificate Awards (GIS, RS, MaTLAB, VB, HYDRUS, WATER GEMS, OFFICE, HSE and etc).

FIELDS OF INTEREST

RESEARCH

Water quality, Wastewater, Contaminations, Water pollutions, Microbial Fuel Cells, Water Salinity, Sediment, Water Availability, Heavy Metals, Hydrology, Environmental science, Modeling, Software Engineering, irrigation and GIS.

ENGINEERING

Design and implementation of Irrigation system, Web-Based Programming, Automation and Automate control of irrigation system and greenhouse.

PUBLICATIONS

INTERNATIONAL JOURNAL PAPERS

H. Kahrizi, M. Farasati, A. Bafkar. **"Effect of nanotechnology on heavy metal removal from aqueous solution"**. Journal of Centeral South University. (2016) 23: 2526−2535. https://link.springer.com/article/10.1007/s11771-016-3313-8

M.J. Manashti, **H. Kahrizi**. **"A system for recording precipitation height by the use of capacitor plates"**. Asian Journal of Applied Sciences (2015), (ISSN: 2321 – 0893) 03(06). https://192.99.73.24/index.php/AJAS/article/view/3462

NATIONAL JOURNAL PAPERS

H. Kahrizi., S.E. Hashemi Garmdareh, R. Abbassi, "**The effect of Phragmites Australis on Removal of Copper, Lead, Zinc and Cadmium in Constructed Wetland**", Journal of Water and Irrigation management, 12, no.1 (2022), 59-69. https://jwim.ut.ac.ir/article_25090_2535.htmlhttps://jwim.ut.ac.ir/article_86594_d9b9c20f642d2cbddb7fa31d4833760b.pdf?lang=en

H. Kahrizi., S.E. Hashemi Garmdareh, "**Investigating the relationship between Constructed Wetland and microbial fuel cell to increase the removal of pollutants and electricity generation**", Journal of Soil and Water research, (2022), IN PRESS.

A. Bafkar, **H. Kahrizi**, M. Farasati. **"Removal of copper and zinc from aqueous solution using nanostructured absorber phragmites australis"**. Journal of Natural Environment. 71, no.3 (2018), 301-314. https://www.cabdirect.org/cabdirect/abstract/20203131226

H. Kahrizi, M. Farasati, A. Bafkar. **"Batch Experiment of Cu Removal from Aquous Solution by Phragmites Australis Nanostructure"**. Journal of Envirnmental helth engineering, (2015), 2: 76-88. https://jehe.abzums.ac.ir/article-1-125-en.html

NATIONAL CONFERENCE PAPERS

H. Kahrizi, M. Sohrabi, M.M. Heydari, M.J. Manashti,**" The System for Logging Water Depth in Open Channels Using Capacitor Plates"**, Twelfth Conference of Hydraulic Engineering Department, College of Agriculture and Natural Resources, Irrigation and Reclamation, Tehran, Iran,2013.

H. Kahrizi, A. Bafkar, M. Farasati. **"Investigating the Copper Absorption Efficiency from aqueous solution using plant absorbents".** The Second National Confrence of planning, Protecting and Consrving Environment and Stable Development. February 15 (2015). PCEPSD02_158.

READY FOR SUBMISSION

Simultaneous Removal of Heavy Metals and Electricity Generation from Polluted Waters using Constructed Wetland-Microbial Fuel Cells (CW-MFCs)

Heavy metals containing wastewater treatment and electricity generation in planted and unplanted single chamber constructed wetland-microbial fuel cell

PATENTS (SCIENTIFIC CERTIFICATION)

Mohammad Javad Manashti, **Hoda Kahrizi**, Moslem Sohrabi, "**Capacitive Rain Gauge for Measuring Water Level**", Patent No.: 78279, Registration Date: 1/14/2013

Mohammad Javad Manashti, **Hoda Kahrizi**, Moslem Sohrabi, "**Spillway with Automatic Levelmeter by use of Capacitor Panel** ", Patent No.: 78270, Registration Date: 01/14/2013

Mohammad Javad Manashti, **Hoda Kahrizi**, Soheila Amirian, "**Water capacitive Levelmeter**", Patent No.: 75246, Registration Date: 05/28/2012

BOOKS

M. Farsati, **H. Kahrizi**. (2022). **Removal of water pollutant**. Tehran, Iran.

FAO. (2022). Treanslators: **H. Kahrizi**, H. Dehghani Sanij, R. Malekian. **Guidance on realizing real water saving with crop productivity interventions**.

F. Verheijen, S. Jeffery, A.C. Bastos, M. van der Velde, I. Diafas. Translators: M. Farsati, **H. Kahrizi**. (2021). **Biochar Application to soils**.

SKILLS

TEACHING EXPERIENCE

Teacher Assistant, 2013-2018

- ✓ Hydraulic
- ✓ Soil Mechanic
- ✓ Irrigation
- ✓ Surface irrigation
- ✓ Pressurized Irrigation
- ✓ Water, Soil and Plant Relations
- ✓ Drainage Basics
- ✓ Planning design and management of agricultural drainage systems

JOB EXPERIENCES

- ✓ Senior expert on Water science, National Agriculture and Water Strategic Research Center (NAWSRC), since 2022
- ✓ Irrigation and drainage Expert, Jamab consulting Engineers Co., 2021
- ✓ Research assistant & teacher assistant, University of Tehran, since 2017
- ✓ Research assistant & teacher assistant, Razi University, 2013-2016
- ✓ Pressurized irrigation system designer, Since May 2009

WATER ENGINEERING SOFTWARES

AutoCAD, Surfer, Hydrus, Water games, Cropwat, GIS, Aqua Crop, RZWQM, DrainMOD.

OTHER

VB Programming, SPSS, SAS, Grapher, Microsoft (Including Word, PowerPoint, Access, Excel, Project, Visio …)

HONORS AND AWARDS

Ministery of Energy, Iran Water Resources Co., Research Scholarship;
Nov 2020

Member of National Elites Foundation
Since 2012

LANGUAGE

English: Advanced
Persian: Native