

# FARIS M. MUNSHI

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## Career Profile

*Assistant professor in Environmental Engineering at King Saud University lectured in water and wastewater treatment, industry and environment systems. Teaching environmental laboratory sessions related to water and wastewater analysis.*

*Serving in several administrative programs within the civil engineering department.*

## AREAS OF INTEREST

- Academic Teaching
- Filtration processes
- Membrane bioreactors
- Advanced Oxidation Processes
- Environmental Management
- Anaerobic Treatment
- Forward osmosis membranes

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## PROFESSIONAL EXPERIENCE

### Member, Scientific Committee

Oct 1, 2019

THE TAREK AL-KASABI REWARD FOR EXCELLENCE IN CIVIL ENGINEERING IN SAUDI ARABIA

### Member, Department Development Committee

Sep 17, 2019

### Co-Chairman of the Department of Civil Engineering

Sep 1, 2019

CIVIL ENGINEERING DEPARTMENT, King Saud University, Riyadh, Saudi Arabia

### Vice president of the Saudi Student Club

2017 – 2018

### Graduate Teaching Assistant

2016 – 2018

CIVIL, ENVIRONMENTAL AND CONSTRUCTION ENGINEERING DEPARTMENT, University of Central Florida, Orlando, United States of America

Assisting in environmental engineering courses, including biological process control and environmental biotechnology.

### Guest speaker

Nov 15, 2017

CIVIL, ENVIRONMENTAL AND CONSTRUCTION ENGINEERING DEPARTMENT, University of Central Florida, Orlando, United States of America

Guest speaker presenting membrane technology and application in water and wastewater treatment.

### Teach-In Speaker

Nov 15, 2017

CASTLE CREEK ELEMENTARY, ADDITIONS SCHOOL VOLUNTEERS PROGRAM, ORLANDO, FLORIDA.

Introducing students to environmental engineering as a career and educational opportunities.

### Graduate Research Assistant

2014 - 2019

CIVIL, ENVIRONMENTAL AND CONSTRUCTION ENGINEERING DEPARTMENT, University of Central Florida, Orlando, United States of America

Under the mentorship of Dr. Woo Hyoung Lee, Researching algae dewatering using forward osmosis membranes for the production of biofuel.

### Member, Quality and Accreditation Committee

Spring 2014

CIVIL ENGINEERING DEPARTMENT, King Saud University, Riyadh, Saudi Arabia

Preparing the course file documents for the National Commission for Academic Accreditation and Assessment, furthermore, organizing arrangements for the NCAAA inspection team during their evaluation period.

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**Member, Food and Water Inspection Committee**

2011 – 2013

Correlation with Saudi FDA, Riyadh Region

A team of ten agencies inspecting water and food industries, monitoring processes, reviewing laboratory reports, sampling, and testing byproducts and wastes.

**Member, Summer, and Collaborative Training Committee**

2011 – 2013

COLLEGE OF ENGINEERING, King Saud University, Riyadh, Saudi Arabia

Civil engineering department representative. Duties were creating open channels with the governmental and private sectors with regards to establishing training opportunities and ensuring standards were met.

**Coordinator, Practical Training Committee**

2010 – 2013

CIVIL ENGINEERING DEPARTMENT, King Saud University, Riyadh, Saudi Arabia

Coordinator of the committee, with duties of establishing relations with training partners, distributing the training opportunities among students, providing support services for trainees.

**Member, General activities and Media Committee**

2009 – 2013

CIVIL ENGINEERING DEPARTMENT, King Saud University, Riyadh, Saudi Arabia

Organizing workshops and lectures in the department and maintaining communication with internal and external media.

**Lecturer, Environmental Engineering Group**

Since 2009

CIVIL ENGINEERING DEPARTMENT, King Saud University, Riyadh, Saudi Arabia

Teaching water and wastewater treatment; industry and environment systems; and water and wastewater laboratory courses. Furthermore, giving tutorials on the subject of water supply and drainage systems.

**Teaching Assistant**

2006

CIVIL ENGINEERING DEPARTMENT, King Saud University, Riyadh, Saudi Arabia

Assisting in tutorials and laboratory in the environmental engineering course group, including water and wastewater treatment, and water supply and drainage systems.

**Civil Engineer**

2006

LAHJAN GROUP, Makkah, Saudi Arabia

Supervising construction projects. Also, in association with the municipal of Makkah and SBG, I served in supervising the maintenance of the underground drainage and service tunnels in the city center.

**Training Civil Engineer**

Summer 2005

SAUDI BINLADIN GROUP (SBG) - PBAD, Makkah, Saudi Arabia

Civil engineering training at The King Abdul Aziz Endowment Project, under an extensive program in steel, wood, concrete, and surveying works.

**AutoCAD Mapping**

2005

MINISTRY OF PILGRIMAGE, Makkah, Saudi Arabia

Contributing in a consulting project by editing maps of "Mina" area.

**Training Civil Engineer**

Summer 2004

AL-MARSAM OFFICE, Makkah, Saudi Arabia

Following the supervision of a seven-story reinforced concrete building project.

**Study participant**

2003

THE CUSTODIAN OF THE TWO HOLY MOSQUES INSTITUTE OF HAJJ RESEARCH, Makkah, Saudi Arabia

Participating in the study of the development of the geographic information system for pilgrims housing in Makkah.

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**HONORS AND AWARDS**

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- Honorable mention at the 2016 sustainable energy awards for the work done under the title “Algae Biofuel Osmosis Dewatering (ABODE) project,” P3 design competition on the 16<sup>th</sup> day of April 2016, at Washington. D.C.
- Funding: U.S. Environmental Protection Agency, P3 Project (SU836132), 2016
- Ph.D. scholarship grant, King Saud University, Saudi Arabia (4/52/24793) 2014-2019

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**CONFERENCE PAPERS AND PRESENTATIONS**

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- “Impact of Reverse Salt Flux (RSF) and Applied Electrical Field on Micro-algae in a Forward Osmosis (FO) Harvesting System”, Association of Environmental Engineering and Science Professors (AEESP), Arizona State University, Tempe, Arizona, May 14-16, 2019.
- “Forward Osmosis for Algae Dewatering and Electrical Field-driven Membrane Fouling Mitigation”, 3MT UCF’s first - Three Minute Thesis, Live Oak Center, UCF, Orlando, Florida, March 27, 2019.
- Graduate Research Forum 2019, Pegasus Ballroom- UCF Student Union, Orlando, Florida, April 5, 2019.
- Materials Innovation for Sustainable Agriculture 2018 (MISA2018), Live Oak Ballroom, Orlando, Florida, October 31, 2018.
- Graduate Research Forum 2018, Pegasus Ballroom- UCF Student Union, Orlando, Florida, April 3, 2018.
- Association of Environmental Engineering and Science Professor’s 2018 Distinguished Lecturer, University of Central Florida, Live Oak Event Center, Orlando, Florida, March 23, 2018.
- “Fouling Control of a Forward Osmosis (FO) Algae Dewatering System using an Electric Field” Membrane Technology Conference and Exposition 2018 (MTC18) in West Palm Beach, Florida, March 12-16, 2018.
- Graduate Research Forum 2017, Pegasus Ballroom- UCF Student Union, Orlando, Florida, April 4, 2017.
- “Algae Dewatering with Different Draw Solutions and Cross Flow Velocities Using a Forward Osmosis (FO) Flat Sheet Membrane” at the 2017 Membrane Technology Conference and Exposition (MTC17) in Long Beach, California, February 13-17, 2017.
- “The Effect of Cross Flow and Draw Solutions on the Algae Dewatering using Forward Osmosis” Florida Section AWWA Fall Conference 2016, 90th-anniversary gala, Orlando, Florida, Nov 27 - Dec 1, 2016.

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**REFEREED JOURNAL PUBLICATIONS**

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Munshi, F.M., Church, J., McLean R., Maier N., Sadmani A., Duranceau S. J., and Lee, W.H., Dewatering Algae using an Aquaporin-based Polyethersulfone Forward Osmosis Membrane, *separation and purification technology*

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**MEMBERSHIPS**

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- Member in American Water Works Association (AWWA) – Since 2015
- Member in American Society of Quality (ASQ) - Since 2017

**EDUCATION & CERTIFICATIONS**

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**PhD in Environmental Engineering**

May 2, 2019

CECE, University of Central Florida, Orlando, FL, USA

**Lean Six-sigma Yellow belt**

April 27, 2017

The 2nd Central Florida Quality Conference, ASQ, University of Central Florida, Orlando, FL, USA

**Advanced English Courses**

April 2013 - Dec 2013

ESL, Rice University, Houston, TX, USA

**Certificates in Effective Teaching Skills, Evaluation of Student Education Outcomes and Course Building and Designing**

2010

Deanship of Skill Development, KSU, Riyadh, Saudi Arabia

**Master of Engineering Science in Environmental Engineering**

2007 – 2009

The University of New South Wales, Sydney, Australia

**Bachelor Degree in Civil Engineering (B.Sc.)**

2001 – 2006

UMM AL-QURA UNIVERSITY, Makkah, Saudi Arabia