

## EDUCATION

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- 2016 **Ph.D. Student in Environment and Civil Engineering**, Texas A&M University  
Dissertation Title: Elucidating the transport mechanism of Engineering Nanoparticles into plants (Uptake, Accumulation, Translocation)
- Dec. 2016 **M.Sc. in Civil and Environmental Engineering**, Texas Tech University, USA
- Apr. 2013 **M.Sc. in Environmental Engineering; Air Quality Control, Solid Waste and Waste Water Process Engineering**, University of Stuttgart, Germany  
Thesis Title; Solute transfer mechanisms in Polar Organic Chemical Integrative Sampler (POCIS)
- Apr. 2007 **B.Sc. in Environmental Science**, University of Birjand

## HIGHLIGHT

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Top Reviewer for the Water Environment Federation, Journal of Water Environment Research 2017  
<https://www.wef.org/wer>

## PUBLICATIONS/ PEER REVIEWED

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- 2018, Sharifan., et al, **Mutual effects and in-planta speciation of co-existing cerium oxide nanoparticles and cadmium in hydroponically grown soybean (*Glycine max (L.) Merr.*)**, [10.1039/C7EN00931C](https://doi.org/10.1039/C7EN00931C)
  - 2017, Sharifan., **Commentary on Characteristics of cadmium uptake and membrane transport in roots of intact wheat (*Triticum aestivum L.*) seedlings**. Environ. Poll. , 231, 1213-1214 [10.1016/j.envpol.2017.06.018](https://doi.org/10.1016/j.envpol.2017.06.018)
  - 2017, Sharifan., et al, **Potential photochemical interaction of UV Filter Molecules with multi-chlorinated structure of Pymnesins in a Harmful Algal Bloom event**, Mini-Reviews in Organic Chemistry, 14, 5, 391-399  
[10.2174/1570193X14666170518124658](https://doi.org/10.2174/1570193X14666170518124658)
  - 2017, Sharifan., et al, **High Performance in Power Generation by Pressure-Retarded Osmosis (PRO) from Hyper-Salinity Gradient: Case Study of Hypersaline Lake of Urmia, Iran**, Desalination and Water Treatment, 72, 302-311.  
[10.5004/dwt.2017.20555](https://doi.org/10.5004/dwt.2017.20555)
  - 2016, Sharifan., et al, **UV Filters an Environmental Threat for the Gulf of Mexico; Case Study of Texas Coastal Zones**, J. of Oceanologia, 58 (4), 327–335 [10.1016/j.oceano.2016.07.002](https://doi.org/10.1016/j.oceano.2016.07.002)
  - 2016, Sharifan., et al, **UV Filters Interaction in the Chlorinated Swimming Pool**, Environmental Research, 148, 273–276 [10.1016/j.envres.2016.04.002](https://doi.org/10.1016/j.envres.2016.04.002)
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- 2018, Sharifan., et al, **Investigation on the Modification of Physicochemical Properties of Cerium Oxide Nanoparticles through Adsorption of Cd and As(III)/As(V)**, Sustainable Chem&Eng. (Submitted 2018)
  - Xiaoxuan Wang, Wenjie Sun, Sha Zhang, Hamidreza Sharifan, Xingmao Ma, **Elucidating the Effects of Cerium Oxide Nanoparticles and Zinc Oxide Nanoparticles on Arsenic Uptake and Speciation in Rice (*Oryza sativa*) in a Hydroponic System** Environ. Sci& Tech, (Submitted 2018)
  - 2018, Sharifan., **The Interaction of UV Chemical Filters with the Peloid Composition used for the Pelotherapy; A case report of the Great Salt Lake**, USA Journal of Environmental Quality, (Submitted 2018)

## PUBLICATIONS/ NON-PEER-REVIEWED

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2016, Sharifan., **Nutrient Recovery from Municipal Wastewater Treatment Plants: Status and Prospects**, Florida Journal of Water Resources, June. 36-37

2016, Sharifan., **What happens to sunscreens in swimming pools?**, Atlas of Science, September.

DOI:10.13140/RG.2.2.26297.16481

## PUBLICATIONS/ PRESENTATION

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- 2017, Sharifan., et al, "*mutual effects of cerium oxide nanoparticles and cadmium on their uptake and accumulation by soybeans in a hydroponic system*" in 14th International Phytotechnologies Conference, September 25-29, 2017, Canada.
- 2017, Sharifan., et al, "*Characterizing the molecular mechanisms for the uptake of cerium oxide nanoparticles by soybean (Glycine max. (L.) Merr.)*" in Pan American Congress of Nanotechnology (PanNano-2017), November 27-29, 2017, Brazil.
- 2016, Sharifan., et al, "*Solute Transfer behavior of Polar Organic Chemical Compounds through Polyethersulfone Membrane (PES) in Passive Sampling Device*". Annual Student Water Conference,. 24-25 March, Stillwater campus of Oklahoma State University. USA
- 2016, Sharifan., et al, "*Transfer Rate of Water Contaminants through a Polyethersulfone (PES) Membrane*", Texas Water Conference,. 19-22 April, Fort Worth, Texas, USA
- 2010, Sharifan., et al, "*Passive air sampler as a tool for long-term air pollution monitoring in tropical industrial and urban air (Case study evaluation of a SO<sub>2</sub> passive sampler in industrial city of Iran)*", International Conference on Urban Environmental Pollution,. 123-25th June, Boston USA
- 2010, Sharifan., et al, "*Bioaccumulation and Distribution of Heavy Metals in Gray Mangrove (Avicennia marina): Case Study of the Tropical Areas of Persian Gulf*". International Research on Food Security, Natural Resource Management and Rural Development, September 14 - 16, Zurich, Switzerland
- 2009, Sharifan., et al, "A Review on; Biological Indication Potential of Grey Mangrove, Avicennia marina as Bioindicator Of Heavy Metals Pollution, 2nd International conference on Global Warming,. 6-9 July, Istanbul, Turkey
- 2009, Sharifan., et al, "Survey the Biogas as Suitable Alternative Instead of Fossil Fuels toward Sustainable Development, Fourth International Exergy, Energy and Environment Symposium,. 19-23 April, American University of Sharjah, UAE

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## PROFESSIONAL WORK EXPERIENCES

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### **2015, Environmental Engineer**

#### **Public Utilities, Urban Water Center of municipality, Virginia Beach**

- Research and interpreting the construction drawing and specifications of the water facilities
- Assisting the maintaining field records of the water distribution system
- Mapping the sewer systems and water utilities

### **2013, Research Assistant**

#### **Institute for Sanitary Engineering, Water Quality and Solid Waste Management, University of Stuttgart, Germany**

- Bio-degradation of UV filters (Benzophenone, Octocrylene)
- Measurement of N<sub>2</sub> from de-nitrification process

### **2013, Research Assistant**

#### **Alfred Wegener Institute for Polar and Marine Researches, Germany**

- Toxin extraction from sampled algae
- Sample preparation for ICP-MS analysis and HPLC
- Data analysis; identification of biotoxins based on molecular spectrum

### **2012, Research Assistant**

#### **Royal Netherlands Institute for Sea Research**

- Measurement of solute transfer of polar organic molecules through PES membrane
- Analyzing polar organic chemical compounds by GC-MS
- Preparing fish samples for isotope analysis

### **2011-2012, Research Assistant**

#### **Institute of Combustion and Power Plant Technology, University of Stuttgart, Germany**

- Ambient air measurement and air quality control in a mobile station
- Installation and maintenance of stationary ambient gas analyzers( NO<sub>x</sub>, CO, O<sub>3</sub>, PM)
- Working by data acquisition system for the CFB

### **2010-2011, Student Research Assistant**

#### **Institute for Sanitary Engineering, Water Quality and Solid Waste Management, University of Stuttgart. Germany - ISWA**

- Controlling the waste water treatment procedure, pressure, discharge etc.

### **2010- Student Technical Assistant**

#### **Operation Wallacea Company**

- Evaluation of the rain forest diversity
- Data Analysis of the field works
- Teaching ecological concepts to high school students

### **2009- Environmental Planning and Air Pollution Control Expert**

#### **South Pars Gas Complex-HSE Center (Assalouyeh)**

- Weekly monitoring of gas emissions and solid waste management
- Ambient air quality measurement by portable devices/diffusive samplers
- Supervising the safety rules on the onshore projects

## **GRANT APPLICATIONS/ AWARDED**

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2018	Travel grant from Zachray Department of Civil Engineering
2017	Travel grant from American Phytoscholar Grant Program, 14th International Phytotechnologies Conference, Canada
2017	Travel grant from National Science Foundation and Sustainable Nanotechnology Organization, 1st Pan American Congress, Brazil
2017	Rollins Family Fellowship, Texas A &M University
2017	Harold J. "Bill" Haynes Fellowship, Texas A &M University 2015, Student Recruitment Fellowship/Presidential Fellowship, Texas Tech University, \$27500/Year plus tuition.
2016	Travel grant from Buchanan Family Trust/Oklahoma State University, \$500
2016	Grant-in-aid for providing the supplemental material of interaction of UV filters in a chlorinated water, PI: Hamidreza Sharifan, \$ 500

## **GRANT APPLICATIONS/NOT AWARDED**

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2014	Sharifan, Kumar. S, Catalytic Dry Reforming of Methane to NSFgrfp
2015	Sharifan, Morse. A, Novel Sustainable Design of Greywater Recycling and Reuse System for Handwashing and Urinals, to EPA, People, Prosperity and the Planet (P3) Student Design Competition, 25K
2015	Sharifan, Morse. A, Novel Sustainable Design of a Greywater Recycling System for Toilets to Texas Water Resources Institute (TWRI), \$5K
2016	Sharifan, Morse. A, UV Filters Behavior in the Chlorinated Water to National Water Research Institute (NWRI), \$10K
2016	Participated: Klein. D, Morse. A, Environmental Fate of UV filters in Texas Marine Ecosystems to EPA Star
2017	Sharifan, Morse. A, Environmental Fate of UV filters in Swimming Pools and Potential Formation of Disinfection by-products to NSF-grfp

## **INVITED REVIEWER**

Environment Science & Technology, ACS (1 Review)  
 Sustainable Chemistry and Environment, ACS (1 Review)  
 Journal of Total Science of Environment (4 reviews)  
 Journal of Environmental Science and Pollution Research (1 review)  
 Journal of Water Environment Research (11 reviews since 2015)

## **SYNERGISTIC ACTIVITIES/VOLUNTEER SERVICES**

2015- Up to date, Reviewer for the Journal of Water Environment Research.  
 2016, Judge for biological design projects (7-grade students), Science and Engineering Fair, South Plain Regional, Lubbock, Texas.  
 2015- 2016, Voluntary member of the Student Disciplinary Committee at Texas Tech University.  
 2015, Volunteer reviewer for the annual conference of ASEE in New Orleans, USA.  
 2014, Volunteer researcher for project of Flash Hydrolysis of Microalgae at ODU, USA.  
 2013, Selected as youth chair for the International conference of YOUMARES 2013, driven by young spirit in marine science and technology  
 2012, Student reporter for international conference of TROPENTAG-Resilience of agricultural Systems against Crises, Universities of Göttingen and Kassel, Germany  
 2010, Internship on biodegradation of phenol, University of Cologne, Germany.  
 2011, Volunteer internship on rain forest evaluation by International British Company of Operation Wallacea in Indonesia.

## **WORKSHOPS**

2016. Teaching Workshop, ASCE; Excellence in Civil Engineering Education, USA  
2012. Bathymetry Technique, Royal Netherland Institute for Sea Research, Netherlands  
2011. NO<sub>2</sub> Measurement, by Saltzman method, University of Stuttgart, Germany.  
2009. Integrated Management System, South Pars Gas Complex, Assalouyeh, Iran  
2008. Biotechnology, Nanotechnology and Environment, Department of Environment, Tehran, Iran  
2008. Disaster Management and Climate Change, United Nation held at University of Tehran  
2008. Healthy, Safety, Environment Protection, D.A.S Co. of UK held at University of Tehran, Iran

## **PROFESSIONAL MEMBERSHIP**

American Society of Engineering Education (ASEE)  
American Society of Civil Engineering (ASCE)  
Water Environment Association of Texas (WEAT)  
British Ecological Society (BES)  
Society of American Military Engineer (SAME)  
The U.S. Green Building Council (USGBC)

## **COMPUTER SOFTWARE and**

GIS software (ArcGIS, Arc info Arc Map 10.4), Minteq3.0, Lab View, MinTab18, JMP

## **LAB SKILLS**

GC-MS, LC-MS, HPLC, Solid Phase Extraction, ICP-MS