Rania Osama Mohamed Mohamed

Assistant professor Civil Engineering Department- Minia Faculty of Engineering Minia University

Name: Rania Osama Mohamed Mohamed Date of Birth: 6th Oct. 1987 Address: 3 Badei Al Zaman St. - Minya – Minya Permanent Job: Assistant Professor, Civil Engineering Department -Minia Faculty of Engineering Minia University Contact email: Rania.osama@ejust.edu.eg / rania.Usama@mu.edu.eg +201067890775 Mobile: Marital Status: Married Language: Arabic (native) and English (fluent). ORCID ID: 0000-0002-6844-4826 Google Scholar: <u>https://scholar.google.com/citations?user=Rx0RuI0AAAAJ&hl=ar</u> ResearchGate: https://www.researchgate.net/profile/Rania-Mohamed-6 LinkedIn:https://www.linkedin.com/in/rania-osama-mohammed-1a347872

Academic Qualification

Doctor of Philosophy, Environmental Engineering, Waste Management, Egypt-Japan University for Science and Technology, Alexandria, Egypt. (Feb. 2017 : July 2020)

<u>Subject:</u> Working on a Ph.D. thesis entitled "Assessment of Duckweed based Phytoremediation Systems in Industrial Pollutants Treatment"

Master of Science, Environmental Engineering, Waste Management, Faculty of Engineering, Minia University, Egypt. (Sep 2011: Aug. 2014)

<u>Subject:</u> Working on a master thesis entitled " Modified process for nitrification denitrification using sequencing batcher reactor treating wastewater in Egypt "

Bachelor of Science "Civil Engineering" (5 years of study) Faculty of Engineering, Minia University, Egypt. (Sep. 2005: July 2010)

Grade: 86.17% Distinction with degree of Honor Graduation Project Grade: Excellent The final grade year is "Distinction (91%) Rank: 1st ranked student for the total academic years

Work Experience

Assistant professor, Environmental and Civil Engineering Department at Faculty of Engineering, Minia University, Egypt. Aug. $2020 \rightarrow Till now$

Main Activities and Responsibilities:

- Teaching the undergraduate students environmental and civil engineering courses.
- Conducting my research.

Former Ph.D. student at Egypt-Japan University of Science and Technology, Environmental Engineering Department. Feb. 2017 \rightarrow July 2020

Lecturer Assistant in civil Engineering department, Faculty of Engineering, Minia University, Egypt. Sep. $2014 \rightarrow$ Feb. 2017

Master Student at Civil Engineering Department, Faculty of Engineering, Minia University, Egypt. Sep. $2011 \rightarrow Aug. 2014$

Demonstrator, Environmental and Civil Engineering Department at Faculty of Engineering, Minia University, Egypt. Feb. $2011 \rightarrow July 2014$

Teaching Courses

- Sanitary Engineering
- Solid Waste Management
- Water Quality
- Environmental Pollution
- Water and Wastewater Treatment
- Water and Wastewater Analysis
- Water Chemistry
- Physical, Chemical, and Biological Treatment
- Theory of structures
- Material science
- Civil Engineering Drawing
- Irrigation and Agriculture Engineering
- Design of Irrigation Structures

Research Area

- Environmental Engineering My research focuses on advanced treatment processes for water, wastewater, and solid waste.
- Anaerobic Digestion Environmental Research Activated Sludge Nitrification Biodegradation -Denitrification.

Training: Courses & Workshops

• Total of (12) Training courses for faculty leadership & development, Minia University (2011-2020)

•	Japanese Language Course – Beginner	Aug. 2018
•	Advanced Research Seminar on Environmental Engineering	Jan. 2018
•	Research Seminar on Recent Topics Environmental Engineering	Jun. 2017
•	Environmental Management System	Jun. 2017

•	Environmental Processes and Systems	Jun. 2017
•	Advanced Research Seminar	Jun. 2017
•	Industrial Waste Treatment	Jun. 2017
•	Principles of Environmental Engineering	Jun. 2017
•	Advanced Communication Skills in different types of education.	Apr. 2014
•	Effective Presentation Skills.	Mar. 2014
•	Principles of Education Quality Management for Higher Institution.	Sep. 2012
•	Basic English Conversation Skills (BECS)	Apr. 2010

Special Research/Professional Skills

- Design of environmental, water supply and wastewater engineering systems.
- Lab and field equipment in water quality analysis, and WQI calculation.

• Aquifer characteristics & tests, hydrogeology aspects, geochemistry and introductory experience.

• Environmental Impact Assessment (EIA) studies, environmental management systems, environmental laws/ standards, water laws, environmental permitting, pollution mitigation.

- Reviewing/approval/developing the environmental/water compliance reports and plans.
- Experience with IC (Ion chromatography), COD, BOD, Spectrophotometer and TOC.
- Experience AutoCAD.

Social Skills and Competences

- Career design skills.
- Communicating with others.
- Good oral and written communication skills in English.

• Excellent interpersonal skills to work effectively with team members from different backgrounds and with different tasks.

Organizational Skills and Competences

- Time management.
- Mobilization of resources for the organization.
- Ability to work collaboratively with colleagues.
- Good communication and time management skills and the ability to meet objectives within a set Deadlines.
- High-level communication, interpersonal, and management skills.
- Demonstrated ability to work with minimum supervision.

Technical Skills and Competences

• Ability to design experiments and to perform experiments under well-controlled conditions.

- Ability to perform in-depth and critical data analysis.
- Determination and ability to work to deadlines.

- Experience with different equipment's in wastewater quality measurements.
- Design of water supply and wastewater systems.
- Writing proposals.

Computer Skills and Competences

- Windows XP, 7, 8, 10, and some other software packages.
- Using MS-Office and Other software Packages.
- Design programs like; AutoCAD & SAP.
- Knowing about Photoshop.
- Holding International Computer Driving License (ICDL)

Other Skills and Competences

- Marketing skills.
- Presentations skills.
- Potential to provide academic supervision to undergraduate students.
- Willingness to travel internationally for project meetings and conferences.
- Focused on delivering high-quality science.

International Conferences

• Technologies and Materials for Renewable Energy, Environment and Sustainability, September 2018, at Athens, Greece.

• International Conference of Chemical, Energy and Environmental Engineering (ICCEEE 2019), August 2020, Volume: 1008, at Egypt-Japan University of Science and Technology, Egypt.

• Minia International Conference on Environment and Engineering (MICEE 2024)

Publications (International Journals)

• Greenhouse gases emissions from duckweed pond system treating polyester resin wastewater containing 1,4-dioxane and heavy metals, Rania Osama, Hanem M.Awad, Shanshan Zha, Fangang Meng, Ahmed Tawfik, Ecotoxicology and Environmental Safety ,Volume 207, 1 January 2021, 111253 (Q1, Impact Factor: 6.291).

• Mechanistic and economic assessment of polyester wastewater treatment via baffled duckweed pond, Rania Osama, Hanem M.Awad, Mona G.Ibrahim, Ahmed Tawfik, Journal of Water Process Engineering, Volume 35, June 2020, 101179 (Q1, Impact Factor: 5.485).

• Potentials of duckweed (Lemna gibba) for treatment of 1,4-dioxane containing wastewater using duckweed multi-ponds system, Rania Osama, Mona G.Ibrahim, Manabi Fujiia, and Ahmed Tawfik, Energy Procedia, Volume 157, January 2019, Pages 676-682.

• Long-Term Assessment of 1,4-Dioxane Uptake via Duckweed with Emphasis on Operational Parameters, Rania Osama, Mona G.Ibrahim, Manabi Fujiia, and Ahmed Elreedy, August 2020, Materials Science Forum 1008:121-127 ,DOI:10.4028/www.scientific.net/MSF.1008.121, Conference: 2nd International Conference of Chemical, Energy and Environmental Engineering (ICCEEE 2019)Volume: 1008.

• Treatment of Domestic Wastewater (Minia City) Using Large Scale SBR System via Nitrification Denitrification Process., M. M. Nassar, M. Shamrukh and E. El-. Minia Journal of Engineering and Technology (MJET), 33(2), pp 55-64.

References

Prof. Mona Gamal El-Din Ibrahim, Professor of Environmental Engineering and Dean of the School of EECE, Egypt-Japan University of Science and Technology, mona.gamal@ejust.edu.eg.

□ **Prof. Dr. Eng. Mohamed Shamrukh**, Prof. Civil Eng. Dept., Engineering Faculty - Minia University, mshamrukh@mu.edu.eg.

Assoc. Prof. Manabu Fujii, Civil, and Environmental Engineering Dept, Tokyo Institute of Technology, fujii.m.ah@m.titech.ac.jp.

Prof. Ahmed Tawfik Professor of environmental engineering, Professor (Full) at National Research Centre. tawfik8@hotmail.com.

Dr. Ahmed Elreedy, Research Associate at Karlsruher Institute für Technologies (KIT), ahm_nazem@alexu.edu.eg.