

Curriculum Vita

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Assistant Professor
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Research Interests

- Advancing innovative wastewater treatment methods by integrating bio-adsorbent materials, membrane technologies, and cutting-edge approaches to address domestic and industrial needs.
- Designing and optimizing novel techniques for the treatment and sustainable reuse of sludge, a by-product of water treatment processes.
- Enhancing the performance of sedimentation and filtration systems through the development of optimized designs and operational strategies.
- Exploring and analyzing modern design frameworks for efficient and sustainable water distribution networks.

Degrees

- **Doctor of Philosophy (Ph.D.) in Civil Engineering – 2024**
Suez Canal University, Port Said, Egypt
THESIS: Industrial Wastewater Treatment Using Chitosan Based Bio-Composites
- **Master of Science (M.Sc.) in Civil Engineering (2020)**
Suez Canal University, Port Said, Egypt
THESIS: Developed Method for Treatment of Industrial Wastewater from Edible Oil Industry Using Membrane Technology
- **Bachelor of Science (B.Sc.) in Civil Engineering (2012)**
High Institute of Engineering and Technology, New Damietta, Egypt
Graduated top of graduating class

Academic Experience

Assistant Lecture, High Institute of Engineering and Technology, New Damietta, Egypt, 2020-2024.

Teach Sanitary and Environmental Engineering, Sanitary Compartments, Water Supply Engineering, Industrial Wastewater Systems, Basics of Environmental Science, Geology and Soil Mechanics, Highways and Airports Engineering, Shallow Foundation, Deep Foundation, and surveying engineering.

Demonstrator, High Institute of Engineering and Technology, New Damietta, Egypt, 2013-2020.

Teach Sanitary and Environmental Engineering, Sanitary Compartments, Water Supply Engineering, Industrial Wastewater Systems, Basics of Environmental Science, Geology and Soil Mechanics, Shallow Foundation, Deep Foundation, Steel Structure Design, Surveying 1, and Surveying 2.

Additional Courses Taught as Assistant Lecturer

- Geology and soil mechanics
- Foundation Engineering
- Steel Structures
- Sanitary and Environmental Eng.
- Design of Irrigation Structures
- Industrial Wastewater Systems
- Surveying Engineering

Soft Skills

- Effective communication skills
- Engaging lecture style
- Strong team player
- Strong organizational skills
- Ability to relate to students
- Effective project and time management skills
- Ability to supervise post-graduate students
- Self-motivated and able to motivate students

Research Skills

- Data analysis, report writing, and laboratory experimentation.

Technical Skills

- Microsoft Office Programs (Microsoft Office, Excell, PowerPoint, etc.)
- AutoCAD
- Geographic Information System (GIS)
- Primavera
- Civil 3D
- TOFEL
- Fundamentals of Digital Transformation
- International Publishing of Scientific Research

Publications and Conferences

- Elhady, Sarah, et al. "Oily wastewater treatment using polyamide thin film composite membrane technology." *Membranes* 10.5 (2020): 84.
- Elhady, Sarah, et al. "Developed Method for Treatment of Industrial Wastewater from Edible Oil Industry using Membrane Technology." *International Journal of Engineering and Advanced Technology (IJEAT)* 9.3 (2020): 3034-3038.

- Elhady, Sarah, et al. "Optimization of anionic dye removal using cross-linked chitosan composite as eco-friendly bio-adsorbent." *Applied Water Science* 14.7 (2024): 159.
- Elhady, Sarah, et al. "Advanced chitosan-based composites for sustainable removal of Congo red from textile wastewater." *Discover Sustainability* 5.1 (2024): 271.
- Elhady, Sarah, et al. "Sustainable Textile Wastewater Treatment Using Biodegradable Chitosan for High-Efficiency Dye Removal." *Egyptian Journal of Chemistry* (2024).
- Presented a research paper at **the International Conference on Harnessing Teaching and Investment for a Sustainable Future, held at the Arab Academy for Science, Technology & Maritime Transport, Port Said, Egypt, on June 6–7, 2024**, and received the Best Paper Award.

Awards and Achievements

- **Best Paper Award** at the **International Conference on Harnessing Teaching and Investment for a Sustainable Future**.
- **First Place** for the project "Optimization of Edible Oil Removal in Wastewater Emulsion Using Reverse Osmosis Membrane Technology" at PSED 2019.

