

1. Name: Heba Ali Mohamed Abd El Gawad, Assistance Professor, Department of Engineering Mathematics and Physics, Higher Institute of Engineering, El-Shorouk Academy, Cairo, Egypt.

2. Degrees:

- B.S. (Chemical engineering) Higher Institute of Engineering, El-Shorouk Academy, Cairo, Egypt. 2006
- M.S. (Chemical and Petroleum Refining Engineering), Faculty of Petroleum and Mining Engineering, Suez University, 2012
- Ph.D. (Philosophy in Chemical Engineering), Faculty of Engineering, Cairo University, 2017

3. Years of Service on Faculty: 7

- 2018 - Present Assistance Professor.

4. Other Experience:

- 2018 – 2023: Visiting Professor- Institute of Aviation Engineering and Technology.

5. Consulting Activities (selected)

- None

6. States in which registered:

- Cairo, Egypt.

7. Principal publications of last 5 years (selected):

- **“An application of advanced oxidation process on industrial crude oily wastewater treatment,”** Sci. Rep., vol. 13, no. 1, p. 3420, 2023.
- **“Silver withdrawal from X-Ray waste via leaching and sorption techniques: Appraisal ideal treatment factors”** *Egypt. J. Chem.*, vol. 66, No. 5, pp. 509 - 522 (2023).
- **“Electrochemical Production of Sodium Hypochlorite from Salty Wastewater Using a Flow-by Porous Graphite Electrode”**, *Energies*, vol. 16, no. 12, p. 4754, 2023.
- **“Rice straw derived cellulose-based hydrogels synthesis and applications as water reservoir system”**, *International Journal of Biological Macromolecules*, vol. 253 (2023) 127058.
- **“Chromium Disarmament from Veritable Tanneries Sewer Water Utilizing Carbonic Rice Straw as a Sorbent: Optimization and Carbonic Rice Straw Characteristics”**, *Water Air Soil Pollution*, (2023) 234:659.
- **“Removal of chromium from tannery industry wastewater using iron-based electrocoagulation process: experimental; kinetics; isotherm and economical studies”**, *Sci. Rep.*, 13 (2023) 19597.
- **“Pioneering Heat Exchanger Network Synthesis: A TOPSIS Driven Paradigm for Optimal Solutions”**, *Decision Making: Applications in Management and Engineering*, Volume 7, Issue 1 (2024) 420-441.
- **“A Comprehensive Approach to Azo Dichlorotriazine Dye Treatment: Assessing the Impact of Physical, Chemical, and Biological Treatment Methods through Statistical Analysis of Experimental Data”**, *Water* 2024, 16(10), 1327; <https://doi.org/10.3390/w16101327>.

- **“Novel collector design and optimized photo-fenton model for sustainable industry textile wastewater treatment”**, Sci. Rep., volume 14, Article number: 8573 (2024).

8. Scientific and professional societies of which a member

- Egyptian Chemical Engineering syndicate
- Egyptian society of engineers, Fellow

9. Honors and awards:

- None

10. Institutional & professional service in last 5 years:

- Member of the Proctoring committee for mid and Final Exams.
- Member of Control Committee (3rd Year).
- Responsible for preparing the new regulation of Chemical Engineering Department 2013 - Higher Institute of Engineering at El-Shorouk City.
- Responsible for preparing the new regulation of (Chemical Engineering-Petrochemical) Department 2019 - Higher Institute of Engineering at El-Shorouk City.
- Member of the Internal Audit Committee, Higher Institute of Engineering at El-Shorouk City.
- Coordinator of the Internal Quality Committee, Department of Engineering Mathematics and Physics, Higher Institute of Engineering, El-Shorouk Academy, Cairo, Egypt.

11. Professional Development Activities in the last 5 years:

- **Critical thinking, 2023.** Faculty and Leadership Development Center (FLDC) – Cairo University.
- **Exam systems and Students Evaluation, 2023.** Faculty and Leadership Development Center (FLDC) – Cairo University.
- **Preparing the course Description, 2022.** Faculty and Leadership Development Center (FLDC) – Cairo University.
- **E-Learning 3, 2020.** Faculty and leadership development center (FLDC) – Cairo University.
- **Electronic Correction System, 2020.** National Authority for Quality Assurance and Accreditation of Education (NAQAAE).
- **Exam system and Students Evaluation for High Education Institutions, 2020.**
- National Authority for Quality Assurance and Accreditation of Education (NAQAAE).
- **Self-Evaluation of Educational Programs: Colleges and Institutes of Higher Education, 2019.** National Authority for Quality Assurance and Accreditation of Education (NAQAAE).