10th of Ramadan City



# **Curriculum Vitae (CV)**

#### Maha Hassan Abd El Kereem

### **Personal Information:**

**Academic Rank:** Professor

**Department:** Chemical Engineering

**Specialization:** Modeling and Simulation

<u>Position:</u> Head of Chemical Eng. Dept., Higher Technological Institute

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# **Education:**

Degree	Discipline	Institution	Year
Ph.D.	Chemical Engineering	CAIRO UNIVERSITY	2003
M.Sc.	Chemical Engineering	CAIRO UNIVERSITY	1997
B.Sc.	Chemical Engineering	CAIRO UNIVERSITY	1993





### **Academic Experience:**

Institution: Higher Technological Institute, Tenth of Ramadan City

Rank: Professor

Dates: Jan. 2019, present

Institution: Higher Technological Institute, Tenth of Ramadan City

Rank: Associate Professor

Dates: 2013- Jan. 2019

Institution: Higher Technological Institute, Tenth of Ramadan City.

Rank: Research Assistant (PhD student)

Dates: 2004 – 2013

Institution: Higher Technological Institute, Tenth of Ramadan City.

Rank: AssistantLecturer,

Dates: Aug. 1998 – Oct. 2003

Institution: Higher Technological Institute, Tenth of Ramadan City.

Rank: Teaching Assistant

Dates: Oct. 1993 – July 1997

#### **Research interests:**

- Wastewater Treatment
- Process Optimization

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- Corrosion Engineering
- Waste Management
- Renewable Energy
- Rheology
- Modeling and Simulation

#### **Publications:**

- 1. R. A. Rezk, Z. Abdel-Salam, N. A. Abdel Ghany, **M. Abdelkreem**, M. Abdel-Harith, LIBS and pXRF validation for the removal of Pb by bio-CaCO3 nanoparticles from contaminated water, SN Applied Sciences 2022.
- 2. Yasmin El-Dakrory, Mahmoud Sliem, **Maha Abdelkreem**, Salah Hassab Elnaby & Reham Rezk, Laser induced fluorescence detection of R6G dye adsorbed on Fe3O4 nanomaterial's, Journal of Applied Water Engineering and Research 2022.
- 3. A. Elhassan, M. Abdelhamid, **M. Abdelkreem**, M. A. Harith, Using LIBS for monitoring and estimation of heavy elements in industrial wastewater during its remediation, "accepted ICPAP 2021 conference proceeding, AIP. Under Publication.
- 4. Soliman, T. Heakal, **M. Abdelkreem** and H. A.Sibak, Process Optimization of Mono Phosphate Calcium (MCP) Production by Acidulation of Egyptian Phosphate Ore with Phosphoric Acid, paper Submitted to Chemical Engineering Journal.
- 5. Taher Elshiekh, **M. Abdelkreem**, SalahKhalil, Ahmed Al-Sabagh, Optimization of Petroleum Crude Oil Treatment Using Hydrogen Sulfide Scavenger, Egyptian Journal of Petroleum, April, 2019.
- 6. R.A. Rezk, A.H. Galmed, **M. Abdelkreem**, N.A. Abdel Ghany, M.A. Harith, Detachment of Cu (II) and Co (II) ions from synthetic wastewater via adsorption on Lates niloticus fish bones using LIBS and XRF, Journal of Advanced Research, S2090-1232(18)30057-2, 2018.
- 7. M. I. A. A. Belal, M. M. Sadawy, **M. Abdelkreem**, A. A. Omar, Adsorption and Corrosion Inhibition Characteristics of EDTA on Carbon Steel in Acidic Environments, The Six International Conference (34<sup>th</sup> Annual) Corrosion Mitigation and Surface Protection, Hurghada, Egypt, December 2017.
- 8. Hussein Abdel-Aal, **M. Abdelkreem**, K.M. Zohdy, Seawater Bittern a precursor for Magnesium Chloride Separation: Discussion and Assessment of Case Studies, International journal of Waste Resources, accepted for publication, November 2017.
- 9. A. TALAAT, **M. Abdelkreem**, E. ASHOUR, and A. ABDELSATTAR, Comparative Study of Congo Red Adsorption Using Different Modifications of Rice Straw, Yanbu Journal of Engineering and Science, vol. 14, June 2017.
- 10. Hussein Abdel and **M. Abdelkreem,** K.M. Zohdy, Dual-purpose Solvay-Dow (Magnesium) conceptual process, open access library journal, 3, e2998,2016.
- 11. Hussein Abdel and **M. Abdelkreem,** Challenges and progress in methane conversion, chemical engineering, 1,1-11, 2016.
- 12. A. TALAAT, **M. Abdelkreem**, E. ASHOUR, and A. ABDELSATTAR, "Comparative study of methylene blue adsorption using (raw, acid, base, modified, magnetite loaded) rice straw," *J. Int. Acad. Res. Multidiscip.*, vol. 4, no. 8, pp. 29–47, 2016.

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- 13. R.A. Rezk, A.H. Galmed, **M. Abdelkreem**, N.A. Abdel Ghany, M.A. Harith, Quantitative analysis of Cu and Co adsorbed on fish bones via laser- induced breakdown spectroscopy, Optics & Laser Technology, 83, 131-139, 2016.
- 14. Hesham M. Mostafa, , **M.Abdelkreem**, Effects of pulsating flow on the evaporation rate from water surface, international journal of advance research in science and engineering, IJARSE, Vol. No.4, Issue 05, May2015.
- 15. KhaledZohdy, <u>MahaAbdelkreem</u>, and Hussein Abdel- Aal, Separation of magnesium chloride from sea water by preferential salt separation (PSS), International journal of bioassays, 2013.
- 16. **M. Abdelkreem**, Adsorption of Phenol from Industrial Wastewater Using Olive Mill Waste, Journal of APCBEES Procedia (2013), Elsevier.
- 17. M.M.Sadawy, K.M. Zohdy, **M. Abdelkreem**, Corrosion Inhibition of Carbon Steel in Hydrochloric Acid Solution by EDTA, International Journal of Nlectrochemical Science, 2013
- 18. Hussein Abdel-Aal, KhaledZohdy, **MahaAbdelkreem**, S. M.-S Abdel-Hamid and M. Bassyouni, A Novel Application in Green Chemical Processing Using Reject Brines and Carbon Dioxide as Raw Materials, Scientific Research, engineering, 2012.
- 19. Mohamed Heikal, K. M. Zohdy, **M. Abdelkreem**, Mechanical microstructure and rheological charactristics of high performance self- compacting cement pastes and concrete containing ground clay bricks, constructing Building Materials, 2013.
- 20. Hussein Abdel-Aal, M. Bassyouni, **MahaAbdelkreem**, Shereen Abdel-Hamid, Feasibility Study for a Solar-Energy Stand-Alone System: (S.E.S.A.S.), smart grid and renewable energy journal, 2012.
- 21. **M. abdelkreem**, Dalal Z. Husein, Removal of strontium from aqueous solutions by adsorption onto orange peel: isotherms, kinetics, and thermodynamic studies, Egyptian journal of environmental research, 2012.
- 22. O. M. A.bdo-Elenien, K. Zohdy, **M. Abdelkreem**, Electrochemical studies of adsorption and inhibition effect of new synthesized triazinane-amide derivatives on cold rolled steel in 0.5 M HCl, journal of radiation research and applied Science, 2012.
- 23. H. H. sokker, **M. Abdelkreem**, K. M. Zohdy , M. M. Younes, preparation of 2-acrylamido-2-methyl prpane-1- sulfonic acid/ bentonite composite hydeo-gel by radiation polymerization for adsorption of basic violet dye from aqueous solution, journal of radiation research and applied Science, 2010.
- 24. Hussein Abdel Aal , K. M. Zohdy and **Maha Abdel- Kreem**, Production of Hydrogen from Sea Water Electrolysis, The open fuel cell journal, Vol. , 2010.





- 25. Hussein Abdel Aal, M. Bassyouni, Shereen M.-S. Abdel-Hamid and **Maha Abdel- Kreem**, Resources of Fossil and Non-Fossil Hydrogen in the Middle East Can Make Fuel Cells an Attractive Choice for Transportation: A Survey Study., WHEC 2010, May (16-19), Essen, Germany.
- 26. Hussein Abdel-Aal, KhaledZohdy, M. Bassyouni, S. M.-S Abdel-Hamid, MahaAbdelkreem, Maher Soliman, Discharge waste brine management for desalination plants, 10<sup>th</sup> international conference on clean energy (ICCE 2010), September 15-17, Famagusta, North Cyprus.
- 27. O. M. A.bdo-Elenien, K. Zohde, **M. Abdel-Kreem**, and O. Elazabawy, Corrosion Inhibition and Adsorption behavior of new 2,3bis-((2-aminoethoxy)Dimethylisilyoxy)-N-(2-(2-aminoethylamino)ethyl0-4,5,6-trihydrox-2-enamide(AEDSHE)on carbon steel surfaces in 0.5 M hydrochloric acid, materials science,5,2009
- 28. **Maha Abdel-Kreem**, M. Bassyouni, Shereen M.-S. Abdel-Hamid and Hussein Abdel-Aal, The Role of GTL Technology as an Option to Exploit Natural Gas Resources, The open fuel cell journal, Vol. 2, 5-10, 2009.
- 29. Mahdi. A. N., A. Soliman, **M. Abd El-kreem**and T. Heakal, Determination of Optimum Operating Conditions for Egyptian Phosphate Rock Extraction by Phosphoric Acid, TESCE, Vol. 34, No. 41, Nov. 2008.

### **<u>Certifications or Professional Registrations:</u>**

### **Honors and Awards:**

- 01st of December 2021 "Constructive Assessment for Learning", DAAD Kairo Akademia.
- 21st of November 2021 "Fundraising skills and best practices", DAAD Kairo Akademia.
- 28th of October 2021 "Taking your classroom online", DAAD Kairo Akademia.
- 21st of October 2021 "university exams and digital question banks", DAAD Kairo Akademia.
- Management and Leadership Skills Training Program (MLSTP) for Women, Part 2, March 2015,
  MLSTP, Faculty of Engineering, Cairo university
- Self Marketing, December 2014, DAAD KairoAkademie.
- Self Institutional Assessment to Higher Education Institutions, Nov. 2014, National Authority for quality Assurance and Accreditation of Education.
- How to Present Scientific Data, June 2014, DAAD KairoAkademie.
- Interactive Lectures, May 2014, DAAD KairoAkademie.
- Proposal Writing Post Docs, April 2014, DAAD KairoAkademie.

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- Scientific Thinking and Argumentation Skills forProblemSolving,March 2014, DAAD KairoAkademie.
- Management and Leadership Skills Training Program (MLSTP) for Women, March 2014, MLSTP,
  Faculty of Engineering, Cairo university
- Emotional Intelligence & Career Development Agenda, September 2013, Info Research Center, U.S.
  Embassy Cairo and Goal Oriented Learners.
- Tools for Self Marketing, Career Development Workshop, June 2013, Info Research Center, U.S.
  Embassy Cairo and Goal Oriented Learners.
- Path Ways to Higher Education, Faculty of Engineering, Cairo University

(APSCU), Training of Trainers (TOT), 2013

- University Code of Ethics, July 2012, Faculty and Leadership Development Center, Cairo University.
- Conference Organization, August 2012, Faculty and Leadership Development Center, Cairo University.
- Effective Presentation Skills, August 2012, Faculty and Leadership Development Center, Cairo University.
- Quality Standards in Teaching, August 2012, Faculty and Leadership Development Center, Cairo University.
- Exams and students Evaluation Systems, September 2012, Faculty and Leadership Development Center, Cairo University.
- Competing for Research Funds, September 2012, Faculty and Leadership Development Center, Cairo University.
- Strategic Planning for Higher Education Foundations, March 2012 National Authority for quality Assurance and Accreditation of Education.
- Self Institutional Assessment to Higher Education Institutions (Administrative Affairs), June 2010, National Authority for quality Assurance and Accreditation of Education.
- Learning Outcomes and Curriculum Map, May 2010, National Authority for quality Assurance and Accreditation of Education.
- Training programs for higher education institutions [Integrated Packages (Seven courses)], National Authority for quality Assurance and Accreditation of Education, 2009.





### **Teaching Experience:**

#### Professor, Jan. 2019, present

Permanent scientific Committee, Supreme Council of Universities.

#### Associate professor, 2013-present

Chemical Engineering Department, Higher Technological Institute, Tenth of Ramadan City, Egypt.

Lecturer, 2004 - 2013

Chemical Engineering Department, Higher Technological Institute, Tenth of Ramadan City, Egypt.

Assistant Lecturer, Aug. 1998 - Oct. 2003

Chemical Engineering Department, Higher Technological Institute, Tenth of Ramadan City, Egypt.

Demonstrator, Oct. 1993 - July 1997

Chemical Engineering Department, Higher Technological Institute, Tenth of Ramadan City, Egypt

#### **Courses taught**

- Mass Transfer and transport phenomenon.
- Plant design and economics.
- Water and wastewater treatment.
- Vessel design.
- Industrial pollution and control (mechatronics, mechanical eng. and automotive eng.).
- Petroleum engineering and refining.