

## CURRICULUM VITAE



Medhat Mohamed El-Moselhy, PhD  
Professor of Physical Chemistry  
Faculty of Science, Al Azhar University  
Group Leader in Science Center for Detection and Remediation of Environmental Hazards (SCDREH)

### **PERSONAL INFORMATION:**

**Name:** Medhat Mohamed El-Moselhy, PhD  
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**Date of birth:** 25 September 1974  
**Nationality:** Egyptian.  
**Languages:** Bilingual ,Arabic (Native) and English (Very Good)

**Address:** Chemistry Department, Faculty of Science, Al-Azhar University  
Nasr City – Cairo 11884 –Egypt

### **Degrees**

- 1996 BSC in Special Chemistry (Excellent Grade & Top of the List).  
Faculty of Science, Al-Azhar University.
- 1997 Diploma of Physical Chemistry (Excellent Grade & Top of the List).  
Faculty of Science, Al-Azhar University.
- 2001 MSC Physical Chemistry, Faculty of Science, Al-Azhar University. **Thesis Title:** “Structural and acidic properties of cation exchanged zeolites”
- 2004 PhD Physical Chemistry, Faculty of Science, Al-Azhar University.  
**Thesis Title:** “Physico-chemical studies of some important environmental pollutants”
- 2005 - 2010 Visiting Scientist, Civil and Environmental Engineering, Lehigh University, Bethlehem, PA, USA.
- 2012-2016 Full Associate professor, Chemistry Department, Faculty of Science, Jazan University, KSA
- Summer 2015 Visiting research scientist, Civil and Environmental Engineering, Cumhuriyet Üniversitesi, Sivas, Turkey.

**Teaching Responsibility:**

- General Chemistry Chem. Dep. Faculty of Science, Al-Azhar University
- Environmental Chemistry
- Catalysis
- Polymer Chemistry
- Water and wastewater Treatment
- Ion Exchange Resin
- Physical Chemistry (Laboratory)

**Research interest**

- zeolite synthesis and modification
- Application of Zeolites in water treatment
- Removal of Heavy metals from water using Ion Exchange Resin
- Photocatalysis
- Ion exchange resin for wastewater treatment

**Analytical Techniques:**

**Spectroscopy:** Experienced in the analysis using atomic absorption, UV/Visible and Infrared spectroscopy

**Chromatography:** Experienced in Gas Chromatography, High Performance Liquid Chromatography (HPLC) and Ion Chromatography (IC).

**Computer experiences:** Computer software: Word, Excel and power point

**International cooperation****Reviewer for**

1. Journal of Hazardous material
  2. Journal of Applied clay science
  3. Elsevier Books Publishing
  4. Journal of Chemical Engineering
  5. Journal of Colloids and Surfaces
- Editor in Chief for AOP Journal of Environmental Waste Management ([http://aperito.org/journal/ebm\\_display/46](http://aperito.org/journal/ebm_display/46)).

## Publications

1. M. M. Mohamed, N.S. Gomaa, M. El-Moselhy, and N.A. Eissa "Comparison of the structural properties of isomorphously substituted Fe in mordenite zeolites prepared by different methods" *Journal of Colloid and Interface Science* 259 (2003) 331–337. **(Impact Factor: 3.637)**
2. M. M. Emara, A. K. Abuelkhiat, R. A. Ali, M. M. El-Moselhy A. "Effect of transition metal incorporation in MCM-41 on the photo catalytic degradation of chlorophenol part I Cr, Military college conf. 2006
3. M. M. Emara, A. S. Turkey, M. M. El-Moselhy "Effect of iron and copper modified MCM-41 and Y zeolites on the photodegradation of monosulfonic acid dye. *Eg. J. Chem.* 49 (2) (2006) 241-259
4. M. M. Emara, A. S. Turkey, M. M. El-Moselhy " EDTA degradation using different percentage of Fe encapsulated inside mordenites" *New trend in analytical chem. International conference, Cairo Univ* (2006).
5. Medhat Mohamed El-Moselhy, Photo-degradation of acid red 44 using Al and Fe modified silicates, *Journal of Hazardous Materials* 169 (2009) 498–508. **(Impact Factor: 5.277)**
6. Mostafa M. Emaraa, Amal S.M. Tourky, Medhat M. El-Moselhy, Structural modification of mordenite zeolite with Fe for the photo-degradation of EDTA, *Journal of Hazardous Materials* 166 (2009) 514–522. **(Impact Factor: 5.277)**
7. M. M. Emara, Medhat Mohamed El-Moselhy and Naglaa s. Farahat, "Photocatalytic degradation of hydroquinone using HFO supported polymeric material", *J of desalination and water treatment* 19(2010) 232-240. **(Impact factor 1.173)**
8. M. M. Emara<sup>a</sup>, Medhat M. El-Moselhy<sup>a</sup>, Youssef H. Youssef, "The role of inspection on the total quality of some Egyptian industries". *Al-Azhar Bull. Sci. Vol. 21, No. 1* (june.): pp. 32-42, 2010.
9. Medhat Mohamed El-Moselhy, Arup K. Sengupta, Ryan Smith, Carminic acid modified anion exchanger for the removal and preconcentration of Mo(VI) from wastewater, *Journal of Hazardous Materials* 185 (2011) 442–446. **(Impact Factor: 5.277)**
10. Medhat M. El-Moselhy Cation Modified Silicates for Catalytic Production of Phenol from Benzene" *Al-Azhar Bull. Sci. Vol. 21, No. 2* (Dec.): pp. 27-42, 2010. **(Impact Factor: 0.8)**
11. Medhat M. El-Moselhy "Treatment of Ash Leachate Using Different Functional Group Anion Exchange Resins" *Al-Azhar Bull. Sci. Vol. 21, No. 2* (Dec.): pp. 27-42, 2010. **(Impact Factor: 0.8)**
12. Medhat M. El-Moselhy and Arup K. Sengupta "Fluoride Removal Using Zr Loaded A500p In Comparison With Activated Alumina" *Al-Azhar Bull. Sci. Vol. 21, No. 2* (Dec.): pp. 27-42, 2010. **(Impact Factor: 0.8)**
13. M. M. Emara, Aida A.Salmanb, Medhat Mohamed El-Moselhy and Samah A.Fattah"

Cadmium removal using newly hybride sorbent". Seventh International Scientific Conference, Al-Azhar University (ISCAZ 2010), Environment, Development, and Nanotechnology, 22 – 24 March 2010, Cairo, Egypt.

14. Sudipta Sarkar, Arup K. SenGupta, John E. Greenleaf and Medhat El-Moselhy "Energy Recovery from Acid Base Neutralization Process through pH-Sensitive Polymeric Ion Exchangers" *Ind. Eng. Chem. Res* 50, 12293–12298, 2011. (**Impact Factor: 2.587**)
15. Mostafa M. Emara<sup>1</sup>, Medhat M. El-Moselhy<sup>1\*</sup>, Refa't H. Hellal<sup>2</sup>, Naglaa S. Farahat<sup>3</sup>" HFO Supported Polymeric Material Using for the Photocatalytic Degradation of Phenol. *EJER*, Vol. 1, No.1, 2011
16. Salah Abdel-Ghani Abo El-eneina, Mostafa Mahmoud Emara, Medhat Mohamed El-Moselhy, Doaa Helal Shabaanc' Industrial wastewater treatment and its impact on water quality "case study". *Al-Azhar Bull. Sci.* Vol. 22, No. 1 (Dec.): pp. 1-20, 2011. (**Impact Factor: 0.8**)
17. Medhat Mohamed El-Moselhy. Effect of phosphate and silicate on the removal of As(III) using HFO supported polymeric materials, *Science Letter*, 2012, 1: 20.
18. Medhat Mohamed El-Moselhy. Copper modified exchanger for the photodegradation of methyl orange dye, *J. Desalination and water treatment*, (2013) 1-10. (**Impact Factor: 1.173**)
19. Medhat Mohamed El-Moselhy and Othman M. Hakami," Selective Removal of Chromate using Hybrid Anion Exchanger". Second International Conference on Water, Energy and the Environment Kusadasi, Turkey September 21-24, 2013, paper 267.
20. Nesrine M. R. Mahmoud, Adel M.S. Lashien, Medhat Mohamed El-Moselhy, Mostafa M. Emara" Photocatalytic Degradation Of Methyl Orange Dye Using Modified Copper Polymeric Material. First Egyptian-German Workshop on Sustainable Water Technologies. First Egyptian-German Workshop on Sustainable Water Technologies (SUSWATEC). February 18.-20th 2013 - Cairo, Egypt
21. L.F.M. Ismail, M.M. Emara, M.M. El-Moselhy, N.A. Maziad, O.K. Hussein. Silica coating and photocatalytic activities of ZnO nanoparticles: Effect of operational parameters and kinetic study. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy* 131 (2014) 158–168. (**Impact Factor: 2.353**)
22. Medhat Mohamed El-Moselhy and Othman M. Hakami," Selective Removal of Chromate using Hybrid Anion Exchanger", *J. Desalination and water treatment*, 56 (2015) 2917–2924. (**Impact factor 1.173**)
23. Medhat Mohamed El-Moselhy" Remote sensing of reducing saccharides: New materials and novel approach" 3rd International Conference and Exhibition on Metabolomics & Systems Biology. March 24-26, 2014 Hilton San Antonio Airport, San Antonio, USA. <http://dx.doi.org/10.4172/2153-0769.S1.026>
24. Medhat Mohamed El-Moselhy," Methylene blue dye degradation using C-100

polymeric material modified with ZnO nanoparticles”, J. Desalination and water treatment, (2016) 1-12. **(Impact factor 1.173)**

25. [Medhat Mohamed El-Moselhy](#) , [Ayten Ates](#) , [Ahmet Çelebi](#) “Synthesis and characterization of hybrid iron oxide silicates for selective removal of arsenic oxyanions from contaminated water”, [Journal of Colloid and Interface Science](#), [Volume 488](#), 15 February 2017, Pages 335–347. **(Impact factor 3.78)**.
26. [Medhat Mohamed El-Moselhy<sup>a,b</sup>](#), [Soha M. Kamal<sup>b</sup>](#) “Selective removal and preconcentration of methylene blue from polluted water using cation exchange polymeric material”, [Groundwater for Sustainable Development](#) 6 (2018) 6–13. **(impact Factor 0.512)**.