

CURRICULUM VITAE



Section 1: Personal Information

Name: Mohamed Khairy Abdel-Fattah Omran

Academic position: Assistance Professor of Physical Chemistry

Gender: Male

Date of Birth: 25/9/1978

Current Nationality: Egyptian.

Section 2: Contact Information

Institution Name: Benha University, Faculty of Science- chemistry department.

City: Benha

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Section 3: Academic Qualifications

(1) **B.Sc.** in special chemistry may 1999, very good with grade of honor,
faculty of science, Benha University, Benha, Egypt.

(2) **M.Sc**, 2004, in physical chemistry, faculty of science, Benha
university, Benha, Egypt

Title: Physicochemical Studies on Titanium Oxide Supported some
Metal Ions.

(3) **Ph.D**, 2008, in physical chemistry, faculty of science, Benha
university, Benha, Egypt

Title: Effect of Particle Size on Physical and Biological Properties of
Some Metals as well as Metals and Non-metals Oxides

Section 4: Positions

Demonstrator in chemistry department, faculty of science, Benha
University, Benha, Egypt from 1999 to 2004.

Assistance lecturer in chemistry department, faculty of science, Benha
University, Benha, Egypt from 2004 to 2008

Lecturer, chemistry department, faculty of science, Benha University,
Benha, Egypt
From 2008 to 2014

Assistance professor in chemistry department, faculty of science, Benha
University, Benha, Egypt from 14/5/2014 till now.

Section 5: Language skills:

Language	Read	Speak	Write
English	Excellent	Excellent	Excellent
Arabic	Excellent	Excellent	Excellent

Section 6: Specialty:

Major: physical chemistry

Minor: Solid state

My topic: Synthesis and applications of nanomaterials in different fields
such as catalysis, dye sensitized solar cells, sensor, biological
activity, magnetic and electrical properties.

Section 7: Courses:

**Major courses for undergraduate and post graduate students in
chemistry including:**

- | | |
|-------------------------------------|-----------------------|
| (1) Solid state | (2) General chemistry |
| (3) Photochemistry | (4) Thermodynamic |
| (5) Material science | (6) Surface chemistry |
| (7) Catalysis and colloid chemistry | (8) kinetics |

Section 8: Supervised on (13) M.Sc

Section 9: Supervised on (3) Ph.D theses

Section 10: Membership of committees

(1) Member of the Committee for accreditation and quality in chemistry department, faculty of science, Benha University, Benha, Egypt from 2010 till now.

(2) Member of the Committee Student Counseling in chemistry department, faculty of science, Benha University, Benha, Egypt from 2004 till now.

Section 11: Workshop and Conference:

(1) Attend a workshop under the title scanning and transmission electron microscopy, which held at faculty of science, Ain shams University at 2009.

(2) Participate in conference on title, The 1st international Conference on Science Diplomacy and Developments in Chemistry, held in Alexandria during the period of 24 – 26 February (2012).

(3) Participate in conference on title, 21th International Conference on Chemistry and Its Role in Development, Mansoura Univrsity - Sharm El-Sheikh, Egypt, during the period of 16 – 20 March (2015).

Section 12: Activities:

(A) Participation in the project of developing the capacity of faculty members and has been passing the training courses for the following programs:

- (1) The international publication of Scientific researchs (2013).
- (2) University administration (2013).
- (3) Self evaluation and external reviewing (2013).
- (4) Ethics of Scientific Research (2013).

(B) Participating in the training project on information and communication technology has been pass training programs for the following:

- 1- Using computer and managing files.
- 2- Word processing.
- 3- SPSS

Section 14: Awards:

1- International scientific publication award offered by Benha University, 2015 (Appreciation certificate)

2- International scientific publication award offered by Benha University,
2016 (Appreciation certificate)

Section 13: Publications:

- 1- Synthesis and structural characterization of TiO_2 and $\text{V}_2\text{O}_5/\text{TiO}_2$ nanoparticles assembled by the anionic surfactant sodium dodecyl sulfate, Mohamed Mokhtar Mohamed, W.A. Bayoumy, M. Khairy, M.A. Mousa, Microporous and Mesoporous Materials, 97 (1–3) (2006) 66-77
- 2- Synthesis of micro–mesoporous TiO_2 materials assembled via cationic surfactants: Morphology, thermal stability and surface acidity characteristics, Mohamed Mokhtar Mohamed, W.A. Bayoumy, M. Khairy, M.A. Mousa, Microporous and Mesoporous Materials, 103 (1–3) (2007) 174-183.
- 3- Structural features and photocatalytic behavior of titania and titania supported vanadia synthesized by polyol functionalized materials, Mohamed Mokhtar Mohamed, W.A. Bayoumy, M. Khairy, M.A. Mousa, Microporous and Mesoporous Materials, 109 (1–3) (2008) 445-457.
- 4- Electrical and Catalytic Properties of Gamma-irradiated and Unirradiated ZnMn_2O_4 Nanoparticles, M. Khairy, M. A. Mousa, American Journal of Chemistry 2(6) (2012) 306-311.
- 5- Effect of γ -Radiation on Electrical and Magnetic Properties of Manganite Materials with Spinel Structures, M. Khairy, M.A. Mousa, Physical Chemistry 2(6) (2012) 109-115.
- 6- Electrical and Photocatalytic Properties of Nano $\text{Fe}_{0.1}\text{Zn}_{0.9}\text{Mn}_2\text{O}_4$ Spinel Structures, M. Khairy, M. A. Mousa, Science Technology 2(6) (2012) 182-190
- 7- Influences of γ -Radiation and Surfactants on Electrical and

- Magnetic Properties of $\text{Cu}_{0.1}\text{Zn}_{0.9}\text{Mn}_2\text{O}_4$ Nanoparticles, M. Khairy, M. A. Mousa, International Journal of Materials and Chemistry 2(5) (2012) 197-204.
- 8- Kinetics and Mechanism of Non-Isothermal Decomposition of Ca(II) - Sr(II) - and Ba (II) Cross-Linked Divalent Metal-Alginate complexes, Ishaq Zaaferany, Khalid Khairou, Fahd Tirkistani, Sayed Iqbal, Mohamed Khairy & Refat Hassan⁴ International Journal of Chemistry; Vol.4,No.6(2012).
- 9- Polymeric biomaterial hydrogels. I. Behavior of some ionotropic cross-linked metal-alginate hydrogels especially copper-alginate membranes in some organic solvents and buffer solutions, Refat Hassan, Fahd Tirkistani, Ishaq Zaaferany, Ahmed Fawzy, Mohamed Khairy, Sayed Iqbal, Advances in Bioscience and Biotechnology, 3 (2012) 845-854.
- 10- Electrical properties of fast ion conducting silver based borate glasses: Application in solid battery, Emad M. Masoud, M. Khairy, M. A. Mousa, Journal of Alloys and Compounds, 569 (2013) 150-155.
- 11- Characterization and photo-chemical applications of nano-ZnO prepared by wet chemical and thermal decomposition methods, M.A. Mousa, W.A.A. Bayoumy, M. Khairy, Materials Research Bulletin 48 (2013) 4576–4582
- 12- Synthesis, Characterization and Magnetic Properties of γ - irradiated and Unirradiated Magnetite Nanopowders, M. Khairy, International Journal of Materials and Chemistry 3(5) (2013) 106-111
- 13- Optimization of polyester printing with disperse dye nanoparticles H. Osman & M. Khairy, Indian Journal of Fibre & Textile Research, 38 (2013) 202-206.
- 14- A New Approach in Printing Wool and Wool/Polyester Fabrics with Disperse Dye Nanoparticles, D. Maamoun, H. Osman, S.H. Nassar,

- and M. Khairy, Journal of Basic Applied Scientific Research, 3(3) (2013) 375-380.
- 15- Preparation of Silver nanoparticle and Silver/SiO₂ nanocomposite and their applications, M. Khairy, R. Kamal Arab Journal of Nuclear Science and Applications, 46(5) (2013) 88-99.
 - 16-Preparation, Characterization and Photocatalytic Activity of Nano-sized Pure and Metal-Doped TiO₂ and ZnO and their Uses in Water treatment, M. Khairy and W. Zakaria, Arab Journal of Nuclear Science and Applications, 46(4) (2013) 39-52.
 - 17- Synthesis, characterization, magnetic and electrical properties of polyaniline/NiFe₂O₄ nanocomposite, M. Khairy, Synthetic metals, 189 (2014) 34-41.
 - 18- Improving Printability of Silk and Polyamide Substrates with Madder Nano-Sized Particles, D Maamoun and M Khairy, American Journals of Nanoscience and Nanotechnology Research, Vol. 2 (2014),1-12.
 - 19- Effect of metal-doping of TiO₂ nanoparticles on their photocatalytic activities toward removal of organic dyes, M. Khairy, W. Zakaria, Egyptian Journal of Petroleum, 23(2014) 419-426.
 - 20- Electrical and optical properties of nickel ferrite / polyaniline Nanocomposite, M. Khairy, M. E. Gouda, Journal of Advanced research, 6(2015) 555-562.
 - 21- Polyaniline–Zn_{0.2}Mn_{0.8}Fe₂O₄ ferrite core–shell composite: Preparation, characterization and properties, M. Khairy, Journal of Alloys and Compounds 608 (2014) 283–291
 22. Synthesis and Electrical Properties of Gamma-Irradiated and Unirradiated Nano-Magnetite, M. Khairy and M.A. Mousa, International Journal of Engineering and Innovative Technology, 4(4) (2014)208-214.
 23. Thermodynamics of the Solvation of Lead Nitrate in Mixed Acetone-

- H₂O Solvents at Different Temperatures, Esam A Gomaa, Elsayed M Abou Elleef, Ahmed Fekri, Mohamed Khairy and Reham M Abou Karn, Research and Reviews: Journal of Chemistry, 3(3) (2014) 22-28.
24. Thermodynamics of solvation for nano zinc oxide in 2M NH₄Cl+Mixed DMF+H₂O solvents at different temperatures, E. A. Gomaa, M. Khairy, A. Kekri, Y. A. Sherif, American Association for Science and Technology, 2(4) (2015)121-126.
25. Thermodynamics Parameters for solvation of nano ZnO and its dopes in 50% DMSO – 50% DMF (v/v) solutions at different temperatures, E. A. Gomaa, M. Khairy, A. Kekri, Y. A. Sherif, Energy Review, 1(2) (2014) 44-55.
26. SnO₂(β-Bi₂O₃)/Bi₂Sn₂O₇ Nanohybrids Doped Pt and Pd Nanoparticles: Applications in Visible-Light Photocatalysis, Electrical Conductivity and Dye-sensitized Solar Cells, Mohamed Mokhtar Mohamed Abdalla and M. Khairy, Physical Chemistry Chemical Physics, 17 (2015) 21716-21728.
27. Effect of Ni content on optical, colorimetric, surface and magnetic properties of Ni_xCo_{1-x}Al₂O₄ nanoparticles, M. Khairy, J Iran Chem Soc, 13(2016) 671–677.
28. Activity and stability studies of titanates and titanate-carbon nanotubes supported Ag anode catalysts for direct methanol fuel cell, Mohamed Mokhtar Mohamed, M. Khairy, Salah Eid, Journal of Power Sources 304 (2016) 255-265.
29. High-Performance Hybrid Supercapacitor Based on Pure and Doped Li₄Ti₅O₁₂ and Graphene, M. Khairy, K. Faisal, M.A. Mousa, journal of solid state electrochemistry 21(3) (2016) 873-882
30. Nanostructured Ferrite/graphene/polyaniline using for supercapacitor to enhance the capacitive behavior M.A. Mousa, M. Khairy, M.

Shehab, journal of solid state electrochemistry, 21 (2017) 995–1005.

31. Optical and kinetics of thermal decomposition of PMMA/ZnO nanocomposites, M. Khairy, N. H. Amin, R. Kamal, Journal of Thermal Analysis and Calorimetry, 128 (2017) 1811-1824.
32. Photocatalytic Activity of Nitrogen and Copper Doped TiO₂ Nanoparticles Prepared by Microwave-Assisted Sol-Gel Process, S. M. Reda, M. Khairy, M. A. Mousa, Arabian journal of chemistry, (2017) in press.