

Name: Adel El-Marghany Mohamed Yahya

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Academic qualifications:

1- **Ph.D.** in Chemistry, Chemistry Department, Faculty of Science, Tanta University, Egypt (1997).

2- **M.Sc.** in chemistry, Chemistry Department, Faculty of Science, Alexandria University, Egypt (1992).

3- **B.Sc.** in chemistry, Chemistry Department, Faculty of Science, Alexandria University, Egypt (1987) with Excellent grade

Main field of specialization: General, Inorganic and Analytical

Present employment:

1- Assistant professor, Chemistry Department, faculty of Science, King Saud University, From 10/9/2015 until now.

2- Assistant professor, Chemistry Unit, Science Department, College of Teachers, King Saud University in Riyadh, From 8/9/2005 until 9/9/2015.

3- Assistant professor of Inorganic and Analytical Chemistry, Chemistry Department, Faculty of Science, Suez, Suez Canal University, Egypt, From, 17/3/1998-2005.

Teaching Experiences:

- Fabrication and characterization of adsorbent materials for separation and catalysis application.
- Water and wastewater treatment.
- Qualitative inorganic chemistry (Identification of acidic and basic radicals in simple salts – Separation of basic mixtures).
- Volumetric analysis (Preparation of standard solutions, acid-base, precipitation, oxidation-reduction titration).
- Gravimetric analysis.
- Instrumental analysis (IR, UV-Vis., chromatography, solvent extraction, potentiometry and conductometry).
- Water and Ore analyses based on different instrumental analytical tools.
 - Structural inorganic chemistry. Chemical equilibrium

List of Selected Publications

ملخص الأبحاث المنشورة

- 1- Unraveling the Complexities of $A_2NaMoCl_6$ (A= Cs, Rb) Halide Double Perovskites Through Theoretical Methods, **Adel El-marghany**, Khair Muhammad, Muhammad Sajid, Mubashir Nazar, M Kashif Masood, Yazan M. Alawaideh and Javed Rehman, Journal of Physics and Chemistry of Solids, (2025),198,112477.
- 2- Activating design of tunable $CuCo_2O_4@NiMnO_3$ heterostructure towards superior oxygen evolution reaction, Adel El-marghany, Muhammad Khalil, Abdul Wahab Haroon, Fawad Ahmad, Ome Parkash Kumar, Abdul Ghafoor Abid, Shahroz Saleem and Zobia Siddique, Journal of Sol-Gel Science and Technology, (2025), 113,804-818.
- 3- Efficient Zinc Vanadate Homojunction with Cadmium Nanostructures for Photocatalytic Water Splitting and Hydrogen Evolution, mran Hasan, **Adel El- Marghany**, Naaser A. Y. Abduh and Fahad A. Alharthi,J. Nanomaterials, (2024),14,6,492.
- 4-Synthesis of platinum decorated bismuth vanadate ($Pt-BiVO_4$) nanocomposite for photocatalytic hydrogen production, Fahad A Alharthi, Adel El Marghany, Naaser AY Abduh and Imran Hasan, Journal of Reaction Kinetics, Mechanisms and Catalysis, (2024),137,1, 423-432.
- 5-Cerium Vanadate with Nitrogen Doped Reduced Graphene Oxide for Visible Light-Driven Hydrogen Evolution and Dye Degradation, Fahad A Alharthi, **Adel El Marghany**, Naaser AY Abduh and Imran Hasan,J. physica status solidi (a),(2023),221,4,2300743.
- 6 - Solvothermally fabricated cobalt selenide supported on graphitic carbon nitride for enhanced oxygen evolution reaction, **Adel El-marghany**, Mika Sillanpää, Sumaira Manzoor,Abdul Ghafoor Abid and Mehar Un Nisa, Applied Physics A (2023),129,8,605.
- 7-Hydrothermal Synthesis of a Magnesium Vanadate-Functionalized Reduced Graphene Oxide Nanocomposite for an Efficient Photocatalytic Hydrogen Production, Fahad A. Alharthi, **Adel El Marghany**, Naaser AY Abduh and Imran Hasan, Journal ACS Omega, (2023), 8,34, 31493-31499.

- 8- Efficient light-driven hydrogen evolution and azo dye degradation over the $\text{GdVO}_4/\text{gC}_3\text{N}_4$ heterostructure, Fahad A. Alharthi, **Adel El Marghany**, Naaser A.Y. Abduh and Imran Hasan, RSC advances (2023), 13 (30), 20417-20429.
- 9- Synthesis of Nanocrystalline Metal Tungstate $\text{NiWO}_4/\text{CoWO}_4$ Heterojunction for UV-Light-Assisted Degradation of Paracetamol, Fahad Ahmed Alharthi, Alanoud Abdullah Alshayiqi, Wedyan Saud Al-Nafaei, **Adel El Marghany**, Hamdah Saleh Alanazi and Imran Hasan, Catalysts, (2023), 13(1), 152.
- 10- Metal Organic Framework-Based Dispersive Solid-Phase Microextraction of Carbaryl from Food and Water Prior to Detection by Ultra-Performance Liquid Chromatography-Tandem Mass Spectrometry, Mohamed A. Habila, Bushra Alhenaki, **Adel El-Marghany**, Mohamed Sheikh, Ayman A. Ghfar, Zeid A. AlOthman and Mustafa Soylak, Journal separations, (2022), 9, 2, 32.
- 11- Role of Fe doping on surface morphology, electronic structure and magnetic properties of Fe doped CeO_2 thin film, Shalendra Kumar, Fahad A. Alharthi, **Adel El marghany**, Faheem Ahmed, Naushad Ahmad, K.H. Chae and Kavita Kumari, Ceramics International, (2021), 47, 3, 4012–4019.
- 12- Fabrication of Schiff's base-functionalized porous carbon materials for the effective removal of toxic metals from wastewater, **Adel Al-Marghany**, Ahmed Yacine Badjah Hadj Ahmed, Zeid Abdullah Al Othman, Mohamed Sheikh, Ayman Abdul Ghfar and Mohamed Habila, Arabian Journal of Geosciences, (2021), 14, 336.
- 13- Removal of Lead (II) from Synthetic Wastewater by *Lavandula Pubescens* Decne Biosorbent: Insight into Composition–Adsorption Relationship Ali Q. Alorabi 1, Fahad A. Alharthi, Mohamed Azizi, Nabil Al-Zaqri, **Adel El-Marghany**, and Khaled A. Abdelshafeek, Appl. Sci., (2020), 10, 21, 7450.
- 14- Synthesis, X-ray structure, Hirshfeld analysis, and DFT studies of a new Pd (II) complex with an anionic s-triazine NNO donor ligand, Saied M. Soliman, Jamal Lasri, Matti Haukka, **Adel El Marghany**, Abdullah Mohammed Al-Majid, Ayman El-Faham and Assem Barakat, Journal of Molecular Structure, (2020), 1217, 128463.

- 15-Synthesis of nanocauliflower ZnO photocatalyst by potato waste and its photocatalytic efficiency against dye, Fahad A. Alharthi, Nabil Al-Zaqril, **Adel El marghany**, Abdulaziz Ali Alghamdi, Ali Q. Alorabi, Neazar Baghdadi, H. S. AL-Shehri, Rizwan Wahab and Naushad Ahmad, Journal of Materials Science: Materials in Electronics, (2020), 31, 11538-11547.
- 16-Synthesis, crystal structure, evaluation of urease inhibition potential and the docking studies of cobalt (III) complex based on barbituric acid Schiff base ligand, Assem Barakat, Saied M. Soliman, M. Ali, **Adel El marghany**, Abdullah Mohammed Al-Majid, Sammer Yousuf, Zaheer Ul-Haq, M. Iqbal Choudhary and Ayman El-Faham, Inorganica Chimica Acta, (2020), 503, 119405.
- 17-Crystal structure of N⁻ (2-phenylacetyl) thiophene-2-carbohydrazide monohydrate, Ayman El-Faham, **Adel El-Merghany** and Hazem A. Ghabbour, Z. Kristallogr. NCS, 232(1); 69-71 (2017).