CURRICULUM VITAE

Aly Abdou
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Education

- **M.Sc.:** "September 2017" in Inorganic Chemistry (Design of New Transition metal Complexes for Environmental Applications) from Chemistry Department, Faculty of Science, Sohag University, Egypt.
  Thesis Title: Design and Synthesis of New Transition metal Complexes based on Imidazole ligands for Environmental Applications.
- **B.Sc.** "May 2010" In Chemistry, faculty of science, Sohag University, Egypt with a grade: Excellent with Honors. (Ranked first over the whole class).

Academic Employment

- Teaching assistant at Chemistry Department, Faculty of Science, Sohag University, starting from 24/1/*2011* till now

Teaching Experience

- Practical sections of physical, analytical and inorganic chemistry for Science, Pharmacy, Engineering, Education and Agriculture students starting from 24/1/2011 till now

Publications

- A. M. Abdel-Mawgoud, Mohamed Ismael and Aly Abdou, Synthesis, Characterization, Antimicrobial Evaluation and DFT Calculations of Fe(III), Ni(II) and Cu(II) Complexes of Tridentate ONO Donor Ligand, J. Pharm. Appl. Chem. 3 (**2017**) 259-266 .

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Research experience and skills

- The nature work in the field of Design of New Transition metal Complexes for Environmental Applications gained a multidisciplinary experience in several topics: organic and inorganic chemistry, Biological investigation and quantum chemical calculations
- Long experimental and lab experience in the synthesis of organic ligands and inorganic coordination compounds
- Nice experience in different characterizations such as: elemental analysis (C H N), Molar conductivity, magnetic susceptibility, spectroscopic (NMR, IR & UV-Vis), thermal analysis (T.G.A & D.T.G) and complex stoichiometry
- Good experience in quantum chemical calculations based on Density Functional Theory (DFT) for both organic ligands and their metal complexes providing their structural stability and estimate their activity based on electronic structural parameters calculations
- Ability of investigation and analysis of in-vitro antimicrobial screening against pathogenic bacteria and fungus that are common contaminants of the environment using either disc diffusion method or well-diffusion method
- Good Experience in investigation and analysis of Molecular docking of the complexes against pathogenic bacteria and fungus proteins, the target enzyme for the antimicrobial reagents, to find the best orientation of the substrate which would form a stable complex with overall minimum energy
- Ability of derivation and analysis of Structure Activity Relationship (SAR) model using Multi-Linear Regression analysis through SPSS software program in order to correlate the biological activity of the prepared complexes with their electronic structure parameters

References

- **Prof. Dr. Abdel-Mawgoud. M. Abdel-Mawgoud**
  Professor of inorganic Chemistry, Sohag University, Egypt
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  abdelmawgoud.abdelmawgoud@science.sohag.edu.eg

- **Prof. Dr. Mohamed Ismael**
  Associate Professor of physical Chemistry, Sohag University, Egypt
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