



SDI Review Form 1.6

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| Journal Name: | International Research Journal of Pure and Applied Chemistry |
| Manuscript Number: | Ms_IRJPAC_39435 |
| Title of the Manuscript: | SYNTHESIS, PHYSICO-CHEMICAL AND ANTIMICROBIAL STUDIES ON METAL (II) COMPLEXES WITH SCHIFF BASE DERIVED FROM SALICYLALDEHYDE AND 2,4-DINITROPHENYLHYDRAZINE |
| Type of the Article | |

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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PART 1: Review Comments

| | Reviewer's comment | Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here) |
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| <p>Compulsory REVISION comments</p> | <p>The authors presented synthesis and physicochemical studies of METAL (II) COMPLEXES WITH SCHIFF BASE DERIVED FROM SALICYLALDEHYDE AND 2,4-DINITROPHENYLHYDRAZINE. Moreover, antimicrobial activity, of the investigated compounds was checked. The study is quiet interested and can be accepted in International Research Journal of Pure and Applied Chemistry but after considering the following points.</p> <p>1- How the author prepared Fe(II) complex. I think with reflux will converted to Fe(III).</p> <p>2- In introduction, (They have been widely studied because of their industrial and biological applications)</p> <ul style="list-style-type: none"> • Abdel-Rahman, L. H.; El-Khatib, R. M.; Nassr, L. A. E.; Abu- Dief, A. M.; Lashin, F. E., Design, characterization, teratogenicity testing, antibacterial, antifungal and DNA interaction of few high spin Fe (II) Schiff base amino acid complexes, Spectrochim. Acta Part A, 2013 111, 266 – 276 • Abdel-Rahman, L. H.; El-Khatib, R. M.; Nassr, L. A. E.; Abu- Dief, A. M., Ismael, M., Seleem, A. A., , Metal based pharmacologically active agents: Synthesis, structural characterization, molecular modeling, CT-DNA binding studies and in vitro antimicrobial screening of iron(II) bromosalicylidene amino acid chelates, Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy , 2014, 117, 366–378 • Abdel-Rahman, L.H., Abu-Dief, A.M., Hamdan, S.K., Seleem, A.A., Nano structure Iron (II) and Copper (II) Schiff base complexes of a NNO-tridentate ligand as new antibiotic agents:spectral, thermal behaviors and DNA binding ability. Int. J. Nano. Chem.2015, 1 (2), 65–77. • Abdel-Rahman, L.H., Abu-Dief, A.M., Adam, M.S.S., Hamdan, S.K., Some new nano-sized mononuclear Cu(II) Schiff base complexes: design, characterization, molecular modeling and catalytic potentials in benzyl alcohol oxidation. Catal. Lett. 2016, 146, 1373–1396. • Abdel-Rahman, L.H., Abu-Dief, A.M., Aboelez, M.O., Abdel-Mawgoud, Azza A.H., DNA interaction, antimicrobial, anticancer activities and molecular docking study of some new VO (II), Cr (III), Mn (II) and Ni (II) mononuclear chelates encompassing quaridentate imine ligand. J. Photochem. Photobiol. B, 2017,170, 271–285. <p>2- All the chemicals used in the investigation should be mentioned with their purity.</p> <p>3- Grams of each component should be added in method of synthesis.</p> <p>4- Reference 12 must be updated by adding the following references:</p> <ul style="list-style-type: none"> • Abdel-Rahman, L. H.; El-Khatib, R. M.; Nassr, L. A. E.; Abu- Dief, A. M.; Lashin, F. E., Synthesis, physicochemical studies, embryos toxicity and DNA interaction of some new Iron(II) Schiff base amino acid complexes , Journal of Molecular Structure, 2013, 1040, 9–18 • Abu-Dief,A. M. and Nassr, L. A. E., Tailoring, physicochemical characterization, antibacterial and DNA binding mode studies of Cu(II) Schiff bases amino acid bioactive agents incorporating 5-bromo-2-hydroxybenzaldehyde , J. Iran. Chem. Soc. 2015, 12, 943-955. • Abdel-Rahman, L. H.; Abu-Dief, A. M.; El-Khatib, R. M.; Abdel-Fatah, S. M., , Sonochemical synthesis, DNA binding, antimicrobial evaluation and in vitro | |



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| | <p>anticancer activity of three new nano-sized Cu(II), Co(II) and Ni(II) chelates based on tri-dentate NOO imine ligands as precursors for metal oxides, J. Photochem. Photobiol. B. 2016, 162 298–308</p> <ul style="list-style-type: none"> Abdel Rahman, L. H., Abu-Dief, A. M., Moustafa, H., Hamdan, S. K. , Ni(II) and Cu(II) complexes with ONNO asymmetric tetradentate Schiff base ligand: synthesis, spectroscopic characterization, theoretical calculations, DNA interaction and antimicrobial studies, Appl. Organometal. Chem., 2017, 31, e3555 <p>5-Which solvent used in antimicrobial activity and why? 6- What about MIC for the investigated compounds?</p> <p>7- The following references should be added to update reference 13</p> <ul style="list-style-type: none"> Abdel-Rahman, L. H.; Abu-Dief, A. M.; Hashem, Nahla Ali , Seleem, Amin Abdou, Recent Advances in Synthesis, Characterization and Biological Activity of Nano Sized Schiff Base Amino Acid M (II) Complexes Int. J. Nano. Chem., 2015, 1 (2), 79-95. Abdel-Rahman, L. H.; Abu-Dief, A. M.; Newair, E. F.; Hamdan, S. K., Some new nano-sized Cr(III), Fe(II), Co(II), and Ni(II) complexes incorporating 2-((E)-(pyridine-2-ylimino)methyl)naphthalen-1-ol ligand: Structural characterization, electrochemical, antioxidant, antimicrobial, antiviral assessment and DNA interaction, J. Photochem. Photobiol. B. 2016, 160, 18–31. Abdel-Rahman, L.H., Abu-Dief, A.M., Basha, M., Abdel-Mawgoud, Azza A.H., Three novel Ni(II), VO(II) and Cr(III) mononuclear complexes encompassing potentially tridentate imine ligand: Synthesis, structural characterization, DNA interaction, antimicrobial evaluation and anticancer activity, Appl. Organomet. Chem., 2017, 31, e3555 <p>8- IR chart should be supplied as supplementary material. 9- Conclusion should be added at the final of manuscript</p> | |
| <p>Minor REVISION comments</p> | <p>The author should revise the language of manuscript carefully to remove any typographical or grammatical errors.</p> | |
| <p>Optional/General comments</p> | | |

Reviewer Details:

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| Name: | Ahmed Mohammed Abu-Dief Mohammed |
| Department, University & Country | Sohag University-82524, Egypt |