

# Dr. Zaid Mahmood

Associate Professor Analytical & General Chemistry

## Address

### Office

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### Home (Pakistan)

E-24, Residential Colony

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## Education.

**Ph.D. 1996.** Analytical & General Chemistry, Leicester University England, UK.

(Synthesis Reactivity and Infrared Laser Powered Homogeneous Pyrolysis and Spectroscopic Studies of Organometallic and inorganic molecules)

**M.Sc. 1982.** Analytical & General Chemistry. Institute of Chemistry University of the Punjab Lahore 54590. Pakistan.

**B.Sc. 1978.** University of the Punjab Lahore (Forman Christian College Lahore).

## Teaching/Research and Administrative Experience/Awards

Central Overseas Training Scholarship (COTS) awarded by Government of Pakistan, Ministry of Education, for Research Leading to Ph.D. degree in Chemistry University of Leicester England UK.

Four Month Teacher training award from National Academy of Higher Education University Grants Commission Islamabad Pakistan.

Twenty Four Years Research and Teaching Experience of Guidance to M.Sc., M.Phil, and Ph.D. Classes in the Institute of Chemistry University of the Punjab. Lahore

**Member Syndicate:** University of the Punjab Lahore. (from March 2007 to March 2010)

## Position Held

**Associate Professor (Analytical & General Chemistry):** From 21-04-2000 to date.

Institute of Chemistry University of the Punjab Lahore.

**Assistant Professor:** From 16-01-1997 to 20-04-2000. Institute of Chemistry University of the Punjab Lahore.

**Lecturer:** 12-9-1987 to 15-01-1997. Institute of Chemistry University of the Punjab Lahore.

**Research Officer.** 1-01-1984 to 11-09-1987. Institute of Chemistry University of the Punjab Lahore.

## **Membership of International Societies.**

1. Member American Chemical Society.
2. Member Royal Society of Chemistry
3. Member Chemical Society of Pakistan
4. Member Pakistan Association for Advancement of Science

**Research Publications:** 32 Research Publications in International & National Journals

**Research Publications**

Dr. Zid Mahmood. Associate Professor Analytical & General Chemistry

1. Catalytic Oxidations of Amine and Aldehydes, New Vistas in Organometallic Chemistry (Jaipur/ India), March 5-9, 1984.
2. Reactions of Transition metals with N, N-dimethyl benzylamine and Benzylideneaniline, J. Sc. Res., 1984, Vol, XIII, No. 1&2, 59.
3. Distribution studies on Meta-nitrobenzoic Acid in water-benzene system at different temperature. Pak. J. Sci; 1984, 369(1), 59.
4. Benzylideneaniline and N,N-dimethylbenzylamine Derivatives of I(B) and II(b) metals. J. Chem. Soc. Pak., 1986, 8, 338. **Impact Factor:0.197**
5. Catalytic Oxidation of Aniline and Substituted Aldehydes, Sci. Int. Lahore., 1988, 1, 125.
6. Ortho-nitro,-amino,-cyano and bromo substituted derivatives of N,N-dimethylbenzylamine, J. Chem. Soc. Pak., 1992, 14, 71. **Impact Factor:0.197**
7. Bonding and Ligand Exchange in Pentamethyldialane: an IR, NMR and *Ab Initio* study. J. Chem. Soc. Farady Trans., 1995, 91(18), 305. **UK. Imp Factor: 2.502**
8. Association and Exchange in Dialkylgallane in Toluene Solution. J. Organometallic Chemistry. 1996, 506, 327. **UK. Impact Factor: 1.632**
9. Vapour Phase Far-infrared Studies of  $\eta$ -bonded Carbonyls, 1,3-Butadiene Tricarbonyl, Cyclopentadienylmanganese Tricarbonyl and Methylcyclopentadienyl manganese Tricarbonyl. Spectrochimica Acta Part A, 1997, 53,995. **UK.I.Fact:1.29**
10. Comparative Infrared Laser-Powered Homogeneous Pyrolysis studies of Trimethylgallane, Triethylgallane, Tri-isopropylgallane, Tri-isobutylgallane and Tri-tertiarybutylgallane, J. Analytical & Applied Pyrolysis 1997, 44, 29. **USA. IF: 1.207**
11. Spectroscopic Studies of Gaseous Binary Metal Carbonyls. Vibrational Spectra and Bonding in Iron pentacarbonyl and Hexacarbonyl of Chromium, Molybdenum and Tungsten. Pakistan Journal of Scientific Research, 2002, **54** No. 3-4.
12. Synthesis and Characterization of  $\sigma$ -bond Phenyl-Palladium Complexes with Triphenylantimony Ligands. Pakistan Journal of Scientific Research 2002, 54, No.3-4.
13. Synthesis and Spectroscopic Studies of Molybdenum and Tungsten Tetra carbonyl Compounds with Schiff Base Ligands., Pakistan Journal of Science 2002, 54, No. 3-4.
14. Synthesis and Characterization of Allyl Complexes of Molybdenum with Schiff Base Ligands. Pakistan Journal of Science 2002, Vol. 54 No. 3-4.

15. Spectroscopic Studies of Substituent effect on the Stability of 2,4-pentane-dianato-anils as free Ligands and their Complexes. University of Engineering and Technology Research Journal. (vol 13, July 2001-December 2002 No. 3).
16. Structural Study of 4-Amino-3-Penten-2-Ones Ligands and Substituent Effect in Comparison with its Parent Compound by Infrared Spectroscopy. University of Engineering and Technology Research Journal. (Vol 13, July 2001-December 2002 No.3).
17. Assay of Urea with p-Dimethylaminobenzaldehyde. J. Chem. Soc. Pak. 2002, **24.No 2**. 122.  
**Impact Factor:0.197**
18. .Assessment of Chromium and Nickle in Common members of Cereals. J. Chem, Soc, Pak vol 25.No.3, 2003. 248.  
**Impact Factor:0.197**
19. Synthesis and Characterization of Cu(II) Complexes with Schiff Base of Salicylidene-4-Triflouro-mthhyl Aniline and its Hydrogen analogue. J, Chem, Soc, Pak. Vol. 25, No.1, 2003,  
**Impact Factor:0.197**
20. Synthesis and Structure Determination of Allyl Complexes of Molybdenum J, Chem, Soc, Pak. Vol. 25, No.1, 2003. 41-43.  
**Impact Factor:0.197**
21. Route of Cadmium and Lead Contamination in root vegetables. Pakistan Journal of Scientific Research, Vol. 56,3-4, 2004, 135-140
22. Spectroscopic studies of Exchange and pyrolysis reactions in mixture of Timethylamin- alane, Trimethylgallane and Triethylgallane, Jour. Chem. Soc. Pak. Vol.26, No.3, 2004, 222-233.  
**Impact Factor:0.197**
23. Synthesis and Structural determination of Allyl complexes of Molybdenum and Tungston by Spectroscopic Methods (X-ray, NMR, IR, and Ms Spectrometry). Jour. Chem. Soc. Pak, Vol. 27, No.1, 95, 2005.  
**Impact Factor:0.197**
24. Synthesis, spectral characterization and reactivity of alkyl/allyl complexes of transition metal 13<sup>th</sup> IUPC International symposium on organometallic chemistry directed towards organic synthesis. 17-21 July 2005, Geneva Switzerland.
25. Comparative Vapour phase FTIR Spectra and Vibrational Assignment of Manganese Pentacarbonyls. Derivatives of the Type XMn(CO)<sub>5</sub>. (Where X=Br, Cl, I, H, D, CH<sub>3</sub>, CD<sub>3</sub>, CF<sub>3</sub>). "Spectrochimica Acta Part A 65 (2006) 445-452. (UK. Impact Factor: 1.29)
26. Characterization of lactate dehydrogenase enzyme immobilized to magnetic nanoparticles. Pak. J. Zool, 38(4) 327-332, 2006.
27. Low Frequency Vapour Phase Infrared Spectra of Carbonyls. Derivatives of the type XMn(CO)<sub>5</sub>. (Where X= Br, Cl, H, D, CH<sub>3</sub>, CD<sub>3</sub>, CF<sub>3</sub>). **Journal of Molecular Spectroscopy**"2006" (Submitted for Publication.)
28. Synthesis and Spectroscopic Studies of 4-Substituted β-Diketo-aniline in Free and in Coordinated Forms. Pakistan Journal of Scientific Research, Vol 56, No.3-4, 2005 (Accepted in press)

29. Synthesis and Spectroscopic studies some Novel Fluoro Ligands and Fluoro Chelates in Comparison with their Hydrogen Analogue. Pakistan Journal of Science. Vol. 56, No 3-4 2005. (Accepted in press)
30. Synthesis, Characterization and Effect of Fluorine Substituted in Salicylidene-4-Fluoro aniline in Comparison with its Hydrogen Analogue. Pakistan Journal of Science Vol. 56, No 3-4. 2005 (Accepted in press)
31. Comparative FTIR Studies and Vibrational Assignment of Cyclopentadienyl-manganese-tricarbonyl and Methylcyclopentadienyl-manganese-tricarbonyl. "Spectrochimica Acta Part A"2006" (Submitted for Publication.)
32. Vapour phase FTIR spectra of Benzenetricarbonyl-chromium and related compounds,  $\text{Cr}(\text{CO})_3(\text{aene})$  (arene = benzene, aniline, toluene and anisol). European Journal of Inorganic Chemistry 2006. (Submitted for Publication).

