

## CURRICULUM VITAE

**Name of Faculty** : **Dr. Vijay Shankar**  
**Designation** : **Associate Professor**  
**Department** : **Chemistry**  
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### EDUCATIONAL INFORMATION

- **D. Phil. (2005):** Chemistry, Department of Chemistry, University of Allahabad (Central University), Allahabad. U.P. India.
- **M.Sc. (1999):** Chemistry, Department of Chemistry, University of Allahabad (Central University), Allahabad. U.P. India.
- **B. Sc. (1997):** Botany and Chemistry, University of Allahabad (Central University), Allahabad. U.P. India.

#### **D.Phil. thesis title, Guide's name, and Institute/University:**

“Studies in Coordination Compounds” Prof. Vijay Krishna, Department of Chemistry, University of Allahabad, Allahabad, INDIA.

### RESEARCH INTEREST

- Synthesis of nanomaterials or nanocomposite materials by using green approach for biological and environmental application.
- Synthesis coordination compounds with transition metals
- To develop material for biosensor to detection of toxic metals.
- Adsorption studies: Studies on adsorption behavior of prepared materials in terms of organic and inorganic pollutants

### PUBLICATIONS:

#### Research Papers

1. Rahul Kanaoujiya, Dharmendra Kumar Sahu, **Vijay Shankar**, Garima, Shekhar Srivastava, Synthesis, Characterization of Ru(III) macrocyclic complex with hirsfeld analysis and drug likeness study, *Materials Today: Proceedings*, **62** (2022) 3497-3501
2. Ashok Kumar Singh, B.K. Srivastava, **Vijay Shankar**, Rajendra Prasad, R.K. Yadav, Anoop Kumar Shukla, Gopal Nandan, P. Kumar, Energy matrices and enviroeconomical perspective of solar decontamination system, *Materials Today: Proceedings*, 46(2021)5464-5468.
3. Monika Singh, **Vijay Shankar**, Dharmveer Singh and Vijay Krishna; Chelation and Stabilization Properties of Citrulline and Uracil with Hg(II) as a Heavy Metal Ion in Solution, *Chemical Science Transactions*, ISSN:2278-3458, (2017), **6(4)**, 646-652
4. **Vijay Shankar**, Dharmveer Singh, Shalini Verma and Vijay Krishna, Mixed metal mixed ligand complexation equilibria of transition metal ions involving nitrilotriacetic acid (NTA) and L-2-amino-3-methyl butanoic acid (Valine) : *National Academy Science Letters*, 39(3), 185-189:2016 ISSN 0369-8211, IF 0.369, UGC SN.1286
5. Dharmveer Singh, Shalini Verma, **Vijay Shankar** and V Krishna: Stability constants determination of homo and hetero bimetallic complexes of tmdta in aqueous solution, *J. Indian Chem. Soc.*, 93, 1-9:2016. ISSN : 00194522, IF 0.10, UGC SN.1498

6. Dharmendra Kumar Sahu and **Vijay Shankar**; Formation Constants of Transition Metal Mixed Ligand Ternary Complexes with Biologically Significant Ligands, *Chemical Science Transactions* ISSN:2278-3458 (2016), **5(1)**, 272-278.
7. Dharmveer Singh, R K Gautam, R Kumar, B K Shukla, **V Shankar** and V Krishna, Citric acid coated magnetic nanoparticles: Synthesis, characterization and application in removal of Cd(II) ions from aqueous solution: *Journal of Water Process Engineering* 4, 233-241:2014. ISSN : 2214-7144, IF 1.713, UGC SN.184
8. Dharmveer Singh, H Chandra, **V Shankar** and V Krishna, Mixed ligand ternary complexes of some transition metals with aspartic acid as primary ligand and cytosine as secondary ligand: Equilibrium study, chemical speciation and stability constant: *International Journal of Research in Chemistry and Environment* 4(1), 48-53:2014. ISSN:2248-9649, IF 0.654, UGC SN.4156
9. **Vijay Shankar**, Role of metal ions in physical and chemical reaction of enzymes: A study; *Anusandhan*, (2015), Vol.3, Issue 1, ISSN-2322-0708.
10. **Vijay Shankar**, Toxicity of metal ions: A comprehensive study; *Anusandhan*, (2014), Vol.2, Issue 1, ISSN-2322-0708.
11. **Vijay Shankar**, Role of chelation in medicinal and biological functions; *Anusandhan*, (2013), Vol.1, Issue 1, ISSN-2322-0708.
12. **V.Shankar**, G.K. Mishra and V.Krishna, Multinuclear complexation equilibria of manganese(II), copper(II), zinc(II) and cadmium (II) with L-2-amino-3-methylbutanoic acid (valine) and nitrilotriacetic acid, *J. Indian Chem. Soc.*, (2006), Vol.83, 373-375
13. **V. Shankar**, G.K. Mishra and V.Krishna, Multimetal multiligand complex formation equilibria of copper(II), nickel(II) and zinc(II) with L-2-amino-3-methylbutanoic acid (valine) and nitrilotriacetic acid, *J.Indian Chem.Soc.*(2006),Vol.83, 23-25
14. Bipin K. Srivastava, **V. Shankar** and V.Krishna, Heterobinuclear complex formation by transition metal ions with diethylenetriaminepentaacetic acid, *Proc. Nat. Acad. Sci. India* (2005), 75A,II, 95-98.

**Patent:**

Dr. Manoj Kumar Praharaj, Dr. P. Maheswari, Dr. N. Srinivasan Arunsankar, Dr. Bipin Kumar Srivastava, Dr. **Vijay Shankar**, Dr. Dhondiram Tukaram Sakhar, Mr. S. R. Bavaji, Dr. P. Jeeva, Dr. A. Antony Lawrence, Dr. Shubhangi Tripathi

**Preparation method and application of Polyaniline- Nano Gold composite material- Published - Indian Patent Office. (Application Number: 202231016303 Date-22-04-2022)**

**Books:**

- Vijay Shankar “ Concepts of Inorganic Chemistry” 2019, ISBN; -81-937753-6-3

I hereby declare that all the particulars furnished by me are correct to the best of my knowledge.

**Date: 05.05.2022**

**(VIJAY SHANKAR)**