BRIEFPROFILE

Dr.(Mrs.) ANUPAMA ASTHANA
Principal,
Govt. Naveen College, Risali, Maroda, Bhilai,
Durg, Chhattisgarh, India
Ph. No. +91 788 2990780
E mail : anurakeshbhilai@gmail.com

Qualification

B.Sc.:1981

M.Sc.:1983

Ph.D.:2003,Chemistry, Pt.Ravishankar Shukla University, Raipur (CG)

Academic Experience

Teaching - 41Years

- Joined at PGCollege,Dhamtariin1983
- As Assistant Professor 1985 to 1990 at Govt. DB Girls PG College, Raipur.
- As Assistant Professor 1990 to 2008 at Govt. VYT PG Autonomous College, Durg.
- As Professor & Head at Govt. VYT PG Autonomous College, Durg, from 2008 to 14.11.2024
- Working as Principal, Govt. Naveen College, Risali, Durg.

Research :

Awarded Ph.D. in Chemistry in the year 2003.

- Thesis Topic : Methods of Analysis of Organic Pollutants and Pesticides.
- Registered Ph.D. guide at Pt. Ravi Shankar Shukla University, Raipur (CG)
- Regisrered Ph.D. guide at Hemchand Yadav University, Durg.
- Thrust Area -
  - AnalyticalandEnvironmental Chemistry
  - AdsorptionTechniques, Chemical Kinetics
- **Ph.D.supervision**-

Awarded	06
Registered	02

- **ResearchProjects**:

  1. Kinetic and thermodynamic studies of adsorption of some toxic metal ions by using nano particles entrapped adsorbents (UGC), 2016.
  2. Radiation induced modification of Chitosan for absorptive removal of organic textile dyes.

  – **Coinvestigator** (BARC), 2019- 2021**.**
- Paper Published - 47
- Book Chapter - 2
- Patent - One

Major Contributions -

- Nominated Member of Academic Council, July 2024.
- Member Executive Council, Hemchand Yadav University, Durg 2022.
- Dean, Physical Sciences, Hemchand Yadav University, Durg 2021.
- Chair person, Board of Studies, Chemistry Deptt., Hemchand Yadav University.
- Member, Central Board of studies, Chhattisgarh.
- Member, Board of studies, Chemistry, Govt. Ambikapur PG College, Ambikapur (CG) 2020-21.
- Member, Board of studies, Biochemistry, Govt. Nagarjun PG Science College, Raipur, 2021.
- Member, Board of Studies, Chemistry, Govt DB Girls PG College, Raipur.
- Member, Board of Studies, Chemistry, Govt. Yoganandan Chhattisgarh PG College, Raipur.
- Member, Board of Studies, Chemistry, Govt. Govt. Digvijay College, Rajnandgaon.
- Member, Sports Committee, Hemchand Yadav University, Durg.
- Member – Governing body in various institutes.
- Co ordinator, IQAC Cell.
- Convener, Purchase Committee of College.
- Contribution at PSC of different states in different capacities.
- Member, NAAC steering Committee.
- Fellow member, 'Indian Chemical Society'.
- Fellow Member of 'Indian Science Congress Association'.
- Reviewer and Subject Expert in various capacities.
- Delivered **'Invited Talks'** in various Institutes and Conferences.

PapersPublished -

1. Metal catalyzed coupling of N-Tosylhydrazones with compounds containing C-H/Hetero atom – H bonds. ***Asian Journal of Organic Chemistry,*** 13 (9), (2024).
2. Comparison of biosorption efficiency for hexavalent chromium remediation in synthetic wastewater using unmodified and chemically modified chicken feathers View supplementary material Comparison of biosorption efficiency for hexavalent chromium remediation in synthetic wastewater using unmodified and chemically modified chicken feathers. ***Journal of Dispersion Science and Technology***, 45(7), (2023).
3. Carbon-13 NMR. ***Spectroscopy,*** pp.93-122, (2023).
4. Collagen - a highly developed and abundant fibrous protein : synthesis and characterization, ***Hand book of Natural polymers – Vol. 1***, 489-508 (2023)
5. Facile preparation of methionine-functionalized graphene oxide/chitosan polymer nanocomposite aerogel for the efficient removal of dyes and metal ions from aqueous solutions. ***Environmental Nanotechnology Monitoring & Management 18(8)*** (2022).
6. Control of surface functionalization of graphene-metal oxide polymer nanocomposites prepared by a hydrothermal method. ***Polymer Bulletin 78(8),*** (2021).
7. Methionine-Functionalized Graphene Oxide/Sodium Alginate Bio-Polymer Nanocomposite Hydrogel Beads: Synthesis, Isotherm and Kinetic Studies for an Adsorptive Removal of Fluoroquinolone Antibiotics. ***Nano materials 11(568),*** (2021).

8. Adsorption of cationic dyes, drugs and metal from aqueous solutions using a polymer composite of magnetic/β-cyclodextrin/activated charcoal/Naalginate : Isotherm, kinetics and regeneration studies, ***Journal of Hazardous Materials,*** **409(2021)**124840.

9. Chicken feathers derived materials for the removal of chromium from aqueous solutions: kinetics, isotherms, thermodynamics and regeneration studies, ***Journal of Dispersion Science and Technology***, (2020).

10. Synthesis, characterization and antibacterial activity of a graphene oxide based NiO and starch composite material, ***Journal of Dispersion Science and Technology***, (2020).

11. Intensified elimination of aqueous heavy metal ions using chickenfeathers chemically modified by a batch method, ***Journal of Molecular Liquids***.,312 (2020) 113475.

12. Degradation of Methylene blue and Methyl violet using Graphene oxide/NiO/β – cyclodextrin nano composites as photo catalyst, ***Int. J of Environmental Analytical Chemistry,*** (2020) 1-19.

13. Control of surface functionalization of Graphene metal oxide polymer nano composites prepared by a hydrothermal method, ***Polymer Bulletin***, (2020) 1-19.

14. Adsorption of heavy metal ions by low cost adsorbents: a review, ***International Journal of Environmental Analytical Chemistry*** (2020) 1-38.

15. Amicellarmediatednovelmethodforthedeterminationofseleniuminenvironmental samples using a chromogenic reagent, ***Analytical methods,*** 12 Issue 35 (2020),4327- 4333.

16. Cationic Dye Removal Using Novel Magnetic/Activated Charcoal/β-Cyclodextrin/Alginate Polymer Nano composite, ***Nanomaterials***, 10 (2020) 170.

17. Kinetics and mechanistic study of oxidation of paracetamol: an accelerated catalytic approach, ***SN Applied Sciences*** 1 (11) (2019) 1380.

18. Adsorption of hazardous chromium (VI) ions from aqueous solutions using modified saw dust: kinetics, isotherm and thermodynamic modeling, ***International Journal of Environmental Analytical Chemistry*** (2019) 1-18.

19. Investigation of a thermoluminescence response and trapping parameters and theoretical model to explain concentration quenching for Yb3+-doped ZrO2 phosphors under UV exposure, ***Bulletin of Materials Science*** 42 (5) (2019) 249.

20. An arginine functionalized magnetic nano-sorbent for simultaneous removal of three metal ions from water samples, ***RSC advances,*** 7 (81) (2017) 51079-51089.

21. Novel glycine-functionalized magnetic nanoparticles entrapped calcium alginatebeads for effective removal of lead, ***Micro chemical Journal,*** 130 (2017) 168-178 (in publication).

22. Glycine functionalized magnetic nanoparticle entrapped calcium alginate beads : a

promising adsorbent for removal of Cu (II) ions, ***Journal of EnvironmentalChemical Engineering,*** 4 (2016) 1985-1995.

23. Development of surfactant assisted kinetic method for trace determination of thallium in environmental samples, ***Micro chemical Journal***, 118 (2015) 150-157.

24. Determination of Dicofol in various environmental samples by spectrophotometric method, using chromogenic reagents, ***Synthesis and reactivity in inorganic, metal, organic and non metal chemistry,*** 45 (2015) 1199-(7).

25. Sensitivespectrophotometricmethodfordeterminationofsomephenothiazinedrugs, ***SpringerResearchonChemicalIntermediates,*** 1164(2014)1838-8.

26. A novel and sensitive kinetic method for the determination of malathion using chromogenic reagent, ***Micro chemical Journal***, 113 (2014) 83-89.

27. A sensitive spectrophotometric determination of atrazine in micellar medium and its application in environmental samples, ***Research on chemical Intermediates,*** 39,6 (2013) 2867-2879.

28. Sensitive and selective methods for determination of antipsychotic drug olanzapine in pharmaceuticals, ***Research on chemical Intermediates,*** 39 (6) (2013) 2629-2640.

29. Photocatalytic degradation of an azodye with ZnO nanoparticles, ***American Institute of Physics AIP conference proceedings,*** (2013) 243-244.

30. Determination of nimesulide in pharmaceutical and biological samples by a spectrophotometric method assisted with the partial least square method, ***Indian Journal of Pharmaceutical Science,*** 201339/8 (2013) 3553-3563.

31. Spectrophotometric analysis of trichloroethylene in various environmental and biological samples, ***Research on Chemical Intermediates,*** 39,8 (2013)3867-3875.

32. Solid phase extractive Spectrophotometric determination of some sulfa drugs, ***Asian Journal of Pharmaceutical and Clinical Research,*** (2012) 5,2.

33. A Catalytic kinetic Spectrophotometric determination of organo phosphorus pestisides in vegetable samples, ***J.Braz.Chem. Society,*** 23,2 (2012) 322-327.

34. Spectrophotometric determination of lumivudine in pharmaceutical products and biological Samples, ***978-93,*** (2011)1-5.

35. Kinetic spectrophotometric determination of methyl parathion in water and vegetable samples, ***Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy,***101(2011) 54-58.

36. A spectrophotometric determination for the trace Amount ofbenzene in various environment samples, ***Chem. Environ. Research,*** (2008) 3&4.

37. Mandeep khol caves-A Classical site of karst Topography, Rajnandgav District, Chhattisgarh, India, ***Ultra Science,*** 19(1) (2007) 153-155.

38. Mandeepkhol caves- Natures' wonder in Rajnandgaon district of Chhattisgarh India, ***J. Current Science,*** 10(2) (2007) 757.

39. Study of Fluctuation of Ground Water level in Somni stream water shed, Patan Block, Durg District Chhattisgarh, ***J. Current Science,*** 9(1) (2006) 367-370.

40. Seasonal Variation in Ground Water Quality in Upper part Block, Durg District, Chhattisgarh, ***Nature Environment and Pollution Technology,*** 5(1) (2006) 111-117.

41. A Simple Spectrometric method for determination of Nicotine in environmental samples, ***J. Chinese Chemical Society,*** 51(2004) 949-953.

42. A Simple sensitive Spectro-photometric method for determination of dichlorvos in environmental samples, ***Indian Journal of Chemical Technology,*** 10 (2003) 96-98.

43. Determination of Thallium by starch Iodide method and its application in Environmental Samples, ***J. Chinese. Chemical Society,*** 50 (2003) 399-402.

44. Determination of carbon Disulphide in Enviromental samples using Leucorystal Violet, ***Chemical Environmental Research***, 12 (2003) 2 & 3.

45. Simple and sensitive spectroscopic method for the determination of Benzene in environmental samples, ***J. Indian Chemical Society***, 79 (2002) 633-634.

46. Thin layer chromatographic separation and determination of widely used Herbicide and related compounds via hydrolysis and oxidative coupling, ***ChemicalEnvironment Research***, 11 (2002) 1 & 2.

47. Determination of ethylene glycol in Environmental samples, ***Chemical Environment Research***, 10 (2001)1 & 2.