

CURRICULUM VITAE



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ASSOCIATE PROFESSOR

**SCHOOL OF PHYSICAL SCIENCES
DEPARTMENT OF CHEMISTRY
G.G.CENTRAL UNIVERSITY
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QUALIFICATIONS:

Higher Secondary from M.P.Board of Secondary Education in 1979 with **1st Division**.

B.Sc. from Govt. Science College, affiliated to R.D.University, Jabalpur in 1983 with **1st Division**.

M.Sc. from Department of Chemistry, U.T.D., R.D.University, Jabalpur in 1985 with **1st Division** with Organic Chemistry.

M. Phil from Department of Chemistry, U.T.D., R.D. University, Jabalpur in 1986 with **1st Division** with Analytical / Organic Chemistry.

Topic “*Determination of Ascorbic Acid in Pharmaceutical and Biological Samples*”.

Ph.D. from Department of Chemistry, U.T.D., R.D.University, Jabalpur in 1991 with Organo – Analytical Chemistry.

Topic “Analysis of Sulphur, Oxygen and Nitrogen Containing Functional Groups in Pure Compounds and Bio-Medical Preparations”.

FICCE : Fellow of International Congress of Chemistry & Environment.

AREAS OF RESEARCH INTEREST / SPECIALISATION:

ORGANIC CHEMISTRY

Biodegradable Natural Polymer Composites, Environmental Pollution and Green Synthesis.

EXPERIENCE: About 28 years of UG / PG Teaching.

AWARDS AND HONORS:

- Young Scientist Award in the Year 1987.
- Trained at Bhabha Atomic Research Centre, Trombay, Mumbai for handling

Best Peer Reviewed Publication (up-to 10)

1. Determination of Vitamin C in Chemical, Pharmaceutical and Biological Samples by Spectrophotometric Titration with o-Diacetoxyiodobenzoate. Analysis of Mixtures of Vitamin C with Methionine and Cysteine or Glutathione. Ashutosh Srivastava and **Sunil Kumar Singh**, ANALYST, FEBRUARY 1988, VOL.113, 259-262.
2. Determination of Organotrithiocarbonates With o-Diacetoxyiodobenzoate and N-Chlorosuccinimide in Aqueous and Non-aqueous Media. Ashutosh Srivastava, **Sunil Kumar Singh** and Anita Gupta. ANALYST, APRIL 1990, VOL. 115, 421-423.
3. First I₂-K₂CO₃-promoted sequential C-N and C-O bond forming approach for one-pot synthesis of 1,4-benzoxazines **Sunil K. Singh** , Anil K. Bajpai , Rajesh Saini, Tetrahedron Letters, 2013, 54,7132. (DOI:10.1016/j.tetlet.2013.10.092)
4. Controlled pesticide release from biodegradable polymers. Anamika Roy, **Sunil K. Singh**, Jaya Bajpai, Anil K. Bajpai, Cent. Eur. J. Chem., 12(4), 2014, 453-469. (DOI: 10.2478/s11532-013-0405-2)
5. Evaluation of poly (vinyl alcohol) based cryogel-zinc oxide nanocomposites for possible applications as wound dressing materials. Archana Chaturvedi , Anil K. Bajpai , Jaya Bajpai, **Sunil K. Singh**, Materials Science and Engineering C 65.(2016) 408–418. (DOI:10.1016/j.msec.2016.04.054)
6. Evaluation of chitosan-carbon based biocomposite for efficient removal of phenols from aqueous solutions. Usha Soni , Jaya Bajpai , **Sunil Kumar Singh** , A.K. Bajpai , Journal of Water Process Engineering, 16 (2017) 56–63. (DOI:10.1016/j.jwpe.2016.12.004)
7. Metal-free carbon as a catalyst for oxidative coupling: solvent-enhanced poly-coupling with regioselectivity. Melad Shaikh, Aanchal Sahu, A. Kiran Kumar, Mahendra Sahu, **Sunil. K. Singh** and Kalluri V. S. Ranganath , Green Chem., 2017, 19, 4533–4537. (DOI: 10.1039/c7gc02227a)
8. Graphene oxide as a sustainable metal and solvent free catalyst for dehydration of fructose to 5-HMF: A new and green protocol. Melad Shaikh, **Sunil K. Singha**, Santimoy Khilari, Mahendra Sahu, Kalluri V.S. Ranganath, Catalysis Communications, 106 (2018) 64–67. (DOI:10.1016/j.catcom.2017.12.018)
9. Triazole-based novel bis Schiff base colorimetric and fluorescent turn-on dual chemosensor for Cu²⁺ and Pb²⁺: application to living cell imaging and molecular logic gate. Kalyani Rout, Amit Kumar Manna, Meman Sahu, Jahangir Mondal, **Sunil K. Singh** and Goutam K. Patra , RSC Adv., 2019, 9, 25919. (DOI: 10.1039/c9ra03341f).
10. Silver hydroxyapatite (AgHAP) reinforced nanocomposites of poly (methyl methacrylate) poly (ε-caprolactone) as hybrid orthopaedic materials. Rashmi Choubey, Raje Chouhan, A.K.Bajpai, Jaya Bajpai and Sunil Kumar Singh, International Journal Of Polymeric Materials And Polymeric Biomaterials, 2021, 70 (11), 782-796. (DOI:10.1080/00914037.2020.1765353)

Recent Books/Book Chapters/Monographs etc.

- Biodegradable Natural Polymeric nanocomposite Material.

- Alginate-Based Nanosorbents for Water Remediation.
- Graphene: A Green, Metal Free and Sustainable Catalyst.

Research Supervision: Two students are working for PhD degree under my supervision.

Administrative Responsibilities:

- Ex - H.O.D. Department of Basic Sciences and Humanities, I.T., GGV.
- Ex - H.O.D. Department of Chemical Engineering, I.T., GGV
- Member of Collation Committee, G.G. University Confidential Cell.
- Assistant Superintendent of I.T. Examinations / Superintendent of I.T. Examinations.
- Superintendent of University Examinations / Chief Superintendent of University Examinations.
- Assistant Coordinator Central Valuation Cell, I.T. Member Observer's committee for University Examination.
- Coordinator Central Valuation Cell, I.T. Member Observer's committee for University Examination.
- Subject expert for University affiliation of Colleges / Add-on courses.

Additional Information:

- Number of B.Sc. Project Guided:19
- Number of M.Sc. Project Guided:19
- Number of M. Phil Dissertation Guided:5
- Number of Ph. D. Thesis Examined: 02
- Number of B. E., Chemical Engineering Project Guided: 03
- Number of Sttp (A I C T E) Attended: 03
- Number of Refresher Course (UGC) Attended: 01
- Number of Orientation (UGC) Attended: 01
- Have delivered invited talks & presented research papers orally in National / International Conferences.
- Have chaired sessions in national/International Conferences/Symposiums.
