



Mr. Meman Sahu
Assistant Professor

Department: Chemistry

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Academic Qualification:

- **Current position:**

Working as an Assistant Professor at L.C.S. College Ambagarh Chowki, Mohla-Manpur-Ambagarh Chowki, C.G. since 25th April 2022

Enrolled in PhD, Department of Chemistry, Guru Ghasidas Vishwavidyalaya (A Central University) Bilaspur, CG, INDIA.

- **M.Sc. in Chemistry (Organic Specialization)**, (2018),
Guru Ghasidas Vishwavidyalaya (A Central University) Bilaspur, CG, INDIA.
- **B.Sc. Hon's (Chemistry)**, (2016),
Guru Ghasidas Vishwavidyalaya (A Central University) Bilaspur, CG, INDIA.

Area of interest/Specialization:

- Fluorescent Colorimetric Chemosensors
- Metal Organic Framework
- Macrocyclic and Supramolecular Chemistry
- Crystal Engineering
- Redox Activity of Coordination Complexes

Experience:

'Five months' teaching and 'four years' research

Award and Honors:

- CSIR(NET)-JRF 2017 (CSIR Fellow ship, All India Rank 41)
- GATE (Conducted by IIT Madras) 2019
- CGSET 2017
- Gold Medal (B.Sc. Chemistry)
- Gold Medal (M.Sc. Chemistry)

Peer Reviewed Publication:

1. **M. Sahu**, A. K. Manna D. De and G. K. Patra, Synthesis, characterization, X-ray crystal structure and Hirshfeld surface analysis of Ni(II) complex of 1,2-bis(pyridin-2-ylmethylene)hydrazine, *Eur. J. Chem.*, 13, 1-7, 2022. (Citation: nil, Impact Factor: 5.236)

2. **M. Sahu**, A. K. Manna and G. K. Patra, A fluorescent colorimetric vanillin di-Schiff base chemosensor for detection of Cu(II) and isolation of trinuclear Cu(II)–dihydrazide, *Mater. Adv.*, 3, 2495-2504, 2022. (Citation: 2, Impact Factor: 3.18)
3. **M. Sahu**, A. K. Manna, K. Rout, D. Nikunj, B. Sharma and G. K. Patra, Synthesis, crystal structure, CN⁻ ion recognition property and computational studies of a novel hydrazinyl-dihydroimidazole Schiff base, *Inorg. Chim. Acta*, 528, 120600, 2021. (Citation: 2, Impact Factor: 2.545)
4. J. Mondal, **M. Sahu**, B. Sharma, R. Ganguly, S. Chowdhury and G. K. Patra, Synthesis, crystal structure, and theoretical studies of a macrocyclic silver(I) complex of imino-pyridyl Schiff base ligand, *Eur. J. Chem.*, 12, 248-255, 2021. (Citation: nil, Impact Factor: 5.236)
5. **M. Sahu**, A. K. Manna and G. K. Patra, A dihydrazone based conjugated *bis* Schiff base chromogenic chemosensor for selectively detecting copper ion, *Inorg. Chim. Acta*, 517, 120199, 2021. (Citation: 9, Impact Factor: 2.545)
6. **M. Sahu**, A. K. Manna, S. Chowdhury and G. K. Patra, A novel dihydro phenylquinazolinone-based two-in-one colorimetric chemosensor for nickel(II), copper(II) and its copper complex for the fluorescent colorimetric nanomolar detection of the cyanide anion, *RSC Adv.*, 10, 44860-44875, 2020. (Citation: 10, Impact Factor: 3.245)
7. A. K. Manna, **M. Sahu**, K. Rout, U. K. Das and G. K. Patra, A highly selective novel multiple amide-based Schiff base optical chemosensor for rapid detection of Cu²⁺ and its applications in real sample analysis, molecular logic gate and smart phone, *Microchem. J.*, 157, 104860, 2020. (Citation: 16, Impact Factor: 4.821)
8. **M. Sahu**, A. K. Manna, K. Rout, J. Mondal and G. K. Patra, A highly selective thiosemicarbazone based Schiff base chemosensor for colorimetric detection of Cu²⁺ and Ag⁺ ions and *turn-on* fluorometric detection of Ag⁺ ions, *Inorg. Chim. Acta*, 508, 119633, 2020. (Citation: 43, Impact Factor: 2.545)
9. K. Rout, A. K. Manna, **M. Sahu**, J. Mondal, S. K. Singh and G. K. Patra, 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 gates, *RSC Adv.*, 9, 25919-25931, 2019. (Citation: 36, Impact Factor: 3.245)
10. K. Rout, A. K. Manna, **M. Sahu** and G. K. Patra, A guanidine based *bis* Schiff base chemosensor for colorimetric detection of Hg(II) and fluorescent detection of Zn(II) ions, *Inorg. Chim. Acta*, 486, 733-741, 2019. (Citation: 26, Impact Factor: 2.545)
11. R. Chandra, A. K. Manna, **M. Sahu**, K. Rout and G. K. Patra, Simple salicylaldimine-functionalized dipodal *bis* Schiff base chromogenic and fluorogenic chemosensors for selective and sensitive detection of Al³⁺ and Cr³⁺, *Inorg. Chim. Acta*, 499, 119192, 2019. . (Citation: 18, Impact Factor: 2.545)

12. R. Chandra, **M. Sahu**, A. K. Manna, K. Rout, S. Chowdhury and G. K. Patra, Ether based flexible *bis* Schiff base fluorescent colorimetric chemosensors for selective and sensitive detection of HF_2^- ion, *J. of Photochem. Photobiol. A Chem.*, 389, 112179, 2019. (Citation: 5, Impact Factor: 4.291)

Recent Books/Book Chapters/Monographs etc.

Book Chapters:02

- Benzil Hydrazone Derived Di-Imines: A Brief Overview, Goutam K. Patra, Kalyani Rout, Amit K. Manna and Meman Sahu, *Imines An Overview*, Nova Science Publishers New York (2019) Page 1-34.
- Optical Sensors for Cysteine: A Brief Overview, Goutam K. Patra, Amit K. Manna and Meman Sahu, *Cysteine: Sources, Uses and Health Effects*, Nova Science Publishers New York (2021) Page 85-102.

Administrative Responsibilities:

- Academic coordinator of Department of Chemistry, LCS College.
- Secretary of Time Table Committee, Internal Evaluation and Half Yearly Exam, LCS College, Sep. 2022 to present.
- Member of College Cleanliness Committee, LCS College, Sep. 2022 to present.
- Member of College Environmental Committee, LCS College, Sep. 2022 to present.
- Member of College All India Survey Higher Education Committee, LCS College, Sep. 2022 to present.

Additional Information:

Papers presented in Seminars/Conferences/Workshop

- Oral Presentation in International Conference (Online) on “Covid Challenges of Energy and Environment Management for Sustainable Growth of Process Industries (CCEEMSGPI-2021)” (Sponsored by AICTE) organized by Department of Chemical Engineering, Guru Ghasidas Vishwavidyalaya, Bilaspur, Chhattisgarh, India (September, 10 and 11, 2021).
- Poster Presentation in the virtual “International Conference on Recent Trends in Green Chemistry (ICRTGC-2021)” organized jointly by the Department of Chemistry, Akal University, Bathinda, Punjab and Indian Chemical Society, Kolkata (September, 28th-30th, 2021)
- Oral Presentation in an International Webinar on “Recent Trends in Chemical Sciences at the Biointerface (RTCSB-2021)” organized by Department of Chemistry, Indira Gandhi National Tribal University, Amarkantak, MP, India (October, 26 and 27, 2021).