

Dr. Sachin Kumar Singh

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Current Position,

- **Assistant Professor of Chemistry**, DDU Gorakhpur University, Gorakhpur
- **Coordinator, M.Sc. Industrial Chemistry Programme**, Department of Chemistry, DDU Gorakhpur University, Gorakhpur

Broad Research Interest,

Functional Soft Materials- Liquid Crystals:

- Design, Synthesis and characterization of liquid crystalline materials.
- Fabrication of liquid crystal based optical sensors.

Employments and Research Experience,

- **Assistant Professor of Chemistry, DDU Gorakhpur University, Gorakhpur**
(July. 2018- continued)
- **Assistant Professor of Chemistry, Magadh University, Bodhgaya**
(2017- 2018)
- **DST-Inspire Faculty, Department of Chemistry, IIT Guwahati, Guwahati,**
(2016-2017)
- **Post Doctoral Fellow-** DRDO New Delhi (Mentor Institute- BHU, Varanasi)
- **Post Doctoral Fellow- Institute of Photonic Technology (IPhT), Jena, Germany**
- **Ph.D. Chemistry**, Department of Chemistry; Institute of Science, **Banaras Hindu University**, Varanasi , Mentor, Prof. B. Singh (Former-Director and Dean, Institute of Science, BHU)
- **German Research Foundation Fellow IPhT, Jena, Germany** (during PhD), **under INSA- bilateral cooperation**, Mentor, Prof. V. Deckert, 2013

Few Major Academic Contributions,

- **Founder Coordinator, M.Sc. Industrial Chemistry Programme**, Department of Chemistry, DDUGU
- **Founder Coordinator**, IT Cell, DDUGU
- **Core Committee Member**, CBCS and NEP System, DDUGU

Major Research Contributions,

(04 Major Research and Consultancy Projects, total lab fund >1 Crore)

Government Funded Research Projects, Running,

(a) Funding agency: Department of Science and Technology (DST), New Delhi

Project Title: Fabrication of Real time, Highly Sensitive and Selective Liquid Crystal-based Optical Sensors for Detection of Heavy Metal ions in Water (Sanction Order No. DST/2016-22/0688)

Duration and Capacity: 2017-24, Major Project

(b) Funding agency: Department of Atomic Energy- UGC-DAE Consortium for Scientific Research, New Delhi

Project Title: Fabrication of Ultrasensitive Chip-based Raman Sensors employing Liquid Crystals for Detection of Environmentally Hazardous Chemical Contaminants (Sanction Order No. CRS/2021-22/01/465)

Duration and Capacity: 2022-25, Major-Project

(c) Funding agency: Inter University Accelerator Centre, New Delhi

Project Title: Ion Beam Irradiation Induced Modifications in Functional Properties of Chiral Liquid Crystals and their Applications in Fabrication of Ultrasensitive Chip-based Optical Sensors (Sanction Order No. IUAC/71517/71366)

Duration and Capacity: 2022-25, Major-Project

Research projects sponsored by non-government sources (Consultancy Projects)

(d) Consultancy agency, Ocean Life Science Corporation, Chanakya Place, New Delhi- 110059
Project Title: Identification of liquid crystalline sample via temperature dependent polarizing optical microscopic technique

Duration and Offer: 2022-24, 10 Lakh per annum

(e) Consultancy agency, Pro Lab Marketing Pvt. Ltd., New Delhi

Project Title: Analysis of phase transition temperature of liquid crystalline sample via temperature dependent polarizing optical microscopic technique

Duration and Offer: 2022-24, 10 Lakh per annum

Collaborative Research/ Extension Activities, with other reputed institutions/research/establishments/ industry for research and academic development,

- Established Collaborative Research through CRS-DAE Scheme between PI's research group and group of **Dr. Vasant Sathe, Director, UGC-Department of Atomic Energy Centre, Indore.**
Offered Terms, Interchange of Research Schemes, Research Fund, Utilization of all Instrumentation Facility of DAE including Travel and Accommodation.
- Established Collaborative Research through IUAC Project Scheme between PI's research group and **group of Dr. Ambuj Tripathi, Director, IUAC, New Delhi.**
Offered terms, Interchange of Research Schemes, Student fellowship- 01, Research Fund and Utilization of all Instrumentation Facility at IUAC including Travel and Accommodation.

PhD Students (Ongoing- 02),

1. **Madeeha Rashid**, 2019-20 (Reg No. RC/FSc/CHE/2019-20/10/22)- DST, New Delhi Project Fellow.
2. **Satyabratt Pandey**, 2021, IUAC, New Delhi Project Fellow

Research Publications

(Total Publications 39; All are high impact SCI, SCOPUS indexed international journals of repute)

cover page article-**02**, article in special issue-**02**, top 10 most viewed article of the issue- **01**)

- ✓ Research Articles, **36 (Average Impact Factor, 3.8)**
- ✓ Book/Book Chapters, 03

For publications details, go to link, <https://www.researchgate.net/profile/Dr-Sachin-Singh>

Honours and Awards,

- **Department of Science and Technology (DST)-Indian National Science Academy (INSA)**, Inspire Award, 2016-22
- **German Science Foundation, Deutsche Forschungsgemeinschaft (DFG)-Germany fellowship**, IPC, Friedrich Schiller University, Jena, Germany.
- **Invited as Guest of Honour, Resource Person/Invited Speaker in many National and International Conferences, events, programmes.**
