



Dr. Varsha Nigam Gour

Associate Professor

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Educational Qualification:

Post Doc. (Medicinal Chemistry) Ph.D. (Natural Product Chemistry), M.Phil, MBA (Operational management), B.Sc. (Microbiology)

Total Experience: 15 yrs

Academic: 15 yrs. | Industry: yrs | Research: 10 yrs

1.	Aug. 2020 to May 2021	Worked as Associate Professor in SAGE University, Bhopal (Left due to Covid -19 II Wave)
2.	Oct. 2018 to Aug. 2020	Worked as Associate Professor in Technocrats Institute of Technology (TIT), Anand Nagar, Bhopal
3.	Sep. 2017 to Aug. 2018	Worked as a Associates Professor in Himalayan University , Itanagar, Arunachal Pradesh
4	Feb.2015 to March 2016	Worked as a Asst. Professor in SAM Girls College, Ashoka Garden, Bhopal
5	Oct.2014 to Feb 2015	Preparation leave for MPPSC (Asst. Prof Exam)
6	Sep. 2011 to Sep. 2014	Worked as a Research Associates , Programme Officer, Resource Person and Lecturer at International Institute of Waste Management (IIWM), Bhopal
7	Dec. 2010 to Aug.	Worked as Tutor in Gupta Tutorial (PET &PMT Exam)

	2011	Preparation) in Ujjain
8	July 2007 to Nov. 2010	Worked as a Asst. Professor in School of Studies in Chemistry and Biochemistry Department , Microbiology Department, and Biotechnology Department, Vikram University, Ujjain
9	June 2006 to July 2007	Worked as a Contract Lecturer in Pharmacy Department, Vikram University, Ujjain
10	July 2006 to March 2007	Worked as a Lecturer in Bharti Gyanpith High Secondary School, Ujjain (MP Broad)
11	Aug. 2005 to Feb.2006	Worked as a Guest Lecturer in Govt. P.G. College Rampura, Dist.- Neemuch, MP (Vikram University)

Areas of Interest:

Medicinal Chemistry, Natural Product Chemistry, Biomedical/Hazardous/greywater Waste Management, Microbiology

Brief Profile:

Dr. Varsha Nigam Gour, Associate Professor, School of Sciences, SAGE University, Bhopal completed Post Doc. (Medicinal Chemistry) Ph.D. (Natural Product Chemistry), M.Phil, MBA (Operational management), B.Sc. (Microbiology) in the reputed Universities and Institutes.

Dr. Varsha Nigam Gour dedicated, resourceful and goal-driven professional educator with a solid commitment to the academic growth and development of every student in the class. Efficiently guided Chemistry subject of UG and PG students through experimental explanation and guided their project work. Motivated students to come up with innovative ideas for as part of self-study for Analog communication and case study For Chemistry course. Committed to professional ethics and standards of practice. Skilled in adapting to students' diverse learning styles.

Dr. Varsha N. Gour has **15 years of teaching experience**, and more than **10 years of research experience**. She has published more than 16 papers in national and International Levels. She worked as **PI and CO-PI in government** funded projects (**DST, UGC, TEQIP-3, UNICEF and BHEL**). She has **supervised three PhD students** in their research work at Himalaya University, Himachal Pradesh and JJTU University, Rajasthan. She is also guided more than 8 M.Phil students in there dissertation work at Vikram University Ujjain. She is worked as **Program Officer** at International Institute of Waste Management (IIWM), Bhopal, and Conducted many field work and campaigning in different Waste Management field like

Solid waste management, Biomedical waste management, Hazardous Waste management, Municipal waste management and Grey water treatment . She has **Subject Matter Expert in Chemistry**_(10-12th Online classes) with Chgg India, New Delhi last 2 years. She Worked as **Project Officer**_in Trident Management, New Delhi. She worked as **Academic Councilor**_with IGNOU, Bhopal.

Research publications in International Journal:

Project completed

- 1. TEQUIP-III Sanctioned project:** Entitled “*Investigation of Mechanical properties and chemical constituents of Alginate fibers of Freshwater Alga, Bhopal*” at **TIT College Bhopal (Worked as Co-PI)**. Period: 1 year, duration: 2019-20.
- 2. MP-UGC Sanctioned Project:** Entitled “*Isolate Aroma constituents of petroleum ether and hexane extracts from Nirmalya Waste and convert it into herbal Perfume*” at **SAM Girls College Bhopal (Worked as Principal Investigator)**, Period: 1 year, duration: 2015-16.
- 3. DST Sanctioned project:** Entitled “*Grey water management and technical up gradation of waste water*” at **IIBM Bhopal, (Worked as Principal Investigator)** Period: 2 years, duration: 2011-2013.
- 4. Worked as Team Member in BHEL funded Project on Sanitation Hygiene and waste management, Raise Awareness in School Children. During the Project conduct awareness, Survey, lectures for school children. Celebrated Hand Washing Day, Open School Drawing Competition, Teacher training program etc.**
- 5. UNICEF funded Project entitled " Sanitation, Hygiene and waste management cells in schools of Shivpuri and Guna district of Madhya Pradesh"**(Worked as Team member)
- 6. Capacity Building Programmes: Worked as Programme Coordinator for 10 Capacity Building Programs of Hazardous waste, Biomedical Waste, E-Waste, Mines Waste, Industries and Municipal Solid Waste, Waste water etc for industrial persons, doctors engineers and faculties and students, which were organized by International Institute of Waste Management(IIBM), Bhopal**
- 7. Presented different topics on waste management like E Waste, Municipal Solid Waste Management, Hazardous waste, Biomedical Waste, Wastewater Management etc. as “Invited Resource Person” in the Seminar of different colleges of Bhopal: IPER, Oriental College of Management, Sarojini Naidu College, Vaishnav College of Technology etc.**
- 8. Committee Member of "International Conference on Waste, Wealth and Health, 15-17 Feb, 2013 at Madhya Pradesh Council of Science and Technology, Bhopal, M.P., India**
- 9. Committee Member of "5th World Ayurvedic Congress"-7-10 Dec, 2012, Bhopal, M.P., India**Delivered lecture/presentation in various programmes viz., Global hand washing day-2012, sanitation, hygiene and waste management awareness programmes in Bhopal, Shivpuri and Guna also.

10. Conducted 15 days training programs for M.Sc. Chemistry students of Sarojini Naidu Girls College as **Convener** organized by IIWM, Bhopal.
11. Experience in characterization of various plant isolated unknown compounds by Spectroscopic techniques such as: **¹H NMR, ¹³C NMR, COSY, HMQC, HMBC, DEPT, FT-IR, UV, Mass. (More than 200 Spectrum solved)**
12. Experience of handling pH meter, Conductometer, Spectrophotometer, Flam photometer, FTIR spectrometer (PerkinElmer), Rota Film Evaporator etc. Instruments handled under the guidance of Prof. Uma Sharma in School of Studies in Chemistry and Biochemistry, Vikram University Ujjain.
13. Prepared project proposal, training /Capacity Building program/Awareness programme module

Papers Published National/International

1. **Varsha Nigam**, Ritu Nigam, Asheesh singh, "Distribution and Medicinal Properties of *Syzygium* species", *Current Research in Pharmaceutical Sciences* **2012**; 02: 73-80.
2. Chhaya Ramrakhiyani, **Varsha Nigam Gaur**, Rucha Athaley, "Comparative and therapeutic studies Of some medicinal Plants of family Fabaceae," *Journal of Pharmacy and Biological Sciences*, Vol. 11, (2), **2016**, PP. 17-19.
3. BK Mehta, **Varsha Nigam**^{1*}, Ritu Nigam and Asheesh Singh, "Gas chromatography mass spectrometry (GC-MS) analysis of the hexane extract of the *Syzygium cumini* bark, *Journal of Medicinal Plants Research* Vol. 6(25), pp. 4163-4166, 5 July, **2012**.
4. B K Mehta, Ritu Nigam, **Varsha Nigam** and Asheesh Singh, "Isolation & Antimicrobial Screening of Ten Long Chain Aliphatic Compounds from *Psidium guajava* (Leaves), *Asian Journal of Plant Science and Research*, **2012**, 2 (3):318-322.
5. P.P.S. Chandel, S. Sarsaiya, S. Gautam, G. Singh Mandloi, **V. Nigam** And R. Gour, "Primary Inventorization of Electronic Waste in Bhopal City," *Current World Environment*, Vol. 9(3), 814-819, **2014**.
6. **Varsha Nigam**, Ritu Nigam, Sumit Agrwal, B.K Mehta, NEW LONG CHAIN ALIPHATIC COMPOUNDS FROM BUTEA MONOSPERMA (LAMK.), **International Journal of Advanced Research in Applied Sciences, Engineering and Technology**, **2019**.
7. **Varsha Nigam**, Giriraj S. Mandloi, Ritu Nigam, TECHNOLOGICAL UP-GRADATION OF GREY WATER TREATMENT SYSTEM. **International Journal of Advanced Research in Applied Sciences, Engineering and Technology**, **2019**.

8. Sandeep¹, Sandeep Kumar², Karan Pratap Singh³, **Varsha Nigam⁴**, Ravi Kant⁵, Grey water reuse: a sustainable solution of water crisis in Hissar city in Haryana, India, **International journal for research & development in technology**, vol.-11, issue 5 (May 19), ISSN (O) :- 2349-3585.
9. Sandeep¹, Sandeep Kumar², Karan Pratap Singh³, **Varsha Nigam⁴**, Chemical Constituents Of Whole Plant Parts Of *Syzygium aromaticum*: A Review, **international journal for research & development in technology**, vol.-11, issue 5 (May 19), ISSN (O) :- 2349-3585.
10. Dr. Varsha Nigam Gour¹, Dr. P.K. Pandey² (2020 June). Chemical Constituents & Mechanical Properties Of Algal Species. **International Journal of Innovative Science and Modern Engineering (IJISME)**. (Accepted) IJISME is peer reviewed Scope of the international journal.
11. Participated in National Webinar on “Intellectual Property Rights: Emerging issues, challenges and human intellect” organized by Anand Vihar College for Women, Bhopal, India on 28 Feb., 2022.

Papers presented in National Conferences:

1. Laiba Zaheen Khan & Mohit **Kamthania**. Global impact of zero emission concepts and its use in sustainable development. National Seminar on Current Research in Environment and Sustainable Development (NSCRESD) at Department of Chemistry, College of Life Sciences, Gwalior held on Sep., 21, 2019.

Patents:

Dr. P.K. Pandey, Dr. Varsha Nigam Gour, title : Mechanical Investigation of Alginate fibers based Composite and Chemical constituents of Freshwater Algal species of Upper and Lower Lakes of Bhopal

- **Application no.- 201921024763. (Cancel)**

International/National Conference & Workshops Attended:

1. Conference on Decentralized wastewater management in Asia, 20 -23 Nov. 2012, Nagpur, India.
2. New long chain aliphatic compound from *Butea monosperma* (Lamk.), JECRC, **Jaipur** Rajasthan. [Indian Journal of Chemical Society]
3. Isolation & Characterization of long chain aliphatic compound from *Butea monosperma* (Lamk.), Department of Chemistry, **Shillong, (Meghalaya)**. [Indian Science Congress]

4. Lipid Constituents of *Butea monosperma* (Bark.), P. G. Department of Chemistry, D.A.V. College, **Abohar, (Punjab)**.
5. Phytochemical Constituents from the stem bark of *Butea monosperma* (Lamk.), Madhya Pradesh Young Scientist Congress, **Bhopal, (MP)**.
6. Lipid Constituents of *Thuja orientalis* (Leaves), Department of Chemistry, Govt. P. G. College, **Ujjain, (MP)**.
7. Morepankhi: A medicinally important plant in Homeopathy & Ayurvedic system, Department of Chemistry, Govt. Kalidas Girls College, **Ujjain, (MP)**.
8. Mechanical Investigation of Alginate fibers based Composite and Chemical constituents of Freshwater Algal species of Upper and Lower Lakes of Bhopal, paper presented in 5th International conference on Environmental pollution and health management -2020 , organized by **Career College** , Bhopal.

Books/Reports/Chapters/General Articles etc.:

1. Nigam, Varsha, et al. "Technological up-gradation of grey water treatment system." *Resource Book of ICWWH* (2013).
2. Dr. Varsha Nigam Gour (2019). Chief Editor in Annual Magazine "**Pratibimb-2019**" of Technocrat Institute of Technology (TIT)-Bhopal.

FDP Attended: NA

IFDP Attended :6

Awards/Recognitions: Young Scientist Award in 2008

Workshops/Seminars/Conference Organized:

SEMINAR ATTENDED

1. Symposium on the Applications of Nuclear Magnetic Resonance to Materials and Medicine: Department of Chemistry, **IIT Delhi**.
2. **26th Young Scientist Congress, MPCST, Bhopal-2011**, Organized by Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur (M.P.), India, **Oral Presentation:** *Utilization of cellulosic waste as a cheap substrate for the production of cellulase.*
3. **99th Indian Science Congress-2012**, Organized by KITT University, Bhubneshwar, India, **Poster Presentation:** *Diversity of cellulolytic microbes and biodegradation of*

municipal solid waste.

4. **27th Young Scientist Congress, MPCST, Bhopal-2012**, Organized by M.P. Council of Science and Technology, Bhopal (M.P.), India, **Oral Presentation:** *Diversity of cellulose decomposing microbes isolated from municipal solid waste of Jabalpur Madhya Pradesh.*

Workshop

1. Three Day workshop on **“Rural Technology: Economic prosperity through traditional methods”** Organized by M.P. Council of Science and Technology, Bhopal.
2. **“State Level Workshop on Madhya Pradesh Resource Altus Programme”** held on 29th Sep 2011 at M.P. Council of Science and Technology.

Webinar

1. Two days national Workshop on Emerging trends in Science & Technology conducted Sagar Group of Institutions , Bhopal dated 27th to 28th June 2020.
2. 6st Days Summer training program/ Faculty Development program on Soft Skills & Personality Grooming under SAGE Summer School Bhopal dated 08th to 13th June 2020.

Membership of Professional Bodies: NA

Ongoing/completed Projects during the last 5 years: 5

Sr. No.	Project Title	Sanctioned by	Sanctioned amount	Worked as	Duration	Status
1.	Grey water management and technical up gradation of waste water	DST-WTI Project No DST/WTI/2K10/177	10 Lac	PI	2010-2013	Completed
2.	Isolate Aroma constituents of petroleum ether and hexane extracts from Nirmalya Waste and convert it into herbal Perfume	MP-UGC Project No (MHRD/UGC/2015/205)	2 Lac	PI	2015-2016	Completed
3	Investigation of Mechanical properties and chemical constituents of Alginate fibers of Freshwater Alga, Bhopal	RGPV TEQIP-III Project. No. (RGPV/TEQIP-III/2019/04/624)	3 Lac	Co-PI	2019-20	Completed

4	Sanitation Hygiene and waste management, Raise Awareness in School Children	BHEL, Bhopal	5 Lac	Team member	2012	Completed
5.	Sanitation, Hygiene and waste management cells in schools of Shivpuri and Guna district of Madhya Pradesh	UNICEF	5Lac	Team member	2013	Completed

Other Achievements:

- **Professional Recognition/Award/Prize/Certificate, Fellowship: “Young Scientist Fellowship 2012”.**

Ph. D Supervisor:

- i. Miss Nidhi Yadav, Research Topic: Nosocomial (Acquired) Infections: A Pilot Study in a Tertiary care public and private hospitals in India” Himalayan University, Itanagar, Arunachal Pradesh.

Registration No.: 5068104052170002

Status: Awarded

Ph. D Co-Supervisor

1. Mr. Sandeep Kumar: Research Topic: “Phytochemical Investigation and microbial screening of *Syzygium aromaticum* (Stem), JJTU University, Jhunjhunu, Rajasthan.
2. **Status: Awarded**
3. Mr. Sandeep Koshik, Research Topic, “Physicochemical Analysis of greywater and its impact on surface water quality.”), JJTU University, Jhunjhunu, Rajasthan.

Registration no.: 190217074

Status: Awarded

M. Phil Co-Supervisor

Students completed their M. Phil research under the guidance.

1. Ms. Heena Keswani
2. Ms. Nayma Siddiqy
3. Mr. Manoj Shinde
4. Ms. Sapana Patni
5. Ms Neha Sharma

6. Mr. Danish
7. Ms. Sadaf Kureshi

Other Experience (Part Time Work)

- I am working as **Subject Matter Expert in Chemistry** (10-12th Online classes) with Chgg India, New Delhi last 2 years
 - Working as **Project Officer** in Trident Management, New Delhi
 - I am working as **Academic Councilor** with IGNOU, Bhopal
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