

Dr. Tanuja Bisht, Department of Chemistry

1. **Name :** Dr. Tanuja Bisht
2. **Father's name:** Mr. Mahendra Singh Bisht
3. **Educational Qualification:** Ph.D
4. **Title of Ph.D. thesis:** Synthesis of calix[4]arenes, thiacalix[4]arenes and related compounds and their application in supramolecular chemistry
5. **Present Designation:** Assistant Professor
6. **Address of College:** IPGGPG College of Commerce,
Nawabi Road, Haldwani
Nainital (Uttarakhand)-263139
7. **Residential Address:** B-18 Ganga Enclave
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10. **Permanent address :** d/o Mr. Mahendra Singh Bisht
Pushp Raj Kunj
Cinema Line Pithoragarh
11. **Teaching Experience:** 11 years
12. **Research experience:** 11 years
13. **Research area:** Organic Supramolecular chemistry, Green Chemistry
14. **Research Field: National Taiwan University, Taipei, Taiwan (Post-PhD work) :** Designed and executed synthesis of variety of norbornene polymers with different linker units. For instance, double strand polymers of norbornene were synthesized by using perylene as a linker. Perylenediimide was selected as the luminescent core because of its red fluorescence and high fluorescent quantum yield. In particular, a new class of polymers having double stranded polybisorbornene skeleton with

multilayer planar perylene linkers were explored as “polymeric ladderphanes”. Because of the ladder-like structure, all linkers are coherently aligned perpendicular the longitudinal axis of the polymer. Strong interactions between these chromophore linkers have led to distinct photophysical characteristics.

University of Delhi, Delhi, India (PhD work): Designed and executed the synthesis, isolation, purification and characterization of a variety of heterocycles and supramolecules including calixarenes, porphyrins, and phthalocyanines for possible use in host-guest chemistry, chemosensing, non-covalent interactions (ionic and H-bonding), and self-assembly.

15. Research paper published (last Five years)

S. No.	Full Journal paper (In format given below Eg: R.K. Gupta, R.S. Sharma etc., <i>Optimisation of Cellular layout using Simulated Annealing</i> , Int. J of Production Research, Vol 26 No.4, Dec 2015, pp 25-34)	ISSN	Whether UGC CARE-listed? If yes, Give Ref. No.	Impact Factor (if any)	No. of co-authors
1.	B. Garg and T. Bisht, <i>Carbon Nanodots as Peroxidase Nanozymes for Biosensing</i> , <i>Molecules</i> , Vol 21 No. 12, Dec 2016, pp 1653	1420-3049	Yes UGC-CARE List Group II (Web of Science: Science Citation Index Expanded)	4.411	01
2.	B. Garg, T. Bisht and Y.-C. Ling, <i>Graphene-based Nanomaterials: Versatile Catalysts for Carbon-Carbon Bond Forming Reactions</i> , <i>Curr Org Chem</i> , Vol 20 No. 15, July 2016, pp 1547-1566	1385-2728	Yes UGC-CARE List Group II (Web of Science: Science Citation Index Expanded)	2.180	02
3.	B. Garg, T. Bisht and Y.-C. Ling, <i>Colorimetric Recognition of Hydrazine in Aqueous Solution by a Bromophenol blue-tethered Ion-pair-like Ratiometric Probe</i> , <i>Spectrochim Acta A: Mole Biomol Spectrosc</i> , Vol 251, April 2021, pp 119456	1386-1425	Yes UGC-CARE List Group II (Web of Science: Science Citation Index Expanded)	4.098	02

4.	B. Garg, T. Bisht and Y.-C. Ling, <i>A Hydrosilylation Approach to Silicon-bridged Functional Dipyrromethanes: Introducing Silicon to a New Arena</i> , Chem Asian J, Vol 15 No. 1, Jan 2020, pp 66-71	1861-4728	Yes UGC-CARE List Group II (Web of Science Core Collection: Science Citation Index Expanded)	4.568	02
5.	B. Garg, T. Bisht and Y.-C. Ling, <i>Graphene-Based Nanomaterials as Efficient Peroxidase Mimetic Catalysts for Biosensing Applications</i> , Molecules, Vol 20 No. 8, Aug 2015, pp 14155-14190	1420-3049	Yes UGC-CARE List Group II (Web of Science: Science Citation Index Expanded)	4.411	02

16. Number of books and chapter in edited volumes/ books published and papers in National/ International conference –proceedings during last five years

S. No.	Title of the book	Name of the Publisher	Place of Publication	Year of Publication	ISBN
1.	Complex Magnetic Nanostructures Synthesis, Assembly and Applications Chapter Title Magnetic Graphene Nanocomposites for Multi-Functional Applications, Chapter 9, Pages 317-357	Springer, Springer International Publishing AG, Cham	Govt PG College Champawat	2017	Print ISBN: 978-3-319-52086-5 Online ISBN: 978-3-319-52087-2
2.	Synthesis of block polymer comprising visible and NIR absorbing components	2 nd National conference on Recent Advances in Sciences & Technology (NCRAS-2016)	Seemant Institute of Technology, Pithoragarh, Uttarakhand, India	2016	
3.	Photo-physical properties of block polymer comprising visible and near	3 rd National conference on Recent Advances in Sciences & Technology	Seemant Institute of Technology, Pithoragarh, Uttarakhand, India	2017	

	infrared absorbing component	(NCRAS-2017)			
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16. Invited lectures/ Resource Person/ paper presentation in Seminars/ Conferences [International (Within Country) / National/ State/ University] (last Five years)

S. No.	Title of the Lecture	Title of Conference / Seminar/ Workshop	Organized by	International/ National/ State/ University
1	Solid state NMR in industrial applications	New technological opportunities in networking and sciences	Seemant institute of technology Pithoragarh	International
2	Biomimetic oxidation by porphyrins	Challenges to ecosystem & environment towards sustainable development	Government P.G. College, Bilaspur, Rampur, U.P., India	International
3	Bis-cationic ionic liquid: tunable solvents for efficient CO ₂ capture	Contemporary issues of climate changes, conservation of biodiversity and natural and natural resources in Himalayan environments	Government P.G. College New Tehri	International
4	Two-dimensional nanomaterials	Concepts of physics and development of innovative teaching methods to inspire inquiring spirit among school and under graduate students	PNG Govt. P.G. College Ramnagar, Nainital	National
5	Magnetic grapheme for C-C coupling reactions	Recent trends in green chemistry and sustainability	Graphic Era University	National
6	Women empowerment in science and technology	The role of women empowerment in the development of higher education	Ramabai ambedkar Govt. degree college, Gajraula, Amroha, U.P	National
7	An efficient binding of carbodioxide with room temperature ionic liquids	Socioeconomic and environmental dimensions of globalization : issues, opportunities and challenges	P.N.G. Govt. Post graduate college, Ramnagar, Nainital	National

8	A move towards green or sustainable chemical approaches for effective CO ₂ reduction in the environment	Environmental sensitivity(with special reference to uttarakhand)	UPSA and UGC-HRDC , Kumuaun University Nainital	National
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17. Organization of Webinar : Organized National Webinar on “Role of nuclear magnetic spectroscopy in structure determination and beyond” 24 July 2020.