

CURRICULUM VITAE

DR.(MISS) PUSHPA JOSHI

Professor

Department of Chemistry

Kumaun University

Nainital - 263002(UTTARAKHAND)

(A) ACADEMIC CAREER

S. No	Examination Passed	Year	Board/University
1	High School	1973	U.P. Board, Allahabad
2	Intermediate	1975	U.P. Board, Allahabad
3	B.Sc. (Zoo., Bot., Chem.)	1977	Kumaun University, Nainital
4	M.Sc. (Organic Chemistry)	1979	Kumaun University, Nainital

Ph.D. (Natural Product Chemistry). 'Chemical Studies on some Aromatic-Medicinal Plants of Kumaon', 1984, Kumaun University, Nainital.

(B) RESEARCH FELLOWSHIPS/TEACHING EXPERIENCE:

1. 1st Nov. 1980 to 31st March 1981, Silver Jubilee Fellowship.
2. 1st April 1981 to 8th Nov. 1982, J.R.F. (UGC)

3. 9th Nov. 1982- 27th July 1998, Assistant Professor at Kumaun University, Nainital.
4. 27th July 1998- 1st May 2013, Associate Professor at Kumaun University.
5. 1st May 2013-till date, Professor at Kumaun University (I have been teaching Chemistry as a subject to undergraduate & postgraduate classes for the past forty years).

(C) RESEARCH ACTIVITIES

1. Training/Experience in Instrumentation

- i. IR Spectroscopy (Perkin Elmer-298)
- ii. UV/Visible Spectroscopy (Hitachi-220)
- iii. HPLC (Waters Associates)
- iv. GC (Varian Vista 6000 with DS-604)

2. Membership of Professional Societies

- i. Member of Central Himalayas Environment Association, Nainital.
- ii. Member of J. of Indian Chemical Society.
- iii. Member, Indian Science Congress.
- iv. Member of EOAI, Delhi.
- v. Member of MAPA, Gujarat.
- vi. Member of ACT, Mumbai.

3. Research Guidance to Students (Enrolled)

- i. Vandana Koshyari- 2017
- ii. Jyoti Darmwal – 2018
- iii. Neeraj Koranga– 2018
- iv. Kiran Pant- 2019
- v. Neelam Rawat- 2021
- vi. Shubham Kathuria -2022

4. Ph. Ds Awarded

- i. Tripti -2017
- ii. Chandan- 2019
- iii. Sapna -2022

5. Courses

- i. **Refresher Course** – University of Delhi, December 1990. “Instrumental Techniques in Chemistry- Code CH-13”.
- ii. **Orientation Course** - University of Lucknow, January 1991.
- iii. **Refresher Course** – University of Allahabad, XVI, 3rd Sept. to 23rd Sept. 2003.

(D) EXTRACURRICULAR ACTIVITIES

1. I served the National Services Scheme as Program Officer for two terms and attended the Orientation and Training Course held at Roorkee, University and National Integration Camp at Tirupati. Besides this organized many day and special camps.
2. I participated in a workshop on ‘Year of Scientific Awareness-2004’, conducted by PAHAL, Uttaranchal on 22nd-23rd May, 2004.
3. I also attended Rashtriya Bal Vigyan Congress Uttaranchal-2004, State Competition as a judge at G.G.I.C. Bazpur (U.S. Nagar) 27th-28th Nov. 2004.
4. Member of Executive Council, 2003- 2004.
5. Member of Academic Council, 2003-2005.
6. Member & Convener of Departmental Timetable Committee.
7. Member & Convener of Ph.D. course evaluation committee.

8. Invigilation, Flying Squad, Evaluation, internal and external in university practical & theory examinations.
9. Member of IYC Souvenir Publication 2013.
10. Member of Organizing Committee in National Seminar on ETC-BI, 2011.
11. Convener of Admission Committee, B.Sc 3rd year.
12. Guiding students for M.Sc (4th SEM), projects.

**(E) PAPERS IN
SYMPOSIA/CONFERENCES/PUBLISHED**

70 papers in Indian/ International Journals/ Meetings.

**PARTICIPATION IN SEMINARS/
SYMPOSIA/CONFERENCES**

1. Chemical constituents of essential oil of *Cymbopogon distans*(steud.) Wats,68th session of Indian science congress, BHU, Varanasi, 1980.
2. GC/MS analysis of some indigenous essential oils, National Symposium on 'Recent Trends in Chromatography, Chemistry Department Roorkee University, Roorkee, Oct. 1982.
3. Chemical composition of the essential oil of *Cymbopogon distans* (steud.) Wats. (Munsiyari), All India Symposium on recent advances in studies on essential oils. Sagar, Jan. 1985.
4. Terpenoid composition of the essential oil of an *Artemesia sp.* growing in higher elevation, All India Symposium on recent advances in studies on essential oils, Sagar, Jan. 1985.
5. Aromatic grasses of Kumaun Himalaya: Distribution, Chemotaxonomy, Nutritive value and Economic Importance, Regional Seminar on Medicinal Plants, Nainital, Dec 1986.

6. 31st Annual Convention & Symposium on “Improved Techniques of Production of Essential Oils Including Quality Control”, Essential Oil Including Quality Control”, Essential Oil Association of India, Nainital, March 1988.
7. 150th Anniversary Celebrations of the Royal Society of Chemistry (London), International Symposium on, “Current Trends in Chemical Research”. University of Delhi, Jan. 1991.
8. Drugs from Himalayan Herbs: Present status and future strategies, National Seminar, March 26-28, 1999, Department of Chemistry, Kumaun University, Nainital.
9. National workshop on Computers in Chemistry, Nov.22-24, 2007 at KU, Chemistry Dept. Almora, Uttarakhand.
10. Chemical composition of some medicinal plants of Kumaon. **P. Joshi** and G. Bisht, accepted oral presentation 5th UCOST, 2010.
11. Training Workshop on Green Chemistry Education. Nov.20, 2010, Dept. Of Chemistry, Green Chemistry Network Centre, University of Delhi.
12. National Seminar on Interface between Statistics Mathematics and Allied Sciences 2010, Almora.
13. National Training on Bioinformatics and its Applications in Drug Designing, March 22-23, 2011 at Dept. of Biotechnology, KU, Nainital.
14. National Workshop on Intellectual Property Rights and Patent Awareness, July 6, 2011 at Dept. of Biotechnology, KU, Nainital by UCOST, Dehradun and DST, New Delhi.
15. National Conference on Emerging Trends in Chemistry-Biology Interface, Nov. 3-05, 2011, Dept. of Chemistry, DSB Campus, KU, Nainital.
16. 6th USSTC, 2011 at SSJ Campus, Almora, 14- 16th Nov. 2011.

17. Training Program on Climate Change and Carbon Mitigation conducted by Biodiversity and Climate Change Division ICFRE, Dehradun, 6-10th Feb 2012 by DST.
18. Characterization of transesterification of algal lipids for biodiesel production. Pankaj Kumar, S. K. Mandotra, M. R. Suseela and **Pushpa Joshi**. International Conference on Chemistry and Materials, Prospects and Prospectives-2012. BBAU, Lucknow.
19. UCOST 2013 Paper presentation entitled A Comparative Study of Organic Carbon and Organic Matter of Tarai Soils of Uttarakhand.
20. Optimization of lipid extraction from freshwater microalgal biomass, Pankaj Kumar, M.R.Suseela, S.K.Mandotra & **Pushpa Joshi**, Symposium on Biotechnology & Stress Biology, of Algae & Cyanobacteria, Feb, 24th – 26th, 2014, BHU, Varanasi.
21. Studies on biosorption of Metsulfuron Methyl from Water by Leaves and Bark of *Cedrus deodar*, Garima Patni, **Pushpa Joshi**, Prakash Singh and Vivekanand accepted for poster presentation at ISC-2015.
22. Phytochemical analysis of essential oil from *Anaphalis busua*. Paridhi Bisht, **Pushpa Joshi** and M.Dhuni accepted for poster presentation at UCOST 2016.
23. Chemical composition of essential oil of *Micromeria biflora*, Paridhi Bisht, **Pushpa Joshi** and M.Dhuni, accepted for poster presentation at ISC 2016.
24. Two days National Seminar on “Plants and Environment” on 27th& 28th March 2017, at Department of Botany, Kumaun University, Nainital. Sapna, **Pushpa Joshi** and Manoj Dhuni.
25. Poster Presentation in 12th Uttarakhand State Science and Technology Congress (UCOST 2017-18) from 07-09 March 2018. Sapna, **Pushpa Joshi** and Manoj Dhuni.
26. Poster presentation in the Young Scientists’ Conference and presented work in the theme Frontier areas in science organized

- by Indian International Science Festival (IISF-2018), from 5th to 8th October 2018. Sapna, **Pushpa Joshi** and Manoj Dhuni.
27. Poster Presentation in International Conference on Global Perspective in Agricultural and Applied Sciences for Food and Environmental Security (GAAFES 2019) from 1-2 December 2019. Sapna, **Pushpa Joshi** and Manoj Dhuni.
 28. Oral Presentation in 2nd International Conference on “Energy Functional Materials and Nano-Technology & Sustainable Environment Management” (ICEFN & SEM-2019), from 24th-26th May, 2019. Sapna, **Pushpa Joshi** and Manoj Dhuni.
 29. Oral Presentation in 13th Uttarakhand State Science and Technology Congress (UCOST 2018-19) from 26th- 28th February, 2019. Sapna, **Pushpa Joshi** and Manoj Dhuni.
 30. Participated in Women Scientists and Entrepreneurs Conclave (WSEC) Organized by Indian International Science Festival (IISF-2019) from 5th to 8th November 2019.
 31. Poster Presentation “Phytochemical composition of the essential oil from aerial parts of *strobilanthes tomentosa* (Nees) from Uttarakhand, India and its Antibacterial activity.” Vandana Koshyari and **Pushpa Joshi**. National conference on climate change: its impact on Bio-Resources of the Himalayan Region (CCIBHR-2022) Organized by Department of Chemistry, SSMMUSSS Government Post Graduate College Dwarahat, Almora, Uttarakhand during June 2022.
 32. Phytochemical screening, in vitro antimicrobial and anti-inflammatory activity of *Osbeckia stellata*. Jyoti Darmwal and **Pushpa Joshi**. The 5th plant science researchers meet, in 2022 at Uttarakhand Open university campus, Haldwani.
 33. Triterpenoids from the Aerial part of *Skimmia laureola* and their biological activity. Jyoti Darmwal and **Pushpa Joshi**. National conference on climate change: its impact on Bio-Resources of the Himalayan Region (CCIBHR-2022) Organized by Department

- of Chemistry, SSMMUSSS Government Post Graduate College Dwarahat, Almora, Uttarakhand in June 2022.
34. Poster presentation on “Preliminary chemical analysis of *Parmotrema reticulatum* (Taylor) M. Choisy with reference to antioxidant activity. Kiran Pant, **Pushpa Joshi** and D.K. Upreti. International Conference on Multidisciplinary Approches in Lichenology (Hybrid mode) organized by CSIR-NBRI, Lucknow, September 2022.
 35. Oral Presentation “In vitro anti-inflammatory and anti-oxidant activity of *Galinsoga parviflora cav.* from Kumaon region, Uttarakhand.” Vandana Koshyari and **Pushpa Joshi**, at the International Conference on Medicinal Plants, Health and Quality-Life (ICMPHQL-2022). Organized by College the Pharmacy, Graphic Era Hill University, Bhimtal Campus, Uttarakhand in November 2022.
 36. Oral presentation on “Antioxidant activity and phytochemical screening of different solvents *Eranthemum pulchellum.*” Jyoti Darmwal and **Pushpa Joshi**, at the International Conference on Medicinal Plants, Health and Quality-Life (ICMPHQL-2022). Organized by College the Pharmacy, Graphic Era Hill University, Bhimtal Campus, Uttarakhand in November 2022.
 37. Poster presentation in National Conference on Food Technology & Nutrition: Enhancing Flavours, Health and Well Being Through Culinary Practices. Sapna and **Pushpa Joshi**. 25th February 2024.
 38. Excavating Forest Treasure: Synthesis of Biomass-Based Porous Activated Carbon Monolith for Supercapacitor Application. Shubham Kathuria, Pramod K. Singh, **Pushpa Joshi**, Pawan Singh Dhapola. 2nd International Conference on Energy Materials and Devices (ICEMD-2024) organized by Department of Physics, MMV, Banaras Hindu University (BHU), Varanasi from 19th -21st March 2024.

39. Bio-derived Carbon Electrodes with Tailored Properties for Sustainable and Eco-Friendly Advanced Supercapacitors. Neelam Rawat, **Pushpa Joshi**, Pramod K. Singh, Pawan Singh Dhapola. 2nd International Conference on Energy Materials and Devices (ICEMD-2024) organized by Department of Physics, MMV, Banaras Hindu University (BHU), Varanasi from 19th - 21st March 2024.
40. In-Vitro Antioxidant Activity of Some Indian Himalayan Macrolichens. Kiran Pant, **Pushpa Joshi**, Vikas Pant and D.K. Upreti. Uttarakhand State Science and Technology Congress 08-09 February 2024.

PAPER PUBLISHED

1. Terpenes from the essential oil of *Cymbopogon distans*, C.S. Mathela and **P. Joshi**, *Phytochemistry*, 20(12) 1981, 2770-2771.
2. Prospects of chemical utilization of plant of Himalayan region; **P. Joshi** and C.S. Mathela, *Himalayan Research and Development Journal*, 1(1) 1982, 31-34.
3. Chemical composition of essential oil of *Carum anethifolium* Benth., **P. Joshi**, A. K. Pant, C. S. Mathela and V. Dev.; *J. Indian Chem.. Soc.*, I XI, 1984, 896.
4. Chemical composition of the essential oil of *Pimpinella achilleifolia* Clark; H. Lohani, **P. Joshi**, A. K. Pant and C. S. Mathela, *Fitoterapia*, LVI(6), 1985, 351-354.
5. Constituents of essential oils from two varieties of *Cymbopogon distans*; A.B. Melkani, **P. Joshi**, A.K. Pant, C.S. Mathela and V. Dev, *Journal of Natural Products*, 48(6), 1985, 995-997.
6. Aromatic grasses of Kumaun Himalaya; Distribution, Chemotaxonomy, Nutritive Value And Economic Importance; C.S. Mathela, A.B. Melkani, **P. Joshi**, A.K. Pant And V. Dev. *J. Econ. Tax. Bot.*

7. Isolation and crystal structure of a novel dihemiacetal bismonoterpenoid from *Cymbopogon martini*, A. T. Bottinii, V. Dev, D. J. Garfagnoli, H. Hope, **P. Joshi**, H. Lohani, C. S. Mathela & T. E. Nelson, *Phytochemistry*, 26 (8), 1987, 2301-2302.
8. Chemical composition of the essential oil of *Conyza viscidula*, A. Pant, **P. Joshi**, A.B. Melkani, C.S. Mathela, A.K. Pant & A.K. Singh, *Fitoterapia*, L VIII (6) 1987, 419-420.
9. Sesquiterpena alcohols from *Hedychium spicatum* var. *acuminatum*; A.T. Bottini, D.J. Garfagnoli, L.S. Della Gado, V. Dev, S.T. Duong, C.G. Kelley, R. Keyer, R. Raffle, **P. Joshi** & C.S. Mathela, *Journal Of Natural Products*, 50(4), 1987, 732-734.
10. Terpenoid Composition of *Cymbopogon distans*; *F. munsiyariensis*, C.S. Mathela, C. Pande, A.B. Melkani and **P. Joshi**, *Herba Hungarica. Tom.*, 27(1), 1988.
11. Substituted furanyl compounds of *Perilla ocimoides*; C.S. Mathela, G.C. Shah, A.B. Melkani and **P. Joshi**, *J. Indian Chem. Soc.*, 66, 1989, 183- 184.
12. GC/MS study of oil of *Heracleum candicans* leaves, G. Bisht, S. Verma and **P. Joshi**, *J. of Indian Chem. Soc.*, 74, 1997, 820.
13. Chemical constituents and antimicrobial activity of *Asplenium dalhousiae*; S. Gupta, **P. Joshi**, A. Saxena, G. Bisht. *Himalayan Chem. and Pharma Bull.*, vol.20-21, 2004, p.7-14.
14. Usefulness of Biomaterial prepared from dry leaves of *Pinus gerardiana* in the removal of Nickel (II) from aqueous solution, Sudha Mathpal, **P. Joshi**, R. Loshali, B. Chandra, N. Chandra and N.D. Kandpal, *J. Chem. Pharma. Res.* 2011, 3(4), 452- 459.
15. Statistical Methods in Development and Validation in Experimental, S. Mathpal, **P. Joshi**, R. Loshali and D. K. Tamta. *Interface between Statistics, Mathematics and Allied*

Sciences National Seminar, Excel India Publishers, New Delhi, 2011, 182-186.

16. Some Physical Characteristics of Soils of Tarai Region of Uttarakhand (India). Part-1. Ruchi Pandey, **P. Joshi**, A. Adhikari and S.P.S. Mehta, R.J.E.A.S.2013, 141-145.
17. Chemical Characteristics of Some of the Soils of Tarai Region.Part-2. Ruchi Pandey, **Pushpa Joshi**, A. Adhikari and S.P.S. Mehta. Indian J. of Scholarly Research.2,2013,1-3.
18. Characterization of transesterification of freshwater microalgal oils. Pankaj Kumar, S. K. Mandotra, M. R. Suseela, Kiran Toppo and **Pushpa Joshi**. Energy Sources, Part- A: Recovery, Utilization, and Environmental Effects, 38:6, 857-864.
19. Adsorption of lead on red soil of Kumaon region of Uttarakhand. M.Dhuni, N.S. Bhandari and **Pushpa Joshi**, IASET, 1 (1) 2015, 51-54.
20. Chemical Characteristics of Red soil and White soil of Kumaon region of Uttarakhand. M. Dhuni, N.S. Bhandari, **Pushpa Joshi**, Ind.J. Computer and Mathematical Sciences 4(4), 2015, 1-4.
21. Phytochemical analysis of essential oil from *Anaphalis busua*, Paridhi Bisht, **Pushpa Joshi** and M. Dhuni. Journal of Chemical Engineering and Chemical Research 3(10), 2016.
22. Phytochemical analysis of essential oil from *Micromeria biflora*. Paridhi Bisht, **Pushpa Joshi**, and M. Dhuni. Journal of Chemical Engineering and Chemical Research 3(10), 2016.
23. Isolation, Characterization, and Anti-cancer Potential of Cytotoxic Triterpenes from *Betula utilis* bark. Tripti Mishra, Rakesh Kumar Arya, Sanjeev Meena, **Pushpa Joshi**, Baleshwar Meena, D.K. Upreti, T.S. Rana, Dipak Dutta, Mahesh Pal. PLOS ONE 11(7) 2016. DOI: 10.1371/journalpone.0159430
24. Chemical Composition of the Essential Oil of *Anaphalis margaritacea* from Munsyari, Pithoragarh, India. Chandan

- Ram, **Pushpa Joshi**, and Kundan Prasad. World Journal of Pharmaceutical Research, 2017. 6(14) 551-57. DOI: 10.20959/wjpr201714-9923.
25. Phytochemical Analysis of *Polygonum amplexicaule* essential oil from Pithoragarh, Uttarakhand, India, 2018. Chandan Ram, **Pushpa Joshi**, Kundan Prasad, Deepak Chandra, and Sapna. Journal of Pharmaceutics and Pharmacology, 6(1): 1-4.
 26. Chemical Composition of the Essential Oil of *Euphorbia Pilosa* from Munsyari, Pithoragarh, India. Chandan Ram, **Pushpa Joshi**, and Kundan Prasad. 2018. 3(3) 01-04.
 27. Ruchi Pandey, **Pushpa Joshi**, Alka Adhikari and S.P.S Mehta, 2019, The Macronutrients Status of Tarai Soils in Uttarakhand, India, *Canadian Journal of Clinical Nutrition*, 7. 27-42.
 28. Tripti Mishra, Preeti Chandra, Brijesh Kumar, Meena Baleshwar, **Pushpa Joshi**, Tikam Singh, Dalip Upreti and Mahesh Pal, 2020, Phytochemical profiling of the stem bark of *Betula utilis* from different geographical regions of India using UHPLC-ESI-MS/MS. *Analytical Science Advances*. 2. 497-504. 2020.
 29. Sapna, **Pushpa Joshi**, Kirti Singh, Vandana Koshyari, Manoj Dhouni, 2021, Comparative study of *In vitro* antibacterial activity of essential oil of two *Zingiberaceae* family species, *International Journal of Research in Pharmacy and Pharmaceutical Sciences*, 6(2), 40-42. **I.F 1. 8**
 30. Sapna, **Pushpa Joshi**, Kirti Singh, Vandana Koshyari and Manoj Dhouni, 2021, Chemical Profile of Essential Oil from *Cynoglossum zeylanicum*, *International Journal of Green and Herbal Chemistry*, 10(2B), 168-174. **I.F. 2.056**
 31. Sapna, Chandan Ram, Kirti Singh, Neelam Rawat, **Pushpa Joshi** and Manoj Dhouni, 2021, Phytochemical Composition of *Zingiber chrysanthum* Rosc. Rhizome Essential Oil and

Evaluation of Its Antibacterial and Antioxidant Potential, *Design Engineering*, Issue: 9, 5163 – 5175. **I.F. 1.41**

32. Ruchi Pandey, **Pushpa Joshi**, Alka Adhikari and SPS Mehta, 2022, The Contributions of Soil Organic Carbon, Total Nitrogen and C/N Ratio in Some of the Soils of Tarai Region of Uttarakhand in India, *Canadian Journal of Clinical Nutrition*, 10. 71-81.

BOOK CHAPTERS

1. Tripti Mishra, **Pushpa Joshi**, Mahesh Pal, and Lalita Joshi. Medicinally Important Local Spices of the Indian Himalayan Region. Chapter 2, pages 15-27. In: Modern Trends in Medicinal and Aromatic Plants. ISBN 978-93-91377-78-6. Rhizomes, Indu Book Services, New Delhi.2023.
2. Neelam Rawat, Sapna and **Pushpa Joshi**, and Nilofar Akhtar. Phytochemistry, Morphology and Biological Properties of Some Medicinal Plants of Genus *Cynoglossum*- a Review. Chapter-14, pages 233-250. In: Modern Trends in Medicinal and Aromatic Plants. ISBN 978-93-91377-78-6. Rhizomes, Indu Book Services, New Delhi.2023.
3. Kirti Singh, Manoj Dhouni and **Pushpa Joshi**. Biosorption: An Emerging Technique of Removing Heavy Metal Pollutants from Aqueous Streams. Chapter- 8. Sustainable Utilization and Conservation of Biological Wealth. ISBN 978-93-91377-78-6. Rhizomes, Indu Book Services, New Delhi 2023.



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