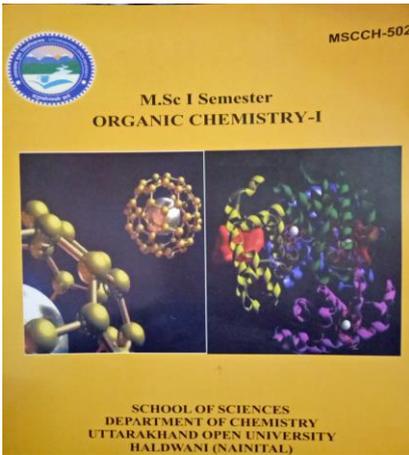


Curriculum Vitae

Full Name:	PROF. MAHESH CHANDRA PUROHIT			
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Education Qualification:	M. Sc PhD			
Teaching Experience	25Years (Professor: March 2022)		Research Experience	Years 32
Research Interest and Fields of Specialization				
<ol style="list-style-type: none"> 1. Natural Products Chemistry 2. Green Chemistry and Nanotechnology 				
Books:				
1. Organic Chemistry-I Edited by Dr. M.C. Purohit for M.Sc I sem, Uttarakhand Open University distance learning students.				
				

Editor: Member of Editorial Board- Journal of Mountain Research
Guest Editor: Journal of Indian Council of Chemist
Reviewer : Journal of Plant Science, Journal of Mountain Research

Member of Academic Institutions

1. Member Academic Council Shri Dev Suman University, Rishikesh- Tehri
2. Member Board of Studies , HNB Garhwal University

Membership of Scientific Organizations

1. Fellow of Indian Council of Chemist
2. Member Pharmaceutical Society of India
3. Member Chromatographic Society of India
4. Member Indian Science Congress Association
5. Member Asian Polymer Association

Research Supervision (No. of Ph.D. Degree Awarded/Submitted/Registered)

Awarded : 09
Submitted: 00
Registered: 03

Research Projects undertaken:

Title, Funding Agency, Total Cost, Completed/Ongoing:

1. Screening of plants for natural dyes Weaker section, IERP, GB Pant Institute of Himalayan Environment and Development, Ministry of Forest and Environment 2,76000/= (Completed), GBPI/IERP/99-2000/43/390. (completed)
2. Conservation and Cultivation of medicinal plants Training, Medicinal Plant Board, AYUSH, Ministry of Health and Family Welfare, 15,0000/= (Completed) Project No.NMPB/UA/06/2006-7 (completed)
3. Screening of Plant for natural dyes and development of low cost technique, 10,69000/= UGC 2011 to 2014 extended 2015 (Completed)
4. Green Synthesis of metallic nanoparticles 6,08600/= UCOST, 2021 (completed) 2024

MoU/LOI :

1. Uttarakhand Pollution Control Board. Providing facilities for spectroscopic analysis.

Administrative Experience

1. Senior Programme Officer of NSS (2011-2015 and 2016-19)
2. Assistant Superintendent of All type of Examination (2011 to 2019)
3. HOD of Chemistry from March 2025
4. Campus Director of BGR campus Pauri (time to time)
5. Deputy Chief Proctor, BGR Campus, Pauri (2023 -2025)
6. Coordinator , Study centre, Uttarakhand open university (2019 to till date)
7. Regional Director, Uttarakhand Open University, Pauri Region. (June 2024 to till date)

Selected Research Publications:

1. **M.C. Purohit**, G. Pant and M.S.M. Rawat, A betulinic acid glycoside from *Schefflera venulosa*, *Phytochemistry* **30(7)**, 2419 (1991).
2. **M.C. Purohit**, M.S.M. Rawat and G. Pant, Antimicrobial activity and phytochemical analysis of *Spiraea vestita*, *Fitoterapia* **LXIII (5)**, 461 (1992).
3. **M.C. Purohit**, M.S.M. Rawat, G.Pant, A.K. Nautiyal, J.Sakakibara and T. Kaiya, Amethylester of melilotoside from the sapwood of *Prunus cornuta*, *Phytochemistry* **32**, 431-32 (1993).
4. **M.C. Purohit**, M.S.M. Rawat and G. Pant Spermicidal activity and chemical analysis of *Schefflera venulosa*, *Fitoterapia* **LXIV (3)** 274 (1993).
5. A.K. Nautiyal, **M.C. Purohit** and G.Pant, Antifungal activity and Phytochemical analysis of bark of *Prunus jaquemontii*, *Fitoterapia* **LXV (2)** (1994).
6. Geeta Pant, **Mahesh C. Purohit**, Gareth A. Morris, Adom G.N. Halsted and Robert I.G. Thomsos, Structure elucidation and ¹H and ¹³C assignment of a pentasaccharide from *Agave Americana*, *Magnetic Resonance in Chemistry* **32**, 231-39 (1994).
7. **M.C. Purohit**, Antibacterial activity of rhizome of *Polygonum amplexicaulii*, *Fitoterapia* **LXVI (4)** 372 (1995).
8. C.B. Pande, **M.C. Purohit**, M.S. M. Rawat and G. Pant, Allelochemicals from the bark of *Prunus cornuta*, *J. Allelopathy* 289-292 (1996).
9. A. N. Purohit, Hemant Lata, S. Nautiyal and **M.C. Purohit**, Some characteristics of four morphological variants of *Podophyllum hexandrum*, *International Plant genetic resource news letter* **114**, 51-52 (1998).
10. **M.C. Purohit**, Raman Bahuguna, U.C. Maithani and A.N. Purohit, Variation in podophylloresin and podophyllotoxin in different population of *Podophyllum hexandrum*, *Current Science* , **77(8)** (1999).
11. Raman Bahuguna, **M.C. Purohit**, M.S.M. Rawat and A.N. Purohit, Qualitative and quantitative

- variations in alkaloids of *Aconitum* species from Garhwal Himalaya, *J.Pant Biology* **27(2)**, 179-183 (2000)
12. Pankaj Prasad and **M.C. Purohit**, Energy profile and effect of environment on quantity of active principle in *Rheum nobile* and *R. emodi* from Sikkim Himalaya, *Current Science*, **80(6)**,134-36 (2001).
 13. **M.C. Purohit**, U.C. Maithani and R.K. Joshi, Qualitative and quantitative variation in anthraquinone derivatives and quercetin glycoside of rheum species from Garhwal Himalaya, *Oriental Journal of Chemistry*, **Vol. 23(2)**, p 629-634 (2007)
 14. M.C. Purohit, Pranjali Purohit and Satish Sati, Optimization of Procedure for dyeing of wool and cotton fibers with natural dye isolated from *Rhododendron arboretum*, *Asian Journal of Chemical and Environmental research*, **Vol. 1 No. 1** p 13-17 (2008)
 15. P.P. Badoni, Prasana Bahuguna, Rakesh Raturi and **M.C. Purohit**, An Iridoidal Glycoside From the Root of *Solanum Pseudocapsicum*, *Asian Journal of Chemical and environmental research*, **Vol.2(1-2)**, 10-12 (2009).
 16. **Purohit M.C.** & Reena. Evaluation of Antimicrobial and Antiinflammatory activities of bark of *Jatropha Gossypifolia*, *World J. Of Science and Technology* 2011, **1(10)**: 01-05.
 17. Reena Purohit, Satish K. Singh, Asima Shaban, Rajesh Nautiyal, **M.C. Purohit** and Satish K. Verma, Immunomodulatory activity of *Madhuka longifolia*, *Der Pharmacia Sinica*, 2012 **3(1)**:153-155.
 18. *Shyamveer Singh & M.C. Purohit*,. Application of Eco-friendly Natural Dye on Wool fibers using Combination of Natural and Chemical Mordants. *Universal Journal of Environmental Research and technology*, 2012, 2(2), 48-55.
 19. Rakesh Joshi, **M.C. Purohit** & Shanti P. Joshi, Improvement of the traditional system of dyeing on wool fibres using eco-friendly natural dye. *J. Of Applicable Chemistry* 2013, **2(4)**, pp 841-49.
 20. Jyoti Kundal, Reena Purohit, Rajendra Singh and **M.C. Purohit**. Antimicrobial and Anti-oxidant Activities of Bark Extract of *Myrica esculanta*. *J. of Applicable Chemistry* 2013, **2(5)**: 1141-1146.
 21. *Shyamveer Singh & M.C. Purohit*, Evaluation of colour fastness properties of natural dye extracted from *Symplocos racemosus* (Lodh) on wool fibers using combination of natural and synthetic mordants. *Indian Journal of Fibre and textile Research*, **vol. 39**, p. 97- 101, 2014.
 22. *Jyoti Kundal, Pranjali Purohit and M.C. Purohit*, Optimization of procedure for the dyeing of cotton and wool fabrics with natural dye extracted from *Myrica esculanta* using different mordants. *Journal of Mountain research* **vol. 9**, p 83-92, 2014.
 23. *Shyamveer Singh & M.C. Purohit*, Dyeing of wool fabrics with extracted eco-friendly natural dyes from *Rhus parviflora* (Tung) using chemical mordants: comparison of fastness properties and colour strength with some mordants. *Chemical Science Transactions* **3** (3), 692 2014.
 24. Pranjali Purohit, Jyoti Kundal and **M.C. Purohit**, Optimization of Procedure for Dyeing of Cotton Fibers with *Rhododendron arboretum* Flowers using *Symplocos racemosa* leaves as mordant, *Journal of Applicable Chemistry* 2015, **4(6)** 1852-1857.

25. Jyoti Kundal, Shyamveer Singh and **M.C. Purohit**, Extaction of Natural Dye from *Ficus cunia* and dyeing of Polyester Cotton and Wool Fabrics Using Different Mordants With Evaluation of Colour Fastness Properties, *Natural product Chemistry and research*, 2016, **4(3)** 1-6.
26. Pranjali Purohit & **M.C. Purohit**, Optimization of procedure for dyeing of wool and cotton fibers with *Symplocos racemosa* leaves. *Journal of Applicable Chemistry*, 2016, **5(1)** 185-190.
27. Jyoti Kundal, Shyamveer Singh and **M.C. Purohit**, Effect of mordants and Evaluation of colour fastness properties of Polyester cotton and wool fabric dyed with leave extract of *Ficus cunia*. *International Journal of Natural products Research*, 2016, **6(2)**; 21-26
28. M.C. Purohit, Mahendra Singh, Reena Purohit and Goutam Kumar, Antimicrobial activity of Methanolic extract of bark of *Prunus cornuta*. *International Journal of Pharmaceutical Sciences and Research*, 2017, **8(8)**; 1000-05.
29. Pranjali Purohit and M. C. Purohit, Uses of *Rhus parviflora* leaves as natural dyes: Determination of optimum dyeing conditions and assessment of washing fastness on woolen sample in absence and presence of natural mordant *Symplocos racemosus* leaves. *Journal of Mountain Research*, 2018, **13**; 69-74.
30. Jyoti Kundal and M.C. Purohit, Application of biological active natural dye along with some synthetic mordants on wool surface, *International Journal of Advance Research in Science and Engineering*, 2018, **7(2)**, 100-106.
31. Mahendra Singh and M.C. Purohit, Anti-inflammatory activity of Methanolic extract of Roots of *Rumex obtusifolius*, *International Journal of Pharmaceutical Science and Research*, 2018, **9(8)**; 3519-3522.
32. Anuj Kandwal, Prajali Purohit, Arun K Khajuria, Gotam Kumar, M.C. Purohit and Niranjana Kumar Mandal, Synthesis of Zinc Oxide nanoparticles using leaf extract of *Ajuga parviflora* Benth.in Wall and their Characterization. *Journal of Pharmacognosy and Phytochemistry* 2019, **8(4)**, 493-497.
33. Anuj Kandwal, M.C. Purohit, Arun Kumar Khajuria and R.K. Joshi, Green synthesis Characterization and antimicrobial activity of Silver nano particle using leaf extract of *Ajuga parviflora* Benth. In wall. *Journal of Plant Archives* 2019, vol. **19(2)**, 943-949.
34. **M.C. Purohit**, Anuj Kandwal, Arun K. Khajuria, Mahender Singh and Rashmi Rawat, Antimicrobial activity of *Ajuga parviflora* leaf extract mediated zinc oxide nanoparticles, *Plant Archives* 2020, **Vol.20 (2)** pp 1627-1630.
35. **M.C. Purohit**, Mahender Singh, Gotam Kumar and Navneet Singh, Plant mediated green synthesis of silver nano-particles using *Rumex obtusifolius* leaf extract and their antimicrobial activity, *International Journal of Pharmaceutical Sciences and research* 2020, **vol. 11(9)**: 4534-4529.
36. **M.C. Purohit**, Jyoti Kundal and Pranjali Purohit Extraction of natural dyes from leaves of *Myrica esculenta* and dyeing of wool and cotton fibers using different mordants : determination of optimum dyeing conditions and assessment of colour fastness properties, *Plant Archives*

37. Pranjali Purohit, Mahesh Chandra Purohit, Anuj Kandwal and Rashmi Rawat, Dyeing of woolen fibers with *Rhododendron arboreum* flowers using *symplocos racemosa* leaves as mordant under optimum conditions **J. Mountain Res.** Vol. 15, (2020), 57-62.
38. **M.C. Purohit**, Navneet Singh, Gotam Kumar, Rashmi Rawat and Mahender Singh, Investigation of invitro Antioxidant potential of Methanolic extract of bark of *Prunus cornuta* and root of *Rumex obtusifolius*. *Plant Archives*, 2021 **vol. 21 (1)** : 82-87.
39. **M. C. Purohit**, Rashmi Rawat, Anuj Kandwal , A. R. Semwal and R. K. Joshi . Biosynthesis of Silver Nanoparticles using *Terminalia bellirica* Fruit Extract and Their Characterization, *J. Mountain Res.* 2021, vol 1(1)8.
40. **M.C. Purohit**, Anuj Kandwal, Reena Purohit, A.R. Semwal, Sama Parveen and Arun K. Khajuria, Antimicrobial activity of synthesized Zinc Oxide nanoparticles using *Ajuga bracteosa* leaf extract, *Asian Journal of Pharmaceutical Analysis*, 2021 vol.11 (4), 1-6.
41. Shyamvir Singh, **M.C. Purohit** and Naveen Kumar, A Novel phytoconstituent isolated and characterized from the leaves of *Rhus parviflora* Roxb, *Chemical Science Transactions* 2021, 10(2), 3842.
42. **M. C. Purohit**, Mahender Singh and Rashmi Rawat, Green synthesis of plant mediated silver nanoparticle using *Terminalia balarica* leaves extract. *J. of Mountain research* 2021, **vol.16(2)**, 161-167.
43. S.V. Singh, J.Kundal and **M.C. Purohit**, Extraction and Dyeing of Natural Dye from Tung leaves on cotton fabrics: Gamma ray assisted changes in colour strength and fastness properties, *Journal of Textile Association*, 2022, **vol 82(5)**, 274-279.
44. Singh S.V. and Purohit M.C., Extraction and Dyeing of Environmental friendly Natural dye from tung leaves on wool fabrics and optimization of procedure for dyeing using metallic mordants, *Research Journal of Chemistry and Environment*, 2022, **Vol 26 (10)** , 20-25.
45. Stuti Gupta, Shivani Jasrotia and **M. C. Purohit**, “Conservation, cultivation and sustainable use of high altitude medicinal and aromatic plants for the socio- economic development: A Review” in *Journal of Mountain Research*, (p ISSN: 0974-3030; e ISSN: 2582-5011), Vol 18 (1), June, 2023, 201-209. (**Web of science, UGC-CARE list**)
46. Stuti Gupta, Shivani Jasrotia, Anuj Kandwal, Rashmi Rawat, Nidhi, Vipul and **M.C. Purohit** “Green synthesis of silver nanoparticles using L. of *Pyracantha crenulata* and its anticancer activity on liver cancer” in *Journal of Mountain Research*, (P-ISSN: 0974-3030; E-ISSN: 2582-5011), Vol. 18 (2), 2023, 273-283. (**Web of science, UGC-CARE list**)

47. Rashmi Rawat, Anuj Kandwal, Reena Purohit, Arun K. Khajuria, Stuti Gupta and **M. C. Purohit** “Green synthesis of Zinc Oxide nanoparticles using *sapindus mukorossi* fruit extract, characterization and their antioxidant activity” in *Journal of Mountain Research*, (P- ISSN: 0974-3030; E-ISSN: 2582-5011), **Vol 18 (2)**, 2023, 25-32. (**Web of science, UGC-CARE list**)
48. Pratibha Sharma, Stuti Gupta, Shivani Jasrotia and **M.C. Purohit**, Green synthesis of silver nitrate metallic nanoparticles using *Azadirachita indica* bark extract characterization and their anticancer activity. *Journal of Mountain Research*, **Vol. 19(1)**, 2024, 183-191.
49. Naveen Kumar, Shyamveer Singh and **M.C. Purohit**, A novel yellow dye phytoconstituents from the leaves of *Rhus parviflora*, *J. Mountain Research*, **Vol 19(2)**, 2024, 235-242.
50. Stuti Gupta¹, Shivani Jasrotia¹, Shivani Jugran⁶, Shikha Syal¹, Vaanie Godbole², Anushka Pallavi³, Anuj Kandwal⁴, Reena Purohit⁵, and **M.C. Purohit¹** Biosynthesis And Characterization Of Gold Nanoparticles Using *Pyracantha Crenulata* Leaves And Evaluation Of Its Antimicrobial And Anticancer Activities. *International Journal of Environmental Science*, **vol. 11 (23)**, 2025, 2098-2114.
51. Anushka Pallavi, Santosh Sharma, **Stuti Gupta**, Bhavya Trivedi and **M.C. Purohit** “Transforming eggshell waste into functional food: Development of calcium fortified oats energy bar for a sustainable future” in *Environment Conservation Journal*, (ISSN: 0972-3099), Vol 26 (4), 2025, 2278-5124. (**Scopus**)
52. **M.C. Purohit**, Shikha Sayal, Reena Purohit, Anti-inflammatory & Anti-microbial activities of the bark extract of *Jatropha gossypifolia* and isolated compound –Tripalmitoleine, *J. Mountain Res.* P-ISSN: 0974-3030, E-ISSN: 2582-5011 Vol. 20(2), (2025), 307-318 .
53. Nidhi, Vipul, Shikha, Stuti Gupta and **M.C Purohit**, Preliminary Phytochemical Screening of Methanolic Extract of *Rumex hastatus* roots, *J. Mountain Res.* P-ISSN: 0974-3030, E-ISSN: 2582-5011, Vol. 20(2), (2025), 282-289
54. Shikha, Stuti Gupta, Rahul Dev and **Dr. M.C. Purohit** “Biogenic Synthesis and Comprehensive Characterization of Silver Nanoparticles from “*Oryza punctata*” Extract: pH-Dependent Optimization and Precursor Concentration Analysis” in *Journal of Applicable Chemistry*, (ISSN: 2278-1862), Vol. 15, No. 1, 2026 pp. 29-43.
55. Stuti Gupta, Reena Purohit, Shikha Syal, Sonali Purohit, Anuj Kandwal, Archana Bachheti, Rakesh Kumar Bachheti, Limenew Abate Worku, **M.C. Purohit** “Bioinspired gold nanoparticles synthesized from *Persicaria capitata* leaves and their antimicrobial and anticancer activities” *Discover nano.* (**Accepted**) (**SCIE indexed and Scopus**)

Scientific Reports

- 1 R.K. Joshi, P.P. Deorari, **M.C. Purohit** and S.P. sati, Phytochemicals at a Glance Part-1 Flavonoids, *Chemical weekly*, **November 22**, 201-203 (2005).
- 2 R. K. Joshi, P.P. Deorari, **M.C. Purohit** and S.P. sati, Phytochemicals at a Glance Part- 2 Xanthones, *Chemical weekly*, **November 29**, (2005).
- 3 R.K. Joshi, Shanti P Joshi and **M.C. Purohit**, Phytochemicals at a Glance Xanthones, *Chemical weekly* **October 2**, (2007).

Part of Book:

1. **M.C. Purohit**, Conservation and Cultivation Strategy of Medicinal and Aromatic Plants in Uttarakhand, *Uttarakhand Statehood: Dimension of Development*, Indu Publishing Company, New Delhi, 313-321 (2000).

Conference/Symposium/Workshop during last Six years

Attended/Presented Paper/Invited Talk/Keynote Address/Session Chair, Title of event, place, date, year

- ▶ Delivered a talk on natural dye procedure optimization of dyeing of wool and cotton fibers using different mordants in an international conference of **International Academy of Physical Sciences** organized by Dept. of mathematics and Computer Sciences, Kumaun university, Nainital held during 17-19 oct. 2016.
- ▶ Delivered a talk on applications of natural dyes in national conference on science and technology organized by **Indian Science congress Association Haridwar chapter** held during 20-22 Nov 2016.
- ▶ Delivered a talk on “Dyeing of wool synthetic mordants” in **8th conference of Indian Science Congress Association (Haridwar Chapter)** organized by Department of Mathematics and Computer sciences, Kumaun University, Nainital, during Oct 14-15, 2017.
- ▶ Delivered a talk on dyeing of wool fibers..... natural mordants. **9th Conference of Indian Science Congress Association (Haridwar Chapter)** organized by Department of Biological sciences, G.B. Pant University of Agriculture and Technology, Pant nagar during Oct. 13-14, 2018.
- ▶ Delivered a talk as a resource person on “Continuous Evaluation of Quality Education & Role of IQAC in Higher Education in a national workshop, organised by IQAC, Govt P.G. College Dakpathar, Dehradun, during 19-20 Feb 2019.

- ▶ Delivered a lecture on Green thesis, characterization and antimicrobial activity of silver nanoparticles using extract of *Ajuga parviflora* in a National Conference on recent advances in natural product chemistry and nanotechnology organized by Department of chemistry, HNBGU, Srinagar, during 9-10 September 2019.
- ▶ Delivered an invited talk on Dyeing of wool with herbal dye development in a 2nd National conference of Science & Technology for rural development organized by Department of chemistry, Maharshi Dayanand university, Rhtak during 14-15 october, 2019.
- ▶ Delivered an invited talk on Dyeing of wool with herbal dye from plant sources and strengthen traditional system of dyeing for rural development in a National Conference on Promoting the advancement of applied sciences organized by Department of Mathematics, HNBGU, SRT campus, Tehri during 22-23 october, 2019.
- ▶ Delivered an invited talk on Antiinflammatory and antimicrobial activities of a cyclic peptide-curcacycline isolated from *Jatropha gossifolia* in a National Conference on Science & Technology: Rural Development organized by Indian Science Congress Association: Haridwar Chapter, Department of Chemistry&Physics, Gurukul Kangari Vishwavidhyaya- Haridwar, during 15-16 Feb 2020.
- ▶ Delivered an invited talk in the one day national e-conference on recent advances in chemical sciences organized by Department of Chemistry, University of Lucknow, Lucknow, on 15 June 2021
- ▶ Delivered an oral presentation in International virtual Conference on Frontiers in Chemical Sciences organized by Department of Chemistry, Mohan Lal Sukharia University, Udaipur – Rajasthan on 25 June 2021
- ▶ Delivered a talk as resource person in the one day National seminar on Recent trends on Organic Chemistry, organized by Department of Chemistry, Indira Gandhi Sr. College CIDCO, Nanded, Maharashtra, July 23, 2022.
- ▶ Delivered a talk on Anti cancer avtivity Nanotechnology in a annual conference of Indian council of chemist organized by Department of Chemistry Agra University, Agra during 28-30 December 2022.
- ▶ Delivered a talk on recent trends in material chemistry in an international conference organized by Department of Chemistry, Dibrugarh University, Assam during 1-3 march 2023.
- ▶ Delivered a talk on Natural dyes isolated from plant sources in a national conference, organized by department of Chemistry, MLS University, Udaipur, Rajasthan during 5-6 January 2024.
- ▶ Delivered a talk on Isolation and characterization in APA international conference organized by Asian Polymer Association during 13-15 October 2025,

Udaipur Rajasthan, India

- ▶ Served as a Panelist for poster evaluation in APA International Conference on Polymers for Advanced Technology During 13-15 October 2025
- ▶ Served as a chairperson of technical session APA International Conference on Polymers for Advanced Technology During 13-15 October 2025

