Bio-Data

Name:	**Dr. Abha Shukla**
Present Position:	Associate Professor
Address:	Department of Chemistry, Kanya Gurukul, Gurukula Kangri (Deemed to be University), Haridwar-249407, Uttarakhand, India.
Email:	abha.shukla@gkv.ac.in
Brief Academic Profile:	M.Sc., Ph.D., P.G.D.C.A.
Field of Specialization:	Organic Chemistry
Teaching Experience:	19 Yrs.
Research Experience:	27 Yrs.
Industrial Experience:	05 Yrs.
Research Field:	Phytochemistry and Environmental Chemistry
Research Papers:	68 [**Annexure I**]
Book Chapters:	04 [**Annexure II**]
Seminars/Conferences Attended:	35
Research Project Completed (Financed by UCOST):	01 [**Annexure II**]
Membership of Society/s:	03 (i) Life Fellow, Indian Chemical Society, Kolkata. (ii) Life Fellow, Indian Association of Chemistry Teachers. (iii) Life Fellow, Indian Science Congress Association Haridwar Chapter.
No. of Students Guided for Ph.D. (Awarded/Registered):	10

Ph.D. Thesis Awarded: 08

(i) **Ravindra Kumar** (2015): "Synthesis and Biological Evaluation of Thiazolidinones and Azetidinones as Potential Antimycobacterial Agents".

(ii) **Anupriya Adhikari** (2015): "Synthesis and Characterization of Bifunctional Chelating Agents and Their Application in Developments of Targeted Molecular Imaging".

(iii) **Swati Vats** (2016): "Phytochemical Investigation and Pharmacological Evaluation of *Reinwardtia indica* and *Dracaena reflexa* of Dehradun Region for Biological Activities".

(iv) **Ritu Tyagi** (2018): "Phytochemical Investigation and Biological Evaluation of *Casearia tomentosa* of Dehradun Region".

(v) **Amanpreet Kaur** (2020): "Phytochemical Investigation and Pharmacological Analysis of *Ehretia acuminata* R. Br.".

(vi) **Anchal** (2021): "Phytochemical Analysis and Pharmacological Evaluation of *Boehmeria rugulosa* of Rishikesh Region".

(vii) **Priyanka Pokhriyal** (2022): "A Green Approach Towards Phytochemical and Pharmacological Study of *Ficus subincisa*".

(viii) **Supriya Dubey** (2024): "Integrated Green Chemical Approach of Phytochemical and Pharmacological Evaluation of *Heterospathe elata* and *Borassus Flabellifer*".

Ph.D. students Registered: 02

(i) **Palak Kansal**: "An Efficient Green Approach Towards Phytochemical and Pharmacological Study of *Ficus drupacea* and *Ficus rumphii* of Uttarakhand".

(ii) **Varnika Sharma**: "Valorization of *Aegle marmelos* Fruit Shell and *Brassica Oleracea*

waste through Phytochemical Profiling with Pharmacological and Other Applications".

Annexure I

Research Papers

1. Palak Kansal, Abha Shukla, Anti-diabetic and Anti-inflammatory activities of Various Green Solvent Extracts of Ficus drupacea Leaves, Research J. Pharm. and Tech., Vol. 18(2): February 2025, pp. 619-624. DOI: https://doi.org/10.52711/0974-360X.2025.00092 (SCOPUS)
2. Rishi Kumar Shukla, Kishan Prajapati, Deepak Painuly, Abha Shukla, Swati Vats, Steroid (novel) and flavonoid from Litchi chinensis, and their molecular docking against Spro and Mpro of SARS-CoV-2, and ADME analysis, Journal of Molecular Structure, February 2025, Vol. 1323, pp. 140578, DOI: https://doi.org/10.1016/j.molstruc.2024.140578 (SCOPUS & WOS) (Elsevier)
3. Supriya Dubey, Abha Shukla, Rishi Kumar Shukla, Ajay Kumar Nutritional value, phytochemical content, and pharmacological screening of Borassus flabellifer L. fruits, Natural Product Research, January 2025 (online). DOI: https://doi.org/10.1080/14786419.2025.2453511(SCOPUS & WOS) (Taylor & Francis)
4. Abha Shukla, Palak Kansal, Rishi Kumar Shukla, Comprehensive nutritional, anti-nutritional, ICP-MS and FTIR profiling of Ficus rumphii leaves: a potential source for dietary enhancement, Natural Product Research, January 2025 (online). DOI: https://doi.org/10.1080/14786419.2025.2453508 (SCOPUS & WOS) (Taylor & Francis)
5. Kishan Prajapati, Rishi Kumar Shukla, Abha Shukla, Zinc Oxide Nanorods from Prunus domestica L.: Bio-Assisted Synthesis, Characterization, Antioxidant and Cytotoxic Activities, Indian Journal of Biochemistry and Biophysics, January 2025, Vol. 62, pp. 78-87, DOI: http://dx.doi.org/10.56042/ijbb.v62i1.12810
6. Abha Shukla, Palak Kansal, Traditional Uses, Medicinal Properties and Phytoconstituents of Some Indian Ficus Species: A Review, International Journal of Biology Pharmacy and Allied

Sciences, December 2024, Vol. 13(12): pp. 6267-6281. DOI: https://doi.org/10.31032/IJBPAS/2024/13.12.8502 (WOS)

7. Kishan, Rishi Kumar Shukla, Abha Shukla, Pankaj Budhlakoti. Therapeutic potentials of characterized isolate from column chromatography by GC-MS and molecular docking of principle active of Prunus domestica L. Indian Journal of Chemistry. Vol. 63, July 2024, 692-700
8. Abha Shukla, Palak Kansal, Supriya Dubey, Rishi Kumar Shukla, Mahendra Pal Singh Parmar, Wild edible Ficus fruits of Uttarakhand, India: a natural remedy towards malnutrition and human health enrichment, Natural Product Research, May 2024 (online). DOI: http://dx.doi.org/10.1080/14786419.2024.2352877 (SCOPUS & WOS) (Taylor & Francis)
9. Palak Kansal, Abha Shukla, and Rishi Kumar Shukla, Lipidomic Profiling and Pharmacological Activities of Ficus drupacea Oil: Comparative Study Between Conventional vs. Green Solvent, Chem. Biodiversity, Vol. 21(4), February 2024, e202302124, pp. 1- 12. DOI: https://doi.org/10.1002/cbdv.202302124 (SCOPUS & WOS) (WILEY)
10. Supriya Dubey, Abha Shukla, Anti diabetic and Anti-inflammatory activity of Green Solvent Extracts of Heterospathe elata fruits, Research J. Pharm. and Tech., Vol. 17(1): January 2024, pp. 163-168. DOI: 10.52711/0974-360X.2024.00026
11. Abha Shukla, Supriya Dubey, Rishi Kumar Shukla, Ajay Kumar, Swati Vats and Priyanka Pokhriyal, A Comparative Study and Characterization of Green Solvent and Hexane Extracted Bioactive lipids from Heterospathe elata fruit, Biomedical & Pharmacology Journal, Vol. 16(4), December 2023, pp. 2041-2050. DOI: https://dx.doi.org/10.13005/bpj/2780
12. Ajay Kumar, Abha Shukla, Supriya Dubey, Curcuma aromatica Salisb.: An Update on Its Chemical Profile and Biological Activities, National academy Science Letters, Vol. 47(4), July 2023, DOI: http://dx.doi.org/10.1007/s40009-023-01326-8
13. Supriya Dubey and Abha Shukla, Rishi Kumar Shukla, Green synthesis, characterization, and biological activities of Zn, Cu monometallic and bimetallic nanoparticles using Borassus flabellifer leaves extract, Current Chemistry Letters Vol. 12, 2023 pp. 799–812 DOI: 10.5267/j.ccl.2023.4.002.

14. Supriya Dubey and Abha Shukla, Rishi Kumar Shukla, Metabolomic Profile by GC/MS and Antioxidant, Antidiabetic and Anti-Inflammatory Activities of Green Solvent Extracts of Heterospathe elata Leaves Chem. Biodiversity, 2023. DOI: https://dx.org/10.1002/cbdv.202300340
15. Kishan, Shukla RK, Shukla A, Chandra H, Nutritive value, phytochemical screening, total phenolic, in-vitro biological activities and ICP-MS analysis of prunus domestica L. Leaves, IJBPAS, Vol.12 No.5, May 2023 pp 2283-2294, ISSN:2277-4998, SCOPUS
16. Ravi Kant, Rishi Kumar Shukla, Abha Shukla, Vineet Kumar Vishnoi and Neelesh Babu, An experimental assessment of antimicrobial Property of phytochemical derivatives Extracted from the peach (prunus persica l. Batsch) Leaves, Rasayan J. of Chemistry, Vol. 15, No.3, September 2022, pp1888-1893, ISSN: 0974-1496, SCOPUS
17. Kishan, Rishi Kumar Shukla, Abha Shukla, Sahil Kumar, Characterization of phytochemicals by GC-MS, in-vitro biological assays and micronutrient analysis by ICP-MS of prunus domestica L. seeds, Plant Science Today, Vol.9 No.4, October 2022 pp1058-1065, ISSN:2348-1900 (Online), SCOPUS
18. Kishan, R. K. Shukla, A. Shukla and R. Singh, Proximate analysis, phytochemical screening, Total phenolic content and in-vitro antioxidant Potential of prunus domestica l. (seed coat, Rasayan J. of Chemistry, Vol. 15, No.1, January - March 2022, pp239-250, ISSN: 0974-1496 e-ISSN: 0976-0083, SCOPUS
19. Priyanka Pokhriyal, Amanpreet Kaur, Abha Shukla, Soniya Dhiman, and Himanshu Gupta, Biocompatible Zinc Nanoparticles Synthesis from Ficus subincisa for a Sustainable Tomorrow: Characterization and Therapeutic Applications, Russian Journal of Bioorganic Chemistry, Vol. 50, No. 2,2024, pp. 408–417. 1478-6419
20. Supriya Dubey, Abha Shukla, Antidiabetic and Anti-inflammatory activity of Green Solvent Extracts of Heterospathe elated fruits, Research J. Pharm. and Tech., Vol. 17(1): January 2024, PP 163-168. 0974360X
21. Abha Shukla, Priyanka Pokhriyal, Rishi K. Shukla and Amanpreet, A Green and Facile Approach for Antidiabetic and Anti-Inflammatory Potency for Ficus Subincisa Fruit INDIAN DRUGS Vol 58 No 08 AUGUST 2021, pp:68-74, ISSN:0019-462X
22. Amanpreet Kaur, Abha Shukla and Rishi Kumar Shukla, In vitro antidiabetic and anti-inflammatory activities of the bark of Ehretia acuminata Indian Journal of Natural Products

and Resources, Vol. 12(4), December 2021, pp. 538-543, ISSN: 0976-0512 (Online) SCOPUS

23. A. Shukla, P. Pokhriyal A desirability approach for Antidiabetic and Anti-inflammatory efficacy of Ficus subincisa bark Research J. Pharm. and Tech, Vol 15No.4, April 2022, pp: 0974-360X (Online)
24. Shukla A., Choudhary A., Kaur A., Shukla R.K., Isolation and identification of two triterpenoids from ethyl acetate extract of bark of Boehmeria rugulosa, Journal of pharmacy and technology 14(3),2021scopus.
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27. Shukla R.K., Nandan, K., Shukla A., Kaur A., Phytochemical analysis and Nutritive Value of Bomba ceibalinn. (petals) Journal PlantArchives,20(1),1201-1206,2020, Scopus.
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31. Shukla A., Kaur A., Shukla R.K. and Choudhary A., Comparative Evaluation of Antioxidant Capacity, Total Flavonoid and Phenolic content of Ehretia acuminata R. Br. fruit, Research J. pharmacy&Technology,12(4)1811-1814, 2019.Scopus
32. Shukla A., Kaur A. and Shukla R.K., Comparative Evaluation of Abts, Dpph, Frap, Nitric Oxide Assays for Antioxidant Potential, Phenolic & Flavonoid Content of Ehretia acuminata R. Br. Bark International Research Journal of Pharmacy, 9 (12), 100-104,2018. Scopus.

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Annexure II

Books Chapters Published

1. Research and Review in Agronomy Vol. 5., Weser Books Germany, 2024-2025, ISBN: 978-3-96492-315-8.
2. Recent Advances in Chemical Sciences Vol. 2., Weser Books Germany, 2024-2025, ISBN: 978-3-96492-525-1.
3. Recent Developments in chemistry and Biochemistry Research Vol. 2., BP international West Bengal India, 2023-24, ISBN: 978-81-972325-2-7.
4. Sustainable Utilization and Conservation of Biological wealth, Indu Book Services Pvt. Ltd. New Delhi, 2023-24, ISBN: 978-93-91377-88-5.

Research Project Completed

1. Wild edible fruits of *Ficus* genus as a contribution to sustainable development: A phytochemical and pharmacological analysis from Uttarakhand region. UCOST Dehradun, (Tenure: 2 Years).