

**Dr MANISHA
NIGAM**



Address:

Department of Biochemistry; School of Life Sciences;
H.N.B. Garhwal University (A Central University)
Srinagar (Garhwal), Uttarakhand-246174, India.

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Personal Information:

Name: Dr. Manisha Nigam

Designation: Assistant Professor

Email: m.nigam@hnbgu.ac.in;
anandmanisha23@gmail.com

Department: Biochemistry

Campus: Birla/Chauras

Cell: +919958004965

Educational Qualifications:

Ph.D., Allahabad University/C.D.R.I. Lucknow, 2010

Current Position

Assistant Professor Stage III, Dept. of Biochemistry H.N.B. Garhwal (Central) University,
Garhwal, Uttarakhand- 246174

Areas of Interest/ Specialization

1. Cancer Biology
2. Oxidative Stress
3. Natural plant products

Teaching Experience:	>10 Years	Research Experience:	20 Years
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Publications:

1. Mishra, A. P., Nigam, M., Namboozee, J., Salau, V. F., Olofinson, K. A., Iriti, M., & Matsabisa, M. G. (2023). GC-MS Analysis, Antioxidant, and Antidiabetic Properties of Methanol Extract of *Annona muricata* L. Leaves-An In vitro and In silico Study. *Current Organic Chemistry*, 27(17), 1531-1541 (**Impact Factor: 2.226**)
2. Nigam M., Mishra A.P., Deb V.K., Dimri D.D, Tiwari V, Bungau S.G., Bungau A. F., Radu A.F. Evaluation of the association of chronic inflammation and cancer: Insights and

implications. *Biomedicine & Pharmacotherapy* 2023; 164, 115015
<https://doi.org/10.1016/j.biopha.2023.115015> (**Impact Factor: 7.4**)

3. Nigam D, Muthukrishnan E, Flores-López LF, Nigam M, Wamaita MJ. Comparative Genome Analysis of Old World and New World TYLCV Reveals a Biasness toward Highly Variable Amino Acids in Coat Protein. *Plants*. 2023; 12(10):1995. <https://doi.org/10.3390/plants12101995> (**Impact Factor: 4.6**)
4. Mishra, A.P.; Swetanshu; Singh, P.; Yadav, S.; Nigam, M.; Seidel, V.; Rodrigues, C.F. Role of the Dietary Phytochemical Curcumin in Targeting Cancer Cell Signalling Pathways. *Plants* 2023, 12, 1782. <https://doi.org/10.3390/plants12091782> (**Impact Factor: 4.6**)
5. Jennifer N, Mishra AP, Nigam M, Devkota HP, Paudel KR, Matsabisa MG. Bioactive Compounds from the Plants of the *Elaeodendron* Genus and Their Biological Activities—A Review. *Applied Sciences*. 2022; 12(24):12618. <https://doi.org/10.3390/app122412618> (**Impact Factor: 2.8**)
6. Bhandari, M., Singh, R.K., Laishevcev, A., Mohapatra, T.M., Nigam, M., Mori, E., de Lacerda, B.C.G.V., Coutinho, H.D.M. and Mishra, A.P., 2022. Revisiting Scrub typhus: A neglected tropical disease. *Comparative Immunology, Microbiology and Infectious Diseases*, 101888. (**Impact factor 2.268**)
7. Nigam, M., Panwar, A. S., & Singh, R. K. Orchestrating the Fecal Microbiota Transplantation: Current Technological Advancements and Potential Biomedical Application. *Frontiers in Medical Technology*, 69 (2022) (**Impact factor 1.179**)
8. Bisht S., Nigam M., Kunjwal S.S., Sergey P., Mishra A.P. and Sharifi-Rad J. Cancer Stem Cells: From an Insight into the Basics to Recent Advances and Therapeutic Targeting Stem cells international 2022, 9653244 (2022) (**Impact factor 5.443**)
9. Olatunde, A., Nigam, M., Singh, R.K. *et al.* Cancer and diabetes: the interlinking metabolic pathways and repurposing actions of antidiabetic drugs. *Cancer Cell Int* **21**, 499 (2021). <https://doi.org/10.1186/s12935-021-02202-5> (**Impact factor 6.429**)
10. Mishra AP, Saklani S, Parcha V, Nigam M, Coutinho HDM. Antibacterial activity and phytochemical characterisation of *Saussurea gossypiphora* D. Don. *Arch Microbiol*. 2021 Jul 22. doi: 10.1007/s00203-021-02494-1. Epub ahead of print. PMID: 34292346. (**Impact factor 2.55**)
11. Budakoti M, Panwar AS, Molpa D, Singh RK, Büsselberg D, Mishra AP, Coutinho HDM, Nigam M. Micro-RNA: The Darkhorse of cancer. *Cellular Signalling* 2021 : 83, 109995. (**Impact factor 4.3**)
12. Das, G., Shin, H. S., Leyva-Gómez, G., Prado-Audelo, M., Cortes, H., Singh, Y. D., Panda, M. K., Mishra, A. P., Nigam, M., Saklani, S., Chaturji, P. K., Martorell, M., Cruz-Martins, N., Sharma, V., Garg, N., Sharma, R., & Patra, J. K. (2021). *Cordyceps* spp.: A Review on Its Immune-Stimulatory and Other Biological Potentials. *Frontiers in pharmacology*, *11*, 602364. (**Impact factor 5.9**)

13. Bahare Salehi, Javad Sharifi-Rad, Natalia Martins, Manisha Nigam, Abhay Prakash Mishra, Dmitry Alexeevich Konovalov, Valeriya Orobinskaya, Ibrahim M Abu-Reidah, Wissam Zam, Farukh Sharopov, Tommaso Venneri, Raffaele Capasso, Wirginia Kukuła-Koch, Anna Wawruszak, Wojciech Koch. Phytosterols: from preclinical evidence to potential clinical applications. *Frontiers in Pharmacology* 2021, 11, 1819. **(Impact factor 5.9)**
14. Salehi B, Mishra AP, Nigam M, Karazhan N, Shukla I, Dadasiewicz AK, Sawicka B, Głowacka A, Darwish MSA, Tarawneh AH, Gadetskaya AV, Cabral C, Salgueiro L, Victoriano M, Martorell M, Docea AO, Abdolshahi A, Calina D, Sharifi-Rad J. *Ficus* plants: State of the art from a phytochemical, pharmacological, and toxicological perspective *Phytotherapy Research* 2020, 35(3), 1187-1217 **(Impact factor 5.8)**
<https://doi.org/10.1002/ptr.6884>
15. Mishra AP, Devkota HP, Nigam M, Adetunji CO, Srivastava N, Saklani S, Shukla I, Azmi L, Shariati MA, Coutinho HDM, Khaneghah AM. Combination of essential oils in dairy products: A review of their functions and potential benefits *LWT - Food Science and Technology* 2020, 133, 110116 (Impact factor **4.9**)
16. Sharifi-Rad M, Anil Kumar NV, Zucca P, Varoni EM, Dini L, Panzarini E, Rajkovic J, Tsouh Fokou PV, Azzini E, Peluso I, Prakash Mishra A, Nigam M, El Rayess Y, Beyrouthy ME, Polito L, Iriti M, Martins N, Martorell M, Docea AO, Setzer WN, Calina D, Cho WC and Sharifi-Rad J. Lifestyle, Oxidative Stress, and Antioxidants: Back and Forth in the Pathophysiology of Chronic Diseases. *Frontiers in Physiology* 2020, 11:694. (Impact factor **4.56**)
17. Salehi, B., P. Mishra, A., Nigam, M., Kobarfard, F., Javed, Z., Rajabi, S., Khan, K., Ahsan Ashfaq, H., Ahmad, T., Pezzani, R., Ramírez-Alarcón, K., Martorell, M., C. Cho, W., Ayatollah, S., Sharifi-Rad, J. (2020). Multivesicular liposome (DepoFoam) in human diseases. *Iranian Journal of Pharmaceutical Research*, 19(2), 9-21. doi: 10.22037/ijpr.2020.112291.13663 **(Impact factor 1.9)**
18. Nigam M, Mishra AP, Devkota AA, Dirar AI, Hassan MM, Adhikari A, Belwal T, Devkota HP. Fruits of *Terminalia chebula* Retz.: A review on traditional uses, bioactive chemical constituents and pharmacological activities *Phytotherapy Research* 2020, 34(10), 1-19 **(Impact factor 5.8)**
19. Salehi B, Konovalov DA, Fru P, Kapewangolo P, Peron G, Ksenija MS, Cardoso SM, Pereira OR, Nigam M, Nicola S, Pignata G, Rapposelli S, Sestito S, Kumar NVA, Cádiz-Gurrea ML, Segura-Carretero A, Mishra AP, Sharifi-Rad M, Cho WC, Taheri Y, Setzer WN, Sharifi-Rad J. Areca catechu—From farm to food and biomedical applications. *Phytotherapy Research* 2020, 34(9), 1-19 **(Impact factor 5.8)**
20. Salehi, B.; Azzini, E.; Zucca, P.; Maria Varoni, E.; V. Anil Kumar, N.; Dini, L.; Panzarini, E.; Rajkovic, J.; Valere Tsouh Fokou, P.; Peluso, I.; Prakash Mishra, A.; Nigam, M.; El Rayess, Y.; El Beyrouthy, M.; N. Setzer, W.; Polito, L.; Iriti, M.; Sureda, A.; Magdalena Quetglas-Llabrés, M.; Martorell, M.; Martins, N.; Sharifi-Rad, M.; M. Estevinho, L.; Sharifi-Rad, J. Plant-Derived Bioactives and Oxidative Stress-Related Disorders: A Key Trend

towards Healthy Aging and Longevity Promotion. *Applied Sciences* **2020**, *10*, 947 (**Impact Factor: 2.6**)

21. Naseri R, Navabi SJ, Samimi Z, Mishra AP, Nigam M, Chandra H, Olatunde A, Tijjani H, Morais-Urano R, Farzaei MH Targeting Glycoproteins as a therapeutic strategy for diabetes mellitus and its complications *DARU J Pharm Sci* (2020) *28*, 333-358. <https://doi.org/10.1007/s40199-020-00327-y> (**Impact Factor: 4.0**)
22. Salehi B, Sahrifi-Rad J, Seca AML, Pinto DCGA, Michalak I, Trincone A, Mishra AP, Nigam M, Zam W and Martins N Current Trends on Seaweeds: Looking at Chemical Composition, Phytopharmacology, and Cosmetic Applications *Molecules* 2019, *24*(22), 4182; <https://doi.org/10.3390/molecules24224182> (**Impact Factor: 4.9**)
23. Nigam M, Atanassova M, Mishra AP, Pezzani R, Devkota HP, Plygun S, Salehi B, Setzer WN and Sharifi-Rad J Bioactive Compounds and Health Benefits of *Artemisia* Species Natural Product Communications 2019: *14*(1):1–17 DOI: 10.1177/1934578X19850354 (**Impact Factor: 0.98**)
24. Nigam M, Suleria H.A.R., Farzaei M.H., Mishra A.P. Marine anticancer drugs and their relevant targets: a treasure from the ocean. *DARU Journal of Pharmaceutical Sciences* 2019, *27*(1):491-515, <https://doi.org/10.1007/s40199-019-00273-4> (**Impact Factor: 4.0**)
25. Saklani S, Rawat Y, Plygun S, Shariati MA, Nigam M, Maurya VK, Yadav A, Mishra AP Biological activity and preliminary phytochemical screening of *Terminalia alata heyne ex roth*. *J Microbiol Biotech Food Sci* 2019 : *8* (4) 1010-1015
26. Nigam M, Mishra AP, Salehi B, Kumar M, Sahrifi-Rad M, Coviello E, Iriti M, Sharifi-Rad J Accelerated ageing induces physiological and biochemical changes in tomato seeds involving MAPK pathways. *Scientia Horticulturae* 2019, *248*, 20-28 (**Impact Factor: 3.4**)
27. Waheed M, Hussain MB, Javed A, Mushtaq Z, Hassan S, Shariati MA, Khan MU, Majeed M, Nigam M, Mishra AP, Heydari M., Honey and cancer: A mechanistic review *Clinical Nutrition* 2019 ,*38* (6):2499-2503. (**Impact Factor: 7.4**)
28. Salehi, B.; Mishra, A.P.; Nigam, M.; Sener, B.; Kilic, M.; Sharifi-Rad, M.; Fokou, P.V.T.; Martins, N.; Sharifi-Rad, J. Resveratrol: A Double-Edged Sword in Health Benefits. *Biomedicines* 2018, *6*(3), 91. (**Impact Factor: 4.7**)
29. Nigam M, Saklani S, Plygun S, Mishra AP. Antineoplastic potential of the *Vitex* species: An overview *Boletín latino americano y del caribe de plantas medicinales y aromáticas* (2018),*17*(5): 492-502 (**Impact Factor: 0.90**)
30. Kumar, M., Yusuf, M.A., Nigam, M. An Update on Genetic Modification of Chickpea for Increased Yield and Stress Tolerance. *Molecular Biotechnology* 2018, *60*(8):651-663 (**Impact Factor: 2.69**)
31. Mishra, A.P., Salehi, B., Sharifi-Rad, M., Pezzani R., Kobarfard F., Sharifi-Rad J., Nigam M. Programmed Cell Death, from a Cancer Perspective: An Overview *Molecular Diagnosis and Therapy* 2018, *22*: 281-295. (**Impact Factor: 4.0**)
32. M Kumar, MA Yusuf, PS Chauhan, M Nigam *Pseudomonas putida* and *Bacillus amyloliquefaciens* alleviates the adverse effect of pesticides and poise soil enzymes activities in chickpea (*Cicer arietinum* L.) rhizosphere. *Tropical plant research* 2017, *4* (3):405-418.

33. Saklani, S.; Mishra, A.P.; Chandra, H.; Atanassova, M.S.; Stankovic, M.; Sati, B.; Shariati, M.A.; Nigam, M.; Khan, M.U.; Plygun, S.; Elmsellem, H.; Suleria, H.A.R. Comparative Evaluation of Polyphenol Contents and Antioxidant Activities between Ethanol Extracts of *Vitex negundo* and *Vitex trifolia* L. Leaves by Different Methods. *Plants* 2017, 6, 45-55. **(Impact Factor: 4.6)**
34. Singh, N., Nigam, M., Ranjan, V., Garg, V.K., Sharma, S., Chaturvedi, R., Shankar, R., Kumar, S., Sharma, R., Balapure, A.K., Rath, S.K. Resveratrol as an adjunct therapy in cyclophosphamide-treated MCF-7 cells and breast tumor explants *Cancer Science* 2011, 102, 1059-1067. **(Impact Factor: 6.5)**
35. Nigam, M., Singh, N., Ranjan, V., Zaidi, D., Nigam, D., Sharma, R., Gupta, D.K., Sundaram, S., Balapure, A. K. Centchroman mediated apoptosis involves cross-talk between extrinsic/intrinsic pathways and oxidative regulation. *Life Sciences* 2010, 87: pp. 750-758 **(Impact Factor: 6.7)**
36. Nigam, M., Ranjan, V., Srivastava, S., Sharma, R., Balapure, A. K. Centchroman induces G0/G1 arrest and caspase-dependent apoptosis involving mitochondrial membrane depolarization in MCF-7 and MDA MB-231 Human Breast Cancer Cells. *Life Sciences* 2008, 82:577-590 **(Impact Factor: 6.7)**
37. Singh, N., Nigam, M., Ranjan, V., Sharma, R., Balapure, A. K., Rath, S.K. Caspase-mediated enhanced apoptotic action of Cyclophosphamide and Resveratrol treated MCF-7 cells. *Journal of Pharmacological Sciences* 2008, 109: 473-489. **(Impact Factor: 3.3)**

Chapters in Edited Books:

1. Kumar R., Harilal S., Gautam A., Nigam M., Mishra A.P., "Phytopharmaceuticals as an Alternative Treatment against Parasites" In: *Parasitic Infections: Immune Responses and Therapeutics*. Eds. Mishra A.P & Nigam M., Wiley, 2023, Pages 251-302, ISBN: 978-1-119-87802-5
2. Olatunde A., Ogunro O., Tijjani H., Obidola S. M., Akpaki M.A., Yadav A., Nigam M., Mishra A.P., "Immune Response against Protozoan Parasites" In: *Parasitic Infections: Immune Responses and Therapeutics*. Wiley, 2023, Pages 73-99, ISBN: 978-1-119-87802-5
3. Nigam M., Mishra A.P. Indian Medicinal Plants and Their Potential Against Coronaviruses. In: *Sustainable Uses and Prospects of Medicinal Plants*. Eds. Kambizi L., Bvenura C., CRC Press, 2023, pages 145-159, ISBN: 9781032071732
4. Saklani S., Saklani D. P., Nigam M., Sinisgalli C., Mishra A.P., 'Traditional healthcare practices of herbal drugs in Uttarakhand Himalaya, India' In: *Sustainable Uses and Prospects of Medicinal Plants*. Eds. Kambizi L., Bvenura C., CRC Press, 2023, pages 387-412, ISBN: 9781032071732
5. Singh D, Nigam M, Mishra A.P., Devkota H.P., Saxena J. *Cyphomandra betacea* (Cav.) Sendtn In: *Himalayan Fruits and Berries Bioactive Compounds, Uses and Nutraceutical Potential*. Eds. Belwal T., Bhatt I., Devkota H. Academic press (Elsevier), 2023, pages 99-110, ISBN: 978-0-323-85591-4

6. Mishra A.P., Nigam M., Devkota H., Matsabisa M. G., *Dolomiaea costus* (Falc.) Kasana and A. K. Pandey: Ethnomedicinal Uses, Bioactive Chemical Constituents, and Pharmacological Activities. In: Medicinal Plants of the Asteraceae Family. Eds. Devkota H., Aftab T., Springer nature, **2022**, pages 153-172, ISBN: 978-981-19-6079-6
7. Mishra A.P., Azmi L., Nigam M., Urano R.P.M., Yadav A., and Matsabisa M.G. Rutaceae: An Insight into Healthcare and Clinical Applications. In: Phytochemical and Pharmacological Investigation of the Family Rutaceae . Eds. Rauf A., Suleria H.A.R., Shah S.M.M. Apple academic press. **2022**, ISBN: 9781774913710
8. Mishra A.P., Srivastav N., Singh A., Nigam M., Pezzani R., Egbuna C., Uche C.Z., Khan J. The Role of Nutraceuticals as Food and Medicine, Types and Sources. In: Food and Agricultural Byproducts as Important Source of Valuable Nutraceuticals. Eds. Egbuna C., Sawicka B., Khan J. Springer nature, **2022**, Pages 1-18, ISBN 9783030987596
9. Nigam M. Phytomedicine: Scope and current highlights. In: Preparation of Phytopharmaceuticals for the Management of Disorders. Eds. Egbuna C., Mishra AP., Goyal MR. Academic Press, Elsevier (USA), 2021, Pages 39-54, ISBN 9780128202845
10. Nigam M. "Physiological Experiments" In: Laboratory exercise (MSCZO505), Ed. Tiwari H.C., Uttarakhand Open University, Haldwani, Uttarakhand, 2021, pp. 170-196, ISBN 9789390845590
11. Nigam M. "Biochemistry Experiments" In: Laboratory exercise (MSCZO505), Ed. Tiwari H.C., Uttarakhand Open University, Haldwani, Uttarakhand, 2021, pp. 197-222, ISBN 9789390845590
12. Nigam M. "Chemical Equilibrium" In: Biochemistry (MSCZO504), Ed. Bubber P., Uttarakhand Open University, Haldwani, Uttarakhand, 2021, pp 1-34. ISBN 9789390845514
13. Nigam M. "Enzymes" In: Biochemistry (MSCZO504), Ed. Bubber P., Uttarakhand Open University, Haldwani, Uttarakhand, 2021, pp 35-76. ISBN 9789390845514
14. Nigam M. "Vitamins" In: Biochemistry (MSCZO504), Ed. Bubber P., Uttarakhand Open University, Haldwani, Uttarakhand, 2021, pp 77-112. ISBN 9789390845514
15. Nigam M. "Carbohydrates" In: Biochemistry (MSCZO504), Ed. Bubber P., Uttarakhand Open University, Haldwani, Uttarakhand, 2021, pp 113-139. ISBN 9789390845514
16. Nigam M. "Vitamins" In: Physiology and Biochemistry (BSCZO301), Ed. Tiwari H.C., Uttarakhand Open University, Haldwani, Uttarakhand, 2019, pp 282-321. ISBN 9789390845620
17. Nigam M. "Enzymes" In: Physiology and Biochemistry (BSCZO301), Ed. Tiwari H.C., Uttarakhand Open University, Haldwani, Uttarakhand, 2019, pp 345-386. ISBN 9789390845620

Book Editor:

1. Parasitic Infections: Immune Responses and Therapeutics. Editors Mishra A.P., **Nigam M.**, Wiley, 2023, Pages 384, ISBN: 978-1-119-87802-5

Popular Article:

1. *Awareness is the key in combating "Cancer"*. Newsletter, H.N.B. Garhwal University (A Central University) Srinagar (Garhwal), Uttarakhand-246174, India. Vol. 2, Issue 1, Page 3, January-June 2022

Total Citations: \approx (3900)

Total Impact Factor \approx 160

Total Number of Research Publications:

Research Papers- 37

Chapters in Edited Books- 17

h-index = 24

i10 index= 28

Awards & Scholarships:

- **"Outstanding Scientist Award-2022"** for outstanding contribution in "Natural plant products based therapy" on the occasion of "National Seminar on Conservation of Biodiversity" held on 2nd and 3rd September 2022 by Society for Conservation of Natural Resources (Registration No. 150200031/2021), Kolkata, West Bengal 700136.
- "Fox Asia conference & Awards 2020 by Social Talks (Registration No. 228/2019) on 1st Feb. 2020 for **"Research excellence award in field of Biochemistry"**
- P.C. Dandiya best poster presentation Award.
- Awarded CSIR-SRF (Oct 2006-Sept 2009)
- Awarded C.S.I.R. (NET) - JRF of December 2003 (Oct 2004- Oct 2006)

Editorial Board Member:

- International Scientific Journal
<http://www.scientific-journal.com/index.html>
- Current trends in Pharma and Pharmaceutical sciences
www.medcavepublications.org
- European journal of biomedical research
<https://www.ejbmr.com>

Reviewer of International Journals

Discover Oncology, Springer nature

Molecular and Cellular Biochemistry, Springer nature.

Journal of Herbal Medicine, Springer

Human Cell, Springer Heidelberg

Journal of Plant Biochemistry and Biotechnology, Springer

Heliyon, Elsevier

Food and Humanity, Elsevier
Microbial Pathogenesis, Elsevier
Scientia Horticulturae, Elsevier
Saudi Pharmaceutical Journal, Elsevier
Evidence-Based Complementary and Alternative Medicine, Hindawi
Critical Reviews in Food Science and Nutrition, Taylor and Francis
Applied Biochemistry and Biotechnology, Humana Press
Cells, MDPI
International Journal of Molecular Sciences, MDPI
Healthcare, MDPI
Vaccines, MDPI
Metabolites, MDPI
Molecules, MDPI
Plants, MDPI
Biomed, MDPI

Reviewed a Book proposal titled “*Next generation resveratrol: Health and Nutraceutical Attributes*”, CRC Press, Taylor and Francis Group (April 2022).

Project Grants:

- *Recipient of the UGC-BSR Research Start-Up-Grant. under the project titled “Influence of the Ageing on Biochemical and Physiological changes in Plants: Insight into the interlinking of Redox Regulation” worth Rs. 6 lakhs*

Work Experiences/ Courses:

Teaching and Research Experience:

Assistant Professor: Stage III (19th Aug 2022 onwards)

Assistant Professor: Stage II (19th Aug 2017- 19th August 2022)

Assistant Professor: Stage I (19th Aug 2013- 19 Aug 2017)

1. Doctoral Research at CDRI, in the thesis title “Study of Molecular mechanism of Novel antiestrogen Centchroman Induced Apoptosis in MCF-7 and MDA-MB 231 Human Breast Cancer Cell lines.” with **Dr. Anil K Balapure**, Sc. F (Sr. Principal Scientist), Tissue & Cell Culture Unit, Central Drug Research Institute (CDRI), Lucknow, from 2006 – 2010.
2. 6-month experience as Junior Unichem Fellow in the Project entitled “**Expression of industrially important peptides through transgenic technology** with **Dr. Rakesh Tuli**, at N.B.R.I., Lucknow from March, 2004 to Sep, 2004.

Research Guidance:

- Supervised 8 candidates in IIC -HNBGU Online Summer Internship Program 2021 organised by Institute Innovation Cell, Hemvati Nandan Bahuguna Garhwal University from June 01, 2021- July 26, 2021.

- **M.Sc. (Dissertation):** Thesis Awarded- 24; Enrolled (06)
- Ph.D. – 01 (enrolled)

Academic services:

At HNB Garhwal University:

1. Paper Setter for M.Sc. & B.Sc. (Biochemistry) Examination.
2. Paper Setter for B.Sc. Naturopathy and Yoga Examination.
3. Paper Setter for B.Sc. & M.Sc. biotechnology Examination.
4. Paper Setter for M.Sc. Microbiology Examination
5. Paper Setter for B.Sc. Horticulture Examination.
6. Paper Setter for M.Sc. & Ph.D. Entrance Examinations

At other universities:

1. Item writer for Subject: Biology, CUET-UG 2023 for National Testing Agency (NTA)
2. Paper Setter for M.Sc. Biotechnology at SBS University, Doon.
3. Paper Setter and Practical examiner for B.Sc. and M.Sc. Zoology for Uttarakhand Open University, Haldwani.
4. Paper Setter for B.Sc. Microbiology at Sri Dev Suman Uttarakhand University, Badshahithol, Tehri, Uttarakhand
5. Paper Setter for B.Sc. Biochemistry at Maa Shkumbhari University, Punwarka, Saharanpur, Uttar Pradesh 247120

Courses:

1. Two-week course on “NEP Orientation & Sensitization Program” organised by Malaviya Mission Teacher Training Centre, HNB Garhwal University (A Central University), Srinagar (Garhwal) (16th -31th Jan 2024).
2. Two-Week Interdisciplinary Refresher Course in “**Advanced Research methodology**” organized by Teaching Learning Centre, Ramanujan College, University of Delhi In collaboration with in collaboration with Girraj Government College, Nizamabad (Telangana University) (23rd Jan – 06th feb, 2023) with “A+” grade.
3. Two-Week Interdisciplinary Refresher Course in “**Advanced concepts in developing MOOCS**” organized by Teaching Learning Centre, Ramanujan College, University of Delhi In collaboration with Davangere University Davangere, Karnataka (06 – 20 October, 2021) with “A+” grade
4. One week course on **Research methodology** organized by Faculty development centre, HNB Garhwal University (A Central University), Srinagar (Garhwal) (10th -16th Dec 2018).
5. One Day National Workshop on “Intellectual Property Rights” organized by **Department of Pharmaceutical Chemistry**, Chauras campus, HNB Garhwal University, Srinagar (17th Nov 2018)

6. Refresher course in Life Sciences and Biotechnology (08 Oct- 02 Nov 2018) from **JNU, HRDC**, New Delhi with “A” Grade.
7. Two days training Programme on ‘**Ethics & Values in Public Governance.**’ By Mr. Krishna Mohan, IAS (Retd.), a DoPT certified National Trainer/ Facilitator on ‘Ethics’ organized by the Internal Quality Assurance Cell (IQAC), HNB Garhwal University (A Central University), Srinagar (Garhwal) (**May 28-29, 2017**)
8. Refresher Course from Lucknow University, (9th Dec-31st Dec 2016) with “A” grade.
9. Orientation course (24th Aug -15th Sept 2015) from **JNU, HRDC**, New Delhi with “A” Grade.

Administrative Experience:

1. Head, Dept of Biochemistry since 1st Feb 2021 to till date.
2. Departmental Purchase committee, Member (2014-20) and Convenor (2021-2023)
3. Member of the University's Newsletter Committee since 12-05-23
4. Member of the "IQAC Committee", HNB Garhwal University since 13-10-21 to 12-10-23.
5. Member of the Committee for "Academic and Administrative Audit for NAAC" since 14-02-23.
6. Member of "IQAC-TASK GROUPS" (Criterion: Research , Innovations and extension) constituted for preparing SSR for applying the next cycle of NAAC.
7. NIRF coordinator for Institution's Innovation Council (IIC), HNBGU
8. Nominated by Hon'ble Vice chancellor as a "Observer" for the examination conducted by National Testing Agency (NTA).
9. Director, Journal Club, Dept of Biochemistry since 1st Feb 2021 to till date.
10. Incharge Head, Dept of Biochemistry since Aug 2014 to Jan 2019.
11. Chairperson (Ex-officio) of the Board of studies, Department of Biochemistry, HNBGU since 13-10-21 to till date.
12. Member of Board of Studies of Department of Biochemistry, H.N.B. Garhwal University, (2015-20)
13. Member of Board of Studies of Department of Biotechnology, H.N.B. Garhwal University, Member (since 17-08-2022 to 16-08-2023)
14. Member of Anti Ragging squad since August 2019
15. Member of Institutional Ethical Committee (I.E.C; ICMR) w.e.f. 15-05-2019 to 14-05-2021.
16. N.S.S. Programme officer, Birla campus Unit, H.N.B. Garhwal University since January 2018-2021.
17. Member of Anti-Discrimination committee, May 2016 to April 2018.
18. Assistant Proctor since (2016-till date)
19. Member of the University Inspecting Team visiting different Colleges in connection with the extension of their affiliations.
20. Team Incharge (Science faculty) for the selection of students for the annual cultural fest programme 2017-8
21. Member of Selection Committee for Guest Faculty appointment in the Department of Biochemistry, HNBGU (since 2014).
22. Election Officer of Student Union Election (2014-15, 2016-17).
23. Member of UG (2016, 2017, 2019, 2020, 2021, 2022) Admission Committee.
24. Convener of PG Admission Committee (2016-18, 2021, 2022) & Member of PG Admission Committee (2019).
25. Member of Registration Committee of National conference on Microbes in Extreme Environment: Diversity and Translational Applications (MEEDTA-2015) organized by HNB Garhwal University (A Central University), Srinagar(Garhwal), (October 30-31, 2015)

List of Abstracts presented at Symposia/Conferences:

INTERNATIONAL:

1. Participated in “**Indo Israel Symposium on Women in STEM-2022**” held on 29-30th March 2022, organized by Department of Applied Sciences, The Northcap University, India in collaboration with Department of Chemical Engineering, Ariel University, Israel.
2. Oral presentation at: International conference on “Aerosols, Air Quality, and Climate Change (AAC-2018) on Himalayan Region of Uttarakhand” in the Department of Physics, School of Science, HNBGU, Srinagar (Garhwal), India on 21-23 October, 2018, titled “Environmental pollution and breast cancer: An insight into the linkage”
Nigam M
3. Oral presentation at: International conference on “Research advancements in Pharmaceutical and clinical sciences” at LTR Institute of Technology (Pharmacy), Kurali, Merrut, India, 4-5th Oct 2017 titled “**Influence of the Ageing on antioxidant enzymes activity in Tomato**”.
Nigam M
4. Oral presentation at: **International Conference on Advances in Biomedical Engineering, Cancer Biology, Bioinformatics and Applied Biotechnology (ABECBAB-2016) Organized by “Krishi Sanskriti” on 21st may, 2016 at Jawaharlal Nehru University, New Delhi** titled: Caspase inhibition restrains Centchroman induced apoptosis in Human Breast Cancer cells.
Nigam M*, Sharma R, Balapure AK
5. Oral presentation at: **International Conference on Advances in Biomedical Engineering, Cancer Biology, Bioinformatics and Applied Biotechnology (ABECBAB-2015) Organized by “Krishi Sanskriti” on 25th and 26th July, 2015 at Jawaharlal Nehru University, New Delhi** titled: Role of the transcription-independent mitochondrial p53 pathway to Centchroman induced apoptosis in Human Breast Cancer Cells (HBCCs) cells.
Nigam M*, Sharma R, Balapure AK
6. Poster & Abstract at: “**5th International Conference on Stem Cells and Cancer (ICSCC-2014): Proliferation, Differentiation, and Apoptosis**” at JNU Convention Centre, New Delhi, (8 - 10 November, 2014); titled; Bax, Bak and Cytochrome c mediated mitochondrial signaling during Centchroman mediated Apoptosis **Nigam M***, Sharma R, Balapure AK
7. Poster & Abstract at: **41th Annual Conference on the Indian Pharmacological Society & International Conference on Translational Pharmacology 2008 at AIIMS, New Delhi, INDIA**; titled “Role of MAPKs and oxidative stress in Centchroman induced apoptosis.” Zaidi D, **Nigam M***, Ranjan V, Sharma R, Balapure AK
8. Poster & Abstract at: **41th Annual Conference on the Indian Pharmacological Society & International Conference on Translational Pharmacology 2008 at AIIMS, New Delhi, INDIA (18-20 December 2008)**; titled “Centchroman Potentiates mitochondrial events leading to oxidative insult in human breast cancer cells.”Ranjan V, **Nigam M***, Zaidi D, Sharma R, Balapure AK (**Winner of P.C. Dandiya Award.**)
9. Poster & Abstract at: **12th International Conference on the Interface of Chemistry-Biology in Biomedical Research (ISCBC-2008), Feb 20th-24th, 2008** at Birla Institute of Technology and Science, Pilani-333031 (Rajasthan), India; titled “Involvement of p53, p21 and Bcl2 Family members in Centchroman induced apoptosis in MCF-7 and MDA MB-231”

Human Breast Cancer Cells". **Manisha Nigam***, Vishal Ranjan, Neetu Singh, S Srivastava, R Sharma, AK Balapure.

NATIONAL

1. Invited lecture on the topic "Nutrition and Stress: Impact on Health" in "Sanjeevani: Health Awareness Outreach cum Workshop" organize by Institute Innovation Cell (Ministry of Education, Government of India Initiative), Hemvati Nandan Bahuguna Garhwal University (A Central University) Srinagar, Garhwal Uttarakhand in collaboration with Devbhoomi Vigyan Samiti supported by Uttarakhand Science Education and Research Centre (USERC), Dehradun on 24th Feb 2024.
2. Invited lecture as "Resource Person" on the topic "Understanding the links between agriculture and health: A Biochemical Perspective" in one day Farmer workshop/Field conference organised by Department of Horticulture, Hemvati Nandan Bahuguna Garhwal University (A Central University) Srinagar, Garhwal Uttarakhand on September 02, 2022.
3. Invited talk on the topic "Basics of review writing" in Summer internship programme (June 01, 2021 – July 26, 2021) of Institute Innovation Cell (Ministry of Education, Government of India Initiative), Hemvati Nandan Bahuguna Garhwal University (A Central University) Srinagar, Garhwal Uttarakhand on June 08, 2021
4. Invited talk on the topic "Cancer signaling pathways" in Summer internship programme (June 01, 2021 – July 26, 2021) of Institute Innovation Cell (Ministry of Education, Government of India Initiative), Hemvati Nandan Bahuguna Garhwal University (A Central University) Srinagar, Garhwal Uttarakhand on June 08, 2021
5. Participated in the webinar on "Cancer therapies: Promises and Challenges in the COVID Era organised by Sree Narayana College, Kollam as a part of AGORA-2021 on 14th May 2021.
6. Participated in 40th Annual conference of Indian Association for Cancer Research organised by Institute of Life Sciences, Bhubaneshwar on 1st March 2021.
7. Participated in "Safe Campus Programme" organized by Association of Indian Universities and Martha Farrell Foundation held from 25th February -27th February 2021
8. Invited talk on "**National Service Scheme and Proctor Board**" as a resource person in Induction programme for organized by Department of Physical Education H.N.B. Garhwal University (A Central University), Srinagar (Garhwal), Uttarakhand on 4th Jan 2021
9. Participated in **Online Lecture Series** on "**Academic Leadership in Higher Education During and After COVID-19 Pandemic**" organized by Faculty development centre, HNB Garhwal University (A Central University), Srinagar (Garhwal) on **22-26 June, 2020**.
10. Chaired a session in International webinar on "Microbial Diversity: from health to environment" organised by Department of Botany and Microbiology, H.N.B. Garhwal University (A Central University), Srinagar (Garhwal), Uttarakhand in collaboration with Association of Microbiologists of India (AMI), Srinagar (Garhwal) Unit, India on 27th June 2020.

11. Participated in Two Day webinar on “Tackling COVID-19 through traditional ways” organised by Department of Botany and Microbiology, Gurukul Kangri Vishwavidyalaya, Haridwar, Uttarakhand on 19-20 June 2020.
12. Participated in Two Day webinar on “Gender Equality & Women’s Rights” jointly organized by Anti-Discrimination Cell, Women study centre and Cell for combating sexual harassment of women, H.N.B. Garhwal University (A Central University), Srinagar (Garhwal), Uttarakhand on 9th June, 2020
13. Participated in One Day webinar on “Food security in the times of pandemic” organized by Department of Biotechnology, H.N.B. Garhwal University (A Central University), Srinagar (Garhwal), Uttarakhand on 16th May, 2020.
14. Participated in the Webinar Lecture Series on the topic of “Covid 19 and Ayurveda” held on April,28, 2020, organized by Amity Institute of Indian System of Medicine, Health & Allied Sciences Domain, Amity University Uttar Pradesh, Noida -INDIA
15. Invited talk on “**National Service Scheme**” as a resource person in Induction programme organized by Department of Physical Education, H.N.B. Garhwal University (A Central University), Srinagar (Garhwal), Uttarakhand on 4th Sept 2018
16. Invited Lecture on “**Cancer and Immunization**” on “World Immunology Day”, sponsored by Indian Immunology Society, New Delhi at Department of Biochemistry, H.N.B. Garhwal University (A Central University), Birla campus, Srinagar (Garhwal) on 1st May, 2018.
17. Invited Lecture on “**Cancer and tuberculosis: an unexplored challenge**” in “World Tuberculosis Day 2018” organized by Department of Botany and Microbiology, H.N.B. Garhwal University (A Central University), Srinagar (Garhwal) on 24th March 2018
18. Delivered lecture as a resource person on “**Cancer: Introduction, awareness and prevention**” at Birla campus unit, National service scheme, HNB Garhwal University (A Central University), Srinagar (Garhwal), on 7th Feb 2018 during 7 days special camps for boys (7th to 13th February 2018).
19. Keynote Address & Lecture on Breast Cancer in “World Cancer Day” at Department of Biochemistry, H.N.B. Garhwal University (A Central University), Birla campus, Srinagar (Garhwal) on 4th Feb, 2018.
20. Delivered lecture as a resource person on “**Breast cancer: Introduction, awareness and prevention**” at Birla campus unit, National service scheme, HNB Garhwal University (A Central University), Srinagar (Garhwal), on 22nd Jan 2018 during 7 days special camps for girls (22nd to 28th January 2018).
21. Poster presentation at:86th Annual Conference of Society of Biological Chemists (SBC-2017) on “Emerging Discoveries in health and agricultural sciences” at, **Jawaharlal Nehru University, New Delhi**, 16-19th November 2017. titled "Accelerated ageing induces physiological and biochemical changes in tomato involving MAPK pathways" Nigam M
22. Invited Lecture on “Infectious diseases” on “World Immunology Day”, sponsored by Indian Immunology Society, New Delhi at Department of Biochemistry, H.N.B. Garhwal University (A Central University), Birla campus, Srinagar (Garhwal) on 29th April, 2017.

23. Keynote Address & Lecture on Breast Cancer in “World Cancer Day” (THEME: “We can, I can”) at Department of Biochemistry, H.N.B. Garhwal University (A Central University), Birla campus, Srinagar (Garhwal) on 4th Feb, 2017.
24. Keynote address & lecture on “Gender Issues” at Department of Biochemistry, H.N.B. Garhwal University (A Central University), Birla campus, Srinagar (Garhwal) on 5th Sept, 2016.
25. Oral presentation at: National Conference on Recent Advances in Science & Technology, organized by Uttaranchal college of applied and life sciences, Uttaranchal University, Dehradun on 27-28 February 2017 titled; *Influence of the Ageing on Biochemical and Physiological changes in Tomato Nigam M*
26. Oral Presentation and abstract at: National conference on Microbes in Extreme Environment: Diversity and Translational Applications (MEEDTA- 2015) organized by HNB Garhwal University (A Central University), Srinagar (30-31 Oct 2015) titled; Microbiome: Interlinking with the Cancer. Nigam M
27. Poster at: **2nd Biotech Congress, Dec 18th-22nd, 2006** at Rajiv Gandhi Biotechnology Centre, Nagpur, India; titled “Non-Genomic events in Centchroman mediated Apoptosis in MCF-7 Human Breast Cancer Cells”. Balapure AK, Ranjan V, Nigam M*, Sharma R.
28. Poster presented at: **XXIX All India Cell Biology conference and symposium on Gene to Genome: Environment and Chemical Interaction, Jan 17-20th, 2006** at Industrial Toxicology Research Centre, Lucknow-226001, India; titled “Induction of Apoptosis in MCF-7 and MDA MB-231 Human Breast Cancer Cells by antiestrogen Centchroman”. **Manisha Nigam***, Vishal Ranjan, S Srivastava, R Sharma, AK Balapure.

Conferences/ symposium/workshop Organised

1. Convener, National Science Day 2024 organised by Institute Innovation Cell (IIC), Ministry of Education Initiative, HNB Garhwal University on 28th Feb. 2024.
2. Convener, “Sanjeevani: Health Awareness Outreach cum Workshop” organize by Devbhoomi Vigyan Samiti & Institute Innovation Cell (Ministry of Education, Government of India Initiative), Hemvati Nandan Bahuguna Garhwal University (A Central University) Srinagar, Garhwal Uttarakhand supported by Uttarakhand Science Education and Research Centre (USERC), Dehradun on 22nd September 2023.
3. Organized a lecture in “Online Internship Program (01st June 2021 to 26th July 2021) conducted by Institute Innovation Cell (IIC), Ministry of Education Initiative on “How to get success in Research” by Prof Seema Dhawan, 12th June 2021, **CONVENER**
4. Organized Webinar on **World Immunology day-2020** on “*COVID-19: Immunopathology and its implications for therapy*”, 29th April 2020, **CONVENER**
5. Organized “National Science Day” at Department of Biochemistry, HNB Garhwal University Birla campus, Srinagar (Garhwal), February 28, 2020, **ORGANISER**
6. Organized “World Cancer Day”, at Department of Biochemistry, HNB Garhwal University, Birla campus, Srinagar (Garhwal), 4th Feb, 2020, **CONVENER**

7. Organized “Induction Programme” for freshers on 16th Aug 2018 at Department of Biochemistry, HNB Garhwal University Birla campus, Srinagar (Garhwal) **ORGANISER**
8. Organized “World Cancer Day”, at Department of Biochemistry, HNB Garhwal University, Birla campus, Srinagar (Garhwal), 4th Feb, 2018, **CONVENER**
9. Organized “National Science Day” at Department of Biochemistry, HNB Garhwal University Birla campus, Srinagar (Garhwal), February 28, 2018, **ORGANISER**
10. Organized “Induction Programme” for freshers on 22nd Aug 2017 at Department of Biochemistry, HNB Garhwal University Birla campus, Srinagar (Garhwal) **ORGANISER**
11. Organized “Swacha Bharat Abhiyan” event on 2nd Oct 2014, 2015, 2016, 2017, 2018 at Department of Biochemistry, HNB Garhwal University Birla campus, Srinagar (Garhwal)
12. Organized “World Cancer Day”, at Department of Biochemistry, HNB Garhwal University, Birla campus, Srinagar (Garhwal), 4th Feb, 2017, **CONVENER**
13. Organized lectures on “Gender Issues” at Department of Biochemistry, HNB Garhwal University Birla campus, Srinagar (Garhwal), 5th Sept, 2016, **ORGANISER**
14. Organized “National Science Day” at Department of Biochemistry, HNB Garhwal University Birla campus, Srinagar (Garhwal), February 28-29, 2016, **CONVENER**

Membership of Scientific Societies:

- The **Indian Science Congress**, India. Life membership (Membership No. L30115)
- The **Society of Biological Chemists**, India. Life membership (Membership No. 3799)
- **Indian association of cancer research**, Mumbai. Life membership (Membership No. 947)
- **International Biotech Technocrats & Consultants Association**, India. Life membership (ID: IBTCA/TA/18/1013)