


KURUKSHETRA UNIVERSITY, KURUKSHETRA, HARYANA, INDIA

Title	Dr.	First Name	Jitender	Last Name	Bhardwaj	Photograph
Designation	Associate Professor					
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Educational Qualifications						
Degree	Institution				Year	
Ph.D.	Kurukshetra University, Kurukshetra				2009	
PG	Kurukshetra University, Kurukshetra				2005	
UG	Kurukshetra University, Kurukshetra				2003	
Career Profile						
Organization/Institution		Designation		Duration		Role
Department of Zoology, Kurukshetra University, Kurukshetra		Associate Professor		October 2023-Contd.		Teaching and Research
Department of Zoology, Kurukshetra University, Kurukshetra		Assistant Professor		April 2012-October 2023		Teaching and Research
Department of Zoology, Sri Venkateswara College, University of Delhi, Delhi		Assistant Professor		Jan 2012-April 2012		Teaching and Research
Department of Zoology, Kurukshetra University, Kurukshetra		Assistant Professor		Nov 2009-Dec 2011		Teaching and Research

Areas of Interest / Specialization	
1. Reproductive Physiology, Biochemistry, Toxicology, Molecular Biology	
Subjects Taught	
Reproductive Physiology, Molecular Endocrinology, Immunology, Cell and Molecular Biology, Developmental Biology	
Research	
1. Supervision of Doctoral Thesis, Completed:	06
2. Supervision of Doctoral Thesis, under progress:	03
3. Research Papers published:	62
4. Patents Published:	07
5. Patents Granted:	01
6. Highest Impact Factor:	17.012
7. h-index	20
8. i-10 index	30
9. Foreign Visit	Visited Oxford University, UK
10. Research Projects Completed:	03
Publications Profile	
1. <i>Research papers published in Refereed/Peer Reviewed Journals</i>	
1. Mokhria, R.K., Bhardwaj, J.K. , Sanghi, A.K. (2023). History, origin, transmission, genome structure, replication, epidemiology, pathogenesis, clinical features, diagnosis and treatment of COVID-19: A review. World J Meta Anal, 11(6), 266-276	
2. Bhardwaj, J.K. , Bikal, P., Sachdeva, S.N. (2023). Cadmium as an ovarian toxicant: A Review. Journal of Applied Toxicology, 1-19 (Impact Factor = 3.3)	
3. Bhardwaj, J.K. , Bikal, P., Sachdeva, S.N. (2023). Chemotherapeutic drugs induced female reproductive toxicity and treatment strategies. Journal of Biochemical and Molecular Toxicology, e23371. (IF = 3.568)	
4. Vats, L., Siwach, K., Andrea, A., Bikal, P., Bhardwaj, J.K. , Supuran, C.T., Sharma, P.K. (2023). Tail approach synthesis of traizolythiazolotriazole bearing benzenesulfonamides as carbonic anhydrase inhibitors capable of inducing apoptosis. Arch.Pharm, 356, e2200439	

(Impact Factor = 4.613).

5. Saraf, P., Panchal, H., Sharma, K., Sharma, S., **Bhardwaj, J.K. (2023)**. Potential of zingiber officinale extract against chlorpyrifos toxicity in caprine testicular cells. *Toxicological International*, 29(4): 465-473.
6. Khatkar, S., Dubey, S.K., Saraf, P., **Bhardwaj, J.K.**, Kumar, S., Kumar, V., Singh, G., Shayoraj **(2022)**. Ruthenium(II) dimethyl sulphoxide based complexes: A potent inducer of apoptosis. *Results in Chemistry*. 10.1016/j.rechem.2022.100481 **(Impact Factor = 2.3)**
7. **Bhardwaj, J.K.**, Mittal, M., Saraf, P., Sharma, S. **(2022)**. Ameliorative potential of vitamin C and E against roundup-glyphosate induced genotoxicity triggering apoptosis in caprine granulosa cells. *Environmental and Molecular Mutagenesis*, 63(5), 246-254. DOI: 10.1002/em.22497 **(Impact Factor = 3.579)**.
8. Siwach, K., Kumar, A., Panchal, H., Kumar, R., **Bhardwaj, J.K.**, Andrea, A., Supuran, C.T., Sharma, P.K. **(2022)**. Selective inhibition of carbonic anhydrase IX by sulphonylated 1, 2, 3-triazole incorporated benzenesulphonamides capable of inducing apoptosis. *Journal of Enzyme Inhibition and Medicinal Chemistry*, 37:1, 1454-1463. **(Impact Factor = 5.756)**.
9. **Bhardwaj, J.K.**, Kamboj, H., Tyor, A.K., **(2022)**. The toxicity of imidacloprid on early embryonic stages and growth rate of hatchlings of common carp, *Cyprinus carpio*. *Toxicology International*, 29(1): 105-115.
10. Panchal, H., Sachdeva, S.N., **Bhardwaj, J.K. (2022)**. Ultrastructural analysis of cadmium-induced toxicity and its alleviation by antioxidant quercetin in caprine testicular germ cells in vitro. *Ultrastructural Pathology*. 46:3, 259-267. **(Impact Factor = 1.385)**.
11. **Bhardwaj, J.K.**, Kumar, V., Saraf, P., Panchal, H., Rathee, V., Sachdeva, S.N., **(2022)**. Efficacy of N-acetyl-L-cysteine against glyphosate induced oxidative stress and apoptosis in testicular germ cells preventing infertility. *Journal of Biochemical and Molecular Toxicology*. e22979. <https://doi.org/10.1002/jbt.22979> **(Impact Factor = 3.568)**
12. **Bhardwaj, J.K.**, Palliwal, A., Saraf, P., Sachdeva, S.N., **(2022)**. Role of autophagy in follicular development and maintenance of primordial follicular pool in the ovary. *Journal of Cellular Physiology*, 237, 1157-1170. Doi: 10.1002/jcp.30613. **(Impact Factor = 6.513)**.
13. Sharma, P.C., Sharma, D., Sharma, A., Bhagat, M., Ola, M., Thakur, V.K., Bhardwaj, J.K., and Goyal, R.K. **(2021)**. Recent advances in microbial toxin-related strategies to combat cancer. *Seminars in Cancer Biology*. <https://doi.org/10.1016/j.semcancer.2021.07.007>. **(Impact Factor**

= 17.012).

14. **Bhardwaj, J.K.**, Kumar, V., Panchal, H., Sachdeva, S.N., (2021). Transmission electron microscopic analysis of glyphosate induced cytotoxicity and its attenuation by N-acetyl-L-cysteine in caprine testicular germ cells in vitro. *Ultrastructural Pathology*, 45:6, 407-413. DOI: 10.1080/01913123.2021.1993400. (**Impact Factor = 1.385**).
15. **Bhardwaj, J.K.**, and Saraf, P. (2021). Ameliorating potentials of N-acetyl-l-cysteine against methoxychlor instigated modulation in structural characteristics of granulosa cells of caprine antral follicles. *Indian Journal of Biochemistry and Biophysics*, 58, 365-371. (**Impact Factor = 1.918**)
16. **Bhardwaj, J.K.**, and Panchal, H. (2021). Quercetin mediated attenuation of cadmium induced oxidative toxicity and apoptosis of spermatogenetic cells in caprine testes in vitro. *Environmental and Molecular Mutagenesis*, 62(6), 374-384. (**Impact Factor = 3.216**)
17. **Bhardwaj, J.K.**, Palliwal, A., Saraf, P., (2021). Effects of heavy metals on reproduction owing to infertility. *J. Biochem. Mol. Toxicol.* 35 (8), 1-21. e22823, <https://doi.org/10.1002/jbt.22823> (**IF =3.642**)
18. **Bhardwaj, J.K.**, Panchal, H., Saraf, P. (2021). Ameliorating effects of natural antioxidant compounds on female infertility: a review. *Reprod. Sci.* 28, 1227-1256. Doi 10.1007/s 43032-020-00312-5. (**IF = 3.060**).
19. **Bhardwaj, J.K.**, Panchal, H., Saraf, P. (2021). Cadmium as a testicular toxicant: A Review. *J Appl Toxicol.* 41, 105-117. <https://doi.org/10.1002/jat.4055>. (**IF = 3.446**).
20. **Bhardwaj, J.K.**, Harkrishan., Tyor, A.K., (2020). Sublethal effects of imidacloprid on haematological and biochemical profile of freshwater fish, cyprinus carpio. *J. Adv. Zool.* 41 (1&2), 75-88.
21. **Bhardwaj, J.K.**, Harkrishan., Tyor, A.K., (2020). Imidacloprid induced alterations in locomotory and behavioural activity of fingerlings of common carp, cyprinus carpio. *Toxicology International*, 27, (3 & 4), 158-167.
22. Harkrishan, Saraf, P., Tyor, A.K., **Bhardwaj, J.K.** (2020). Effect of imidacloprid on histopathological alterations of brain, gills and eyes in hatchling carp (*Cyprinus carpio* L.). *Toxicology International*, 27, (1&2), 70-78.
23. **Bhardwaj, J.K.**, Saraf, P. (2020). N- acetyl-l-cysteine mediated regulation of DNA fragmentation, an apoptotic event, against methoxychlor toxicity in the granulosa cells of

ovarian antral follicles. *Mut Res Gen Tox En.* 858-860, 503222
<https://doi.org/10.1016/j.mrgentox.2020.503222> (IF = 3.189).

24. Bansal, K.K; **Bhardwaj, J.K.**; Saraf, P; Thakur, V.K; Sharma, P.C. (2020). Synthesis of thiazole clubbed pyrazole derivatives as apoptosis inducers and anti-infective agents. *Materials Today Chemistry.* 17(2020) 100335. (IF = 8.301).
25. Kamal, R; Kumar,R; Kumar, V; **Bhardwaj, J.K.**; Saraf, P; Kumar, A; Pandit, K; Kaur, S; Chetti, P; and Beura, S. (2020). Diacetoxy iodobenzene mediated regioselective synthesis and characterization of novel [1,2,4] triazolo [4,3-a] pyrimidines: apoptosis inducer, antiproliferative activities and molecular docking studies. *Journal of Biomolecular Structure and Dynamics,* 39(12), 4398-4414. DOI: 10.1080/07391102.2020.1777900. (IF = 5.235).
26. Kumar, R., Bansal, P., Singh, j., Dhanda, S., **Bhardwaj, J.K.** (2020). Aggregation, adhesion and efficacy studies of probiotic candidate *Pediococcus acidilactici* NCDC 252: a strain of dairy origin. *World Journal of Microbiology and Biotechnology.* 36(10), 1-15. (IF = 3.312).
27. **Bhardwaj, J.K.**, Mittal, M., Saraf, P and Kumari, P. (2020). Pesticides induced oxidative stress and female infertility: a review. *Toxin Reviews.* 39(1), 1-13. (IF = 4.266).
28. **Bhardwaj, J.K.**, Mittal, M and Saraf, P. (2019). Effective attenuation of glyphosate induced oxidative stress and granulosa cell apoptosis by vitamin C and E in caprines. *Mol Reprod Dev.* 86(1), 42-52. (IF = 3.113).
29. **Bhardwaj, J.K.**, Kumari, P., Saraf, P. and Yadav, A. S. (2018). Antiapoptotic effects of vitamin C and E against Cypermethrin induced oxidative stress and spermatogonial germ cell apoptosis. *J Biochem Mol Toxicol.* DOI: 10.1002/jbt.22174. (IF = 3.652).
30. **Bhardwaj, J.K.**, Kumar, V., Saraf, P., Kumari, P and Mittal, M. (2018). Current status and changing national scenario of goat population: a review. *Agricultural Reviews.* 39(2), 91-103. (NAAS = 4.37).
31. **Bhardwaj, J.K.**, Saraf, P., Kumari, P., Mittal, M., and Kumar, V. (2018). N-acetyl-cysteine mediated inhibition of spermatogonial cells apoptosis against malathion exposure in testicular tissue. *J Biochem Mol Toxicol.* Doi.org/10.1002/jbt.22046 (IF = 3.652).
32. Kumar, P., Duhan, M., Kadyan, K., **Bhardwaj, J.K.**, Saraf, P. and Mittal, M. (2018). Multicomponent synthesis of some molecular hybrid containing thiazole pyrazole as apoptosis inducer. *Drug Research.* 68, 72-79. (IF = 1.864)
33. Singh, K., Raparia, S., **Bhardwaj, J.K.**, and Saraf, P. (2018). Metal (II) complexes as potent

- apoptosis inducers in testicular germ cells of capra hircus. *J. Applicable. Chem.* 7 (1), 165-176.
34. **Bhardwaj, J.K.**, Sharma, R.K., and Saraf, P. (2017). Alterations in phosphatases and antioxidant enzymes' activity in follicular fluid and granulosa cells during follicular Atresia in goat (*Capra hircus*) ovary. *J. Adv. Zool.* 38(2) 154-163.
35. **Bhardwaj, J.K.**, Kumari, P., Saraf, P., Mittal, M., Yadav, A. S. (2017). Male infertility owing to pesticide poisoning and antioxidant induced amelioration: A review. *J. Cell Tissue Research.* 17(3), 6307-6314. (NAAS = 4.04)
36. **Bhardwaj, J.K.** and Saraf, P. (2017). Pesticides induced infertility: targeting ovarian granulosa cells. *Organic & Medicinal Chem IJ.* 4(2), 1-4. (IF = 1.378).
37. Kumar, R., Kumar, V., Kumar, R., **Bhardwaj, J.K.**, Saraf, P., Kumari, P. and Bhardwaj, V. (2017). Design, synthesis and screening of triazolopyrimidine-pyrazole hybrids as potent apoptotic inducers. *Arch. Pharm. Chem. Life Sci.* 350, e1700137, 1-10. (IF = 3.751)
38. **Bhardwaj, J.K.** and Saraf, P. (2017). Morphological attributes of granulosa cells perpetuating functional integrity of an ovarian follicle. *J. Adv. Micros. Res.* 12, 92-96.
39. **Bhardwaj, J.K.** and Saraf, P. (2017). N-acetyl cysteine mediated effective attenuation of methoxychlor-induced granulosa cell apoptosis by counteracting reactive oxygen species generation in caprine ovary. *Environ Toxicol.* 32(1), 156-166.. (IF = 4.109)
40. Singh, A.K., **Bhardwaj, J.K.**, Olival, A., Kumar, A., Podder, A., Maheshwari, A., Agrawal, A., Latha, N., Singh, B.K., Tomas, H., Rodrigues, J., Kishan, R., Rupini, B., Rathi, B. (2016). Design, synthesis and biological evaluation of arylpiperazine- based novel phthalimides: active inducers of testicular germ cell apoptosis. *J. Chem. Sci.* 128(8), 1245-1263. (IF = 1.573)
41. Sindhu, J., Singh, H., Khurana, J.M., **Bhardwaj, J.K.**, Saraf, P., and Sharma, C. (2016). Synthesis and biological evaluation of some functionalized 1H-1, 2, 3-triazole tethered pyrazolo [3,4-b] pyridine-6(7H)-ones as antimicrobial and apoptosis inducing agents. *Med. Chem. Res.* 25(9), 1813-1830. (IF = 1.965)
42. Sharma, R.K., Vashisht, B., **Bhardwaj, J.K.** and Tehri, K. (2016). Malathion induced histopathological effects on goat oviduct. *J. Entom. Zoo. Stud.* 4(3), 242-245. (NAAS = 5.53).
43. **Bhardwaj, J.K.** and Saraf, P. (2016). Transmission electron microscopic analysis of malathion-induced cytotoxicity in granulosa cells of caprine antral follicles. *Ultrastructural Pathology.* 40 (1), 43-50. (IF = 1.094)
44. **Bhardwaj, J.K.** and Saraf, P. (2015). Granulosa cell apoptosis by impairing antioxidant defense

- system and cellular integrity in caprine antral follicles post malathion exposure. *Environ Toxicol.* 31(12), 1944-1954. (IF = 4.119)
45. Sharma, R.K., Bhat, R.A., Goyal, A.K. and **Bhardwaj, J.K. (2015)**. Germ cells apoptosis during spermatogenesis in mammals. *J. Entom. Zoo. Stud.* 3(3), 506-515. (NAAS = 5.53).
46. Chandak, N., **Bhardwaj, J.K.**, Dimitrova, D.Z., Kitanov, G., Sharma, R.K., Sharma, P.K., Saso, L. (2015). Effective attenuation of atrazine-induced histopathological changes in testicular tissue by antioxidant N-phenyl-4-aryl-polyhydroquinolines. *J Enzyme Inhib Med Chem.* 30(5), 722-729. (IF = 5.756).
47. Sharma, R.K., Singh, R., **Bhardwaj, J.K. (2015)**. Scanning and transmission electron microscopic analysis of ampullary segment of oviduct during estrous cycle in caprines. *Scanning.* 37, 36-41. (IF = 1.932)
48. **Bhardwaj, J.K.** and Saraf, P. (2014). Malathion induced granulosa cell apoptosis in caprine antral follicles: An ultrastructural and flow cytometric analysis. *Microsc. Microanal.* 20, 1861-1868. (IF = 4.127).
49. **Bhardwaj, J.K.** and Saraf, P. (2014). Influence of toxic chemicals on female reproduction: A review. *Cell Biol:Res Ther.* 3:1 <http://dx.doi.org/10.4172/2324-9293.1000110>. (IF = 2.42).
50. Sharma, R.K., Singh, R., **Bhardwaj, J.K. (2013)**. Temporal variations in trace element profile in different segments of fallopian tube during oestrous cycle in caprines. *App. Cell Biol.* 2(3), 105-109.
51. Sharma, R.K., Singh, R., **Bhardwaj, J.K.** and Saini, S. (2013). Topographic and Ultrastructural variations in isthmus segment of oviduct during oestrous cycle in caprines. *Scanning.* 35, 344-348. (IF = 1.932)
52. Chandak, N., **Bhardwaj, J.K.**, Sharma, R.K., and Sharma, P.K. (2013). Inhibitors of apoptosis in testicular germ cells: Synthesis and biological evaluation of some novel IBTs bearing sulfonamide moiety. *Eur. J. Med. Chem.* 59, 203-208. (IF = 7.088)
53. **Bhardwaj, J.K.** and Sharma, R.K. (2012). Detection of Apoptosis during Follicular Atresia in Caprine Ovary by TUNEL and Fluorescence Microscopy. *J. Cell Tiss. Res.* 12, 3273-3278. (NAAS Rating = 4.38)
54. **Bhardwaj, J.K.** and Sharma, R.K. (2012). Apoptosis and ovarian follicular Atresia in mammals, Zoology, Dr. Maria-Dolores Garcia (Ed.), ISBN: 978-953-51-0360-8, In Tech.
55. Sharma, R.K., Sharma, V and **Bhardwaj, J.K. (2011)**. Ultrastructural Characterization of germ

cells apoptosis in goat (*Capra Hircus*) testes. *J. Adv. Microsc. Res.* 6, 223-226.

56. **Bhardwaj, J.K.** and Sharma, R.K. (2011). Scanning electron microscopic changes in granulosa cells during follicular atresia in caprine ovary. *J. Scanning.* 33, 21-24. (IF = 1.932)
57. **Bhardwaj, J.K.** and Sharma, R.K. (2011). Changes in trace elements during follicular atresia in caprine ovary. *Biol Trace Elem Res.* 140, 291-298. (IF = 4.081)
58. Sharma, R.K., **Bhardwaj, J.K.** and Ahlawat, N. (2009). Ultrastructural developments during spermiogenesis in Indian goat. *Int. J. Integ. Biol.* 6, 112-114.
59. Sharma, R.K. and **Bhardwaj, J.K.** (2009). Ultrastructural characterization of apoptotic granulosa cells in caprine ovary. *J. Microsc.* 236, 236-242. (IF = 2.331)
60. Sharma, R.K. and **Bhardwaj, J.K.** (2009). *In situ* evaluation of granulosa cells during apoptosis in caprine ovary. *Int. J. Integ. Biol.* 5, 58-61.
61. Sharma, R.K. and **Bhardwaj, J.K.**, (2007). Granulosa cell apoptosis *in situ* in caprine ovary. *J. Cell Tiss. Res.* 7(2), 1111-1114. (NAAS Rating = 4.38)

2.

a) *Research papers published in Refereed/Peer Reviewed Conferences*

1. **Sharma, R.K. and Bhardwaj J.K.** (2008). **Toxic chemicals and reproduction. Proc. 1st Rashtreeya yuva vaigyanik sammelan, pp. 59-66.**

3. Patents Granted/Published

1. Apoptosis Inducing Composition Comprising Triazolothiazolyl-Triazole Derivative of Benzenesulfonamide3, 202211043810 (**Granted in May, 2023**)
2. Apoptosis Inducing Composition Comprising Triazolothiazolyl-Triazole Derivative of Benzenesulfonamide2, 202211043808 (**Published**)
3. Apoptosis Inducing Composition Comprising Triazolothiazolyl-Triazole Derivative of Benzenesulfonamide, 202211043805 (**Published**)
4. Apoptosis Inducing Composition of Chlorophenylphenylsulfonyl-Triazol-Benzenesulfonamide, 202211010594 (**Published**)
5. Apoptosis Inducing Composition of Bromo-methoxyphenyl-Phenylsulfonyl-Triazol-Benzenesulfonamide, 202211010516 (**Published**)
6. Composition having Reduced Reproductive Toxicity of Titanium Dioxide (TiO₂),

202311000193 (**Published**)

7. Apoptosis Inducing Composition of Phenyl-Phenyl-Phenylsulfonyl-Triazol-Benzenesulfonamide

202314013383 (**Published**)

8. Apoptosis Inducing Composition of Halo-Phenyl-Phenylsulfonyl-Triazol-Benzenesulfonamide

202314013315 (**Published**)

Conference Organization/ Presentations

1. Seminars/Conferences/Workshops organized:	18
3. National/International Seminars/Conferences Attended:	60
4. Invited Talks Delivered:	25
5. Research Training/Workshops Undertaken:	22

Seminars/Conferences/Workshops Organized:

1. Ist International Conference on 'Emerging Trends of Nanotechnology in Drug Discovery' organized by Sri Venkateswara College, University of Delhi, India & Department of Biochemistry, University of Delhi South Campus (UDSC), India in association with Centro de Quimica da Madeira (CQM), University of Madeira, Portugal, held on 26-27 May, 2014.
2. One day National seminar on Conventional and Novel Forensic Approaches organized by Department of Zoology, KUK, 12 March, 2016.
3. Indo-Portuguese Workshop on Emerging Trends of Nanotechnology in Chemistry and Biology organized by Department of Chemistry, Hansraj College & Deshbandhu Colege, University of Delhi, India in association with Centro de Quimica da Madeira (CQM), University of Madeira, Portugal on 12-13 February, 2016.
4. National Conference on 'Evolving New Horizons Of Zoological Sciences In Human Welfare' Organized by Department of Zoology, Kurukshetra University, Kurukshetra, November 23-24, 2016.
5. UGC-SAP Sponsored National Seminar on 'Challenges in Sustainable Management of Natural Resources' Organized by Department of Zoology, Kurukshetra University, Kurukshetra, March 24-25, 2017.

6. 30th All India Congress of Zoology and National Seminar on ‘Advances in Zoology for Sustainable Development’ Organized by Department of Zoology, Kurukshetra University, Kurukshetra and Zoological Society of India, Gaya from February 15-17, 2018.
7. International Seminar on Making New India: Insights from Bhagavad-Gita’ Organized by Department of Tourism and Hotel Management, Commerce, Sanskrit, Pali & Prakrit, Philosophy and University School of Management, Kurukshetra University, Kurukshetra from December 13-15, 2018.
8. 1st International Conference on Integrative Chemistry, Biology and Translational Medicine (ICBTM-2019) organized by Centre for Global Health, Hansraj College, University of Delhi, Delhi, India & Loyola University Chicago Stritch School of Medicine, USA from February 25-26, 2019.
9. International Seminar on Making New India: Insights from Bhagavad-Gita’ Organized by Department of Tourism and Hotel Management, Commerce, Sanskrit, Pali & Prakrit, Philosophy and University School of Management, Kurukshetra University, Kurukshetra from December 03-05, 2019.
10. Two days National online conference on Post COVID opportunities and challenges in Zoological Sciences organized by Department of Zoology & CRC, RUSA, KUK, 29-30 June, 2020.
11. Two days National online conference on Post Covid Opportunities and Challenges in Zoological Sciences organized by Department of Zoology, Kurukshetra University, Kurukshetra in collaboration with Corporate Resource Centre (Under RUSA 2.0) from June 29-30, 2020.
12. Science Conclave”Kindle Youth towards Basic Sciences for Human Well-being organized by Kurukshetra University, Kurukshetra in collaboration with Department of Science and Technology, Government of Haryana from March 03-04, 2020.
13. One Week Online Faculty Development Programme on Winter School in Life Sciences organized by Faculty Development Centre, Kurukshetra University, Kurukshetra and Department of Zoology, Kurukshetra University, Kurukshetra from 22-02-2021 to 27-02-2021.
14. Online/Offline (Blended mode) Alumni meet 2021 organized by Kurukshetra University, Kurukshetra on 19-08-2021.
15. 6th International Gita Seminar on Vishwa Guru Bharat: Lessons from Bhagavad Gita organized by Kurukshetra University, Kurukshetra from December 09-011, 2021.
16. 2nd International conference on Integrative Chemistry, Biology & Translational Medicine organized by University of Delhi, INMAS, DRDO, Delhi, Heterochem Innotech Myoclinic, Florida, USA and

University of Debrecen, Hungary from December 6-8, 2022.

17. 7th International Gita Seminar on World Peace and Harmony: Insights from Srimad Bhagavad Gita organized by Kurukshetra University, Kurukshetra from 29th November to 1st December, 2022
18. International Conference on Applications of Nanotechnology in Transformation of Environment, Agriculture and Health organized by Department of Zoology, University of Rajasthan, Jaipur from November 3-4, 2023

Research Training/Workshops/Refresher Courses Undertaken

1. UGC Sponsored online workshop on National Education Policy-2020 organized by HRDC, Kurukshetra University, Kurukshetra on 17-02-2023.
2. One day national workshop on Intellectual property rights: management and innovations organized by IPR Cell, Chaudhary Devi Lal University, Sirsa on November 12, 2021.
3. One day workshop on Role of teachers in National Education Policy, 2020 organized by Faculty Development Centre, Kurukshetra University, Kurukshetra on August 25, 2021.
4. One day faculty development program on Role of online teaching pedagogy and ICT tools in outcome based education organized by Department of Civil Engineering KKR &KSR Institute of Technology and Sciences on June 25, 2020.
5. One week short term course on MOOCS and OER Organized by Human Resource Development Centre, Kurukshetra University, Kurukshetra from 16-09-2019 to 21-09-2019.
6. Interdisciplinary Refresher Course in Environment Studies (All Disciplines) Organized by Human Resource Development Centre, Kurukshetra University, Kurukshetra from 01-02-2019 to 21-02-2019.
7. One day Awareness Workshop on Intellectual Property Rights Organized by IPR Cell, KUK; Patent Office, Government of India, New Delhi and ASSOCHAM at Kurukshetra University, Kurukshetra on January 19, 2019.
8. UGC sponsored short term course on E-Learning Technologies Organized by Human Resource Development Centre, Kurukshetra University, Kurukshetra from 27-08-2018 to 01-09-2018.
9. One day workshop on 'IP Awareness Programme on National IPR Policy 2016' Organized by ASSOCHAM, Kurukshetra University and IP Office at Kurukshetra University, Kurukshetra on 11th January, 2018.
10. Swarna Jayanti Two Days National Workshop on Data Analysis Using SPSS Organized by

Department of Statistics and Operational Research, Kurukshetra University, Kurukshetra from March 20-21, 2017.

11. One Day Workshop on Online Database Scopus and OUP Resources Organized by Jawaharlal Nehru Library, Kurukshetra University, Kurukshetra from July 25, 2017.
12. Indo-Portuguese Workshop on Emerging Trends of Nanotechnology in Chemistry and Biology organized by Department of Chemistry, Hansraj College & Deshbandhu College, University of Delhi, India in association with Centro de Quimica da Madeira (CQM), University of Madeira, Portugal on 12-13 February, 2016.
13. Attended a refresher course in Environment Studies (Multi-Disciplinary) organized by Academic Staff College, Kurukshetra University, Kurukshetra and Institute of Environment Studies, K.U.K from 18-12-2014 to 07-01-2015.
14. A short term course (Induction Programme) organized by Academic Staff College, Kurukshetra University, Kurukshetra from 03-10-2012 to 09-10-2012.
15. One day workshop on '*Save the Girl Child*' organized by the Women's Studies Research Centre, Kurukshetra University, Kurukshetra held on August 23, 2012
16. SERC School in Chronobiology III: Clocks, Rhythms and Behaviour (Sponsored by Department of Science and Technology, Govt. of India, India) organized by Department of Zoology, University of Delhi, Delhi from 24 December, 2010 to 07 January, 2011.
17. Joint Indo-German workshop on Bioinformatics in *Human Genetics: Mutations, Microarray Analysis & Ontologies* conducted by Centre for Genetic Disorders, GNDU, Amritsar in collaboration with Central University of Punjab, Bathinda & Institutes for Human and Medical Genetics, Charite-Universitätsmedizin, Berlin, Germany from 25-29 January, 2010.
18. Indo-US Seminar-cum-Demonstrative Workshop in *Animal Cell Culture, DNA Finger Printing and cell marker identification (Flow cytometric assay)* held at P.U., Chandigarh from 13-15 December, 2007.
19. 65th BRNS-IANCAS National Workshop on *Radiochemistry and Applications of Radioisotopes* held in Department of Physics, Kurukshetra University, Kurukshetra from November 29 to December 8, 2007.
20. Training Course on "*Application of Research Techniques in Reproductive Biomedicine*" organized by National Institute of Health and Family Welfare (NIHFW), New Delhi from 11-22 December,

2006.

21. Training Course on "*Cloning of phospholipase A2 from Indian Red Scorpion and solution phase synthesis of peptides*" held at Department of Biophysics, All India Institute of Medical Sciences (AIIMS), New Delhi from June 14 to July 23, 2004.
22. Seminar-cum-Training programme on *Electron Microscopy* organized by Department of Zoology, K.U., Kurukshetra and SAIF, P.U., Chandigarh from January 29-31, 2004.

Research Projects (Major Grants/Research Collaboration)

1. **Research Projects Completed: 03 (01 from UGC; 02 from KUK)**
2. **Research Projects Undergoing:**

Awards and Distinctions

- **Awarded Certificate of honour (2023) in recognition of academic achievements and contributions in raising the reputation of university by Kurukshetra University, Kurukshetra**
- **Awarded Best Research Paper Presentation Award in *International conference on "Reproductive Healthcare"* and 32nd Annual meeting of ISSRF Organized by University of Rajasthan, Jaipur from February 11-13, 2022.**
- **Awarded Prof. S.S. Guraya Young Scientist Award-2021 by Indian Society for Study of Reproduction and Fertility (ISSRF), India.**
- **Medal of Appreciation at 30th All India Congress of Zoology by Zoological Society of India**
- **Awarded UGC Travel Grant for attending International Health Conference-2017 at University of Oxford, UK from June 29th to July 1st, 2017.**
- **Awarded Best Research Paper Award (2012) by Journal of Cell and Tissue Research & Society for Science and Environment.**
- **Best Research Paper Presentation Award in *International conference on "Frontiers in Reproductive Biotechnology"* and 21st Annual meeting of ISSRF Organized by National Dairy Research Institute, Karnal, February 9-11, 2011.**
- **Best Research Paper Presentation Award in national conference on managing climate change: molecules to communities by *Asian Journal of Experimental Sciences*, March, 2009.**
- **Best Research Paper Presentation Award in National Seminar on "Technical Advances in Environment Management and Applied Zoology" organized by Dept. of Zoology, Kurukshetra University, Kurukshetra. January, 2008.**

- **Best Research Paper Presentation Award in U.G.C. sponsored National Seminar on "Environmental Stresses and Biodiversity" on November 8-9, 2006 organized by K.V.A.D.A.V. College for Women, Karnal, Haryana.**
- **Awarded Junior Research Fellowship (CSIR-JRF) during Ph.D. by CSIR, New Delhi.**
- **Awarded University Research Scholarship (URS) during Ph.D. by Kurukshetra University, Kurukshetra.**

Association With Professional Bodies

1. Reviewing

Peer Review of Scientific Journals

Journal of Biochemical and Molecular Toxicology
 Biotechnology and Applied Biochemistry
 Journal of Basic and Clinical Physiology and Pharmacology
 Cellular Physiology
 Journal of Scanning
 Journal of medicine and medical Research
 Journal of Microscopy
 Environmental Toxicology
 Toxicology In Vitro
 Toxicology Letters
 Reproductive Biology and Endocrinology
 Environmental Toxicology and Applied Pharmacology
 Biomedicine and Pharmacotherapy
 Drug and Chemical Toxicology
 Redox Biology
 Chemico-Biological Interactions
 Chemical Biology and Drug Design
 Reproductive Sciences
 Ecotoxicology and Environmental Safety
 Environmental Toxicology and Pharmacology
 Environmental Science and Pollution Research
 Biological Trace Element Research
 Future Oncology
 Human Reproduction Update
 Biocell
 Biomedical and Environmental Sciences
 Cell Biology and Toxicology
 Clinical and Experimental Obstetrics and Gynecology
 Future Medicinal Chemistry
 Journal of Ayurveda and Integrative Medicine
 Human Cell
 Journal of Ethnopharmacology

Toxin Reviews
Marine Environmental Research
Pharmaceutical Biology
Journal of Endometriosis and Pelvic Pain Disorders
PLOS ONE
Womens Health

2. *Committees and Boards*

- Member NAAC Steering Committee, Kurukshetra University, Kurukshetra from 2021
- Member RUSA 2.0 Kurukshetra University, Kurukshetra
- Member University Court, Kurukshetra University, Kurukshetra from 2018-2020 and 2022-2024
- Member Academic Council, Kurukshetra University, Kurukshetra from 2019-2020; 2021-2023
- Member, UMC Committee, Kurukshetra University, Kurukshetra for the session 2016-2017 and 2019-2020 and 2022-2023.
- President, Zoological Association, Kurukshetra University, Kurukshetra from 2015-2017
- Member, PG Board of Studies in Zoology, Kurukshetra University, Kurukshetra
- Member, PG Board of Studies in Forensic Science, Kurukshetra University, Kurukshetra
- Member, UG Board of studies in Anthropology, Kurukshetra University, Kurukshetra
- Member, UG Board of Studies in Zoology, Kurukshetra University, Kurukshetra
- Member, Editorial Board of International Journal of Zoology Research (IJZR)
- Member, Editorial Board of Organic and Medicinal Chemistry International Journal
- Member, Editorial Board of Journal of Haryana Studies
- Member, Editorial Board of Journal of Gene Expression

3. *Memberships*

- Indian Society for the Study of Reproduction and Fertility (ISSRF)
- International Society of Integrative Biology (ISIB)
- International Society of Zoological Sciences (ISZS)
- International Society for Applied Life Sciences (ISALS)
- Indian Science Congress Association (ISCA)
- Zoological Association, Kurukshetra University, Kurukshetra

Signature of Faculty