

## Varsha Baweja

**Current Designation:** Professor, Department of Zoology

Deshbandhu College, University of Delhi, Delhi, India

**Contact:** [vbaweja@db.du.ac.in](mailto:vbaweja@db.du.ac.in), [varsukv@gmail.com](mailto:varsukv@gmail.com)

**Website:** <https://www.deshbandhucollege.ac.in/>,  
<https://sites.google.com/view/varshabaweja/home>



### Education & Training:

1996-1999	Pool Officer (CSIR)	Department of Zoology, University of Delhi
1991-1996	Research Associate (CSIR)	Department of Zoology, University of Delhi
1990	Ph. D.	Kanpur University, Kanpur
1985	M. Sc. (Entomology)	Kanpur University, Kanpur
1983	B. Sc.	Dayalbagh Educational Institute, Agra

**Academic Interests:** Developmental Biology, Physiology, Animal Biodiversity

**Research Interests:** Entomopathogenic Nematodes, Human diseases

**Teaching Experience:** 30 years

**Research guidance:**

- **Projects:** 2 -completed
- **M. Sc. Dissertation:** 2
- **Summer Internships:** 11

**Research Papers Published:** 21

**Research Papers Presented:** 19

**Books:** 2; **Book Chapters:** 2; **E-content:** 4

### Appointments and Positions:

- 2021- Till Date **Professor**, Deshbandhu College, University of Delhi
- 2011-2021 **Associate Professor**, Deshbandhu College, University of Delhi
- 2008-2011 **Reader**, Deshbandhu College, University of Delhi
- 2005-2008 **Lecturer**, Deshbandhu College, University of Delhi
- 2004-2005 **Lecturer**, Maitreyi College, University of Delhi
- 2003-2004 **Lecturer**, Miranda House, University of Delhi
- 2000-2002 **Lecturer**, Daulat Ram College, University of Delhi

- 1996-1999 **Pool Officer**, Department of Zoology, University of Delhi
- 1991-1996 **Research Associate**, Department of Zoology, University of Delhi
- 1988-1990 **Lecturer**, S. N. Sen P. G. College, Kanpur

#### **Administrative Responsibilities:**

- **2024- Election Officer** for conducting Staff Council Elections for the year 2024-2025
- **2024- Convenor**, Alumni Meet, Deshbandhu College, University of Delhi.
- **2023- Chairperson**, Grievance Redressal Cell, College Students' Union Elections 2023-2024.
- **2023- Till Date Chairperson**, Students Grievance Redressal Committee, Deshbandhu College, University of Delhi.
- **2019-2023 Convenor**, Social Media, Deshbandhu College, University of Delhi.
- **2022- Till Date** Member, South Co-hub Cluster for the implementation of NEP 2020 through the Undergraduate Curricular Framework - 2020 (UGCF)
- **2022- Convenor** NEP Syllabus drafting committee for DSC paper 'Wildlife Conservation and Management'
- **2022- Convenor** NEP Syllabus drafting committee for DSC paper 'Developmental Biology'
- **2021-Till Date** Member, Academic Audit Committee, Deshbandhu College
- **2021-Till Date Principal Coordinator**, Unnat Bharat Abhiyan, Deshbandhu College
- **2021- 2024- Co-Convenor**, NSS, Deshbandhu College, University of Delhi
- **2020-Till Date** Member, Internal Screening Committee for Promotions of Faculty, Deshbandhu College
- **2020-Till Date** Member of Placement Cell, Deshbandhu College
- **2020-2021** Member of Purchase Committee, Deshbandhu College
- **2020-2021** Member of Canteen Committee
- **2020 Convenor**, Zoology Department Screening Committee
- **2019-2021 Teacher-in-Charge**, Department of Zoology, Deshbandhu College
- **2019-2020** Member of Purchase Committee
- **2019-2020** Member of Canteen Committee
- **2017-2018** Member of Sports Committee
- **2016-2017** Member of Cultural Committee

- **2016-2017** Member of Building and Furniture Committee
- **2015-2016** **Coordinator** B.Sc. Life Sciences
- **2015-2016** **Convener** of Extension Lecture Committee
- **2015-2016** Member, Union Advisory Committee
- **2014-2015** Member, Proctorial Committee
- **2014-2015** Member, Extension Lecture Committee
- **2013-2014** Member of Building and Furniture Committee
- **2013-2014** Member of Prospectus committee
- **2012-2013** **Convener** of Proctorial committee
- **2012-2013** Member of Building and Furniture Committee
- **2011-2012** **Convener** of Extension Lecture Committee
- **2011-2012** **Convener** of Garden Committee

#### Research Publications:

1. Kamana Singh, Prabha Arya, Nisha Vashishta, Akanksha Rajpati, Anushka Raina, Harvin Siag, **Varsha Baweja**. **2024** Efficacy of *Curcuma longa*, *Withania somnifera*, *Ginkgo biloba* in curing dementia: a synergistic pharmacotherapy. The Bioscan, 19(1): 01-18. ISSN 0973-7049, IF= 1.88
2. Yogesh Sharma, Shaveta Padha, Anjali Dhar, **Varsha Baweja**, Indrakant K Singh. **2023** RNAi based biopesticides: A review of recent studies in lepidopteran insects. Proc. Zool. Soc. <https://doi.org/10.1007/s12595-023-00489-y> IF=<1
3. Bhumika Chauhan, **Varsha Baweja**, Monica Misra. **2022** Role of a evolutionary conserved hypothalamic neuropeptide: Neuropeptide Y (NPY) in release of gonadotropin and anterior pituitary hormones in different animal groups. Indian J of Natural Sciences. 13(74):48415-48423. ISSN 0976 – 0997
4. Ruby Mishra, Atul K Sharma, **Varsha Baweja et al.** **2022** Solid support Based Synthesis of 1,5-Benzodiazepines: A Mini Review. Synthetic Communications. 52: 481-503. IF: 2.007 [DOI No 10.1080/00397911.2021.2024855](https://doi.org/10.1080/00397911.2021.2024855)
5. Singh S, Singh A., **Baweja V. et al.** **2021** Molecular rationale of insect-microbes symbiosis- From insect behaviour to mechanism. Microorganisms. 9: 1-23. <https://doi.org/10.3390/microorganisms9122422> ISSN 2076-2607 IF: 4.1
6. **Baweja Varsha et al.** **2021** Neuroprotective effects of phytoestrogens: A potential alternative to Estrogen therapy in Alzheimer's disease patients. Journal of Geriatric Mental Health. 8(2): 83-92 <https://www.jgmh.org/text.asp?2021/8/2/83/336907> ISSN 2348-9995

7. **Baweja Varsha** and Rawat R. **2020** Biocompatibility of *Steinernema glaseri* with a nematode trapping fungus *Arthrobotrys superba* on different nutrient media. Acta Ecologica Sinica 40(5): 412-416. <https://doi.org/10.1016/j.chnaes.2020.03.001> ISSN 1872-2032 (IF: 2.1)
8. **Varsha Baweja** and Seth R. K. **2013** Azadirachtin treated larvae of *Spodoptera litura* as potential host for *Steinernema glaseri*– an integrated approach. Int. J. Env. Res. and Dev: 3 (8): 113-116. ISSN 2249-3131
9. Seth, R.K., Tyagi, S., **Baweja V. 2001** Effect of Host – irradiation on Bioefficacy of Entomopathogenic Nematodes (EPNs), *Steinernema glaseri* As Potential Parasitoids on Lepidopteran pest, *Spodoptera litura* (Fabr.). In: Second Research Co-ordination Meeting on “Use of Nuclear Techniques for the Colonization and Production of Natural Enemies of agricultural insect pests” Tapachula Chiapas, Mexico. (Reviewed by IAEA Tech Doc Committee)
10. **Baweja Varsha** and S.S. Sehgal. **1997** Potential of *Heterorhabditis bacteriophora* Poinar (Nematoda, Heterorhabditidae) in parasitizing *Spodoptera litura* Fabricius in response to malathion treatment. Acta Parasitologica 42(3): 168-172.
11. Seth, R.K., **Varsha Baweja** and S.S. Sehgal, **1994** Bioinfectivity of entomogenous nematode, *Heterorhabditis bacteriophora* on progeny of irradiated *Spodoptera litura*. J. Nucl. Agric. Biol. 23(3): 192.
12. Nayak, M.K., S.S. Sehgal and **Varsha Baweja, 1993** Morphometric variation within and between two natural populations (from plague endemic areas) and a pure-line laboratory strain of oriental rat flea *Xenopsylla cheopis* (Siphonoptera :Pulicidae). Bull. Ent. 34(1-2): 132-141.
13. **Baweja Varsha**, S.S. Sehgal and M.K. Nayak. **1993** The influence of temperature on the rate of development of *Spodoptera litura* (Fabricius) Bull. Ent. 34(1-2): 142-147.
14. Gupta, P.C. and **V. Sachdeva. 1992** On a remarkable new species of the genus *Calceostoma* van Beneden, 1858. Acta Parasitol. 37: 1-3. (Impact Factor 1)
15. Nayak, M.K. S.S. Sehgal and **Varsha Baweja, 1991** Flea-host relationships of associated *Rattus* and native wild rodents in selected biotopes of two erstwhile plague endemic areas in India. Indian J. Ent. 53(4): 564-574.
16. Gupta, P.C. and **V. Sachdeva. 1989** On two monogeneans from Indian marine fishes. Riv. Di Parasitol. 56: 293-298.
17. Gupta P.C. and **V. Sachdeva, 1989** Two piscine monaxinids from Indian subcontinent. Riv. Di Parasitol. 56: 287-292.
18. Gupta, P.C. and **Varsha Sachdeva. 1989** *Neofridericianella ritai* gen. nov.sp. nov. (Monogenea : Fridericianellidae fam. nov.) from an estuarine fish, *Rita*

*pavimenta* (Gunther) from Chilka lake, Puri, Orissa. Riv. Di Parasitol. 56: 293-197-203.

19. Gupta, P.C. and **Sachdeva, V. 1986** Two new species of the genus *Lamellodiscoides* Yamaguti, 1963 (Monogenea : Diplectanidae) with a key to its species, and synonymy to the genus *Pseudolamellodiscoides* Gupta and Krishna, 1979. Proc. Nat. Sym. Fish & Env. 27-31.
20. Gupta, P.C. and **Varsha Sachdeva, 1987** *Neohamatopeduncularia bengalensis* gen. nov. sp. nov. and *Lobotrema aspidopariaii* sp. Nov. (Monogenea: Dactylogyridae) from the gills of Indian fishes. Kanpur Univ. Res. J. (Sci.) 5: 41-55.
21. Gupta P.C. and **Sachdeva, V. 1986** *Silonditrema kanpurensis* sp. nov. (Monogenea: Dactylogyridae) from freshwater fish, *Mystus tengara*. Indian J. Parasitol. 10: 153-155. ISSN: 0253-7168

#### Papers presented in Conference/ Symposium:

1. Chowdhary, K., Mehra, K. and **Baweja V. 2022**. Neuroprotective role of curcumin- A review. International Conference on Natural Products and Human Health held at Deshbandhu College, University of Delhi, Delhi, India
2. Jones, S. and **Baweja V. 2022**. Therapeutic potential of Indian medicinal in the fight against *Mycobacterium tuberculosis*. International Conference on Natural Products and Human Health held at Deshbandhu College, University of Delhi, Delhi, India
3. **Baweja V. 2021**. Integration of Preventive and therapeutic tactics in the management of cervical cancer. Health 2021 Virtual International Conference on Cancer Biology: Advances & Challenges held on Zoom, Deshbandhu College, University of Delhi.
4. **Baweja V.** and Himanshu. 2020. Soy consumption and prevailing statistics of neurodegenerative disorders in Asia. International Conference on Natural Products and Human Health held at University of Delhi, Delhi, India. ISBN 9-788194-428237
5. Chakraborty, A. and **Baweja, V. 2020**. Curcumin in cancer: an end to our woes? International Conference on Natural Products and Human Health held at University of Delhi, Delhi, India. ISBN 9-788194-428237
6. Tiwari, S K and **Baweja, V. 2020**. Therapeutic effects of curcumin in gynaecological cancers. International Conference on Natural Products and Human Health held at University of Delhi, Delhi, India. ISBN 9-788194-428237
7. Himanshu and **Baweja Varsha. 2019**. Effect of dietary isoflavone consumption on the prevalence of Alzheimer's disease. In: 6<sup>th</sup> World Congress on Nanomedical Sciences held at Vigyan Bhawan New Delhi.
8. **Baweja Varsha. 2018**. Biopesticides: A potent tool for green technology for the mitigation of pesticide pollution. In Fourth National Symposium on

Environment: Green Technology for Environmental Sustainability' held at Deshbandhu College, New Delhi.

9. **Varsha Baweja**. 2017. Interaction of *Steinernema glaseri*, an Entomopathogenic Nematode with a Predatory Fungus *Arthrobotrys superba* on Different Nutrient Media. International Journal of Bioengineering and Life Sciences, Vol:11 (10)
10. **Baweja, V.**, Gupta, K K, Dubey, V, Keshavam, C. 2014. Assessing antimicrobial activity of various plant extracts on midgut microflora of *Aedes aegypti*. Int. J. of Bioengineering and Life Sci., Vol 1 (12)
11. Gupta K K, **Baweja V**, Prajneshu M. 2013. Effect of Plant Extracts on the Midgut Microbial Flora of *Aedes aegypti*. In: XII Int. Conf. on Vector and Vector borne Diseases, Udaipur.
12. Seth, R.K., **Baweja V**. 2000. Compatibility of entomopathogenic nematodes and F-1 sterility for managing *Spodoptera litura* (Lepidoptera, Noctuidae): Parasitoid responses & host suitability. In: XXI Int. Cong. of Entomology, Brazil, pp. 417
13. **Baweja Varsha**, 2000. Experimental evaluation of adult stage of *Spodoptera litura* (Lepidoptera: Noctuidae) as a potent host for Entomopathogenic Nematodes, *Steinernema glaseri*; In XXI International Congress of Entomology, Brazil, pp. 513.
14. Seth, R.K. **Varsha Baweja** and Anjali Dhar. 1998. Ascertaining the bioinfectivity potential of entomogenous nematodes on F-1 progeny of irradiated *Spodoptera litura*. In: FAO/IAEA Int. Conf. on area wide control of insect pests integrating the sterile insect and related nuclear and other techniques, Penang, Malaysia, 117.
15. **Varsha Baweja**, S.K. Sagar and S.S. Sehgal, 1997. Host searching behaviour: Response to host volatile cues by entomopathogenic nematodes. In: National Symposium on IPM in India – Constraints and Opportunities, New Delhi, 10-11.
16. Sagar, S K, Sehgal, S S, **Baweja, V**, Kaur, J J, and Rao, D K. 1997. Efficacy of ether extracts of seed coats of Neem (*Azadirachta*) and Karanj (*Pongamia glabra*) against mosquitoes. In: National Symposium on IPM in India – Constraints and Opportunities, New Delhi, 21.
17. Sehgal S.S. and **Varsha Baweja**, 1996. Efficiency of *Heterorhabditis bacteriophora* Poinar (Nematoda: Heterorhabditidae) under insecticide–stress in parasitizing *Spodoptera litura* Fabr. (Lepidoptera: Noctuidae). In: XX International Congress of Entomology, Italy, 683.
18. **Varsha Baweja**, and S.S. Sehgal, 1996. The area of discovery and host searching strategy of an entomophagous nematode *Heterorhabditis bacteriophora* in soil columns. In: XX International Congress of Entomology. Italy, 678.



19. **Sachdeva, V.** and P.C. Gupta, 1986. Two new species of the genus *Microcotyle* from marine fishes at Puri coast, Orissa, India. In: National Congress of Parasitology, 7th Session, Raipur.

#### Books, Book Chapters and E-contents:

- **Varsha Baweja** and Monica Misra **2021** E-book on Practical Manual on Developmental Biology. Kindle Direct Publishing. ASIN: B08WN3PN54 <http://www.amazon.com/dp/b08wn3pn54>
- **Varsha Baweja** and Ruby Mishra (Editors) **2017** Reproductive Health in India: Concerns and Awareness. Publisher: Enriched Publications, New Delhi. ISBN: 978-819346343-7
- **Baweja Varsha** **2017** Chapter on “Status of Congenital Anomalies in India: A Bird’s Eyeview”. Book Reproductive Health in India: Concerns and Awareness, Enriched Publications, New Delhi, pp. 121-133. ISBN: 978-819346343-7
- **Baweja Varsha**, S.S. Sehgal and R.K. Seth **1998** Chapter on “Nematodes as a biological tool in Integrated Pest Management”. Book Ecofriendly Pest Suppression, Westville Publications, New Delhi, pp. 271-320. ISBN 13: 97881858
- Jain Anju, Nanda Sarita, **Baweja Varsha** **2018** Endocrine Disruptors. E-content for postgraduate course under NME-ICT Project of MHRD. <https://epgp.inflibnet.ac.in/Home/ViewSubject?catid=2rAs1Puvga4LW93zMe83aA==>  
<https://ugcmoocs.inflibnet.ac.in/quiz/exam.php>
- Nanda Sarita, **Baweja Varsha**, Jain Anju **2018** Neuronal Cytoskeleton. E-content for postgraduate course under NME-ICT Project of MHRD. <https://epgp.inflibnet.ac.in/Home/ViewSubject?catid=2rAs1Puvga4LW93zMe83aA==>  
<https://ugcmoocs.inflibnet.ac.in/quiz/exam.php>
- Jain Anju, **Baweja Varsha**, Anna Senrung **2018** Neuroendocrine Physiology: Hypothalamic Hormones. E-content for postgraduate course under NME-ICT Project of MHRD. <https://epgp.inflibnet.ac.in/Home/ViewSubject?catid=2rAs1Puvga4LW93zMe83aA==>
- Anna Senrung, **Baweja Varsha**, Jain Anju **2018** Neuroendocrine Physiology: Classification of Hormones. E-content for postgraduate course under NME-ICT Project of MHRD. <https://epgp.inflibnet.ac.in/Home/ViewSubject?catid=2rAs1Puvga4LW93zMe83aA==>

#### Invited Speaker/ Resource Person:

- **Session Chair** in a technical session of an International Conference on Integrative Chemical Science for Health & Environment, ICHE-2023 held on October 6-8, 2023 at Deshbandhu College, University of Delhi, New Delhi, India.

- **Session Chair** of a Session at two days National Symposium on “Potential of Start-ups in the field of Biological Sciences: Start-up Awareness” held on September 12-13, 2024 organized by Department of Zoology, Deshbandhu College, University of Delhi, New Delhi, India
- **Invited talk** on ‘Mindful and sustainable eating’ in a webinar held on the occasion of National Nutrition Week, Deshbandhu College, University of Delhi on Sep 6, 2023.
- **Resource Person-** Online Diploma Course in Teaching of Science at Middle Stage. Organized by Department of Education in Science and Mathematics at NCERT, New Delhi, From August 7, 2023 to August 11, 2023.
- **Resource Person-** Online Diploma Course in Teaching of Science at Middle Stage. Organized by Department of Education in Science and Mathematics at NCERT, New Delhi, From July 31, 2023 to August 4, 2023.
- **Resource Person-** Development of Learning Outcomes based activities in Biology, Chemistry, Physics and Mathematics at Secondary Stage (Level 2). Organized by Department of Education in Science and Mathematics at NCERT, New Delhi, From July 3, 2023 to July 7, 2023.
- **Resource Person** in a workshop on "**Drosophila as a research Model**", organized for the students of Undergraduate students of third year of University of Delhi. March 28, 2023
- **Resource Person-** Online Diploma Course in Teaching of Science at Upper Primary Stage. Organized by Department of Education in Science and Mathematics at NCERT, New Delhi, From January 16-20, 2023.
- **Session Chair** of one Oral Session at International Conference on Natural Products and Human Health – 2022 (ICNPHH-2022)” held on November 4-6, 2022 organized by Department of Zoology, Deshbandhu College, University of Delhi, New Delhi, India.
- **Invited talk on** Social Responsibilities was delivered on the occasion of Yuva Shakti Abhiyan 2022 at Kalindi College, University of Delhi on June 18, 2022
- **Invited talk** on Social Responsibilities was delivered on the occasion of Yuva Shakti Abhiyan 2022 at Laxmibai College, University of Delhi on June 16, 2022.
- **Resource Person-** “Development of Learning Outcomes based activities under Roadmap in Biology at Higher Secondary Stage (byte sized videos).” (PAC 6.07/2021-22). Organized by Department of Education in Science and Mathematics at NCERT, New Delhi, From February 21-22 and February 25-27, 2022.
- **Resource Person-** “Development of Learning Outcomes based activities under Roadmap in Biology at Higher Secondary Stage (byte sized videos).” (PAC 6.07/2021-22). Organized by Department of Education in Science and Mathematics at NCERT, New Delhi, From February 9-13, 2022
- **Resource Person-** “Development of Learning Outcomes based activities under Roadmap in Biology at Higher Secondary Stage (byte sized videos).” (PAC 6.07/2021-22). Organized by Department of Education in Science and Mathematics at NCERT, New Delhi, From February 3-4, 2022.
- **Resource Person-** “Development of Learning Outcomes based activities under Roadmap in Biology at Higher Secondary Stage (byte sized videos).” (PAC



- 6.07/2021-22). Organized by Department of Education in Science and Mathematics at NCERT, New Delhi, From January 17-19, 2022
- **Resource Person** in three days "Capacity Building Workshop" held on December 22-24, 2021 at Deshbandhu College, University of Delhi.
  - **Session Chair** of an Oral Session at Health 2021 International Conference on Cancer Biology: Advances and Challenges, Delhi on November 12, 2021.
  - **Session Chair** of an Oral Session at Two days online International Conference on Insect Plant Biology: 2021, Delhi on October 7, 2021.
  - **Judge**- "Create A Canvas"- An Inter-College Poster Making Competition held on 4th October, 2021 as a part of "Wildlife Week Celebration: WILD-O-VIGUS" organized by Deshbandhu College, University of Delhi, New Delhi, India.
  - **Resource Person**- Online Course in Teaching of Science at Upper Primary Stage. Organized by Department of Education in Science and Mathematics at NCERT, New Delhi, From February 8-12, 2021.
  - **Resource Person**- Online Diploma Course in Teaching of Science at Upper Primary Stage. Organized by Department of Education in Science and Mathematics at NCERT, New Delhi, From December 1-4, 2020
  - **Invited talk** on 'Bio-sustainable solutions to global environmental crisis' in a webinar organized by S N Sinha College, Tekari, Gaya on June 18, 2020.
  - **Invited talk** on 'Impact of Covid-19 pandemic on the environment' in an international webinar, organized by Sheodeni Sao College, Kaler, Bihar on June 5, 2020.
  - **Resource Person**- Workshop on Development of Tactile Kit in Science at Upper Primary Stage. Organized by Department of Education in Science and Mathematics at NCERT, New Delhi, From March 11-13, 2020
  - International Conference on Natural Products and Human Health – 2020 (ICNPHH-2020)" held on February 27-29, 2020 organized by Department of Zoology, Deshbandhu College, University of Delhi, New Delhi, India. **Jury Member** for an Oral Session.
  - **Evaluator** for Biology in Vidyarthi Vigyan Manthan (VVM) 2019-20, State Level Camp (Level II) Delhi held at Deshbandhu College, New Delhi, January 19, 2020
  - **Invited talk** on Biopesticides: A potent tool of Green Technology for mitigation of Pesticide Pollution was delivered in Colloquium of the Department of Zoology, Deshbandhu College on January 10, 2020.
  - **Resource Person**- Workshop on Development of Scripts for the Modules of Training Package in Biology for teachers teaching at Higher Secondary Stage for dissemination in MOOC format. Organized by Department of Education in Science and Mathematics at NCERT, New Delhi, From December 31, 2019 to January 3, 2020
  - **Resource Person**- Online Course in Science for Teachers teaching at Upper Primary Stage. Organized by Department of Education in Science and Mathematics at NCERT, New Delhi, From December 9-13, 2019.
  - **Resource Person**- Workshop on Development of Script for the Modules of Training Package in Biology for Teachers Teaching at Higher Secondary stage for

- Dissemination of MOOC Format. Organized by Department of Education in Science and Mathematics at NCERT, New Delhi, From November 25-29, 2019
- **Invited talk** on Insect Biodiversity was delivered in Colloquium of the Department of Zoology, Deshbandhu College on August 30, 2019.
  - **Resource Person**- Online course in teaching of science at upper primary stage. Organized by Department of Education in Science and Mathematics at NCERT, New Delhi from 22.07.2019 to 25.07.2019
  - Let's Innovate Competition organized by Delhi Public School, R.K. Purum Delhi, on July 13, 2019. **Jury Member**
  - **Resource Person**- Workshop on Mapping of QR codes in class X Science text book with e-content. Organized by Department of Education in Science and Mathematics at NCERT, New Delhi from 11.03.2019 to 13.03.2019
  - **Invited talk** on 'Role of lifestyle behaviours on women's health' on International Women's Day at Deshbandhu College on March 8, 2019.
  - **Resource Person**- Workshop on Development of modules of training package in Biology for teachers teaching at Higher Secondary Stage in online format. Organized by Department of Education in Science and Mathematics at NCERT, New Delhi from 25.02.2019 to 01.03.2019
  - **Resource Person**- Online course in teaching of science at upper primary stage. Organized by Department of education in science and mathematics, NIE, NCERT, New Delhi, from 24.01.2019 to 30.01.2019
  - **Resource Person**- Online course in teaching of science at upper primary stage. Organized by Department of education in science and mathematics, NIE, NCERT, New Delhi, from 12.11.2018 to 16.11.2018
  - **Resource Person**- Workshop on Development of tactile kit in science at upper primary stage. Organized by Department of education in science and mathematics, NIE, NCERT, New Delhi, September 10, 11, 13 and 14, 2018
  - **Resource Person**- Workshop on Development of tactile kit in science at upper primary stage. Organized by Department of education in science and mathematics, NIE, NCERT, New Delhi, from 19.03.2018 to 23.03.2018
  - **Resource Person**- Workshop on Development of tactile kit in science at upper primary stage. Organized by Department of education in science and mathematics, NIE, NCERT, New Delhi, from 12.03.2018 to 16.03.2018
  - **Resource Person**- Online Course in teaching of science at upper primary stage. Organized by Department of education in science and mathematics, NIE, NCERT, New Delhi. 19.02.2018 to 23.02.2018
  - **Resource Person**- Workshop on Development of kit based on handbook on understanding science through activity games, and art forms at upper primary and secondary Stages. Organized by Department of education in science and mathematics, NIE, NCERT, New Delhi. 29.01. 2018 to 02.02.2018.
  - **Resource Person**- Online Course in teaching of science at upper primary stage. Organized by Department of education in science and mathematics, NIE, NCERT, New Delhi. 8.1.2018 to 12.1. 2018

- **Resource Person-** Workshop on Development of kit-based handbook of understanding science through activities games and art forms at upper primary and secondary stages. Organized by Department of education in science and mathematics, NIE, NCERT, New Delhi, December 18-22, 2017.
- **Resource Person-** Workshop on Development of joyful Learning of science kit. Organized by Department of education in science and mathematics, NIE, NCERT, New Delhi. 11.12.2017 to 15.12.2017
- **Resource Person-** Workshop on Development of e-Resources in science at upper primary stage. Organized by Department of education in science and mathematics, NIE, NCERT, New Delhi. 27.11.2017-1.12. 2017
- **Session Chair** of an Oral Session at International Conference on Entomology at Paris, France on October 19, 2017.
- **Resource Person-** Workshop on Development of e-Resource in science at upper primary stage. Organized by Department of education in science and mathematics, NIE, NCERT, New Delhi. 9.1.2017-13.1. 2017
- **Jury Member-** Technovations: "A future Technology Idea Presentation" held during Technical Fest Tryst, Indian Institute of Technology, Delhi on February 24-27, 2017.
- National Symposium on "Environment: Greener Future and Awareness" held at Deshbandhu College, New Delhi. March 19, 2016. **Jury Member** for an Oral Session
- **Resource Person-** Workshop entitled, "Monitoring the Implementation of Environmental Education in Schools in States and UTs" organized by Department of Education in Science and Mathematics, NCERT, New Delhi. Nov.18- 20, 2012.

#### **Program Coordinator:**

- **Convenor** "Mr and Ms Sabrang' 2024" program on April 19, 2024 at Deshbandhu College, University of Delhi.
- **Covenor** 2nd International Conference on Natural Products and Human Health (ICNPHH-2022) held at Deshbandhu College, University of Delhi on November 4-6, 2022
- **Coordinator**-Media and Publicity Committee of the 70<sup>th</sup> Foundation Day Celebrations of the college. August 1, 2022.
- **Convenor-** One-day National conference on "National Education Policy: Implementation, Challenges, Opportunities and Probable Outcomes", with special reference to University of Delhi, under the aegis of Azadi Ka Amrut Mahotsav and IQAC held at Deshbandhu College, University of Delhi on May 14, 2022
- **Chief Editor** of the Proceedings of National conference on "National Education Policy: Implementation, Challenges, Opportunities and Probable Outcomes", with special reference to University of Delhi held at Deshbandhu College, University of Delhi on May 14, 2022

- **Convenor-** Hands-on workshop on Research Methodology organized by Department of Zoology, Department of Biochemistry and Department of Botany Dshbandhu College on Zoom. April 1-5, 2021.
- **Member, Organizing Committee** Innovation in Science Pursuit for Inspired Research (DST) held at Dshbandhu College, Kalkaji, New Delhi, Dec 17-20, 2020.
- **Convenor** of Webinar on Environment, held on Zoom on June 6, 2020.
- **Convenor** of Virtual workshop on 'Role of a Citizen in Biodiversity Conservation' held on Gotomeetings app on May 13, 2020.
- **Co-convenor** International Conference on Natural Products and Human Health held at University of Delhi, Delhi, India on February 27-29, 2020.
- **Advisory Member** National Conference on Pharmacovigilance Advancement in the Safe Drug Development. held at Dshbandhu College, University of Delhi, Kalkaji, New Delhi on January 16-17, 2020
- **Convenor, Organizing Committee** INSPIRE Internship Programme-2019 held at Dshbandhu College, New Delhi, Dec 17-21, 2019.
- **Convenor** National Conference on "Insect-Plant Biology in 21<sup>st</sup> Century" held at Dshbandhu College, University of Delhi, Kalkaji, New Delhi on November 4-5, 2019.
- **Member, Organising Committee** of Two weeks Faculty Development Programme on Entrepreneurship (Science, Technology and Management for Society) held at Dshbandhu College, New Delhi. Dec 13-27, 2018.
- **Member, Organizing Committee** of the 4th National Symposium on 'Environment: Green Technology for Environmental Sustainability' held at Dshbandhu College, New Delhi. Sep 25, 2018.
- **Member, Organising Committee** of the workshop on "Skill development to build a clean India" held at Dshbandhu College, New Delhi. June 7-8, 2018
- **Member, Organizing Committee** INSPIRE Internship Programme- 2017 held at Dshbandhu College, Kalkaji, New Delhi, Dec 18-22, 2017.
- **Member, Organizing Committee** for Third National Symposium on "Environment: Challenges Generation Next" held at Dshbandhu College, Kalkaji, New Delhi, March 31, 2017
- **Coordinator, National Symposium** on "Reproductive Health in India: Concerns and Awareness" held at Dshbandhu College, New Delhi. February 12, 2016.
- **Member, Organising Committee** of National Symposium on "Environment: Greener Future and Awareness" held at Dshbandhu College, New Delhi. March 19, 2016.
- **Member, Organising Committee** of National Symposium on "Environment: Challenges and Awareness" held at Dshbandhu College, New Delhi. Nov 5, 2014.

**Professional Training:**

- Successfully completed with A grade one week National **Faculty Development Program** on “**Unveiling Apiculture: Exploring The Art and Science of Beekeeping Methods and Applications**”, jointly organized by Miranda House, Dyal Singh College, ICAR and Guru Angad Dev Teaching Learning Centre from October 10<sup>th</sup> to 16<sup>th</sup>, 2023.
- Participated in the **One Week One Lab Program (OWOL)** on “**Grassroots Innovations and Skill Development Conclave for Rural Development**” on September 13, 2023 at CSIR, Pusa Complex, New Delhi.
- Successfully completed one day online **National Workshop** on “Investment & Tax Planning for Wealth Creation”, organized by Alliance School of Business, Alliance University, Bengaluru on June 10, 2023.
- Attended **Pre- Conference workshop** on "Role of Pharmacognosy and Regulations for the Development of Traditional Medicine" held at DPSRU, New Delhi on November 3, 2022
- Attended "**NeuroEunoia 2022: Brain Awareness Programme**" held between 07-10 October 2022, organised by Gargi College (University of Delhi) in collaboration with IQAC and under the aegis of the Indian Academy of Neuroscience (Delhi-NCR Chapter).
- Successfully completed two weeks Online Interdisciplinary **Faculty Development Programme** on ‘Introduction to Python Programming’ organized by Delhi Effective Education and Pedagogy Cluster in collaboration with Mahatama Hansraj Faculty Development Centre, Hansraj College, University of Delhi. From August 8-19, 2022
- Successfully completed three-day residential **Master Trainers' Training Programme on Capacity Building of Faculty as Master Trainers in Community Based Participatory Research (CBPR)** under Unnat Bharat Abhiyan (2.0) held at Kurukshetra University, Kurukshetra from July 19-21, 2022.
- Attended a webinar on **AVENUES IN PUBLIC HEALTH CARE** organised by Deshbandhu College, University of Delhi in association with Indian Institute of Public Health-Delhi, Public Health Foundation of India (PHFI) on June 25, 2022.
- Attended a webinar on “**Coastal Wetlands and Climate Change**” organised by Department of Botany, Deshbandhu College on February 2, 2022.
- Attended Three Days **Lecture Series on “NEP 2020: Delhi University Undergraduate Curriculum Framework 2022”** organised by Institute of Lifelong Learning, University of Delhi in collaboration with Mahatama Hansraj Faculty Development Centre, Hansraj College, University of Delhi on January 27-29, 2022.



- Successfully completed one week Online Interdisciplinary **Faculty Development Programme** on '**Wildlife conservation and management**' organized by Daulat Ram College, University of Delhi in collaboration with Mahatama Hansraj Faculty Development Centre, Hansraj College, University of Delhi. From Oct 4-9, 2021.
- Attended an International Webinar on "**World Ozone Day 2021**" organized by Deshbandhu College on September 16, 2021.
- Successfully completed one week Online Interdisciplinary **Faculty Development Programme** on 'Computational approach to drug discovery' organized by Deshbandhu College, University of Delhi in collaboration with Mahatama Hansraj Faculty Development Centre, Hansraj College, University of Delhi. From Aug 2-7, 2021
- Attended a webinar on "**Avenues in Public Health Care**" organized by Deshbandhu College, University of Delhi in association with Indian Institute of Public Health-Delhi, Public Health Foundation of India on July 24, 2021.
- Attended **India International Science Festival 2020**, organized by Ministry of Science and Technology, Ministry of Earth Sciences, Ministry of Health and Family Welfare, Govt of India in collaboration with Vijnana Bharati (VIBHA) and Council of Scientific and Industrial Research (CSIR). Dec 22-25, 2020.
- Attended First National Conference on "**Application of Mathematical Tools in Social Sciences and Sciences (Online)**" organized by Zakir Husain Delhi College, University of Delhi from October 17-18, 2020
- Attended an International E-conference entitled "**NeuroEunoia 2020: A Neuroscience Affair**" organized by Gargi College, University of Delhi on 16-17 October 2020
- Attended a National Webinar on '**Wasteland Management through Aromatic Plant Cultivation**' organized by Eco club Prakriti, Maitreyi college, University of Delhi on October 16, 2020
- Attended a Webinar on '**Machine Learning and Data Science for Biologists**' organized by Kirori mal College, University of Delhi on September 4, 2020.
- Attended a webinar on **नई शिक्षा नीति एवं आत्मनिर्भर भारत: अवधारनाय और चुनौतियां**, organized by NSS Unit, Deshbandhu College, University of Delhi on August 17-18, 2020.
- Attended a Webinar on '**Search, Research and Publication Ethics**' organized by Deshbandhu College, University of Delhi on July 24, 2020.
- Successfully completed one-week Online **Faculty Development Programme** on 'Development and Delivery of MOOCs and E-Content' jointly organized by Central University of Haryana, Mahendergarh and Deshbandhu College, University of Delhi from June 26,2020 to July 1, 2020.
- Attended a Webinar on 'Understanding of Sri Jagannath Consciousness' organized by Deshbandhu college, University of Delhi on June 25,2020

- Attended a Webinar on 'Challenges Faced by Women during Lockdown' organized by Daulat Ram College, University of Delhi on June 19, 2020.
- Attended a webinar on 'Challenges before Universities in Covid-19 Phase' organized by Delhi Metropolitan Education (GGSIU, Delhi) on May 13, 2020.
- Attended a webinar on 'Covid-19 Pandemic and Immunity' and 'Socio-psychological Issues and Covid-19' organized by Deshbandhu College, University of Delhi and Delhi Pharmaceutical Sciences and Research University, Delhi on May 6, 2020.
- Attended a webinar on 'Urban Health Hazard and Preparedness in Global Pandemic Covid-19' organized by Shaheed Bhagat Singh College, University of Delhi. May 2, 2020
- Attended a webinar on 'Mental Health Issues and Solutions' organized by Sri Venkateswara College, University of Delhi. April 28, 2020.
- Attended a webinar on 'Covid-19 and the challenges of the Visually Impaired' organized by the University of Delhi. April 27, 2020.
- Participated in a Pre-Conference Workshop on "Issues and Challenges for the Development of Phytopharmaceutical Drug" organized by DPSRU, New Delhi and Deshbandhu College, New Delhi. February 26, 2020.
- Attended **Research Based Pedagogical Tools (RBPT) Workshop** for Science Teachers at Daulat Ram College, University of Delhi. 25.03.2019 to 27.03.2019
- Successfully completed a training workshop on "Drosophila and Zebra Fish Model Systems" organized by Daulat Ram College, University of Delhi. December 19-21, 2016.
- Attended a national workshop on '**Recent Trends in Biochemistry and Biotechnology**' organized by Deshbandhu College, University of Delhi. April 21-22, 2016.
- Attended International Congress on "**Embryo Implantation and Pregnancy: Intricacies and Strategies for its Success**" held at National Institute of Immunology, New Delhi. March 9-11, 2015
- Attended a Seminar on '**Use of Animals in Education and Research**' held at Department of Zoology, University of Delhi. Oct. 20, 2012.
- Attended '**The Academic Congress – Enabling the Young: Redefining Education**' held at University of Delhi, 6-7 September, 2012.
- Successfully completed a course on "**Introduction to Bio-informatics**" organized by Department of Zoology, Zakir Husain College and ILLI, University of Delhi. January 16-20, 2012.
- Attended Indo-Swiss Collaboration in Biotechnology **International Conference on "Recent trends in developing bioremediation strategies for Hexachlorohexane (HCH) & other chlorinated contaminants"** organized by Department of Zoology, University of Delhi. Feb 9-11, 2011

- Successfully completed **four weeks Refresher Course** organized by UGC-ASC Jawaharlal Nehru University, New Delhi on "**Biotechnology**" from 26<sup>th</sup> July to 20<sup>h</sup> August, 2010 and obtained grade 'A'.
- Successfully completed **three weeks Refresher Course** organized by UGC-ASC Jamia Millia Islamia, New Delhi on "**Human Rights and Social Inclusion**" (Interdisciplinary) from 15<sup>th</sup> April to 5<sup>th</sup> May, 2010 and obtained grade 'A'.
- Attended a workshop on "**The fascinating world of e-resources for teaching biology to undergraduate students**" organized by Pearson Education India and Daulat Ram College, University of Delhi. March 8, 2010
- Attended National Symposium on "**Current Trends in Genomics and Proteomics**" organized by Deshbandhu College, N. Delhi. Feb 4-5, 2010.
- Successfully completed **four week Orientation Programme** organized by the UGC-ASC Jamia Millia Islamia, New Delhi from 16<sup>th</sup> April to 14<sup>th</sup> May 2009 and obtained grade 'A'.
- Successfully completed a workshop on "**Development of Online Quizzes in Life Sciences**" organized by Institute of Lifelong Learning on April 13, 2009.
- Successfully completed **three weeks Refresher Course** organized by CPDHE (Centre for Professional Development in Higher Education), ILL, University of Delhi on "**Life Sciences**" from January 29<sup>th</sup> to February 18<sup>th</sup>, 2009.
- Successfully completed a "Workshop to train the teachers for online examination/assignment" held at Maitreyi College, University of Delhi on January 29, 2009.
- Successfully completed **four days' workshop on " Biology Laboratory Course (LS 306)"** held at Acharya Narendra Dev College, University of Delhi from October 21 to 24, 2008.
- Attended National Symposium on "New Frontiers in Cell Biology" organized by Deshbandhu College, University of Delhi. November 29-30, 2007.
- Attended National Symposium on "Science of Life: The New Horizon" organized by Miranda House, University of Delhi. November 21-23, 2007.
- Attended Lecture workshop on "**Molecular Endocrinology & Gamete Biology**" held on October 3-4, 2005 organized by Indian Academy of Sciences, Bangalore at Daulat Ram College, University of Delhi, Delhi- 110007
- Successfully completed the "**Workshop on Analytical Techniques and Instrumentation for Biological Sciences**" held at Jawaharlal Nehru University, Delhi from February 7-12, 2000.
- Successfully completed a training programme on "Evaluation of Entomopathogenic Nematodes for their Bio-efficacy, Multiplication Potential and Biology" at Sugarcane Breeding Institute (ICAR), Coimbatore, TN on February 2, 1994.

## Research Projects

- Innovation Project: Effect of plant extracts on the midgut microbial flora of *Aedes aegypti*
- Innovation Project: Influence of plant extracts on reproductive physiology and behavior of *Aedes aegypti*

### Internship Opportunities

- Himanshu (B Sc Hons Biochemistry IIInd year) Effect of dietary isoflavone consumption on the prevalence of Alzheimer's disease. 2019-2020
- Aritra Chakraborty, Prithwik Bhowmik, Shubham Tiwari (B Sc Hons Zoology IIIrd year) Prevalence of gynaecological cancers and associated risk factors. 2019
- Ashish Sharma, Junaid Ali, Bhanu and Garima Tiwari (B Sc Life Science Ist year) Effect of non-ionizing radiations on the development of *Drosophila melanogaster*. 2017

### Visits, Colloquia and Webinars

- A visit to Zebra Fish Facility of Daulat Ram College, University of Delhi was organized on April 21, 2023 to let students understand the Zebra fish as a research model as well as its development under maintained laboratory conditions.
- International webinar on "Integrating Developmental Biology and Ecology- A New Frontier" on January 28, 2023. The speaker was world renowned developmental biologist Prof Scott F Gilbert.
- A visit to National Food Testing Laboratory was organized on October 14, 2022 to make students (of Food, Nutrition and Health paper) aware about the procedures and techniques used in testing food adulteration and providing FSSAI certificate to the product.
- E-workshop on "Development of Chick and Mouse Embryos: Experiments and Molecular Techniques" on March 12, 2022. The guest speaker was Dr Raj Ladher, NCBS, Bangalore.
- During Covid 19 pandemic an Alumni talk series- "**RECONNECT**" was initiated with the aim to bring all the alumni of the Zoology Department, Deshbandhu college to a common interactive online platform where students can share their achievements and experiences. in this series Dr Ravi Toteja of batch 1989-1992, Dr Sivaram V S Mylavarapu of batch 1991-1994 and Mr Rajat Rastogi of batch 2011-2014 were invited to speak about their research and experiences.
- A weekly lecture series "**Colloquium**" was initiated in 2019 with an aim to inculcate scientific aptitude among young minds and make them aware of

latest developments in science. It was inaugurated by **Dr Shivani Soni**, Scientist, California State University, USA on July 26, 2019. She delivered a lecture on "**Role of Erythroblast Macrophage Protein in Macrophage Development and Function**". A series of around 16 talks were organized on different topics by eminent experts of national and international repute.

- A "**Biodiversity Club**" was started in 2019 to connect students with the nature. A nature walk at Okhla bird sanctuary, Delhi was organized on January 23, 2020 to observe and assess both the flora and the fauna of this sanctuary, with special emphasis on the avian population.
- A visit to the Institute of Genomics and Integrative Biology (IGIB), Mathura Road, Delhi was organized on September 28, 2018 to provide an insight knowledge of cutting-edge technologies used in modern scientific research.
- An educational trip to National Dairy Research Institute, Karnal was organized for the students of Developmental Biology in 2010
- An educational trip to National Institute of Health and Family Welfare, Munirka, Delhi was organized for the students of Developmental Biology in 2009.

#### **Community Outreach Programmes:**

- Basic Life Support Training program was organized in association with Fortis Escorts, New Delhi on August 4, 2022.
- A talk on "Understanding and overcoming our stress and emotions" by a renowned clinical psychologist Dr Puneet Jain was also organized on August 4, 2022
- A multidisciplinary free health camp in association with NITRD, Fortis Escorts and Rotary club was organized at Rajpur Khurd Village on July 23, 2022.
- Menstrual hygiene awareness drive was organized in association with Innerwheel club, Vasant Kunj on July 23, 2022. Sanitary pads were also distributed in Rajpur village.
- On World Environment Day a cleanliness and plantation drive was organized at Bhati and Sultanpur Village on June 5, 2022
- A Legal Awareness Camp was organized in association with Delhi Legal service Authority at Rajpur Khurd village on March 6, 2022
- Two days workshop on Road Safety was organized on Jan 11-12, 2022.
- Under Swachh Bharat Abhiyan a Chitrakari Pratiyogita and a cleanliness drive was organized to inculcate sense of cleanliness in the villages adopted by the college.



- A national webinar was organized on the 'Socio-economic development of rural India' on Zoom in September 2021
- Reproductive and sexual health awareness program at Deshbandhu College, New Delhi, 2016.
- Dengue awareness program at Deshbandhu College, New Delhi, 2015.
- Dengue awareness program during Antardhwani at University of Delhi, Delhi, 2015.



Varsha Baweja