

**DESHBANDHU COLLEGE**  
(UNIVERSITY OF DELHI)  
KALKAJI, NEW DELHI - 110019

<b>Title: Assistant Professor</b>	<b>Dr.</b>	First Name	<b>Kiran</b>	Last Name	<b>Bala</b>	Photograph
Designation	<b>Assistant Professor</b>					
Address	Department of Zoology, Deshbandhu College Kalkaji, University of Delhi, Delhi - 110019					
Phone No. Office						
Residence Mobile	<b>+91 9818123320</b>					
Email	<a href="mailto:kbala@db.du.ac.in">kbala@db.du.ac.in</a> <a href="mailto:kiranbala2801@gmail.com">kiranbala2801@gmail.com</a>					
Web-Page link	<a href="https://sites.google.com/db.du.ac.in/dr-kiran-bala/home">https://sites.google.com/db.du.ac.in/dr-kiran-bala/home</a>					
<b>Educational Qualifications</b>						
Ph.D: 2011 M.Sc: 2007 B.Sc: 2003						
<b>Career Profile</b>						
<ul style="list-style-type: none"> <li>◆ <b>Teaching as an Ad-hoc Assistant Professor at Deshbandhu College affiliated to University of Delhi (July 2012 to onwards).</b></li> <li>◆ Worked as an Ad-hoc Assistant Professor at <b>Sri Guru Tegh Bahadur Khalsa College</b> affiliated to University of Delhi (January-April, 2012).</li> <li>◆ Worked as a Guest Lecturer at <b>Miranda House College</b> affiliated to University of Delhi (August-November, 2011 and January-April, 2012).</li> <li>◆ Worked as an Ad-hoc Assistant Professor at <b>Shivaji College</b> affiliated to University of Delhi (March- June, 2011).</li> </ul>						
<b>Administrative Assignments</b>						
<ol style="list-style-type: none"> <li>1. <b>Co-Convenor</b> of “SYNERGIA” Life Sciences (P) Society (2022-2023).</li> <li>2. <b>Member and Coordinator</b> of Rangoli Competition in College Annual Fest “Sabrang”-9-10 March, 2022.</li> <li>3. <b>Co-Convenor</b> of “SYNERGIA” Life Sciences (P) Society (2021-2022).</li> <li>4. <b>Convenor</b> to organise talk under Colloquium Activity in the Department of Zoology (2020-2021 till onwards).</li> <li>5. <b>Member</b> in website updating of Department of Zoology (July 2021-till onwards).</li> <li>6. <b>Member</b> in Zoology Dept. Cultural Society Annual Festival “Chimaera” in years 2013-2022.</li> <li>7. <b>Member</b> in Deshbandhu College Annual Festival “Sabrang” in years 2013-2022.</li> </ol>						
<b>Areas of Interest/Specialization:</b>						

**1. Microbiology:** Spreading and Sterilization; Basic microbiological techniques for isolation, purification and culture media preparation; Gram Staining; Pour plating; Preparation of bacterial smear; Different types of streaking; Measurement of bacterial growth by turbidometry & Serial dilution technique. Maintenance of HCH degrading and non-degrading Sphingomonads and *E.coli* strain.

**2. Molecular Biology:** Soil DNA isolation, Genomic & plasmid DNA isolation from Prokaryotes, Gene Cloning and sequencing in prokaryotic system, PCR, Gel Electrophoresis, Restriction digestion of plasmid DNA, DNA-DNA Hybridization, Transformation of plasmid DNA into *E. coli*.

**3. Enzymology:** Preparation of enzyme extract, Protein expression, His-tagged protein purification by FPLC and manually. SDS-PAGE, Enzyme assays and Enzyme kinetics. Protein purification from Inclusion body. Protein refolding (on column refolding and without column) and protein dialysis.

**4. DNA Sequencing:** Designing the gene sequencing primers using Oligo Analyzer, Gene runner and Bioedit software and sequencing the 16S rRNA gene sequence by using ABI Sequence Analyzer software.

**5. Chromatography:** Thin Layer Chromatography (TLC), Column Chromatography, Gas Liquid Chromatography (GLC), Gas Chromatography-Mass Spectroscopy (GC-MS), High Performance Liquid Chromatography (HPLC) and Nuclear Magnetic Resonance (NMR) for the identification of epsilon HCH isomer and its metabolites.

**6. Scientific Computer Software:** Phylogenetic analysis (PHYLIP, TreeconW, MEGA and Etaxon), ClustalX for Multiple sequence alignment, ClustalW, BioEdit, Sequence analyzer software for assemble the nucleotide sequence, RDP–Ribosomal Database project software, DNA-STAR and Clone Manager for sequence analysis, Vector NTI, Adobe Photoshop, Image J software, End Note, MS-word, PowerPoint and Excel.

### ***Subjects Taught***

Bioinformatics, Chordates, Cell Biology, Biotechnology, Non-Chordates and Biochemistry and Immunology

### ***Publications Profile***

#### ***e-Content Developed (Authored)***

1. National Mission on Education Information Communication Technology (NME-ICT). Certificate for Developing E- lesson for Undergraduate Course under the MHRD Project entitled “**Chromosomal Mutations**” (Author).
2. National Mission on Education Information Communication Technology (NME-ICT). Certificate for Developing E-lesson for Undergraduate Course under the MHRD Project entitled “**Microbial Growth Kinetics**” (Co-author).

3. National Mission on Education Information Communication Technology (NME-ICT). Certificate for Developing E-lesson for Undergraduate Course under the MHRD Project entitled “**Human Genetic Disorders**” (Author).
4. National Mission on Education Information Communication Technology (NME-ICT). Certificate for Developing E-lesson for Undergraduate Course under the MHRD Project entitled “**Principles of gene expression: Transcription**” (Co-author).
5. National Mission on Education Information Communication Technology (NME-ICT). Certificate for Developing E-lesson for Undergraduate Course under the MHRD Project entitled “**Principles of gene expression: Translation**” (Co-author).
6. National Mission on Education Information Communication Technology (NME-ICT). Certificate for Developing E-lesson for Undergraduate Course under the MHRD Project entitled “**Sequence organisation of genome**” (Co-author).
7. National Mission on Education Information Communication Technology (NME-ICT). Certificate for Developing E-lesson for Undergraduate Course under the MHRD Project entitled “**Immune response to infectious agent Fungi**” (Co-author).

### ***Research papers published in Refereed/Peer Reviewed Journals***

1. Utkarsh, Gauri, Shailly, Princy, Roshan, Jasvinder, Mansi, Nirjara, Sukanya Lal, Charu Dogra, Vineet, Jaspreet, Helianthous, Charu Tripathi, Priya, Ankita, Anjali, Rajendra, Jayaraj, Seema Makhija, Renu Gupta, Sumit, Namita, Jeeva, Sripoorna, Pushplata, Renu Solanki, Nitish, OmPrakash, **Kiran Bala**, Rashmi, Ravi Toteja, Vipin Chandra Kalia and Rup Lal (2022) Microbial Journey: Mount Everest to Mount Mars. *Ind J Microbiol* **Impact factor: 3.73 Accepted.**
2. Goel, P., Garg, N., Lata, P., RajKumar and **Bala, K., (2022)** Gut Microflora and Atherosclerotic Cardiovascular Disease. *Biosphere*.
3. Sharma P., Jindal S., **Bala K.**, Kumari K., Niharika N., Kaur J., Pandey G., Pandey R., Jackson J.C., Russell J. R., Oakeshott J. G and Lal R (2013) “Functional Screening of Enzymes and Bacteria for the Dechlorination of Hexachlorocyclohexane by a High-Throughput Colorimetric Assay” *Biodegradation* **Impact factor: 3.909, Citations: 13**
4. **Bala K.**, Geueke B., Miska M., Rentsch D., Poiger T., Lal R., Holliger C., and Kohler, H. E. P. (2012) “Enzymatic conversion of e-hexachlorocyclohexane and heptachlorocyclohexane, two neglected components of technical hexachlorocyclohexane”. *Environ. Sci. Technol* **Impact Factor: 9.028, Citations: 30**

5. Garg, N., **Bala, K.**, and Lal, R. (2011) *Sphingobium lucknowense* sp. nov., F2T a hexachlorocyclohexane (HCH) degrading bacterium isolated from HCH contaminated soil. *Int J Syst Environ Microbiol* **Impact Factor: 2.747, Citations: 27**
6. Anand S., **Bala K.**, Saxena A., and Lal R., (2011) “*Microbacterium amylolyticum* sp. nov., N5T a bacterium isolated from industrial waste soil.” *Int J Syst Environ Microbiol* **Impact Factor: 2.747, Citations: 14**
7. Jit, S., Dadhwal, M., Kumari, H., Jindal, S., Kaur, J., Lata, P., Niharika, N., Lal, D., Garg, N., Gupta, S. K., Sharma, P., **Bala, K.**, Singh, A., Vijgen, J., Weber, R., and Lal, R. (2010) Evaluation of hexachlorocyclohexane contamination from the last lindane production plant operating in India. *Environ Sci Pollut Res Int.* 18, 586-97. **Impact Factor: 4.306, Citations: 73**
8. Sharma, P., Verma, M., **Bala, K.**, Nigam, A., and Lal, R. (2010) Taxonomic description of *Sphingopyxis ummariense* UI2<sup>T</sup> sp. nov., isolated from Hexachlorocyclohexane (HCH)-dumpsite in North India. *Int J Syst Environ Microbiol* 60, 780-784. **Impact Factor: 2.747, Citations: 37**
9. **Bala, K.**, Sharma, P. and Lal, R. (2010) *Sphingobium quisquiliarum* sp. nov., P25T a hexachlorocyclohexane (HCH) degrading bacterium isolated from HCH contaminated soil. *Int J Syst Environ Microbiol* 60, 429-433. **Impact Factor: 2.747, Citations: 41**
10. Lal, R., Dadhwal, M., Kumari, K., Sharma, P., Singh, A., Kumari, H., Jit, S., Gupta, S.K., Nigam, A., Lal, D., Verma, M., Kaur, J., **Bala, K.** and Jindal, S. (2008) *Pseudomonas* sp. to *Sphingobium indicum*: a journey of microbial degradation and bioremediation of Hexachlorocyclohexane. *Ind J Microbiol*, 48, 3–18. **Impact factor: 3.73, Citations: 29**

#### ***Organizing the Conference/ Seminar/Symposium/ Colloquium***

1. **Organizing Member** in organizing one-day National Conference on “National Education Policy” Organized by Deshbandhu College, University of Delhi, New Delhi, India on **May 14, 2022.**
2. **Organizing Member** in organizing a talk on “Chemico-Biology Approaches for Defense Applications” Organized by Life Sciences Society Synergia, Deshbandhu College, University of Delhi, New Delhi, India on **April 21, 2022.**
3. **Organizing Member** in organizing a talk on “Drug Designing & Discovery” Organized by Life Sciences Society Synergia, Deshbandhu College, University of Delhi, New Delhi, India on **March 31, 2022.**
4. **Program Coordinator** in organizing a talk on “Coping with Covid” Organized by Life Sciences Society Synergia, Deshbandhu College, University of Delhi, New Delhi, India on **March 26, 2022.**

5. **Organizing Member** in organizing a talk on “Microbiome: Human Health, Environment & Society” Organized by Life Sciences Society Synergia, Deshbandhu College, University of Delhi, New Delhi, India on **February 16, 2022**.
6. **Organizing Committee Member** in e-workshop “Development of Chick and Mouse Embryos: Experiments and Molecular Techniques” Organized by Department of Zoology, Deshbandhu College, University of Delhi, New Delhi, India on **March 12, 2022**.
7. **Content Writer** in the three days “Capacity Building Workshop” jointly organized by department of Biochemistry, Botany and Zoology Deshbandhu College University of Delhi on **22-24 December, 2021**.
8. **Organizing Committee Member** in 6th Annual International Conference of International Network of Soil Contamination Research-INSCR 2021 on “Microbes in Sustainable Development” organized” in association with Department of Zoology, University of Delhi from **15-18 November 2021**.
9. **Co-Chair** in 6th Annual International Conference of International Network of Soil Contamination Research-INSCR 2021 on “Microbes in Sustainable Development” organized” in association with Department of Zoology, University of Delhi from **15-18th November 2021**.
10. **Co-Convenor** in Organizing “Health 2021 e-international conference cancer biology: advances & challenges” Organized by Department of Zoology, Deshbandhu College, University of Delhi, New Delhi, India on **11-13 November, 2021**.
11. **Convenor and Organizing Member** in *Lecture Cum Virtual Lab Visit* on “Landfill: A Public and Environmental Health Perspective” Organized by Department of Zoology, Deshbandhu College, University of Delhi, New Delhi, India on **8 November, 2021**.
12. **Organizing Member** in Virtual Jungle Safari on “Dudhwa Tiger Reserve” Organized by Department of Zoology, Deshbandhu College, University of Delhi, New Delhi, India on **25 September, 2021**.
13. **Organizing Committee Member** of MICROSHERE: An International Outreach Program on occasion of International Microorganism Day organized by Deen Dayal Upadhyaya College (DU), Gargi College (DU), IIT Rorkee, Kirori Mal College (DU), Ramjas College (DU), PG Dept. of Zoology (MU) & PhiXgen Pvt. Ltd., Gurugram in association with Acharya Narendra Dev College (DU), Maitreyi College (DU), Sri Venkateshwara College (DU) & C.M.P. College (AU) on **17 September, 2021**.
14. **Organizing Member** in the international webinar on “World Ozone Day 2021” Organized by Deshbandhu College, University of Delhi, New Delhi, India on **16 September, 2021**.
15. **Co-Convenor and Organizing Member** in “Virtual talk on in vitro Fertilization” organized by Department of Zoology, Deshbandhu college, University of Delhi on **23 July, 2021**.

16. **Co-Convenor** in organizing Colloquium talk on “Role of Retinoic Acid on Dendritic Cell Maturation and Function” organized by Department of Zoology, Deshbandhu College, University of Delhi on **February 13, 2021**.
17. **Co-Convenor and Organizing Member** in Lecture Cum Virtual Lab Visit On “Synthetic Biology and Biotechnology a Tool for Shaping Human Future” organized by Department of Zoology, Deshbandhu college, University of Delhi on **31st October, 2020**.
18. **Organizing Member**, “e-National Symposium on "Food Safety and Health" organized by Department of Zoology, Deshbandhu College under the aegis of IQAC and DBT Star College Scheme on **September 19, 2020**.
19. **Organizing Member**, “International Conference of Natural Products and Human Health-2020 (ICNPHH-2020)” organized by Department of Zoology, Deshbandhu College, University of Delhi, held on **27-29 February, 2020**.
20. **Organizing member** “Insect-Plant Biology in 21<sup>st</sup> Century” held at Deshbandhu College, University of Delhi, Delhi on **4-5 November, 2019**.
21. **Organizing member** “Fourth National Symposium on Environment: Green Technology for Environmental Sustainability” held at Deshbandhu College, University of Delhi, Delhi on **September 25, 2018**.
22. **Organizing member** in “Third National Symposium on Environment: Challenges Generation Next” held at Deshbandhu College, University of Delhi, Delhi on **March 31, 2017**.
23. **Organizing member** in the “Second National Symposium on Environment: Greener Future and Awareness” organized by Department of Zoology, Deshbandhu College, University of Delhi, held on **March 19, 2016**.
24. **Organizing member** in the “National Symposium on Reproductive Health in India: Concerns and Awareness” organized by Department of Zoology, Deshbandhu College, University of Delhi, held on **February 12, 2016**.
25. **Organizing member and resource person** in the “INSPIRE Internship Program-2015” organized by Department of Zoology, Deshbandhu College, University of Delhi & Department of Science & technology, Government of India, held on **December 14-18, 2015**.
26. **Organizing member** in the “National Symposium on Vector Biology and Vector Management” organized by Department of Zoology, Deshbandhu College, University of Delhi, held on **February 12, 2015**.
27. **Organizing member** in the “National Symposium on Environment: Challenges and Awareness” organized by Department of Zoology, Deshbandhu College, University of Delhi, held on **November 5, 2014**.

28. **Resource person** in the “INSPIRE Internship Program-2013” organized by Department of Zoology, Deshbandhu College, University of Delhi & Department of Science & technology, Government of India, held on **December 16-20, 2013**.
29. **Resource person** in the “INSPIRE Internship Program-2012” organized by Department of Zoology, Deshbandhu College, University of Delhi & Department of Science & technology, Government of India, held on **October 1-5, 2012**.

### ***Oral and Poster Presentation in the Conference/ Symposium***

- 1. Poster presentation** on “Evaluating the role of gut microbiota as possible biomarkers for gastric Cancers” in the “2<sup>nd</sup> International Colloquium RMBDP 2022” organized by department of Zoology, University of Delhi, Delhi on **24-25 February, 2022**.
- 2. Oral presentation** in 6th Annual International Conference of International Network of Soil Contamination Research-INSCR 2021 on “Alterations in Gut Microflora Causing Atherosclerotic Cardiovascular Disease” organized in association with Department of Zoology, University of Delhi from **15-18 November, 2021**.
- 3. Oral presentation** in Health 2021 e-international conference cancer biology: advances & challenges “Role of microRNAs in lung cancer” organized by Department of Zoology, Deshbandhu College, University of Delhi, New Delhi, India on **11-13 November, 2021. (Received Best Poster Certificate)**
- 4. Poster presentation** in the “International Conference of Natural Products and Human Health-2020 (ICNPHH-2020) On Interplay between nitric oxide (NO) and Nitrite (NO<sub>2</sub><sup>-</sup>) in plasticity of brain neurons responsible for learning and memory process” organized by Department of Zoology, Deshbandhu College, University of Delhi, held on **27-29 February, 2020**.
- 5. Poster presentation** in the “INSCR International Conference (IIC-2017) On Role of Micro-Plant-Animal Interactions in Human Health” held on **September 26-28, 2017**, at University of Delhi, Delhi, INDIA.
- 6. Poster presentation** “Role of animal agriculture in global warming” in the Second National Symposium on Environment: Greener Future and Awareness organized by Department of Zoology, Deshbandhu College, University of Delhi, held on **March 19, 2016. (Received Third Poster Certificate)**
- 7. Poster presentation** on “The enzymatic degradation of epsilon-Hexachlorocyclohexane (ε-HCH)” poster presented in ISCB International Symposium organized by Indo Swiss Collaboration in Biotechnology (ISCB). A decade experience in R&D and Technology Management. Symposium Hall, NASC Complex, New Delhi, India on **10-11 March 2011**.
- 8. Poster presentation** on “The enzymatic degradation of epsilon-Hexachlorocyclohexane (ε-HCH)”. Poster presented in Indo Swiss Collaboration in Biotechnology at an International Conference on Recent Trends in

Developing Bioremediation Strategies for Heaxachlorocyclohexane (HCH) & Other Chlorinated Contaminants, University of Delhi, Delhi, India on **9-11 February, 2011.**

**9. Poster presentation** on “Purification of  $\alpha$ -HCH (hexachlorocyclohexane); role of LinA (HCH dehydrochlorinase) and LinB (HCH haloalkane dehalogenase) in its transformation” poster presented at 51<sup>st</sup> AMI (Association of Microbiologists of India) conference, Birla Institute of Technology, Mesra, Ranchi, Jharkhand, India on **14-17 December, 2010.**

**10. Poster presentation** on “*Sphingobium quisquiliarum* sp. nov., P25<sup>T</sup> a Hexachlorocyclohexane (HCH) Degrading Bacterium Isolated from HCH Contaminated Soil” poster presented at 49<sup>th</sup> AMI (Association of Microbiologists of India) conference, Delhi, India on **17-19 November, 2008.**

### ***Research Projects***

- Dermatoglyphic: A preliminary tool for Blood Group Typing (Minor Project under DBT-Star College Scheme, September 2019; Status – Ongoing).

### ***Overseas Research Experience under Indo-Swiss Project***

Visited as a Research Scholar for six months in the Laboratory of Dr. Hans Peter Kohler & Dr. Thomas Poiger (February–July, 2010) at Eawag (UMIK, Swiss Federal Institute of Aquatic Science and Technology), Department of Environmental Microbiology, CH-8600, Dübendorf, Switzerland & Research station Agroscope Changins-Wädenswil, Plant Protection Chemistry. **The project entitled “Environmental Risk and Bioremediation of Hexachlorocyclohexane Isomers” under the Indo Swiss Collaboration in Biotechnology (ISCB).**

### ***Attended and Participated in the Conferences/Seminars/Symposium***

- 1. Participated** in an international webinar, “Evolution of Vaccine Technology: Applications and Challenges” at BIOSPARK’ 22 Organized by Department of Biochemistry, Deshbandhu College, University of Delhi on **23 April 2022.**
- 2. Participated** in Virtual field visit "Reefs and Sea - Shores; System of Lakshadweep" Organized by Deshbandhu College, University of Delhi held on **5 February, 2022.**
- 3. Participated** in 6th Annual International Conference of International Network of Soil Contamination Research- INSCR 2021 on “Microbes in Sustainable Development” organized in association with Department of Zoology, University of Delhi from **15-18 November 2021.**
- 4. Participated** in webinar on “Reflections of Indian Knowledge System: Heritage, Culture, Society and Science” organized by Azadi Ka Amrit Mahotsav (AKAMAH) Committee, Deshbandhu College on **29 October, 2021.**



5. **Participated** in Motivational lecture series, entitled "What has Science done for our Society?" organized by Department of Chemistry, Deshbandhu College, University of Delhi, India on **21 October, 2021**
6. **Participated** in webinar of "Wild Life Week Celebration: WILD-O-VIGUS" Organized by Deshbandhu College, University of Delhi, New Delhi, India from **4-9 October, 2021**.
7. **Participated in "Dudhwa Tiger Reserve"** Organized by Deshbandhu College, University of Delhi, New Delhi, India on **25 September, 2021**.
8. **Participated** in the international webinar on "World Ozone Day 2021" Organized by Deshbandhu College, University of Delhi, New Delhi, India on **16 September, 2021**.
9. **Participated** in webinar Unnat Bharat Abhiyan organised by UBA Cell Deshbandhu College on **9 September 2021**.
10. **Participated** in the 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**.
11. **Participated** in International Webinar Lecture Series on "Non-Invasive Cancer Diagnosis and Prognosis" organized by Department of Biochemistry, Deshbandhu college, University of Delhi on **17 October, 2020**.
12. **Participated** in the National webinar on topic "Wonderful Wilderness" organized by ARSD College, Dhaula kuan, New Delhi held on **1 October 2020**.
13. **Participated** LSME online international conference on "Responsible Research and Innovations in Management and Human Science" Organized by the London School of Management Education from **19-20 August 2020**.
14. **Participated** in the webinar on "Immunology of Covid-19" organized by Department of Zoology, Gargi College, and University of Delhi on **5 August 2020**.
15. **Participated** in the International Webinar on "COVID-19; Living through the Pandemic" organized by Department of Zoology, Hansraj College, University of Delhi on **29 July 2020**.
16. **Participated** in the Webinar on "Gender Sensitivity: Best Practice to Follow" Organized by Internal Complaints Committee (ICC) and IQAC, Deshbandhu College and POSHCA (NGO empaneled with Ministry of Women and Child Development) on **15 July 2020**.
17. **Participated** in the webinar entitled "Importance of IPR in Pandemic Situation: Special Focus on Expedite Patent Processing" organized by Shivaji College, University of Delhi on **11 July 2020**.
18. **Participated** in the National Webinar- I "Impact Centric Research: Funding Opportunities and Challenges in Framing Successful Research Proposal" organized by Shivaji College, University of Delhi on **11 July 2020**.
19. **Attended** webinar on "Epidemiology, Detection, Treatment and Comparative Genomics of SARS-CoV-2 and Managing Personal and Professional Life during COVID-19 Pandemic and Lockdown" Organized by Shivaji College on **9 July 2020**.

20. **Participated** in webinar on “Impact of Covid-19 on Research Progress in life Sciences: Mitigation of Losses and the Way Forward” Organized by Life Sciences of Mansarvoar Global University on **5 July 2020**.
21. **Participated** in the National Webinar on “Coronavirus Protective Physiochemical Science and Technology Using Borosil” Organized by School of Chemical Science, Central University of Gujrat and Gujrat Council of Science and Technology, Government of Gujrat on **2 July, 2020**.
22. **Participated** in webinar on “Challenges faced by Women during lockdown” by Ms. Swarana Kanta Sharma, District and Session Judge, North Delhi, organized by Gender Champion Cell, Daulat Ram College on **June 19, 2020**.
23. **Participated** in two days National Webinar on “Environmental Awareness” Organized by Department of Zoology, S. N Sinha College Tekari Gaya on **June 18-19, 2020**.
24. **Attended** the National Webinar on “Environmental Day” organized by Department of Zoology Under the aegis of DBT STAR College Scheme & IQAC Deshbandhu College, University of Delhi, India on **6 June, 2020**.
25. **Attended** one-day International Webinar on “Effects of COVID19 Pandemic on Our Environment” organized by Department of Zoology, Sheodeni Sao College, Kaler (Arwal), Bihar on **5 June, 2020**.
26. **Attended** the Webinar on “Covid-19 Pandemic and Immunity & Socio Psychological Issues and Covid-19” organized by Department of Zoology, Deshbandhu College, University of Delhi & Delhi Pharmaceutical Sciences and Research University on **6 May 2020**.
27. **Participated** in International Conference on "Human Rights- National and International Issues and Challenges", organized by Shaikshik Foundation in association with Deshbandhu College & Dr. Ambedkar International Centre, New Delhi held at Dr. Ambedkar International Centre, New Delhi from **February 22-23, 2020**.
28. **Participated** in National Conference on “Insect-Plant Biology in 21<sup>st</sup> Century” held at Deshbandhu College, University of Delhi, Delhi on **4-5 November, 2019**.
29. **Participated** in ICSI Teacher’s Conference and Faculty Development Programme on “Empowering Educators” held on **17 September 2019** at the Park Hotel, 15, Parliament Street, New Delhi.
30. **Attended** International Conference organized by Shaikshika Foundation in association with Deshbandhu College, Delhi University on “Bhartiya Women Past, Present and Future” held at NDMC Convention Centre, New Delhi on **23-24 February 2019**.
31. **Participated** in the “Fourth National Symposium on Environment: Green Technology for Environmental Sustainability” held at Deshbandhu College, University of Delhi, Delhi on **September 25, 2018**.
32. **Organizing member and resource person** in the “INSPIRE Internship Program-2015” organized by Department of Zoology, Deshbandhu College, University of Delhi & Department of Science & technology, Government of India, held on **December 14-18, 2015**.

33. **Participated** in the “INSPIRE Internship Program-2014” organized by Department of Zoology, Deshbandhu College, University of Delhi & Department of Science & technology, Government of India, held on **October 8-12, 2014**.
34. **Participated** in the “INSPIRE Internship Program-2013” organized by Department of Zoology, Deshbandhu College, University of Delhi & Department of Science & technology, Government of India, held on **December 16-20, 2013**.
35. **Participated** in the “INSPIRE Internship Program-2012” organized by Department of Zoology, Deshbandhu College, University of Delhi & Department of Science & technology, Government of India, held on **October 1-5, 2012**.

#### ***Attended and Participated Workshop***

1. **Mentor** in the three days “Capacity Building Workshop” jointly organized by department of Biochemistry, Botany and Zoology Deshbandhu College University of Delhi on **22-24 December, 2021**.
2. **Participated** 2<sup>nd</sup> Undergraduate Workshop on “Understanding Public Health from an interdisciplinary Perspectives” organised by Delhi Effective Education & Pedagogy Cluster (DDEP-C) DRIIV on **October 7-12, 2021**.
3. **Participated** in four-day online workshop on “**Research Methodology**” organized by Deshbandhu College, University of Delhi under agies of IQAC and DBT Star Scheme from **April 1-5, 2021**.
4. **Attended** the WORKSHOP on “Role of a Citizen in Biodiversity Conservation” organized by Department of Zoology, Deshbandhu College, University of Delhi on **May 13, 2020**.
5. **Participated** in the “Workshop on Technical Terminology in Science Teaching” organized by Deshbandhu College, University of Delhi, Ministry of Human Resources Development and Department of Higher Education on **October 26-27, 2017**.
6. **Attended** the DBT Star College Scheme and AOGIN Inia workshop on “Women Health and Cancer Awareness” organized by Department of Zoology, Miranda House, University of Delhi held on **April 7, 2017**.
7. **Participated** in the “Workshop on Microbial Genomics and Metagenomics” organized by Department of Zoology, University of Delhi, on **September 22, 2016**.
8. **Attended** a National Workshop on “Recent trends in Biochemistry and Biotechnology” (NRTBB-2016) at Biochemistry Department in Deshbandhu College, University of Delhi & Department of Science & technology, Government of India, held on **April 21-22, 2016**.
9. **Attended** the “Training Workshop in Bioinformatics and Biostatistics” organized by Miranda House, University of Delhi on **February 24-25, 2016**.

10. **Attended** the “Training the Trainers: IPR Workshop” organized by Miranda House, Delhi University on **January 15, 2016.**
11. **Attended** the “Training Workshop in Animal Behavior” held in Department of Zoology, University of Delhi on **19 -25 August 2015.**
12. **Participated** the “ASM Virtual Workshop on the art of science communication” held at Ramjas College, University of Delhi on **4 September 2013.**

#### ***Attended Faculty Development Programme and Induction/Orientation Programme***

1. **Completed** One-Week Online Faculty Development Programme on “Computational Approach to Drug Discovery” organized by Mahatma Hansraj Faculty Development Centre, A Centre of MoE, Govt. of India Under Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT) from **2-7 August 2021.**
2. **Completed** 4-Week Induction/Orientation Programme for "Faculty in Universities/Colleges/Institutes of Higher Education" organized by Teaching Learning Centre, Ramanujan College University of Delhi, under the aegis of Ministry of Human Resource Development Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching from **December 10, 2020 - Jan 08, 2021** and obtained grade A+.
3. **Completed** One-Week Online Faculty Development Programme on "ADVANCED PEDAGOGICAL TECHNIQUES" organized by Teaching Learning Centre, Ramanujan College University of Delhi, under the aegis of Ministry of Human Resource Development Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching from **October 29 - November 05, 2020** and obtained a grade A.
4. **Completed** One-Week Online Faculty Development Programme on "DEVELOPMENT AND IMPLEMENTATION OF MOOCS" organized by Teaching Learning Centre, Ramanujan College University of Delhi, under the aegis of Ministry of Human Resource Development Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching from **October 21 - October 27, 2020** and obtained a grade A+.
5. **Completed** Two-Week Online Faculty Development Programme on "RESEARCH METHODOLOGY" organized by Teaching Learning Centre, Ramanujan College University of Delhi, under the aegis of Ministry of Human Resource Development Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching from **1 October- 15 October 2020** and obtained a grade A+.
6. **Completed** One-Week Online Faculty Development Programme on “Development and Delivery of MOOCs and E-Content” jointly organized by Central University of Haryana, Mahendergarh under the aegis of Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT) and IQAC, Deshbandhu College, University of Delhi, New Delhi, from **26 June -1 July 2020.**

### ***Organized and Participated in Student's Excursion/Academic Tours***

- 1. Organized and Participated** in Research Lab Visit to Department of Biotechnology, IIT Delhi on **25 March, 2022.**
- 2. Organized and Participated** in "The Madras Crocodile Bank Trust Center for Herpetology" Organized by Department of Zoology, Deshbandhu College, University of Delhi, New Delhi, India on **1 February, 2022.**
- 3. Organized and Participated** in *Lecture Cum Virtual Lab Visit* on "Microbiological Testing of Food" Organized by Department of Zoology, Deshbandhu College, University of Delhi, New Delhi, India on **7 December, 2021.**
- 4. Participated** in *Lecture Cum Virtual Lab Visit* on "Landfill: A Public and Environmental Health Perspective" Organized by Department of Zoology, Deshbandhu College, University of Delhi, New Delhi, India on **8 November, 2021.**
- 5. Organized and Participated** in Virtual Talk on in Vitro Fertilization (IVF) by Department of Zoology, Deshbandhu College, University of Delhi, New Delhi, India on **23 July 2021.**
- 6. Organized and Participated** in Lecture Cum Virtual Lab Visit On "Synthetic Biology and Biotechnology a Tool for Shaping Human Future" for B.Sc. (P) Life Sciences 5<sup>th</sup> Semester Students on **31 October 2020.**
- 7. Organized and Participated** in Educational visit to "National Science Centre, Pragati Maidan, New Delhi" for a batch of 52 students of B.Sc. (P) Life Science 4th Semester, on **12 February 2020**, under the aegis of DBT Star College Project and IQAC.
- 8. Organized and Participated** in One-day educational trip to Regional Centre for Biotechnology, Faridabad for a batch of 20 students of B.Sc. (Hons) Zoology, final year students of Deshbandhu College, on **16 October 2019**, under the aegis of DBT Star College Project and IQAC.
- 9. Organized and Participated** in Research Lab Visit to ICGEB (International Centre for Genetic Engineering and Biotechnology) for B.Sc. (P) Life Science 3rd year 5th semester Students on **16 September 2019.**
- 10. Organized and Participated** in Research Lab Visit to TERI University, Vasant Kunj, New Delhi for B.Sc. (P) Life Sciences 5th Semester Students on **31 October 2018.**
- 11. Organized & Participated** in Educational trip to Department of Geology, University of Delhi, Delhi for B.Sc. (P) Life Science Students on **March 2018.**
- 12. Organizing and Participated** in the educational excursion to Sultanpur National Park Organized by the Department of Zoology, SGTB Khalsa College, to survey migratory birds, under the aegis of DBT's Star College Scheme on **5 February 2012.**

### ***Other Activities***

1. **Authored** an article titled **“Earth is in Danger - Curb the Plastic Pollution”** in the Teacher’s Corner section of Life Science Society Annual Magazine “Trinity” (2020-21), Deshbandhu College, University of Delhi.
2. **Editor** of Indian Network for Soil Contamination Research journal “Biosphere”
3. **Life member** of Indian Network for Soil Contamination Research journal.