# **Curriculum Vitae**

# Dr. Tarkeshwar

| Title                 | Dr.  | First                                      | Tarkeshwar             | Las   | t Name   |                            | Photograph                                   |  |
|-----------------------|--|--|------------------------|-------|--|----------------------------|--|--|
| (Ms/Mr/Dr/Prof)       |  | Name                                       |                        |       |  |                            |  |  |
| Designation           | Assistant Professor (Sr. Grade)            |  |                        |       |  |                            |  |  |
| Department            | Zoology                                    |  |                        |       |  |                            |  |  |
| Address               | Department of Kalindi College,             |  |                        |       |  |                            |  |  |
| (Official)            | University of Delhi, East Patel Nagar,     |  |                        |       | (5)  |                            |  |  |
|                       |  | Delhi-110008                               |                        |       |  |                            |  |  |
| Phone No.             |  | 9873761548                                 |                        |       |  |                            |  |  |
| Email                 | tarkeshwar@kalindi.du.ac.in                |  |                        |       | A STATE OF THE STA |                            |  |  |
|                       | tarukmc@gn                                 | nail.com                                   |                        |       |  |                            | 0  |  |
| Education             |  |  |                        |       |  |                            |  |  |
| Subject               | Institution                                |  |                        |       | Year   |                            | Details                                      |  |
| Ph.D. (Zoology)       | Department<br>Delhi                        | artment of Zoology, University of 2013     |                        |       |  |                            |  |  |
| Details:              |  |  |                        |       |  |                            | f <i>Spilosoma</i> (Walker) (L.) (Meliaceae) |  |
| M.Phil. (Zoology)     |  |  | gy, University         |       | 2006   |                            | Ist Division                                 |  |
| Details:              |  | of Chinal                                  | berry, <i>Melia az</i> | edara | <i>ich</i> (l.), on (  | certain beha               | avioural                                     |  |
|                       | responses of                               |  | • .                    |       | . ,,   |                            |  |  |
| M.Sc. (Zoology)       | Kirori Mal (<br>Delhi                      | College, U                                 | Jniversity of          |       | 2004   |                            | I <sup>st</sup> Division                     |  |
| B.Sc. (Zoology)       | Kirori Mal College, University of<br>Delhi |  |                        | 2002  |  | I <sup>st</sup> Division   |  |  |
| Add-on                |  | D. S. Kothari Centre for Research and 2008 |                        |       |  |                            |  |  |
| Certificate Course    | Innovation in                              | Science l                                  | Education, Mira        | anda  | 2000   |                            |  |  |
| "Medical              | House, Unive                               |  |                        |       |  |                            |  |  |
| Biotechnology"        |  |  |                        |       |  |                            |  |  |
| Biotechnology         |  |  |                        |       |  |                            |  |  |
| Career Profile        |  |  |                        |       |  |                            |  |  |
| Institution           | Designat                                   | ion  | Duration               |       |  | Role                       |  |  |
| Department of         | Assistant                                  |  |                        |       |  | Teaching, Research & Other |  |  |
| Kalindi College,      | 1 ISSISTANT                                | 110100001                                  | 03-01-202110 till 0    |       | iate   | <u> </u>                   | Academic and Administrative                  |  |
| University of Delhi,  |  |  |                        |       |  | responsibi                 |  |  |
| East Patel Nagar,     |  |  |                        |       |  | 1                          |  |  |
| Delhi-110008          |  |  |                        |       |  |                            |  |  |
| Department of Anim    | al Assistant                               | Professor                                  | 15/01/2020 t           | 0     |  | Teaching                   | & Other Academic                             |  |
| Science (Zoology),    |  |  | 04-01-2021             |       | and Administrative   |                            |  |  |
| School of Life        |  |  |                        |       |  | responsibi                 | ilities                                      |  |
| Sciences, TAB,        |  |  |                        |       |  |                            |  |  |
| Shahpur,              |  |  |                        |       |  |                            |  |  |
| Central University of | f  |  |                        |       |  |                            |  |  |
| Himachal Pradesh,     |  |  |                        |       |  |                            |  |  |
| Dharamshala           |  |  |                        |       |  |                            |  |  |
| Himachal Pradesh      |  |  |                        |       |  |                            |  |  |
| Kalindi College,      | Assistant                                  | Professor                                  | 16/05/2015 t           | 0     |  |                            | & Other Academic                             |  |
| University of Delhi,  |  |  | 14/01/2020             |       |  |                            | Administrative                               |  |
| East Patel Nagar,     |  |  |                        |       |  | responsibi                 | ilities (Mentioned Below)                    |  |
| Delhi-110008          |  |  |                        |       |  |                            |  |  |

| Deen Dayal | Assistant Professor | 24/07/2011 to 15/05/2014 | 1. | Teaching                  |
|------------|---------------------|--------------------------|----|---------------------------|
| Upadhyaya  | (Adhoc)             |                          | 2. | Co-convener               |
| College    |                     |                          |    | 'SYNAPSES' the            |
|            |                     |                          |    | Department Society,       |
|            |                     |                          | 3. | Member Archives Committee |
|            |                     |                          |    | (2013-14), NAAC, DDUC.    |
|            |                     |                          | 4. | Member of Department      |
|            |                     |                          |    | Purchase Committee,       |
|            |                     |                          |    | (2012-13, 2013-14)        |

#### **Research Interests/Specialization**

- 1. Applied Entomology
- 2. Insect-Plant Resistance
- 3. Microbiology
- 4. Bioinformatics

#### Administrative Assignments / Contribution to corporate life

- 1. Coordinator (2019-20) & Co-Coordinator (2014-2019, Present): Internal Quality Assurance Cell (IQAC)
- 2. SC/ST, Liaison Officer
- 3. Member: Research Project Fund Allocation Committee
- 4. Member: Anti-Tobacco Cell, Kalindi College
- 5. Member: Research Committee
- 6. Member: Purchase Committee
- 7. **Teacher In-charge:** Department of Zoology, Kalindi College, University of Delhi for session 2018-19, 2019-20
- 8. Academic Co-ordinator, Kalindi College, University of Delhi from January 2019-January 2020
- 9. Public Information Officer (PIO), Kalindi College, University of Delhi
- 10. Coordinator: Internal Quality Assurance Cell (IQAC), Kalindi College, University of Delhi
- 11. **Deputy Coordinator:** CEC, Kalindi College, University of Delhi (Nov/Dec, 2018, May/June 2019, Nov/Dec 2019-2020)
- 12. **Convener:** Technical Support Committee, (Online) Admission Committee (2017-18, 2018-19), Kalindi College, University of Delhi
- 13. Convener: Student Management Software, Kalindi College, University of Delhi
- 14. Convener: Management Information System, Kalindi College, University of Delhi
- 15. Member: ARIIA Committee, Kalindi College, Kalindi College, University of Delhi
- 16. Member: Prize committee "College Annual Day" (2017-18, 2018-19), Kalindi College, University of Delhi
- 17. Member: Research Fund Allocation Committee, Kalindi College, University of Delhi
- 18. Member: Women Development Cell, Kalindi College, University of Delhi
- 19. Member: Proctorial Board, Kalindi College, University of Delhi
- 20. Member: Swachchhata Abhiyan Committee, Kalindi College, University of Delhi
- 21. **Member:** Internal Quality Assurance Cell (IQAC), Kalindi College for National Assessment & Accreditation Council, NAAC (2014-18)
- 22. **Member**: Dissection Monitoring Committee (DMC), Department of Zoology, Kalindi College, University of Delhi (as internal member).
- 23. **Member**: Dissection Monitoring Committee (DMC), Department of Zoology, Dyal Singh College, University of Delhi (as External member).
- 24. **Member**: Dissection Monitoring Committee (DMC), Department of Zoology, Deen Dayal Upadhyaya College, University of Delhi (as External member).

- 25. **Member,** SSR Preparation Committee, Kalindi College for National Assessment & Accreditation Council, NAAC.
- 26. **Member:** Convener committee "*Lehren*" the Inter-college Cultural Fest, 2015 and 2016, Kalindi College, University of Delhi
- 27. **Member:** Stall display & Decoration, Conceptualization and its Execution, for Good Academic Practices in Antardhwani-2015, Kalindi College, University of Delhi
- 28. **Member**, Admission Committee (SC/ST Student Admission Committee) (2015-16), Kalindi College, University of Delhi
- 29. **Convener:** SWOC Analysis Committee (Execution Committee), Kalindi College (2015-17), Kalindi College, University of Delhi

## **Teaching Experiences (Subject/Courses taught)**

#### Undergraduate Level Undergraduate Level Postgraduate level · Introduction to Biology • Genetics & Genomics Developmental Biology • Introduction to Medical • Evolutionary Biology · Medical Entomology Diagnostics • Applied Zoology (Entomology) • Entomology Lab • Physiology Biotechnology • Functional Anatomy of Chordates Molecular Biology • Bioinformatics Biostatistics · Cell Biology • Animal Behaviour · Basics of Wildlife Studies Animal Diversity • Bioinformatics and Biostatistics • M.Sc. Dissertation & Research Guidance Biochemistry • Food, Nutrition and Health • Research Guidance to 02 Ph.D. Students Ecology • Environmental Studies • Research & Publication Ethics • Developmental Biology • Physiology & Biochemistry Advances In Entomology And Management Of Immunology • Non-Chordata-I (Protista to Insect Pest • Comparative anatomy and Pseudocoelomates) Developmental Biology • Comparative anatomy of Vertebrates • Fundamentals of Biochemistry • Insect Vector & Diseases • Genetics & Evolutionary Biology • Research Methodology

#### **Research Experience**

# Undergraduate level

1. Innovation Project KC-302 "Microbial Fuel Cell: An efficient benign set up for electrochemical cell for removing of impurities from laboratory generated waste water"

Funded under Delhi University Innovation Projects Scheme 2015-16.

Number of Undergraduate students Involved in the project: 10 Students

2. Minor Project: "To Develop Software for Online Assessment/Examination for College students as an ICT based teaching-learning practice"

Funded by Kalindi College under Antardhwani: Good academic Practices 2015-16.

Number of Undergraduate students Involved in the project: 3 Students

3. Minor Project: "Linking Urban Spaces with potential Carbon Stock".

**Inhouse Project Code: 27/2018** 

Number of Undergraduate students Involved in the project: 12 Students

4. Minor Project: "Reinventing the Butterfly Conservatory".

**Inhouse Project Code: 28/2018** 

Number of Undergraduate students Involved in the project: 12 Students

5. Minor Project: "Ayurveda: The Alternative System of Time Tested Medicine".

Inhouse Project Code: 44/2018

Number of Undergraduate students Involved in the project: 15 Students

6. Title of the Project: "Student Wellness: Strategy for Student Success through Medical Diagnostics".

**Inhouse Project Code: 45/2018** 

Number of Undergraduate students Involved in the project: 15 Students

# Postgraduate level

7. Research Guidance for M.Sc. Dissertation in paper Forensic Science

| No. of Student | Subject                                   | Institution                            |
|----------------|---|--|
| 01             | M.Sc. Anthropology Part-II, Semester- IV, | University of Delhi                    |
|                | 2018-19, for the paper Forensic Science   |  |
|                | (Entomology)                              |  |
| 08             | M.Sc. Zoology, Part-II, Semester-IV,      | Central University of Himachal Pradesh |
|                | 2019- 20)                                 |  |

Publication (Peer Reviewed/Indexed Journals): 09

| Year of     | Title  | Journal (Name of the journal.  | Co-Author  |
|-------------|--|--|--|
| Publication |  | Vol Issue ISSN)  |  |
| 2022        | Biofabricated nanoparticles: Their delivery and utility in <i>Plutella xylostella</i> management                                       | Indian Journal of Biochemistry & Biophysics, Vol 59, Page: 399-404, ISSN 0975-0959 (Online), 0301-1208 (Print) | Kapinder, Kriti<br>Bhardwaj,<br>Savita Singh &<br>Tarkeshwar   |
| 2022        | Nanoparticles: applications in medicine and agriculture  | International Journal of<br>Scientific and Research<br>Publications, Vol. 12 (3):<br>28-33<br>ISSN: 2250-3153  | Tarkeshwar, Anubha Dasb, Sunil Thakur, Kumari Ruchika, Kanika Choudhary, Kapinder  |
| 2022        | Sustainable Management Strategies and<br>Biological Control in<br>Apple Orchards – Indian Perspective                                  | Plant Science Today, Vol 9(2): 443–45. ISSN 2348-1900 (online)   | Manisha Arora Pandit, Saloni Gulati, Neeru Bhandari, Tarkeshwar, Poonam Mehta, Roma Katyal, Charu Dogra Rawat & Jasleen Kaur |
| 2021        | Geometrical and electro-static determinants of protein-protein interactions.   | Bioinformation, Vol. 17(10)<br>851-860<br>ISBN: 0973-2063(online),0973-<br>8894(Print)                         | Vicky Kumar,<br>Ashita Sood,<br>Anjana<br>Munshi,<br><b>Tarkeshwar</b><br><b>Gautam</b> &<br>Mahesh<br>Kulharia1             |
| 2021        | Influence of different odours on the associative learning of larval parasitoid <i>Cotesia plutellae</i> (K.) (Hymenoptera: Braconidae) | Journal of Advanced Zoology,<br>Vol. 42 (1): 20-33<br>ISSN: 0253-7214  | Kapinder,<br>Tarkeshwar,<br>and Singh A.K  |
| 2019        | Orientation and behavioural responses of <i>Cotesia plutellae</i> (Kurdjumov) (Hymenoptera: Braconidae) towards honey and sucrose.     | International Journal of Zoological Investigations. 5 (1): 33-48. ISSN:2454-3055                               | Kapinder,<br><b>Tarkeshwar</b> ,<br>Kumar, A.<br>and Singh A.K   |
| 2018        | Effect of light intensity and nutritional value of food resources on flight response of adult parasitoid,                              | BioRxiv 444224; (online) doi:<br>https://doi.org/10.1101/444224  | Kapinder,<br>Tarkeshwar<br>and Singh A.K   |

|                | Cotesiaplutellae (Kurdjumov)              |                                   |               |
|----------------|---|-----------------------------------|---------------|
|                | (Hymenoptera: Braconidae)                 |                                   |               |
| 2014           | Insecticidal and antifeedant activity of  | IOSR, Journal of Agriculture and  | Tarkeshwar,   |
|                | Melia azedarach (L.) fruits on Spilosoma  | veterinary Science. Vol.7, 1(II): | Kapinder and  |
|                | obliqua (Walker) (Lepidoptera:            | 15-20. (e-ISSN: 2319-2380, p-     | Singh A.K.    |
|                | Arctiidae).                               | ISSN: 2319-2372).                 |               |
| 2014           | Role of vitamins on various biological    | IOSR, Journal of Agriculture and  | Kapinder,     |
|                | aspects of an egg parasitoid,             | veterinary Science. Vol.7, 1(II): | Tarkeshwar    |
|                | Trichogramma chilonis (Ishii)             | 10-14. (e-ISSN: 2319-2380, p-     | and Singh A.K |
|                | (Hymanoptera: Trichogrammatidae) on       | ISSN: 2319-2372).                 |               |
|                | its laboratory host, Corcyra cephalonica. |                                   |               |
|                |   |                                   |               |
| Paper in Confe | rence/Proceedings: 03                     |                                   |               |
| 2021           | Biopesticides: Effective strategy for the | PENWI21-Present status and        | Savita Singh, |
|                | management of Plutella xylostella         | future trends in entomological    | Tarkeshwar    |
|                | (Lepidoptera: Putellidae).                | and wildlife studies(Proceedings  | and Kapinder  |
|                |   | of International Conference)      |               |
|                |   | <i>Pp:</i> 73-81                  |               |
|                |   | ISBN: 978-81-7906- 000-0          |               |
| 2020           | Melia Azedarach: A Potent Insect          | Perspectives on Biodiversity of   | Tarkeshwar,   |
|                | Inhibitor and An Alternative to           | India, In: Proceedings of         | Kapinder and  |
|                | Biodiversity Pollutant-Synthetic          | International Biodiversity        | Singh, A.K.   |
|                | Insecticides                              | Congress (IBC2018), Vol. IV       |               |
|                |   | Pp: 602-604                       |               |
|                |   | ISBN: 978-81-937930- 6-0          |               |
| 2020           | Educational Institutions as Incubation    | Perspectives on Biodiversity of   | Varsha Singh  |
|                | pocket for Harbouring Biodiversity        | India, In: Proceedings of         | and           |
|                |   | International Biodiversity        | Tarkeshwar    |
|                |   | Congress (IBC2018), Vol. IV       |               |
|                |   | <i>Pp</i> : 367-369               |               |
|                |   | ISBN: 978-81-937930- 6-0          |               |
| ļ              | 1   |                                   | 1             |

# Seminar/Workshop/Conferences Presentation/Organisation

### Paper presentation in Conference/Seminar

- Presented a paper entitled "Microbial Fuel Cell: An Efficient Benign Set Up for Electrochemical Cell for Removing of Impurities from Laboratory Generated Wastewater" in National Conference on "Recent Trends and Advancements in Chemical Sciences" held from 29-31 March 2019, organised by Department of Chemistry, University of Delhi and Bhaskaracharya College of Applied Sciences, University of Delhi in association with Society for Promotion of Education and Science (SPES) at University of Delhi.
- 2. Presented a paper entitled "Carbon Sequestration by urban green spaces" in National Conference on "Recent Trends and Advancements in Chemical Sciences" held from 29-31 March 2019, organised by Department of Chemistry, University of Delhi and Bhaskaracharya College of Applied Sciences, University of Delhi in association with Society for Promotion of Education and Science (SPES) at University of Delhi.
- 3. Presented a paper entitled 'शहरी ग्रीन स्पेस को संभावित कार्बन स्टॉक के साथ जोड़ना'in National Seminar (राष्ट्रीय संगोष्ठी) on "सतत पर्यावरण विकास: वैज्ञानिक और तकनीकी शब्दावली का उपयोग" held on 14-16 March, 2019 organised by Department of Zoology, Gargi college in association with Commission for Scientific and Technical Terminology, MHRD & Department of Higher Education at Gargi College University of Delhi.
- 4. Presented a paper entitled as "Influence of Light Intensity and Physiological Condition on flight response *Cotesia plutellae* (Kurdjumov) (Hymenoptera: Braconidae)" in the UGC sponsored National Conference on "Biotechnological Interventions in Agriculture, Health and Industry" held on 23-24 February, 2019, organized by Department of Biotechnology, Deen Dayal Upadhyaya Gorakhpur University, Gorakhpur, Uttar Pradesh.
- 5. Presented a paper entitled as "Biodiversity conservation through Tagfalters: Role of Institution and Youth" in the International Conference on "Advances in Biological and Environmental Research for Human welfare" held on 16-18 November, 2018, organized by Department of Zoology, Deen Dayal Upadhyaya Gorakhpur University, Gorakhpur, Uttar Pradesh.

- 6. Presented a paper entitled as "Orientation and Behavioural Responses of *Cotesia plutellae* (Kurdjumov) (Hymenopetera: Braconidae) towards Honey and Sucrose" in the International Conference on "Advances in Biological and Environmental Research for Human welfare" held on 16-18 November, 2018, organized by Department of Zoology, Deen Dayal Upadhyaya Gorakhpur University, Gorakhpur, Uttar Pradesh.
- 7. Presented a paper entitled as "Microbial Fuel Cell: A Greener Way for Removing of Impurities from Laboratory Generated Waste Water" in the International Conference on "Advances in Biological and Environmental Research for Human welfare" held on 16-18 November, 2018, organized by Department of Zoology, Deen Dayal Upadhyaya Gorakhpur University, Gorakhpur, Uttar Pradesh
- 8. Presented a paper entitled as "Educational Institute as Incubation pocket for Harbouring Biodiversity" in the **International Biodiversity Congress**, held on 4-6 October 2018, organised by Forest Research Institute, Dehradun, Uttarakhand.
- 9. Presented a paper entitled as "*Melia Azedarach*: a Potent Insect Inhibitor and an Alternative to Biodiversity Pollutant-Synthetic Insecticides" in the **International Biodiversity Congress**, held on 4-6 October 2018, organised by Forest Research Institute, Dehradun, Uttarakhand.
- 10. Presented a paper entitled as "An approach to protect environment: Microbial Fuel Cell" at DST Sponsored National Seminar on "Innovation in Sciences In Emerging Challenges in Health and Environment (NSHE-2018)" held on 20th march, 2018, at Daulat Ram College, University of Delhi, Delhi.
- 11. Presented a poster in DST Sponsored National Seminar on "Saksham Mahila, Saksham Samaaj: Ek Vaigyanik Drishtikon: A Paradigm Shift Towards Empowerment of Women" held from 3-4 February 2017, at Kalindi College, University of Delhi, Delhi-110007.
- 12. Participated and displayed project model "Microbial Fuel Cell" at "*Innovation Festival 2017*" from 20-23 January 2017, organised by Innovation Space, National Science Centre, Pragati Maidan, New Delhi-110001.

### Participation in Conference/Seminar/workshop

- 13. Participated in National Leadership Summit on "Excellence in Higher Education: Current Challenges and the Road Ahead" held on 6<sup>th</sup>-7th December, 2019, organized by Mahatma Hansraj Faculty Development Centre (MHRFDC) and IQAC, Hansraj College, University of Delhi.
- 14. Participated in Faculty Development Programme for "Shifted Goalposts in New NAAC: A Challenge for Today's IQAC" held on 10<sup>th</sup> September 2018, organised by Sri Guru Nanak Dev Khalsa College, University of Delhi, at SGND Khalsa College, University of Delhi.
- 15. Participated in 1 Day workshop on "Document Verification: A Forensic Perspective" held on 11th June, 2018 organised by Shaheed Rajguru College of Applied Science for Women, University of Delhi.
- 16. Participated in First International Conference on "Mass Disaster and Emergency Management (A Lifesaving strategy)" held on 20-21 April, 2018, organized by National Task force for Disaster Management in association with Kingsmead School, England at Dyal Singh college, University of Delhi.
- 17. Participated in "Science Academies Lecture Workshop" on "Ingenuity in Biological Sciences" held from 11-12 January, 2018 organised by Gargi College, University of Delhi, at Gargi College, University of Delhi.
- 18. Participated as Science Ambassador in "1st Science Ambassador Program, a Seminar & Workshop on Recent Developments in Biotechnology" held on 6th November, 2017 organised Bio-Red laboratories in association with Deshbandhu College, University of Delhi and St. Thomas Girls Sr. Sec. School, at St. Thomas Girls Sr. Sec. School, Delhi.
- 19. Participated in "One Day Faculty Development Programme on Research Based Pedagogical Tools (RBPT) for Undergraduate Level Science Teachers" held on 3rd November, 2017, at Deen Dayal Upadhyaya College, University of Delhi.
- 20. Participated in workshop "DST Sponsored Third Lecture Workshop" on "Trans-disciplinary Areas of Research and Teaching" by Shanti Swaroop Bhatnagar Awardees, held from 15-16 September, 2017, at Deen Dayal Upadhyaya College, University of Delhi.
- 21. Participated in workshop on "Undergraduate Science Teachers, Workshop themed at Developing Scientific Temper in Students: Tools & Techniques" held on 31st January, 2017, at Ramjas College organised by Department of Zoology, Ramjas College University of Delhi, Delhi-110007 and India Bioscience.

- 22. Participated in workshop on "Bioinformatics and Bio-statistics Workshop: An Introduction" held from 24-25 February 2016, at Department of Zoology, Miranda House College, University of Delhi, Delhi-110007
- 23. Participated in workshop on "6<sup>th</sup> Workshop on Bioinformatics and Molecular Modelling in Drug Design" held from 21-23 January 2016, at Dr. B.R. Ambedkar Centre for Biomedical Research, University of Delhi, Delhi-110007
- 24. Participated in workshop on "**Training Workshop in Animal Behaviour**" held from 19-25 August 2015, at Department of Zoology, University of Delhi, Delhi-110007
- 25. Participated in *DST-SERB* supported National Conference on "Climate Changes: Impacts, Adaptation, Mitigation Scenario and Future Challenges in Indian Perspectives" held from 02-03 March 2015, at Conference Hall, University of Delhi, organized by Department of Botany, Deen Dayal Upadhyaya College, University of Dehi, Delhi-110015.
- 26. Participated in Workshop "Data Acquisition and Analysis" held on 30<sup>th</sup> September 2014, at Department of Zoology, University of Delhi, Delhi.
- 27. Participated in Workshop "Training & Awareness Program on Intellectual Property Rights" held on 2<sup>nd</sup> November 2014, at Conference Hall, University of Delhi, organized by FICCI in association with IPO & University of Delhi.
- 28. Participated in Workshop "Role of Youth in Combating Climatic Change" held on 3<sup>rd</sup> November, 2014, at Mahatma Gandhi Institute for Combating Climatic Changes, Bakoli, Alipur, Delhi-110036.
- 29. Participated in "3<sup>rd</sup> **Training Workshop in Drosophila**" held on 20-21 September, 2013 at Department of Zoology conducted by Department of Zoology, University of Delhi.
- 30. Participated in "Hands-on cum workshop for Teachers" for the course "Paper 21: Evolutionary Biology" held on 10<sup>th</sup> February, 2013 at SGTB Khalsa College, conducted by *Sri Guru Tegh Bahadur Khalsa College* in collaboration with *Acharya Narendra Dev College* and *Swami Shraddhanand College*, University of Delhi.
- 31. Participated in "Introduction to Bioinformatics" Workshop for faculty of Delhi University, held from 16-22 January, 2013 at Institute of Life Long Learning (ILLL), University of Delhi organised by Zakir Husain Delhi College University of Delhi.
- 32. Participated in Bioinformatics Workshop for faculty of Delhi University, held from 27-30 July, 2011 at Department of Bioinformatics, Sri Venkateswara College University of Delhi.
- 33. One Day Training Programme for "Prevention and Control of Dengue Fever" held on 24<sup>th</sup> December, 2004 at Delhi Sachivalaya, organized by Health Department, Municipal Corporation of Delhi.

#### Member/Convener in Organising Committee

- Convener, Organising committee of "Two Day's Orientation cum Workshop on "हमारे समृद्ध वैदिक गणित की झलक", on the occasion of आजादी का अमृत महोत्सव being organized by the Department of Mathematics and IQAC Kalindi College, University of Delhi in collaboration withशिक्षा संस्कृति उत्थान न्यास held on Thursday, 10th Feb & Friday, 11th Feb 2022 organised by IQAC and Department of Mathematics, Kalindi college, University of Delhi.
- 2. Convener, National Webinar on "FIGHT AGAINST TOBACCO" held on 16 October 2021, organised by Anti-Tobacco Committee in collaboration with IQAC, Kalindi College, University of Delhi.
- 3. Member, Organised Committee of International Conference on "Changing Environment: Understanding the emerging challenges and their management strategies" held on 11-12 April 2019, organised by Department of Zoology, Kalindi college, University of Delhi
- 4. Member, Organising Committee of DBT sponsored workshop on "The Folscope" held on 10<sup>th</sup> April 2019, organised by Department of Zoology, Kalindi college, University of Delhi.
- 5. Member, Organising Committee for National Conference on "Recent Trends and Advancements in Chemical Sciences" organised by Department of Chemistry, University of Delhi and Bhaskaracharya College of Applied Sciences, University of Delhi in association with Society for Promotion of Education and Science (SPES), from 29-31 March 2019, held at University of Delhi.
- 6. Organized Campus Bird Count (The Bird Count India 2019) and Invited talk as part of the Great Backyard Bird Count Drive in association with Nature Science Initiative with B.Sc.(Honours) Zoology 1<sup>st</sup> and 2<sup>nd</sup> Year

- students. A pre-introductory talk was delivered by Ms. Misha Bansal, project coordinator, on the topic "Introduction to Birding" on 13<sup>th</sup> February 2019 and Mr. Prasanna Gautam, a very passionate bird enthusiast from the team joined and guided during Kalindi College Campus Bird Count and Walk on 15<sup>th</sup> February 2019. In our campus walk we recorded 28 different bird species in our campus at different location.
- 7. Organised Three Day Training Workshop "Entrepreneurship Awareness Camp for Science Student" from 15-17 January 2019 under "Entrepreneurship Development Programme" DST, Govt. of India, conducted by Department of Zoology in association with IQAC Kalindi College and National Institute for Entrepreneurship and Small Business Development (NIESBUD), Ministry of Skill Development, Govt. of India, at Kalindi College, University of Delhi.
- 8. Convener, NAAC sponsored National workshop on "**Skill Enhancement At Institutions of Higher Learning: Training Today and Tomorrow**" through IQAC, Library and Science Departments, Kalindi College from 7-13 January 2019, at Kalindi College, University of Delhi.
- 9. Organized workshop on "Skill Enhancement Workshop for Laboratory Staff" through IQAC and Science Departments, Kalindi College held on 13-14 March 2018, at Kalindi College, University of Delhi.

#### Resource Person

- Resource person and delivered a lecture the topic "Right to Information Act 2005" in Two-Day Training Workshop for Administrative Staff from 7-8 January 2019 on the Theme: Administration and Institutional Managements- RTI, in NAAC sponsored National workshop on "Skill Enhancement At Institutions of Higher Learning: Training Today and Tomorrow" organised by IQAC, Library and Science Departments, Kalindi College from 7-13 January 2019, at Kalindi College, University of Delhi.
- 2. Resource person and presented the topic "Bio-Safety and Waste Management" under the sub-session "Biological Waste Management" in workshop on "Skill Enhancement Workshop for Laboratory Staff" held on 13-14 March 2018, organised by IQAC and Science Departments, Kalindi College, at Kalindi College, University of Delhi.

### Subject Expert/Special Lecture

- 1. Keynote Speaker in National Webinar on "Environment Awareness" on 18 June 2020 at S.N. Sinha College, Magadh University, Gaya Bihar, India.
- 2. Chairperson, Technical Session, in e-Symposium IRABSRD 2020 Two Days National e-symposium on "Innovations and Recent Advancements in Biological Sciences for Rural Development" on 23-07-2020 organized by Daudnagar College, Daudnagar, (Aurangabad, Bihar) Magadh University, Bodh Gaya.
- 3. Visited as Subject Expert (Evaluation Board) for the Zoology subject at Jharkhand Public Service Commission (JPSC), Ranchi, Jharkhand from 08-11-2019 to 17-11-2019.
- 4. Special/Invited Lectures on "Forensic Entomology" for M.Sc. Forensic Science Course (Part-II- Sem III) at Department of Anthropology, University of Delhi on 4<sup>th</sup> September and 23<sup>rd</sup> October, 2018.
- 5. Visited as Subject Expert (Interview Board Member) for the Post of Science teachers conducted by EdCIL (India) in Odisha Adarsh Vidyalaya Sangathan (OAVS) at Bhubaneswar, Odisha.

# Orientation/Refresher Programme/Course

- Completed UGC-Sponsored Refresher Course in Life Sciences (SRC) held from 28-06-2019 to 11-07-2019, Organised by UGC-HRDC, Centre for Professional Development in Higher Education, University of Delhi at University of Delhi, Delhi.
- 2. Completed UGC-Sponsored Orientation Programme (OR-91) held from 21-11-2017 to 19-12-2017, Organised by UGC-HRDC, Centre for Professional Development in Higher Education, University of Delhi at University of Delhi, Delhi.

#### **Awards & Distinctions**

1. Won Best poster presentation award for the paper entitled as "An approach to protect environment: Microbial Fuel Cell" at DST Sponsored National Seminar on "Innovation in Sciences In Emerging Challenges in Health and Environment (NSHE-2018)" held on 20<sup>th</sup> march, 2018, at Daulat Ram College, University of Delhi, Delhi

- 2. Senior Research Fellow (SRF), CSIR (Council Of Scientific And Industrial Research, Human Resource Development Group), and Junior Research Fellow (JRF), through CSIR-JRF, NET, Qualified on 1/12/2005.
- 3. Received SC/ST Meritorious Award by NCT, Delhi Government in 2002-03.

# Public Service/ University Service/ Consulting Activity

Member in *ePathshala* at Department of Zoology, University of Delhi, Delhi-110008

#### **Professional Societies Memberships**

- 1. Life time member of "Society for Promotion of Education and Science (SPES)", Delhi, India
- 2. Founder member and Life member "Himalayan Life Science Society (HLSS)", Central University of Himachal Pradesh, Dharamshala, Himachal Pradesh, India
- 3. Member, Indraprastha Vijana Bharti, Delhi, India

# Board of Studies/Syllabus revision

Member in University of Delhi-Learning Outcome-Based Curriculum Framework (LOCF) for Undergraduate CBCS Syllabus in Zoology Department, University of Delhi.

#### Papers:

- 1. Research Methodology, B.Sc. (H) Zoology, III Sem., SEC paper
- 2. Computational Biology, B.Sc. (H) Zoology, V Sem., DSE paper
- 3. General Entomology, B.Sc. Applied Life Sciences, VI, Core paper

# Syllabus Committee Member, Department of Animal Sciences, Central University of Himachal Pradesh, Dharamshala

#### **Projects**(Major Grants/ Collaborations)

#### **Major Project**

#### 1. Title of the Project:

"Microbial Fuel Cell: An efficient, economical and environmental benign set up for simultaneous conversion of chemical energy into electrical energy along with the removal of impurities from laboratory generated waste water"

#### Name co-investigator:

Dr. Amit Kumar, Assistant Professor, Department of Chemistry, Kalindi College, University of Delhi

Number of Undergraduate students Involved in the project: 10 Students

**Total cost of the project:** Rs. 6 Lakhs.

#### **Minor Project**

1. Title of the Project: "Linking Urban Spaces with potential Carbon Stock".

#### **Inhouse Project Code: 27/2018**

Name co-investigator: Dr. Varsha Singh & Dr. Manisha Arora Pandit

Assistant Professor, Department of Zoology, Kalindi College, University of Delhi

Number of Undergraduate students Involved in the project: 12 Students

Total fund of the project: Rs. 7,500/-

2. Title of the Project: "Reinventing the Butterfly Conservatory".

#### **Inhouse Project Code: 28/2018**

Name co-investigator: Dr. Varsha Singh & Dr. Manisha Arora Pandit

Assistant Professor, Department of Zoology, Kalindi College, University of Delhi

Number of Undergraduate students Involved in the project: 12 Students

Total fund of the project: Rs. 7,500/-

3. Title of the Project: "Ayurveda: The Alternative System of Time Tested Medicine".

# **Inhouse Project Code: 44/2018**

Name co-investigator:

Dr. Divya Verma, Assistant Professor, Department of Botany, Kalindi College, University of Delhi Dr. Amit Kumar, Assistant Professor, Department of Chemistry, Kalindi College, University of Delhi Number of Undergraduate students Involved in the project: 15 Students

Total fund of the project: Rs. 10, 000/-

4. Title of the Project: "Student Wellness: Strategy for Student Success through Medical Diagnostics".

#### **Inhouse Project Code: 45/2018**

Name co-investigator: Dr. Punita Verma

Assistant Professor, Department of Physics, Kalindi College, University of Delhi

Number of Undergraduate students Involved in the project: 15 Students

Total fund of the project: Rs. 15, 000/-

5. Project Title: "To develop software for Online Assessment/Examination for college students as an ICT based teaching-learning practice"

# Name of Co-investigators

Dr. Amit Kumar, Assistant Professor, Department of Chemistry, Kalindi College, University of Delhi

Number of Undergraduate students Involved in the project: 03 Students

Total cost of the project: Rs. 70,000/-

#### **Other Details**

# Book/Book Chapter:

- 1. **Book Authored:** "A Concise Textbook Book of Animal Behaviour and Chronobiology", Prestige Publications (In Press)
- 2. Chapter in edited book: 05 (04 Elsevier, 01 CRC Press)
- 3. Translation work of course material of School of Science, Indira Gandhi National Open University (IGNOU), New Delhi.
  - Experiment 5:Determination of Composition of AComplex by Job's Method
  - BBCT-101, Molecules of Life, Block 3
  - BBCCL-106, Protein(A Practical Manual)
  - Unit 4 : MetalCarbonylCompounds-II
  - Unit 3: MetalCarbonylCompounds-I
  - Unit 2 :OrganometallicCompounds
  - Unit 1: InorganicReagents
- 4. Editing, Translation and Review of course material of School of Science, Indira Gandhi National Open University (IGNOU), New Delhi.

Course: Biology, Subject: Biochemistry

Chapters: 03

- i. Unit 9: Lipids तिपिड
- ii. Unit 10: Membrane Lipid- कला तिपिड
- iii. Unit 11: Specialized Functions of Lipid- तिपिडों के विशेषीकत कार्य
- 5. Contributed a chapter on "Gene Annotation Using of ORF Finder" for workshop on "Recent Trends in Bioinformatics" held on 31<sup>st</sup> January, 2018 organised by Department of Botany at Deen Dayal Upadhyaya College, University of Delhi.

- 6. Author of e-quizzes on chapter 'Protein Metabolism' of Chapter: Biochemistry & Immunology, Unit: 3, Paper No. 18 for B.Sc. Life Science, in Institute of Lifelong Learning (ILLL), University of Delhi. Delhi, 2014.
- 7. Tarkeshwar and Singh I.K. (2014). Chapter 4: **Biodiversity and its Conservation (Unit 4).** *In:* "*Basic Environmental Studies*". Book Age Publications pp: 77—114. [ISBN: 978-93-83281-41-1]

Other Skill:

**2007-08** One year Diploma course in Advance Computer Software.

Dr. Tarkeshwar

Tautain