




Faculty Profile



Title	Dr.	First Name	Sarita	Last Name	Kumar	Photograph
Designation	Professor					
Address	Department of Zoology Acharya Narendra Dev College, Govindpuri, New Delhi - 110019					
Phone No. (Office)	+ 91 11 2629 4542					
Residence	+91 11 46557447					
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Email	saritakumar@andc.du.ac.in ; sarita.sanjay90@gmail.com					
Web-Page	https://www.andcollege.du.ac.in/uploads/departments/Zoology/Faculty_Proforma_Sarita%20Kumar_Oct%202020.pdf https://www.linkedin.com/in/sarita-kumar-b3267018/ http://wikieducator.org/User:Saritasanjay					
Educational Qualifications						
Degree	Institution				Year	
B. Sc. (H) Zoology	Hans Raj College, University of Delhi				1983	
M. Sc. Zoology	Hans Raj College, University of Delhi				1985	
Ph. D. Zoology	Department of Zoology, University of Delhi				1990	
Certificate in French	University of Delhi				1988	
Diploma in French	University of Delhi				1989	
Career Profile						

Working as Professor in Zoology at Acharya Narendra Dev College, I am a trained entomologist and obtained my doctoral degree from University of Delhi, India. With more than **29 years of teaching and 19 years of research experience**, I have been **registered** under University of Delhi to guide students for Ph.D. degree. My area of research **includes insect pest and vector control**. A prolific writer, I am credited with over **70 publications** in reputed International/National research journals and more than **75 presentations** in conferences; **23 Books and 27 e-Chapters** on science and science education. I work with various government organizations for curriculum development; editing and reviewing of educational content; and as a resource person in many training programs. I have completed **one major and five minor research projects** and at present working on another **major project** sanctioned by ICMR. I have also mentored more than hundred students in innovative science projects and formulated products from waste emerged from industries.

A believer of open education, I have **also facilitated/coordinated International conference and more than 20 workshops** in New Delhi. I was selected as one of the 'Open Access Competition Winners' amongst the ten worldwide by the International Network for the Availability of Scientific Publications (INASP), UK, to celebrate the Open Access Week. I am also a proud recipient of '**Distinguished Teacher Award**' conferred by University of Delhi and '**Meritorious Teacher Award**' conferred by Government of NCT of Delhi. For my continued and immense contribution in the CUBE network of HBCSE-TIFR, Mumbai, I have been awarded **K S Krishnan Fellow Award, Anil Sadgopal Award, SK Mahajan Award** for popularization and contribution to Science.

Academic Identity

✓ UGC Vidwan ID:	49788
✓ Researcher ID:	AAF-3124-2020
✓ Scopus ID:	56122646400
✓ ORCID ID:	0000-0002-1066-3057

Administrative Assignments

Within the College

- **Acting Principal** (Nov.17- Dec 27, 2015; March 2016)
- **Vice-Principal** (2014-2017)
- Coordinator, **Internal Quality Assurance Cell** (June 18, 2021 - To date)
- Member, **Internal Quality Assurance Cell** (Oct 1, 2014-Feb 13, 2017)
- **Transparency Officer** (Oct 1, 2014-Feb 13, 2017)
- **Teacher-In-Charge**, Department of Zoology (April, 2018- June 2020)
- **Convener**, Library (April, 2018- June 2020)
- Member, **Internal Quality Assurance Cell** (2015-2018)
- **Superintendent**, Examinations (Oct 1, 2014-Feb 13, 2017)
- **Coordinator, Admissions** (Oct 1, 2014-Feb 13, 2017)
- **Teacher-In-Charge**, Department of Zoology (July, 2014-Dec, 2014)

- Convener, **Finance Committee** (2010-2014)
- Convener, **Sashakt - A Society for Women Empowerment** (2012-2014; 2002-2004)
- Convener, **College Complaints Committee** (2012-2013)
- Teacher Member, **Governing Body** of the college (2012-2013; 1999-2000)
- Convener, **Central Purchase Committee** of the college (2009-2010)
- Convener, **Central Development Committee** of the college (2009-2010)
- Teacher Representative, **PF Committee** (2008-2010)
- Member, **Fellowship Committee** (2008-2010)
- Convener, Committee formed for the planning of **New College Building** (2008-2010)
- Convener, **Library Committee** (2006-2008; 2018-2020)
- **Teacher-In-Charge**, Life Sciences Courses (2004-2006)
- **Bursar** (2003-2005)
- Convener of **Support Staff Welfare Committee** (2003-2005)
- **Teacher-In-Charge**, Department of Zoology (2002-2004; 1996-2000)
- **Teacher-In-Charge**, Department of Sericulture (2002-2004)
- **Deputy Superintendent** of Examinations (1998 – 2000)
- **Staff council** secretary (1996-1998)

University Level

- Team member in the **curriculum development** of:
 - ✓ **Zoology for Life Sciences course** at the undergraduate level, University of Delhi
 - ✓ **Zoology for Applied Life Sciences course** at the undergraduate level, University of Delhi
 - ✓ **Zoology for Honours course under FYUP Scheme** at the undergraduate level, University of Delhi
 - ✓ **Zoology for Honours course under CBCS Scheme** at the undergraduate level, University of Delhi
 - ✓ **Zoology for Life Sciences course under CBCS Scheme** at the undergraduate level, University of Delhi
 - ✓ **Zoology for Honours course under LOCF-CBCS Scheme** at the undergraduate level, University of Delhi
 - ✓ **Zoology for Life Sciences course under LOCF-CBCS Scheme** at the undergraduate level, University of Delhi
- **Member of Science Faculty** during the academic years 2009-2012.
- Member of **Committee of Courses** during the years 2012-2021
- Member of **Department Research Committee** during the years 2012-2013, 2016-2018

Others

- In the '**Panel of Inspectors**' to conduct inspection of "*Amardeep College, Firozabad*" to grant affiliation to Dr. Bhimrao Ambedkar University, Agra
- In the '**Panel of Inspectors**' to conduct inspection of "*Chaudhary Nathu Singh Yadav College, Dehuli, Mainpuri*" to grant affiliation to Dr. Bhimrao Ambedkar University, Agra.

Areas of Interest / Specialization
Insecticide Toxicology, Applied Entomology, Mosquito Control, Plant Pest Control
Subjects Taught
28 Years (1994-Till date) <ul style="list-style-type: none"> ➤ Animal diversity-I: Non-Chordata ➤ Biochemistry ➤ Applied Zoology ➤ Medical Zoology ➤ Applied Entomology ➤ Parasitology ➤ Apiculture and Sericulture
Research Guidance
As on April 27, 2023 <ul style="list-style-type: none"> ➤ Ph.D. students completed their doctoral research – 06 ➤ M. Phil. students completed their dissertation – 02 ➤ Ph.D. student registered for doctoral research – 06 ➤ CSIR Senior Research Associate – 01 ➤ UGC Post-doctoral fellow – 01 (Completed) ➤ CSIR Research Associate – 01 (Completed) ➤ Guiding postgraduate students for their Dissertations ➤ Facilitated summer training of more than 150 Undergraduate students under ELITE scheme of the college ➤ Training school students under innovation projects ➤ Guided/mentored undergraduate students under Innovation Projects funded by University of Delhi (ANDC-201, ANDC-301). ➤ Guided twelve students under the aegis of IEDC-DST projects
Publications Profile
As on April 27, 2023 <ul style="list-style-type: none"> ✓ Research papers: 74 ✓ SCI-Indexed Publications: 33 ✓ SCOPUS-Indexed Publications: 47 ✓ Total Citations: 1368 ✓ h-Index: 21 ✓ i10 Index: 30 ✓ Conference publications/Presentations: 78

- ✓ Full publications: 09
- ✓ Abstracts: 69
- ✓ **Books: 22**
- ✓ Edited: 01
- ✓ PG level (MHRD): 01
- ✓ UG level: 01
- ✓ Biological Science/School education: 20
- ✓ **E-Chapters: 27**
- ✓ PG students: 03 (UGC ePG-Pathshala)
- ✓ UG students: 12 (VLE, DU)
- ✓ e-books: 12

Contributing as Writer, Reviewer, Editor & Expert - IGNOU, NCERT, SCERT & NIOS

Publications in Peer-Reviewed Journals

- ✓ Lanbiliu, P., Samal, R.R., Panmei, K. & **Kumar, S.** (2023) β -cyfluthrin-induced alterations in the total and differential haemocytes count in the red cotton bug, *Dysdercus koenigii* (Fabricius, 1775). *Journal of The Entomological Research Society*, 25(1): 215-227. <https://doi.org/10.51963/jers.v25i1.2315>
- ✓ Sharma, A., Samal, R.R., Kumar, M., Verma, V., Sagar, R., Singh, S.P., Raghavendra, K. & **Kumar, S.** (2023) Laboratory evaluation of the efficacy of deltamethrin-laced attractive toxic sugar bait formulation on *Anopheles stephensi* Liston. *Malaria Journal*, 22: 92. <https://doi.org/10.1186/s12936-023-04524-3>
- ✓ Gautam, D., Samal, R.R., Dheer, S., **Kumar, S.** & Hooda, S. (2023) One pot chemical coprecipitation preparation of magnetic graphene oxide-deltamethrin nanoformulations for management of *Aedes aegypti*. *Journal of Applied and Natural Science*, 15(1): 194-202. <https://doi.org/10.31018/jans.v15i1.4305>
- ✓ Sinha, S.N., Ungarala, R., Kumar, D., Sangaraju, R. & **Kumar, S.** (2022) A novel RP-HPLC method for quantification of cholinesterase activity in human blood: An application for assessing organo-phosphate and carbamate insecticide exposure. *PLOS One*, 17(12): e0279287. <https://doi.org/10.1371/journal.pone.0279287>
- ✓ Sharma, A., Mishra, M., Dagar, V.S. & **Kumar, S.** (2022) Morphological and physiological changes induced by *Achyranthes aspera*-mediated silver nanocomposites in *Aedes aegypti* larvae. *Frontiers in Physiology*, DOI: <https://doi.org/10.3389/fphys.2022.1031285>
- ✓ Falswal, J., Dey, D. & **Kumar, S.** (2022) An overview on non-*Apis* bees *vis-à-vis* the exploration of integrated taxonomic approach (Hymenoptera: Apoidea). *Fragmenta*

Entomologica, 54(2): 233-246 (<https://doi.org/10.13133/2284-4880/703>)

- ✓ Samal, R.R., Panmei, K., Lanbiliu, P. & **Kumar, S.** (2022) Metabolic detoxification and *ace-1* target site mutations associated with acetamiprid resistance in *Aedes aegypti* L. *Frontiers in Physiology*, DOI: <https://doi.org/10.3389/fphys.2022.988907>
- ✓ Mishra, M., Dagar, V.S., Sharma, A. & **Kumar, S.** (2022) Docking-based virtual screening ascertaining β -sitosterol-induced alterations in the *Helicoverpa armigera* Hübner gut enzyme. *Journal of The Entomological Research Society*, 24(2): 209-218. <https://doi.org/10.51963/jers.v24i2.227>
- ✓ **Kumar, S.**, Sharma, A., Samal, R.R., Kumar, M., Verma, V., Sagar, R.K., Singh, S. & Raghavendra, K. (2022) Attractive Sugar Bait Formulation for development of Attractive Toxic Sugar Bait for control of *Aedes aegypti* (Linnaeus). *Journal of Tropical Medicine*, Article ID: 2977454, 1-10
- ✓ Samal, R.R., Panmei, K., Lanbiliu, P. & **Kumar, S.** (2022) Reversion of CYP450 monooxygenase-mediated acetamiprid larval resistance in dengue fever mosquito, *Aedes aegypti* L. *Bulletin of Entomological Research*, 1:10, <https://doi.org/10.1017/S0007485321001140>
- ✓ Yadav, K., Samal, R.R., Sahgal, A. & **Kumar, S.** (2022) Indigenous plants demonstrating effective antioxidant properties. *Biology Bulletin*, 49(1): 62-72.
- ✓ Sankar, M. & **Kumar, S.** (2021) A systematic review on the eco-safe management of mosquitoes with diflubenzuron: An effective growth regulatory agent. *Acta Ecologica Sinica*, <https://doi.org/10.1016/j.chnaes.2021.09.019>
- ✓ Lall, Y., Samal, R.R., Sagar, S.K. & **Kumar, S.** (2021) Formulation of *Clitoria ternatea* leaves-mediated silver nanoparticles to control *Aedes aegypti* larvae. *Journal of Communicable Diseases*, 53(3): 1-11.
- ✓ Gupta, D., Samal, R.R., Gautam, D., Hooda, S. & **Kumar, S.** (2021) Multifunctional activity of graphene oxide-based nanoformulation against the disease vector, *Aedes aegypti*. *Journal of Applied and Natural Science*, 13(4): 1265-1273. <https://doi.org/10.31018/jans.v13i4.3018>
- ✓ Samal, R.R., Gupta, S. & **Kumar, S.** (2020) An overview of the factors affecting dengue transmission in Asian region and its predictive models. *Journal of Applied and Natural Science*, 12(3): 560-570. <https://doi.org/10.31018/jans.v12i3.2360>
- ✓ Samal, R.R. and **Kumar, S.** (2021) Cuticular thickness associated with insecticide resistance in *Aedes aegypti*. *International Journal of Tropical Insect Science*, 41: 809-820. <https://doi.org/10.1007/s42690-020-00271-z> (Published online in 2020)

- ✓ Sivakumar, A., Mishra, M., Dagar, V. and **Kumar, S.** (2020) Reduced physiological and reproductive fitness induced by *Nerium oleander* leaf extracts in the cotton bollworm, *Helicoverpa armigera* (Lepidoptera: Noctuidae). *Acta Ecologica Sinica*, <https://doi.org/10.1016/j.chnaes.2020.12.002>
- ✓ Aggarwal, D, Samal, R. R. and **Kumar, S.** (2020) Comparative larvicidal efficacy of α -cypermethrin alone and α -cypermethrin/*Citrus sinensis* peel extract binary mixtures against *Aedes aegypti* L. *Romanian Journal of Biology-Zoology*, 65 (1-2): 83-98.
- ✓ Kungreiliu, P., Samal, R.R., Lanbiliu, P. and **Kumar, S.** (2021) Variations in nutrients and detoxification enzyme levels induced by lufenuron stress in *Aedes aegypti* L. (Diptera: Culicidae). *International Journal of Tropical Insect Science*, <https://doi.org/10.1007/s42690-021-00481-z>
- ✓ Gupta, A., Samal, R.R. and **Kumar, S.** (2021) Adverse effects of toxic xenobiotics on the life table attributes and reproductive potential of Dengue fever mosquito in New Delhi, India. *Journal of Advance and Natural Science*, 13(1): 71-78. <https://doi.org/10.31018/jans.v13i1.2470>
- ✓ Samal, R.R. and **Kumar, S.** (2021) Cuticular thickness associated with insecticide resistance in *Aedes aegypti*. *International Journal of Tropical Insect Science*, 41: 809-820. <https://doi.org/10.1007/s42690-020-00271-z> (Published online in 2020)
- ✓ Aggarwal, D, Samal, R. R. and **Kumar, S.** (2020) Comparative larvicidal efficacy of α -cypermethrin alone and α -cypermethrin/*Citrus sinensis* peel extract binary mixtures against *Aedes aegypti* L. *Romanian Journal of Biology-Zoology*, 65 (1-2): 83-98.
- ✓ Sivakumar, A., Mishra, M., Dagar, V. and **Kumar, S.** (2021) Reduced physiological and reproductive fitness induced by *Nerium oleander* leaf extracts in the cotton bollworm, *Helicoverpa armigera* (Lepidoptera: Noctuidae). *Acta Ecologica Sinica*, <https://doi.org/10.1016/j.chnaes.2020.12.002>
- ✓ Samal, R.R., Gupta, S. & **Kumar, S.** (2020) An overview of the factors affecting dengue transmission in Asian region and its predictive models. *Journal of Advance and Natural Science*, 12(3): 560-570. <https://doi.org/10.31018/jans.v12i3.2360>
- ✓ Mishra, M., Sharma, A., Dagar, V.S. & **Kumar, S.** (2020) Effects of β -sitosterol on growth, development and midgut enzymes of *Helicoverpa armigera* Hübner. *Archives of Biological Sciences*, 72(2), 271-278. <https://doi.org/10.2298/ABS200308021M>
- ✓ Dagar, V.S., Mishra, M. & **Kumar, S.** (2020) Effect of dietary stress of emamectin benzoate on the Fitness Cost of American Bollworm, *Helicoverpa armigera* (Hübner, 1808). *International Journal of Tropical Insect Science*. 2020; <https://doi.org/10.1007/s42690-020-00168-x>

- ✓ Aggarwal, D., Sharma, A. & **Kumar, S.** (2020) Optimizing synthesis of *Citrus limetta* peel silver nanocomposites possessing larvicidal potential against dengue vector, *Aedes aegypti* L. *Advances in Zoology and Botany*, 8(1): 12-19.
- ✓ Sharma, A., Tripathi, P. & **Kumar, S.** (2020) One pot synthesis of silver nano-composites from *Achyranthes aspera*: An eco-friendly larvicide against *Aedes aegypti* L. *Asian Pacific Journal of Tropical Biomedicine*, 10(2): 54-64.
- ✓ **Kumar, S.** (2019) Influence of open educational resources on educational practices in the Global South. *Nature Human Behaviour*, 3: 540-541.
<https://www.nature.com/articles/s41562-019-0624-4>
- ✓ Mishra, M., Gupta, K.K., & **Kumar, S.** (2019) Diminished activity of midgut enzymes in *Helicoverpa armigera* Hübner (Lepidoptera; Noctuidae) larvae induced by dietary stem extracts of *Thevetia neriifolia*. *Journal of the Lepidopterist's Society*, 73(1): 23-33.
<https://doi.org/10.18473/lepi.73i1.a4>
- ✓ Samal, R. R. & **Kumar, S.** (2018). Status of *Aedes aegypti* L. against different classes of insecticides in New Delhi, India to formulate mosquito control strategy in fields. *Open Parasitology Journal*, 6: 52-62. DOI: 10.2174/1874421401806010052
- ✓ Sharma, A., **Kumar, S.**, & Tripathi, P. (2018) Effects of *Achyranthes aspera* extracts on the survival and midgut histo-architecture of *Aedes aegypti* L. early IV instars. *Open Parasitology Journal*, 6: 41-51. DOI: 10.2174/1874421401806010041
- ✓ Mishra, M., Gupta, K.K., & **Kumar, S.** (2018). Growth regulatory and growth inhibitory effects of *Thevetia neriifolia* stem extracts on *Helicoverpa armigera* (Lepidoptera: Noctuidae). *Archives of Phytopathology and Plant Protection*, 51 (17-18): 895-914. DOI: [10.1080/03235408.2018.1521324](https://doi.org/10.1080/03235408.2018.1521324)
- ✓ **Kumar, S.**, Sharma, A. & Warikoo, R. (2018) Potential of *Nardostachys jatamansi* extracts to manage Indian strain of *Aedes aegypti*: A novel approach for vector control. *Vector Biology Journal*, 3(1): 1:5. <https://dx.doi.org/10.4172/2473-4810.1000129>
- ✓ Dagar, V.S. & **Kumar, S.** (2018) Emamectin Benzoate: Potential larvicide and antifeedant agent against cotton boll worm *Helicoverpa armigera* (Lepidoptera: Noctuidae). *Journal of Applied and Natural Sciences*; 10(2): 564-571.
- ✓ Shamsi, T.N., Parveen, R., Ahmad, A., Samal, R.R., **Kumar, S.** & Fatima, S. (2018) Inhibition of gut proteases and development of dengue vector, *Aedes aegypti* by *Allium sativum* protease inhibitor. *Acta Ecologica Sinica*, 38(5); 325-328.
<https://doi.org/10.1016/j.chnaes.2018.01.002>.
- ✓ Shrankhla & **Kumar, S.** (2018). Larvicidal activities of petroleum ether extracts of different fruit peel wastes against an Indian strain of filarial vector, *Culex*

quinquefasciatus Say (Diptera: Culicidae). *European Journal of Biomedical and Pharmaceutical Sciences*, 5(2): 1074-1078.

- ✓ **Sarita Kumar**, Radhika Warikoo, Monika Mishra, Roopa R Samal, Shrankhla Rana, Kungreiliu Panmei, Vinay S Dagar and Aarti Sharma (2017) Impact of *Ocimum basilicum* leaf essential oil on the survival and behaviour of an Indian strain of Dengue Vector, *Aedes aegypti* L. *Vector Biology Journal*, 2017, 2:2 DOI: 10.4172/2473-4810.1000122.
- ✓ Aarti Sharma, **Sarita Kumar** and Pushplata Tripathi (2017) Assessment of *Achyranthes aspera* induced toxicity and molecular analysis of RAPD-PCR profiles of larval genomic DNA of *Aedes aegypti* L. (Diptera: Culicidae). *Journal of Parasitic Diseases*, 41 (4): 1066-1073. DOI: 10.1007/s12639-017-0935-1
- ✓ Rajiv Kumar Shukla, **Sarita Kumar** and Pushplata Tripathi (2017) *Pseudomonas aeruginosa*: Isolation, characterization and evaluation of larvicidal efficacy against *Aedes aegypti* L. *European Journal of Biomedical and Pharmaceutical Sciences*, 4(9): 660-669.
- ✓ Aarti Sharma, **Sarita Kumar** and Pushplata Tripathi (2017) A facile and rapid method for green synthesis of *Achyranthes aspera* stem extract-mediated silver nanocomposites with cidal potential against *Aedes aegypti* L. *Saudi Journal of Biological Sciences*, DOI: 10.1016/j.sjbs.2017.11.001
- ✓ Aarti Sharma, **Sarita Kumar** and Pushplata Tripathi (2016) Evaluation of the larvicidal efficacy of five indigenous weeds against an Indian strain of dengue vector, *Aedes aegypti* L. (Diptera: Culicidae). *Journal of Parasitology Research*, 2016: 1-8 (Article ID 2857089: <http://dx.doi.org/10.1155/2016/2857089>)
- ✓ Monika Mishra, Kamal Kumar Gupta and **Sarita Kumar** (2015) Impact of the stem extract of *Thevetia nerifolia* on the feeding potential and histological architecture of the midgut epithelial tissue of early fourth instars of *Helicoverpa armigera* Hübner. *International Journal of Insect Science*, 7: 53-60. Doi: [10.4137/IJIS.S29127](https://doi.org/10.4137/IJIS.S29127)
- ✓ Mriganki Singh, Sushma Kumari, Rahul Attri and **Sarita Kumar** (2015) Impact of *Calotropis procera* leaf extracts on the Survival, Morphology and Behaviour of Dengue vector, *Aedes aegypti* L. *DU Journal of Undergraduate Research and Innovation*, 1(3): 96 – 107.
- ✓ Radhika Warikoo and **Sarita Kumar** (2015) Investigations on the oviposition deterrence and ovicidal potential of the leaf extracts of *Argemone mexicana* against an Indian strain of Dengue vector, *Aedes aegypti* (Diptera: Culicidae). *Applied Research Journal*, 1(4): 208 – 215.
- ✓ Rajiv Kumar Shukla, Pushplata Tripathi and **Sarita Kumar** (2015) Evaluation of larvicidal efficacy of *Actinomyces*, Isolated from the Soil, against dengue vector, *Aedes aegypti*

- ✓ Monika Mishra, Kamal Kumar Gupta and **Sarita Kumar** (2015) Impact of the stem extract of *Thevetia neriiifolia* (Apocynaceae) on food consumption and growth of early fourth instars of *Helicoverpa armigera* Hübner. *Malaya Journal of Biosciences*, 2 (1): 26 – 35.
- ✓ Aarti Sharma, **Sarita Kumar** and Pushplata Tripathi (2015) Impact of *Achyranthes aspera* leaf and stem extracts on the survival, morphology and behaviour of an Indian strain of Dengue Vector, *Aedes aegypti* L. (Diptera: Culicidae). *Journal of Mosquito Research*, 5 (7): 1-9 (doi: 10.5376/jmr.2015.05.0006)
- ✓ Radhika Warikoo and **Sarita Kumar** (2014) Impact of the *Argemone mexicana* stem extracts on the reproductive fitness and behaviour of adult dengue vector, *Aedes aegypti* L. (Diptera: Culicidae). *International Journal of Insect Science*, 6: 71-78. doi: [10.4137/IJIS.S19006](https://doi.org/10.4137/IJIS.S19006).
- ✓ Monika Mishra, Kamal Kumar Gupta and **Sarita Kumar** (2014) Impact of stem extracts of yellow oleander, *Thevetia neriiifolia* (Apocynaceae) on the feeding potential of IV Instars of Gram Pod Borer, *Helicoverpa armigera* Hübner (Lepidoptera: Noctuidae). *International Journal of Advanced Life Sciences*, 7: 408-416.
- ✓ **Sarita Kumar**, Monika Mishra, Naim Wahab and Radhika Warikoo (2014) Larvicidal, repellent and irritant potential of the seed-derived essential oil of *Apium graveolens* against Dengue Vector, *Aedes aegypti* L. (Diptera: Culicidae). *Frontiers in Public Health*, 2: 1-7. DOI: 10.3389/fpubh.2014.00147
- ✓ Radhika Warikoo and **Sarita Kumar** (2014) Oviposition altering and Ovicidal Efficacy of Root extracts of *Argemone mexicana* against Dengue Vector, *Aedes aegypti* (Diptera: Culicidae). *Journal of Entomology and Zoology Studies*, 2: 11-17. ISSN: 2320-7078.
- ✓ Radhika Warikoo and **Sarita Kumar** (2013) Impact of *Argemone mexicana* extracts on Cidal, Morphological and Behavioural Responses of Dengue vector *Aedes aegypti* L. (Diptera: Culicidae). *Parasitology Research*, 112(10): 3477-3484, Doi: 10.1007/s00436-013-3528-7.
- ✓ **Sarita Kumar** and Ravi Toteja (2012) Print to Digital: A study of students' psychosomatic cost in traditional and e-learning. *Procedia - Social and Behavioral Sciences*; 67: 553 – 560.
- ✓ Ravi Toteja and **Sarita Kumar** (2012) Usefulness of M-Devices in Education: A Survey. *Procedia - Social and Behavioral Sciences*; 67: 538 – 544.
- ✓ **Sarita Kumar**, Radhika Warikoo, Monika Mishra, Anubha Seth and Naim Wahab (2012) Larvicidal efficacy of the *Citrus limetta* peel extracts against Indian Strains of *Anopheles*

stephensi Liston and *Aedes aegypti* L. *Parasitology Research* 111(1):173-8 (DOI: 10.1007/s00436-011-2814-5)

- ✓ **Sarita Kumar**, Ankita Ray, Jasdeep Kaur, Roopa Samal, Naim Wahab and Radhika Warikoo (2012) Efficacy of the ethanolic leaf extracts of citrus plant, *Citrus sinensis* as larvicidal and irritant agent against dengue vector *Aedes aegypti* L. *Asia Pacific Journal of Tropical Biomedicine*, 3(2): 152-155.
- ✓ **Sarita Kumar**, Gokul Nair, Abhay Pratap Singh, Sahil Batra, Naim Wahab and Radhika Warikoo (2011) Evaluation of the larvicidal efficiency of stem, roots and leaves of the weed, *Parthenium hysterophorus* (Family: Asteraceae) against *Aedes aegypti* L. *Asian Pacific Journal of Tropical Diseases* 2(5): 395-400.
- ✓ **Sarita Kumar**, Naim Wahab, Monika Mishra, Radhika Warikoo (2012) Evaluation of fifteen local plant species as larvicidal agents against an Indian strain of dengue fever mosquito, *Aedes aegypti* L. (Diptera: Culicidae). *Frontiers in Physiology*; 3(104), 1-6; doi: 10.3389/fphys.2012.00104.
- ✓ Radhika Warikoo, Naim Wahab and **Sarita Kumar** (2011) Larvicidal potential of commercially available Pine (*Pinus longifolia*) and Cinnamon (*Cinnamomum zeylanicum*) oils against an Indian strain of dengue fever mosquito, *Aedes aegypti* L. (Diptera: Culicidae). *Acta Entomologica Sinica*, 54(7): 793-798.
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- Priyanka Dasgupta and **Sarita Kumar** (2016) A survey of hygiene awareness with relation to food consumption. *Trends in Biology Education & Research: Practices & Challenges*', 26th Biennial Conference of the Asian Association for Biology Education, September 20-23, 2016, Goa, India; pp 36.
- Priyanka Dasgupta and **Sarita Kumar** (2016) Traditional and theatre-oriented education: a psychoanalytic study of the students. *Trends in Biology Education & Research: Practices & Challenges*', 26th Biennial Conference of the Asian Association for Biology Education, September 20-23, 2016, Goa, India; pp 44.
- Charu Khosla Gupta, Shweta Singh, Pragya Yagnik, Bishal K. Das, **Sarita Kumar** and Arijit Chowdhuri (2016) Addressing posteriori environmental concern 21st century – Clean potable drinking water in households, *National Seminar on Water and Air Quality in Urban Ecosystem*, Shivaji College, March 22, 2016; pp 35.
- Rahul Roy, Gayatri Rai, Aarti Sharma, Arijit Chowdhuri, Charu K Gupta and **Sarita Kumar** (2016) Synthesis and characterization of copper nanoparticles (CuNPs) for water purification. *Proceedings of Second National Symposium on Environment: Greener Future and Awareness*, Deshbandhu College, University of Delhi, March 19, 2016, PP 20.
- Komal Mewari, Ritika Singh, Prince Upadhyay and **Sarita Kumar** (2016) Investigations on the survival and development of rice weevil, *Sitophilus oryzae* in different varieties of rice grains. *Proceedings of Second National Symposium on Environment: Greener Future and Awareness*, Deshbandhu College, University of Delhi, March 19, 2016, PP 21.
- Vinay Dagar and **Sarita Kumar** (2016) Bioefficacy of *Rosemarinus officinalis* oil against dengue fever mosquito *Aedes aegypti* L. (Diptera: Culicidae): An environmental friendly approach for management of *Aedes aegypti*. *Proceedings of Second National Symposium on Environment: Greener Future and Awareness*, Deshbandhu College,

University of Delhi, March 19, 2016, OP 6.

- Abhay Pratap Singh and **Sarita Kumar** (2016) Anti-mosquito potential of an obnoxious weed *Parthenium hysterophorus* against dengue vector, *Aedes aegypti* L. *Proceedings of Second National Symposium on Environment: Greener Future and Awareness*, Deshbandhu College, University of Delhi, March 19, 2016, OP 9.
- Aarti Sharma, **Sarita Kumar** and Pushplata Tripathi (2015) Evaluation of the random amplified polymorphic DNA (RAPD) assay for the detection of DNA damage in *Aedes aegypti* larvae (Diptera: Culicidae) treated with leaves and stem extracts of *Achyranthes aspera* L. (Amaranthaceae). *India International Science Festival*, IIT Delhi, December 4-8, 2015.
- Abhay Pratap Singh, Radhika Warikoo, Monika Mishra and **Sarita Kumar** (2015) Anti-mosquito potential of waste fruit peels against Indian strains of *Aedes aegypti* L., *Culex quinquefasciatus* Say and *Anopheles stephensi* Liston. Presented at *India International Science Festival*, IIT Delhi, December 4-8, 2015.
- Abhishek Singh, Imtiyaz Gulami, Anirudhda Yadav, Aparna Shandheep, Srishti Vajpayee, Kajal Kumari, Jabili Chowdari and **Sarita kumar** (2015) Comparing the N2 strain *C. elegans* with the native ones to study behavioral modifications due to domestication. *XXXIII Annual Conference of Indian Academy of Neurosciences*, IAN-2015, Panjab University, Chandigarh, October 31-November 2, 2015.
- Radhika Warikoo and **Sarita Kumar** (2015) Variations in the larvicidal potential of *Argemone mexicana* extracts against an Indian strain of Dengue vector, *Aedes aegypti* L. (Diptera: Culicidae) assayed with extracts and extracts/PBO combinations. National Symposium on Vector Biology and Vector Management, Deshbandhu College, New Delhi, February 12, 2015.
- Aarti Sharma, **Sarita Kumar** and Pushplata Tripathi (2015) Evaluation of the leaves and stems of *Achyranthes aspera* (Amaranthaceae) as the potential larvicides against an Indian strain of Dengue Vector, *Aedes aegypti* L. (Diptera: Culicidae). National Symposium on Vector Biology and Vector Management, Deshbandhu College, New Delhi, February 12, 2015.
- Rajiv Kumar Shukla, **Sarita Kumar** and Pushplata Tripathi (2015) *Pseudomonas fluorescens*: A Novel and Potential Control Agent of an Indian Strain of *Aedes aegypti* (Diptera: Culicidae). National Symposium on Vector Biology and Vector Management, Deshbandhu College, New Delhi, February 12, 2015.
- Rajiv Kumar Shukla, Pushplata Tripathi and **Sarita Kumar** (2014) Isolation, identification and biochemical characterization of bacteria as biocontrol agents against dengue vector larvae. Proceedings of International Conference on “New approaches in food security and value addition: Technological and genetic options”, NAFSVA – 2014, Bichpuri, Agra,

February 17-19, 2014, pp: 26.

- Radhika Warikoo and **Sarita Kumar (2013)**. Potential of *Argemone mexicana* extracts to manage Indian strain of *Aedes aegypti*: A novel approach for vector control. Presented at *XII International Conference on Vector and Vector Borne diseases*, Udaipur, 16-18th September, 2013.
- Naim Wahab, Radhika Warikoo, Monika Mishra and **Sarita Kumar (2013)**. Larvicidal Efficacy of Natural Extracts Prepared from *Chrysanthemum* flowers against Indian Strains of *Anopheles stephensi* Liston, *Culex quinquefasciatus* Say and *Aedes aegypti* L. Presented at *XII International Conference on Vector and Vector Borne diseases*, Udaipur, 16-18th September, 2013.
- Aashifa Pasha and **Sarita Kumar (2013)**. Creation of *E-museum* as OER using wiki platform for Undergraduate Courses in Zoology. *National Conference on 'Redefining Science Teaching: Future of Education'* organized by Acharya Narendra Dev College at University of Delhi South Campus, March 7-9, 2013.
- Ankush Jain, Anubha Seth and **Sarita Kumar (2013)**. Formulation of beneficial products from the wastewater of silk industry. *National Conference on 'Redefining Science Teaching: Future of Education'* organized by Acharya Narendra Dev College at University of Delhi South Campus, March 7-9, 2013.
- Anubha Seth, Radhika Warikoo, Monika Mishra and **Sarita Kumar (2013)**. Larvicidal and irritant potential of Citrus peel wastes against Indian strains of Malaria vector *Anopheles stephensi* (Diptera: Anophelinidae). *National Conference on 'Redefining Science Teaching: Future of Education'* organized by Acharya Narendra Dev College at University of Delhi South Campus, March 7-9, 2013.
- Hemlata Sharma, Monika Mishra and **Sarita Kumar (2013)**. Alterations in haemolymph proteins of *Helicoverpa armigera* larvae treated with hexane stem extracts of *Achyranthes* sp. *National Conference on 'Redefining Science Teaching: Future of Education'* organized by Acharya Narendra Dev College at University of Delhi South Campus, March 7-9, 2013.
- Rahul Khewadia, Mahak Juneja and **Sarita Kumar (2013)**. Delayed and abnormal development of Red Cotton Bug, *Dysdercus cingulatus* (Hemiptera: Pyrrhocoridae) reared on *Aloe vera* aqueous leaf extract-treated diet. *National Conference on 'Redefining Science Teaching: Future of Education'* organized by Acharya Narendra Dev College at University of Delhi South Campus, March 7-9, 2013.
- Rajiv Kumar Shukla, Pushplata Tripathi and **Sarita Kumar (2013)** Isolation, identification and biochemical characterization of bacteria as potential biocontrol agents. *Biosparks-2013*, School of Life Sciences, Jawahar Lal Nehru University, New Delhi, February 15 – 16, 2013.

- Radhika Warikoo, Monika Mishra, Amit Gaurav and **Sarita Kumar** (2012) *Argemone mexicana*: A weed with larvicidal, anti-juvenile and growth inhibitory potential against Dengue vector, *Aedes aegypti* L. Presented at V International Congress of Environmental Research, 22-24th November, Terengganu, Malaysia.
- Monika Mishra, Radhika Warikoo, Amit Gaurav, Naim Wahab and **Sarita Kumar** (2012) Larvicidal and irritant potential of Citrus peel wastes against Indian strains of Dengue vector *Aedes aegypti* and Filarial vector *Culex quinquefasciatus*. Presented at V International Congress of Environmental Research, 22-24th November, Terengganu, Malaysia.
- **Sarita Kumar** (2012) 'Transition from traditional to *e-learning*: Student's acceptance and readiness' presented at 'The Academic Congress – Enabling the Young: Redefining Education' held at University of Delhi, 6-7 September, 2012.
- Ravi Toteja and **Sarita Kumar** (2011) Open Educational Resources: Success stories. Oral presentation at an International Conference on '*Open Paradigms in Education-OPEN 2011*', 31st Jan-2nd Feb, India International Centre, New Delhi.
- **Sarita Kumar** and Ravi Toteja (2011) Print to Digital: A study of students' psychosomatic cost in traditional and e-learning. Proceedings of 3rd International Conference on e-learning, 23-24th November, Bandung, Indonesia.
- Ravi Toteja and **Sarita Kumar** (2011) Usefulness of m-devices in education: A survey. Proceedings of 3rd International Conference on e-learning, 23-24th November, Bandung, Indonesia.
- Radhika Warikoo, Naim Wahab and **Sarita Kumar** (2011) *Argemone Mexicana*: A deleterious weed as a potential mosquito control agent. Presented at IV International Congress of Environmental Research, 15-17th December, Surat.
- Naim Wahab, Radhika Warikoo and **Sarita Kumar** (2011) Laboratory Evaluation of the Larvicidal Efficiency of *Nardostachys jatamansi* against an Indian Strain of *Aedes aegypti*. Presented at IV International Congress of Environmental Research, 15-17th December, Surat.
- **Sarita Kumar**, Radhika Warikoo and Naim Wahab (2010) A Laboratory Study on the Larvicidal Properties of Three Peppercorns Against an Indian strain of Dengue Fever Mosquito, *Aedes aegypti* L. (Diptera: Culicidae). Oral Presentation at *National Symposium; Chemistry in Biology: The Future of Life Sciences*, 12-13 Feb, New Delhi, India
- Abhay Pratap Singh, Anubha Seth, Radhika Warikoo, Naim Wahab and **Sarita Kumar** (2010) Oviposition deterrent and ovicidal effects of the leaf extracts of *Parthenium* sp.

against an Indian strain of *Aedes aegypti*. Paper presented at the *3rd International Conference on Parthenium*, 8-10th December, IARI, New Delhi.

- Gokul Nair, Sahil Batra, Radhika Warikoo, Naim Wahab and **Sarita Kumar** (2010) Spatial repellency and contact irritancy response of female *Aedes aegypti* to the leaf extracts of *Parthenium* sp. in different solvents. Paper presented at the *3rd International Conference on Parthenium*, 8-10th December, IARI, New Delhi.
- Radhika Warikoo, Naim Wahab and **Sarita Kumar** (2010) Laboratory evaluation of the larvicidal efficiency of *Parthenium* sp. against an Indian strain of *Aedes aegypti*. Paper presented at the *3rd International Conference on Parthenium*, 8-10th December, IARI, New Delhi.
- **Sarita Kumar**, Kumar, R., Hwang, J-S and Raghavendra, K. Effect of insecticides (temephos and fenthion) on the larvivorous efficiency of *Mesocyclops thermocyclopidoides* (Copepoda: Cyclopoida): an experimental evaluation. Paper presented in *9th International Conference on Copepoda*, July 11-15, 2005, Hammamet, Tunisia.

Research Projects (Major Grants/Research Collaboration)

Ongoing:

National:

- ✓ ICMR – MERA India project: ***Attractive Toxic Sugar Bait (ATSB) methods to control mosquitoes in different regions of Delhi and NCR.*** Duration – 3 years

Completed:

International:

- ✓ **Local Coordinator of ROER4D Sub-Project 2:** “Research into Open Educational Resources for Development in Post-Secondary Education in the Global South”, University of Cape Town, South Africa
- ✓ **CCGN-CAF Project:** ‘OER awareness and adoption in Indian Higher Education: A short survey’, Creative Commons Global Network, USA
- ✓ Mentor of the project '**Locust swarms and frugal ways we can think of to mitigate the problem or solve it to some extent**' (BioE271 course), **Prakash Lab** headed by **Professor Manu Prakash**, Bioengineering Department, Stanford University, USA.

National:

- ✓ **Major Research Project** ‘A laboratory study on the larvicidal properties of certain botanicals against mosquito larvae-An alternative for mosquito control’ sanctioned by UGC (1st May 2009 – 30th April, 2012)

- ✓ Mentor – DST Women Scientist Scheme-B Project: ***‘Developing and documenting innovative practices for learning physics and biology through experimentation for children and young adults’***. Duration – 3 years, Sanctioned date – May 10, 2018
- ✓ **Minor DST Entrepreneurship Project:** ‘Identification and formulation of products from weed extracts exhibiting anti-mosquito potential’ (1st August, 2010 – 30th July, 2011).
- ✓ **Minor DST Entrepreneurship Project:** ‘Formulation of certain beneficial products from silkworm cocoon waste’ (1st October, 2011 – 30th September, 2012).
- ✓ **Minor DST Entrepreneurship Project:** ‘Evaluation of the beneficial properties and formulation of certain useful products from the waste peels of banana’ (1st April, 2013 – 30th March, 2014).
- ✓ **Minor DST Entrepreneurship Project:** ‘Formulation of Mehndi Remover Using Natural Products’ (1st Dec, 2015 – 30th Nov, 2016).
- ✓ **DU Innovation Project:** ‘Mobile healthcare: The future of health management in India- A Feasibility Study’; (2014-2015).
- ✓ **DU Innovation Project** ‘Development of low-cost, robust, portable water purifier prototype with physical, chemical and biological filtration for field water disinfection and potable water generation in natural calamity afflicted zones with harsh conditions’; (2015-2016).

Awards and Distinctions

- **S. K. Mahajan Award** 2021 for Popularization of Scientific Pursuit; HBCSE, TIFR, Mumbai, 2021
- **Anil Sadgopal Award** for Popularization of Science; HBCSE, TIFR, Mumbai, 2018; 2020
- **K S Krishnan Teacher Fellow Award** from HBCSE, TIFR, Mumbai, 2014.
- **User Page Expo Award** by WikiEducator Community in February 2013.
- One of the **‘Open Access Competition Winners’** amongst the ten worldwide by the International Network for the Availability of Scientific Publications (INASP), United Kingdom, to celebrate the Open Access Week.
- **Meritorious Teacher Award** from Directorate of Higher Education, Govt. of NCT of Delhi on 10th May, 2011.
- **Distinguished Teacher Award** by Delhi University, India and received award from the former president of India, Dr. Abdul Kalam on 7th September, 2009.
- Academic Editor of the book **‘Advances in Diptera – Insight, Challenges and Management Tools’**, IntechOpen, London, UK
- Member of Institutional **Animal Ethics Committee (IAEC)**, IGNOU

- **Editor of Theory and Practical course** material of '*Insect and Vector Borne Diseases*' for B.Sc. General with Zoology Program, IGNOU
- **Editor of Theory and Practical course** material of '*Human Physiology*' for B.Sc. (H) Biochemistry, IGNOU
- External Expert in **Doctoral Committee**, Ph.D. Life Sciences, IGNOU
- External Expert for the **Development of M.Sc. Zoology Course**, IGNOU
- Academic Editor of '**Journal of Advances in Medicine and Medical Research**' (previously called British Journal of Medicine and Medical Research) (India, USA and UK)
- Associate Editor of '**International Journal of Nutrition and Health Sciences**'
- On the **Editorial Board** of: The Open Access Journal of Science and Technology (UK); Journal of Applied and Natural Sciences (Haridwar), Asian Pacific Journal of Tropical Biomedicine (China)
- **Reviewer of the research papers** in the **International Journals** – BMC Research Notes (England), BMC Complementary and Alternative Medicine (England), African Journal of Biotechnology (Nigeria), Journal of Medicinal Plant Research (Nigeria), Journal of Mosquito Research (Canada), Asian Pacific Journal of Tropical Biomedicine (China); and **National Journals** - International Journal of Pharmacy and Pharmaceutical Sciences (Madhya Pradesh), Indian Journal of Medical Research (New Delhi).
- **Subject expert** in live teleconference session in Gyandarshan TV channel on 29 Jan, 2020 on the topic "Mosquito borne diseases-Prevention and control".
- **Editor of the Abstract Book** of the *International Conference on Natural Products and Human Health – 2020 (ICNPHH-2020)*, University of Delhi, Delhi, Feb 27-29, 2020.
- **Judged** one oral session and two poster sessions in the *International Conference on Natural Products and Human Health – 2020 (ICNPHH-2020)*, University of Delhi, Delhi, Feb 27-29, 2020.
- Invited as a panelist for "**Are we responsible for strengthening the mosquitoes? - Lacunae in programs for the prevention of mosquito breeding and spread of mosquito-borne diseases**" in one day workshop on 'Acquire Skills-Mosquito Kills', organized by Department of Zoology, Hindu College, University of Delhi, 18th August 2017.
- **Best poster award:** Roopa Rani Samal and **Sarita Kumar** (2017) Impact of acetamiprid on the survival, morphology and development of *Aedes aegypti* L. (Diptera: Culicidae). "*Biochemistry and Molecular Biology: From Niche to Nation*"; 44th Philippine Society for Biochemistry and Molecular Biology Annual Convention, Tagaytay City, Philippines, November 27-30, 2017
- **Chaired two sessions** in the 26th Biennial Conference of the Asian Association for Biology Education *Trends in Biology Education & Research: Practices & Challenges*, September 20-23, Goa, India.
- **Chaired two sessions** in *Trends in Biology Education & Research: Practices & Challenges*, 26th Biennial Conference of the Asian Association for Biology Education, September 20-23, 2016, Goa
- **Chaired the session** in *Second National Symposium on Environment: Greener Future and Awareness*, Deshbandhu College, New Delhi, March 19, 2016.
- **Chaired the session** in *National Symposium on Vector Biology and Vector Management*,

Deshbandhu College, New Delhi, February 12, 2015.

- **Chaired the session** in *Second National Symposium on Environment: Greener Future and Awareness*, Deshbandhu College, New Delhi, March 19, 2016.
- **'Shiksha Rattan Puraskar'** on 12th October, 2011 by IIFS, New Delhi.
- Selected as **Featured WE on India Page** for the month of August, 2009 (www.wikieducator.org/India).
- Awarded **National scholarship and Prize** from Delhi University in post graduation for obtaining second position in University of Delhi at Graduation level.
- Honored with Prizes from Delhi University after post graduation for **first position in the college and second position in University of Delhi** at post-Graduation level.

Association with Professional Bodies

- Life member of Indian Science Congress, Delhi Chapter
- Life member of Association of Teachers in Biological Sciences (ATBS)
- Life member of National Academy of Vector Borne Diseases, Bhubaneswar
- Life member of Indian Society of Parasitology, Lucknow
- Member of Scientific Advisory Board, Virginia, USA
- Member of WikiEducator Community, India
(www.wikieducator.org/User:Saritasanjay)

Other Activities

Cultural Activities

- Convener of the **Zoological Society 'Niche'** (2008-2010).
- Convener of **Music competition** during the annual festival of the college (2007-2008).
- Convener of **Dance competition** during the annual festival of the college (2006-2007).
- Member of **Dramatic Society** of the college (2006-2008).
- Convener of **Annual Festival** and all the Cultural Activities of the college (2004-2006).
- Convened various **events during the college festival** and functions, such as Sketching competition, Debate, Quiz, Rangoli, Just-A-Minute, etc.

Contribution to NCERT

- **Content writer** in the curriculum development of **science text book** for **Class VII, NCERT**, New Delhi.
- **Reviewer** in the curriculum development of **science text book** for **Class X, NCERT**, New Delhi.
- **Editor** in the development of **science text book** for **Class VIII, NCERT**, New Delhi.
- **Expert panelist for the orientation of teachers** of KVS/NVS/CBSE affiliated schools to new Text Books developed by NCERT through teleconferencing.

- Part of **team deputed by RIE**, Ajmer to finalize the '**Teacher's Handbook of Science** for Class VI, VII and VIII'.
- Part of **team deputed by NCERT** for preparation of the '**Learning modules in science** for the students seeking lateral entry to Class VI-VIII'.
- Part of **team deputed by NCERT** for preparation of the '**Manual of Practical for Class VI-VIII**'.
- Part of the team developing manual on '**Capacity building of head masters and teachers** of RIE DMP schools on the use of science and mathematics kits', NCERT.
- Resource person for the **activity-based orientation** of teachers to science kits developed by NCERT.
- Part of team deputed by DESM, NCERT, Delhi to finalize the **exemplar problems** of Maths' and Science for Class VI-VIII.
- **Resource person** for training of Post-Graduate Teachers teaching Classes IX to XII in Army schools across the country, held at Army Welfare Educational Society (AWES) on 28th June, 2011.
- Developing online **content for CTES (Certificate Programme for Teaching of Elementary School Science)**, initiated by NCERT.
- Developing **Educational Games and Toys** for teaching Biology at upper primary and secondary level as a part of team of NCERT, New Delhi.
- Expert for '**Field Trial and Finalization of the Training Package in Biology at Higher Secondary Stage**', NCERT, New Delhi
- Developing **Biology Kit and Kit Manual** at NCERT for the Higher Secondary stage.
- Part of the **NCERT project assigned by MHRD** "Analysis of Concept in Science and Mathematics in terms of Learning Performance at Upper Primary Stage"
- Part of the **NCERT project** "Impact study of learning at Upper Primary Level in Chattisgarh"
- Subject expert in the program '**Development of Audio-Video Materials or Experiments/Activities in Science at Secondary Stage**' conducted by NCERT.
- Subject expert in the program '**Development of Tactile Kit in Science at Upper Primary Stage**' conducted by NCERT.
- Subject expert in the workshop '**Development of Tactile Books in Science at Upper Primary Stage**' conducted by NCERT.
- Subject expert in the workshop '**Development of Kit based on Handbook on Understanding Science through Activities, Games and Art Forms (Secondary Stage)**' conducted by NCERT
- **Resource Person** in the program on '**Capacity Building of Key Resource Persons on the use of Biology Kit at Higher Secondary Stage**', NCERT.
- **Resource Person** in the program on '**Study of Students Difficulties in Conceptual Understanding of Science at Secondary Stage**', NCERT.
- Academic expert in the NCERT workshop on '**Online Course in Teaching of Science at Upper Primary Stage**' to design summative assessment and question bank.
- Resource Person in the NCERT workshop on '**Development of Scripts for the Modules of Training Packages in Biology for Teachers Teaching at Higher Secondary Stage for dissemination in MOOC Format**'.

Workshops/Seminars/Conferences Attended

- Workshop to '*Develop course material of Course BZYCL-136 (Physiology and Biochemistry: Laboratory) for students of B.Sc. General (With Zoology)*', IGNOU, Feb 19-20, 2020
- *International Conference on Natural Products and Human Health – 2020 (ICNPHH-2020)*, University of Delhi, Delhi, Feb 27-29, 2020.
- **12th National Conference on Vector-borne and Zoonotic Diseases: Identification to Management**, Zoological Survey of India, New Alipore Kolkata, West Bengal, November 25– 26, 2019.
- **National Conference on Insect Plant Biology in 21st Century**, Deshbandhu College, University of Delhi, November, 4-5, 2019.
- **CUBE Clear Workshop**, conducted by Homi Bhabha Centre for Science Education, TIFR, Mumbai, Feb 22-25, 2019
- **Education Conclave 2018' – 'Education deconstructed: A dialogue with experts'** held at ANDC, November 2, 2018.
- National Symposium '**Green Technology for Environmental Sustainability**', Deshbandhu College, Kalkaji, September 25, 2018.
- Delhi meeting for the launch of CC-India; ANDC, September 1, 2018
- International Conference - **OE Global 2017**, Cape Town, South Africa, March 6-8, 2017
- One-day workshop on '**Acquire Skills-Mosquito Kills**', organized by Department of Zoology, Hindu College, University of Delhi, 18th August 2017.
- Talk by Padmashree Prof. P. K. Rajagopalan on the topic: "**Entomology, Ecology, Ethology and Epidemiology in Disease Investigation**", organized by NCDC, Delhi on 16th October, 2017.
- International Conference - "**Biochemistry and Molecular Biology: From Niche to Nation**"; 44th Philippine Society for Biochemistry and Molecular Biology Annual Convention, Tagaytay City, Philippines, November 27-30 2017
- Guest Lecture by Padmashree Prof. P. K. Rajagopalan "**Entomology, Ecology, Ethology and Epidemiology in Disease Investigation**", 16 October 2017, Central Seminar Hall, NCDC, New Delhi
- International Conference - "**Biochemistry and Molecular Biology: From Niche to Nation**"; 44th Philippine Society for Biochemistry and Molecular Biology Annual Convention, Tagaytay City, Philippines, November 27-30 2017
- International Conference - **OE Global 2017**, Cape Town, South Africa, March 6-8, 2017
- One day workshop on '**Acquire Skills-Mosquito Kills**', organized by Department of Zoology, Hindu College, University of Delhi, on 18th August 2017.
- Talk by Padmashree Prof. P. K. Rajagopalan on the topic: "**Entomology, Ecology, Ethology and Epidemiology in Disease Investigation**", organized by NCDC, Delhi on 16th October, 2017.
- Brainstorming Session on "Spreading Quality Teaching", INSA, New Delhi, March 29, 2016.
- 2-day Symposium on "Women and Leadership, The Absent Revolution' under Global Education Dialogues, South Asia Series 2015, organized by British Council, New Delhi; February 10-11, 2015.

- One day workshop on **'Open Science for Higher Education and Research'** held on October 3, 2013 at UDSC, New Delhi.
- Re-launch of **'Creative Commons India'** held on November, 12, 2013 at India Islamic Centre, Lodhi Road, New Delhi.
- One-day workshop on **'Open Educational Resources and Open Licensing in the Indian Context'** held at India International Centre, Lodhi Road, on February 22, 2013.
- National Conference **'Redefining Teaching Science: Future of Education'** held at Conference Room, UDSC, March 7-9, 2013.
- 3-day Workshop on **'Evaluation Methodology'**, held at CPDHE, University of Delhi, November 8-10, 2012.
- One day seminar on **'Use of Animals in Education and Research'** held at Department of Zoology, University of Delhi on October 20, 2012.
- **'The Academic Congress – Enabling the Young: Redefining Education'** held at University of Delhi, September 6-7, 2012.
- One day workshop on **'Animal Welfare and Alternative Models'** held at IGIB-CSIR, University of Delhi on July 6, 2012.
- 5-day workshop on **'Research in Education'** from May 14-18, 2012 at Acharya Narendra Dev College, organized in collaboration with HBCSE.
 - International Conference on **"Open Paradigms in Education – OPEN 2011"** held from January 31 – February 2, 2011 at India International Center, New Delhi.
 - 2-day National Symposium on **"Chemistry in Biology: The Future of Life Sciences"**, Feb 12-13, 2010, New Delhi, India; Organized by Acharya Narendra Dev College, Univ. of Delhi at India International Center, Lodhi Road.
 - 2-day workshop on **"Genetics in Drosophila"** held at Department of Zoology, University of Delhi from November 13-14, 2010.
 - 5-day workshop on **"RNAomics: Isolation to Interference"** held at Shivaji College from October 25-29, 2010.
 - Workshop on **"Application of Free/Open Source Software in Science Teaching and Research"**, April 14-15, 2010, New Delhi, India held at Acharya Narendra Dev College.
 - 'Parallel workshops LC42 and LC43 on **'WikiEducator'** for College teachers, organized by Acharya Narendra Dev College and supported by Commonwealth of Learning, Vancouver, April 13 -17, 2009.
 - Parallel workshops LC44 and LC45 on **'Open Educational Resources'** for College teachers and students, organized by Acharya Narendra Dev College and supported by Commonwealth of Learning, Vancouver, May 12 -15, 2009.
 - Workshop LC46 on **'Open Educational Resources'** for School teachers, organized by Acharya Narendra Dev College held at Sri Ram School, Vasant Vihar on May16-18, 2009 and May 27-29, 2009
 - **Workshop 'Wikied-08'** – A workshop on Open Educational Resources for College teachers and students, organized by Acharya Narendra Dev College and Gandhi Bhavan, University of Delhi, October 3-6, 2008.
 - **Workshop 'How to attract and retain meritorious students in Maths' and Science'** organized by **National Knowledge Commission** on September 10, 2007 in South Campus, University of Delhi.

- National Symposium on **'Science of Life: The New Horizon'** organized by Miranda house, University of Delhi, November 21– 23, 2007.

Workshops/Seminars/Conferences Organized/Facilitated

- Advisor, International E-conference **'NeuroEunoia 2020: A Neuroscience Affair'**; October 16-17, 2020; Organized by Gargi College, University of Delhi.
- **Science Film Festival, SCI-FFI 2021**, 17-18 March, 2021; organized by Vidnyan Parishad, Goa, the state unit of Vijnana Bharati
- **National Conference on Insect Plant Biology in 21st Century**, Deshbandhu College, University of Delhi, November, 4-5, 2019.
- **'CUBE-STEM Meet'**, September 6, 2019, Acharya Narendra Dev College, University of Delhi
- **Organized** 26th Biennial Conference of the Asian Association for Biology Education **'Trends in Biology Education & Research: Practices & Challenges'**, September 20-23, 2016, Goa, India
- **Organized** a one-day workshop on **"Think Lab – Cube Interactive Meet"** held at ANDC; September, 18 2014.
- **Organized** a one-day workshop on **"Collaborative Undergraduate Biology Education, CUBE-2014"** held at ANDC; February, 7 2014.
- **Organizing Secretary** of National Conference **'Redefining Teaching Science: Future of Education'** held at Conference Room, UDSC, March 7-9, 2013.
- Member of **Organizing Committee** of **'The Academic Congress – Enabling the Young: Redefining Education'** held at University of Delhi, September 6-7, 2012.
- **Invited as resource person** for the **"Collaborative Undergraduate Biology Education (CUBE) program"** held from June 29, 2012-July 1, 2012 at Homi Bhabha Centre for Science Education (HBCSE), TIFR, Mumbai.
- **Invited for talk** by Indian Science Congress Delhi Chapter on **'Genetically Modified Foods: Harmful or Useful'** For ICSA members, held at India International Centre Annexe, New Delhi on May 11, 2012.
- **Facilitated** faculty of Mumbai University for **e-Content development** in Economics and understanding soft skills.
- **Resource person** in the workshop for the faculty of Mumbai University on **'e-Content development in Economics and understanding soft skills'** held at Acharya Narendra Dev College, Nov. 29-Dec 2, 2011.
 - **Convener** of One day National Seminar on **'Teaching Redefined: Open Access to Education'** held at AND College on Nov. 1, 2011; sponsored by INASP, UK.
 - Member of **organizing committee** of 2-days **"Workshop on Evolution"** 9-10th May, 2011, held at Institute of Life Long Learning, University of Delhi.
 - **Facilitator** of **OER workshop** held at Institute of Distance and Open Learning, Mumbai, from February 24-26, 2011.
 - **Organizing Secretary** of the International Conference on **"Open Paradigms in Education – OPEN 2011"** held from January 31 – February 2, 2011 at India International Center, New Delhi.
 - Member of **organizing committee** of 2-days National Symposium on **"Chemistry**

in Biology: The Future of Life Sciences”, Feb 12-13, 2010, New Delhi, India; Organized by Acharya Narendra Dev College, Univ. of Delhi at India International Center, Lodhi Road.

- Member of **organizing committee** of the workshop on **“Application of Free/Open Source Software in Science Teaching and Research”**, April 14-15, 2010, New Delhi, India held at by Acharya Narendra Dev College.
- **Facilitator** of **‘Wikied-09’** – A workshop on **Open Educational Resources** for College teachers and students, organized by Acharya Narendra Dev College and Commonwealth of Learning, Vancouver, Canada, January 9-13, 2009.
- **Facilitator** of parallel workshops LC42 and LC43 on **‘WikiEducator’** for College teachers, organized by Acharya Narendra Dev College and supported by Commonwealth of Learning, Vancouver, April 13 -17, 2009.
- **Facilitator** of parallel workshops LC44 and LC45 on **‘Open Educational Resources’** for College teachers and students, organized by Acharya Narendra Dev College and supported by Commonwealth of Learning, Vancouver, May 12 - 15, 2009.
- **Facilitator** of workshop LC46 on **‘Open Educational Resources’** for School teachers, organized by Acharya Narendra Dev College held at Sri Ram School, Vasant Vihar on May16-18, 2009 and May 27-29, 2009
- **Facilitator** of workshop on **‘WikiEducator’** for the faculty of CIET, NCERT, held on June 29, 2009
- **Organized and acted as resource person** in a **workshop on ‘Biotechnology’** based on the Biology course of B.Sc. Life Sciences Part III for university teachers, organized by Acharya Narendra Dev College and Institute of Life Learning, University of Delhi, October 21-24, 2008.
- Worked as **coordinator** for the **workshop ‘Wikied-08’** – A workshop on Open Educational Resources for College teachers and students, organized by Acharya Narendra Dev College and Gandhi Bhavan, University of Delhi, October 3-6, 2008.
- Worked as coordinator in **Bamboo & Rattan ODL Course Development Workshop**, organized by IGNOU, July 21-23, 2006.
- Worked as one of the members of organizing committee of 2-days National Symposium on **“Biotechnology: Expanding Horizons”**, 2003; Conducted by Acharya Narendra Dev College, University of Delhi at INSA Auditorium

Other Activities

- Did Faculty Development Program on **‘Intellectual Property Rights’**, Organized by Deen Dayal Upadhyaya College, University of Delhi, Feb 9-13, 2021
- Delivered a talk on **‘Different Trends in Malaria Research’**, Organized by Sri Venkateswara College, University of Delhi, July 11, 2020.
- Delivered a talk on **‘टिड्डों की पारिस्थितिकी - The Ecology of Locusts’** Organized by Vindhyan Ecology and Natural History Foundation; May 30, 2020.
- **Delivered a talk during live teleconference session in Gyandarshan TV channel** on 29

Jan, 2020 on the topic "**Mosquito borne diseases-Prevention and control**".

- Member of **National Advisory Committee** of *National Conference on Challenges in Life Sciences and Agro-based Industries for Rural Development*, December 21, 2019, Jalgaon, Maharashtra.
- **Editorial convener** in *National Conference on Insect Plant Biology in 21st Century*, Deshbandhu College, University of Delhi, November, 4-5, 2019.
- **Resource person** in the **DU Pre-Entrance Summer School-2017**, University of Delhi
- Developed '*Shabdawali*' on Environment terms for '*Vishwakosh*' – a **project of MHRD**, Govt. of India.
- Contributed towards the preparation of manuscripts for '**Microbiology Elective**' and **Practical Microbiology** for IGNOU, New Delhi, India.
- Developed manuscript for '**Foundation Course in Science and Technology**', IGNOU, New Delhi.
- Worked as moderator of the '**Biological Science group**' registered under: VIMARSH- A forum for DU Science Community.
- Initiated and working on the project of developing '**Glossary of Entomological Terms**' on WikiEducator. It is a collaborative project and is open for all the educators to join in. Can be seen on my page on WikiEducator: (www.wikieducator.org/User:Saritasanjay)
- Initiated and working on the project of developing '**E-museum**' on WikiEducator. It is a collaborative project and is open for all the educators to join in. Can be seen on: www.wikieducator.org/Department_of_Zoology_at_ANDC/Zoology_Museum)

Signature