

Faculty Profile

Title Dr.	First Name	RASHMI	Last Name	SAINI	Photograph
Designation	Assistant Professor				
Address (Office)	Department of Zoology Gargi College (University of Delhi) Siri Fort Road, New Delhi-110049, INDIA				
Contact No.(Mobile)	+91-9599074440				
Email	dr.rashmisaini@gmail.com				
	rashmi.saini@gargi.du.ac.in				
Scopus Author id:	57197129656				
Google Scholar id :	DC61PzsAAAAJ				
Vidwan ID :	283092				
Loop Profile:	1794113				
ORCiD:	https://orcid.org/0000-0002-4439-0894				
EDUCATIONAL	QUALIFICAT	ΓIONS			
Degree	Institution			Year	
B.Sc	University of Lucknow, Lucknow			1998	
M.Sc	University of Lucknow, Lucknow			2000	
PhD	Central Drug Research Institute (CDRI), Lucknow Registered at Jawaharlal Nehru University (JNU), New Delhi			2007	
Other Qualification	National Eligibility Test (NET)				2001
CAREER PROFILE					
 2015- Continuing Assistant Professor, Department of Zoology, Gargi College, University of Delhi, Delhi, India. 2013-2015 Assistant Professor, Department of Zoology, School of Biological Sciences, Dr. Harisingh Gour Central University, Sagar (MP), India. 					
• 2011-2013	Research Associate, Department of Radioprotective Drug Development Research Institute of Nuclear Medicine and Allied Sciences (INMAS) Defence Research & Development Organization (DRDO), New Delhi, India				
• 2010-2011	Postdoctoral F Centre of Hema University of C				
• 2000-2001	Project Associate, Department of Preventive Toxicology Immunobiology, Indian Institute of Toxicology Research (CSIR-IITR), Lucknow, India				

ADMINISTRATIVE ASSIGNMENTS

- Member, Placement and Career Counselling Committee (Placement Cell), Gargi College, University of Delhi, Delhi, 2016- Continuing
- Member, National Social Services (NSS), Gargi College, University of Delhi, Delhi, 2018- Continuing.
- Editor, Annual Magazine "FLIGHT" of Department of Zoology, Gargi College, University of Delhi, 2022.
- Organizing committee member, National Seminar on Use of Scientific & Technical Terminologies in Sustainable Environment development, its challenges, Computational Analysis and Opportunities, Gargi College, University of Delhi, 2019.
- Session Chairperson, National Seminar on Use of Scientific & Technical Terminologies in Sustainable Environment development, its challenges, Computational Analysis and Opportunities, Gargi College, University of Delhi, 2019
- Resource Person, Summer Immersion Programme, under DBT Star College Scheme and Department of Zoology, Gargi College, University of Delhi, 2018.
- Organizing Committee member, Symposium- "Wanderers of Nature: Exploring Wildlife" Gargi College, University of Delhi, 2018.
- Teacher Coordinator, Zoology Department for Scintillations, 2017-18.
- Member, Admission Committee, BSc Life Sciences, Gargi College, University of Delhi, Delhi, 2016-2017.
- Chairperson (Scientific programme: Technical Session II) at the National Seminar on Science and Technology for Human Development jointly organized by The Indian Science Congress Association (ISCA) & Department of Biotechnology, Dr. Harisingh Gour Central University, Sagar, MP, 2016.
- **Teacher InCharge-**Confocal Microscope, Sophisticated Instrumentation Centre (SIC), Dr. Harisingh Gour University, Sagar, M.P. 2014-15.
- **Organizing committee member**, National Conference on Evolving Trends in Biotechnology (NCETB), Dr. Harisingh Gour University, Sagar, M.P. 2015.
- Member, Purchase Committee, Dr. Harisingh Gour University, Sagar, M.P., 2014-15.
- Coordinator, Intercollegiate Biotechnology Competitive Events, Department of Biotechnology, Dr. Harisingh Gour University, Sagar, M.P. 2015.
- Organizing committee member, National Symposium on Frontiers in Modern Biology, "Innovations in Science and Technology for Inclusive Development", Dr. H. S. Gour Central University, Sagar, M.P. 2014
- Member, NAAC Committee, Department of Zoology, Dr. Harisingh Gour University, Sagar, M.P. 2013-14.

AREAS OF INTEREST / SPECIALIZATION

Cell and Molecular Biology, Free Radical Biology, Entomology

SUBJECTS TAUGHT

Ph.D Course Work: Research Methodology

Post Graduate Courses: Entomology: Structure and Function of Insects, Physiology and biochemistry of Insects

Animal Biotechnology, Computer Applications and Biostatistics.

Elective Course: Free Radicals, Oxidative stress and Antioxidants

Under Graduate Courses:

<u>Disciple Specific Courses (DSC):</u> Molecular Biology, Cell Biology, Comparative anatomy of Vertebrates,

Developmental Biology, Non Chordates, Applied Zoology

General Elective Courses (GE): Human Physiology, Animal Diversity

Skill Enhancement Courses (SEC): Research Methodology, Medical Diagnostics

RESEARCH GUIDANCE

- Ph.D Co-supervision- Thesis Title "Multicopy nrdB gene mediated molecular detection of Ca. L. asiaticus and its management by controlling *Diaphorina citri* through *Tinospora cordifolia*", 2020- Ongoing.
- Mentor, Three students in the Pathfinder Project, Gargi College, Title: Visualize Science: From Theoretical knowledge to Practical Applications, 2021-22.
- Research supervision as PI- Two students in the Project "Ascorbate mediated defence mechanism of oxidative stress enzymes in *E.coli* against sulfonylurea herbicides" under DBT Star College Scheme, 2019-2021.
- Research supervision as PI- Two students in the Project "Potential use of *Thinopyrum intermedium, Coriander sativum and Mentha piperita* for bioremediation of heavy metals contaminated water" under DBT Star College Scheme, 2017-2018.
- Research supervision as PI- Two students in the Project "Qualitative assessment of physicochemical parameters of harvested rainwater in different regions of National Capital Territory (NCT) and NCR" under DBT Star College Scheme, Gargi College, 2016-2017.
- Research supervision as PI- Four students in the Project "Correlation of toxic stress on population colonization rates in fresh water protozoans" under DBT Star College Scheme, Gargi College, 2015- 2016.

REFRESHER COURSE/ORIENTATION PROGRAMME/FACULTY DEVELOPMENT PROGRAMMES ATTENDED:

- Two Week Faculty Development Programme (FDP) on "NEP Orientation and Sensitisation" organised by Mahatma Hansraj Faculty Development Centre (MHRFDC), Hansraj College under the aegis of Malaviya Mission Scheme, UGC, 3-17 Nov, 2023.
- One Week Faculty Development Programme (FDP) on "E-content Generation and Managing Online Teaching" organized by Sri Aurobindo College (E), and Mahatma Hansraj Faculty Development Centre (MHRFDC), Hansraj College, University of Delhi, 11-17 Dec, 2020.
- One Week FDP on "Skills for Next Generation Teachers" organized by Vimala College, Thrissur, Kerela, Guru
 Angad Dev Teaching Learning Center SGTB Khalsa College, University of Delhi and Jean Monnet Module,
 Center of European Studies, JNU, New Delhi, 01-07 Dec, 2020.
- Two Weeks FDP on "Advanced Concepts for Developing MOOCS" organized by Teaching Learning Centre (TLC) Ramanujan College, University of Delhi, Delhi MHRD (PMMMNMTT), 02-17 July, 2020.
- Two Weeks FDP on on Design, Develop, and Deliver Online Courses" organized by National Institute of Educational Planning and Administration (NIEPA), New Delhi 22-26 June, 2020.
- FDP on "Artificial Intelligence and Data Science" organized by Department of Information Technology, Oriental Institute of Science & Technology, Bhopal. 10-14 June, 2020.
- Refresher Course in "Research Methodology" at UGC-HRDC, Jawaharlal Nehru University, New Delhi during Oct 14-26, 2019.
- Refresher Course on "Climate change and Disaster Management" at CPDHE (UGC-HRDC), University of Delhi, Delhi during June, 9 - 30 Jun, 2017.
- Orientation Course organized by UGC-HRDC, Dr. Harisingh Gour University, Sagar (MP), 10 Nov -7 Dec, 2014.

PUBLICATIONS PROFILE

Research Publications in peer reviewed international journals:

- Rashmi Saini*, Paserkar N, Varma A, Acharya DK, Upadhye V, Pathak D, Warghane A. Emerging Nanotechnological Applications in Preserving and Improving the Shelf Life of Food. Pharm Nanotechnol. 2023 Oct 24. doi: 10.2174/0122117385260631231016102111. Epub ahead of print.
- Nityanand Srivastava, Salman S Usmani, Rajasekaran Subbarayan, Rashmi Saini, Pranav K. Pandey. Hypoxia: syndicating triple negative breast cancer against various therapeutic regimens. Frontiers in Oncology, Volume 13, 2023. https://doi.org/10.3389/fonc.2023.1199105
- Anand Varma, Ashish Warghane, Neena K. Dhiman, Neha Paserkar, Vijay Upadhye, Anupama Modi and Rashmi Saini*. The role of nanocomposites against biofilm infections in humans. Frontiers in Cellular and Infection Microbiology, 28 February 2023 Sec. Clinical Microbiology, Volume 13, 2023. https://doi.org/10.3389/fcimb.2023.1104615
- 4. **Rashmi Saini**, Himaani Mehra, Tanisha Goyal and Neena K Dhiman. Dietary antioxidants and their potential role in human disease management. Current Nutrition and Food Science (ISSN- 2212-2881), 19(3), 262- 281, 2023. doi: 10.2174/1573401318666220520151057
- 5. Ishu Priya, **Rashmi Saini***, Mohammad I Ali. Potential of *Tinospora cordifolia* in effective management of Citrus Greening Disease by alteration in life cycle stages of the vector *Diaphorina citri*. Indian Journal of Natural Science, 14(80), 60711-16, 2023.
- Ishu Priya, Rashmi Saini*, Mohammad I. Ali. Identification of Gram negative bacterium *Candidatus liberibacter asiaticus* (CLas) causing Citrus Greening Disease by Multicopy gene. Indian J. Applied & Pure Bio. Vol. 38(2), 901-907 (2023). ISSN: 0970-2091
- Rashmi Saini and Neena K Dhiman. Natural Anti-Inflammatory and Anti-Allergy Agents: Herbs and Botanical Ingredients. Anti-Inflammatory and Anti-Allergy Agents in Medicinal Chemistry (ISSN 1871-5230), 21 (2), 90-114. 2022, PMID: 35410623. doi:10.2174/1871523021666220411111743.
- 8. **Rashmi Saini,** Zafar Azam, Leena Sapra, RK Srivastava. Neuronal nitric oxide synthase (nNOS) in neutrophils: an insight. Reviews on Physiology, Biochemistry and Pharmacology, Springer Publication, 180, 49-83, 2021.
- 9. **Rashmi Saini** and Neena K Dhiman. Assessing the potential of phytochelators in reducing heavy metal water poisoning. Vigyan Prakash: Research Journal of Science & Technology, 19(4), 40- 46, 2021.
- 10. **Rashmi Saini** and Sarika Singh. Inducible Nitric Oxide Synthase: An asset to Neutrophils. Journal of Leukocyte Biology, 105(1), 49-61, 2019.
- 11. **Rashmi Saini.** Nitric oxide (NO): Implications on fertilization potential of Spermatozoans. ISSRF Newsletter 24, 93-95, 2019. ISSN2395-2806
- 12. Neena K. Dhiman, Anjali Deswal, Dharvi Mahajan, Shashi Tyagi and **Rashmi Saini.** Assessing the effectiveness of *Coriander sativum, Mentha piperita* and *Thinopyrum intermedium* in remediation of waters with heavy metal toxicity. International Journal of Current Research, 11(4) 2995-2998, 2019.
- 13. Neena Kumar, Dharvi Mahajan, Anjali Deswal and **Rashmi Saini.** Qualitative Assessment of Physicochemical Parameters of Harvested Rainwater in different regions of National Capital Territory (NCT) and NCR. Peripex: Indian Journal of Research, 7 (10) 474-475, 2018.
- 14. Neena Kumar, Rashmi Saini, Khushboo Chaudhary, Muskaan Bansal, Kanika and Namrata Pandey. Correlation

- between toxic stress by heavy metal toxicants and periphytic protozoan colonization rates. International Journal of Advanced Research, 5 (5), 529-534, 2017.
- 15. **Rashmi Saini** and Neena Kumar. Global Climate Change and Aquatic Ecosystem: Potential Impacts and Challenges. International Journal of Current Research 9(8), 56336-56342, 2017.
- 16. Neena Kumar and **Rashmi Saini**. Post-Disaster Epidemics: Possibilities and Prevention. Paripex: Indian Journal of Research (PIJR), 6(7), 22-25, 2017.
- 17. **Rashmi Saini,** Shilpy Shakya. Herbs and botanical ingredients with beneficial effects on blood sugar levels in pre-diabetes. Herbal Medicine. iMedPub Journals. Vol 2(1), 1-11. ISSN- 2472-0151, 2016.
- Savita Verma, Bhargab Kalita, Rashmi Saini, Manju L Gupta. Ameliorative effects of active principles of Podophyllum hexandrum against ionizing radiation induced oxidative stress in liver and lung tissues of Strain 'A' mice. Oxid. Antioxid. Med. Sci. 3(1), 51-64. ISSN- 2146-8389, 2014.
- Rashmi Saini, Savita Verma, Abhinav Singh, Manju L Gupta. Role of active principles of *Podophyllum hexandrum* in amelioration of radiation mediated lung injuries by ROS/RNS reduction. CellBio, 2, 105-116. ISSN-2325-7776, 2013.
- 20. Rohit Saluja, **Rashmi Saini**, V.K. Bajpai, and M. Dikshit. Ultrastructural localization of nitric oxide synthase isoforms in rat and human eosinophils. Cell and Tissue Research 340, 381-388. ISSN- 1432- 0878, 2010.
- 21. **Rashmi Saini,** S Patel, R Saluja, A. A. Sahasrabuddhe, M. P. Singh, S. Habib, V. K. Bajpai, and M. Dikshit. Nitric oxide synthase localization in the rat neutrophils: immunocytochemical, molecular and biochemical studies. Journal of Leukocyte Biology 79, 519-528. ISSN- 1938-3673, 2006.
- 22. **Rashmi Saini,** V.K. Bajpai, and M. Dikshit. Characterization and localization of nitric oxide synthase in rat polymorphonuclear leukocytes. Natural Antioxidants and Micronutrients, 67-71, 2005.
- Prashant Sharma, S.A.V. Raghavan, Rashmi Saini and Madhu Dikshit. Ascorbate-mediated enhancement of reactive oxygen species generation from polymorphonuclear leukocytes: modulatory effect of nitric oxide. Journal of Leukocyte Biology, 75, 1070-1078. ISSN- 1938-3673, 2004.

Book Chapters:

- Ishu priya, Mohammad I. Ali, Rashmi Saini. Detection of pathogen Candidatus Liberibacter asiaticus (CLas) causing Citrus Greening Disease by gene primer method. In- Recent Research in Medical and Life Sciences, MKSES Publications. (ISBN: 978-93-91248-77-2), Chapter 6, 79-85, 2023.
- 2. Ashish Warghane, **Rashmi Saini**, Neena Dhiman, Khushdil Khan , Meena Koche , Aditya Sharma, R.M. Gade , Prakash Halami , Anunava Das. Value-Addition of Citrus Processing Industry Waste through Enzymes Technology. Elsevier Publications (ISBN-978-0-323-89929-1), 2023.
- Rashmi Saini, Shilpy Shakya, Neena K. Dhiman. Potential of Herbs and Spices to prevent progression to diabetes by impacting Pre-diabetic Blood Sugar Levels. In Role of Medicinal Plants in Health Care. RP Publications, Delhi, (ISBN-978-93-91580-24-7), 2022.
- Rashmi Saini. Impacts of Climate Change on Aquatic Ecosystems. In- Climate Change and Disaster Management. Centre for Professional Development in Higher Education UGC-HRDC, University of Delhi, New Delhi. Chapter 25, 253-261, 2017.
- 5. **Rashmi Saini** and Sachin L. Badole. Bioactive Compounds Increase Incretins with Beneficial Effects on Diabetes. In- Glucose Intake and Utilization in Pre-Diabetes and Diabetes: Implications for Cardiovascular Disease. Chapter 28, 349-353, 2015.

- Rashmi Saini, Badole SL, Zanwar A. L-Arginine derived Nitric oxide: Key to Healthy Skin. In-Bioactive Dietary Factors and Plant Extracts in Preventive Dermatology, Editor Ronald Ross Watson and Sherma Zibadi, New York. Springer press publisher, Chapter 8, 73-82. ISBN-1627031669, 2013.
- 7. **Rashmi Saini,** Badole SL, Zanwar A. Ascorbic Acid (Vitamin C): Antioxidant involved in treatment of skin cancer. In-Bioactive Dietary Factors and Plant Extracts in Preventive Dermatology, Editor Ronald Ross Watson and Sherma Zibadi, New York. Springer press publisher. Chapter 6, 61-66. ISBN-1627031669, 2013.
- 8. Zanwar A, Badole SL and **Rashmi Saini.** Role of Emblica officinalis in prevention of skin diseases. In-Bioactive Dietary Factors and Plant Extracts in Preventive Dermatology, Editor Ronald Ross Watson and Sherma Zibadi, New York. Springer press publisher. Chapter 40, 439-444. ISBN-1627031669, 2013.
- Zanwar A, Badole SL and Rashmi Saini. Withania somnifera, use for skin disease. In-Bioactive Dietary Factors and Plant Extracts in Preventive Dermatology, Editor Ronald Ross Watson and Sherma Zibadi, New York. Springer press publisher. Chapter 47, 487-491. ISBN-1627031669, 2013.
- Rashmi Saini, Madhumita Chatterjee, and Madhu Dikshit. Neutrophil nitric oxide synthase: functional, biochemical and molecular perspective. In-Current Trends in Pharmacology. Editor A. Ray & K. Gulati. IK International, New Delhi. Chapter 22, 327-365. ISBN-9788188237777, 2006.

Patents:

Granted:

Patent Granted "Flexible Mice Restainer For Hind Limb Tumor Radiation Exposure". Indian Patent Office, New Delhi. 2014 Intellectual Property Agency, INDIA, 2014 Patent File No 255713, Patent Application No. 2634/DEL/2013 Dt. 23 Sep 2013.

Filed:

Patent Application No. TEMP/E1/21936/2023-DEL, Dt. 19th Mar 2023, Patent File No– 202311018671, Indian Patent Office, Intellectual Property Agency, New Delhi, India.

Patent Application No. TEMP/E1/41999/2023-DEL, Dt. 29th May 2023, Patent File No–202311036860, Indian Patent Office, Intellectual Property Agency, New Delhi, India.

Design Application No. 390729-001, Dt. 20th July, 2023, Indian Patents and Design Office (IPO), Govt. of India, India.

PAPERS PRESENTED IN INTERNATIONAL/ NATIONAL CONFERENCES/ SEMINARS/ SYMPOSIA

- Ishu Priya, Mohammad I. Ali, **Rashmi Saini***. Assessing the potential of Tinospora cordifolia in the regulation of the life cycle and mortality rate of D.citri. Proceedings of 63rd Annual International Conference of Association of Microbiologists of India (AMI) Microbial Technologies for sustainable Biosphere (MICROBIO TECH-2023) conducted by Maharishi Dayanand University Rohtak (Haryana), 2-4 Feb, Pg. 381, 2023.
- Rashmi Saini. Hydroxyurea Augments Endothelail Nitric oxide Synthase (eNOS) mediated nitric oxide (NO) production and decreases Reactive Oxygen Species (ROS) generation in murine Aortic Endothelial Cells (MAECs) of Sickle Transgenic Cell mice. 5th Annual Meeting of the International Academy for Clinical Hematology (IACH), 22-24 Sept, 2022
- Ishupriya, Ashish Warghane, Rashmi Saini*. Management of Citrus Greening Disease by disruption of
 multitrophic host vector pathogen interaction by *Tinospora cordifolia*. Proceedings of 62nd Annual
 International Conference based on Theme: Microbiology and Society-Current trend and future prospects
 (MSCTFP- 2022), University of Mysore, 21-23 Sept. 2022.
- Rashmi Saini and Neena Kumar. Correlation of Toxic Stress by Lead and Cadmium on Periphytic ciliate

- Colonization rates. The Indian Science Congress Association (ISCA- Sagar Chapter). Proceeding of The National Seminar on Science and Technology for National Development. Sept 23-24, 14, 2016.
- Neena Kumar, Rashmi Saini, Khushboo Choudhary, Muskan Bansal, Kanika and Namrata Pandey. Study of Impact of Toxic Stress on Population Colonization Rates in Fresh Water Protozoans. National Conference on Combating Industrial Pollution for Sustainable Environment (CIPSE-2016), Sept 22-23, 66, 2016.
- Rashmi Saini. Effects of Antioxidants on Oxidative-Nitrosative Stress Mediated Pathophysiology of Diabetes. National Seminar on Recent Initiatives in Higher Education, Feb 20-21, 41-42, 2016.
- Satyaprakash Beraiya and Rashmi Saini. Modulation of the Intracellular compartmentalization of Nitric Oxide Synthase Isoforms in the Sickle cell disease by Hydroxyurea Therapy. International Conference on Energy Environment & Life Science for Sustainable Future (ICEELSSF) & National Science Day Celebration, at Swami Vivekanand University, Sagar (MP), India. 28 Feb - 1 March, 2014
- Rashmi Saini, Savita Verma, Manju L Gupta. Restoration of radiation inflicted damage to pulmonary system
 of mice by Podophyllum hexandrum mediated reactive nitrogen species (RNS) reduction. Cancer Research
 and Therapeutics, 8(3), 494. (IF- 0.6) ISSN- 0793-1483, 2012.
- Savita Verma, Rashmi Saini, Manju L Gupta. Ameliorative effects of Podophyllum hexandrum on radiation inflicted injuries to hematopoietic system of mice. Cancer Research and Therapeutics, 8(3), 494. ISSN- 0793-1483, 2012.
- Rashmi Saini, Nicola Conran, Fernando F. Costa. Effect of Tetrahydrobiopterin on real time Nitric Oxide (NO) and Reactive Oxygen Species (ROS) generation in neutrophils of Sickle cell disease patients with and without hydroxyurea therapy. Hematologica, 96 (2), 302, (IF- 6.5) ISSN- 1592-8721, 2011.
- Sachin Kumar, **Rashmi Saini**, and Madhu Dikshit. Status of nitric oxide synthase in bone marrow neutrophils during maturation and their correlation with free radical generation. Emerging Trends in Free Radical and Antioxidant Research: Third Meeting of the Society for Free Radical Research -Asia (SFRR-Asia) & Sixth annual meeting of Society for Free Radical Research-India (SFRR-India), Lonavala, India. Jan 8-11, 2007.
- Rashmi Shakya, A.A. Sahasrabuddhe, V. K. Bajpai and M. Dikshit. Intracellular Localization of Nitric Oxide Synthase in Immature and Mature Rat Neutrophils: A Biochemical and Immunocytochemical study. Medicinal Chemistry Research, 12, 334-335. (IF- 3.16) ISSN- 1554-8120, 2003.

CONFERENCE/SEMINARS/SYMPOSIA/WEBINARS/PRESENTATIONS/ORGANIZATION

- Participated in National e-Workshop on Innovation & Intellectual Property Rights (NeW IPR-2023) Innovative Technology Enabling Centre- InTEC, CSIR- Institute of Minerals and Materials Technology, Bhubaneswar, India. 12 -17 June, 2023.
- Attended 1st World Congress on Controversies in MDS and AML (COMydAL) and 5th Annual Meeting of the International Academy for Clinical Hematology (IACH), 22-24 Sept, 2022
- Participated in MICROSPHERE 2.0: AN INTERNATIONAL OUTREACH PROGRAM organized on the
 occasion of International Microorganism Day under the aegis of the International Microbiology Literacy
 Initiative (IMiLI), Indian Network for Soil Contamination Research (INSCR), Federation of European
 Microbiological Sciences (FEMS) & International Society for Microbial Ecology (ISME) in association with
 Gargi College (DU), Kirori Mal College (DU), Ramjas College (DU), Shivaji College (DU), Acharya
 Narendra Dev College (DU), PG Dept. of Zoology (Magadh University) and SGTB Khalsa College (DU). 17
 Sept, 2022

- Participated in Virtual Event "BioRender Grants Mini Series", 20 Jan, 2022.
- Attended Webinar on "Accelerate your research using Elsevier"s Scopus" Researcher Academy organized by Delhi University in collaboration with Elsevier, 11 Feb, 2022.
- Participated in International Webinar on "Neurobiology of Behavior: the Challenge and the Promise for Translational Research" by Harisingh Gour Central University, Sagar M.P, 15-16 Dec, 2021.
- Participated in International Webinar on "Neuronal and Hormonal Interventions in Stress Integrated Behaviour" by Harisingh Gour Central University, Sagar M.P, 29-30 Nov, 2021.
- Participation in VISUALIZE 2021, Virtual Event on Advancing Communication in Science, organized by BioRender, 29-30 Sept, 2021.
- Participated in An International Outreach Program on International Microorganism Day MICROSPHERE under the aegis of Indian Network For Soil Contamination Research (INSCR), jointly organized by Deen Dayal Upadhyaya College (DU), Gargi College (DU), IIT Rorkee, Kirori Mal College (DU), Ramjas College (DU), PG Dept. of Zoology (MU) & PhiXgen Pvt. Ltd., Gurugram in association with Acharya Narendra Dev College (DU), Maitreyi College (DU), Sri Venkateswara College (DU) & C.M.P. College (AU), 17 Sep, 2021.
- Participated in Webinar "IMMUNE CELL ACTIVATION AND REGULATION IN DISEASE" organized by Department of Molecular Medicine and Biotechnology, SGPGIMS, Lucknow, 6-7 Aug, 2021.
- Attended NEUROEUNOIA 2020: A NEUROSCIENCE AFFAIR, International e-conference sponsored by Indian Academy of Neurosciences, 16-17 Oct, 2020.
- Participated in National Webinar entitled "Promotional Avenues for Teachers in Higher Education: CAS Regulations-2018" organized by Guru Angad Dev TLC, SGTB Khalsa College, University of Delhi, under PMMMNMTT of MHRD, on 5 Sept, 2020.
- Participated in webinar on "Application of Bioinformatics in Drug Discovery" organized by Faculty of Engineering, Department of Biotechnology, Karpagam Academy of Higher Education, Coimbatore, 3 July, 2020.
- Participation in webinar on "Entomology in Criminal Investigations" organized by Department of Zoology, Gargi College, University of Delhi, Delhi on 22 Aug, 2020.
- Participation in webinar on "Immunology of Covid-19" organized by Department of Zoology, Gargi College, University of Delhi, Delhi on 5 Aug, 2020
- Participation in National Webinar Series (NWS)-2020 on "Immunity and Infection: Biochemical approaches to therapies" organized by Society of Biological Chemists, Davengere Branch & Department of Biochemistry, Davangere University, Davengere, Karnataka. 15-21 June, 2020.
- Attended the 2nd Task Force meet under DBT Star College Scheme, Ministry of Science & Technology and Gargi College, University of Delhi, Delhi. May 8-9, 2018.
- Participated in the "National Conference on the Technological Empowerment of Women" organized by NASI, on the occasion of International Women's Day, at Vigyan Bhavan, New Delhi on March 8-9, 2018.
- Participated in National Seminar sponsored by NAAC "Mentoring the Teachers-Mentors: Capacity Building Programme" organized by IQAC, Gargi College, University of Delhi, Delhi, Jan 19- Jan 20, 2018.
- Participated in Symposia on "Art of Grant Writing" held under the DBT Star college scheme at Department of

Zoology, Miranda House, University of Delhi, 5th & 6th January, 2017.

- Participated in the conference and presented poster in the National Seminar on Science and Technology for National Development (ISCA-Sagar chapter), Sept 23-24, 2016.
- Paper presentation in CIPSE-2016 held at Gargi College, University of Delhi, Delhi on Sept 22-23, 2016.
- Participated in the workshop named SCIENCE SETU on "DNA FINGERPRINTING" held at Hindu College, University of Delhi, Delhi on 22 Jan, 2016.
- Attended interactive session on FOLDSCOPE held at Gargi College on 16th Dec, 2015.
- Participation and oral presentation in National Conference on Evolving Trends in Biotechnology (NCEBT), at Sagar MP. (The Indian Science Congress Association-Sagar Chapter). March 28-30, 2015
- Participated in the conference and presented posters in the National Symposium on Frontiers in Modern Biology, on "Innovations in Science and Technology for Inclusive Development" held in Sagar, March 24-25, 2014.
- Attended the workshop cum seminar on "Harnessing Intellectual Property and Its Management for Growth and Prosperity" held at Dr. H.S Gour University, Sagar in Jan, 2014.
- Attended Springer User Awareness Program, Dr. H.S Gour University, Sagar held in Dec, 2013.
- Attended the conference and presented posters in the International Conference on Radiation Biology (ICRB), &
 11 th Biennial Meeting of the Indian Society for Radiation Biology at ACTREC Tata Memorial Centre, Kharghar, Navi Mumbai, held in November, 2012.
- Attended the conference and presented poster in 16th International Congress of European Hematology Association (EHA) London, held in June, 2011.
- Attended and presented poster in International conference of Hematology and Hemotherapy (HEMO 2010) held in Brazilia in Nov, 2010.

WORKSHOP/TRAINING PROGRAMME ATTENDED

- Participated in "IESRF Research Workshop 2022", Editor training at Research publication workshop, CME Webinar Event, 11-12 Nov, 2022.
- Participated in Research Essentials: Fundamentals of writing research articles for high impact journals, Researcher Academy, Elsevier, 21 Nov, 2022.
- Participated in DU eLibrary Worshop on LIBRARIAN"S DAY "SERVING MILLIONS OF E- RESOURCES |
 24 X 7 | EVERYWHERE | ON ANY DEVICE", 12 Aug, 2022
- Participated in Training session on "Discover Emerald resources for your academic excellence and research "by Emerald Publishing (DU Lib), 18 Jan, 2022.
- Attended Workshop on "Understanding Plagiarism Detection Software Ouriginal (Urkund)" by University of Delhi in association with eGalactic Pune, 28 Jan, 2022.
- Participation in Indo-Singapore Workshop on Cardiovascular Diseases: An Insight to New Advances and their Translational Application, Department of Biotechnology, Jamia Millia Islamia, New Delhi and Cardiovascular and Metabolic Disporders Program, DUKE-NUS Medical College, Singapore, 24-29 Sept, 2021.

- Participation in e-workshop on Research Article Writing organized by PharmaState Academy on 23 Aug, 2020.
- Participation in Research Proposal Writing e-Workshop organized by PharmaState Academy on 13 Aug, 2020.
- Attended Science Academic Lecture workshop on "Ingenuity in Biological Sciences", organized by Department of Zoology, Gargi College, University of Delhi, Delhi, Jan 11- Jan 12, 2018.
- Attended the workshop on "What is Plagiarism and How to avoid it" at Gargi College, University of Delhi, Delhi, Oct 13, 2017.
- Attended the workshop on "Research Matrices: Impact factor and h-Index" held at Gargi College, University of Delhi, Delhi, March 9, 2017.
- Workshop on "Biomanufacturing and photonics applied to cell biology" organized by INCT do Sangue, National Institute of Science and Technology in Blood, UNICAMP Brazil in September, 2010.

AWARDS AND DISTINCTIONS

- WOMEN RESEARCHER AWARD in the International Scientist Awards on Engineering, Science and Medicine, organized by VDGOOD Professional Association, Salem India, 8-9 Jan, 2021
- InSc Research Excellance Award- 2020 by Institute of Scholars, an ISO certified Institute by International Accurate Certification, accredited by UASL
- Edge India Times Award-2020, Honor of Excellence in Teaching (5 STAR grade) by Edge India Publications.
- Edge India Times Award-2020 Honor of Excellence in Research (5 STAR grade) by Edge India Publications.
- Best poster Award in International Conference on National Science Day Celebration, 28 Feb 1 March, 2014 at Swami Vivekanand University, Sagar (MP), India.
- DRDO: Laboratory technology group award- 2013 for significant contribution towards "Development of safe radioprotector for human application". Ministry of Defence, DRDOefence Research and Development Organisation, New Delhi
- Post Doctoral Research Fellowship sponsored by FAPESP- The State of Sao Paulo Research Foundation at Center of Hematology and Hemotherapy (HEMOCENTRO), University of Campinas (UNICAMP), Campinas, Sao Paulo, Brazil. 2010-2012.
- Best Poster Award by Emerging Trends in Free Radical and Antioxidant Research: Third Meeting Of the Society for Free Radical Research -Asia (SFRR-Asia) & Sixth annual meeting of The society of Free Radical Research (SFRR) Lonavala, India, 2007.
- Qualified National Eligibility Test (NET-JRF)- 2001, UGC-CSIR, New Delhi, India
- University Top Rank Holder, 2000 in MSc. Zoology, University of Lucknow, Lucknow

RESEARCH PROJECTS (MAJOR/MINOR GRANTS/RESEARCH COLLABORATION)

• Research Project on "Ascorbate mediated defence mechanism of oxidative stress enzymes in E.coli against sulfonylurea herbicides" DBT Star College Scheme, Gargi College, University of Delhi, Delhi. (2019-2021).

- Research Project on "Potential use of *Thinopyrum intermedium*, *Coriander sativum* and *Mentha piperita* for bioremediation of heavy metals contaminated water" under the DBT Star College Scheme, Gargi College, University of Delhi, Delhi. (2017-2018).
- Research Project on "Qualitative assessment of physicochemical parameters of harvested rainwater in different regions of National Capital Territory (NCT) and NCR" under the DBT Star College Scheme, Gargi College, University of Delhi, Delhi. (2016-2017).
- Research Project on "Correlation of toxic stress on population colonization rates in fresh water protozoans" under the DBT Star College Scheme, Gargi College, University of Delhi, Delhi. (2015-2016).
- UGC-BSR StartUp Grant for the Research work on "Studies on modulatory effects of ascorbate on Reactive Nitrogen Species (RNS) mediated pathophysiology of diabetes" (2014-2016).

ASSOCIATION WITH PROFESSIONAL BODIES

- Professional Life time Membership, InSc-Institute of Scholars, an ISO certified Institute by International Accurate Certification, accredited by UASL
- Member, VDGOOD Professional Association, 2021-2022.
- Editorial Board Member, Science publishing group, American Journal of Biomedical and Life Sciences (AJBLS), New York, U.S.A.
- Editor, Indian Adaptation of Gene Cloning and DNA Analysis: An Introduction by T. A. Brown, 2022.
- Content Editor, International Journal of Microbial Science, 2021-2022.
- Reviewer, Current Medicinal Chemistry, Bentham Science Publishers.
- Reviewer, Pulsus Journals: Journal of Analytical Toxicology and Applications.
- Reviewer, Journal of Institute of Scholars (InSc)-International Journal of Basic and Applied Sciences.
- Member, Society of Leukocyte Biology (SLB), Bethesda, USA.
- Lifetime Membership of Indian Science Congress Association (ISCA), Delhi.
- Fellowship, International Asian Zoology Research (F.I.A.Z.R)
- Fellowship, Scientific Research and Development (F.S.R.D)

OTHER ACTIVITIES

Invited Lectures:

- "Role of Nitric oxide Biology in the blood cell functions" in the National Seminar on Innovations and Upcoming Opportunities in Life Sciences (IUOLS-2022) organized by Faculty of Life Sciences, Mandsaur University, Mandsaur, M.P., Oct 15, 2022.
- "Correlation of Toxic Stress by Lead and Cadmium on Periphytic ciliate Colonization rates" in The National Seminar on Science and Technology for National Development. The Indian Science Congress Association – Sagar Chapter at Dr. Harisingh Gour University, Sagar, M.P. Sept 24, 2016.
- "Amelioration of Nitric oxide (NO) bioavailability after hydroxyurea treatment in explants culture of murine
 aortic endothelial cells (MAEC) of Sickle Transgenic Cell mice" National Conference On Evolving Trends in
 Biotechnology Department of Biotechnology, Dr. Harisingh Gour Central University, Sagar, MP.