


Curriculum Vitae

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|--|--|------------------------|--|-----------|--------|---|
| Title | Dr. | First Name | Ruchi | Last Name | Mishra |  |
| Designation | Assistant Professor (Adhoc) | | | | | |
| Department | Environmental Science, B. A. Programme | | | | | |
| Institutional Email Address | rmishra@jmc.du.ac.in | | | | | |
| EDUCATION | | | | | | |
| Degree | Institution | Year | Details | | | |
| PhD | University of Delhi | 2018 | <i>Viscum articulatum</i> extract and its ribosome inactivating protein trigger apoptosis in leukemia cell lines. | | | |
| MPhil | NA | - | - | | | |
| CAREER PROFILE | | | | | | |
| Organisation / Institution | Designation | Duration | Role | | | |
| Jesus and Mary College, University of Delhi | Assistant Professor (Adhoc) | Nov, 2020 to till date | Teaching Environmental Studies (EVS) to UG students, Member: B. A. Programme Committee; Member: Green Society; Member AQAR/NAAC for criteria-7 | | | |
| Lakshmbai College, University of Delhi | Assistant Professor (Guest) | Sep, 2019 to Apr, 2020 | Teaching Environmental Studies (EVS) to UG students | | | |
| Miranda House, University of Delhi | Assistant Professor (Guest) | Jan, 2018 to Apr, 2019 | Teaching Environmental Studies (EVS) to UG students | | | |
| Department of Environmental Studies, University of Delhi | PhD fellow (UGC-NET JRF & SRF) | Apr, 2011 to Sep, 2017 | Research work on biodiversity conservation priorities and bioprospecting | | | |
| CSIR-URDIP, Pune | Women Scientist-C, IPR scholar | May, 2009 to Apr, 2010 | Patent searching and analysis | | | |
| CSIR-CIMAP, Lucknow | CSIR Research Intern | Mar, 2007 to Jun, 2008 | Microbiology research work | | | |
| AREA OF INTEREST: Environmental Science, Biodiversity Conservation, Bioprospecting, Anticancer mechanism of mistletoe extract, Bioremediation, Protein biochemistry, Apoptosis, Animal cell culture, Flow cytometry, etc. | | | | | | |

TEACHING EXPERIENCE (Subjects/Courses taught)

- I. AEC- Environmental Science: Theory into Practice-I
- II. AEC- Environmental Science: Theory into Practice-I
- III. SEC: Sustainable Ecotourism and Entrepreneurship

PhD (Supervised)-

MPhil (Supervised)-

HONORS & AWARDS

1. DST- Women Scientist-C, 2009
2. UGC NET Junior Research Fellowship (JRF) 2010
3. CSIR-Diamond Jubilee Research Intern Award, 2022
4. National Education and Training Excellence Award, 2023

PUBLICATION DETAILS

Books:

Chapter: Malhotra S*, Mishra R*, Karmakar S, Rawat D, Sharma S, Singh S, Kumar P, Raiping S, Mishra V, Environmental factors shaping plant-microbe associations: Their significance to improve plant health and vegetation restoration in degraded lands, in: Introduction to Challenges and Strategies to Improve Crop Productivity in Changing Environment, pp 1-16, Enriched Publications Pvt. Ltd.

Journal Articles:

- Mishra V*, Mishra R*, Sharma RS, Ribosome inactivating proteins – An unfathomed biomolecule for developing multi-stress tolerant transgenic plants. International Journal of Biological Macromolecules (**Impact factor- 8.03**) 2022, 210: 107-122.
- Singh S, Malhotra S, Mukherjee P, Mishra R, Farooqi F, Sharma RS, Mishra V, Peroxidases from an invasive Mesquite species for management and restoration of fertility of phenolic-contaminated soil. Journal of Environmental Management (**Impact factor- 8.91**) 2020, 256: 109908.
- Mishra R, Sharma, RS, Singh S, Sardesai MM, Sharma S, Mishra V, Antiproliferative, cell cycle arrest and apoptosis induction potential of the *Viscum articulatum* Burm. f. aqueous extract in leukemia cells. Journal of Ethnopharmacology (**Impact factor- 5.195**) 2018, 219.
- Singh S, Mishra R, Sharma RS, Mishra V, Phenol remediation by peroxidase from an invasive mesquite: Turning an environmental wound into wisdom. Journal of Hazardous Materials (**Impact factor- 14.224**) 2017, 334:201-211.
- Mishra R, Das MK, Singh S, Sharma RS, Sharma S, Mishra V, Articulatin-D induces apoptosis via activation of caspase-8 in acute T-cell leukemia cell line. Molecular and Cellular Biochemistry (**Impact factor- 3.40**) 2017, 426:87-99.
- Mishra R, Archana, Sharma S, Singh S, Sharma, RS, Malhotra S, Karmakar S, Sardesai, MM,

Mishra V, Purification and Characterization of a Lectin Isoform of Ribosome Inactivating Protein from *Viscum articulatum* Parasitic on *Grewia tilifolia*. Phytomorphology (**Impact factor- <1.0**) 67(3&4):91-100.

Newspaper Articles:

Papers presented in Seminars/conferences:

- **Mishra R.**, Innovative potential of lifelong learning toward achieving the framework of sustainable development, International Conference on “Beyond Education: Implementation of Lifelong Learning in India” Department of Lifelong Learning and Extension and Internal Quality Assurance Cell (IQAC) Chhatrapati Shahu Ji Maharaj University (CSJMU), Kanpur, held on 11-12 December 2023.
- **Mishra R**, Therapeutic potential of mistletoe ribosome inactivating protein: Perspective for cancer treatment. International conference on Recent Advancements in Chemical Sciences: Health, Environment and Society, organized by Department of Chemistry, Deshbandhu College, University of Delhi, held on 8th -9th April 2022.
- **Mishra R**, Mishra V, Sharma RS, Efficient induction of apoptosis by ribosome inactivating protein from *Viscum articulatum* in acute T-cell leukemia cell line. 1st International Conference Integrative Chemistry, Biology and Translational Medicine (ICBTM-2019), University of Delhi, held on 25-26 Feb, 2019.
- Archana, **Mishra R**, Mishra V, Potential of Mistletoe Ribosome Inactivating Protein to Protect Crop Biodiversity from Disease Damage. National conference on ‘emerging challenges of environmental health society and policies. Rajdhani College, University of Delhi, Delhi, held on 15-16 Feb, 2019.
- **Mishra R**, Yadav A, Sharma RS and Mishra V, Purification of a ribosome inactivating lectin from *Viscum articulatum*: a protein with multiple enzymatic activities. World biotechnology congress, JNU, Delhi, held on 20-22 Feb 2017.
- **Mishra R**, Sharma RS, Mishra V, Evaluation of anticancerous potential of aqueous extract of *Viscum articulatum*, leafless mistletoe, on human leukemia cells. 5th Biennial International conference on new developments in drug discovery from natural products and traditional medicine, NIPER SAS Nagar, Mohali, Chandigarh, held on 18-20 Nov 2016.
- Twenty-sixth Annual National Convention & Conference of Society for Information Science (SIS) on “**Recent Trends in Patinformatics**” organized by CSIR Unit for Research and Development of Information Products (URDIP), Pune and presented a poster titled “Study of Women Inventors; Some Emerging Trends” held on 09-12 Dec 2009.
- Luqman S, **Mishra R**, Khan S, Darokar MP, Bioevaluation of phytomolecules as efflux pump modulators to manage multidrug resistance in *Mycobacterium*. 8th edition of India's biggest biotech event “Bangalore Bio-2008”, held on 24-26 April 2008.
- **Mishra R**, Luqman S and Darokar MP, Role of Efflux Pump Modulators in altering the Activity of ATPase in *Mycobacterium smegmatis*. 3rd Symposium on Current Advances in Molecular Biochemistry: Applications in Health, Environment and Agriculture, organized by University of

Lucknow, Lucknow, held on 28-30 Dec 2007.

National Workshops and Seminars Organised:

1. International Conference on “Social Determinants of Health Inequality and Inequity: Impact of COVID-19 for the future” organized by Department of B.A. Programme, Jesus and Mary College from 2023, February, 23-23.
2. India-UK Workshop on “Knowledge transfer on the sustainability of innovative wastewater treatment technologies to India: Circular Economy concepts & Graphene related technologies” held on 06 March 2019 at Department of Environmental Studies, University of Delhi, Delhi.

Talks/Lectures:

Talk on “Urban Wildlife” on 5th October 2023 in collaboration with Green Society, Jesus and Mary College, University of Delhi.

Participation as Resource Person:

Talk on “Importance Biodiversity Parks as Educational Tool for Students” on the occasion of International Biodiversity Day celebration held at Aravalli Biodiversity Park, Delhi, on 22nd May 2023

OTHER DETAILS

Preparation of Teaching Material:

Contributed to prepare study material of Ability Enhancement Course: Environmental Science, for School of Open Learning, University of Delhi

Research Projects:

Membership in Professional Bodies:

Life time memberships of **Indian Science Congress Association (ISCA)**

Orientation and Refresher Courses:

- Short Term Course on “Bioprocess Engineering for Waste Valorization” organized by Dr. B.R. Ambedkar National Institute of Technology Jalandhar (Punjab), India, from 01st Nov-05th Nov, 2023.
- One week FDP on “Data Science for Social Science” from 01-07 November 2022 organized by Ramanujan College, University of Delhi.
- Two - Week Interdisciplinary Refresher Course in Environmental Studies On The Theme “21st Century Environmental Issues, Challenges & Solutions” From 15-29 July, 2021 organized by Ramanujan College, University of Delhi.
- Two weeks National Interdisciplinary Refresher Course on “Research Methodology and Data Analysis (Sharpening Skills through MS Excel, SPSS, MATLAB and R)” from 24th March to 7th

April, 2021 organized by Ramanujan College, University of Delhi.

- TEQIP-III sponsored online Short Term Course on “**Computational Tools for Analysis of Biological Systems**” organized by Department of Biotechnology, Dr. B. R. Ambedkar National Institute of Technology, Jalandhar, Punjab, India, held on September 02-06, 2020.
- One Week National e-workshop on "**Research Methodology**" organized by Department of Zoology and Department of Commerce, Govt Lahiri PG College, Chirimiri, India from 8th – 14th September 2020.
- One Week Online FDP on "**ICT Enhanced Teaching Learning And Creating Moocs**" with grade A+.organized by Teaching Learning Centre, Ramanujan College, University of Delhi And IQAC, Shivaji College, University of Delhi, under Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching, Ministry of Human Resource Development during August 18 - August 25, 2020.

Field Work:

Regular field visits to Aravalli Biodiversity Park and Yamuna Biodiversity Park.