

Curriculum Vitae**Dr. Ruchi Mishra**

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Email- [ruchimishra27@gmail.com](mailto:ruchimishra27@gmail.com)**Qualifications:**

- PhD (2018) from Department of Environmental Studies, University of Delhi, Delhi.  
**Research area:** Prospecting of biodiversity focused on exploring native biodiversity of mistletoe (*Viscum spp.*) from Indian Western Ghat Region.
- M.Sc. 2006 with 81.5% marks from C.S.J.M. University, Kanpur.
- B.Sc. 2002 with 75.3% marks from C.S.J.M. University, Kanpur.

**Achievement & Awards:**

- **NET JRF- 2010.**
- **Women Scientist Scholar-C Award 2010** by Department of Science and Technology (DST) India.
- Qualified **GATE- 2007 and 2008.**
- Qualified **CSIR Diamond Jubilee Research Intern Award 2007.**
- **Published five research papers in international SCI journals and three chapters in the book with ISBN.**

**Working Experience:**

Organization & Address	Position Held	Period		Nature of Jobs
		From	To	
Jesus and Mary College	Asst. Prof. (Adhoc)	Nov. 2020 to till now		Teaching EVS to UG students
Lakshmibai College, University of Delhi	Asst. Prof. (Guest)	Sep, 2019	Apr, 2020	Teaching EVS to UG students
Miranda House, University of Delhi	Asst. Prof. (Guest)	Jan, 2018	May, 2019	Teaching (EVS) to UG students
Maitreyi college, University of Delhi	Asst. Prof. (Guest)	Aug, 2018	May, 2019	Teaching EVS to UG students
ANDC, University of Delhi	Asst. Prof. (Guest)	Sep, 2014	Nov, 2014	Teaching EVS to UG students
Department of Environmental Studies, University of Delhi	Ph.D fellow (UGC JRF & SRF)	Apr, 2011	Sep, 2017	Bioprospecting, biodiversity conservation priorities, bioremediation etc.
CSIR-URDIP, Pune	IPR scholar (WOS-C)	May, 2009	Apr, 2010	Patent searching & analysis
CSIR-CIMAP, Lucknow	CSIR Research Intern	Mar, 2007	Jun, 2008	Research work

**Research publications/Book chapters**

S. No	Authors	Title	Journal/Book	Volume / Page No	Year	ISSN/ISBN No.	Impact factor
1	Singh S, Malhotra S, Mukherji P,	Peroxidases from an invasive Mesquite species for	Journal of Environmental Management	256	2020	0301-4797	5.45

	<b>Mishra R</b> , Farooqi F, Sharma RS, Mishra V	management and restoration of fertility of phenolic-contaminated soil					
2	<b>Mishra R</b> , Sharma, RS, Singh S,... Mishra V	Antiproliferative, cell cycle arrest and apoptosis induction potential of the <i>Viscum articulatum</i> Burm. f. aqueous extract in leukemia cells	Journal of Ethnopharmacology	219:91-102	2018	03788741	<b>3.69</b>
3	<b>Mishra R</b> , 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	426:87-99	2017	03008177	<b>2.88</b>
4	Singh S, <b>Mishra R</b> , Sharma RS, Mishra V	Phenol remediation by peroxidase from an invasive mesquite: Turning an environmental wound into wisdom	Journal of Hazardous Materials	334:201-211	2017	03043894	<b>9.03</b>
5	<b>Mishra R</b> , Yadav A, Sharma S, Singh S,... ..Mishra V	Purification and characterization of a lectin isoform of ribosome inactivating protein from <i>Viscum articulatum</i> parasitic on <i>Grewia tilifolia</i>	Phytomorphology	67(3&4), 91-100	2017	0031-9449	<b>&lt;1.00</b>
<b>Book Chapter</b>							
6	Malhotra S*, <b>Mishra R</b> *,... Mishra V	Environmental factors shaping plant-microbe associations: Their significance to improve plant health and vegetation restoration in degraded lands	Introduction to Challenges and Strategies to Improve Crop Productivity in Changing Environment	1-16	2018	978-81934634-9-9	<b>NA</b>
7	Mishra V*, <b>Mishra R</b> *, Sharma RS	Efficient induction of apoptosis by ribosome inactivating protein from <i>Viscum articulatum</i> in acute T-cell leukemia cell line	Proceedings of ICBTM	30	2019	978-93-5351-396-2	<b>NA</b>
8	Mishra V*, <b>Mishra R</b> *, Sharma RS	Ribosome Inactivating Protein: A potential molecule for the development of multi-stress tolerant transgenic plants	Biotechnological Applications for Environmental Protection	1-15	2019	In Press	<b>NA</b>

\*' joint first Author

### International/National conference presentations

- **Mishra R**, Mishra V, Sharma RS, Efficient induction of apoptosis by ribosome inactivating protein from *Viscum articulatum* in acute T-cell leukemia cell line. 1<sup>st</sup> 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**, 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.
- **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.
- Luqman S, **Mishra R**, Khan S, Darokar MP, Bioevaluation of phytomolecules as efflux pump modulators to manage multidrug resistance in *Mycobacterium*. 8<sup>th</sup> 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*. 3<sup>rd</sup> 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 symposium *cum* Faculty development programme (FDP) on **Genome editing: Tools & Applications** organized by D. S. Kothari Center for Research and Innovation in Science Education, Miranda House, University of Delhi, Delhi, held on 15-22 January 2018.
- International Symposium on “**Green Chemistry and Sustainable Development**” organized by D S Kothari Centre for Research and Innovation in Science Education, University of Delhi held on 30-31 March 2012.
- 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.
- Participated as a volunteer in the National Conference on “**Immunology in Health and Disease**”, organized by C.S.J.M. University Kanpur held on 11-12 January 2006,

### Training/Workshop/Seminar:

- Workshop on “**Content Management System to Learning Management System**” organized by Lakshmibai College, University of Delhi during 4th-8th August 2020.
- A Webinar on “**Popular Science Writing under AWSAR Programme**” organized by the Department of Science and Technology (DST) and Vigyan Prasar (VP) on 7<sup>th</sup> August 2020.
- International Webinar on “**Writing Research Projects and Articles**” organised by the Department of Electrical and Electronics Engineering, Annamacharya Institute of Technology and Sciences, Rajampet, Andhra Pradesh, on 04-08-2020 & 05-08-2020.
- A webinar on “**Botanical Secrets for Wellness: Clued From Nature’s Signature**” organized by the Phytomics: The Botanical society of Bhaskaracharya College of Applied Sciences (University of Delhi), held on 16th May 2020.
- 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.
- Workshop on “**Application of Flow Cytometry**” held on 20 March 2015 at D. S. Kothari Center for Research and Innovation in Science Education, Miranda House, University of Delhi, Delhi.
- Workshop on “**IPR, Patenting and patentability Assessment**” held on 4<sup>th</sup> September 2014 at Cluster Innovation center, University of Delhi.
- Training course on “**Introduction to Mathematica**”, held during 28/11/2011 to 02/12/2011 at Delhi University Computer Centre, University of Delhi, Delhi.
- Training course on “**Basic Computers, MS-Word, MS-PowerPoint, Internet & Email**”, held during 14/11/2011 to 25/11/2011 at Delhi University Computer Centre, University of Delhi, Delhi.
- Training course on “**SPSS – (Statistical Package for Social Sciences)**”, held during 30/07/2012 to 03/08/2012 at Delhi University Computer Centre, University of Delhi, Delhi.
- Workshop on “**Bioinformatics and Molecular Modeling in Drug Design**”, held during 18-20 January 2012 at Dr. B. R. Ambedkar Center for Biomedical Research (ACBR), University of Delhi, Delhi.
- **General Course on Intellectual Property (DL101)**, session 1, 2010 (from March 1 to April 15, 2010), organized by **World Intellectual Property Organization (WIPO)** Worldwide Academy, Geneva, Switzerland.

### Ph.D work Experience:

- April 2011- June 2018  
**Department of Environmental Studies, University of Delhi, Delhi**  
Thesis title: *Viscum articulatum* extract and its ribosome inactivating protein trigger apoptosis in leukemia cell lines.

I worked on prospecting biodiversity focused on exploring native biodiversity of mistletoe (*Viscum spp.*) from Indian Western Ghat Region. I purified a novel ribosome inactivating proteins (RIP) from *Viscum spp.*, which are used by traditional society of India for medicinal purposes. I reported a novel isoform of RIP and demonstrated its anti-cancer potential against leukemia (blood cancer). Also, I revealed the anti-cancer pathway(s) triggered by purified RIP i.e. RIP induces programmed cell death in the cancer cells. Our study would help in translating traditional knowledge into pharmaceutical products of global importance and developing policy on conserving native biodiversity.

**Membership:**

- Lifetime memberships of **Indian Science Congress Association (ISCA)**

**Personal Details:**

- **Father's Name:** Santosh Kumar Mishra
- **Address (Correspondence):** 304, Second floor, Indra vihar, Near BBM Depot, Delhi- 110 009
- **Address (Permanent):** Anandpuram Colony, Hariharganj, Fatehpur, (U.P.), Pin- 212 601
- **Marital Status:** Married

**References:**

1. **Dr. Vandana Mishra**, (Mo. 9871260287), Email- [mistletoe\\_h@hotmail.com](mailto:mistletoe_h@hotmail.com)  
Department of Environmental Studies, University of Delhi Delhi- 110 007
2. **Dr. Radhey Shyam Sharma** (Mo. 9810227222), Email- [radheyss26@gmail.com](mailto:radheyss26@gmail.com)  
Department of Environmental Studies, University of Delhi, Delhi- 110 007

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