




Faculty Details proforma for DU Web-site

Title	Professor	First Name	Radhey Shyam	Last Name	Sharma		
Designation	Professor						
Address	Department of Environmental Studies, Laboratory of Bioresources & Environmental Biotechnology, University of Delhi, Delhi-110 007						
Phone No	Office	91-11-2766-6237 (Tele/Fax); 91-11-2766-7725 (Extn. 1422)					
	Residence	3405 Nichalson Road, Kashmere Gate, Delhi-110 006					
	Mobile	9810227222					
Email	radheys26@gmail.com; rads26@hotmail.com and rssharma@cemde.du.ac.in						
Web-Page	Under construction						
Educational Qualifications							
Degree	Institution				Year		
Ph.D.	University of Delhi				1999		
M.Sc. Botany	University of Delhi				1993		
B.Sc. (H) Botany	University of Delhi				1991		
Career Profile							
Professor (2015 – onwards)							
Visiting Assistant Professor, Massachusetts Institute of Technology, Cambridge, USA (2011-2012)							
Administrative Assignments							
<ul style="list-style-type: none"> • Served as Coordinator, M.Phil. Course in Restoration Ecology at the University of Delhi • Served as a member of Annual Flower Show Committee of the University of Delhi (1999-2010) • Member Garden Committee, University of Delhi (2016-onwards) 							
Areas of Interest / Specialization							
Soil Microbial Ecology; Bio-/Phyto-Remediation; Plant-Microbe Associations; Bioresources and their Utilization							
Subjects Taught							
Post-Graduate Teaching (M.Sc.)							
<ul style="list-style-type: none"> • Ecotoxicology and Environmental Health (Coordinator, 2007– till date) • Environmental Biotechnology (Coordinator, 2006-2007; 2010-2011) • Environmental Communication & Education (2015–) • Environmental History and Environmentalism (2013; 2016-) • Natural Resources: Their Conservation and Management (2007–2010) • Natural Resource Conflicts and Choices (2017- onwards) • Environmental Toxicology and Impact Assessment (2007–2010) • Biodiversity and Conservation (2006-2007) • Introduction to Environment (2006-2007; 2009-2011) • Ecology and Systematics (1999-2003) • Crop Genetics (1999-2003) 							
Post-Graduate Teaching (M.Phil.)							
<ul style="list-style-type: none"> • Restoration Ecology 							
Research Guidance							

1. Supervision of Doctoral Thesis awarded: **05**
2. Supervision of Doctoral Thesis, under progress : **06**
3. Supervision of awarded M.Phil dissertations : **01**

Publications Profile

Books / Monographs

<u>Year of Publication</u>	<u>Title</u>	<u>Publisher</u>	<u>Co-Author</u>
2018	Ribosome Inactivating Protein: A potential molecule for the development of multi-stress tolerant transgenic plants. Biotechnological Applications for Environmental Protection (in Press)	Springer	V Mishra, R Mishra, RS Sharma
2003	Valuing hydrological impacts of changing landuse – a case of Yamuna Floodplain Wetland Ecosystems, Delhi. In: Water Resources, Sustainable Livelihoods and Ecosystem Services.	Concept Publishing Company, New Delhi.	P. Kumar, A. Love, R.S. Sharma , C.R. Babu
2003	Ecological restoration of degraded ecosystems and wastelands. In: Innovative Environmental Biotechnologies: From Research to Application.	Department of Biotechnology, Ministry of Science & Technology, Government of India.	S. Subramanian, J. Rajiv, S. Kipgen, R.S. Sharma , A. Mohmmmed, A. Bhattacharyya, S. Sinharoy, B. Mittra, C.R. Babu
2002	Economic Valuation of Wetlands: Problems and Prospects. In: (Nair, K.R.G., Roonwal, G.S., and Gupt, Y.) Environmental and Sustainable Development. Indo-Canadian Perspectives.	Kaveri Books, New Delhi.	A. Love, S. Sharma, R.S. Sharma , C.R. Babu
1997	Protection of wild genetic resources of plants and microbes through wild life (Protection) Act 1972 - A view point, In: Handbook of Environment, Forest & Wildlife Protection Laws in India.	Natraj Publication, Dehra Dun.	A. Joshi, N. Sardesai, R.S. Sharma , A. Mohmmmed, C.R. Babu

In Indexed/ Peer Reviewed Journals

<u>Year of Publication</u>	<u>Title</u>	<u>Journal</u>	<u>Co-Author</u>
2018	A major lineage of non-tailed dsDNA viruses as unrecognized killers of marine bacteria.	Nature, 554, 118–122 DOI: 10.1038/nature25474	K Kauffman, FA Hussain, J Yang, P Arevalo, JM Brown, WK Chang, D VanInsberghe, J Elsherbini, MB Cutler, L Kelly, MF Polz
2018	<i>Viscum articulatum</i> Burm. f. aqueous extract exerts antiproliferative effect and induces cell cycle arrest and apoptosis in leukemia cells.	Journal of Ethnopharmacology 219: 91-102	R Mishra, S Sharma, S Singh, MM Sardesai, S Sharma, V Mishra
2017	Environmental predictors of indole acetic acid producing rhizobacteria at fly ash dumps: Nature-based solution for sustainable restoration.	Frontiers in Environmental Science 5:59. doi:	S Malhotra, V Mishra, S. Karmakar

2017	Phenol remediation by peroxidase from an invasive mesquite: Turning an environmental wound into wisdom.	10.3389/fenvs.2017.00059 Journal of Hazardous Materials 334, 201-211	S. Singh, R Mishra, V Mishra
2017	Articulatin-D induces apoptosis via activation of caspase-8 in acute T-cell leukemia cell line.	Molecular and Cellular Biochemistry 426: 87–99	R Mishra, MK Das, S Singh, V Mishra
2016	Detoxification of azo dyes in the context of environmental processes.	Chemosphere 155: 591 – 605.	D Rawat, V Mishra
2016	Isolation and identification of <i>Bacillus megaterium</i> YB3 from an effluent contaminated site efficiently degrades pyrene	Journal of Basic Microbiology 56: 369–378	SS Meena, RS Sharma , P Gupta, S Karmakar, KK Aggarwal
2015	Increased iron-stress resilience of maize through inoculation of siderophore-producing <i>Arthrobacter globiformis</i> from mine.	Journal of Basic Microbiology 56:719-735	M Sharma, V Mishra, N Rau, RS Sharma
2012	Induction of apoptosis by ribosome inactivating proteins: importance of N-glycosidase activity.	Applied Biochemistry and Biotechnology 166:1552-1561.	M.K. Das, R.S. Sharma , V. Mishra
2011	A cytotoxic type-2 ribosome inactivating protein (from leafless mistletoe) lacking sugar binding activity.	International Journal of Biological Macromolecules 49: 1096-1103	M.K. Das, R.S. Sharma , V. Mishra
2011	Functionally diverse rhizobacteria of <i>Saccharum munja</i> (a native wild grass) colonizing abandoned morrum mine in Aravalli hills (Delhi).	Plant and Soil 341:447–459.	M. Sharma, V. Mishra, N. Rau, R.S. Sharma
2011	Variations in outer-membrane characteristics of two stem-nodulating bacteria of <i>Sesbania rostrata</i> and its role in tolerance towards diverse stress	Current Microbiology 63:81–86	R.S. Sharma , V. Mishra, A. Mohammed, C.R. Babu
2011	A novel cationic peroxidase (VanPrx) from a hemiparasitic plant (<i>Viscum angulatum</i>) of Western Ghats (India): Purification, characterization and kinetic properties.	Journal of Molecular Catalysis B: Enzymatic. 71: 63–70.	M.K. Das, R.S. Sharma , V. Mishra
2009	Evaluation of functional diversity in rhizobacterial taxa of a wild grass (<i>Saccharum ravennae</i>) colonizing abandoned fly ash dumps in Delhi urban ecosystem.	Soil Biology & Biochemistry, 41: 813–821.	N. Rau, V. Mishra, M. Sharma, M.K. Das, K., Ahaluwalia, R.S. Sharma
2008	Antifungal activity of some Himalayan medicinal plants and cultivated ornamental species.	Fitoterapia 79: 589–591.	R.S. Sharma , V. Mishra, R. Singh, N. Seth and C.R. Babu
2008	Phage specificity and lipopolysachharides of stem- and root-nodulating bacteria (<i>Azorhizobium caulinodans</i> , <i>Sinorhizobium spp.</i> , and <i>Rhizobium spp.</i>) of <i>Sesbania spp.</i>	Archives of Microbiology 189: 411-418	R.S. Sharma , V. Mishra, A. Mohammed, C.R. Babu
2008	Purification and characterization of a unique peroxidase from a wild plant from Western Ghats region (India).	FEBS Journal 275 (S1): 397.	M.K. Das, R.S. Sharma , M. Serdesai, S.R. Yadav and V. Mishra
2005	Diversity in promiscuous group of rhizobia from three <i>Sesbania spp.</i> colonizing ecologically distinct	Research in Microbiology 156	R.S. Sharma , A. Mohammed, V.

	habitats of the semi-arid Delhi region.	(1): 57-67.	Mishra, C.R. Babu
2005	Crystal structure of Himalayan mistletoe ribosome inactivating protein reveals the presence of an inhibitor and a new functionally active sugar-binding site.	Journal of Biological Chemistry 280: 20712 – 20721.	V. Mishra, S. Bilgrami, R.S. Sharma , P. Kaur, S. Yadav, R. Krauspenhaar, Ch. Betzel, W. Voelter, C.R. Babu, T.P. Singh
2005	cDNA Cloning and characterization of a ribosome inactivating protein of a hemi-parasitic plant (<i>Viscum album</i> L.) from North-Western Himalaya (India).	Plant Science 168 (3): 615-625.	V. Mishra, R.S. Sharma , M. Paramasivam, S. Bilgrami, S. Yadav, A. Srinivasan, C. Betzel, C.R. Babu, T.P. Singh.
2005	Unique sugar affinity of four novel isoforms of a ribosome inactivating protein from <i>Viscum album</i> (L.) inhabiting NW Himalaya.	FEBS Journal 272 (s1): 75.	R.S. Sharma , V. Mishra, S. Yadav, C.R. Babu, T.P. Singh
2005	Natural colour yielding potential of Himalayan plant species and identification of probable class of compounds.	Asian Journal of Chemistry 17(1): 149-154.	R.S. Sharma , V. Mishra, R. Singh, N. Seth, C.R. Babu
2005	Structure–function relationship of a ribosome inactivating protein from a Himalayan hemi-parasitic plant.	FEBS Journal 272 (s1): 54.	V. Mishra, R.S. Sharma , A.S. Ethayathulla, S. Bilgrami, M. Paramasivam, S. Yadav, C.R. Babu, T.P. Singh
2004	Purification and characterization of four isoforms of Himalayan mistletoe ribosome inactivating protein from <i>Viscum album</i> having unique sugar affinity.	Archives of Biochemistry and Biophysics 423(2): 288-301.	V. Mishra, R.S. Sharma , S. Yadav, C.R. Babu, T.P. Singh
2004	Crystal structure of a novel ribosome inactivating protein from a semi-parasitic plant inhabiting north-western Himalaya.	Acta Crystallography D60:2295-2304.	V. Mishra, A.S. Ethayathullah, R.S. Sharma , S. Yadav, R. Krauspenhaar, C. Betzel, C.R. Babu, T.P. Singh
2002	Crystal structure of a ribosome inactivating viscumin from Indian <i>Viscum album</i> at 2.8 Å resolution.	Acta Crystallography A58 (Suppl), 488.	A. Bhushan, V. Mishra, A.K. Verma, S. Yadav, R.S. Sharma , C.R. Babu, T.P. Singh
2002	Diversity among rhizobiophages from rhizospheres of legumes inhabiting three ecogeographical regions of India.	Soil Biology and Biochemistry 34(7): 965-974.	R.S. Sharma , A. Mohammed, C.R. Babu
2001	Molecular diversity of the plasmid genotypes among <i>Rhizobium</i> gene pools of sesbanias from different habitats of a semi-arid region (Delhi).	FEMS Microbiology Letters 205(2): 171-178.	A. Mohammed, R.S. Sharma , S. Ali, C.R. Babu

<u>Articles</u>			
2016	Environmental Toxicants and Reproductive Health - an Environmental Perspective.	Indian Society for the Study of Reproduction and Fertility 18:78-81.	R.S. Sharma, Swagata Karmakar, Vandana Mishra
2014	Restoration of ecosystem health: A key to ensure long-term reproductive health among living organisms.	Indian Society for the Study of Reproduction and Fertility 14:36-38.	R.S. Sharma
2007	Potential of microbial diversity to enhance agricultural productivity.	Ecosystems: Vol. 1. IUCN Commission on Ecosystem Management	R.S. Sharma
2005	<i>Sesbanias</i>- a novel bioresource for restoration ecology and sustainable development.	Species 43:29.	R.S. Sharma, V. Mishra, A. Mohmmmed, C.R. Babu
2005	Unexplored ecological significance of <i>Saccharum munja</i>.	Species 43:39.	M. Sharma, N. Rau, V. Mishra, R.S. Sharma
2004	Mistletoe- a potentially new medicinal resource.	Species 41:10.	V. Mishra, R.S. Sharma, C.R. Babu
<u>Conference Presentations</u>			
<u>A. International Conferences</u>			
1. S Garg, RS Sharma , L Dumeet, V Mishra (2017). Phage Display based biosensors for detection of environmental pollutants. International Conference on Nanobiotechnology, 05-06 February 2018, Jamia Millia Islamia, New Delhi.			
2. R Mishra, A Yadav, RS Sharma , V Mishra (2017). Purification of a ribosome inactivating lectin from <i>Viscum articulatum</i> : a protein with multiple enzymatic activities. World biotechnology congress, 2017.			
3. R Mishra, RS Sharma, V Mishra (2016), Evaluation of anticancerous potential of aqueous extract of <i>Viscum articulatum</i> , leafless mistletoe, on human leukemia cells. 5th Biennial International conference on new developments in drug discovery from natural products and traditional medicine, NIPER, Mohali, Punjab			
4. S Karmakar, V Mishra, RS Sharma (2016). Environmental applications of ssDNA bacterial viruses. <i>VirusDis</i> . 27(4):428			
5. S Karmakar, V Mishra, RS Sharma (2016). Pattern of distribution of bacterial host and its phages in soil environment. <i>Expert Opin Environ Biol</i> , 5:3(Suppl). http://dx.doi.org/10.4172/2325-9655.C1.011			
6. RS Sharma , S Karmakar, R Bidhuri, S Malhotra, R Singh, V Mishra (2015). Prevalence of polyphosphate accumulating bacteria in degraded ecosystems. In: Proceedings of 56 th Annual Conference of Association of Microbiologists of India (AMI-2015) & International Symposium on "Emerging Discoveries in Microbiology" Dec 7-10, 2015, JNU, New Delhi, pp. EMP123			
7. V Mishra, S Malhotra, A Juneja, S Karmakar, RS Sharma (2015). Variation in nitrogen-fixing bacteria in different plant species at different stages of vegetation development. In: Proceedings of 56 th Annual Conference of Association of Microbiologists of India (AMI-2015) & International Symposium on "Emerging Discoveries in Microbiology" Dec 7-10, 2015, JNU, New Delhi, pp. AMP97			
8. S. Sharma, V. Mishra, A.S.Ethayathullah, S. Karmakar, R.S. Sharma (2015). Identification of multi-targeted Plant Compound for Breast Cancer Therapeutics. International Symposium on "Current Advances in Radiobiology, Stem Cells and Cancer Research" at Jawaharlal Nehru University, New Delhi, India February,			
9. V. Mishra, M.K. Das, R.S. Sharma (2015). Indian Mistletoe: Source of Novel Anti-cancer Ribosome Inactivating Protein. International Symposium on "Current Advances in Radiobiology, Stem Cells and Cancer Research" at Jawaharlal Nehru University, New Delhi, India February, 2015			
10. Mincer, T. J., Johnson, M. D., Flynn-Carroll, A., Sharma, R. S. , Wildschutte, H., Polz, M. (2014). Indole as a Mediator of Protozoan Grazing of Bacteria: A New Role for a Multifaceted Infochemical. Proceedings of 114th General Meeting of the American Society for Microbiology, Boston, Massachusetts, May 17-20, 2014. N-779			
11. R.S. Sharma , S. Raiping, M.K. Das, V. Mishra, N. Rau, M. Sharma (2006). Phage induced functional diversity			

in rhizosphere bacteria and its significance in restoration ecology. **International Symposium on Biology, Ecology and Management of World's Worst Plant Invasive Species**. 10-14 December 2006.

12. M.K. Das, **R.S. Sharma**, V. Mishra. Prospecting of stem-parasitic weeds for novel medicinally important compounds. In: **International Symposium on Biology, Ecology and Management of World's Worst Plant Invasive Species**. December 10-14 2006.
13. M. Sharma, **R.S. Sharma**. Dhubgrass – an agricultural weed, as a source of novel rhizobacteria. In: **International Symposium on Biology, Ecology and Management of World's Worst Plant Invasive Species**. December 10-14 2006.
14. **R.S. Sharma**, A. Mohammed, V. Mishra, C.R. Babu. Diversity in functionally important traits of promiscuous group of *Sesbania*-rhizobia and their colonization potential to ecologically diverse habitats of a semi-arid region of India. **XVII International Botanical Congress 2005**, July 17-23, 2005.
15. V. Mishra, **R.S. Sharma**, T.P. Singh, C.R. Babu. Novel ribosome inactivating proteins (RIPs) from Himalayan *Viscum album* (L.)- potential biomolecules for bioprospecting. **XVII International Botanical Congress 2005**, July 17-23, 2005.
16. M.K. Das, S. Raiping, V. Mishra, M. Sharma and **R.S. Sharma**. Significance of bacteriophage sensitivity in rhizosphere ecology of growth promoting bacteria of *Dichanthium annulatum* (Willem.). In: **Third International Conference on Plants and Environmental Pollution (ICPEP-3)**, 28 November – 2 December 2005.
17. S. Raiping, **R.S. Sharma**, M. Sharma, V. Mishra. Soil-borne bacteriophages of rhizobacteria of *Dichanthium annulatum* (Willem.) inhabiting mined out area and their significance in inoculation technologies. In: **Third International Conference on Plants and Environmental Pollution (ICPEP-3)**, 28 November – 2 December 2005.
18. N. Rau, **R.S. Sharma**, V. Mishra. Variations in functional properties among rhizosphere bacteria of *Saccharum munja* (L.) inhabiting heavy metal contaminated fly ash dumps. In: **Third International Conference on Plants and Environmental Pollution (ICPEP-3)**, 28 November – 2 December 2005.
19. V. Mishra, **R.S. Sharma**, T.P. Singh, C.R. Babu. Diversity In Ribosome inactivating proteins from a Himalayan parasitic plant: *Viscum album* L. In: **ICOB-4 & ISNP-24, IUPAC International Conference on Biodiversity and Natural Products: Chemistry and Medical Applications**, 26-31 January 2004.
20. R. Singh, **R.S. Sharma**, V. Mishra, N. Seth, C.R. Babu. Chemical prospecting for medicinal compounds from a hemi-parasitic plant (*Dendrophthoe trigona*) inhabiting western ghats of India. In: **ICOB-4 & ISNP-24, IUPAC International Conference on Biodiversity and Natural Products: Chemistry and Medical Applications**, 26-31 January 2004.
21. S. Kshirsagar, **R.S. Sharma**, M. Sen (2003). New reports to the Flora of Delhi. In: **Thirteenth Annual Conference of Indian Association for Angiosperm Taxonomy and International Symposium on Plant Taxonomy: Advances and Relevance**. November 14-15, 2003.
22. V. Mishra, **R.S. Sharma**, S. Bilgrami, S. Yadav and T.P. Singh. Diversity in ribosome inactivating proteins (Rips): some molecular evidences. In: **International Symposium on Ecology of Biological Invasions**, December 4-6, 2003.
23. **R.S. Sharma**, A. Mohammed. Diversity among rhizobiophages and *Rhizobium* gene pools from rhizosphere of Sesbanias inhabiting ecologically distinct habitats. In: **International Symposium on Ecology of Biological Invasions**, December 4-6, 2003.
24. V. Mishra, S. Bilgrami, M. Paramasivam, S. Yadav, **R.S. Sharma**, C.R., Babu, T.P. Singh (2003). Crystal structure of a ribosome inactivating protein (Viscumin) from the Indian *Viscum album* reveals the presence of natural superinhibitor. "**International Symposium on Modern Trends in Cellular and Molecular Biology**" on March 6-7, 2003
25. V. Mishra, S. Bilgrami, M. Paramasivam, A.K. Varma., S. Yadav, **R.S. Sharma**, C.R. Babu, T.P. Singh. Crystal structure of a ribosome inactivating protein (viscumin) from Indian *Viscum album* at 2.8 Å resolution in **The First Indian Symposium of the Protein Society – Protein Structure and Function**, by International Protein Society at Indian Institute of Technology Bombay, Mumbai, October 18 - 20, 2002.

26. V. Mishra, A.K. Varma, S. Yadav, **R.S. Sharma**, C.R. Babu, T.P. Singh. Crystal structure of a Ribosome inactivating viscumin from Indian *Viscum album* at 2.8 Å resolution in **AsCA 01 IVth Meeting of Asian Crystallographic Association** at Indian Institute of Science Bangalore, India, November 18-21, 2001.

B. National Conferences

27. D Rawat, S Sharma, **RS Sharma**, V Mishra (2015). Proteomic analysis of halophilic bacterium efficient in degrading Acid Orange 7 Dye. 7th Annual Meeting of Proteomics Society of India (PSI) "Biochromatography, Molecular Recognition and Proteomics" Vellore Institute of Technology (VIT), Vellore, Tamil Nadu, Dec 3–6, 2015
28. D Rawat, **RS Sharma**, V Mishra (2015). Toxicity assessment of microbe-mediated degradation of Acid Orange 7 dye. In: 1st International Conference on Trends in Cell and Molecular Biology (TCMB), Birla Institute of Technology and Science (BITS) Pilani, Goa, Dec 19–21, 2015
29. **R.S. Sharma** (2014). Environmental degradation and reproductive health. National Seminar on Reproductive Health Awareness, The IIS University, Jaipur during September 12-13, 2014.
30. S. Karmakar, V. Mishra, **R.S. Sharma** (2013). Role of environmental management of heavy metals to improve reproductive health of human. National Symposium on Changing Environment and Lifestyle: Impact on Reproductive Health (**NSCEL- 2013**), AIIMS, New Delhi. 19–20 November 2013
31. **R.S. Sharma** (2013). Restoration of ecosystem health: A key to ensure long-term reproductive health among living organisms National Symposium on Changing Environment and Lifestyle: Impact on Reproductive Health (**NSCEL-2013**), AIIMS, New Delhi. 19– 20 November 2013
32. S Malhotra, **R.S. Sharma** (2013). Change in land use pattern and environment: Principal causes of emergence and reemergence of infectious diseases. National Symposium on Changing Environment and Lifestyle: Impact on Reproductive Health (**NSCEL- 2013**), AIIMS, New Delhi. 19–20 November 2013
33. **R.S. Sharma** (2008). Prospecting of wild grasses and their rhizosphere microbial communities for remediation and biomass enhancement at the fly ash dumps. **Workshop on Taxonomy and Bioprospecting**, Ministry of Environment & Forests (Govt. of India) and University of Delhi, 28 Jan-06 Feb 2008.
34. **R.S. Sharma** (2006). Biodiversity and Environmental Pollution. 4-week Orientation Course on Environment for Teachers of Higher Education, 24.2.6- 24.03.06
35. **R.S. Sharma** (2005). Potential bioresources for ecological restoration of degraded lands and stressed habitats. Workshop on "Bioresources and Biotechnology in Sustainable Development" for College Teachers and University Lecturers, 23.01.06 – 6.02.06.
36. V. Mishra, A.S Ethayathulla, S. Bilgrami, **R.S. Sharma**, S. Yadav, P. Kaur, C.R. Babu T.P. Singh. Crystal structure determination and structure-function relationship of a type II ribosome inactivating protein from a Himalayan hemi-parasitic plant. **34th National Seminar on Crystallography, Indian Crstallographic Association and INSA National Committee for IUPAB & IUCr**, January 10-12 2005.
37. **R.S. Sharma**, A. Mohmmed, V. Mishra, C.R. Babu. Strainal differentiation in the promiscuous group of rhizobia from three *Sesbania spp.* colonizing ecologically distinct habitats of semi-arid Delhi region. In: **BioTech 2004: Challenges & Opportunities, 2nd National Conference Biotechnology Society of India, New Delhi.** October 13-15, 2004.
38. M. Sharma, V. Mishra, C.R. Babu, **R.S. Sharma**. Lithophytic grasses and associated microbes: ideal inputs for biological technologies for ecological restoration of degraded lands. In: **BioTech 2004: Challenges & Opportunities, 2nd National Conference Biotechnology Society of India, New Delhi.** October 13-15, 2004.
39. C.R. Babu, S.R. Kipgen, S. Subramaniam, **R.S. Sharma**, A. Bhattacharya, D.M. Kothamasi, R. Janardhanan, Kumar (2003). Restoration technologies in sustainable development. In Indo-Canadian **"Workshop on Biotechnology for Environmental protection and Sustainable Development"** on February 5-6, 2003.

40. S. Subhashree, **R.S. Sharma**, J. Rajiv, C.R. Babu (2001). Taxonomic riddles needing molecular approaches. National Seminar on **New Challenges in Taxonomy in 21st Century for Utilization and Conservation of Plant Diversity**. February 20, 2001.
41. **R.S. Sharma** (2001). Basic Science Education: How Relevant in Today's Society. Indian Science Congress Association 2001 at IARI, New Delhi.
42. V. Mishra, S. Yadav, **R.S. Sharma**, C.R. Babu, T.P. Singh. Crystal structure of a ribosome inactivating viscum from Indian *Viscum album* in. XXXI **National Seminar on Crystallography**, BARC, Mumbai, June 19-22, 2001.
43. **R.S. Sharma**, A. Mohmmmed. Rhizobiophages and *Rhizobium* inoculants. In National Symposium on Microbial Technologies for Environmental Management and Resource Recovery, 1995.
44. A. Mohmmmed, **R.S. Sharma**. Plasmid profile as selectable marker in the development of efficient *Rhizobium* inoculants. In National Symposium on Microbial Technologies for Environmental Management and Resource Recovery, 1995.
45. C.R. Babu, A. Mohmmmed, **R.S. Sharma**, et al. Consortium of rhizospheric bacterial inoculants as a biofertilizer mix for the management of natural ecosystems. In: Abstracts TCDC International Workshop on Application of Biotechnology in Biofertilizers and Biopesticides, IIT, New Delhi

Research Projects (Major Grants/Research Collaboration)

Co-Principal Investigator, DU-DST sponsored R & D project “Diversity in bacteria at nutrient stressed site: Role of bacteriophages” 2014–2018

Principal Investigator, UGC-DU sponsored R & D project “Role of Phage-Bacterium Association in Ecology of Abandoned Mine” 2015-2016

Principal Investigator, UGC-DU sponsored R & D project “Prevalence of lysogenydifferent habitats” 2014-2015

Principal Investigator, MoEFCC sponsored project “Advanced Training & Research in Plant Biosystematics. 2015-2018

Principal Investigator, DBT sponsored R & D project “Rhizosphere Microbial Diversity of Lithophytic Grasses and their Potential in Ecological Restoration of Stressed and Degraded Habitats”, 2005-2009

Co-Principal Investigator, NBDB, DBT sponsored R & D project “Evaluation of Viscaceae Members of Western Ghats Region for Prospecting of Ribosome Inactivating Proteins”, 2006-2010.

Awards and Distinctions

- * **DBT CREST Award in Environmental Biotechnology (2011-12)**
- * **Expert Member, IUCN Commission on Ecosystem Management, South Asian Region (2005–till date)**
- * **Member, Core Group on the UNCCD, Govt. of India (2005–08)**

Association With Professional Bodies

- * **Society of Biological Chemists (SBC) (India), Member**
- * **Bacteriophage Ecology Group (BEG) (Ohio), Member**
- * **Association of Microbiologists of India (AMI), Member**