CURRICULUM VITAE

Dr VIDHI CHAUDHARY
M. Sc., M. Phil., Ph. D. (Botany)
Assistant Professor
Department of Botany
Daulat Ram College
University of Delhi
Delhi – 110 007, India
Mobile: +91 9871967002
Email: msvidushi17@gmail.com

EDUCATION

2009-2013	*Doctor of Philosophy in **Botany***
	University of Delhi, Delhi, India
	Thesis Title: "**Biochemical and Ultrastructural Analyses of Antagonistic Interactions of Cyanobacteria with Plant Pathogenic Fungi and their Biocontrol Potential in Tomato**"
	Supervisor: **Dr A. K. Bhatnagar**
	Co Supervisor: **Dr Radha Prasanna** (IARI, New Delhi)
2004-2006	*Masters of Philosophy in **Botany***
	University of Delhi, Delhi, India
	Marks Obtained: **81.8%**
	Thesis Title :**"Effect of Arbuscular Mycorrhiza on Growth and Productivity of *Artemisia annua* L."**
	Supervisor: **Dr A. K. Bhatnagar**
	Co Supervisor: **Dr Rupam Kapoor**
2002-2004	*Masters of Science in **Botany***
	M.M.H.P.G. College, Ghaziabad, C. C. S. University, Meerut, India
	Marks Obtained : **71.7%**
1999-2002	*Bachelor of Science in **Biology***
	Ram Chameli Chaddha Vishwas Girls Degree College, Ghaziabad, C. C. S. University, Meerut, India
	Marks Obtained : **65.5%**

TEACHING EXPERIENCE

- Presently working as an **Assistant Professor** in Department of Botany, **Daulat Ram College**, University of Delhi, India from 25th July, 2013 to till date.
- Worked as a **Guest Faculty** in Department of Botany, **Maitreyi College**, University of Delhi, Delhi, India from 3rd January, 2013 to 13th April, 2013.
- Worked as a **Guest Faculty** in Department of Botany, **Hindu College**, University of Delhi, Delhi, India from 16th January, 2013 to 12th April, 2013.
- Worked as a **Botany Lecturer** in Department of Microbiology and Biotechnology, **Adhunik Institute of Education and Research**, Ghaziabad, Uttar Pradesh, India from 22nd August, 2006 to 30th May, 2007.

RESEARCH EXPERIENCE

November 2015 - October 2016

Worked as a **Principal Investigator** in University of Delhi funded **Innovation Project DR - 311** entitled "**Greener and Sustainable Approach to Control Water Pollution**" at Department of Botany, Daulat Ram College, University of Delhi, Delhi, India.

Salient Findings of Research Work

- Assessment of physico-chemical properties of Yamuna water from three most polluted sites, i.e., Wazirabad, ITO and Okhla to check the pollution level **(Kathal et al. 2016)**.
- Phytoremediation of heavy metals from the polluted sites of river Yamuna with the help of aquatic plants (*Eichhornia*, *Salvinia*) by Rhizofiltration technique**.**

May 2007 - March 2012

Worked as a **Senior Research Fellow** in **ICAR** funded Research Project titled "Application of Microorganisms in Agriculture and Allied Sciences (AMAAS)" under the theme Microbial Genomics - "**Mining for genes involved in the production of fungicidal compounds in *Anabaena* strains**" under the supervision of Dr Radha Prasanna, Principal Scientist (Principal Investigator of the Project as well as Co- supervisor of Ph. D. program) at Division of Microbiology, Indian Agricultural Research Institute (IARI), PUSA, New Delhi, India.

Salient Findings of Research Work

- Significant and pioneering contributions towards exploring cyanobacteria for their multifaceted abilities as plant growth promoting and biocontrol agents in vegetable crop, besides mining them as valuable sources of metabolites and novel genes **(Prasanna et al. 2010 a)**.
- ***First time reports*** for the activity of hydrolytic enzymes- chitosanase and endoglucanase in a set of *Anabaena* strains, which was correlated with cidal activity against phytopathogenic fungi, as evidenced by disc diffusion assays and microscopy **(Prasanna et al. 2008, 2010 b)**.
- Development of ELISA based micro titre plate based assay for determining minimum inhibitory concentration (MIC) of biocidal metabolites **(Chaudhary et al. 2010)**.
- Interesting and novel information on phylogeny and evolution in the Indian *Anabaena* germplasm, evaluated on the basis of morphological, biochemical and molecular attributes, by studying sequences derived using different sets of primers and DNA fingerprints **(Gupta et al. 2012 a, 2013)**.
- Optimization of environmental/ nutritional conditions for the maximizing production of hydrolytic enzymes, responsible for their fungicidal activity **(Chaudhary et al. 2012 a, 2013)**.
- Identification, purification and characterization of two genes (*end* 1 and 2) encoding hydrolytic enzymes from *A. laxa* which showed β-1, 4 (*end* 1 and 2) and β-1, 3 (*end* 2) endoglucanase activities, by PCR based analyses, followed by genomic library construction **(Gupta et al. 2012 b)**.
- Agriculturally useful synergistic interactions among bacterial/ cyanobacterial strains and their novel formulations have been demonstrated *for the first time* at IARI, in integrated nutrient and pest management of rice-wheat cropping system and vegetables **(Prasanna et al., 2012)**.
- Establishment and agronomic proficiency of cyanobacterial consortia as organic options in wheat-rice cropping sequence with the help of DNA based markers **(Prasanna et al. 2013 a)**.
- The promise of biocontrol activity of cyanobacteria based biofilm preparations against phytopathogenic fungi in agriculture as potential inoculants, which can effectively establish in soil **(Prasanna et al. 2013 b)**.
- Development of novel *Anabaena* amended composts/ compost teas using cyanobacteria/ cyanobacteria-bacteria combinations, demonstrating significant suppressiveness of damping off and wilt diseases, caused by phytopathogenic fungi in tomato **(Dukare et al. 2011; Chaudhary et al. 2012 b)**.
- Tripartite interactions of tomato-*Fusarium-Anabaena* against *Fusarium* wilt resulted in reduced disease severity coupled with improved plant growth/ yields, by inducing defense and pathogenesis-related (PR-) enzymes in tomato root tissues, elicited by cyanobacteria **(Prasanna et al. 2013 c)**. The study not only generated several first reports and interesting information on a less explored domain of cyanobacteria, but also led to the development of novel disease suppressive compost formulations for organic agriculture.

September 2004 – January 2006

Worked as a **M. Phil. student** under the supervision of Prof. A. K. Bhatnagar and the co-supervision of Dr Rupam Kapoor at Environmental Biology Laboratory, Department of Botany, University of Delhi, India.

Salient Findings of Research Work (M. Phil. Program)

- The effect of mycorrhization and phosphate fertilization in improving the concentration of essential oil and artemisinin of *Artemisia annua* L. (an antimalarial plant) was studied **(Kapoor et al. 2007; Chaudhary et al. 2008)**. This technology will be helpful in bringing down the cost of cultivation of *Artemisia annua* and improving the efficiency of the fertilizers in conjunction with AM fungi.

AWARDS/ACHIEVEMENTS

- ***Young Scientist International Women Empowerment Award,*** organized by Sardar Vallabh Bhai Patel Science & Technology Organization, Regd. under Govt. of India, Jamia Nagar, New Delhi on 8th March, 2017.
- ***I prize for Best Poster Presentation*** entitled "**Pollution Status of Yamuna River - A National Concern**" in a National Seminar on *Water and Air Quality in Urban Ecosystem*, hosted by Department of Botany, Shivaji College, University of Delhi on March 22, 2016.
- ***I prize for Best Poster Presentation*** entitled "**Influence of Cyanobacteria Induced Defense and Pathogenesis Related Mechanism in Tomato Plants against *Fusarium* Wilt Disease**" in a National Seminar on *Biotechnological Intervention for the Benefits of Mankind*, hosted by Anand Engineering College, Agra, from February 2-4, 2012.
- ***III prize for Best Poster Presentation*** entitled "**Biological Control of Soil-Borne Fungal Disease by Novel Cyanobacteria Fortified Composts**" in *Rhizosphere3* International Conference, hosted by University of Western Australia, Perth, Western Australia, from September 25th – 30th 2011.

RESEARCH PUBLICATIONS IN REFEREED JOURNALS

- R. Kathal, P. Malhotra and **V. Chaudhary** (2016). Phytoremediation of cadmium from polluted soil. *Journal of Bioremediation and Biodegradation* DOI: 10.4172/2155-6199.1000376.
- R. Kathal, **V. Chaudhary**, L. Kumar and A. Puri (2016). Pollution status of Yamuna river - A national concern. *International Research Journal of Environmental Science* 5 (12): 1-6.
- R. Kathal, P. Malhotra and **V. Chaudhary** (2015). Phytoremediation - A greener and sustainable technology for controlling toxicity of copper in soil. *Journal of Basic and Applied Engineering Research* 3 (1): 56-59.
- **V. Chaudhary**, R. Prasanna and A. K. Bhatnagar (2013). Influence of phosphorus and pH on the fungicidal potential of *Anabaena* strains. *Journal of Basic Microbiology* 53: 201-213.
- R. Prasanna, **V. Chaudhary**, V. Gupta, S. Babu, A. Kumar, R. Singh, Y. S. Shivay and L. Nain (2013). Cyanobacteria mediated plant growth promotion and bioprotection against *Fusarium* wilt in tomato. *European Journal of Plant Pathology* 136 (2): 337-353.
- R. Prasanna, A. Kumar, S. Babu, G. Chawla, **V. Chaudhary**, S. Singh, V. Gupta, L. Nain and A. K. Saxena (2013). Deciphering the biochemical spectrum of novel cyanobacterium based biofilms for use as inoculants. *Biological Agriculture and Horticulture* 29 (3): 145 - 158.
- R. Prasanna, S. Babu, A. Rana, S. R. Kabi, **V. Chaudhary**, V. Gupta, A. Kumar, Y. S. Shivay, L. Nain and R. K. Pal (2013). Evaluating the establishment and agronomic proficiency of cyanobacterial consortia as organic options in wheat-rice cropping sequence. *Experimental Agriculture* 49 (3): 416-434.
- J. Singh, A. R. Choudhury, M. Srivastava, **V. Chaudhary**, R. Prasanna, D. Lee, H. L. Seung, B. Malhotra (2013). Highly efficient bioenzyme functionalized biocompatible nanostructured Nickel Ferrite-chitosan nanocompatible platform for biomedical application. *The Journal of Physical Chemistry* 117 (16): 8491-8502.
- **V. Chaudhary**, R. Prasanna, L. Nain, S.C. Dubey, V. Gupta, R. Singh, S. Jaggi and A. K. Bhatnagar (2012). Bioefficacy of novel cyanobacteria-amended formulations in suppressing damping off disease in tomato seedlings. *World Journal of Microbiology and Biotechnology* 28 (12): 3301-3310.
- **V. Chaudhary**, R. Prasanna and A. K. Bhatnagar (2012). Modulation of fungicidal potential of *Anabaena* strains by light and temperature. *Folia Microbiologica* 57 (3): 199-208.

- V. Gupta, C. Natarajan, **V. Chaudhary**, A. Kumar, E. Sharma, J. Sharma, A. K. Bhatnagar and R. Prasanna (2012). Analyses of diversity among fungicidal *Anabaena* strains. *Journal of Applied Phycology* 24: 1395-1405.
- V. Gupta, R. Prasanna, **V. Chaudhary** and L. Nain (2012). Biochemical, structural and functional characterization of novel antifungal endoglucanases from *Anabaena laxa*. *Biocatalysis and Agricultural Biotechnology* 1(4): 338-347.
- A. S. Dukare, R. Prasanna, S.C. Dubey, L. Nain, **V. Chaudhary**, R. Singh and A. K. Saxena (2011). Evaluating novel microbe amended composts as biocontrol agents in tomato. *Crop Protection* **30**: 436-442.
- **V. Chaudhary**, R. Prasanna, V. Gupta, S. B. Singh, C. Natarajan and L. Nain (2010). Development of microtitre plate based assay for evaluation of fungicidal potential and microscopic analyses of cyanobacterial metabolites. *Archives of Phytopathology and Plant Protection* **43** (14): 1435-1444.
- R. Prasanna, V. Gupta, C. Natarajan and **V. Chaudhary** (2010). Bioprospecting for genes involved in the production of chitosanases and microcystin like compounds in *Anabaena* strains. *World Journal of Microbiology and Biotechnology* **26**: 717-724.
- R. Prasanna, Lata, R. Tripathi, V. Gupta, **V. Chaudhary**, S. Middha, M. Joshi, R. Ancha and B. D. Kaushik (2008). Evaluation of fungicidal activity of extracellular filtrates of cyanobacteria – Possible role of hydrolytic enzymes. *Journal of Basic Microbiology* **48**: 186-194. **[Cited as one of the most requested articles of the journal for the year 2008]**
- **V. Chaudhary**, R. Kapoor and A. K. Bhatnagar (2008). Effectiveness of two arbuscular mycorrhizal fungi on concentrations of essential oil and artemisinin in three accessions of *Artemisia annua* L. *Applied Soil Ecology* **40**: 174-181.
- R. Kapoor, **V. Chaudhary** and A. K. Bhatnagar (2007). Effect of arbuscular mycorrhiza and phosphorus application on artemisinin concentration in *Artemisia annua* L. *Mycorrhiza* **17**: 581-587.

.

REVIEWS/ CHAPTERS IN BOOKS/ MANUALS

- **V. Chaudhary** and R. Kathal (2018). "A sacred river or an open drain" In: Liana Botanical Society Magazine at Department of Botany, Daulat Ram College, University of Delhi.
- **V Chaudhary** (2017). "Sugar" In: Manual of In-house Skill Development Certificate Course on "Food Adulteration and Security" at Department of Botany, Daulat Ram College, University of Delhi.
- **V Chaudhary** (2017). "Tea and Its Adulterants" In: Manual of In-house Skill Development Certificate Course on "Food Adulteration and Security" at Department of Botany, Daulat Ram College, University of Delhi.
- N. P. Malkani and **V. Chaudhary** (2015). Micropropagation of anticancer plants. In: Workshop Manual on Conservation of medicinal plants by micropropagation, Department of Botany, Daulat Ram College, University of Delhi, New Delhi, pp. 24-26.
- V. Gupta, S. K. Ratha, A. Sood, **V. Chaudhary** and R. Prasanna (2013). New insights on biodiversity and applications of cyanobacteria (blue-green algae)-Prospects and Challenges. *Algal Research* 2: 79-97.
- R. Prasanna, A. Rana, **V. Chaudhary**, M. Joshi and L. Nain (2012). Cyanobacteria-PGPR interactions for effective nutrient and pest management strategies in agriculture. Chapter 10, In: *Microorganisms in Sustainable Agriculture and Biotechnology*, (Eds. T. Satyanarayana, B.N. Johri and A. Prakash). Springer Science + Business Media B.V. Springer, Dordrecht, London, pp. 173-195.
- R. Prasanna, A. Sood, P. Jaiswal, S. Nayak, V. Gupta, **V. Chaudhary**, M. Joshi and C. Natarajan (2010). Rediscovering cyanobacteria as valuable sources of bioactive compounds. *Applied Biochemistry and Microbiology* **46** (2): 119-134.
- R. Prasanna, M. Joshi, V. Gupta, C. Natarajan and **V. Chaudhary** (2009). Diversity analyses of cyanobacteria using polyphasic approaches–phenotyping, biochemical aspects and molecular tools. In: *Bioprospecting microbes for agriculture*, (Eds. R. Prasanna, Lata, A.K. Saxena, and D.W. Dhar), Division of Microbiology, IARI, New Delhi, pp. 238-250.

POPULAR ARTICLE

R. Prasanna, **V. Chaudhary**, A. S. Dukare, Lata and A. K. Saxena (2011). Novel microbe amended disease suppressive composts. *ICAR News* **17**(1): 10-11.

TRAININGS/ WORKSHOPS/EVENTS ATTENDED

- Faculty Development Workshop on **Ecology: Modern Perspectives,** organized by IQAC and Department of Botany, Hansraj College, University of Delhi on December 12-13, 2016.
- **Training the Trainers: IPR Workshop** organized by IPR Chair, CIC-CSEC and Ramjas College, University of Delhi on August 10-11, 2016.
- Training cum Interaction Programme on **Climate Change, Global Warming and Green House Effect in Delhi** organized by Mahatma Gandhi Institute for Combating Climate Change, Alipur, Delhi on June 13, 2016.
- **"Science SETU-I"** A bridge between the National Institute of Immunology and undergraduate colleges organized by National Institute of Immunology (NII), New Delhi, India on March 26, 2015.
- Workshop on **Ecofriendly Practices: New Perspective** organized by Ecoclub Dhara, Daulat Ram College, University of Delhi, New Delhi, India on February 5, 2015.
- An educational visit to **Air Quality Assessment Laboratories** at Indian Institute of Technology (IIT), New Delhi, India on September 17, 2014.
- Workshop on **Techniques in Plant Cell Tissue and Organ Culture** organized by DBT Star College Project, Department of Botany, Daulat Ram College, University of Delhi, New Delhi, India from March 26-28, 2014.
- Workshop on **Applied Genomics and Proteomics** organized by Deshbandhu College, University of Delhi, New Delhi, India from March 12-14, 2014.
- International Workshop on **rRNA Sequencing, Phylogeny & Next Generation Genome Sequencing** organized by Birla Institute of Technology, Mesra, Ranchi, India from December 14-17, 2010.
- National Training Programme on **DNA Sequencing and Microbial Identification** organized by National Bureau of Agriculturally Important Microorganisms, Kusmaur, Kaithauli, Mau Nath Bhanjan, U.P., India from September 1-7, 2008.
- National Training Programme on **Microbial Identification Modules of Some Agriculturally Important Microorganisms** organized by National Bureau of Agriculturally Important Microorganisms, Kusmaur, Kaithauli, Mau Nath Bhanjan, U.P., India from September 26-October 16, 2007.

ORAL/POSTER/ ABSTRACTS IN PROCEEDINGS OF SYMPOSIA/ CONFERENCES

- **V. Chaudhary** and R. Kathal (2017). Psychoactive Plants and Human Health. In: *National Conference on Pharmacognosy: Scope of Phytochemically Unexplored Medicinal Plants*, January 12, Department of Botany, Zakir Husain Delhi College, University of Delhi (**Poster Presentation**).
- R. Kathal, **V. Chaudhary**, L. Kumar, R. Baishya and P. L. Uniyal (2017). Phytoremediation of chromium from yamuna water by *Eichhornia*. In: *International Conference and Outreach Programme on Environment and Ecology: Sustainability and Challenges (ENCON-2017),* January 4-6, Sri Venkateswara College, University of Delhi (**Poster Presentation**).
- R. Kathal, **V. Chaudhary** and L. Kumar (2016). Phytoremediation of heavy metals from polluted water - A Review. In: *International Conference on Green Chemistry in Environmental Sustainability and Chemical Education (ICGC-2016),* November 17-18, Department of Chemistry, Daulat Ram College, University of Delhi (**Poster Presentation**).
- **V. Chaudhary** and R. Kathal (2016). Phytoremediation - A Greener Sustainable Approach to Control Soil Pollution. In: *National Conference on Environmental Challenges, Human Health and Society*, September 8-10, University Maharaja College Jaipur. (***Oral Presentation***).

- R. Kathal, **V. Chaudhary**, L. Kumar, A. Puri, R. Baishya, P. L. Uniyal (2016). Phytoremediation Efficiency of *Eichhornia* plant in controlling toxicity of Manganese from Yamuna Water. In: *National Conference on Environmental Challenges, Human Health and Society*, September 8-10, University Maharaja College Jaipur. (***Poster Presentation***).
- R. Kathal, **V. Chaudhary** and L. Kumar (2016). Controlling heavy metal water pollution by phytoremediation: A sustainable approach. In: *National Conference on Combating industrial pollution for Sustainable environment - A fusion of Industrial and Scientific Efforts,* September 22-23, Department of Chemistry, Gargi College, University of Delhi. (***Abstract Accepted***).
- R. Kathal, **V. Chaudhary**, L. Kumar and A. Puri (2016). Pollution Status of Yamuna River - A National Concern. In: *National Seminar on Water and Air Quality in Urban Ecosystem*, March 22, Department of Botany, Shivaji College, University of Delhi (***Poster Presentation - Best Poster Award***).
- R. Kathal, **V. Chaudhary**, L. Kumar and A. Puri (2016). Water Quality Assessment of Yamuna River in Delhi Region. In: *National Conference on Nanoscience - Opportunities and challenges*, February 19 - 20, Department of Chemistry, Maitreyi College, University of Delhi ***(Poster Presentation).***
- **V. Chaudhary**, R. Pasricha and R. Kathal (2015). Climate change and plant biodiversity loss. In: *National conference on climate change: impacts, adaptation, mitigation scenario and future challenges in Indian perspective*, March 2-3, Department of Botany, Deen Dayal Upadhyaya College, University of Delhi, India ***(Poster Presentation).***
- **V. Chaudhary**, R. Pasricha and R. Kathal (2015). Exploring inoculation protocol for the improved effectiveness of beneficial microorganisms in biocontrol for sustainable agriculture. In: *Fifth International Conference on Plants & Environmental Pollution (ICPEP-5)*, February 24-27, International Society of Environmental Botanists, National Botanical Research Institute, Lucknow, India ***(Oral Presentation).***
- **V. Chaudhary**, V. Gupta, R. Prasanna and A. K. Bhatnagar (2012). Control of *Fusarium* wilt (*Fusarium oxysporum lycopersici*) in tomato by drench application of cyanobacterium amended compost tea. In: *International Algal Summit: Algae For Sustainable Development*, February 21–22, The Energy and Resources Institute (TERI), New Delhi, India ***(Poster Presentation)***
- **V. Chaudhary**, V. Gupta, R. Prasanna and A. K. Bhatnagar (2012). Influence of cyanobacteria induced defense and pathogenesis related mechanisms in tomato plants against *Fusarium* wilt disease. In: *National Seminar on Biotechnological Intervention for the Benefits of Mankind*, February 2–4, Anand Engineering College, Agra, India ***(Poster Presentation)***
- R. Prasanna, **V. Chaudhary**, V. Gupta, A. Kumar, Lata and B. D. Kaushik (2012). Cyanobacteria as novel biocontrol options in agriculture. In: *National Seminar on Biotechnological Intervention for the Benefits of Mankind*, February 2–4, Anand Engineering College, Agra, India.
- R. Prasanna, S. Babu, **V. Chaudhary**, V. Gupta, L. Nain and Y. S. Shivay (2012). Monitoring and evaluating the field level colonization and establishment of cyanobacterial strains in soil using agronomic and molecular tools. In: *National Seminar on Biotechnological Intervention for the Benefits of Mankind*, February 2–4, Anand Engineering College, Agra, India.
- **V. Chaudhary**, V. Gupta, R. Prasanna, and A. K. Bhatnagar (2011). Induction of defense related proteins by cyanobacteria amended formulations in *Fusarium oxysporum sp. lycopersici* challenged tomato seedlings. In: *52nd Annual Conference of AMI*, November 3-6, Panjab University, Chandigarh, India.
- V. Gupta, R. Prasanna, **V. Chaudhary** and J. Sharma (2011). Purification, characterization and *In silico* analyses of biosynthesis of an antifungal compound from *Anabaena laxa*. In: *52nd Annual Conference of AMI*, November 3-6, Panjab University, Chandigarh, India.
- **V. Chaudhary**, R. Prasanna, V. Gupta and A. K. Bhatnagar (2011). Biological control of soil borne fungal disease by novel cyanobacteria fortified composts. In: *Rhizosphere3 International Conference*, September 25-30, Perth, Australia ***(Poster Presentation)***
- V. Gupta, S. S. Cameotra, P. Dureja, **V. Chaudhary**, J. Sharma and R. Prasanna (2011). Identification and characterization of a novel majusculamide C-like fungicidal compound from

Anabaena laxa. In: *4th Congress of European Microbiologists - Federation of European Microbiological Societies (FEMS)*, June 26-30, Geneva, Switzerland.

- **V. Chaudhary**, V. Gupta, R. Prasanna and A. K. Bhatnagar (2010). Influence of light and temperature on fungicidal and hydrolytic enzyme activity in *Anabaena* strains. In: *51st Annual Conference of AMI – International Symposium on Recent Advances in Cross Disciplinary Microbiology : Avenues & Challenges*, December 14-17, Birla Institute of Technology, Mesra, Ranchi, India ***(Poster Presentation).***
- V. Gupta, **V. Chaudhary**, R. Prasanna and J. Sharma (2010). Identification and Characterization of fungicidal compound (s) in *Anabaena laxa.* In: *51st Annual Conference of AMI – International Symposium on Recent Advances in Cross Disciplinary Microbiology : Avenues & Challenges*, December 14–17, Birla Institute of Technology, Mesra, Ranchi, India.
- V. Gupta, C. Natarajan, **V. Chaudhary**, A. Kumar, R. Prasanna and J. Sharma (2009). Genetic analyses and environmental regulation of fungicidal activity in *Anabaena fertilissima*. In: *50th Annual Conference of AMI – Third Golden Era of Microbiology*, December 15–18, National Chemical Laboratory, Pune, India.
- C. Natarajan, V. Gupta, **V. Chaudhary**, E. Sharma and R. Prasanna (2009). Molecular characterization of fungicidal activity in *Anabaena laxa* and *Calothrix elenkinii*. In: *7th Asia Pacific Conference on Algal Biotechnology – Algal Biotechnology in the Asia Pacific Region: New Challenges and Opportunities for the 21st Century*, December 1–4, University of Delhi, Delhi, India.
- V. Gupta, C. Natarajan, **V. Chaudhary**, R. Prasanna and J. Sharma (2009). Biochemical and Molecular analyses of modulation of fungicidal activity of *Anabaena* strains by light/dark environment. In: *National Symposium on Phycology in India: Basic to Applied*, February 12-13, Punjabi University, Patiala, India.
- **V. Chaudhary**, V. Gupta, C. Natarajan and R. Prasanna (2008). Morphological, ultrastructural and biochemical facets of antagonistic mechanism of cyanobacterial metabolites towards *Pythium* species. In: *International Symposium on Microbial Biotechnology: Diversity, Genomics and Metagenomics*, November 18-20, University of Delhi, Delhi, India ***(Poster Presentation).***
- **V. Chaudhary**, B. Kumar, R. Kapoor and A. K. Bhatnagar (2008). Mycorrhizal Technology to augment production of artemisinin in *Artemisia annua* L. In: *International Symposium on Microbial Biotechnology: Diversity, Genomics and Metagenomics*, November 18-20, University of Delhi, Delhi, India.
- C. Natarajan, V. Gupta, **V. Chaudhary** and R. Prasanna (2008). Biochemical and genetic analysis of fungicidal activity in *Calothrix elenkinii*. In: *International Symposium on Microbial Biotechnology: Diversity, Genomics and Metagenomics*, November 18-20, University of Delhi, Delhi, India.
- R. Prasanna, M. Joshi, V. Gupta, **V. Chaudhary** and Lata (2008). Dissecting the traits of Plant Growth Promoting Cyanobacteria using biochemical and molecular tools. In: *12th International Symposium on Microbial Ecology – ISME 12 Microbial Diversity – Sustaining the Blue Planet*, August 17-22, Cairns, Australia.
- **V. Chaudhary**, V. Gupta, S. Nayak and R. Prasanna (2007). Ecological significance of cyanobacteria in wetland Rice ecosystem as biocontrol agents. In: *National Conference on Wetlands, Science and Society – An Assessment of their Integration*, December 11-13, DUBS, University of Delhi, Delhi, India ***(Poster Presentation).***
- R. Prasanna, V. Gupta, **V. Chaudhary**, Lata and B. D. Kaushik (2007). Fungicidal activity in *Anabaena* strains – Potential role of hydrolytic enzymes. In: *48th Annual Conference of Association of Microbiologists of India on Microbes: Biofactories of the future*, December 18– 21, Department of Biotechnology, Indian Institute of Technology, Madras, Chennai, India.
- R. Prasanna, V. Gupta, **V. Chaudhary**, Lata and B. D. Kaushik (2007). Characterization of the algicidal and fungicidal activity of *Anabaena* strains. In: *International Symposium on "Applied Phycology and Environmental Biotechnology*", October 29–31, Birla Institute of Technology and Science, Pilani, Rajasthan, India **(*Poster Presentation*).**

- D. Sharma, P. Gupta, **V. Chaudhary** and R. Kapoor, (2006). Biopriming of micropropagated plants with arbuscular mycorrhizal (AM) fungi as a useful tool for EX-SITU conservation of plant species. In: *Conference on Biodiversity Related International Conventions* : *Role of Indian Scientific Community"*, March 8-10, Delhi University Botanical Society, University of Delhi, New Delhi, India.

CONFERENCES/ SEMINARS ATTENDED (IN ABROAD)

Awarded travel grant by DST to attend an International Conference on **Rhizosphere3** organized by University of Western Australia, Perth, Western Australia on September 25-30, 2011.

CONFERENCES/ SEMINARS/EVENTS ATTENDED (IN INDIA)

- **"Harit Diwali Swasth Diwali"** campaign organized by Ministry of Environment, Forest and Climate Change, Government of India on 17th August, 2017 at Indira Paryavaran Bhawan, Jor Bagh, New Delhi
- **Nature Interpretation Walk** at Asola Bhatti Wildlife Sanctuary during wildlife week 2017, New Delhi on 6th October, 2017 organized by National Museum of Natural History and Department of Physics, Daulat Ram College, University of Delhi.
- National Conference on **Pharmacognosy: Scope of Phytochemically Unexplored Medicinal Plants**, organized by Department of Botany, Zakir Husain Delhi College, University of Delhi on January 12, 2017.
- International Conference and Outreach Programme on **Environment and Ecology: Sustainability and Challenges (ENCON-2017)**, organized by Sri Venkateswara College, University of Delhi on January 4-6, 2017.
- International Conference on **Green Chemistry in Environmental Sustainability and Chemical Education (ICGC-2016)**, organized by Department of Chemistry, Daulat Ram College, University of Delhi on November 17-18, 2016.
- National Conference on **Environmental Challenges, Human Health and Society** organized by University Maharaja College Jaipur and International Society for Life Sciences on September 8-10, 2016.
- National Seminar on **Water and Air Quality in Urban Ecosystem** organized by Department of Botany, Shivaji College, University of Delhi on March 22, 2016.
- National Conference on **Nanoscience-Opportunities and challenges** organized by Department of Chemistry, Maitreyi college, University of Delhi on February 19 -20, 2016.
- International Conference on **Public health: Issues, Challenges, Opportunities, Prevention, Awareness (Public Health: 2016)** organized by Daulat Ram College, University of Delhi and Krishi Sanskriti, New Dealhi, India on January 15-16, 2016.
- National conference on **Climate Change: Impacts, Adaptation, Mitigation Scenario and Future Challenges in Indian Perspective** organized by Department of Botany, Deen Dayal Upadhyaya College, University of Delhi on March 2-3, 2015.
- Fifth International Conference on **Plants & Environmental Pollution** (ICPEP-5) organized by International Society of Environmental Botanists, National Botanical Research Institute, Lucknow on February 24-27, 2015.
- International Algal Summit on **Algae For Sustainable Development,** jointly organized by Indian Phycological Society, Delhi and The Energy and Resources Institute (TERI), New Delhi, on February 21-22, 2012.
- National Seminar on **Biotechnological Intervention for the Benefits of Mankind** organized by Department of Biotechnology, Anand Engineering College, Keetham, Agra on February 2-4, 2012.
- International Symposium on **Recent Advances in Cross Disciplinary Microbiology: Avenues & Challenges** and **workshop on rRNA sequencing phylogeny and next generation genome sequencing** of 51st Annual Conference of Association of Microbiology of India organized by Birla Institute of Technology, Mesra, Ranchi on December 14-17, 2010.

- International Symposium on **Microbial Biotechnology: Diversity, Genomics and Metagenomics** of 49th Annual Conference of association of Microbiologists of India organized by Department of Zoology, University of Delhi, Delhi on November 18-20, 2008.
- National conference on **Wetlands, Science and Society – An Assessment of their Integration** organized by Delhi University Botanical Society, International Society of Plant Morphologists, Department of botany jointly with Department of Zoology and Environmental Biology, University of Delhi on December 11-13, 2007.
- International Symposium on **Applied Phycology and Environmental Biotechnology** organized by Biological Sciences Group and Centre for Desert Development Technologies on October 29-31, 2007.
- National Symposium on **Applications And Recent Advances In Life sciences** organized by D. N. (P.G.) College, Department of Zoology, Ch. Charan Singh University, Meerut on November 18, 2006.
- National Conference on **Biodiversity Related International Conventions : Role of Indian Scientific Community** organized by the Delhi University Botanical Society, Department of Botany, University of Delhi, on March 8-10, 2006.
- National Seminar on **Relevance of Botany in the conservation and improvement of plants** organized by the Delhi University Botanical Society, Department of Botany, University of Delhi, on February 8-9, 2006.
- National Seminar on **Genetically Modified Organisms - Biosafety Aspects** organized by the Delhi University Botanical Society, Department of Botany, University of Delhi, on March 10-11, 2005.

TRAININGS/ WORKSHOPS/EVENTS ORGANIZED

- Worked as a **Co-convener** of Faculty Development Program (FDP) on CBCS based curriculum paper "**Industrial and Environmental Microbiology**" for B.Sc. Botany (hons) at Department of Botany, Daulat Ram College, University of Delhi from 19th-20rd March, 2018.
- Worked as a **resource person** for a session **"Sugar, Tea and their adulterants"** and as a **member** of **organizing committee** in In-house Skill Development Certificate Course on "**Food Adulteration and Security**" at Department of Botany, Daulat Ram College, University of Delhi from July 3-14, 2017.
- Worked as a **Resource Person** in In-house Skill Development Certificate Course on "**Digital Literacy**" at Daulat Ram College, University of Delhi from July 4-16, 2016.
- Worked as a Resource Person in Workshop on "**Horticulture**" at Daulat Ram College, University of Delhi from May 25 to June 16, 2016.
- Worked as a **member of organizing team** in Workshop on "**DNA Fingerprinting**" under **Science SETU-II Program -** A bridge between National Institute of Immunology and undergraduate colleges, at Hindu College, University of Delhi, New Delhi, India on January 22, 2016.
- Worked as a **Resource Person** in Workshop on "**Micropropagation and Conservation of Medicinal Plants**" at Department of Botany, Daulat Ram College, University of Delhi from September 28 to October 01, 2015.

TECHNIQUES EXPERTISE

- **Microbiological Techniques:** Isolation and Pure Culture Maintenance of microbes, Antibiotic Assay
- **Mycorrhizal Techniques:** Isolation and enumeration of AM fungal spores in soil, Quantification of AM colonization in roots
- **Biochemical Techniques:** Soil Analysis, Enzymes assay etc.
- **Molecular Biological Techniques:**
  Genomics: Isolation of genomic and Plasmid DNA, Polymerase Chain Reaction (PCR), Agarose Gel Electrophoresis
  Proteomics: Native PAGE, SDS-PAGE
- **Instrumentation:** Spectrophotometry, Atomic Absorption Spectrophotometry, Flame Photometry, Thin Layer Chromatography, Gas Chromatography, Soxhlation
- **Microscopy:** Light and Scanning Electron Microscopy

- **Statistical analysis:** SPSS software: One Way and Two way Anova, Duncan's Multiple Range Test (DMRT)
- **Working knowledge of Computer**

SUBMITTED SEQUENCES WITH ACCESSION NUMBERS (TOTAL 97)

- Prasanna R., Gupta V. and **Chaudhary V**. 2008**.** ***chi IS*** **gene**, partial cds *Anabaena sp.* RPAN8 submitted with Gen Bank **Accession numbers EU: 629161.**
- Prasanna R., Gupta V. and **Chaudhary V**. 2008. ***chi IS gene***, partial cds *Anabaena sp.* RPAN9 submitted with Gen Bank **Accession numbers EU: 629162.**
- Prasanna R., Gupta V., Natarajan C. and **Chaudhary V**. 2009. *Anabaena laxa* RPAN8 and *Anabaena iyengarii* RPAN9 **microcystin synthase gene** (***mcy*** **A**) partial cds, submitted with Gen Bank **Accession numbers FJ607652- FJ607655.**
- Prasanna R., Gupta V., Natarajan C. and **Chaudhary V.** 2009. *Anabaena laxa* RPAN8 and *Anabaena iyengarii* RPAN9 **chitosanase gene (*choA*)** partial cds, submitted with Gen Bank **Accession numbers FJ624111**& **FJ624112.**
- Prasanna R., Gupta V., Natarajan C. and **Chaudhary V.** 2009. Phylogenetic analyses of the intra and inter-species diversity in the genus *Anabaena*, based on 16S rDNA and microcystin sequences having Genbank **Accession numbers: GQ466493-GQ466520 (1457 bp), GQ466521-GQ466548 (660 bp), GQ466549-GQ466576 (1124 bp) and for *mcyA* GQ466577-GQ466582.** (89 Sequences) **[*First report for tremendous diversity in cyanobacterial genus Anabaena*]**

MEMBERSHIP OF SOCIETIES

Association of Microbiologists of India (Life Member)

EXTRA CURRICULAR ACHIEVEMENTS

- **Member of Event Management Group** of National Seminar on **Genetically Modified Organisms-Biosafety Aspects** organized by Delhi University Botanical Society on March 10-11, 2005.
- **Member of Event Management Group** of National Conference on **Biodiversity Related International Conventions: Role of Indian Scientific Community** organized by Delhi University Botanical Society on March 8-10, 2006.

CONTRIBUTION TO COLLEGE

2017-18: Member of Garden Committee, Member of Women Development Cell
2015-17: Member of Steering Committee for NAAC
2015-16: Member of Canteen Committee, Member of Quiz Society
2016-17: Member of Canteen Committee, Member of Garden Committee
2016-17: Member of Student Advisory Board
2013-18: External and Internal Examinership of University Practical Examination
2013-18: Evaluation of University Theory Exam Answer Sheets

PERSONAL DETAILS

Date of Birth	:	1st July, 1982
Gender	:	Female
Address	:	R-42/1, IInd Floor, Rishabh Nagari, Model Town - III, Near Arya Samaj Mandir, New Delhi -110009, India
Phone (Home)	:	95-0120-4120450
Nationality	:	Indian

REFERENCES

Dr A. K. Bhatnagar (M. Phil. and Ph. D. Supervisor)
Ex Professor and Head
Department of Botany
University of Delhi
New Delhi – 110007, India
Mob. +91 9810376885
E mail: akbhatnagar49@gmail.com

Dr Radha Prasanna (Ph. D. Co- Supervisor)
Principal Scientist
CCUBGA, Division of Microbiology
IARI, PUSA
New Delhi – 110012, India
Tel: +91 11 25847649; Extn.: 4978 (Office)
+91 9911188793 (Mobile)
E mail: radhapr@gmail.com

Dr Rupam Kapoor (M. Phil. Co-Supervisor)
Professor
Department of Botany
University of Delhi
New Delhi – 110007, India
Mob. +91 9818497035
E mail: kapoor_rupam@yahoo.com

Hereby I declare that all the statements made in this application are true, complete and correct to the best of my knowledge.

(VIDHI CHAUDHARY)