

Name: Dr. Deepali

Department: Botany

Current Designation: Assistant Professor

Email id: deepali@mirandahouse.ac.in

Academic Qualifications (reverse chronological order):

1. Ph.D. Botany, Centre for Advance Study in Botany, Banaras Hindu University, Varanasi (2009)

2. M.Sc. Botany, Department of Botany, Magadh University, Patna (1999)

3. B.Sc. (Honours) Botany, JD Women's College, Magadh University, Patna (1996)

Research Degree(s) (reverse chronological order):

Ph.D. Botany, Centre for Advance Study in Botany, Banaras Hindu University. Varanasi (2009)

Research Associate, Centre for Cellular and Molecular Biology (CCMB), Hyderabad, (2009-2010).

Field of Specialization under the Subject/Discipline:

Research: Microbiology, Phycology, Structural elucidation of Biomolecules and characterization of proteins, Bioremediation

Courses Taught: Biomolecules and Cell biology, cell and molecular biology, Molecular biology, plant physiology, Biofertilizer.

Total Teaching Experience: 12 years

Teaching at Miranda House since: 20 July 2015

List of Publications (reverse chronological order):

(Articles in referred/peer-reviewed/UGC Care journals/ Books/Book Chapters)

Article Published:

1. Deepali, Ravi Kumar Asthana, Gopal Nath. Antarctic cyanobacterium *Nostoc CCC537*, a new source of γ-linolenic acid and its antibacterial potential. Cemical Biology Letters. **2021**, *8*(2), 50–58.



- **2.** Reeta Kumari, **Deepali**, Sonal Bhatnagar. Biodiversity Loss: Threats and Conservation Strategies. International Journal of Pharmaceutical Sciences Review and Research. **2021**, 61(8) 242-254.
- **3.** Tripathi, M. K., Kumar M., **Deepali**, Asthana, R. K., & Nigam S. Proteomic analysis of sensitive and resistant isolates of *Escherichia coli* in understanding target(s) of a cyanobacterial biomolecule hapalindole-T. Journal of Aquaculture Research & Development. **2017**.
- **4. Deepali**, Sureshwar P Singh, RK Asthana. The rate of biosynthesis of isolated active principle 4- [(5-carboxy-2-hydroxy)-benzyl]-1, 10-dihydroxy-3, 4, 7, 11, 11-pentamethyloctahydrocyclopenta<a>naphthalene from an antarctic cyanobacterium *Nostoc* ccc 537 Under different growth regimes. W J of Pharm Research. **2014**, 3: 7-14.
- 5. Chauhan S, Dabas P, Kumar N, Malik I, Kumari S, Vats A, Tripathi S, Prasad NVSRK, Giri KV, **Deepali*.** Screening of cyanobacteria strains from Delhi and NCR for antibacterial potential. Internation Journal of Pharmaceutical Science and research **2013**, 5: 1000-1006.
- **6.** Dabas P, Tripathi S, Chauhan S, Malik I, Kumar N, Kumari S, Kumari R, Bhatnagar S, **Deepali***.Cyanobacteria, an unexplored source for biomolecules: A review. Adv Sci Eng and Med . **2014**, 6:1-10.
- 7. Kumari R, Nautiyal A, Dhaka N, **Deepali** and Bhatnagar S.. Potential of Organic Farming in Production of Environment Friendly Sugarcane. *Current Nut & Food* Sci. **2014**, 10: 173-180.
- **8.** Aggarwal A, Kumari R, Mehla N, **Deepali**, Singh RP, Bhatnagar S, Sharma K, Vashishtha A, Rathi B. **2013**. Depletion of the Ozone Layer and Its Consequences: A Review. American J of Plant Sciences. 4:1990-1997.
- **9. Deepali,** Asthana RK, Tripathi MK, Srivastava A, Singh AP, Singh SP, Nath G, Srivastava R, Srivastava BS. Isolation and identification of a new antibacterial entity from an Antarctic strain *Nostoc* CCC 537. Journal of Appl Phycology. **2008**. DOI 10.1007/s10811-008-9328-2.RESEARCH,
- **10.** Asthana RK, Srivastava A, Singh AP, **Deepali**, Singh SP, Nath G, Srivastava R and Srivastava BS. Identification of an antimicrobial entity from the cyanobacterium *Fischerella* sp. isolated from bark of *Azadirachta indica* (Neem) tree. J of Applied Phycology. **2006**. DOI: 10.1007/s10811-005-9011-9

Chapters in book:

- 1. **Deepali** and Elangbam, G. Patent and Its Significance. In: Intellectual Property Rights: Challenges & Prospects. **2021**, pp 84-96.
- 2. **Deepali**. Trademarks And Its Importance. In: Intellectual Property Rights: Challenges & Prospects. **2021**, pp 118-125.
- 3. **Deepali**; Cyanobacteria; in "Biofertlizer and Biocontrol agent for organic farming" ed. Reeta Khosla, Kojo publication, India, **2017**, pp.28-39.



Educational Resource Material Developed (reverse chronological order):

DBT Sub-Committee in evaluating, Lab Manual, SOPs, and e-Resources development.

Research Guidance (reverse chronological order):

Ph. D Guidance as a co-guide to Ms Kannikka Behl "Integrated applications of algal biomass for Industrial effluents treatment and Biomolecules production".

Research Projects (reverse chronological order):

- **1.** Mahatma Gandhi National Council of Rural Education (MGNCRE) Department of Higher Education, Ministry of Human Resource Development, Government of India: "Ecological, Agricultural and Livelihood Sustainability: An Integrated Rural Development Study of Loktak Lake Manipur." (Rs. 2,00,000). (Ongoing).
- **2.** DSKC summer project 2020: Title of the project: "Adulteration in Food and its Impact on Health: An Indian Scenario' A Survey based Study, Mentors: Dr. Deepali 30 June-9 August 2020.
- **3.** DBT Star Projects 2020 under the DBT Star College Scheme "Extraction Of Heavy Metals From Green Leafy Vegetables And Its Impact On Human Health.
- 4. Innovation Project (SVC-209), University of Delhi, "potential of organic farming in combating salt stress and its socio-economic aspects" (Rs. 8, 00,000), 2014.
- 5. Innovation Project (SVC-102), University of Delhi, "Screening of Cyanobacteria for antibacterial property and to explore its biosynthesis regulated by heterochromatin. (Rs. 10,00,000), 2012.

Membership Of Professional Bodies (reverse chronological order):

American society of Microbiology

Administrative Responsibilities (reverse chronological order):

- 1. Staff advisor, MH Vatavaran, since 2017.
- 2. Member of Unnat Bharat Abhiyan since 2019.
- 3. Member of extended admission committee for B.Sc.(H) Botany, 2016-2017.
- 4. Member of extended admission committee for B.Sc.(H) Botany, 2017-2018.
- 5. Member of extended admission committee for B.Sc. Program, Life Science, 2019-2020.
- 6. Member of extended admission committee for B.Sc. Program, Life Science, 2020-2021.
- 7. PRO member during admission, 2021-2022.



- 8. Member of Proctorial Committee, Miranda House, since 2021.
- 9. Member of Garden Committee, Miranda House since 2015
- 10. Co-Ordinator (Botany) for Life Science B.Sc. Program, 2018-2021.
- 11. Staff advisor, Botanical Society, 2016-2018.
- 12. Co-Ordinator for Baseline test from Botany, 2016-2018.
- 13. NAAC co-ordinator of Botany department 2021-2022. r
- 14. Co-Ordinator of 'TRICOD' the life science society 2018-2021.

Invited talks/Session chair/Resource person (reverse chronological order):

Resource Person

- 1. Bridge Course on Basic Laboratory Techniques organized by D.S.Kothari Centre for Research and Innovation in Science Education and Botany, Miranda House, University of Delhi from 05-09 August 2019.
- 2. "Workshop on Biofertilizers" organized by DBT Star College Scheme and Department of Botany, Miranda House, University of Delhi on 13 March 2019.
- 3. Workshop on Biofertilizer for Zoology (H), II year students, under DBT star college scheme (Department of Biotechnology, Ministry of Science and Technology, Govt of India) and Department of Botany, Mirada House on 08 November 2017.
- 4. Workshop on Biofertilizer for Life Science, III year students, under DBT star college scheme (Department of Biotechnology, Ministry of Science and Technology) and Department of Botany, Mirada House on 04 September 2017.
- 5. "Frontiers of research" organized by Vigzest, The Life Sciences Festival Tricord, The Life Sciences Society, Miranda House, University of Delhi, 2017.
- 6. Bridge Course on 'Basic Laboratory Techniques' for students of B.Sc. Botany (Honours) I year on 5-6 September, 2017, under the aegis of DS Kothari Centre for Research and Innovation in Science Education, Miranda House.
- 7. Bridge Course on 'Basic Laboratory Techniques' for students of B.Sc. Life Sciences I year on 7-8 September, 2017 under the aegis of DS Kothari Centre for Research and Innovation in Science Education, Miranda House.
- 8. INSPIRE Internship Programme, 2017, Innovation in Science Pursuit for Inspired Research, An Initiative of DST, Government of India, faculty at Department of Botany conducted two workshops entitled 'DNA and Enzymes: Tiny but Mighty Players' and 'The Cell: Life's Playground' between 18-22 December, 2017 organized by DS Kothari Centre for Research and Innovation in Science.



Conferences/ Workshops/ FDP Organised:

Faculty Development Program:

1. Organized One Week Interdisciplinary Online Faculty Development Programme on "ENVIRONMENT SUSTAINABILTY AND CLIMATE CHANGE" organized by Department of Botany and IQAC, Miranda House, University Of Delhi In Collaborations of Mahatma Hansraj Faculty Development Centre (A Centre Of Ministry Of Education, Govt. of India under Pmmmnmtt Scheme) From April 4, 2022 To April 8, 2022. (As Convenor)

Workshops:

- 1. Member of the Organizing committee in "A Workshop on Herbarium Technique" organized by Department of Botany, Miranda House, University of Delhi on 20 January 2020.
- 2. Member of the Organizing committee in Workshop for teachers of Botany on "Evolving Face of Microscopy: Magnifying lens to Nano scope" organized by Department of Botany, Miranda House, University of Delhi on 11-12 December 2019.
- 3. Coordinator for "The Bonsai workshop" Organized by Department of Botany, Miranda House and Indian Bonsai Association, New Delhi, hold on 22nd March 2018 under DBT star college scheme (Department of Biotechnology, Ministry of Science and Technology, Govt of India
- 4. Member of organizing committee in workshop on Biofertilizer for Zoology (H), II year students, under DBT star college scheme (Department of Biotechnology, Ministry of Science and Technology, Govt of India) and Department of Botany, Mirada House on 08 November 2017.
- 5. Member of organizing committee in workshop on Biofertilizer for Life Science, III year students, under DBT star college scheme (Department of Biotechnology, Ministry of Science and Technology) and Department of Botany, Mirada House on 04 September 2017.
- 6. Organizing member for the "Workshop on Biofertilizers" organized by DBT Star College Scheme and Department of Botany, Miranda House, University of Delhi on 04 September 2017.

Webinar/ Conferences

- 1. Member of the Organizing committee in a webinar on "Tinkering with Plant Genome" organized by Department of Botany, Miranda House, University of Delhi on 06 July 2020.
- 2. Member of Organizing committee in 1 st International Conference on Integrated Chemistry, Biology and Translational Medicine, Hansraj College, 25 to 26 June 2019.
- 3. Member of Organizing committee in National Symposium on "Recent Trends in



Innovative Research, March, 2013, Sri venkateswara college, University of Delhi.

- 4. Member of Organizing committee in National conference on "Ecology and Environment management: Indian Scenario February 2011, Department of Botany ,Sri venkateswara college, University of Delhi.
- 5. Organize the inaugural lecture of Botanical Society on 'RNA and the Origin of Living Systems' on 13 Sep 2017.
- 6. Member of Organizing committee in 1 st International conference on emerging trends of nanotechnology in drug discovery, Sri venkateswara college, University of Delhi, May 2014.

Seminars/Workshops/Conferences attended (reverse chronological order):

Participation and Poster/paper presentation

- 1. Participated in the Online Interdisciplinary International Seminar on 'Science and Society' from 22 February 2022 to 25 February 2022, organized by Miranda House, University of Delhi.
- 2. Paper presentation in Temporal Assessment of Changing Dynamics of Loktak Lake Wetlands in Manipur Using Geospatial Techniques: Mapping Environmental Nostalgia and Memory, ICDP, Shaheed Bhagat Singh College, University of Delhi, January 2022.
- 3. International conference on "Drug development, its Challenges and the role of Nutrition in immunboosting against Covid-19" organized by Department of Zoology, Kalindi College, University of Delhi on 20 May 2020.
- 4. Webinar on "Biodiversity and Man" organized by the Department of Botany, Dyal Singh College, University of Delhi, in collaboration with Society for Ecological Research and Natural Resources Management (SERNRM) on June 5, 2020.
- 5. Webinar on "Global Research Perspective to Pandemic COVID-19" organized by Alumni Association of JNU, Jawaherlal Nehru University, New Delhi on13 June 2020.
- 6. Interdisciplinary National Conference on "Intellectual Property Rights: Challenges and Prospects" organized by Department of Botany, Maitreyi College, University of Delhi on October 22-23, 2019.
- 7. "National Conference on Challenges and Strategies to improve Crop Productivity in Changing Environment: An Integral Approach" Department of Botany, Zakir Hussain Delhi College, University of Delhi, 2018.
- 8. "Algae Mediated Synthesis of Hybrid Photocatalysts (Ba/TiO2 Nanocomposite) for the Degradation of Textile Dye under Visible Light' in "Indo Hungarian symposium on recent advance in chemistry and biology" pp.30, Miranda house, University of Delhi, 2017.
- 9. International Conference and Out research Programe on "Environmental and Ecology:



Sustainability and Challenges" Sri Venkateswara college, University of Delhi 4-6 January, 2017.

- 10. Commision for Scientific and Technical Terminology, Hansraj College, University of Delhi, 23 -24 July 2015.
- 11. Symposium On "Proteomics" Sri Venkateswara college, University of Delhi, 16 March 2015.
- 12. 1st International conference on emerging trends of nanotechnology in drug discovery, 26-27 May 2014, Sri venkateswara college, University of Delhi
- 13. National Symposium on "Recent Trends in Innovative Research, 28 Feb to 3 March, 2013, Sri venkateswara college, University of Delhi.
- 14. Virtual Workshop On Scientific Writing And Publishing, American Society For Microbiology & Sri Venkateswara college, University of Delhi, 6 Feb 2013.
- 15. ASM The Academic Congress Enabling The Young: Redefining Education University Of Delhi, North Campus, Delhi, 6-7 Sept 2012.
- 16. National conference on "Ecology and Environment management: Indian Scenario February 2011, Department of Botany, Sri venkateswara college, University of Delhi.
- 17. "International conference and outreach program on "Environment and Ecology: Sustainability and challenges" Sri Venkateswara College, University of Delhi, New Delhi, 2011.
- 18. XXXIII All India Cell Biology Conference & International Workshop on Cell Cycle Regulation. December 2009, University of Hyderbad-500046.
- 19. "National symposium on Phycology in India: Basic to Applied" February 2009, Department of Botany, Punjabi University, Patiala-147002.
- 20. "International Symposium on applied phycology and environmental biotechnology", October 2007, BITS- Pilani-333031, Rajasthan.
- 21. "International conference on Applied Phycology", February 2006, Department of Botany, University of Delhi, New Delhi-110007.
- 22. National symposium on Biology and Biodiversity of fresh water Algae, September 2004, Center for Advance studies in Botany, University of Madras, Guindy Campus, Chennai-600025
- 23. National symposium on "Recent trend in algal Biology and Biotechnology", February 2004, Department of Botany, Punjabi University, Patiala-147002.

Workshops:

1. Participated in National Workshop in Plant Science, organized by Department of Botany, Sri Vekateswara College, University of Delhi on 4-5 December, 2019.



- 2. Training the trainers: IPR Workshop; Miranda House, University of Delhi; 15th January 2016.
- 3. Indo-Portuguese Workshop on Emerging Trend of Nanotechnology in Chemistry and Biology. Hansraj College, University of Delhi, 12-13 February, 2016.
- 4. Work shop on Biofertilizer, Zakir Husain Delhi College, University of Delhi, 14-16 July 2016.
- 5. Workshop- cum- camp on Foldscope; jointly organized by DBT Govt of India and Sri Venkateswara College, University of Delhi; 16th December 2015.

Capacity Building/Skill Updation (reverse chronological order):

Attended and gave an e-poster presentation at the National Symposium cum Faculty

S.No.	Name of the Course/Programme attended	Duration		Sponsoring Institution
		From	To	
1	Participated in training program on "National Intellectual Property Awareness Mission"	08/02/2022		Intellectual Property Office India
2	Participated in one day faculty development program "Digital pedology and climate change education across disciplines"		28.08.2021.	Sri Venkateswara College, university of Delhi and International Union of Biological Science
3	One week online Faculty Development Programme on "Moving Towards New Normal through Effective Online Teaching"	01/12/2020	07/12/2020.	Mahatma Hansraj Faculty Development Centre, A Centre of MoE, Govt. of India Under Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT)
4	One Week Online Faculty Development Programme" (MHRD- PMMMNMTT and Ramanujan College) Transforming Lifestyle Through Yoga Darshan & Its Functional Modes (Inter Disciplinary & Bilingual)	20/11/2020	27/11/2020	Ministry of Human Resources Development Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching



5	Two week online Refresher Course on Science of "Yoga and Meditation (IDC) Entitled: Path to Self: Yoga and Meditation".	17/06/2020	30/06/2020	Professional Development in Higher Education (CPDHE),UGC- HRDC, University of Delhi
6	Two week online Faculty Development Programme on ta Analysis in Social Science" organized by Ramanujan College, University of Delhi.		30/06/2020	Ministry of Human Resources Development Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching.
7	2-Week Faculty Development Programme on "MANAGING ONLINE CLASSES AND CO- CREATING MOOCS 3.0" organized by Ramanujan College, University of Delhi	25/7/2020	10//8/2020	Ministry of Human Resources Development Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching
8	7 th Orientation Courses,	29/08/2016	23/09/2016	Human Resource Development Centre, Jawaharlal Nehru University Jawaharlal Nehru University, New Delhi
9	Faculty Development Programme on "Agriculture, Health and Society"	15/03/2019	16/03/ 2019	Hansraj Faculty Development Centre (MHRFDC) and Department of Botany, Hansraj College, University of Delhi
10	e-poster presentation at the National Symposium cum Faculty Development Programme on "Genome Editing: Tools and Applications"	15/01/2018	22/01/ 2018	D.S. Kothari Centre for Research and Innovation in Science Education, Miranda House, University of Delhi.
11	23rd Refresher Course in "Life Sciences & Biotechnology".	08/10/2018	02/11/ 2018	UGC-Human Resource Development Centre,



			Jawaharlal Nehru University.
12	Faculty Development Program on Research Based Pedagogy Tools		Department of Zoology,under the aegis of Science Foundation ,Deen Dayal Upadhyaya College,University of Delhi