




## Faculty Details Proforma For College Web-site



<b>Title</b>	<b>Dr.</b>	<b>First Name</b>	<b>MEENAM</b>	<b>Last Name</b>	<b>BHATIA</b>	<b>Photograph</b>
<b>Designation</b>		<b>ASSOCIATE PROFESSOR</b>				
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### **Educational Qualification :**

Degree	Institution	Year
Ph. D.	Department of Botany, Delhi University, Delhi	2021
M.Sc	Department of Botany, University of Rajasthan, Jaipur.	2003
B.Sc	Maharani College, University of Rajasthan, Jaipur.	2001
NET & CSIR-UGC JRF	CSIR, Delhi	2003
SLET	Rajasthan Public Service Commission, Rajasthan.	2005

### **Career Profile**

With teaching experience of more than 17 years, I have published many research articles in national and international peer-reviewed journals. I received a Gold medal from the Indian Fern Society in recognition of my outstanding research work in the field of Pteridology. I have presented many research papers and posters in national and international symposiums and conferences. Besides dedicated teaching and learning of the subject, I have also guided students in innovation projects, many SDPs, and internships. With an aim to develop and strengthen the skill, abilities, and scientific aptitude of students, I have organized many “Capacity Building Workshops” for students on “Mushroom Cultivation; Intellectual Property Rights and Biological Resources in 2022-23 and Learning Reproductive Biology with Fluorescence Microscopy” in 2021-22. More than 100 students participated from various streams. Many lectures on various occasions were also organized on “Pollinators and Pollinator Dependent Plants and Conservation Values “on World Environment Conservation Day; “Montreal Protocols and SDGs” On World Ozone Day; “Algae in the Changing World”, “The Indian Biological Data Centre: The step before the leap “by eminent scientists. Now ICT has become an impeccable tool in the teaching and learning process. So, to meet the need of the hour many ITC In house skill Development programs were organized for students of Botany Honours (2021-22) and Life Sciences (2022-23) and for non-teaching staff too to learn ITC skills and improve their efficiency. I have also organized a lecture series in November 2021 on “Redefining Gardening from Hobby to Enterprise’ to aim at developing self-employment and entrepreneurship among students and gave an idea to the young minds on how a hobby can be pursued as a career. I have also taken students to different Institutes and laboratory field trips so that students can have exposure to current research in plant sciences in different institutes,

Laboratory Techniques and Instruments, etc. In this series, we have been to Regional Centre for Biotechnology (RCB), Indian Agricultural Research Institute (IARI), and Biological Data Center.

### Administrative Assignments

- TIC Botany Department 2021-22.: Admissions and all administrative-related work are required for the Department's smooth functioning.
- TIC Life Science Department 2022-23: Admissions and all administrative-related work are required for the Department's smooth functioning.
- Convenor, Prize Committee 2021-2022; 2022-2023: Annual day arrangements and Prize distributions.

### Areas of Interest / Specialization

Biodiversity and its conservation, Reproductive Biology of Ferns, Archegoniate, Plant Anatomy, and Plant Physiology.

### Subjects Taught

B.Sc. H. VI Sem Plant Metabolism  
B.Sc. Life Science IV Sem Plant Physiology and Metabolism  
B.Sc. H. III Sem Plant Anatomy  
B.Sc. H. V Sem Plant Physiology  
B.Sc. Life Science III Sem Plant Anatomy and Embryology

### Research Guidance

- Supervised a group of ten undergraduate students for innovation project DR-203: 2013.
- Supervised a group of ten undergraduate students for innovation project Dr-303: 2015.

### Publications Profile

- Ethnobotanical uses of plants of Mandakini valley in Rudraprayag, Uttarakhand Pradeep Kumar Bhandari, Meenam Bhatia, and Uniyal PL. Int. J. of Life Sciences, 2022; 10(3):273-281 ISSN:2320-7817.
- Beta vulgaris mediated bio-inspired copper Nanoparticle and its application as an Antibacterial agent. Darshan Singh, Deepti Rawat, and Meenam Bhatia. Rasayan J.Chem Vol. 15, No. 4 ,2287-2291. October – December 2022 ISSN: 0974-1496.
- In Vitro spore germination, Gametophyte ontogeny and Sporophyte regeneration in *Platycerium bifurcatum* (Cav.)C.Chr. 2018. Indian Fern Journal.35: 5.ISSN 0970-2741.
- Meenam Bhatia, Priti, P.L.Uniyal and P.V. Madhusoodanan. 2017. Studies on the Gametophyte Development and Reproductive Behavior of *Achrostichum aureum* L.” The International Journal of Plant Reproductive Biology 9(2): 89-92.
- Book “Introduction to Basic Laboratory Techniques” by Meenam Bhatia and Ritu Garg. 2009.Shree Kala Prakashan, Delhi. ISBN 81-86038-17-5.
- Book Chapter: In Vitro Gametophyte Development, Reproductive Biology, and Nitric Oxide Signaling in Ferns In **Ferns: Biotechnology, Propagation, Medicinal Uses, and Environmental Regulation: Springer Nature Singapore Pte Ltd.** ISBN 978-981-16-6169-3
- Meenam Bhatia, Pratibha Kumari and Aradhna Yadav. Exploring the morphogenetic diversity in fern gametophytes and their potential in Plant Science research. In: Lianas ISBN 978-93-92603-05-1 Botanical Magazine, Department of Botany, Daulat Ram College, University of Delhi, Delhi. pp. 32-38.

- Aradhana Yadav, Pratibha Kumari and Meenam Bhatia. In: Lianas ISBN 978-93-92603-05-1 Botanical Magazine, Department of Botany, Daulat Ram College, University of Delhi, Delhi. pp. 59-63.
- Pratibha Kumari, Aradhana Yadav and Meenam Bhatia. In: Lianas ISBN 978-93-92603-05-1 Botanical Magazine, Department of Botany, Daulat Ram College, University of Delhi, Delhi. pp. 64-69.
- e-content on “Plant anatomy” for Restructured B.Sc. (Programme) under e-content generation project National Mission on Education through ICT of Institute for Life Long Learning, DU.

### Conference Organization / Presentation (in the last three years)

- **Presented paper In vitro development of *Allantodia aspera* (Blume) Ching (Athryiaceae ) from spore germination to Sporophyte formation** at the National Symposium on Advances in Pteridology Research: present status and Future Strategies at Bhopal, MP from 26<sup>th</sup> -28<sup>th</sup> November 2022.
- **Presented paper** at National symposium on “Pteridological studies in India: Perspectives and Modern approaches in relation to Environment and Climate change” organized by BSI, Regional Centre Itanagar, Arunachal Pradesh on 22-23 February 2018.
- **Presented paper** at International Conference on “Fern tissue culture: A step forward towards biodiversity conservation” organized by Chemistry Department, DRC, DU, Delhi from 17<sup>th</sup> -18<sup>th</sup> November 2016.
- Poster presentation on “Bio-inspired copper nanoparticle and its application as antibacterial agent” in Antradhvani, February 2014 at the sports complex of Delhi University.
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### Research Projects (Major Grants/Research Collaboration)

- Supervised a group of ten undergraduate students for innovation project DR-203: “Bio-inspired copper nanoparticle and its application as antibacterial agent” in the year 2013.
- Supervised a group of ten undergraduate students for innovation project Dr-303: “Development of New Fluorescent Silica Nanoparticles for Rapid Detection of Clinical Pathogen” in the year 2015.

### Awards and Distinctions

Received a SS Bir Medal from the Indian Fern Society in recognition of my outstanding research work in the field of Pteridology at the National Symposium on Advances in Pteridology Research: present status and Future Strategies at Bhopal, MP on 27<sup>th</sup> November 2022.

### Association with Professional Bodies

**Life Member of Indian Fern Society**

**Life Member of Delhi University Botanical Society**

### Other Activities

- SDP for students under IQAC on “Disease prevention with natural remedies and identification of active molecules” from 20<sup>th</sup>-27<sup>th</sup> December 2021.
- ICT Workshop under IQAC for Non-teaching from 27<sup>th</sup> -28<sup>th</sup> January 2022.
- In-House Skill Development Programme on “An Insight into the Basic ICT Tools” 24<sup>th</sup> -25<sup>th</sup> November 2021.
- Workshop on Learning Reproductive Biology with Fluorescence Microscopy” in 2021-22.
- Webinar cum Workshop series on “Building Self Confidence- Preparing Yourself For Success” from 12<sup>th</sup> -14<sup>th</sup> September 2020.
- International Conference on Effective Strategies for Biodiversity Conservation 23<sup>rd</sup> -24<sup>th</sup> march 2021.
- Staff advisor of the Botanical Society Vasundhara (2021-22): organized many curricular and Extracurricular activities to showcase the talent of the students. Organized lectures on “Pollinators and Pollinator Dependent Plants and Conservation Values “on World Environment Conservation Day; “Montreal Protocols and SDGs” On World Ozone Day; “Algae in the Changing World” and "New Insights to Climate Change Research: The Carbon Angle.

- Staff advisor of the Life Science Association Astitva (2022-23): organized many curricular and Extracurricular activities to showcase the talent of the students. Workshops, on “Capacity Building Workshops series 1 on “Mushroom Cultivation; series 2 on Intellectual Property Rights and Biological Resources in 2022-23. Organized lecture on “The Indian Biological Data Centre: The step before the leap “by an eminent scientist from Biological Data Centre, Faridabad, Haryana.
- Convenor of the garden Committee, organized a lecture series in November 2021 on “Redefining Gardening from Hobby to Enterprise’ series to aim at developing self-employment and entrepreneurship among students and gave an idea to the young minds on how a hobby can be pursued as a career.
  - Series 1: Topic 1: Sustainable Ecosystems in Farming: Aquaponics and Its Commercial Applications  
Topic 2: Organic Farming and Organic Waste Management
  - Series 2: Topic 1: Garden Types and its Benefits Topic 2: Gardening: A Wonderful Hobby and a Promising career option
  - Series 3: Urban Gardening
  - Series 4: Urban Gardening
- Resource person in Skill Enhancement Workshop for Non-Teaching Staff held at DRC, DU, from 7<sup>th</sup> – 13<sup>th</sup> July 2021.
- Resource person in SDP for students “Disease prevention with natural remedies and identification of active molecules” held at DRC, DU on 20<sup>th</sup> -27<sup>th</sup> December 2021.
- Resource person in In-House Skill Development Programme on “An Insight into the Basic ICT Tools” held at DRC, DU from 24<sup>th</sup> -25<sup>th</sup> November 2021.
- Co-Chaired the morning session on 27<sup>th</sup> November 2022 at the National Symposium on Advances in Pteridology Research: present status and Future Strategies at Bhopal, MP from 26<sup>th</sup> -28<sup>th</sup> November 2022.
- Organised Institute and laboratory field trip for students to Biological Data Center, Regional Centre for Biotechnology (RCB), to give them exposure to current research in plant sciences in different institutes, Laboratory Techniques, Instruments, etc.
- Organised Institute and laboratory field trip for students to Indian Agricultural Research Institute (IARI) to give them exposure to current research in plant sciences in different institutes, available facilities, Laboratory Techniques, Instruments, etc.
- Jury member in Paper presentation activity in Chemophoria 2023, the annual fest of the Chemical Society, DRC.
- Jury member in salad dressing activity in Vasundhara 2023, the annual fest of the Botanical Society, DRC.
- Jury member in Quiz in Vasundhara 2023, the annual fest of the Botanical Society, DRC.
- Jury member in Quiz in Vasundhara 2022, the annual fest of the Botanical Society, DRC.

