



MANAV RACHNA INTERNATIONAL INSTITUTE OF RESEARCH AND STUDIES, FARIDABAD

Sector 43, Aravalli Hills, Manav Rachna Campus Rd, Faridabad, Haryana 121004

DR. ABHILASHA SHOURIE

Designation: Professor

Qualifications: M.Sc (Botany), Ph.D (Plant Biotechnology), M.D.S.University, Ajmer, Rajasthan

Email ID: abhilasha.fet@mriu.edu.in

Experience: 16 Years



[Google Scholar Profile:](https://scholar.google.com/citations?user=uGRQYIsAAAAJ&hl=en)

<https://scholar.google.com/citations?user=uGRQYIsAAAAJ&hl=en>

Research Interest : Phytochemistry, Herbal Drugs, Plant Tissue Culture, Stress Physiology of Plants

Projects:

- Start-up- M/s Tricho Agronica Pvt. Ltd., Faridabad
Position in the Company- Director
Funding- Grant of Rs. 1.72 Cr under Indian Oil start-up scheme (IOSUS).
Start-up Project Title: 'Bioformulation- A Novel Eco-friendly solution against Fungal Pathogens in Tomato'.
- R&D Project: 'Econext Talent hunt for Eco-smart Youth leadership and competence development of young change makers based on Eco-eureka and E3 Next training in rural and urban Haryana', Rs. 25 lakhs funded by DST.
- Consultancy Project: 'Solid Waste Management at RakhiGarhi, Hisar', Funded for Rs. 20 Lakhs by ITRHD, New Delhi.
- R&D Project: 'Ecological Survey of Faridabad- Smart City Project', Rs. 25 lakhs, funded by supported by MoUD & MCF. 2014.
- R&D Project: 'Establishment of quality seed (spawn) production unit for diversification of mushroom cultivation in district Faridabad', Rs 5.0 lakhs funded by DST, Faridabad (Under District Innovation Fund), 2014-2017.

+ Journal Publication Details:

Abhilasha Shourie and U. Vijayalakshmi* (2022) Fungal Diversity and its Role in Mycoremediation, Geomicrobiology, Vol (2022): 1-19

Bhupesh Kaushik, Jatin Sharma, Keshav Yadav, Prithik Kumar and **Abhilasha Shourie**. (2021) Phytochemical Properties and Pharmacological Role of Plants: Secondary Metabolites. Biosci Biotech Res Asia 2021;18(1), pp 23-35.

Perna Sharma and **Abhilasha Shourie** (2019), 'Therapeutic Potential of Family Oleaceae in Ageing Associated Disorders', Ambient Science, Vol. 6 (Sp1): 10-14.

<p>U. Vijayalakshmi and Abhilasha Shourie (2019), ‘Influence of Jasmonic acid on Flavonoid Production in <i>Glycyrrhiza glabra</i> Callus Cultures’, <i>Ambient Science</i>, Vol. 6 (Sp1): 32-37.</p>
<p>U. Vijayalakshmi and Abhilasha Shourie (2019), ‘Yeast extract mediated elicitation of anti-cancerous compounds licoisoflavone B, licochalcone A and liquirtigenin in callus cultures of <i>Glycyrrhiza glabra</i>’, <i>BioTechnologia</i>, Vol. 100 (4) C pp. 441–451.</p>
<p>Abhilasha Shourie and U. Vijayalakshmi (2018), ‘Role of Pseudomonas fluorescence in Cadmium stress alleviation in <i>Vigna radiata</i> (Mung Beans), <i>International Journal of Pharma and Bioscience</i>, Vol- 9(3): (B) 61-65.</p>
<p>U. Vijayalakshmi and Abhilasha Shourie (2017), ‘Standardization of conditions for extraction of flavonoids from <i>Glycyrrhiza glabra</i> callus and the impact of most influencing factors on their yield, <i>International Journal of Pharma and Bioscience</i>, Vol 8(3), pp 272-277.</p>
<p>Abhilasha Shourie, Anjali Chandwani, Shweta Singh, Anjali Rawal, U.Vijayalakshmi (2017), ‘Anticancerous potential of medicinal plants- A Review’, <i>World journal of Pharmaceutical research</i>, Vol 6/6, pp 462-483.</p>
<p>U. Vijayalakshmi and Abhilasha Shourie (2016), ‘Remedial effect of ascorbic acid and citric acid on oxidative browning of <i>Glycyrrhiza glabra</i> callus cultures’, <i>BioTechnologia</i>, Vol. 97(3), pp. 179-186.</p>
<p>U. Vijayalakshmi and Abhilasha Shourie (2016), ‘Cinnamic acid Supplementation Regulates the Production of Licochalcone A, Liquirtigenin and Licoisoflavone B in <i>Glycyrrhiza glabra</i> Callus Cultures’, <i>International Journal of Phytomedicine</i>, Vol 8, pp 343-352.</p>
<p>Pushpa C. Tomar, Abhilasha Shourie, Anil K. Haritash, Shyam N. Mishra (2015), ‘Response of Cadaverine on cultured tissues of <i>Brassica juncea</i> (RH-30)’, <i>World journal of Pharmaceutical research</i>, Vol 04, Issue 12, pp-2122-2139.</p>
<p>U. Vijayalakshmi and Abhilasha Shourie (2015), ‘Evaluation of different methods for extraction of antioxidant phenolic compounds from <i>Glycyrrhiza glabra</i> roots’, <i>World journal of Pharmaceutical research</i>, 4 (10), pp. 1524-1537.</p>
<p>U. Vijayalakshmi and Abhilasha Shourie (2015), ‘Elicitor induced flavonoid production in callus cultures of <i>Glycyrrhiza glabra</i> and regulation of genes encoding enzymes of the phenylpropanoid pathway’, <i>Der Pharmacia Lettre</i>, 7 (8), pp. 156-166.</p>
<p>Ashish Kumari, Abhilasha Shourie and U. Vijayalakshmi (2015), Effect of Lead and Lead-EDTA on Growth and metal accumulation characteristics of <i>Epipremnum aureum</i>, <i>International Journal of Applied Environmental Sciences</i>, 10 (5), pp. 1591-1606.</p>
<p>Abhilasha Shourie (2014), ‘Ultrasonication assisted extraction of phenolic antioxidants from <i>Citrus maxima</i> leaves and their GC-MS profile’, <i>International Journal of Pharma and Bioscience</i>, 5 (3), pp. 38 – 48.</p>

Abhilasha Shourie, Pushpa Tomar, Deepika Srivastava, Rahul Chauhan (2014), 'Enhanced biosynthesis of Quercetin occurs as a photoprotective measure in *Lycopersicon esculentum* Mill. under acute UV-B exposure', *Brazilian Archives of Biology and Technology*, Vol.57, n.3: pp. 317-325.

U. Vijayalakshmi and **Abhilasha Shourie** (2013): 'Gas chromatography-Mass Spectrometric analysis of ethanolic extracts of *Glycyrrhiza glabra* Linn. roots.', *International Journal of Pharma and Bioscience*, 4(4), 741-755.

Abhilasha Shourie and Kuntal Kalra (2013): 'Analysis of phytochemical constituents and pharmacological properties of *Abrus precatorius* L.', *International Journal of Pharma and Bioscience*, 4(1): (P) 91 – 101. ISSN 0975-6299.

+ Research Supervised (PhD):

- Dr. U. Vijayalakshmi, Thesis Title- 'Enhancement of Secondary Metabolite Production in Callus Cultures of *Glycyrrhiza glabra* Linn. Through Elicitation'. Status- Ph.D. Degree Awarded.
- Ms. Perna Sharma, Thesis Title- 'Phytochemical and Pharmacological Studies of *Nyctanthes arbor-tristis*'. Status- Ongoing

+ Book/Chapter Publications:

1. **Abhilasha Shourie**, Rajeev Singh and Anamika Singh (2021), 'Histopathologic Diagnosis of Fungal Infections of lab animals', In 'Fungal Diseases in Animals', Editors: Arti Gupta and Nagendra Pratap Singh, **Springer**, Pages 73-91, ISBN: 978-3-030-69507-1, [DOI: 10.1007/978-3-030-69507-1_6](https://doi.org/10.1007/978-3-030-69507-1_6)
2. Hema Joshi, **Abhilasha Shourie** and Anamika Singh (2020), Chapter 25 - Cyanobacteria as a source of biofertilizers for sustainable agriculture, In 'Advances in Cyanobacterial Biology', Editors: Prashant Kumar Singh, Ajay Kumar, Vipin Kumar Singh, Alok Kumar Shrivastava, **Academic Press- Elsevier**, Pages 385-396, ISBN 9780128193112, <https://doi.org/10.1016/B978-0-12-819311-2.00025-5>.
3. **Abhilasha Shourie**, U. Vijayalakshmi and Anamika Singh (2021) Chapter-23 'Bioactive compounds from microalgae, In 'An Integration of Phycoremediation Processes in Wastewater Treatment', Editors: Maulin Shah Susana Rodriguez-Couto Celia Bertha Vargas De La Cruz Jayanta Biswas, **Elsevier**, Paperback ISBN: 9780128234990. <https://doi.org/10.1016/B978-0-12-823499-0.00021-3>
4. Anamika Singh and **Abhilasha Shourie** (2021), Chapter- 'Climate change impacts on plant-microbial interactions', In 'Climate Change and the Microbiome- Sustenance of the Ecosphere', Editors: DK.Choudhary, Arti Mishra, Ajit Varma, **Springer**, ISBN 978-3-030-76862-1, Page 155-186.
DOI: 10.1007/978-3-030-76863-8_8
5. **Abhilasha Shourie** and Anamika Singh (2021), Chapter- 'Impact of Climate change on Soil Fertility', In 'Climate Change and the Microbiome- Sustenance of the Ecosphere', Editors: DK.Choudhary, Arti Mishra, Ajit Varma, **Springer**, ISBN 978-3-030-76862-1, Page 49-62.
DOI: 10.1007/978-3-030-76863-8_4

Dr. Abhilasha. Shourie, Dr. Shilpa S. Chapadgaonkar and Dr. Anamika Singh, 2020. A Text Book of Biochemistry , ISBN- 9789386768551, IK International Publications, New Delhi.

Dr. Abhilasha. Shourie and Dr. Shilpa S. Chapadgaonkar, 2015. Bioanalytical Techniques, ISBN- 13 : 978-8179935293, The Energy and Resources Institute (TERI Publishing House), New Delhi.

Dr. Sarita Sachdeva & **Dr. Abhilasha Shourie**, 2010, Elements of Biotechnology, Manav Rachna Publishing House, New Delhi.

+ Administrative Responsibilities:

- Member of Board of Studies, BT, FET, MRIIRS
- Member of Board of Faculty of Engineering & Technology, MRIIRS
- Member- Doctoral Research Board, MRIIRS
- Member of Departmental Research Committee, BT, FET, MRIIRS

- NAAC Coordinator
- R&D Coordinator
- Research & Innovation Catalyst Coordinator

+ Professional Affiliation:

- Life Member of Green Chemistry Network Center (GCNC), Royal Society of Chemistry, London, North India Section.
- Life Member of Indian Society of Analytical Scientists (ISAS)
- Life Member of Indian National Committee of International Association of Hydrogeologists (INC-IAH).
- Life Member of Indian Green Building Council (IGBC)
- Reviewer in Natural Product Research (Taylor & Francis)
- Reviewer in International Journal of Phytoremediation (Taylor & Francis)
- Reviewer in African Journal of Biotechnology (Academic Journals)
- Reviewer in Journal of Microbiology, Biotechnology and Food Sciences

+ Expert Talk Delivered:

- Guest Lecture on 'Recent Advanced in Agriculture & Technology', SM College, Palwal, April, 2022.
- Invited Lecture on 'Gardening: Unearthing Creativity & Passion', Dyal Singh College, Delhi University, February, 2022.
- Expert Talk on 'Environmental impacts of COVID-19' on the occasion of Earth Day, at KLMDN College for Women, Faridabad, April, 2021.
- Expert Talk on 'Environment and Covid-19', SM College, Palwal, April, 2021.
- Expert Talk on 'Emerging Trends in Agri-nanotechnology', KLMDN College for Women, Faridabad, 2019.
- Expert Talk on 'Nanotechnology in Agriculture', Maitreyi College, Delhi University, New Delhi, 2019.
- Expert Talk on 'MRIIRS- The Green Campus', EcoThon- Solutions for Sustainability, Indira Gandhi National Centre for the Arts, Janpath, New Delhi, March, 2019.
- Expert Talk on 'Carbon Budget and Climate Change Mitigation', in a STP on 'Climate Change and Sustainable Infrastructure Development', at YMCA University of Science and Technology, Faridabad & NITTTR, Chandigarh, June, 2018.
- Expert Talk on 'Ecological Footprints of India and Sustainable Development' in a STP on 'Environment, Development and Sustainability' at YMCA University of Science and Technology, Faridabad and NITTTR, Chandigarh, July, 2016.

+ Patent:

Patent Published on 07/06/2019, Title of Innovation- Novel Medium for Enhanced Production of Phytochemicals in Plant Tissue Cultures.

+ Awards:

- Honor for Academic Achievements by SMM College, Palwal, during Prize distribution ceremony of Inter-District Competitions, October, 2019.

- Conferred the 'Dr. APJ Abdul Kalam Teaching Excellence Award' in 2017.
- Awarded Junior Research Fellowship (JRF) CSIR-UGC- NET, 2001.
- Selected in RPSC-SLET in 2003.