

RITU PANDEY, Ph.D.

ritupandey84@gmail.com
+91-9958896158

ACADEMIC QUALIFICATIONS

Degree	Institution	Year	Percentage
Ph. D.	Department of Plant Molecular Biology, University of Delhi, Delhi.	2015	NA
M. Sc.	Department of Botany, University of Delhi, Delhi.	2007	78.2% (Second rank holder at university level)
B. Sc.	Ewing Christian College, University of Allahabad, UP.	2005	80.66% (Gold Medallist)
Higher Secondary	Crosthwaite Girls College, Allahabad, UP.	2001	70%
Secondary	Crosthwaite Girls College, Allahabad, UP.	1999	76%

ACHIEVEMENTS

- Qualified joint **CSIR-UGC Junior Research Fellowship (JRF)** held in June, 2007 under CSIR fellowship Scheme (Subject: Life Science).
- Qualified **GATE** examination held in February 2007.

TEACHING EXPERIENCE

- Total teaching experience (till date): ~9 YEARS
- Lady Irwin College, University of Delhi (02/01/2023 to 08/12/2023).
- SGTB Khalsa College, University of Delhi (26/07/2016 to 17/10/2022).
- Dyal Singh College, University of Delhi (16/01/2016 to 20/05/2016).
- Lady Irwin College, University of Delhi (05/01/2015 to 15/01/2016).

Research Projects

- Completed one year research project titled "**Black gold: Usage and effects on plant growth**" as Co-principal Investigator funded by Science Research Centre, SGTB Khalsa College, University of Delhi. 2017-18
- Completed the research project titled "***In-silico* identification and experimental validation of Heat Shock Proteins (HSPs) and Heat Shock Factors (HSFs) in *Vigna unguiculata* L.**" as Co-principal investigator funded

LIST OF PUBLICATIONS

Research papers

- **Ritu Pandey**, Gopal Joshi, Ankur R. Bhardwaj, Manu Agarwal, Surekha Katiyar-Agarwal. A Comprehensive Study on Identification and Expression Profiling of MicroRNAs in *Triticum aestivum* During Abiotic Stress and Development. (2014) **PLoS ONE** 9(4): e95800. **ISSN:** 1932-6203
- Ankur R. Bhardwaj, Gopal Joshi, **Ritu Pandey**, Shailendra Goel, Arun Jagannath, Amar Kumar, Surekha Katiyar-Agarwal and Manu Agarwal. A genome-wide perspective of miRNAome in response to high temperature, salinity and drought stresses in *Brassica juncea* (Czern) L. (2014) **PLoS ONE** 9(3):e92456. **ISSN:** 1932-6203
- Ankur R. Bhardwaj, Rohit Shukla, Kiran Bankar, Gopal Joshi, **Ritu Pandey**, Shailendra Goel, Arun Jagannath, Amar Kumar, Surekha Katiyar-Agarwal and Manu Agarwal. Global insights into high-temperature and drought stress regulated genes by RNA-seq in *B. juncea* (Czern) L. (2015) **BMC Plant Biology** 15:9. **ISSN:** 1471-2229
- **Ritu Pandey**, Ankur R. Bhardwaj, Manu Agarwal and Surekha Katiyar-Agarwal. Discovery of small RNAs in wheat: a survey. (2017) **Ind J Plant Physiol.** 22: 411. **ISSN** (print): 0019-5502; online: 0974-0252
- Sukhbir Kaur Gujral and **Ritu Pandey**. *In-silico* identification of heat-stress specific genes during high temperature stress in cow pea (*Vigna unguiculata* L.) (2021) **European Journal of Biotechnology and Bioscience** 9(3): 06-08 **ISSN:** 2321-9122
- Darshan Kaur Cheema, Sukhbir Kaur Gujral and **Ritu Pandey**. Comparative assessment of organic compost and chemical fertilizers on growth and development of *Vigna unguiculata* L. (2019) **European Journal of Biotechnology and Bioscience** 7(4): 36-40. **ISSN:** 2321-9122
- Vinoy Krishna, **Ritu Pandey**, Rajneesh Dwevedi, Nancy Raina, Swati Raman, Anjali Sherawat, Renuka Gupta, Rupa Upadhyay. Scientific perspective of Indian cultural practices. (2017) **International Journal of Advanced Education and Research** 2(3): 174:178 **ISSN:** 2455-5746
- Vinoy Krishna, Rupa Upadhyay, **Ritu Pandey**, Nity Nishant, Rajneesh Dwevedi. Integrated pest management: A brief review. (2017) **International Journal of Biology Research** 2(2):70-74 **ISSN:** 2455-6548

- Vinoy Krishna, Aniket Kumar, **Ritu Pandey**, Sandeep K Singh and Rajneesh Dwevedi. The evolution of ecological sensitive zones in India: A case study of Western Ghats. (2017) **International Journal of Fauna and Biological Studies** 4(3): 20-25 **ISSN:** 2347-2677
- **Ritu Pandey** and Ankur R Bhardwaj. Assembly of high-throughput mRNA-Seq data: A review (2016) **Bioinformatics Review** 2(06): 19-23 **ISSN:** 2455-6645
- Ankur R Bhardwaj, **Ritu Pandey** and Gopal Joshi. Conventionally unconventional (2016) **Bioinformatics Review** 2(10): 04-08 **ISSN:** 2455-6645
- Sunanda Y, Bhardwaj AR, Mikawlawng K, **Pandey R**, Sarangthem K. DNA barcoding and antioxidant study of four Dendrobium species found in Manipur. (2022) **Vegetos** <https://doi.org/10.1007/s42535-022-00517-w> **ISSN:** 0970-4078

Books

- Rupa Upadhyay, **Ritu Pandey** and Nancy Raina. **Botany: A practical manual.** (2017) Elite Publishing House. **ISBN:** 978-81-88901-69-2

Book Chapters

- Bhardwaj AR#, **Pandey R#**, Agarwal M, Katiyar-Agarwal S (2021) Northern Blotting Technique for Detection and Expression Analysis of mRNAs and Small RNAs In: Jin H. and Gassmann W. (Eds.) RNA Abundance Analysis: Methods and Protocols, Methods in Molecular Biology, vol. 883, DOI 10.1007/978-1-61779-839-9, **Springer New York Heidelberg Dordrecht London** 2021. PMID: 22589122. **ISSN:** 1064-3745
- **Pandey R**, Bhardwaj AR, Katiyar-Agarwal S (2012) Endogenous Small RNAs and Antibacterial Resistance in Plants. In: R. Sunkar (Ed.) MicroRNAs in Plant Development and Stress Responses, Signaling and Communication in Plants microRNAs in plant development and stress responses, **Springer-Verlag Berlin Heidelberg** Volume 15, 233-259. **ISSN:** 1867-9048 (Print) 1867-9056 (Online)
- Bhardwaj AR#, **Pandey R#**, Agarwal M, Katiyar-Agarwal S (2012) Northern Blot Analysis for Expression Profiling of mRNAs and Small RNAs. In: Jin H. and Gassmann W. (Eds.) RNA Abundance Analysis: Methods and Protocols, Methods in Molecular Biology, vol. 883, DOI 10.1007/978-1-61779-839-9_2, **Springer Science+Business Media New York** 2012. PMID: 22589122. **ISSN:** 1064-3745. # denotes equal contribution.

Posters/Oral Presentations

- "Nanotechnology: An approach to improve shelf life of fruits and vegetables". Poster presentation at **International Conference on Advances in Chemical Sciences and Nanocomposites** held at Zakir Hussain College, University of Delhi. April 1-2, 2022.
- "Comparative Assessment of Organic Compost and Chemical Fertilizers on Crop Vigor". Oral presentation at **National conference on Emerging environmental Challenges and Sustainable Development** held at Sir Shankar Lal Concert Hall, University of Delhi. March 21-23, 2018.
- "A Perspective of Stress Associated small RNAs in Wheat". Presented at **National conference on Challenges and Strategies to Improve Crop Productivity in Changing Environment: An Integrated Approach** held at Zakir Hussain College, University of Delhi. January 12, 2018.
- "Science for non-science students: Perspectives in learning and opportunities". Presented at **National Conference on Learning**, Lady Irwin College, University of Delhi. April 2, 2016
- "Genome-wide Identification of Tissue- and Abiotic Stress-specific miRNAs in *Triticum aestivum*." Presented at **International conference on 7th Annual Convention of ABAP & International Conference on Plant Biotechnology, Molecular Medicine & Human Health** held at Department of Genetics, South Campus, University of Delhi. October 18-20, 2013.
- "miRNA-omics of *Triticum aestivum*: Identification and Expression Profiling of Tissue-Specific and Abiotic Stress-Responsive miRNAs." Presented at **Indraprastha International Conference on Biotechnology (IICB-2013), New Delhi**. October 22-25, 2013.
- "Global microRNA Identification and Expression Profiling in Tissues and During Abiotic-Stress in *Triticum aestivum*". Presented at **National Symposium on Frontiers of Plant Molecular Biology**, September 27-28, 2013.
- "Genomics of small non-coding RNAs in wheat during development and abiotic stress conditions". Presented at International Conference on "**International Conference on Plant Biotechnology for Food Security: New Frontiers-2012**". Indian Agricultural Research Institute, New Delhi, India. February 21-24, 2013.

- "Genomics of small non-coding RNAs in wheat during development and abiotic stress conditions". Presented at **National Science Day Symposium, UDSC**. February 27-28, 2012.

RESOURCE PERSON

- Resource person for the workshop entitled "**Development of tactile books in Science at Upper Primary Stage**" Conducted at DSEM, **NCERT**, NIE campus, New Delhi from 27 June to 30 June 2017.
- Delivered an invited talk on '**Next Generation Sequencing and its application**' in Add-on course entitled "An integral Perspective for Skill Augmentation" held from 23 Feb to 5 March 2016 at **Swami Shraddhanand College**, University of Delhi.

WORKSHOPS/CONFERENCES ORGANIZED

- Event Co-ordinator for a **virtual tour of Central Food Technological Research Institute** organized by Floridus-The Botanical Society of SGTB Khalsa College, University of Delhi held on March 23rd, 2022.
- Member of organizing committee for the **Celebration of World Environment Day** organized by Floridus-The Botanical Society of SGTB Khalsa College, University of Delhi held on June 5th, 2022.
- Event Co-ordinator for a webinar on the occasion of **World Water Day** organized by Floridus-The Botanical Society of SGTB Khalsa College, University of Delhi held on March 22nd, 2022.
- Event Co-ordinator of **Inaugural function** organized by The Botanical society – Floridus, SGTB Khalsa college, University of Delhi held on January 7th, 2022.
- Event Co-ordinator for **Interclass quiz competition** organized by The Botanical society – Floridus, SGTB Khalsa college, University of Delhi held on January 13th, 2022.
- Event Co-ordinator for the lecture titled '**Underground Revolution: Roots Can Help Achieving Food Security**' by Dr. Jitender Giri organized by The Botanical society – Floridus, SGTB Khalsa college, University of Delhi held on January 25th, 2022.
- Member of organizing committee of **inter-college quiz** competition on the theme 'Science and Society' organized by The Botanical society – Floridus, SGTB Khalsa college, University of Delhi held on January 30th, 2020.

- Member of organizing committee for the '**An interactive session on the theme Pollination**' organized by The Botanical society – Floridus, SGTB Khalsa college, University of Delhi held on October 29th, 2020.
- Member of organizing committee for the '**Orientation Programme**' organized by Department of Botany, SGTB Khalsa College, University of Delhi held on November 26th, 2020.
- Member of organizing committee of online lecture on the occasion of **National Energy Conservation Day**, 2020 organized by Eco Club, SGTB Khalsa College, University of Delhi held on December 12, 2020.
- Member of organizing committee in the international conference entitled "**International Conference on Guru Nanak's Philosophy and Legacy**" held on February 22-23, 2019 at SGTB Khalsa College, University of Delhi.
- Member of organizing committee of '**Skin and Wellness Workshop**' organized by Botanical Society Floridus, SGTB Khalsa College, on October 12, 2018.
- Member of organizing committee of one day workshop on '**Gardening: cultivate learning and living**' organized by Botany Department, SGTB Khalsa College, University of Delhi held on September 20, 2017.
- Member of organizing committee of one day event on '**Sikh Environment Day**' organized by SGTB Khalsa College, University of Delhi held on March 22, 2017.
- Member of organizing committee of inter-college workshop on '**Biofertilizers**' organized by Botany Department, SGTB Khalsa College, University of Delhi held on February 2-3, 2017.
- Member of organizing committee of inter-college workshop on '**Hands on Training on Molecular Biology Techniques**' organized by Department of Botany, SGTB Khalsa College, University of Delhi held on October 4-5, 2016.

FACULTY DEVELOPMENT PROGRAMMES

- Participated in TWO-WEEK FACULTY DEVELOPMENT PROGRAM (INTERDISCIPLINARY) (16th August to 31st August 2021) "**Biostatistical & Mathematical Skills with Excel and R**" organized by Guru Angad Dev Teaching Learning Centre of MHRD at SGTB Khalsa College.
- Participated in ONE-WEEK FACULTY DEVELOPMENT PROGRAM '**Applications of Genomics, Metagenomics and Bioinformatics in Biological Systems**' (16th August – 20th August 2021) organized by Sri Aurobindo College, University of Delhi & ICMR AIIMS Computational Genomics Centre in collaboration with

Mahatma Hansraj Faculty Development Centre Hansraj College, University of Delhi

- Participated in ONE-WEEK ONLINE NATIONAL LEVEL FACULTY DEVELOPMENT PROGRAM " **Moodle Learning Management System** " organized by Spoken Tutorial Project, IIT Bombay, funded by National Mission on Education through ICT, MHRD, Govt. of India from 11th June 2020 to 16th June 2020.
- Participated in the Faculty Development Programme on "**Industrial and Environmental Microbiology**" under the aegis of DBT Star College Project, GOI held at Daulat Ram College, University of Delhi on 19-20 March 2018.
- Participated in the Faculty Empowerment Workshop entitled "**WGBI: National Workshop on Basic ICT Skills for Educators (e-content Development and Assessment Tools)**" held at Guru Angad Dev Teaching Learning Centre of MHRD at SGTB Khalsa College, University of Delhi on 15-16 March 2017.

SEMINARS ATTENDED

- Participated in **Webinar-cum-workshop:Series I on Holistic Health** organized by the Department of Botany, SGTB Khalsa College, University of Delhi held on November 12th, 2020.
- Participated in **Webinar-cum-workshop:Series II on Avenues of Terrace Gardening** organized by the Green Fingers Club, SGTB Khalsa College, University of Delhi held on November 28th, 2020.
- Participated in one day National seminar entitled "**National Seminar cum Workshop on e-content, MOOCs (SWAYAM) and ARPIT**" jointly organized by AICTE and Guru Angad Dev Teaching Learning Centre of MHRD at SGTB Khalsa College, University of Delhi on August 31, 2019.
- Attended two-day workshop on "**Seminar and Training on Spectral Confocal Laser Scanning Microscopy**" conducted at Biotech Centre, University of Delhi South Campus, held on October 13-15, 2009.
- Actively participated in National seminar on "**Current Trends in Plant Sciences**" at Department of Botany, University of Delhi. February 15-16, 2007.
- Actively participated in National seminar on "**Relevance of Botany in the Conservation and Improvement of Plants**" at Department of Botany, University of Delhi. February 8-9, 2006.

ACADEMIC ACTIVITIES

- Member of Students' Welfare Committee of SGTB Khalsa College from 2018-2020.
- Member of Eco-Club (Environmental society) of SGTB Khalsa College 2019 onwards.
- Member of Editorial Board of SGTB Khalsa College magazine Tegh (2017-2019)
- Member of the preparatory committee for NAAC visit in SGTB Khalsa College. (College obtained "A" grade accreditation in November 2016)
- Regular examiner (theory) at Central Evaluation Centre (CEC), University of Delhi.
- Regular external and internal examiner (practicals), in various colleges of University of Delhi.

ACADEMIC ACHEIVEMENTS

- Secured **IInd rank** in University of Delhi, M.Sc. Botany 2007-2008.
- **Lakshmi Krishnaswami Prize** 2007-2008 for securing first rank in Miranda House College in M.Sc. Botany.
- Secured **highest marks** in M.Sc. (previous) Botany in Miranda House College 2006.
- **Dr. Lalit Mohan Srivastava Memorial Scholarship** 2004-2005 for scoring highest marks in Botany at B.Sc. part I, II and III.
- **Dudgeon Memorial Medal** 2004-2005 for securing highest marks in Botany at B.Sc. part I, II and III.
- **Smt. Yamuna Devi Memorial Medal** 2004-2005 for securing highest marks in Botany at B.Sc. part I, II and III.
- **Shri Ayodhya Nath Srivastava Memorial Scholarship** 2004-2005 for securing highest marks in Botany at B.Sc. III.
- **Col. P. P. Singh Memorial Scholarship** 2004-2005 for securing highest marks in Botany at B.Sc. part III.
- **Dr. S. N. Bhattacharya Memorial Medal** 2003-2004 for securing highest marks in Botany at B.Sc. part I and II.
- Received **Gold Medal** for securing first position in the examination held in the year 2004-2005.
- **Mary Rice Memorial Medal** 2003-2004 for scoring highest marks in B.SC. I and II.

- **Joseph Macafe Memorial Medal** 2003-2004 for scoring highest marks in B.Sc. II.
- Received certificate 2003-2004 for securing Ist place in order of merit in B.Sc. (Biology) II.
- Received certificate 2002-2003 for securing IVth place in order of merit in B.Sc. (Biology)I.

PERSONAL DETAILS

Father's Name : Sh. Jawahar Lal Pandey
Date of Birth : 6th April, 1984
Nationality : Indian
Marital Status : Married

I declare that the above-mentioned information is true to the best of my knowledge.

Ritu Pandey