Dr. Chandrama Prakash Upadhyaya
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Assistant Professor
Department of Biotechnology
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Career Summary

- An innovative professional having 16 years teaching (UG, PG, Ph.D) and research experience as Assistant Professor including Foreign (Konkuk University, Seoul, South Korea) and Central University in India.
- Proficient in successfully completing the projects as **Project Investigator** funded from different funding agencies such as **UGC, DBT, DST,** Govt of India.
- Developed new curriculum for UG and PG and Ph.D level to expand learning opportunities.
- Extensive participation on committees and extra-curricular activities.
- Expertise of the subject with experimental skill.
- Organized six workshops on instrumentation, Refresher Course, International and National Conference

Area of Research

- Plant Molecular Biology, Plant Stress Physiology, Nano Biotechnology, Bioinformatics and Plant Genetic Engineering

Courses Taught (UG & PG, Ph.D)

- Basic and advanced Biochemistry, Molecular Biology & Biotechnology, Plant Genetic Engineering, Plant Pathology and Physiology, Environmental Biology, Research methodology

Education

- Ph.D (2008) in Botany with specialization Plant Biotechnology from **University of Delhi.**
- M.Sc Biochemistry (2000) from **Lucknow University**, Lucknow, U.P.
- B.Sc. Bioscience (1996) from **DDU Gorakhpur University**, Gorakhpur U.P.
- Intermediate and High school: U P Board; Throughout first class

Recognition, Awards and Scholarship

1. **2024:** Fellow of Association of Biotechnology and Pharmacy (ABAP)
2. **2012:** Visiting Scientist fellowship from Indian National Science Academy (**INSA**), New Delhi.
3. **2005:** Research Fellowship as trainee at Switzerland for Young Researcher, offered by Indo-Swiss collaboration in Biotechnology, DBT, Govt of India.
4. **2003 -2008:**Ph.D Fellowship as SRF from Department of Biotechnology, Govt. of India
5. **2002:** Qualified **ICMR-JRF** and **GATE**

Total Research publications 49; Scopus documented 41; Books 03, Book chapter 08; Total Citation 3629; h-index: 42, i10 index: 31,

Academic Appointments

S.N.	Year	Position Held	Nature of Position	Institute/University	Responsibility
1	May 2013-Till date	**Assistant Professor**	Academic-Full time	Department of Biotechnology, Harisingh Gour Central University, Sagar city India	Teaching & research
2	June 2011-May 2013	**Assistant Professor**	Academic-Full time	Guru Ghasidas Central University, Bilaspur City, India	Teaching & research
3	March 2009 – June 2011	**Assistant Professor & Group leader**	Tenure Track Academic-Full time	Konkuk University, Seoul, Korea Republic	Teaching & Research
4	April 2008 -	**Post Doc Research Associate**	Tenure Track academic	JNU, New Delhi, India	Research

UGC Training Course

1. One week faculty training course on "Development of Concept in Modern Biology" at Jawaharlal Nehru University from 4thfeb 2012 to 13 feb 2012 sponsored by UGC, New Delhi.
2. Orientation course at HRDC sponsored by UGC at DR Hari Singh Gour Central University, Sagar, M.P. from 18th May 2015 to June 2015 sponsored by UGC, New Delhi.
3. UGC sponsored refresher course on Chemical & Pharmaceutical Sciences, Organized by HRDC at DR Hari Singh Gour Central University, Sagar, M.P. from 17th Feb 2016 to 8th March 2016.
4. Participated two days' workshop on Assessment and Accreditation by NAAC organized by HRDC at DR Hari Singh Gour Central University, Sagar, M.P. from 28th to 29th March 2014.

International Patents published

1. Park Se Won C P.Upadhyaya et al (2012), Characterization of a sulphoraphane derivative from broccoli (*Brassica oleracea* L. var. italica) florets. Patent No 10-1630782-0000 (Granted)
2. Development of solid lipid-based nano-pesticide efficient for controlling fungal disease in crops (Patent pending)

Research Grants Received As Principal Investigator

1. 2011-2013: Role of 24-epibrassinosteroid in potato (*Solanumtuberosum)* development and abiotic stress tolerance: A physiological and molecular approach (Funded from UGC under startup grant: INR: 6 Lak) **Status; Completed**
2. 2014-2017: Investigating and probing RBC-Endothelial cell interaction through ex-vivo cerebral malaria model to develop adjuvant therapy for malaria pathology. (Funded from DBT under twinning programme in collaboration with IIT Guwahati, INR: 0.84 Crore) **Status; Completed**
3. 2017-2020: Development of transgenic potato overexpressing vitamin B6. DST-SERB, **Status: Completed** (0.38 Cr)
4. 2023-2028: DBT-BUILDER Project _Interdisciplinary Life Science Program for Advance Research and Education (Level II) (3.49 Cr): **Status: Ongoing**

Research Supervisor

1. Total number of Masters dissertation supervised: 34
2. PhD Supervision: 03 awarded, 4 in progress

Membership of Professional Academic Bodies

1. Member of American Society of Plant Biologist (ASPB)
2. Life member of Association of Biotechnology & Pharmacy (APAB)
3. Life member of Indian Science Congress (ISC)
4. Life Member of Indian Society of Plant Physiology (ISPP)
5. Life member of Biotech Research Society of India (BRSI)
6. Life Member of Indian Potato Association (IPA)

Publication List (UGC listed and International SCOPUS Journals)

1. S Rajput, S Jain, D Dash, N Gupta, **Chandrama Prakash Upadhyaya**, M L Khan, R K Koiri **(2024)** Role of cyanotoxins in the development and promotion of cancer. **Toxicology Reports.**13, 101798, IF 1.7

2. A Pathak, N Mandal, D C Upadhyaya, N Joshi**, Chandrama Prakash Upadhyaya (2024)** Lipid nanoparticles: a sustainable solution for crop disease management. **Advances in Natural Sciences: Nanoscience and Nanotechnology**. 15(3) 033001, IF 2.24 (Corresponding author)

3. N Joshi, A Pathak, D C Upadhyaya, **Chandrama Prakash Upadhyaya (2024)** Impact of Metal Oxide Nanoparticles on Potato (*Solanum tuberosum* L.) Tuber Yield in Hydroponics. **Am J of Potato Research**. 101(4) 322-335, IF 2.4 (Corresponding author)

4. M K Manjhi, P Chauhan, **Chandrama Prakash Upadhyaya**, A K Singh, R Anupam **(2024)** Mechanism of antibacterial activity of diallyl sulfide against *B cereus*. J Ayurveda Integ Medicine 15(3) 100951, IF 1.7

5. P Singh, Y Arif, H Siddiqui, **C P Upadhyaya**, J Pichtel, S Hayat (2023) Critical Factors Responsible for Potato Tuberization. ***Bot. Rev***. https://doi.org/10.1007/s12229-023-09289-7; IF 4.2

6. Neha J, Abhishek P, Devanshi CU, Suresh BNK, **Chandrama Prakash Upadhyaya (2022) S**ynthesis of biocompatible Fe3O4 and MnO2 nanoparticles for enhanced tuberization in potato (*Solanum tuberosum* L.) **Biocatalysts and Agricultural Biotechnology**. 39: 258-266 **IF 3.6**

7. R Pundir, A Pathak, D C Upadhyaya, A Muthusamy, **Chandrama Prakash Upadhyaya** (**202**1) Red and blue light-emitting diodes significantly improve in vitro tuberization of potato (Solanum tuberosum L.). **Journal of Horticultural Research**. 29(1) 95-108. IF 1.6 (Corresponding author)

8. Devanshi C U, Deepak S B, Ashwani K and **Chandrama P. Upadhyaya,** S K Jain **(2020)** Genetic engineering of potato (*Solanum tuberosum* L) for enhanced α-tocopherol and abiotic stress tolerance, **Physiologia Plantarum.** DOI: 10.1111/ppl.13252, IF5.4 (Corresponding author)

9. J K Singh, B Chaurasia, A Dubey, R Kothari, **Chandrama Prakash Upadhyaya**, Ashwani Kumar, et al. **(2020**) Biological Characterization and Instrumental Analytical Comparison of Two Biorefining Pretreatments for Water Hyacinth (Eichhornia crassipes) Biomass Hydrolysis. **Sustainability** (3 (1) 1-11. IF 3.6

10. **Chandrama Prakash Upadhyaya**, R KPundir, A Pathak, N Joshi, D S Bagri (**2020**) Irradiation Studies of LED Light Spectra on the Growth and Development of Potato (*Solanum tuberosum L.).* **Plant Science Today** 7(3) 406-*416 IF 1.0* (First and corresponding author)

11. I-M Chung, B. Baskar, **Chandrama P. Upadhyaya**, G. Pacakiraj, G Rajkumar, M Thiruvengdavam **(2019**) Alleviation of *Phytophthora infestans* Mediated Necrotic Stress in the Transgenic Potato (*Solanum tuberosum* L.) with Enhanced Ascorbic acid Accumulation. ***MDPI* Plants** 8*(10)*, 365 IF 4.0

12. **.** N Joshi, A Pathak, R Anupam, N Jain, J Singh and **Chandrama P Upadhyaya (2019)** A rapid and efficient biosynthesis of metallic nanoparticles using aqueous extract of Chia (Salvia hispanica L.) seeds**. BioNanoScience**. 9-893-902, IF 3.0 (Corresponding author)

13. A Kumar BN Suresh, A Dubey, **Chandrama P Upa**dhyaya, J K Adamnd (**201**9) Integrating Microbiome Network: Establishing Linkages Between Plants, Microbes and Human Health. **The Open J of Microbiology**. 13, 330-342. IF 2.3

14. R K Singh, R Kumar, N Jain, M-T Kuo, **Chandrama P Upadhyaya**, J Singh **(2019)** Exploring the impact of the Pb^{2+} substitution by Cd^{2+} on the structural and morphological properties of $CH_3NH_3PbI_3$ perovskite. **Applied Nanoscience**, (9) pages 1953–1962, IF 3.2

15. Neha J, Abhishek P, Jai S, R Prasad and **Chandrama P. Upadhyaya (2018)** Biosynthesis of silver nanoparticles using Carissa carandas berries and its superior antibacterial activities. **Sol Gel Sci Tech**, 86(3), 682-689. IF 2.6 (corresponding author)

16. Deepak S B, Devanshi C U, Ashwani K and **Chandrama P. Upadhyaya (2018)** Overexpression of PDX-II gene in potato (*Solanum tuberosum* L) leads to the enhanced accumulation of vitamin B6 in tuber tissues and tolerance to abiotic stresses, **Plant Science**, 272; 267-275 (IF 4.8); (corresponding author)

17. J K Singh, P Vyas, A Dubey1, **Chandrama Prakash Upadhyaya**, R Kothari, V.V. Tyagi Ashwani Kumar. (**2018)** Assessment of different pretreatment technologies for efficient bioconversion of lignocellulose to ethanol. **Frontiers In Bioscience**, Scholar, 10, 350-371, IF 2.3

18. Deepak S B, Devanshi C U, Subodh K J, **Chandrama P Upadhyay** (**2017**) Biotechnological improvement of nutritional and therapeutic value of cultivated potato **Frontiers In Bioscience,** Scholar, 10, 217-228, IF 2.3**,** (corresponding author)

19. **Chandrama P Upadhyaya**, D S Bagri, D C Upadhyaya, A K Pathak, P G Kawar **(2016)** Molecular and biochemical analysis of supplementation of calcium under *invitro* condition on tuberization in potato (*Solanum tuberosum* L.). **Biocatalysis and Agricultural Biotechnology**, 7; 210-216, IF 3.6; (Corresponding author)

20. **Chandrama Prakash Upadhyaya**, D S Bagri and D CUpadhyay **(2015)**Ascorbic acid abd/or 24-epibrassinolide triggers physiological and biochemical responses for the salt stress mitigation in potato (*Solanum tuberosum* L). **Int J Appl Sci & Biotechnol**, Vol 3(4): 655-667 (**IF 1.42**), (Corresponding author)

21. **Chandrama Prakash Upadhyay**[*], D S Bagri, D Kumar, and R Prasad (2016) Protection of growth via antioxidants and endogenous hormones maintenance in response to 24-epibrassinolide in tomato (*Lycopersicon esculentum* L) growing under salt, drought and heavy metal stress. **Eu J of Bioscience**, 4(1)44-55. **IF 4.5** (Corresponding author)
22. DS Bagari and **Chandrama P. Upadhyaya**[*] (2014) An updated commentary on the role of RNA interference in the plant disease management. **J of Botanical Society of India** Vol 44, 117-137.

23. **Chandrama P Upadhyaya***, M A Gururani, R Prasad and A Verma **(2013)** A cell wall extract from *Piriformospora indica* promotes tuberization in Potato (*Solanum tuberosum* L.) *via* enhanced expression of Ca+2 signaling pathway and lipoxygenase gene. **Appl Biochem Biotechnol. Volume 170 (4), 743-755. (IF 1.8**) (First author)

24. M A Gururani, **Chandrama Prakash Upadhyaya**, R J strasser, & Se W Park **(2013)** Evaluation of abiotic stress tolerance in transgenic potato plants with reduced expression of PSII manganese stabilizing protein. **Plant Science**, 198. 7–16. **(IF4.2)**

25. R Prasad, **Chandrama P. Upadhyaya,** and DD Pandey **(2013)** "Effect of Light Quality on the Growth and Development of Indian Pepper (*Capsicum annum L.).* **Advances in Biological Research**, ISSN 0970-7956. (**IF 0.6**)

26. M A Gururani, **Chandrama Prakash Upadhyaya**, J Venkatesh, V Baskar and Se Won Park **(2013)** "Plant growth promoting rhizobacteria enhance abiotic stress tolerance in *Solanum tuberosum* through inducing changes in the expression of ROS scavenging enzymes and improved photosynthetic performance". **Journal of Plant Growth Regulation,** June 2013, 32 (2)245-258 (IF 2.23)

27. D Kumar, P Singh, M A Yusuf, **Chandrama P Upadhyaya**, S D Roy, T Hohn and Neera B Sarin **(2013)** The *Xerophytaviscosa* Aldose Reductase (ALDRXV4) Confers- Enhanced Drought and Salinity Tolerance to Transgenic Tobacco Plants by Scavenging Methylglyoxal and Reducing the Membrane Damage. **Molecular Biotechnology,** 54 (2) 292-303. (**IF 2.27**)

28. ANookaraju, **Chandrama P. Upadhyaya**, S C Chun, D H Kim, S W Park **(2012)** Role of Ca2+/ calmodulin-mediated signaling in Potato tuberization: An Overview. **Botanical Studies** (2012) 53: 177-189. (**I F 1.4)** (Corresponding author)

29. M A Gururani, **Chandrama Prakash Upadhyaya**, N. Akula and Se Won Park **(2012)** Plant disease resistance genes: Current status and future directions. **Physiological and Molecular Plant Pathology (78) 51-65.** (**I F 3.26**) (Corresponding author)

30. M A Gururani, **Chandrama Prakash Upadhyaya**, J Venkatesh, R J strasser, & S W Park **(2012)** Physiological and biochemical responses of transgenic potato plants with altered expression of PSII manganese stabilizing protein indicates its role in potato tuberization. **Plant Physiology and Biochemistry**58, 182–194.(**I F 4.4**)

31. Jae W Yu, **Chandrama Prakash Upadhyaya**, M A Gururani, N Akula, and S W Park **(2012)** Dynamic proteomic profile of potato tuber during its in vitro development. **Plant Science,** 195, 1–9**.** (**I F 4.8**)

32. V jelly, **Chandrama P. Upadhyaya** and P S Won **(2012)** Chlorophyll a fluorescence transient studies of transgenic potato overexpressing *GalUR*gene for salinity stress tolerance. **Hort. Environ. Biotechnol**. 53(4):320-328. **I F** 2.2 (Corresponding author)

33. **Chandrama Prakash Upadhyaya,** J Venkatesh, M A Gururani, L Asnin, a Sharma, and S W Park **(2011)** Transgenic potato overproducing L-ascorbic acid resisted an increase in methylglyoxal under salinity stress via maintaining higher reduced glutathione level and glyoxalase enzyme activity. **Biotech letters,** 2011 Nov; 33(11):2297-307. (**I F 1.61**) (First & Corresponding author)

34. S. Pandey N. Akula, **Chandrama P. Upadhyaya,** C Se Chul, and S W Park **(2011),** An update onBiotechnological approaches for improving abiotic stress tolerance in tomato. **Crop Science:** 51:2303–2324, I F 2.02; (Corresponding author)

35. Baskar.V, **Chandrama P. Upadhyaya**, J-W Yu and S W Park **(2011)** Genetic engineering of Glyoxylase I gene in Potato for salinity resistance. K **J of Life and Environmental science** 123 (1) 24-31. (Corresponding author)

36. **Chandrama P. Upadhyaya**, J Venkatesh, M A. Gururani, S H Moon and S W Park **(2011)** Overexpression of ascorbate pathway gene in transgenic potato alleviates abiotic stress: Physiological and chlorophyll a fluorescence measurements. K **J of Life and Environmental science** 123 (1) 45-49

37. Hemavathi, **Chandrama Prakash Upadhyaya,** N Akula, K Young, and S W Park **(2010),** Molecular and biochemical analysis of the proteins for abiotic stress tolerance in transgenic potato tubers overexpressing *GalUR*gene. **Molecular Breeding**, 25 (1), 76-87, (**I F 3.1**). (Corresponding author)

38. **Chandrama Prakash Upadhyaya**, A Nookaraju, M A Gururani, D C Upadhyaya, D-H Kim, S C Chun and S W Park **(2010)** An insight update on the recent approaches employed towards marker-free transgenics. **Botanical Studies;** Vol. 51 (No. 3) 152-165(IF 1.41). (first & corresponding author)

39. Hemavathi, **Chandrama Prakash Upadhyaya**, N Akula, K Young, S CChun , D H Kim, and S W Park **(2010)** "Enhanced ascorbic acid accumulation in transgenic potato confers tolerance to various abiotic stresses." **Biotech Letters** 32(2) 112-123 **I F 1.61) ,** (Corresponding author)

40. A. Nookarajua, **Chandrama P. Upadhyaya**, S K. Pandey, K E Young, S W Park **(2010)** Molecular approaches for enhancing sweetness in fruits and vegetables. **Scientia Horticulturae**127 (2010) 1–15**)** (**I F 1.51**) (Corresponding author)

41. N S Survay, **Chandrama P. Upadhyaya,** B Kumar and S W Park **(2010)** Characterization of a cinnamoyl derivative from broccoli (*Brassica oleracea* L. var. italica) florets. **Fitoterapia** 81;1062–1066 (**I F 2.4**)

42. N S Survay, **Chandrama Prakash Upadhyaya**, B Kumar, and S-W Park **(2010)** "New Genera of Flavonols and Flavonol Derivatives as Therapeutic Molecules" **J. Korean Soc. Appl. Biol. Chem.** 54(1), 1-18 (**I F 1.1**)

43. N.S. Survay, E Y Ko, **Chandrama P. Upadhyay**, D Y Yoon, Y S Jung and S W Park **(2010)** Hypoglycemic effects of fruits and vegetables in hyperglycemic rats for prevention of type-2 diabetes. **Kor. J. Hort. Sci. Technol**. 28(5):850-856, 2010 (**IF 0.42**)

44. **Chandrama P. Upadhyaya**, M A. Gururani, Se-Won Park **(2010)** Investigating the Role of 33kDa Oxygen Evolving Complex Protein in *in vitro* Potato tuberization. **K Journal** of J**ournal of Life and Environmental sciences,** 122 (2): 42-49.

45. Nazneen S, **Chandrama P Upadhyaya,** and S W Park **(2010)** High Performance Liquid Chromatography and Tandem Mass Spectrometry Coupled with ESI for Identification and Quantification of Intact Glucosinolates from Broccoli. **K Journal of Life and Environmental sciences,** 122 (1): 11-16.

46. A. Nookaraju, **Chandrama Prakash Upadhyaya** and Se Won Park (2010) *In vitro* Tuberization of Potato as Influenced by Plant Growth Promoting Rhizobacteria. **K Journal Journal of Life and Environmental sciences,** 122 (1): 32-38.

47. Hemavathi, **Chandrama Prakash Upadhyaya**, K E Young, N Akula, Se Won Park **(2009)**"Over-expression of strawberry D-galacturonic acid reductase in potato leads to accumulation of vitamin C with enhanced abiotic stress tolerance. **Plant Science** (177), 659-677 (**I F 4.8)** (Corresponding author)

48. **Chandrama P. Upadhyaya**, M A. Gururani and Se-Won Park (2009) "Generation of Marker free transgenic potato (*Solanum tuberosum*) with enhanced alfa tocopherol (Vit E) production through metabolic engineering" **K Journal of Life and Environmental sciences,** 121 (2): 41-46.

49. **Chandrama P. Upadhyay**, P. Bhomkar**,** M Saxena, N. Prakash M Pooggin, T Hohn and N B. Sarin, **(2008)** "Salt stress alleviation in transgenic *Vigna mungo* L. Hepper (blackgram) by overexpression of the *glyoxalase I* gene using a novel *Cestrum* yellow leaf curling virus (CmYLCV) promoter". **Molecular Breeding** 22 (2), 169-181. I F 3.6; (First author)

Books:

1. Recent Developments in Microbial Technologies (2020) Springer ISBN: ISBN: 978-981-15-4439-2
2. PGPR association with transgenic plants (**2015**), Anchor Academic Publishing, Hamburg, Germany.
3. Biotechnological approach for improvement of abiotic stress tolerance in blackgram (**2011**): Lap-Lambert Academic Publisher, Germany.

Book Chapters:

1. A Verma**, C. P. Upadhyaya** et al, Chapter Title: Role of *P indica* fungus in tuberization of potato**,** In Edited Book: Mycota 9 (2011) by AjitVerma and Roulf Oullmer , Springer-Verlag.
2. Prasad R, Kumar A, **Upadhyaya CP**, and Varma A (2012) Biotechnology: A global scenario. In: Environment and Biotechnology (Prasad Rand Kumar A) LAP LAMBERT Academic Publishing, Germany pp. 1-22
3. R Prasad, **Chandrama P Upadhyaya**, M Kumar, and A Varma **(2015)** Evolutionary History of Microbiology (ed. Prasad R), IK International, New Delhi, India 1-10.
4. **Chandrama Prakash Upadhyaya** and Mohammad A H**(2016)** Transgenic Plants for Higher Antioxidant Content and Drought Stress Tolerance. **M.A. Hossain et al. (Springer eds.), Drought Stress Tolerance in Plants, Volume 2**, (DOI 10.1007/978-3-319-32423-4_17).
5. Devanshi C U and **Chandrama Prakash Upadhyaya (2017**) Bioactive Compounds and Medicinal Importance of *Litchi chinensis* 333-336 In Manoj Kumar et al (Springer Nature eds.) The Lychee Biotechnology, **ISBN 978-981-10-3643-9**, DOI 10.1007/978-981-10-3644-6.
6. **Chandrama P Upadhyay**a, Deepak S B and Devanshi C U **(2018)** Genetically modified potatoes as a source of novel carbohydrates. In. Mustafa Yildiz (**Intech eds USA**) Potato (*Solanum Tuberosum*),
   ISBN 978-953-51-3566-1.
7. Ram Prasad, N Gupta, **Chandrama P Upadhyaya**, A Singh (**2018**) Applications of Silver Nanoparticles in Plant Protection Kamel Ahmed Abd-Elsalam, R. Prasad (eds.), Nanobiotechnology Applications in Plant Protection, Nanotechnology in the Life Sciences,

Springer Nature 2018

8. **Chandrama Prakash Upadhyaya**, Deepak Singh Bagri (2021) Biotechnological Approaches for Nutritional Improvement in Potato (*Solanum tuberosum* L.). S K Upadhyaya (Eds): Genome editing for crop improvement. Willy Science ISBN:978111967242
9. A. Pathak and **Chandrama P. Upadhyaya** (**2021)** A Brief Insight on the Role of Various Phytohormones in Potato (*Solanum tuberosum L*) Tuber Development. Shamsul Hayat et al. (Eds): Salicylic Acid - A Versatile Plant Growth Regulator

Abstracts /Oral/Poster/Full paper proceedings published in recognized National & International conferences/Seminar:

1. P. Bhomkar, S.D. Roy, **Chandrama P. Upadhyaya**, Mikhail pooggin, Thomas Hohn and Neera Bhalla Sarin (2004) "Transformation of *Vigna mungo* (blackgram) for abiotic stress tolerance using marker free approach In: Proceedings, 4th Int. Crop Science Congress, Brisbane, Australia (Available online)
2. Neera Sarin, **Chandrama P. Upadhyay**, Bhalla-Sarin, N, M Pooggin and Thomas Hohn (2005) Development of salt tolerant marker free transgenics of *Vigna mungo*. 4th International Food Legume Research Conference, IARI, New Delhi, October 18- 22. (Available online).
3. Ravi Rajwanshi, **Chandrama P. Upadhyay**, P. Bhomkar, and Neera Bhalla Sarin (2006) Antibiotic marker free approach for obtaining salt stress tolerant *Vigna mungo*" at the International conference organized by Society for *In vitro* biology" at Minneapolis, Minnesota, USA in June 2006.
4. **Chandrama P. Upadhyay**, P. Bhomkar, M. Saxena, Ravi Rajwanshi, Nisha Kant, Deepak Kumar,M.Pooggin, T.Hohn and N.B. Sarin. Development and evaluation of transgenic Blackgram (*Vignamungo*) for salt stress tolerance by overexpression of the *glyoxalase I* gene. *International Meeting on Biotic and Abiotic Stress Responses in Plants*, I.C.G.E.B., New Delhi, India, (2006) P-44.
5. Neera Bhalla Sarin, **C.P. Upadhyay**, P. Bhomkar, Nishakant, N. Shiva Prakask, M. Pooggin and Thomas Hohn (2007) "Developing salt stress tolerance in the legume *Vigna mungo* (Blackgram) using the transgenic approach" at the "International Conference on Stress Biology" at Greece (Athens) in August 2007.
6. Neera Sarin, **Chandrama P. Upadhyaya**, Prasanna Bhomkar, Ravi Rajwanshi, Suchandra Deb Roy, Nishakant Pandey, Mikhail Pooggin and Thomas Hohn. Stress Tolerance and Value addition in Brassica juncea and Vigna mungo through Transgenic approach. *5th International Crop Science Congress &Exhibition*, (2008) p.p.-202-203.
7. Neera Bhalla Sarin, **C.P.Upadhyaya**, P.Bhomkar, R.Rajwanshi, Nishakant Pandey, N. Shiva Prakash, Mikhail Pooggin and Thomas Hohn. Developing salt stress tolerance in the legume *Vigna mungo* (Blackgram) using the transgenic approach. 3rd cell stress society international congress on stress responses in biology and medicine and 2nd world conference of stress, Budapest, Hungary, (2007) p.p.-222.
8. **Chandrama P. Upadhyay**, Nookaraju A, Mayank A G and Se-Won Park," Molecular and biochemical analysis of the proteins for abiotic stress tolerance in transgenic potato tubers overexpressing *GalUR* gene" at the Federation of European Society of Plant Biology, at Velencia, Spain 2010.
9. **Chandrama P. Upadhyaya (2012)** Presented a oral talk on the topic entitled, "Metabolic enginnering of vitamin C Pathway: Biofortification of potato" at National Symposium on Plant Biology and its role in sustainable agriculture, March 17-18, 2012, at department of Botany, GGU, Bilaspur, C.G.
10. **Dr C P Upadhyaya (2013)** delivered an invited talk in the National Seminar on Stress, development and adaptation: Biochemical ad Biotechnological Adoptations, Department of Biochemistry, Lucknow University from March 15-16, 2013.
11. Deepak Singh Bagri**,** Baby Anuragi, Teena Rahangdale, Satendra P. Singh, Jitendra k. Nirankar & **Chandrama Prakash Upadhyay**, (2014) Epibrassinolide protects pepper plants from salinity, drought and zinc toxicity through enhancing the levels of proline, ndogenous hormones and antioxidant potential, **International Conference** on "Frontiers discoveries and emerging apportunities in life science" organised by Department of Biotechnology, Dr. H S Gour Central University, **Sagar, M.P. from Feb 13 to 15, 2014.**
12. Deepak Singh Bagri**,Chandrama P. Upadhyay**& Park Se Won (2014) Metabolic Engineering of ascorbic acid pathway gene in potato (Solanum Tuberosum) for protection against active oxygen species, **International Conference** on "Frontiers discoveries and emerging apportunities in life science" organised by Department of Biotechnology, Dr. H S Gour Central University, **Sagar, M.P. from Feb 13 to 15, 2014.**

13. Chandrama Prakash Upadhyaya (2014) key note address talk on the topic , "Genetic Engineering of potato (Solanum tuberosum) for enhanced vitamin C accumulation". At National Seminar on Role of green technology in agriculture, horticulture and forestry from 26-27 Feb 2014 Organized by Govt autonomous Gorls PG College, Sagar. M.P.
14. Deepak Singh Bagri and **Chandrama Prakash Upadhyaya** (2014) Molecular insights on the role of Plant Growth Promoting Rhizobacteria (PGPR) in potato (*Solanum tuberosum*) tuberization and abiotic stress tolerance", **Full paper preceding** in current trends and future challenges in Biotechnology & Biomedicine for human welfare and sustainable development, organized by Govy. New Science College Rewa, M.P., India, ISBN-978-81-928063-6.5
15. **Dr Chandrama Prakash Upadhyaya** (**2014**) Delivered a lecture to the participants in the Hand's on Training Program on Microbial Biotechnology organized by department of Applied Microbiology, Dr H S Gour University from 20th jan – 3rd Fe 2014.
16. **Dr Chandrama P. Upadhyaya (2014)** Invited talk on the topic "Metabolic Engineering of potato for vitamin C accumulation" at Indo-Italian Workshop on Food Technology & Cold Chain management at Amity University, Noida.
17. **Chandrama P. Upadhyaya (2015)** Oral talk on the topic Protection of abiotic stress and heavy metal stress using genetic engineering approach at National Conference on Evolving Trends in Biotechnology, organised by Department of Biotechnology (ISCA – Sagar chapter), Dr. H S Gour Central University, Sagar, M.P., 28 - 30 March 2015
18. Deepak Singh Bagri and **Chandrama Prakash Upadhyaya** (2015) Protection of growth via antioxidants and endogenous hormones maintenance in response to 24-epibrassinolide in tomato (*Lycopersicon esculentum*L) growing under salt, drought and heavy metal stress, In National conference on Evolving trends in Biotechnology, organised by Department of Biotechnology (ISCA – Sagar chapter), Dr. H S Gour Central University, Sagar, M.P., 28 -30 March 2015.
19. Deepak Singh Bagri, **Chandrama Prakash Upadhyay** (2015) Protection of growth via antioxidants and endogenous hormones maintenance in response to 24-epibrassinolide in tomato (*Lycopersicon esculentum*L) growing under salt, drought and heavy metal stress, National Symposium on Horizons of light in molecules, materials and daily life, Dece. 18-19, 2015, Department of Chemistry, Dr. H S Gour Central University Saga, M.P.
20. Deepak Singh Bagri, **Chandrama Prakash Upadhyay** (2015) Protection of growth via antioxidants and endogenous hormones maintenance in response to 24-epibrassinolide in tomato (*Solanum Lycopersicum*) growing under salt, drought and heavy metal stress, **3dr International plant physiology congress**, held at New Delhi, India from 11 to 14 Dec. 2015.
21. Devanshi Chandel Upadhyay, Abhishek Kumar, Deepak Singh Bagri and **Chandrama Prakash Upadhyaya** (2015) Calcium regulates tuberization in potato through enhanced expression of CaM, StCDPK and LOX genes, **3dr International plant physiology congress**, held at New Delhi, India from 11 to 14 Dec. 2015.
22. **Chandrama Prakash Upadhyaya** and Se Won Park (2015) Abiotic stress tolerance in transgenic potato with reduced expression of PSII manganese stabilizing protein, **3dr International plant physiology congres**s, held at New Delhi, India from 11 to 14 Dec. 2015.
23. **Dr Chandrama P. Upadhyaya (2016)** Invited talk at national Seminar on Plants, Microbes and Environment: Interaction, Challenges and remedies, Organized by Department of Botany, Dr H S Gour University, Sagar from 20-21 Feb 2016.
24. **Chandrama Prakash Upadhyaya (2016)** Presented a poster on the topic, "Plant growth promoting rhizobacteria enhancing potato tuberization and environmental stress tolerance: "A novel strategy for organic potato farming", as a science communicator at 103rd Indian Science Congress Association, Mysore, 3-7 Jna. 2016.
25. **Chandrama Prakash Upadhyaya(2016)** Invited oral talk on the topic "Transgenic potato (*Solanum tuberosum*) with reduced expression of PSII complex resisted an increase in Methylglyoxal under different abiotic stresses" in the national conference of plant physiology held on 8-10 Dec 2016 at GKVK, Bangalore.
26. Deepak Singh Bagri, Devenshi Chandel Upadhaya, Neha Joshi And **Chandrama Prakash Upadhyaya (2016)** "Simple and flexible method of multiple genes cloning for gene pyramiding into binary vectors" in the National seminar on science and technology for national development (the Indian science congress association Sagar chapter at Dr. Harisingh Gour University, Sagar M.P. "September 23-24, 2016
27. Neha Joshi, Deepak Singh Bagri and **Chandrama Prakash Upadhyaya (2016)** "Importance of L-ascorbate in augmenting abiotic stresses in crop plants" in the **National seminar on science and technology for**

national development (the Indian science congress association Sagar chapter at Dr. Harisingh Gour University, Sagar M.P. "September 23-24, 2016

28. **Chandrama P Upadhyaya (2016)** Invited talk on the topic, Green Revolution in India; Changing the tradition of agriculture, at Science Fair and National Science Day celebration- 2016, organizeg by Dr H S Gour University, Sagar.

29. **Chandrama Prakash Upadhyaya(2017)** Invited talk on the topic Isolation and molecular identification of plant growth promoting rhizobacteria influencing potato tuberization at the National seminar on digitization of biodiversity using DNA barcodes organized by Department of Zoology, Dr Harisingh Gour Vishwavidyalaya, Sagar from 12th Feb 2017.
30. **Chandrama Prakash Upadhyaya(2017)** invited talk on the topic entitled, "Metabolic engineering of potato crop with enhanced vitamin content" in the National Workshop on "Recent Advances in Genomics and Bioinformatics for Genome Analysis" organized by Department of Biotechnology, Faculty of Life Sciences, AKS University, Satna (M.P.) form 20-26 March, 2017.
31. **Chandrama Prakash Upadhyaya (2017) Invited talk on the topic entitled, "**Plant Growth-Promoting Rhizobacteria Enhanced Abiotic Stress Tolerance in Potato (*Solanum tuberosum*) Through Improved Photosynthetic Performance" in the **National Seminar on Microbes and Human Welfare organized by** School of Life Sciences, Jaipur National University, Jaipur from **23-25 September, 2017**
32. Neha Joshi**,** Deepak Singh Bagri and **Chandrama Prakash Upadhyaya** "Genetic engineering of transgenic potato (*solanum tuberosum* L) for biotic and abiotic stress tolerance." In the National seminar on digitization of biodiversity using DNA Barcodes at Department of Zoology, Dr. Harisingh Gour University, sagar M.P. Feb 10, 2017

33. Neha JoshiAbhishek Pathak, **Chandrama Prakash Upadhyaya**, Jai Singh (2017) "Antibacterial activity of biologically synthesized silver nanoparticals" in the 58th annual confereance of association of microbiologists of India (AMI-2017) & international symposium on Microbial for sustainable development: scope & applications (MSDSA-2017) at Baba Bhim Rav Ambetkar University Central University Lucknow , Lucknow, November 16-19, 2017
34. Abhishek Pathak**,** Neha Joshi, **Chandrama Prakash Upadhyaya**, Jai Singh (2017) "Efficient method for biosynthesis of silver nanoparticles with enhance antimicrobial activity using the *Carissa carandas* (Karonda) aqueous extract" in the international conference on functional biological and molecular interactions: application in health and agriculture (FBMI 2017) at department of biochemistry, university of Lucknow, Lucknow, Dec. 19 – 23, 2017
35. Robin Kumar Pundir, Abhishek Pathak, Neha Joshi and **Chandrama Prakash Upadhyaya (2017**) "Physiological and biochemical investigations on different spectra of light on growth and development of potato (*Solanum tuberosum L*)" in the international conference on functional biological and molecular interactions: application in health and agriculture (FBMI 2017) at department of biochemistry, university of Lucknow, Lucknow, Dec. 19 – 23, 2017
36. **Chandama Prakash Upadhyaya** (2017) Invited Talk on the topic Genetic Engineering of potato for abiotic stress tolerance at international conference on functional biological and molecular interactions: application in health and agriculture (FBMI 2017) at department of biochemistry, university of Lucknow, Lucknow, Dec. 19 – 23, 2017
37. **Chandrama Prakash Upadhyaya** (2017) Oral talk at the National Conference of Plant Physiology, Organized by Indira Gandhi Krisi Vishwavidyalaya Raipur and IIPP, new Delhi from 23-25 Nov 2017.

38. Deepak Singh Bagri**,** Devenshi Chandel Upadhaya, and **Chandrama Prakash Upadhyaya (2018)** "Overexpression of pyridoxine in potato (*solanum tuberosum)* leads to the higher accumulation of vitamin B6 content" in the Conference name- 6th international conference on pollution and it's agriculture, pharmacy, science and technology" at Swami Vivekananda University Sagar (M.P.), Feb 27-28 2018
39. Neha JoshiAbhishek Pathak, **Chandrama Prakash Upadhyaya**, Jai Singh (2018) "Impact of biologically synthesized Nanoparticals on growth and physiological response in Potato (*Solanum tuberosum L*) Development."in theConference name- 6th international conference on pollution and it's agriculture, pharmacy, science and technology" at Swami Vivekananda University Sagar, Feb 27-28 2018
40. Robin Kumar Pundir, Abhishek Pathak, Neha Joshi and **Chandrama Prakash Upadhyaya (2018)** "Effect of different spectra of LED lights on growth and development of potato (*Solanum tuberosum L.*)"in

theConference name- 6th international conference on pollution and it's agriculture, pharmacy, science and technology" at Swami Vivekananda University Sagar, (M.P.), Feb 27-28 2018

41. Deepak Singh Bagri, Devanshi Chandel Upadhyaya and **Chandrama Prakash Upadhyaya (2018)** Genetic engineering of potato (*Solanum tuberosum* L) for enhanced accumulation of vitamin B6 and abiotic stress tolerance" Paper presentation at 4th International Plant Physiology Congress held at Lucknow from 2nd to 5th Dec 2018.
42. Deepak Singh Bagri and **Chandrama Prakash Upadhyaya (2019)** Genetic engineering of potato (*Solanum tuberosum* L.) for enhanced vitamin B6 and α–tocopherols accumulation overexpressing the pyridoxine gene. Invited talk at International Conference on Trends in Plant Science & Agrobiotechnology held at IIT, Guwahati from Feb 14th to Feb 16, 2019.
43. **Chandrama Prakash Upadhyaya (2019)** Genetic engineering of blackgram (*Vigna mungo* L.) for enhanced abiotic stress tolerance using the glyoxalase system. Invited talk at Wallop of Globalization in Engg-Medi-Sci-Agri-Pharm-Tech Research, SVN University, Sagar from 27-28th Feb 2019.
44. Neha Joshi, Abshishek Pathak and **Chandrama Prakash Upadhyaya (2019)** Green synthesis nanoparticles using plant parts and its potential antibacterial activities. Keynote speaker at International Conference on Advances and Innovations in Biotechnology for Sustainable Development het at AKS University, Satna from 5-7 April 2019.

Departmental level course/ seminar/ workshop Organized:

1. Organized DBT Sponsored National workshop on NGS and RT-PCR from 21-25th Oct 2024.
2. Organized DBT sponsored National level Workshop on Tools and Techniques in Molecular Biology from 19-25 Jan 2023.
3. Organized a national workshop on molecular biology, Theory and practice organised by Department of Biotechnology, Dr. H S Gour Central University, Sagar, 21-27 Feb. **2018**.
4. Organized the MHRD approved GIAN course as a course coordinator on the topic Molecular Virology: Biotechnology tools controlling viral diseases from 14th – 20th November**, 2016.**
5. Science Academies Lecture workshop on Scope of Medical Biotechnology organised by Department of Biotechnology, Dr. H S Gour Central University, Sagar, 21 & 22 Jan. **2016**.
6. Organized Science Fair & National Science Day Celebration -2016 as Additional Secretary, at Dr H S Gour University, sagar, M.P.
7. DST purse sponsored workshop on DNA Sequencer & Real Time PCR, organised by Department of Biotechnology, Dr. H S Gour Central University, Sagar, 17 & 18 Sept. **2015**.
8. Summer school in Biotechnology organized by Department of Biotechnology, Dr. H S Gour Central University, Sagar, 18 & 29 May 2015.
9. Organized as organizing secretary the international conference (FDEOLS-2014), Department of Biotechnology, Dr H S Gour Central University from 14th Feb 2014 to 16th feb 2014.

Dr Chandrama Prakash Upadhyay

c.p.upadhyay