**Curriculum vitae**



1. Name and full correspondence address : **Dr. Gaurab Gangopadhyay**

Professor

Division of Plant Biology

Bose Institute

(Unified Academic Campus)

EN 80, Sector V, Bidhan Nagar

Kolkata – 700091

2. Email(s) and contact number(s) : [gaurabgangopadhyay@gmail.com](mailto:gaurabgangopadhyay@gmail.com)

918902781646

3. Institution : Bose Institute, Kolkata

4. Date of Birth : 24.07.1966

5. Gender (M/F/T) : M

6. Category Gen/SC/ST/OBC : Gen

7. Whether differently abled (Yes/No) : No

8. Academic Qualification (Undergraduate Onwards)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Degree | Year | Subject | University/Institution | % of marks |
| 1. B.Sc. | 1986 | Botany (Hons.) | Presidency College/ University of Calcutta | 61.3 |
| 2. M.Sc. | 1988 (result in 1989) | Botany | University of Calcutta | 63.6 |
| 3. Ph.D. | 1997 | Science (Botany) | University of Calcutta | - |

9. Ph. D thesis title, Guide’s Name, Institute/Organization/University, Year of Award:

*In vitro* studies on salt and water stresses in *Nicotiana tabacum* L. var. Jayasri and *Brassica juncea* (L) Czern. Var. 85-59

Professor Sukumar Gupta

Bose Institute, degree under University of Calcutta

Date of submission: 15.12.1995, Date of award: 20.09.1997

10. Work experience (in chronological order):

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S.No. | Positions  held | Name of the  Institute | From | To | Pay Scale |
| 1 | Assistant Professor | Bose Institute | 23.06.2008 | 22.06.2012 | Rs. 15,600-39,100 GP Rs. 7,600/- |
| 2 | Associate Professor | Bose Institute | 23.06.2012 | 31.12.2018 | Rs. 37,400-67,000 GP Rs. 8,700/- |
| 3 | Professor | Bose Institute | 01.01.2019 | Till date | Matrix pay – Level 13A Rs. 1,47,600/- |

11. Professional Recognition/ Award/ Prize/ Certificate, Fellowship received by the applicant:

|  |  |  |  |
| --- | --- | --- | --- |
| S.No | Name of Award | Awarding Agency | Year |
| 1 | Research Associateship (Ad hoc) | CSIR | 1999 |

12. Publications: **Total 83** as on 10.09.2022

**The list of significant publications for the last ten years**

**(With Impact Factors of 2021-22):**

1. Dutta D, Harper A and Gangopadhyay G 2022. Transcriptomic analysis of high oil‑yielding cultivated white sesame and low oil‑yielding wild black sesame seeds reveal differentially expressed genes for oil and seed coat colour. Nucleus (Published online on 04.05.2022. <https://doi.org/10.1007/s13237-022-00389-0>) (Impact Factor – 0.565)
2. Pal S, and Gangopadhyay G 2022. Expression and *in silico* analysis of the pineapple *SERK* gene homologues during *in vitro* regeneration and induced *Fusarium* infection. Vegetos (Published online on 18 February 2022. <https://doi.org/10.1007/s42535-022-00350-1>) (Impact Factor – 1.34)789
3. Dutta D, Banerjee S, Pal M and Gangopadhyay G 2022. Validation of determinate (*dt*) gene-based DNA marker in inter-specific hybrid sesame and *in-silico* analysis of the predicted dt protein structures. Physiology and Molecular Biology of Plants (Published online on 31 January 2022. <https://doi.org/10.1007/s12298-022-01135-1>) (Impact Factor – 3.023)
4. Datta D, Prasad R and Gangopadhyay G 2022. Inter‑specific hybrid sesame with high lignan content in oil reveals increased expression of *sesamin synthase* gene. Nucleus 65:7–18 (Published online 19 May, 2021. <https://doi.org/10.1007/s13237-021-00354-3>) (Impact Factor – 0.565)
5. Kumar D, Laha S and Gangopadhyay G 2021. *In silico* and expression analysis of Δ1-pyrroline-5-carboxylate synthetase in rice seedlings under NaCl stress. Research Journal of Biotechnology 16 (5): 31-40 (Impact Factor – 0.454)789
6. Sengupta S, Bhattacharya S, Karmakar A, Ghosh S, Sarkar S N, Gangopadhyay G, Datta K and Datta SK 2021. RNAi-mediated down-regulation of *ITPK-2* enhanced inorganic phosphorus and minerals in the transgenic rice. Journal of Biosciences 46:32 (<https://doi.org/10.1007/s12038-021-00154-6>) (Impact Factor – 2.712)789
7. Datta D, Awon VK and Gangopadhyay G (2021) Amino acid substitution in the conserved motifs of a hypothetical R-protein in sesame imparts a significant effect on ADP binding position and hydrogen bond interaction. Physiological and Molecular Plant Pathology 113: 101588 (<https://doi.org/10.1016/j.pmpp.2020.101588>) (Impact Factor – 2.747)789
8. Datta D, Awon VK and Gangopadhyay G (2020) Transcriptomic dataset of cultivated (*Sesamum indicum*), wild (*S. mulayanum*), and inter-specific hybrid sesame in response to induced *Macrophomina phaseolina* infection. Data in Brief 33: 106448 (<https://doi.org/10.1016/j.dib.2020.106448>) (Impact Factor – 1.13)789
9. Sultana M and Gangopadhyay G (2020) *In silico* structural analysis and ligand-binding predictions of a few developmental stage-specific proteins during *in vitro* morphogenesis in *Vanilla*. Vegetos 33:570-579 (<https://doi.org/10.1007/s42535-020-00140-7>) Published online 15.07.2020 (Impact Factor – 1.34)789

1. Bhattacharya S, Sengupta S, Karmakar A, Sarkar SN, **Gangopadhyay G**, Datta K and Datta SK **2019**. Genetically engineered rice with *appA* gene enhanced phosphorus and minerals. **Journal of Plant Biochemistry and Biotechnology** (<https://doi.org/10.1007/s13562-019-00505-3>) **(Impact Factor – 1.525)**789
2. Laha S, Kumar D, Sengupta DN and **Gangopadhyay G** **2019**. *In silico* characterization of *SAMdC* from Pokkali rice and its over-expression in transgenic tobacco. **Vegetos** (Springer) (<https://doi.org/10.1007/s42535-019-00019-2>) **(Impact Factor –** 1.34**)**
3. Bose. S., **Gangopadhyay, G.** and Sikdar, S.R. **2019**. *Rorippa indica* *HSPRO2* expression in transgenic *Brassica juncea* induces tolerance against mustard aphid *Lipaphis erysimi*. **Plant Cell Tissue and Organ Culture** 136: 431 – 443 (online version <https://doi.org/10.1007/s11240-018-1524-4>) **(Impact Factor – 2.711)**
4. Bose. S., **Gangopadhyay, G.** and Sikdar, S.R. **2018**. RiHSPRO2, a nematode resistance protein-like homolog from a wild crucifer *Rorippa indica* (L.) Hiern, is a promising candidate to control mustard aphid *Lipaphis erysimi*. **Arthropod-Plant Interactions** 12:701–714 (online version <https://doi.org/10.1007/s11829-018-9615-z>) **(Impact Factor – 1.988)**
5. Sultana, M. and **Gangopadhyay, G. 2018**. Early expression of WUSCHEL is a marker for *in vitro* shoot morphogenesis in tobacco and *Beta palonga*. **Plant Cell Tissue and Organ Culture** 134: 277 – 288 (online version <https://doi.org/10.1007/s11240-018-1421-x>) **(Impact Factor – 2.711)**
6. Arora, V., Ghosh, M.K., Singh, P. and **Gangopadhyay, G. 2018**. Light regulation of nitrate reductase gene expression and enzyme activity in the leaves of mulberry. **Indian Journal of Biochemistry and Biophysics** 55: 62-66. **(Impact Factor – 1.476)**
7. Debnath, A.J., **Gangopadhyay, G**., Basu, D. and Sikdar, S.R. **2018**. An efficient protocol for *in vitro* organogenesis of *Sesamum indicum* L. using cotyledon as explants. **3 Biotech** 8:146 ( <https://doi.org/10.1007/s13205-018-1173-7> ) **(Impact Factor – 2.406)**
8. Arora, V., Ghosh, M.K., Pal, S. and **Gangopadhyay, G**. **2017**. Allele specific CAPS marker development and characterization of chalcone synthase gene in Indian mulberry (*Morus* spp., family Moraceae). **PLOS ONE** June 22, 2017 <https://doi.org/10.1371/journal.pone.0179189> **(Impact Factor – 3.752)**
9. Arora, V., Sultana, M., Kumar, V. and **Gangopadhyay**, **G**. **2017**. Isolation and characterization of BADH2 gene from *in vitro* propagated *Pandanus amaryllifolius* Roxb. Plant Cell Tissue and Organ Culture (online version DOI 10.1007/s11240-017-1209-4). **(Impact Factor – 2.711)**
10. Prasad, R. and Gangopadhyay, G. 2014. Selection of prospective parents among Indian and exotic Sesame (Sesamum indicum L.) for Marker Assisted Breeding. Indian Journal of Genetics and Plant Breeding 74(2): 197-204. (Impact Factor – 0.771)
11. Prasad, R., Mukherjee, K.K. and Gangopadhyay, G. 2013. Image analysis based on seed phenomics in Sesame. Plant Breeding and Seed Science 68: 119-136. (DOI: 10.2478/v10129-011-0085-z)

13. Detail of patents.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| S.No | Patent Title | Name of Applicant(s) | Patent No. | Award Date | Agency/Country | Status |
| 1 | Downstream processing in micropropagation | Gangopadhyay, G. et al. | 770/Cal/99 dtd. 09.09.99 |  | India |  |

14. Submissions to GenBank, NCBI database: Total 89 as on 24.01.2021

15. Present funded project: 1

Project entitled “Development of transgenic pineapple over-expressing AcSERK to combat fungal pathogens” funded by Department of Biotechnology, Govt of West Bengal (Memo No. 43(Sanc) – BT/ST/P/S&T/2G-32/2017 dtd 16.02.2018)

16. Reviewer of the following Journals (**Last five years**):

1. In Vitro Cellular & Developmental Biology – Plant (July 2017)
2. Trends in Phytochemical Research (August 2017)
3. Acta Physiologiae Plantarum (November 2017)
4. BioMed Research International (March 2018)
5. African Journal of Biotechnology (March 2018)
6. The Nucleus (March 2018)
7. Journal of Plant Science and Research (March 2018)
8. African Journal of Agricultural Research (March 2018)
9. The Nucleus (June 2018)
10. PLOS ONE (December 2018)
11. The Nucleus (February 2019)
12. Indian Journal of Genetics and Plant Breeding (February 2019)
13. 3 Biotech (October 2019)
14. Applied Biological Research (March 2020)
15. Genetic Resources and Crop Evolution (March 2020)
16. Proceedings of the Indian National Science Academy (July 2020)
17. African Journal of Agricultural Research (July 2020)
18. 3 Biotech (August 2020)
19. African Journal of Agricultural Research (August 2020)
20. Hort Science (September 2020)
21. BMC Genomics (September 2020)
22. Journal of Plant Breeding and Crop Science (September 2020)
23. Hort Science (October 2020)
24. The Nucleus (November 2020)
25. Planta Medica (December 2020)
26. BMC Plant Biology (December 2020)
27. BIOCELL (January 2021)
28. PROTOPLASMA (December 2021)
29. PROTOPLASMA (January 2022)
30. 3 Biotech (April 2022)

18. Reviewer of Project Proposal

1. Kerala State Council for Science, Technology and Environment (Young Investigators Programme in Biotechnology) – Name of Project: Development of water stress tolerant banana plantlets through *in vitro* selection (Reference No. 02/YIPB/KBC/2010/CSTE)
2. Kerala Biotechnology Commission – Name of Project: Community Agriculture Resource Center (CARC) (Reference No. 008/KBC/CARC/2012/CSTE) – March 2012
3. Kerala State Council for Science, Technology and Environment - Name of Project: Improvement of *Stevia rebaudiana* by *in vitro* mutagenesis and allele mining (Reference No. 019/SRSLS/2012/CSTE dtd. 26th April 2013) – May 2013.
4. Kerala State Council for Science, Technology and Environment - Name of Project: Hairy root culture of *Gymnema sylvestre* and *Tylophora indica* for enhanced production of pharmaceutical compounds (Reference No. 031/SRSLS/2013/CSTE dtd. 24th January 2014) – February 2014.
5. Kerala State Council for Science, Technology and Environment - Name of Project: “Characterization of key structural genes involved in flavonoid synthesis in Indian Gooseberry (*Emblica officinalis* Gaertn)” (Reference No. 015/SRSLS/2013/CSTE) – April 2014.
6. Kerala State Council for Science, Technology and Environment - Name of Project: “Systematic studies on the bryophytes of Peechi-Vazhani Wildlife Sanctuary in Thrissur district, Kerala” (Reference No. 031/SRSLS/2014/CSTE dtd. 20th March 2015) – April 2015.
7. Evaluated the Final Technical Report of Science Research Scheme (SRS) Kerala State Council for Science, Technology and Environment (KSCSTE) on 20.12.2019.
8. Evaluated the KSCSTE project proposal entitled “Process development for bio-ethanol from Kerala’s Banana/Plantain agro-residues” on 03.09.2022.

