# **Curriculum Vitae**

- Name: Dr. Susmita Das
- Designation: Visiting Scientist
- Affiliation: Agricultural and Ecological Research Unit (AERU), Indian Statistical Institute (ISI), Kolkata, India
- Addresses: **Work:** Plot No, 203, Barrackpore Trunk Rd, Dunlop, Bonhooghly Government Colony, Baranagar, Kolkata, West Bengal 700108

Residence: 180/A Jessore Road Patipukur Tatultala Kolkata – 700089

- Contact No.: (+91) 9433636271
- Emails: das.susmita508@gmail.com; sdbot\_rs@caluniv.ac.in
- Date of birth: 5<sup>th</sup> August, 1989
- Nationality/Citizenship: Indian

### **Educational Qualification:**

Examinations passed	Year	Subjects	Name of School/ college	Name of Board/University	Marks obtained	Division/ Class
Ph.D.	2022	Botany (Plant Physiology & Biochemistry with special emphasis on Stress Physiology)	University of Calcutta	University of Calcutta	NA	Thesis awarded
M.Sc.	2013	Botany (Spcl Advanced Plant Physiology, Biochemistry & Plant Molecular Biology)	West Bengal State University	West Bengal State University	76.55%	1 <sup>st</sup> class Rank 1 <sup>st</sup>
B.Sc. (Hons.)	2011	Botany (Honours) Chemistry, Zoology Environmental Science	East Calcutta Girls' College	West Bengal State University (WBSU)	56.50%	2 <sup>nd</sup> Div.
Higher Secondary Examination	2008	Biological Science, Chemistry, Physics, Mathematics, Environmental Science	Krishnapur Adarsha Vidyamandir	West Bengal Council Of Higher Secondary Education (WBCHSE)	64%	1 <sup>st</sup> Div.
Madhyamik/ Secondary Examination	2006	Bengali, English, Mathematics, Physical science, Life science, History, Geography, Biology (Additional)	Sree Ramkrishna Sarada Sangha Balika Vidyalaya	West Bengal Board Of Secondary Education (WBBSE)	73.38%	1 <sup>st</sup> Div.

#### **Examination qualified (others):**

Research Eligibility Test (RET), University of Calcutta, 2014.

#### Fellowship achieved:

DST-INSPIRE Fellowship, Department of Science & Technology, New Delhi, Govt. of India, 2015.

#### Recognition

Recognized as Reviewer of the journal - International Journal of Basic and Applied Sciences.

# Ph.D thesis title, Guide's Name, Institute/Organization/University, Year of Award.

- **Ph.D. Thesis title**: Studies on arsenic induced toxicity in growth and metabolism in Rice (*Oryza sativa* L.) and its possible amelioration by selenium and silicon.
- Guide's Name: Prof. Asok Kumar Biswas (retd.)

- Institute/Organization/University: Department of Botany, University of Calcutta, India
- Year: 27<sup>th</sup> May 2022.

# **Research Experiences:**

- 2021-Present: Research work on arsenic induced toxicity in rice (*Oryza sativa L.*) based on growth, metabolism and productivity and identification of soil microbes present in arsenic contaminated soil of West Bengal. During this period, I have trained two interns worked under different research topics related to soil microbiology from the Maulana Abul Kalam Azad University of Technology (MAKAUT), West Bengal. And two other interns from Vellore Institute of Technology (VIT, India) and MAKAUT, are now working under my guidance worked on different research topics related to arsenic stress and soil microbes' study under the mentorship of Prof. Pabitra Banik, Agricultural and Ecological Research Unit (AERU), Indian Statistical Institute (ISI), Kolkata. They are from the Vellore Institute of Technology (VIT) and the Maulana Abul Kalam Azad University of Technology (MAKAUT), West Bengal. Prior to achieve the Visiting Scientist Position at AERU, ISI, Kolkata, I worked in a contractual basis for 3 months (Sep Nov 2022) in the division Agricultural Biotechnology, ICAR Central Research Institute for Jute and Allied Fibres (ICAR-CRIJAF), West Bengal under the mentorship of Dr. Dipnarayan Saha, Principal Scientist, Agricultural Biotechnology, CRIJAF on the project entitled, "Prospecting heat stress tolerance through genome-edited heat shock factors and NAC-domain transcription factors in flax (*Linum usitatissimum*)".
- 2014-2019: Ph.D. work on "Studies on arsenic induced toxicity in growth and metabolism in Rice (*Oryza sativa L.*) and its possible amelioration by selenium and silicon" for conducting my Ph.D. degree under the supervision of Prof. Asok K. Biswas (retd.), Plant Physiology and Biochemistry laboratory, Department of Botany, University of Calcutta. Beside this, I also worked on some experimental procedures on another project entitled, "Screening of arsenic tolerant and sensitive rice (*Oryza sativa L.*) cultivars grown in the arsenic contaminated soil of West Bengal on the basis of tolerance, growth and metabolism" funded by University Grants Commission, New Delhi. Ref: F.No. 43-102/2014(SR) dt 18.01.2016. During this period, I have trained three masters (M.Sc.) students worked under different research topics related to physio-chemical studies of rice on abiotic stresses induced by arsenic, silicon and selenium for their M.Sc special paper in the Plant Physiology, Biochemistry and Molecular biology under the supervision of Prof. Asok K. Biswas, Department of Botany, University of Calcutta.
- **2012-2013:** Project work on "Study of the saline soil improvement properties of some filamentous cyanobacteria isolated from highly saline environment" during M.Sc. degree in Botany under the supervision of Dr. Krishna Ray, Assistant Professor of Botany, West Bengal State University.

# Laboratory Expertise/Technical skills:

Highly proficient in performing following biological experiments:

- Assays of different enzymes activities
- DNA isolation
- RNA isolation
- cDNA preparation
- PCR & Realtime PCR analysis
- Cloning
- Estimation of photosynthetic and respiratory activities of plants
- Peptide isolation

Expert in operating following equipment:

- Spectrophotometer
- Spectrofluorometer
- Fluorescence microscope
- Centrifuge, Ultracentrifuge
- Incubator, Germination chamber, LICOR
- Autoclave, weighing balance, pH meter
- Thin layer chromatography (TLC)
- High-performance liquid chromatography (HPLC)
- Nanodrop, PCR, agarose gel electrophoresis

Expert in Microsoft word, excel, power point; proficient in performing statistical analysis in SPSS, GraphPad, Origin lab etc..

# Awards

- Young Scientist Award Indian Society For Plant Physiology (ISPP), New Delhi, India
- NASI Swarna Jayanti Puraskar National Academy Of Sciences (NASI), New Delhi, India
- Young Achiever Award 2020 Institute of Scholars (InSc), India
- 2<sup>nd</sup> rank ARRW Diamond Jubilee National Symposium on "GenNext Technologies for Enhancing Productivity, Profitability and Resilience of Rice Farming" organised by the Association of Rice Research Workers, Cuttack, Odisha, India in collaboration with the Indian Council of Agricultural Research, New Delhi, the ICAR-National Rice Research Institute, Cuttack and the ICAR-Indian Institute of Rice Research, Hyderabad.

# Membership:

- American Society of Plant Biologists (Nov. 2019 Nov. 2020)
- Botanical Society of Bengal (Lifetime Membership)
- Indian Science Congress Association (Lifetime Membership)
- Indian Society for Plant Physiology
- Professional (Lifetime) Member of Institute of Scholars (InSc)

#### Publications (in peer-reviewed journals):

#### A. Published Papers:

- 1. S. Das, A. Ghosh, M. A. Powell, P. Banik (2023): Meta-analyses of arsenic accumulation in Indica and Japonica rice grains. *Environmental Science and Pollution Research*. (IF: 5.190; 5 years IF: 5.053)
- A. Shomali, S. Das, N. Arif, M. Sarraf, N. Zahra, V. Yadav, S. Aliniaeifard, D. K. Chauhan, M. Hasanuzzaman (2022): Diverse physiological roles of flavonoids in plant environmental stress responses and tolerance. *Plants*, 11(3):316. (IF: 4.658)
- 3. S. Das, B. Majumder, A. K. Biswas (2022): Comparative study on the influence of silicon and selenium to mitigate arsenic induced stress by modulating TCA cycle, GABA and polyamine synthesis in rice seedlings. *Ecotoxicology*. (IF: 2.935; 5 years IF: 3.272)
- 4. B. Majumder, S. Das, B. Pal, A. K. Biswas (2022): Influence of arsenate imposition on modulation of antioxidative defense network and its implication on thiol metabolism in some contrasting rice (*Oryza sativa* L.) cultivars. *Biometals.* (IF: 3.378; 5 years IF: 3.231)
- M. Sarraf, K. Vishwakarma, V. Kumar, N. Arif, S. Das, R. Johnson, E. Janeeshma, J.T. Puthur, S. Aliniaeifard, D.K. Chauhan, M. Fujita, M. Hasanuzzaman (2022): Metal/Metalloid-based nanomaterials for plant abiotic stress tolerance: An overview of the mechanisms. *Plants*, 11(3):316. (IF: 4.658)

- S. Das and A. K. Biswas (2021): Comparative study of silicon and selenium to modulate chloroplast pigments levels, Hill activity, photosynthetic parameters and carbohydrate metabolism under arsenic stress in rice seedlings. *Environmental Science and Pollution Research*. pp. 1-22. (IF: 5.190; 5 years IF: 5.053).
- S. Das, B. Majumder, A. K. Biswas (2021): Selenium alleviates arsenic induced stress by modulating growth, oxidative stress, antioxidant defense and thiol metabolism in rice seedlings. *International journal of phytoremediation*. pp. 1-15. (IF: 4.003).
- R. Kaur, S. Das, S. Bansal, G. Singh, S. Sardar, H. Dhar, H. Ram (2021): Heavy metal stress in rice: Uptake, transport, signaling and tolerance mechanisms. *Physiologia Plantarum*. doi: 10.1111/ppl.13491. (IF: 5.081)
- B. Majumder, S. Das, B. Pal and A. K. Biswas (2020): Differential responses of photosynthetic parameters and its influence on carbohydrate metabolism in some contrasting rice (*Oryza sativa* L.) genotypes under arsenate stress. *Ecotoxicology*. doi: 10.1007/s10646-020-02241-0. (IF: 2.935; 5 years IF: 3.272)
- B. Majumder, S. Das, B. Pal and A. K. Biswas (2019): Evaluation of arsenic induced toxicity based on arsenic accumulation, translocation and its implications on physio-chemical changes and genomic instability in indica rice (*Oryza sativa* L.) cultivars. *Ecotoxicology*. doi: 10.1007/s10646-019-02135-w. (IF: 2.935; 5 years IF: 3.272)
- S. Das, B. Majumder, A. K. Biswas (2018): Modulation of growth, ascorbate-glutathione cycle and thiol metabolism in rice (*Oryza sativa* L. cv. MTU-1010) seedlings by arsenic and silicon. *Ecotoxicology* 27(10):1387-1403. doi: 10.1007/s10646-018-1994-5. (IF: 2.935; 5 years IF: 3.272). Paper awarded as 'Young Achiever Awrad 2020' by Institute of Scholars (InSc), India.
- B. Majumder, S. Das, S. Mukhopadhyay and A. K. Biswas (2018): Identification of arsenic-tolerant and arsenic-sensitive rice (*Oryza sativa* L.) cultivars on the basis of arsenic accumulation assisted stress perception, morpho-biochemical responses, and alteration in genomic template stability. *Protoplasma* 256(1):193-211. doi: 10.1007/s00709-018-1290-5. (IF: 3.186; 5 years IF: 3.447)

#### **B.** Papers communicated:

13. S. Das, A. Shomali, M. Sarraf, R. Johnson, E. Janeeshma, V. Kumar, S. Aliniaeifard, J. T. Puthur, M. Hasanuzzaman (2022): Regulation of photosynthesis in plants under metal/metalloid Stress: A review of the mechanisms. *Planta* (under review). (IF: 4.540; 5 years IF: 4.689)

#### Posters and oral presentations in National and International conferences:

- S. Das and A. K. Biswas: Interactive influence of arsenate and silicate on growth, photosynthetic parameters and carbohydrate metabolism in rice (*Oryza sativa* L.) seedlings. Participated and delivered an oral presentation under the "Theme II: Precision rice production" and secured 2<sup>nd</sup> rank during ARRW Diamond Jubilee National Symposium on "GenNext Technologies for Enhancing Productivity, Profitability and Resilience of Rice Farming" held on Dec.16th-17th, 2021 organised by the Association of Rice Research Workers, Cuttack, Odisha, India in collaboration with the Indian Council of Agricultural Research, New Delhi, the ICAR-National Rice Research Institute, Cuttack and the ICAR-Indian Institute of Rice Research, Hyderabad.
- 2. S. Das and A. K. Biswas: Silicon alleviates arsenic toxicity: evidences based on Krebs cycle, GABA and polyamine synthesis in rice. Poster presented and participated in the virtual 30<sup>th</sup> International Biometric Conference, 2020 (IBC 2020) for the session #3343107 held at Seoul, Korea.
- **3. S. Das** and A. K. Biswas: Impact of exogenous silicate amendments on growth and thiol metabolism in rice (*Oryza sativa* L. cv. MTU-1010) seedlings subjected to arsenate stress. Participated and delivered an oral presentation during North Zonal Seminar on Crop Productivity and Stress Management organized by Indian Society For Plant physiology at Chandra Shekhar Azad University of Agriculture and

Technology, Kanpur (U.P.) on 22<sup>nd</sup> February, 2020. Received **YOUNG SCIENTIST AWARD** of Indian Society For Plant Physiology (ISPP, India).

- **4.** Participated and delivered an oral presentation in **Young Scientist Award Presentation Session** organized during National Conference of Plant Physiology at Kerala Agricultural University, Thrissur, India from 19<sup>th</sup> to 21<sup>st</sup> December, 2019.
- 5. S. Das and A. K. Biswas: Exogenous silicon mitigates arsenic induced toxicity by modulating oxidative stress, antioxidants and ascorbate-glutathione cycle in rice (*Oryza sativa* L. cv. MTU-1010). Participated and delivered an oral presentation during 89<sup>th</sup> Annual Session of the National Academy Of Sciences (NASI, India) and Symposium on "Science and Technology based Entrepreneurship Development" on December 21<sup>st</sup> to 23<sup>rd</sup> at ICAR-NAARM, Hyderabad. Received NASI-SWARNA JAYANTI PURASKAR (2019) for Best Paper Presentation in the field of Biological Sciences.
- 6. S. Das and A. K. Biswas: Regulation of growth, photosynthetic parameters and sugar metabolism in rice (*Oryza sativa* L. cv. MTU-1010) by arsenic and their possible alteration by selenium. Participated and delivered an oral presentation in 8<sup>th</sup> Asian-Australasian Conference on Precision Agriculture (ACPA 2019) held at Punjab Agricultural University, Ludhiana, Punjab, from 14<sup>th</sup> – 17<sup>th</sup> October, 2019.
- 7. S. Das and A. K. Biswas: Regulation of growth, photosynthetic parameters and sugar metabolism in rice (*Oryza sativa* L.) seedlings by arsenic and their possible alteration by silicon. Participated and delivered an oral presentation in the "6<sup>th</sup> India Biodiversity meet 2019 (International Conference)" held at Indian Statistical Institute, Kolkata, from 14<sup>th</sup> 16<sup>th</sup> February, 2019.
- S. Das, B. Majumder and A. K. Biswas: Interactive influence of arsenate and selenate on growth and thiol metabolism in rice (*Oryza sativa* L.) seedlings. Poster presented in 4<sup>th</sup> International Plant Physiology Congress organized by CSIR-National Botanical Research Institute, Lucknow, India and Indian Society for Plant Physiology, New Delhi, India held on December, 2<sup>nd</sup> – 5<sup>th</sup>, 2018.
- 9. B. Majumder, S. Das and A. K. Biswas: Comparative study of arsenic tolerant and sensitive rice (*Oryza sativa* L.) cultivars on the basis of arsenic accumulation, leaf gas exchange, sugar metabolism and genomic template stability. Poster presented in 4<sup>th</sup> International Plant Physiology Congress organized by CSIR-National Botanical Research Institute, Lucknow, India and Indian Society for Plant Physiology, New Delhi, India held on December, 2<sup>nd</sup> 5<sup>th</sup>, 2018.
- 10. B. Majumder, S. Das and A. K. Biswas: Identification of arsenic sensitive and tolerant rice (*Oryza sativa* L.) cultivars on the basis of ROS mediated redox signaling and thiol metabolism; its further validation by RAPD profiling. Poster presented in UGC-CAS Phase VII sponsored National Seminar on "New Horizons of Integrative Biology" organized by the Department of Botany, University of Calcutta, held on March, 29<sup>th</sup>-30<sup>th</sup>, 2018.
- 11. S. Das, B. Majumder and A. K. Biswas: Regulation of growth and thiol metabolism in rice (*Oryza sativa* L. cv. MTU-1010) seedlings by arsenic and their possible alteration by silicon. Poster presented in the national conference on 'Reaching the unreached through Science and Technology Concepts, Principles and Application of Science and Technology for nation building' organized by the Indian Science Congress Association, Coimbatore Chapter, held at Kongunadu Arts and Science College, Coimbatore on October, 9<sup>th</sup>-11<sup>th</sup>, 2017.
- 12. B. Majumder, S. Das and A. K. Biswas: Identification of arsenic tolerant and sensitive rice (*Oryza sativa* L.) cultivars on the basis of growth, oxidative stress and genotoxicity induced by arsenic. Poster presented in the national conference on 'Reaching the unreached through Science and Technology Concepts, Principles and Application of Science and Technology for nation building' organized by the Indian Science Congress Association, Coimbatore Chapter, held at Kongunadu Arts and Science College, Coimbatore on October, 9<sup>th</sup>-11<sup>th</sup>, 2017.
- 13. B. Majumder, S. Das and A. K. Biswas: Accumulation of arsenic and its role on growth and ascorbate-glutathione cycle in different rice (*Oryza sativa* L.) cultivars. Poster presented in in International Conference on "The Green Planet Past, Present, Future" organized by CAS, Department of Botany, University of Calcutta in collaboration with Probir Chatterjee Research Foundation and Botanical Survey of India held on December 21<sup>st</sup> 23<sup>rd</sup>, 2016. Received award for best poster presentation.

#### Statistical Workshop participated:

- 1. Participated in 62<sup>nd</sup> ISI World Statistics Congress, ISI 2019 held at Kuala Lumpur, Malaysia, during 18th to 23rd August, 2019.
- 2. Participated in the Winter school on "Research Methods in Biology and Application of Statistics", held at the Biological Anthropology Unit, Indian Statistical Institute, Kolkata, during 5<sup>th</sup> to 10<sup>th</sup> February, 2018.
- **3.** Participated in the Summer school on "Use and Application of SPSS", held during August, 22<sup>nd</sup> to 25<sup>th</sup>, 2017, at the Biological Anthropology Unit, Indian Statistical Institute, Kolkata.

#### Workshops participated:

- 1. Participated in the National workshop on Statistical Analysis of Biological Data, a five-week-long national workshop from 17<sup>th</sup> January- 21<sup>st</sup> February, 2022 with grade A<sup>+</sup>, organized by the Department of Botany, Zakir Husain Delhi College, NAAC Accredited "A" Grade College, University of Delhi.
- 2. Participated in "7 Day Hands-on Workshop on Molecular Biology techniques" held on 17<sup>th</sup> to 23<sup>rd</sup> January, 2020 organized by Department of Botany, University of Calcutta.
- **3.** Participated in technical workshop on "Mitigation Strategies for Stress Management" during ISPP North Zonal Seminar on "Crop Productivity and Stress Management" organized by Chandra Shekhar Azad University of Agriculture and Technology, Kanpur and Indian Society For Plant physiology (ISPP), New Delhi held on February 22, 2020 at College of Agriculture, CSAIIAT, Kanpur. (U.P.).

#### Seminars/Webinars attended in National and International conferences:

- Participated in "Ethics of Publication" at Indian Council of Medical Research, on 23<sup>rd</sup> November, 2021 presented by Catriona Fennell Director Journal Service, Dr. Roli Mathur Scientist F and Head, ICMR Bioethics Unit.
- 2. Participated in AWSAR (Augmenting Writing Skills for Articulating Research) webinar on **Popular** Science Writing held on 10<sup>th</sup> September, 2021 organized by the Department of Science and Technology (DST), Government of India and Vigyan Prasar (VP).
- Participated in the Mega Science Technology and Inductry Expo (The Largest Virtual Science Expo) as part of "India International Science Festival – 2020) held at virtual platform-Delhi during December 22<sup>nd</sup> to 25<sup>th</sup>, 2020.
- **4.** Participated in the National webinar entitled **'Emerging Trends in Plant Research'** organized by Archana Sharma Foundation of Calcutta and Department of Botany, University of Calcutta held on 27-10-2020.
- 5. Participated in the webinar on 'Translating Physiology into Techniques for Abiotic Stress Tolerance' organized by ICAR-National Institute of Abiotic Stress Management (ICAR-NIASM), Baramati; Society for Agricultural Research on Abiotic Stress (SARAS) & Indian Society for Plant Physiology (ISPP), New Delhi (India) held on October 09, 2020.
- Participaed as Delegate in the one day International Webinar on "Science & Technology for Sustainable Development" organised by Indian Science Congress Association, Kanpur Chapter & DAV College, Kanpur, UP, India on 19<sup>th</sup> September 2020.
- Participated in AWSAR (Augmenting Writing Skills for Articulating Research) webinar on Popular Science Writing held on 1<sup>st</sup> September, 2020 organized by the Department of Science and Technology (DST), Government of India and Vigyan Prasar (VP).

- **8.** Participated in AWSAR (Augmenting Writing Skills for Articulating Research) webinar on **Popular** Science Writing held on 7<sup>th</sup> August, 2020 organized by the Department of Science and Technology (DST), Government of India and Vigyan Prasar (VP).
- **9.** Participated in Two days National level webinar entitled **'Plant research in welfare of human being'** jointly organized by Department of Botany, South Calcutta girls' College & Dinabandhu Mahavidyalaya held on 17<sup>th</sup> and 18<sup>th</sup> July, 2020. *Certificate ID: KKXBLC-CE000019*.
- Participated in the one day National Webinar on "Plant Diversity of Konkan", organized by Department of Botany, Sharadchandra Pawar Mahavidyalaya, Lonand, India held on 29-06-2020. *Certificate ID: 0AKBXI-CE000054.*
- Participated in the 4-Day International Conference on 'Eradication of Biological and Chemical Weapons' supported by UNESCO and organized by MIT School of Government and Bharatiya Chhatra Sansad under the aegis of Dr. Vishwanath Karad, MIT World Peace University, Pune, India held on 23<sup>rd</sup>-26<sup>th</sup> June, 2020.
- 12. Participated in the National Webinar on "Modern Agricultural Technology: A Step Towards Rural Self-Reliance" organized by the Institute of Agriculture, Visva-Bharati (A Central University), Sriniketan, West Bengal, India during 12-14 June, 2020 with the aim to bring the modern Agricultural Technologies under focus for achieving rural self reliance. In the three day webinar, eight panel of experts shared their knowledge and wisdom on the online platform. The national webinar was held for three hours daily (02:30-05:30 PM). *Sl No. (Certificate ID) NWV-RAUXXM-CE000214*.
- Participated during North Zonal Seminar on Crop Productivity and Stress Management organized by Indian Society For Plant physiology at Chandra Shekhar Azad University of Agriculture and Technology, Kanpur (U.P.) on 22<sup>nd</sup> February, 2020.
- 14. Participated during 89<sup>th</sup> Annual Session of the National Academy Of Sciences (NASI, India) and Symposium on "Science and Technology based Entrepreneurship Development" on December 21<sup>st</sup> to 23<sup>rd</sup> at ICAR-NAARM, Hyderabad.
- **15.** Participated in National Conference of Plant Physiology at Kerala Agricultural University, Thrissur, India from 19<sup>th</sup> to 21<sup>st</sup> December, 2019.
- 16. Participated in the Women Scientists & Entrepreneurs Conclave (WSEC) as part of "India International Science Festival – 2019) held at Biswa Bangla Convention Centre/Science City/Bose Institute/CSIR-Indian Institute of Chemical Biology/Satyajit Ray Flim and Television Institute, Kolkata during November 5th to 8th, 2019.
- **17.** Participated in 8<sup>th</sup> Asian-Australasian Conference on Precision Agriculture (ACPA 2019) held at Punjab Agricultural University, Ludhiana, Punjab, from 14<sup>th</sup> 17<sup>th</sup> October, 2019.
- **18.** Participated in University of Calcutta sponsored National Seminar on "Advancement in Plant Sciences : An Insight" organised by Botanical Society of Bengal in collaboration with CAS, Department of Botany, University of Calcutta held on 30<sup>th</sup> September, 2019.
- Participated in the "6<sup>th</sup> India Biodiversity meet 2019 (International Conference)" held at Indian Statistical Institute, Kolkata, from 14<sup>th</sup> – 16<sup>th</sup> February, 2019.
- **20.** Participated in UGC-CAS-VII sponsored National Seminar on "New Horizons of Integrative Biology" organized by Department of Botany, University of Calcutta, on 29-30 March, 2018.
- 21. Participated in the National Symposium on "Towards Climate Smart Agriculture A Key to Livelihood Security" organized by Institute of Agricultural Science, University of Calcutta in collaboration with Alumni Association, Institute of Agricultural Science, University of Calcutta, held on December 9<sup>th</sup> 11<sup>th</sup>, 2017.
- 22. Participated in the Indian Science Congress Association (ISCA), Kolkata sponsored three day National level Conference on "Reaching the Unreached through Science and Technology Concepts, Principles

and Application of Science and Technology for Nation Building" organized by ISCA, Coimbatore Chapter held at Kongunadu Arts and Science College, Coimbatore during 9<sup>th</sup>-11<sup>th</sup> October, 2017.

- **23.** Participated in the International Conference on "The Green Planet: Past, Present and Future" from 21<sup>st</sup> to 23<sup>rd</sup> December, 2016 held at CAS-VII, Department of Botany, University of Calcutta, Kolkata, India in collaboration with Probir Chatterjee Research Foundation & Botanical Survey of India and achieved best poster award.
- 24. Participated in the National Science Day Celebration, 2015 with One Day Seminar on "Gnomic Perspectives of Host Pathogen Interaction" as held on December 3<sup>rd</sup>, 2015 at Department of botany, CAS, University of Calcutta, Kolkata, West bengal, Sponsord by WBSCST.
- **25.** Attended & actively participated in the interaction and deliberation in the National Symposium on "Plant Diversity: Structure, Function, Utilization and Conservation" organized by the Botanical Society of Bengal, in collaboration with the centre of Advanced Study, Department of Botany, University of Calcutta from 4<sup>th</sup> 6<sup>th</sup> December, 2014 in connection with the Centenary Celebration of Department of Botany, University of Calcutta.

# **Personal Information:**

- Father's name: Mr. Prasanta Kumar Das
- Mother's name: Mrs. Madhabi Das
- Religion: Hindu
- Gender: Female
- Marital Status: Married
- Husband's name: Dr. Abhik Ghosh

#### Academic referees

# 1. Prof. Asok Kumar Biswas

Retired Professor Plant Physiology and Biochemistry Laboratory Department of Botany University of Calcutta, India E-mail: <u>dr.asokbiswas25@gmail.com</u> Phone: +919831701816

### 2. Prof. Pabitra Banik

Agricultural and Ecological Research Unit (AERU) Indian Statistical Institute (ISI), India E-mail: banikpabitra@gmail.com Phone: +919433888591

### 3. Dr. Kutubuddin Ali Molla

Scientist (Agricultural Biotechnology) Crop Improvement Division, ICAR-National Rice Research Institute, Cuttack, Odisha, India Fulbright Visiting Scholar, Plant Pathology and Environmental Microbiology, Pennsylvania State University, PA-16802, USA E-mail: kutubuddin.molla@icar.gov.in Phone: +918018378878

### 4. Prof. Prabir Kumar Saha

Sr. Professor & Consultant Scientist Division of Plant Biology Bose Institute, India E-mail: pksbi33@gmail.com Phone: +919903952293 I hereby declare that the above information(s) is/are true to the best of my knowledge & belief.

Thanking you,

Yours sincerely,

An. Surmita An. Dr. Susmita Das

Dr. Susmita Das Visiting Scientist Agricultural and Ecological Research Unit (AERU) Indian Statistical Institute (ISI), Kolkata