Personal Information

Shamim Mia, Ph D

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Personal Websites:

Google scholar- https://scholar.google.com/citations?user=OVibbbUAAAAJ&hl=en
ResearchGate- https://www.researchgate.net/profile/Shamim-Mia-2
University webpage- https://www.pstu.ac.bd/user-profile/142

Date of birth: 03 March 1982

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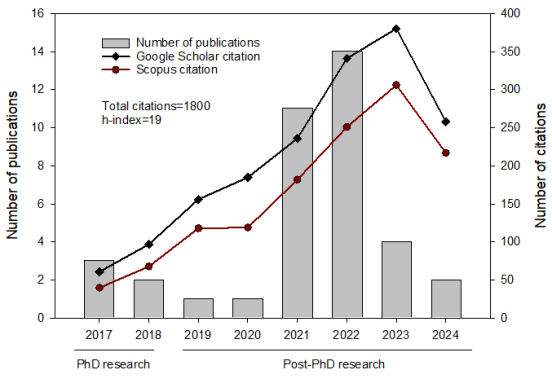
Career summary



Dr Mia is regarded as one of the leaders in biochar research in the world and published more than **50 articles/book chapters** in top ranked international journals his fields. His publication received international attention with **1860 citations and *h index*=19** (please see figure in the right). He is currently serving editors of several international journals including ***Soil Science and Plant Nutrition*** (Taylor & Francis, Impact factor =2.0, Q2), ***Discover Soil*** (Springer) and as a **guest editor** for ***Sustainability*** (MDPI, Impact factor 3.9, Q2). Dr Mia established a facility for biochar productions from waste while he developed biochar based smart fertilizer. He **established an agreement with ACI Fertilizer Bangladesh for commercial production of this fertilizer**. His researcher has been highlighted in national media (e.g. channel i report, link- https://www.youtube.com/watch?v=0g4whfx306E).

Education

2023-2024	Postdoctoral Research Fellow at the **University of Sydney, Australia**
2014-2018	Ph.D. in Agriculture at the **University of Sydney, Australia**
2011-2013	MS in Environmental Sciences at **Wageningen University, the Netherlands**
2005-2006	MSc in Agronomy at **Bangladesh Agricultural University, Mymensingh, Bangladesh (first class first)**
2000-2005	B Sc.Ag. (Honours) at **Bangladesh Agricultural University, Mymensingh, Bangladesh (first class)**

Employment

2023	**Visiting Researcher** at the University of Newcastle, Australia
2023	**Visiting Professor** at Tohoku University, Japan
2019	**Visiting Researcher** at the University of Sydney, Australia
2018 to till date	**Professor (grade 2)**, Department of Agronomy, Patuakhali Science and Technology University, Bangladesh
2014-2018	**Associate Professor**, Department of Agronomy, Patuakhali Science and Technology University, Bangladesh
2009-2014	**Assistant Professor**, Department of Agronomy, Patuakhali Science and Technology University, Bangladesh
2007-2009	**Lecturer**, Department of Agronomy, Patuakhali Science and Technology University, Bangladesh
2006-2007	**Scientific Officer**, Bangladesh Agricultural Research Institute, Gazipur, Bangladesh

Awards

- JSPS postdoctoral Fellowship (not availed)
- Best Researcher Award-2022 from PSTU teachers association
- Best presentation award, 1st international conference of Weed Science Society of Bangladesh
- University of Sydney Postgraduate Award for PhD
- Farrer memorial travelling grants, Department of Primary Industries, NSW
- Best poster presentation award (second prize), research symposium, The University of Sydney
- Netherlands government fellowship (Nuffic) for MSc.

Patent /Technology/Significant Achievements

- Developed technology for recycling of bio-waste to agriculture (model published in a journal and installed a facility at PSTU)
- Developed biochar enriched mixed fertilizers (secured an agreement with Advanced Chemical Industries (Ltd.) Bangladesh for commercialization)
- Identified three salt tolerant *Rhizobial* strains for mungbean
- Collected 1000 local rice landraces

Professional Membership

- Member, Soil Science Society of Australia
- Member, Bangladesh Society of Seed Technology
- Member, Seed Technology Society of Bangladesh
- Member, Agronomy Society of Bangladesh
- Member, Weed Science Society of Bangladesh
- Member, Board of studies, Department of Agronomy, PSTU

Leadership and voluntary services

- Executive member, Weed Science Society of Bangladesh
- Led as a key member of the International Collaboration for Food Security and Sustainable Agriculture, comprising 15 universities in Asia and Australia
- Actively participated (led as general secretary of a unit) in *Badhan*, a volunteer blood donation organization and contributed to start a unit at PSTU
- Led PSTU teacher association as an elected office secretary
- Initiated voluntary Internship Program at PSTU
- Established PSTU Innovation and Dissemination Centre

Fund received

Dr. Mia has received **over Tk. 4 crore** as research fund and established collaborations with national and international universities including Wageningen University and Research (WUR), the Netherlands, the University of Sydney, Australia, Tohoku University, Japan and University of Putra, Malaysia. He established a laboratory at PSTU while he is leading it.

Table 1. Highlights of major research grants

Sl No.	Project title	Role[#]	Funds (Tk. '000')	Funding organization
1	Enhancing adoption of wheat in Bangladesh: Identification of zones for appropriate and climate resilient production in the coastal region	Co-PI	400	Nuffic-WUR-PSTU-CSA
2	Reducing Carbon Footprint in Agriculture through Conservation and Efficient Nutrient Management Practices: A Case Study of Bangladesh	Co-PI	800	Nuffic-WUR-PSTU-CSA
3	Mitigation of arsenic from rice field in Bangladesh	IC	1500	Heiwa Nakajima Foundation, Japan
4	Development of biochar enriched fertilizer for enhancing nutrient use efficiency in agriculture	PI	5000	Krishi Gobeshona Foundation, MoA, GOB
5	Enhancement of maize yield through biochar enriched phosphorus fertilizer	IC	2800	Ministry of Higher Education, Malaysia
6	Development of agronomic technologies for the extension of cotton in the coastal area	PI	1050	Cotton Development Board, MOA, GOB
7	Recycling nutrients from municipal organic waste through pyrolysis and composting	PI	2450	Ministry of Education, GOB
8	Enhancing nitrogen use efficiency in rice through biochar enriched compost amendment: a ^{15}N study	PI	245	Ministry of Science, Information and Technology, GOB

Sl No.	Project title	Role#	Funds (Tk. '000')	Funding organization
9	Establishment of PSTU innovation and dissemination centre (PIDC)	Member	21140	HAQEP, UGC-World Bank
10	Collection, preservation, improvement and development of cultural practices for Murta (*Schumannianthus dichotoma*)	Member	4410	BAS-USDA
11	Conversion of municipal solid waste to value added products- a circular economic approach for renewable power and organic fertilizer	Co-PI	1785	Ministry of Education, GOB

#PI and IC indicate principal investigator and international collaborator, respectively.

Key Collaborators

- Professor Dr. Fulco Ludwig, Earth Systems and Global Change, Wageningen University and Research, the Netherlands
- Professor Dr. Tomoyuki Makino, Laboratory of Soil Science, Tohoku University, Japan
- Associate Professor Dr. Feike Dijkstra, The University of Sydney, Australia
- Associate Professor Mohammad Mahmudur Rahman, The University of Newcastle, Australia
- Associate Professor Dr. Susilawati Binti Kasim, University of Putra, Malaysia
- Professor T. Sabrina, Faculty of Agriculture, Universitas Sumatera Utara, Medan Indonesia

Student supervision and mentorship

Ph. D. students

- **Mian advisor**- Nowrose Jahan Lipi (4th year at PSTU),
  - i. Md. Monirul Islam (3rd year at PSTU), and
  - ii. S. M. Mahbubul Alam (4th year at PSTU)
- **Co-supervisor**
  - I. Dr. Md. Isfatuzzaman Bhuyan, awarded at Wageningen University, the Netherlands
  - II. Hasib Mohammad Tusar (Defended at University of Putra, Malaysia)
  - III. Siska Syaranamual (3rd year at the University of Sydney)

MS students- 15 students (completed) and currently supervising 5 students at different universities at home and abroad including-

a) Tohoku University, Japan
b) Universitas Sebelas Maret, Indonesia
c) University Putra, Malaysia
d) Universitas Sumatera Utara, Medan, Indonesia
e) The University of Sydney, Australia

Internship supervision- Completed 50 students

Editorial and Peer Reviewer Services

- Editorial board member, ***Soil Science and Plant Nutrition*** (Taylor and Francis, Impact factor =2.389, Q2)
- Editorial Member, ***Discover Soil*** (Springer)
- Guest Editor, ***Sustainability*** (MDPI, Impact factor 3.25, Q1)
- Associate editor, ***Journal of Patuakhali Science and Technology University***

Completed more than **80 reviews** for SCI journals including Elsevier, Springer, and Taylor and Francis including-

- Science of the Total Environment
- Soil Science and Plant Nutrition
- Geoderma
- Pedosphere
- Heliyon
- Waste Management
- Soil Biology and Biochemistry
- Peer J
- Journal of Soil Science and Plant Nutrition
- Archives in Agronomy and Soil Science
- Annals of Agricultural Sciences
- Soil Security
- Agriculture
- Agronomy
- Journal of the Saudi Society of Agricultural Sciences and many others.

Research output

Dr. Mia published **52 peer- reviewed articles** and **nine book chapters** that received more than **1860 citations** (***h***-index 19). Many of the publications (**over 40 articles**) published in top ranked journals and publishers. Moreover, Dr Mia has 25 conference abstracts/proceedings/presentations, two consultancy services, and ten newspaper editorials/reports.

Sl. No	Publication	Contribution
1	**Mia. S**., Moin E.H., Karim, S.M.R., 2024. Global research in weed science. A bibliometric analysis. ***Outlook on Pest Management*** (in press)	**Led the research and corresponding author**
2	Kumar S., Islam R., Saha M.K., Khan M.H.R., Alam M.R., **Mia S.** 2024. Meta(loid)s contamination in Bangladesh: a comprehensive synthesis with ecological and health implications. ***Environmental Science and Pollution Research*** (in press) **[Impact factor=5.8, Q1]**	**Led the research and corresponded** the article

Sl. No	Publication	Contribution
3	Bhuyan, M., Supit, I., Kumar, U., **Mia, S**., Ludwig, F. (2024). The significance of farmers' climate change and salinity perceptions for on-farm adaptation strategies in the south-central coast of Bangladesh. ***Journal of Agriculture and Food Research***, 16, 101097	Student work and contributed as a **co-author**
4	Bhuyan M.I., **Mia S.,** Supit I. and Ludwig F. 2023. Spatio-temporal variability in soil and water salinity in the south-central coast of Bangladesh. ***CATENA***, 106786. **[Impact factor=6.37, Q1]**	Student work and contributed as a **co-author**
5	Bhuyan M.I., Supit I. **Mia S.,** Mulder M. and Ludwig F. 2023. Effect of soil and water salinity on dry season boro rice production in the south-central coastal area of Bangladesh. ***Heliyon***, e19180 **[Impact factor=3.77, Q1]**	Student work and contributed as a **co-author**
6	Tusar, H.M.; Uddin, M.K.; **Mia, S**.; Suhi, A.A.; Wahid, S.B.A.; Kasim, S.; Sairi, N.A.; Alam, Z.; Anwar, F. 2023. Biochar-Acid Soil Interactions—A Review. ***Sustainability*** *15*, 13366. **[Impact factor=3.9, Q2]**	Student work and contributed as a **corresponding author**
7	Akter, S., **Mia S.,** Maniko T., Rahman M.M. and Rajapakshawa, A.U. 2023. Arsenic removal from aqueous solution: A comprehensive synthesis with meta-data. ***Science of the Total Environment***, 160821. **[Impact factor=10.76, Q1]**	**Equal contribution** with the first author and contributed as **corresponding author**
8	Saha, M.K., **Mia S.,** Biswas A.K.M., Sattar M.A., Kader M.A., Jiang Z. 2022. Potential methane emission reduction strategies from rice cultivation systems in Bangladesh: A critical synthesis with global meta-data. ***Journal of Environmental Management***, 310, 114755 **[Impact factor=8.91, Q1]**	**Equal contribution** with the first author and contributed as **corresponding author**
9	Somaddar, U., **Mia, S**., Khalil, M.I., Sarker, U.K., Uddin, R.U., Kaysar, M.S. et al. 2023. Effect of reproductive stage-waterlogging on the growth and yield of upland cotton (*Gossypium hirsutum*). ***Plants*** 12(7), 1548. **[Impact factor=4.65, Q1]**	**Student work and contributed as co-author**
10	Antor N.H., **Mia S.** Hasan M.M., Lipi N.J., Jinodo K., Sanchez-Monedero M.A., and Rashid M.H. 2023. Chemical and biological activation of biochar slow down N mineralization and improve nitrogen use efficiency. ***Pedosphere*** 33(4):659-669 **[Impact factor=5.514, Q1]**.	**Equal contribution** with the first author and contributed as **corresponding author**
11	Nkoh, A.N., Ajibade, F.O., Atakpa, E.O., Baque, M.A., **Mia, S**., Odii, E.C., and Xu R. 2022. Reduction of heavy metal uptake from polluted soils and associated health risks through biochar amendment: A critical synthesis. ***Journal of Hazardous Materials Advances***, 6, 100086.	Collaborative work and contributed as one of **the corresponding authors**.
12	Hoque T. H., Hasan A. K., Hasan M. A., Nahar N., Dey, D. K., **Mia S.,** Solaiman Z. M., Kader A. M. 2022. Nutrient release from vermicompost under anaerobic conditions in two contrasting soils of Bangladesh and its effect on wetland rice crop. ***Agriculture***, *12*(3), 376 **[Impact factor=3.408, Q1]**	Collaborative work and contributed as one of the **co-authors**.

Sl. No	Publication	Contribution
13	Suhi A.A., **Mia S**., Khanam S., Mithu M.H., Uddin M.K., Muktadir M.A., Ahmed S., and Jindo K. 2022. How Does Maize-Cowpea Intercropping Maximize Land Use and Economic Return? A Field Trial in Bangladesh. ***Land***, 11,581 [Impact factor=3.905, Q2].	**Equal contribution** with first author and contributed as **corresponding author**
14	Mannan M.A., Tithi M. A., Islam R. M., **Mia S.,** Rahman M. Z., Fawad M., ElSayed A. I., Mansour E., and Hossain M.S. 2022. Soil and foliar applications of zinc sulfate and iron sulfate alleviate the destructive impacts of drought stress in wheat. ***Cereal Research Communications***, 50, 1279–1289 **[Impact factor=1.24, Q3]**.	Collaborative work and contributed as one of the **co-authors**.
15	Mosharrof M., Uddin M., **Mia S.,** Sulaiman, M., Shamsuzzaman, S., Haque, A. (2022). Influence of Rice Husk Biochar and Lime in Reducing Phosphorus Application Rate in Acid Soil: A Field Trial with Maize. ***Sustainability***, 14(12), 7418.	Collaborative and contributed as co-author.
16	Baquy, M., Al Mamun, M., **Mia, S**., Alam, M., Khan, M., Rahman, S. (2022). Biochar research advancement in Bangladesh: challenges and opportunities of biochar in improving soil health. ***Sains Tanah: journal of soil science and agroclimatology***, 19(2), 145-159	Collaborative and contributed as co-author.
17	Rahman M.M., Takia H., Hasan M.K., Hossain M.B., **Mia S.,** and Hossen K. 2022. Application of advection diffusion equation for determination of contaminants in aqueous solution: A mathematical analysis. ***Applied Mathematics and Physics,*** 10 (1), 24-31.	Collaborative work and contributed as one of the **co-authors**.
18	Sattar M. A. **Mia S.,** Shanta A.A., Biswas A.K.M.M., Ludwig, F. 2021. Remote Impacts from El Niño and La Niña on Climate Variables and Major Crops Production in Coastal Bangladesh. ***Atmosphere***, 12, 1449 **[Impact factor=3.110, Q2]**.	Student work and contributed as a **co-author**
19	Saha M., **Mia S.**, Biswas A.K.M., Sattar M.A., Dijkstra F. A. Methane emission from different rice cultivation systems in Bangladesh: A model-based approach (***preprint in Research Square***).	Student work and contributed as the **corresponding author**
20	**Mia S**., Ahmed N.U., Islam M.Z., Rashad M.M. I., Islam M. I., Zaman A.K.M.M. 2021. Genetic diversity and yield performance among T. Aman rice (*Oryza sativa* L.) landraces of Barishal region of Bangladesh. ***Journal of Crop Science and Biotechnology***, 25, 123-132.	Led the research and contributed as **fir**st and **corresponded author**
21	**Mia S**., Anwar M.P., Islam M. S., Karim S. M., Asaduzzaman M., Borman S., Ali M. H., Billah M. M., Ahammed M. M., Gathala M.K. 2021. Education and Research of Weed Science in Bangladesh: Present Status and Directions for Improvements. ***Bangladesh Journal of Weed Science***, 7 (1 & 2):66-84.	Led the research and contributed as **fir**st and **corresponded author**
22	Mithu M. M., **Mia S.,** Suhi A., Tahura S., Biswas P., Kader M. A., Kassim S., Makino T. 2021. Biochar enriched compost elevates mungbean (*Vigna radiata* L.) yield under different salt stresses. ***Crop and Pasture Science*** **74, 79-89 [Impact factor=2.25, Q2]**.	Student work and **contributed equally** with the first author and **corresponded the article**

Sl. No	Publication	Contribution
23	Nkoh J. N., Baquy M. A., **Mia S.,** Shi R. Kamran M. A., Mehmood K., and Xu R. 2021. A Critical-Systematic Review of the Interactions of Biochar with Soils and the Observable Outcomes. ***Sustainability*** 13, 13726 **[Impact factor=3.889, Q1]**.	Collaborative work and contributed as one of the **corresponding authors**.
24	Rajapaksha A.U., Selvasembian R., Ashiq, A., Gunarathne V., Ekanayake V., Perera V.O, Wijesekera H., **Mia S.** Ahmad M., Vithanage M. and Ok Y.S. 2021. A systematic review on adsorptive removal of hexavalent chromium from aqueous solutions: recent advances. ***Science of Total Environment*** 809, 152055**. [Impact factor=10.76, Q1].**	Collaborative work and contributed as one of the **co-authors**.
25	Mosharrof M., Uddin M., Sulaiman M., **Mia S**., Shamsuzzaman S., Haque A. (2021). Combined application of rice husk biochar and lime increases phosphorus availability and maize yield in an acidic soil. ***Agriculture***, 11(8), 793.	Collaborative work and contributed as one of the **co-authors**.
26	Mannan M.A., **Mia S.,** Halder E. and Dijkstra, F.A. 2021. Biochar application rate does not improve plant water availability in soybean under drought stress. ***Agricultural Water Management***, 253, 106940 **[Impact factor=6.611, Q1]**.	Contributed equally with the **first author** and **corresponded** the article.
27	Shabnam S., Ahmed S., **Mia S.** 2021. Effect of phosphorous and boron on nodulation and yield of soybean under non-saline agro-ecosystem. ***Bangladesh Agronomy Journal*** 23(2):127-133.	Student work and contributed as **co-author.**
28	Mosharrof M., Uddin M.K., Sulaiman M.F. **Mia S.,** Shamsuzzaman S.M. and Haque, A.N.A. 2021. Combined application of biochar and lime increases maize yield and accelerates carbon loss from an acidic soil. ***Agronomy***, *11*(7), 1–20 **[Impact factor=3.949, Q1]**.	Collaborative work and contributed as one of the **co-authors**.
29	Mosharrof M. Uddin M.K., Sulaiman M.F., **Mia S.,** Shamsuzzaman S.M. and Haque A.N.A. 2021. Combined application of biochar and lime increases increases phosphorus availability and maize yield in an acidic soil. ***Agriculture***, 793 **[Impact factor=3.408, Q1]**.	Collaborative work and contributed as one of the **co-authors**.
30	Qiao C., **Mia S.,** Wang Y., Hou J., Xu B. 2021. Assessing the effects of nitrification inhibitor DMPP on acidification and inorganic N leaching loss from tea (*Camellia sinensis* L.) cultivated soils with increasing urea–N rates, ***Sustainability*** 13(2).994 **[Impact factor=3.889, Q1]**.	Collaborative work and contributed as one of the **co-authors**.
31	Pei J., Li J., **Mia S.,** Singh B., Wu, J. Dijkstra F.A. 2021. Biochar aging increased microbial carbon use efficiency but decreased biomass turnover time. ***Geoderma*** 382, 114710 994 **[Impact factor=7.421, Q1]**.	Contributed as **co-author**.
32	Mia F., Hussain A.S.M., **Mia S.**, Hassan Z. 2020. Effect of variety and spacing on the resource use efficiency of maize. ***Journal of Experimental BioSciences***, 11(2):35-48	Student work and contributed as **co-author**.
33	**Mia S.**, Singh B., and Dijkstra, F. A. 2019. Biochar aging increases ammonium-^{15}N recovery and phosphorus uptake in a grassland.	Contributed as the **first** and **corresponding author**.

Sl. No	Publication	Contribution
	Biology and Fertility of Soils. 55(6): 577-588. **[Impact factor=6.605, Q1]**	
34	**Mia, S.**, Uddin, E., Kader, A., Ahsan, A., Mannan, A., Hossain, M., and Solaiman, M. Z. 2018. Pyrolysis and co-composting municipal organic waste in Bangladesh: a quantitative estimate of recyclable nutrients, greenhouse gas emissions, and potential benefits. ***Waste Management*** 75:503-513 **[Impact factor=8.816, Q1]**	Contributed as the **first** and **corresponding author**.
35	**Mia S.**, Dijkstra, F. A. and Singh B. 2018. Enhanced biological nitrogen fixation and competitive advantage of legumes in mixed pastures diminish with biochar aging. *Plant and Soil* 424 (1&2):639-651**[Impact factor=4.993, Q1]**	Contributed as the **first** and **corresponding author**.
36	**Mia S.**, Hasan M. M., Rashid M. H., Kayum A., and Ahmed N. U. 2018. Nitrogen and phosphorus co-limitation cause culm shortness in the aged Murta (*Schumannianthus dichotoma*) plantation. ***International Journal of Innovative Research*** 3(3): 94–99	Contributed as the **first** and **corresponding author**.
37	**Mia S.**, Dijkstra, F. A. and Singh B. 2017. Aging induced changes in biochar's functionality and adsorption behavior for phosphate and ammonium. ***Environmental Science and Technology***, 51 (15):8359–8367 **[Impact factor=11.357, Q1]**	Contributed as the **first** and **corresponding author**.
38	**Mia S.**, Singh B. and Dijkstra, F. A. 2017. Aged biochar affects nitrogen mineralization and recovery: a ^{15}N study in two contrasting soils. ***GCB Bioenergy*** 9(7):1196-1206 **[Impact factor=5.957, Q1]**	Contributed as the **first** and **corresponding author**.
39	**Mia S.**, Uddin N., Hossain, S. A. A. M., Amin R., Zannat, F. and Hiemstra, T. 2015. Production of biochar for soil application: A comparative study of three kiln models. ***Pedosphere*** 25(5):696-702 **[Impact factor=5.514, Q1]**	Contributed as the **first** and **corresponding author**.
40	Mete F. Z., **Mia S.**, Dijkstra F. A., Abuyusuf M. and Hossen A. S. M. I. 2015. Synergistic effect of biochar and NPK fertilizer on Soybean yield. ***Pedosphere*** 25(5):713-719 **[Impact factor=5.514, Q1]**	Student work and contributed as the **corresponding author**.
41	**Mia S**., Abuyusuf, M. Hiemstra T., Sattar A., Jeffery S. 2014. Biochar amendment for high nitrogen and phosphorous bioavailability and its potentiality of use in Bangladesh agriculture: a review ***Journal of Patuakhali Science & Technology University*** 5 (1):145-156.	Contributed as the **first** and **corresponding author**.
42	**Mia S.**, van Groenigen J. W., van de Voorde T., and Oram N., Bezemer, T. M., Mommer, L. and Jeffery S. 2013. Biochar application rate affects biological nitrogen fixation in red clover conditional on potassium availability. ***Agriculture Ecosystems & Environment*** 191:83-91 **[Impact factor=6.576, Q1]**	Contributed as the **first** and **corresponding author**.
43	Hiemstra T., **Mia S.**, Benoit P. and Molleman B. 2013. Natural and pyrogenic humic acids at Goethite and natural oxide surfaces interacting with phosphate. ***Environmental Science & Technology*** 47: 9182-9189 **[Impact factor=11.357, Q1]**	My MS work and contributed as **co-author**.

Sl. No	Publication	Contribution
44	Hadiuzzaman, **Mia S**., Ahmed S., Abuyusuf M. and Biswas P. 2014. Effect of Biochar, poultry litter, cowdung and vermicompost on lentil. ***Bangladesh Journal of Progressive Science and Technology*** 12(2):141-144.	Contributed as the **corresponding author**.
45	Hosan, S. M., Sultana, S., Iftekharudduala, K. M., Ahmed, M. N. U., **Mia S.** 2010. Genetic divergence in landraces of Bangladesh rice (*Oryza sativa* L.). ***The Agriculturist*** 8(2):28-34.	Contributed as co-author.
46	**Mia S**., M. A. Kayum, M.E. Uddin, M. H. Rashid and Tinsley, R. L**.** 2009. Seed quality and quality control practices as perceived by the farmers in the coastal belts of Bangladesh. ***Journal of Seed Science & Technology*** 13 (1&2):115-120.	Contributed as the **first** and **corresponding author**.
47	Uddin M. E., Malek, M.A. and **Mia, S**. 2009.Vegetable cultivation in the coastal area of Bangladesh: means and constrains. ***Eco-Friendly Agriculture Journal*** 2(2):428-432.	Contributed as the **corresponding author**.
48	Bhuiya M.S.U., Khan S. and **Mia, S.** 2009. Effect of compost on the yield and yield components of Lentil. ***Journal of Patuakhali Science & Technology University*** 1(2): 93-100.	Contributed as the **corresponding author**.
49	Kabir M. S., **Mia S**., Kayum M.A. and Islam, M. S. 2008. In vitro regeneration of garlic through root tips cutting. ***Journal of Environmental Science & Natural Resource*** 1(2): 39-42.	Contributed as the **first** and **corresponding author**.
50	**Mia S**., Bhuiya, M. S. U. and Islam, N. 2008. Effect of time of herbicide application on weed and yield of *Boro* rice cv. BRRIdhan29. ***Journal of Agro-forestry & Environment*** 2(2): 183-188.	Contributed as the **first** and **corresponding author**.
51	**Mia S**., Bhuiya, M. S. U. and Islam, N. 2007. Effect of methods of crop establishment on yield of *Boro* rice cv. BRRIdhan29. ***Bangladesh Journal of Progressive Science and Technology*** 5 (2):385-388.	Contributed as the **first** and **corresponding author**.
52	**Mia S**., Bhuiya, M.S.U.and Islam, N. 2007. Economic performance of direct drum seeded and transplanted rice. ***Journal of Agro-forestry & Environment*** 1 (1): 21-26.	Contributed as the **first** and **corresponding author**.

Book chapters

1.	Singh B. **Mia S.**, Camps-Arbestain M. 2023. Biochar: Mechanisms and interactions with soil. ***Encyclopaedia in soils in the environment*** (2nd edition), pp 406-420.	Contributed as one of the **co-authors**.
2.	**Mia S**., Mithu M.M., Akter S., Suhi A., Siker A., Sanchez-Monedero M.A., Makino T. 2022. Conversion of organic waste to economically valuable products: recent advancements with challenges. In Selvasembian et al. (Eds). ***Biotechnological approaches in waste management, CRC Press, Taylor & Francis Group***, Chapter 12;pp:1-39	Contributed as the **first** and **corresponding author**.

Sl. No	Publication	Contribution
3.	**Mia S**., Alam R., Sattar A., Dijkstra F.A. 2020. Nutrient loading in the river systems around major cities in Bangladesh: A quantitative estimate with consequences and potential recycling options. In Rahman A (Ed.) ***Statistics for Data Science and Policy Analysis***. Springer, Singapore, pp 111-128.	Contributed as the **first** and **corresponding author**.
4.	**Mia S.**, Dijkstra, F.A. and Singh B. 2017. Long- term ageing of biochar: a molecular understanding for agricultural and environmental implication. In Sparks eds. ***Advances in Agronomy*** 141, pp 1-51, Elsevier **[Impact factor=7.81, Q1]**	Contributed as the **first** and **corresponding author**.
5.	**Mia S.** Suhi A., Makino T., Tawni T., Masud M.M., Rahman M.M., Kader M.A. 2024. Biochar impacts on plant water dynamics under drought and salinity stress. Latef et al. ***Biochar in mitigating abiotic stress in plants. Elsevier (in press)***	**First** and **corresponding author**
6.	**Mia S.** Bristy S.Y., Jindo K., Munna N.H., Uddin K., Kasim S.B., Rahman S. 2024. Potential Health Risks Associated with Biochar−From Production to Field Application. Nidheesh et al. (edit). ***Biochar Amendments for Environmental Remediation. CRC press (in press).***	**First** and **corresponding author**
7.	Uddin K., Hasan M.M. **Mia S.** et al. 2023. Insights into the Keyword Sequences Importance (KSI) Technique in Thesis and Publications. Uddin et al. edits. ***A reference book on Keyword Sequence Importance-A novel method for scientific writing***. Ahmadu Bello University Press Limited, Nigeria. pp 1-8.	Contributed as co-author
8.	Hasan M.M. **Mia S.** Uddin K. et al. 2023. English for thesis and publication writing. Uddin et al. edits. ***A reference book on Keyword Sequence Importance-A novel method for scientific writing***. Ahmadu Bello University Press Limited, Nigeria. pp 181-200.	Contributed as co-author
9.	Jatto M.P., Shabuddin W.N.A.B., Mohmad-Hairin, N.E. B. Zi, L.Q., Khosim, N.A.B., Mia S., Zannat M. M. Preparation and presentation of scientific research. Uddin et al. (edits). ***A reference book on Keyword Sequence Importance-A novel method for scientific writing.*** Ahmadu Bello University Press Limited, Nigeria. pp 201-222.	Contributed as co-author

Conference Abstract/Oral Presentation

I. **Mia S.** and Bhuyan M. I. 2022. **Salinity in the coastal area of Bangladesh: Occurrence, impacts and management.** FAO Science and Innovation Forum Side Event Report on "Salinity, a Complex Global Challenge with a need for an Integrated Approach" 13th Ocotber, 2022, The Neterlands.

II. **Mia S.,** Anwar M.P., Islam M. S., Karim S.M., Asaduzzaman M., Borman S., Ali M.H., Billah M.M., Ahammed M.M., Gathala M.K. Education and Research of Weed Science in Bangladesh: Present Status and Directions for Improvements. First International

Conference of Weed Science Society of Bangladesh, held on 21 May 2022 at Sher-e-Bangla Agricultural University.

III. **Mia S.,** Dijkstra F. A., Singh B. 2018. Chemically activated biochar increases ammonium-^{15}N recovery and phosphorus uptake in a grassland. 3rd young scientist congress, Bangladesh Academy of Science, Dhaka Bangladesh.

IV. **Mia S.** 2018. Can biochar enhance nutrient cycling in organic production and reduce residual toxicity? Bangladesh Organic Farming Network, 16-17 February, 2018, Dhaka, Bangladesh.

V. **Mia S**., Dijkstra F. A. and Singh S. 2016. Biochar ageing causes opposite effects on ammonium and phosphate sorption. 3rd Asia Pacific Biochar Conference, Kangwon National University, The Republic of Korea. 19-23 October, 2016.

VI. **Mia S.**, Dijkstra F. A. and Singh S. 2016. Biochar ageing affects nitrogen mineralization and recovery: a ^{15}N study in two contrasting soils. 3rd Asia Pacific Biochar Conference, Kangwon National University, The Republic of Korea,19-23 October, 2016

VII. **Mia, S.** Dijkstra, A. F., and Hossain, Z. Changing paradigm from waste dumping to waste pyrolysis and composting in Bangladesh. Asian Network for Organic Farming Technology, May 23, 2015, Dhaka, Bangladesh.

VIII. **S. Mia**., M. H. Rashid and Emad M. 2014. Improvement of murta yield through cultural practices. Seminar on Collection, Preservation, Improvement and Development of Cultural Practices for Murta (*Schumannianthus dichotoma*),15 Frebruary, 2014

IX. Hiemstra T., **Mia S.**, Benoit P. and Molleman B. 2013. Fulvic and humic acid interaction with phosphate at synthetic and natural oxide surfaces. Goldsmith Meeting. 26-30 August, 2013, Florence, Italy.

X. **Mia S.**, Hiemstra T. 2013. Biochar: Is it a promising technology for Bangladesh? Webnair presentation. BENJapan Webnair. November 3, 2012.

XI. **Mia S.**, Zaman, A.K. M. M., Ahmed N.U., Kayum M. A., Mele I.J. and M. S. B. Ansari. 2010. Food security in the climate change vulnerable coastal belts: strengthening cultivation of local rice. *The National Seed Conference and Fair Souvenir-2010*.pp 68-73.

Poster Abstract/Presentation

i. Bhuyan M.I., **Mia S.,** Supit I. and Ludwig F. 2023. Spatio-temporal variability in soil and water salinity in the south-central coast of Bangladesh. 21th Conference of Bangladesh Society of Agronomy. November 5, 2022.

ii. Mithu M.H., **Mia S.**, Biswas P. Biochar compost enhances the performance of mungbean (vigna radiata L.) grown under salinity stress. 20th Conference of Bangladesh Society of Agronomy. 31 December, 2021.

iii. Suhi A. A., **Mia S.**, Ahmed S. 2021.Performance of successively planted maize (Zea mays L.) grown with cowpea (Vigna unguiculata L.) under intercropping system. 20th Conference of Bangladesh Society of Agronomy. 31 December, 2021.

iv. Hasan MM, Mia S, Antor NH, Rashid MH. 2020. Activated biochar addition to biowaste enhances compost quality but not plant performance. 19th Conference of Bangladesh Society of Agronomy, BARC

v. Munny U. M. Hasan M.M., **Mia S.,** Biswas A. K.M. 2018. Activated biochar enhances composting process but increases ammonia emission. 17th Bangladesh Society of Agronomy Conference, Salna, Gazipur.

vi. **Mia S.** Sattar M.A., Alam, R. 2018. Nutrient loading in the river systems around major cities in Bangladesh: A quantitative estimate with consequences and potential recycling options. 3rd CSD annual conference, ULAB, Dhaka, Bangladesh.

vii. **Mia, S.,** Dijkstra, F.A., Singh, B., 2017. Aged biochar affects gross nitrogen mineralization and recovery: a ^{15}N study in two contrasting soils. Poster and impact presentation at International Nitrogen Initiatives Conference held between 4th and 8th December, 2016 at Melbourne Cricket Ground, Melbourne, Victoria, Australia.

viii. **Mia S.,** Hiemstra T., and Benoit P. 2013. Biochar derived humic acids possess high cation exchange sites. Asian Network for Sustainable Organic Farming Technology (ANSOFT), 20- 23 August, 2013, Dhaka, Bangladesh.

ix. **Mia S.,** Sattar M.A., Abuyusuf M., Hiemstra T. and Jeffery S. 2013. Biochar amendment for high N and P availability: an implication to Bangladesh. 12th Conference of Bangladesh Society of Agronomy, 20-21 September 2013, Dhaka, Bangladesh.

x. **Mia, S.** Dijkstra, A. F., and Hossain, Z. Changing paradigm from waste dumping to waste pyrolysis and composting in Bangladesh. Asian Network for Organic Farming Technology, May 23, 2015, Dhaka, Bangladesh.

Book edited

Uddin K., **Mia S**., Hasan M.M., Shahjahan M., Amin S.M.N. 2023. A reference book on Keyword Sequence Importance-A novel method for scientific writing. Ahmadu Bello University Press Limited, Zaria, Kaduna State, Nigeria.

Booklet

- Rashid M. H., **Mia S.**, and Hassan M. M. 2014. Murta chashabad podhoti (Cultural Practices of Murta (in Bengali), Barisal, Bangladesh.

Newspaper open editorial

a) **Mia S.** Genetic diversity in coastal rice of Bangladesh. The Daily Observer. Published on 20 November, 2021.
b) **Mia S.** Biochar technology to prevent climate change. The Daily Nation. Published on 09 June, 2021.
c) **Mia S.** *Jolbayu poribotton rodhe biochar projukti* (in Bengali). The Daily Shadhin Bangla. Published on 20 December, 2020.
d) **Mia S.** Oil Spill in Sundarban-A three- step management strategy. The Daily New Age. Published on 20 December 2014.

Consultancy Services

- Team leader, Environmental and Social Impact Analysis for the feasibility study of the Bangladesh-Singapore-Netherlands Joint Venture Shipbuilding Industry Establishment
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I hereby declare that the above statements are correct and complete to the best of my knowledge.

Shamim Mia