#### **DR. NIRMALI GOGOI**

: FEMALE

#### DATE OF BIRTH

: 1<sup>ST</sup> FEBRUARY, 1974

SEX

FOR

ADDRESS FOR CORRESPONDENCE Department of Environmental Science Tezpur University Napaam, Tezpur District: Sonitpur, Assam PIN: 784028 E-mail: <u>nirmali@tezu.ernet.in</u> <u>nirmalievs@gmail.com</u>

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# ACADEMIC QUALIFICATION 2016-2017

Post -Doctoral Research Department of Biochemistry and Molecular Biology Oklahoma State University,USA

2005

Ph. D. Dibrugarh University, Dibrugarh Thesis title: METHANE EMISSION ESTIMATION FROM DIFFERENT RICE AGROECOSYSTEMS OF ASSAM

FELLOWSHIP/SCHOLARSHIP AWARDED	1. Raman Fellowship for Post- Doctoral Research to USA (2015-2016).			
	2. University merit scholarship from 1997 to 1999, during post-graduation study.			
	3. National merit scholarship from 1989 to 1996 during Higher secondary onwards till graduation.			
Field of Interest	1. Environmental Physiology of Plants (Stress Physiology)			
	2. Green House Gas Emission and Carbon Sequestration from Agro-Ecosystem and forest ecosystem.			
Working experience:	1. Worked as Senior Research Fellow in Assam Agricultural Univesity Jorhat in a Department of Science and Technology (DST) funded Project From Dec.1999 to August,2003.			
	2. Worked as Technical Assistant in the Department of Environmental Science, Tezpur University from April, 2004 to March, 2009.			
	3. Worked as Assistant Professor in the Department of Environmental Science, Tezpur University, Assam from March, 2009 till date.			

## Ph.D. Research Supervision

Completed: 05 Ongoing :04

*M.Sc. Project Supervision:* Completed :23 Ongoing: 3

### LIST OF PUBLICATIONS

#### A) Original Research Papers:-

- 1. Gogoi.L.; Narzary,R.;Gogoi,N.;Borkotoki,B.; Kataki,R.(2020)Effect of biochar on soil respiration from a semievergreen moist deciduous forest soil. International Journal of Geosynthetic and Ground Engineering.
- 2. Chakraborty, S. Metya, A., Datye, A. Debburman, P., Dasgupta, P., Sarma, D., **Gogoi**, N., and Bora, A. (2020) Isotopic and concentration analyses of  $CO_2$  and  $CH_4$  in association with the eddy covariance based measurements in a tropical forest of north east India. DOI: <u>10.1002/essoar.10502721.1</u>.
- Bora, M.J., Bordoloi, S., Kumar, H., Gogoi, N., Zhu, H., Sarmah, A.K., Sreeja, P., Sreedeep, S., and Mei, G. (2020). Influence of biochar from animal and plant origin on the compressive strength characteristics of the degraded landfill surface soil. International Journal of Damage Mechanics. DOI: 10.1177/1056789520925524.
- 4. Sarma Baruah, M., Gogoi.N., K.P. Sarma (2020). Tolerance mechanism of cadmium in Ceratopteris pteridoides: Translocation and subcellular distribution. *Ecotoxicology and Environmental Safty*; July 2020. DOI: <u>10.1016/j.ecoenv.2020.110599</u> (IF 4.5)

**5.**Baruah, N., Mondal, S.C., Farooq, M., **Gogoi, N**\*. (2019) Influence of Heavy Metals on Seed Germination and Seedling Growth of Wheat, Pea, and Tomato. *Water, Air, & Soil Pollution* 230 (12), 273. (**IF 1.769**)

6. Gopal, P., Nadimpalli, G., Saikia, R. Sankari, H., Ratnam, R., Gogoi N., Garg, A., Buragohain, P., and Kataki, R. Optimization of pyrolyzer design to produce maximum bio- oil from *Saccharum ravannae* L.: an integrated approach using experimental data artificial intelligence. *BiomassConv.Bioref.* 9, 727–736(2019).<u>https://doi.org/10.1007/s13399-019-00397-2</u>. (IF 2.326).

7. Bharadwaj, N., Barthakur, S., Biswas, A. D., Das, M. K., Kour, M., Ramteke, A. and **Gogoi**, **N.** (2019) Transcript expression profiling in two contrasting cultivars and molecular cloning of a SKP-1 like gene, a component of SCF-ubiquitin proteasome system from mungbean Vigna radiate L. *Scientific reports*, 9(1): 8103,. doi:10.1038/s41598-019-44034. (**IF 4.122**).

8.S.C. Mondal, B.Sarma, M. Farooq, D.J. Nath, **Gogoi**,  $N^*$ .(2019) Cadmium bioavailability in acidic soils under bean cultivation: Role of soil additives. *International Journal of Environmental Science and Technology* (1-8). (**IF 2.037**).

**9.**Sarma, B., Farooq, M., **Gogoi**, N<sup>\*</sup>., Borkotoki, B., Kataki, R., Garg, A. (2018) Soil organic carbon dynamics in wheat-Green gram crop rotation amended with vermicompost and biochar in combination with inorganic fertilizers: A comparative study. *Journal of Cleaner Production* 201, 471-480 (**citation 7**) (**IF 6.395**).

10. Sarma, D., Baruah, K.K., Baruah, R, **Gogoi**,  $N^*$ ., Bora, A., Chakraborty, S., and Karipot, A.(2018)Carbon dioxide, water vapour and energy fluxes over a semi-evergreen forest in

Assam, Northeast India. Journal of Earth System Science 127:94. (citation 2) (IF 1.104)

- **11.**Sarma, B., **Gogoi**, N<sup>\*</sup>. Bharali, M., Mali, P. (2018) Field evaluation of soil and wheat responses to combined application of hardwood biochar and inorganic fertilizers in acidic sandy loam soil. *Experimental Agriculture* 54 (4), 507-519. (citation 3) (IF 2.089)
- 12. Saikia, R., Baruah, B., Kalita, D., Pant, K.K., Gogoi, N., Kataki, R. (2018) Pyrolysis and kinetic analyses of a perennial grass (Saccharum ravannae L.) from north-east India: Optimization through response surface methodology and product characterization. *Bioresource technology* 253, 304-314. (citation 17) (IF 5.807)
- 13. Bharadwaj, N., **Gogoi, N.,** Borthakur, S., Basumatary, N., (2018). Morpho-physiological responses in different mungbean genotypes under Drought stress. *Research Journal of Recent Sciences*. ISSN 2277-2502. (citation 2)
- 14. Gaur, D., Baruah, K.K. and **Gogoi, N.**(2018). Analysis of Greenhouse Gas (Methane and Nitrous Oxide) emission and global warm-ing potential from rice fields: with reference to biological mitigation of climate change. *SDRP journal of Earth Sciences and Environmental Studies*. Vol 3:2.DOI: 10.25177/JESES.3.2.3.
- 15. Buragohain, S., Sarma, B., Nath, D.J., Gogoi, N<sup>\*</sup>. Meena, R.S., Lal, R. (2018) Effect of 10 years of biofertiliser use on soil quality and rice yield on an Inceptisol in Assam, India. Soil Research 56 (1), 49-58. (citation 36) (IF 1.611)
- 16. Sarma, B., Borkotoki, B., Gogoi N and Kataki, R. (2017) Responses of Soil Enzymes and Carbon Mineralization to Applied Organic Amendments: A Short-term Study in Acidic Sandy Loam Soil. *Journal of the Indian Society of Soil Science* 65(3), 283-289. (citration 3) (IF 0.18).
- 17. Sarma, B., and **Gogoi N.\***, (2017). Nitrogen Management for Sustainable Soil Organic Carbon Increase in Inceptisols Under Wheat Cultivation. Communications in Soil Science and Plant Analysis DOI10.1080/00103624.2017.1373785.
- 18. Sarma, B., Gogoi N\*, Bharali, M., and Mali, P. (2017). Field evaluation of soil and wheat responses to combined application of hardwood biochar and inorganic fertilizers in acidic sandy loam soil. Experimental Agriculture https://doi.org/ 10.1017/S0014479717000205. (citation 3) (IF 2.089)
- **19.** Bharadwaj, N., Barthakur, S. and **Gogoi N.** (2017) Physiological responses of osmopriming and hormonal treatments in two contrasting mungbean (Vigna radiata) cultivars. Current Science 112 (12), 25. (**citation1**) (**IF 0.756**)
- 20. Paul, S., Das, M.K., Baishya, P., Ramteke, A., Farooq, M., Baroowa, B., Sunkar, R., Gogoi N.,\* (2017) Effects of high temperature on yield associated parameters on vascular bundle development in five potato cultivars. Scientia Horticulturae 225, 134–140. (Citation 8) (IF 2.961)

- **21.** Bharali, A. Baruah, K.K. and **Gogoi N.** (2017). Potential option for mitigating methane emission from tropical paddy rice through selection of suitable rice varieties. *Crop and Pesture Science*. http://dx.doi.org/10.1071/CP16228. (**Citation 3**) (**IF 1.488**)
- 22. Narzari, R., Bordoloi, N., Sarma, B., Gogoi N., and Kataki, R. (2017). Fabrication of biochars obtained from valorisation of biowaste and evaluation of its physicochemical properties. *Bioresource Technology*. (Citation 21) (IF 5.807)
- 23. Sarma, B., Borkotoki, B., Narzari, R., Kataki, R. and Gogoi N.\* (2017). Organic amendments: Effect on carbon mineralization and crop productivity in acidic soil. *Journal of Cleaner Production* 152, 157-166 (Citation 16) (IF 6.395)
- 24. Bharali, A. Baruah, K.K. and Gogoi N. (2016) Changes in organic carbon pool in a tropical soil planted to rice in relation to photosynthesis carbon fixation. *Australian Journal of Crop Science* 10(8), 1197-1206. 10.5 (Citation 3) (IF 0.55)
- 25. Bharali, A., Baruah, K.K. and Gogoi N. (2016) Methane emission from irrigated rice ecosystem: Relationship with carbon fixation, partitioning and soil carbon storage. *Paddy and Water Environment* DOI 10.1007/s10333-016-0541-3. (Citation 7) (IF 1.264)
- 26. Baruah, S.; Dutta, P.; Pegu, J.; Kaushik, H.; **Gogoi N**.; Puzari, K.C. and Hazarika, G.N. (2016) SEM study on morphological changes in Metarhizium anisopliae infected Aphis craccivora Koch. *Journal of Biological Control* 30(1). 29-33.
- 27. Paul, S., Bose, I. and Gogoi, N.\* (2016) Indices and their applicability under high temperature in potato (Solanum tuberosum L.) cultivars. *Current Science*. Vol.III (7) 1126-1231. (Citation 1) (IF 0.756)
- 28. Baroowa, B., Gogoi N\*. and Farooq, M. (2016). Changes in physiological, biochemical and anti- oxidant enzyme activities of green gram (Vigna radiate L.) genotypes under drought. *Acta Physiologia Plantarum* 38, 219-329. (Citation 8) (IF 1.438).
- **29.** Paul, S. Farooq, M., Bhattacharya, S.S. and **Gogoi N.\*** (2016) Management strategies for sustainable yield of potato crop under high temperature. *Archives of Agronomy and Crop Science* DOI: 10.1080/03650340.2016.1204542 (**citation 6**) (**IF 1.681**)
- 30. Sarma, B, Borgohain,S. Nath, D.J. and Gogoi, N.\* (2016) Temporal responses of soil biological characteristics to organic inputs and mineral fertilizers under wheat cultivation in inceptisol. *Archives of Agronomy and Soil Science*. doi.org/10.1080/03650340.2016.1179385 (citation 12) (IF 1.681)
- **31.** Baroowa, B. and **Gogoi N**.\* (2016). The effect of osmotic stress on antioxidative capacity of black gram (Vigna mungo L.). *Experimental Agriculture* DOI: http://dx.doi.org/10.1017/S0014479716000090 (citation 2) (IF 2.089)
- 32. Paul, S. Farooq, M. and **Gogoi N**.\*(2016). Influence of high temperature on carbon assimilation, enzymatic antioxidants and tuber yield of different potato (Solanum tuberosum

L.) cultivars. Russian Journal of Plant Physiology 63(3), 199-205. (citation 7) (IF 0.94)

- 33. Baroowa, B. and Gogoi N\* (2016). Morpho-physiological and yield responses of black gram (Vigna mungo L.) and green gram (Vigna radiata L.) under drought at different growth stages. *Research Journal of Recent Sciences* 5(2), 1-8. (citation 3)
- 34..Paul, S. and Gogoi N\*. (2015). Indices and their applicability under high temperature in potato (Solanum tuberosum L.) cultivars. *International Letters of Natural Sciences* 43, 63-68. (citation 1)
- **35.** Baroowa, B. and **Gogoi N**\*, Paul, S. and Baruah, K.K. (2015). Response of leaf water status, stomata characteristics, photosynthesis and yield in black gram and green gram genotypes to soil water deficit. *Functional Plant Biology* 42(10), 1010 1018. ( **citation 1**) (**IF 2.491**)
- **36.** Baroowa, B. and **Gogoi N**\*. (2015). Changes in plant water status, biochemical attributes and seed quality of black gram and green gram genotypes under drought. *International Letters of Natural Sciences* 42, 1-12. (citation 4)
- 37. Sarma, B., Bhattacharya, S.S., Gogoi N\*, Paul S. and Baroowa, B. (2015). Impact of N fertilization on C balance and soil quality in Maize –Dhaincha cropping sequence. *Journal of Agricultural Sciences* 60(2), 135-148. (citation 8) (IF 1.33)
  - **38.** Sarma, B. and **Gogoi N**\*. (2015). Germination and seedling growth of Okra (Abelmoschus esculentus L.) as influenced by organic amendments. Cogent Food and Agriculture 1: 1030906. http://dx.doi.org/10.1080/23311932.2015.1030906. (citation 16)
  - **39.**Baroowa, B. and **Gogoi N**\*. (2014). Biochemical changes in black gram and green gram genotypes after imposition of drought stress. *Journal of Food Legumes* 27(4), 350-353. (citation 7)

**40.** Sarma, B., Devi, P. and **Gogoi N\***, Devi, Y.M. (2014). Effects of cobalt induced stress on Triticum aestivum L. crop. *Asian Journal of Agriculture and Biology* 2(2), 137-147. ( **citation 5**)

**41.**Sahariah, B., Sinha, I., Sharma, P., Goswami, L., Bhattacharyya, P, **Gogoi N** and Bhattacharya, S.S. (2014). Efficacy of bioconversion of paper mill bamboo sludge and lime waste by composting and vermiconversion technologies. Chemosphere 109, 77-83. (**citation 26**) (**If 5.108**)

**42.** Paul, S., **Gogoi N**\*, Sarma, B. and Baroowa, B. (2014). Biochemical changes in potato under elevated temperature. *Indian Journal of Plant Physiology* 19(1), 36-42. (citation 10) (IF 0.54)

**43.**Baroowa, B. and **Gogoi N**\*. (2013). Biochemical changes in two Vigna spp. during drought and subsequent recovery. *Indian Journal of Plant Physiology* 18(4), 319-325. (citation 10) (IF 0.54)

44. Goswami, L., Patel, A., Dutta, G., Bhattacharya, P., Gogoi N., and Bhattacharya, S. S.

(2013). Hazard remediation and recycling of tea industry and paper mill bottom ash through vermi conversion. *Chemosphere* 92, 708-713. (citation 33) (IF 5.108)

**45.** Baroowa, B., **Gogoi N**\*, Paul, S. and Sarma, B. (2012). Morphological responses of pulse (Vigna spp.) crops to soil water deficit. *Journal of Agricultural Sciences* 57(1), 31-40. (citation 9) (IF 1.33)

**46.** Baroowa, B. and **Gogoi N**\*. (2012). Effect of induced drought on different growth and biochemical attributes of black gram (Vigna mungo L.) and green gram (Vigna radiate L.). *Journal of Environmental Research and Development* 6(3A), 584-593. (citation 28)

**47. Gogoi, N**, Baruah, K.K., Gogoi, B. and Gupta, P.K. (2008). Methane emission from two different rice ecosystems (Ahu and Sali) at lower Brahmaputra valley zone of North East India. *Applied Ecology and Environmental Research* 6(3), 99-112. (citation 21)

**48.Gogoi N**, Baruah, K.K. and Gupta, P.K. (2008). Selection of rice genotypes for lower methane emissions. *Agronomy for Sustainable Development* (EDP Sc.) 28, 181-186. (citation 24) (IF 4.101)

**49. Gogoi N**, Baruah, K.K., Gogoi, B. and Gupta, P.K. (2005). Methane emission characteristics and its relations with plant and soil parameters under irrigated rice ecosystem of northeast India. *Chemosphere* **59**, 1677-1684. (**Citation 67**) (**IF 5.108**)

**50. Gogoi N**, Baruah, K.K., Gupta, P.K. and Das, K.K. (2003). Physiological parameters of rice (Oryza sativa L.) associated with emission of methane from different agroecosystem. *Indian Journal of Plant Physiology* (special issue) pp.597-601. (citation 4) (IF 0.54)

51. Neog, B. **Gogoi, N.** and Baruah, K.K. (2002). Morpho-physiological changes associated with waterloging in rice (Oryza sativa L.). *Indian Journal of Agricultural Sciences*, 72, 402-405. (**Citation 4**)

**52.** Baruah, K.K., **Gogoi N.**, Gogoi, B., Barman, B. and Gupta, P.K. (2002). In: Non CO2 greenhouse gases: scientific understanding, control options and policy aspects. Edtrs. Van Ham et al. Millpress (The Netherlands) pp.101-106. (citation 2)

**53. Gogoi N.,** and Baruah, K.K. (2001). Effects of natural gas flare on growth, flowering and yield of rice (Oryza sativa L.). *Pollution Research* 20 (3), 337-341. (citation 1)

**54. Gogoi, N.**, and Baruah K.K., (2000) Effect of cold hardening and GA3 on growth and yield of boro'rice. *Indian Journal of Plant Physiology*, 5 (4), 339-343, (citation 3) (If 0.54)

**55. Gogoi N.,** and Baruah, K.K. (1999). Effect of cold and chemical hardening on growth, yield and some biochemical characters in boro rice (Oryza sativa L.). *Indian Journal of Plant Physiology* 4, 179-184. (citation 3) (IF 0.54)

#### **B) Review Article:-**

- 1. Gogoi, L., Narzari, R., Gogoi, N., Farooq, M., Kataki, R. (2019) Biochar Production and Application in Forest Soils-A Critical Review, *python*, 88 (4).
- **2.** Gogoi N<sup>\*</sup>., Farooq, M., Barthakur,S., Baroowa, B., Paul,S., Bharadwaj, N., and Ramanjulu, S.(2018) Thermal stress impacts on reproductive development and grain yield in grain legumes. *Journal of Plant Biology* 61-(5): 265-291. (Citation 3) (IF 1.254)
- M. Farooq, Gogoi N., S. Barthakur, B. Baroowa, N. Bharadwaj, S. S. Alghamdi & K. H. M. Siddique (2017). Drought Stress in Grain Legumes during Reproduction and Grain Filling. *Journal of Agronomy and Crop Science*, 1-22. (citation 124) (IF 2.96)
- M. Farooq, Faisal Nadeem, Gogoi, N., Aman Ullah, S. S. Alghamdi, Harsh Nayyar, & K. H. M. Siddique, (2017) Heat Stress in Grain Legumes during Reproductive and Grain-Filling Phases. *Crop and Pasture Science*, DOI: 10.1071/CP17012. (citation 11) (IF 1.488)
- M. Farooq, Gogoi, N., M. Hussain, S. Barthakur, S. Paul, N. Bharadwaj, S. S. Alghamdi & K H. M. Siddique, 2017. Effects, tolerance mechanisms and management of salt stress in grain legumes. *Plant Physiology and Biochemistry* 118:199-217. (citation 42) (IF 3.404)

#### C) Book Review:-

**1.**Meena RS, **Gogoi N**, Kumar S. Alarming issues on agricultural crop production and environmental stresses (2016). *Journal of cleaner production* 1-3. (citation 30) (IF 6.395)

2.Ashoka P, Meena RS, Gogoi N, Kumar S, Green nanotechnology is a key for eco-friendly agriculture, *Journal of Cleaner Production* (2016), doi: 10.1016/j.jclepro.2016.11.117. (citation 28) (IF 6.395)

#### D) Book chapter:-

 Borah, P., Baruah, N.GogoiL, Borkotoki, B., Gogoi, N. and Kataki, R. (2020) Biochar: A New Environmental Paradigm in Management of Agricultural Soils and Mitigation of GHG Emission *In book*: Biochar Applications in Agriculture and Environment Management. DOI: <u>10.1007/978-</u> <u>3-030-40997-5\_11</u>.

2. Hiloidhari, M., Bhuyan, N., **Gogoi, N.**, Seth, D., Garg, A., Singh, A., Prasad, S., and Kataki, R. (2020) Agroindustry wastes: biofuels and biomaterials feedstocks for sustainable rural development. Technology, Advances, Life Cycle Assessment, and Economics, 357- 388, https://doi.org/10.1016/B978-0-12-818996-2.00016-8 3.**Gogoi, N**<sup>\*</sup>., Sarma, B., Mondal, SC., Kataki, R., Garg, A., (2019) Use of Biochar in Sustainable Agriculture. Innovations in Sustainable Agriculture, 501-528

4.Farooq,M; Sanaullah,M.; Nadeem,F; **Gogoi, N**. Arshad,M.S. and Lal,R.(2018). Soil degradation and climate change in South Asia. In book: Soil and Climate (CRC press). 323-358. (Citation 23)

5. **Gogoi, N**<sup>\*</sup>., Baruah, K, K., and Meena, S, R., 2018. Grain Legumes: Impact on Soil Health and Agroecosystem. In book: Legumes for Soil Health and Sustainable management.(Springer) DOI: 10.1007/978-981-13-0253-4\_16. (Citation 24)

6. Narzari, R., Bordoloi, N., Chutia, R.S., Borkotoki, B., **Gogoi N**, Bora, A. and Kataki, R. (2015) Biochar-an overview on its production, properties and potential benefits. In: Biology, Biotechnology and Sustainable Development. H. Choudhury (Edtrs.), Research India Publications, New Delhi, India (ISBN: 978-93-84443-19-1). (citation 5)

7.Handique, S. and **Gogoi N**. (2013). Solid waste management and conservation of MSW into organic compost. In Organic Farming and Vermiculture. Lingaraj Patro (Edtrs.), MP Publishers & Distributors, New Delhi, India (ISBN 978-81-89972-84-4).

8.Baruah, K.K., Das, K. and **Gogoi N**. (2005). Vegetation recovery in flood degraded wasteland of Majuli. In Science and technology for Regional Development: Case for North East India. Dolui, S.K. and Mahanta, C. (Edtrs.), Tezpur University and IIT, Guwahati, pp.20-26

9.Baruah, K.K., Nath, B.C. and **Gogoi N**. (2001). Physiological and biochemical traits of rice (*Oryza sativa* L.) genotypes associated with tolerance of iron toxicity. *In*: Plant Nutrition: food security and sustainability of agro ecosystems through basic and applied research. Edtrs. Horst, W.J. *et al.* Kluwer (London) pp. 476-478. (citation 4)

#### E) Papers in proceedings of Conferences:-

1. Gopal,P., Ratnam, R.,Farooq,M.Garg,A. **Gogoi**, N.(2018) Influence of biochar obtained from invasive weed on infiltration rate and cracking of soils:An integrated experimental and artificial intelligence approach. In:Proceedings of the 8th International Congress on Environmental Geotechnics.1: 351-358. Published by Springer, Singapore.

2. **Gogoi N.,** Baruah, K.K., Gupta, P.K. and Das, K.K. (2001). Methane emission from irrigated rice ecosystems of Assam: Differences due to cultivar and soil characteristics. *In:* Role of Plant Physiology for sustaining quality and quantity of food production in relation to environment. Edtrs. Chetti M.B. *et al.* ISPP, pp. 16-19.

#### TRAINING/SEMINAR ATTENDED:

- Participated four (4) workshops (one week each) under the project entitled "Strengthening education, research and innovation for climate smart crops in India" (funded by European Union under Erasmus + programme) at University of Milan, Italy; Polytechnic University of Marche; Ankona, Italy; Costa Navarino, Greece; International Crop Research Institute of Semi-arid Tropics, Hyderabd, India From January 18<sup>th</sup> 2020 -Feb 16<sup>th</sup> 2020.
- Participated in International Conference Climate Change, Biodiversity and Sustainable Agriculture (ICCBSA-2018), at Assam Agricultural University, Jorhat, Dec 13th - 16th, 2018.
- Participated in International Seminar on Land and Water issues in South East Asia: Status, Challenges and Opportunities. At North East Institute of Land and Water Management, Dolabari, Tezpur, 18-20<sup>th</sup> January, 2018.
- Participated in Workshop on Capacity Building for Mitigation of Climate Change using Precision Agriculture 20-22 March, 2015 Department of Energy, Tezpur University, Assam, India.
- Participated in International Conference on Harnessing the "Sub-Himalayan plant diversity for human welfare" Held at Dibrugarh University, Dibrugarh, Assam during 11-13<sup>th</sup> March 2015.
- Participated in national Conference of Plant Physiology, 2014 "Frontiers of plant physiology research: Food security and Environmental challenges." Held at Orissa University of Agriculture and Technology, Bhubaneswar during November 23-25, 2014.
- Participated in training cum workshop on Statistical package for social sciences (SPSS) organized by the Department of Sociology, Tezpur University from November 3-9, 2014.
- Participated in National Seminal on Climate Change and Climate Resilient Agriculture, organized by Agromet Advisory Services, Sonitpur in collaboration with AICRPDA, BN College of Agriculture, AAU, Biswanath Chariali Assam. 18-19<sup>th</sup> March, 2013.
- Participated the 4<sup>th</sup> International Congress of Environmental Research, Organized by JERAD, Bhopal; SVNIT, Surat and Gujarat Pollution Control Board, Ahmedabad at SVNIT, Surat from 15<sup>th</sup> to 17<sup>th</sup> Dec, 2011.
- Participated in the Summer School on "Climate variability and its impact on crop production-Physiological perspective towards mitigation strategies organized by the dept. of Crop physiology Assam Agricultural University, Jorhat in collaboration with ICAR, new Delhi from 23<sup>rd</sup> August to 12<sup>th</sup> Sept.,2011.

- Participate in the workshop on Development of Self learning materials (SLMs) for distance Learners organized by the Department of Business Administration, Tezpur University from 17<sup>th</sup>-18<sup>th</sup> June,2011.
- Participate in the one day workshop on "Climate Change-Issues & Policy formulation" organized by the Department of Environmental Science, Tezpur University in collaboration with ASTEC, Guwahati, Assam on 3<sup>rd</sup> March, 2011.
- Participated in National Seminar on "Climate Change and Sustainable Development with reference to India. Organized by the department of Environmental Science, Tezpur University from 1<sup>st</sup> to 3<sup>rd</sup> April, 2010.
- Participated in Faculty Development Programme on SPSS organized by Department of Business Administration in collaboration with SPSS South Asia Pvt. Ltd. 15-16<sup>th</sup> Dec, 2009.
- ◆ Participated in annual conference of Indian Science congress at NEHU in Jan.2009.
- Participated in the workshop on Promoting Technology Development, Utilization and Transfer. Organized by Department of Science and Industrial Research, Govt. of India, New Delhi at Tezpur University on 20<sup>th</sup> January, 2006.
- Participated in the National Workshop on Science and Technology for regional development: Case for North East India. Organized by Tezpur University and held at IIT Guwahati, 3-6 February, 2004.
- Participated in the 2<sup>nd</sup> International Congress of Plant Physiology on Sustainable Plant Productivity under changing Environment organized by Indian Society for Plant Physiology and International Association for Plant Physiology, January, 8-12, 2003.
- Participated in the National Training Workshop on Greenhouse gas emission from ricebased cropping system at Central Rice Research Institute, Cuttack, Orissa, 4<sup>th</sup> -15<sup>th</sup> February, 2002.
- Participated in the National Seminar on Water and Land Management including CAD for socioeconomic upliftment of NE region, 22<sup>nd</sup> -23<sup>rd</sup> November 2001 organized by North Eastern Regional Institute of Water and Land Management, Tezpur.
- Participated in the 5<sup>th</sup> Agricultural Science Congress 4-7<sup>th</sup> April, 2001 at Assam Agricultural University, Khanapara, Guwahati.

### **MEMBERSHIP OF ACADEMIC SOCIETIES:**

\* Life member of Indian Society for Plant Physiology

\* Life member of Indian Science Congress Association

\* Member of Indian Society of Pulses Research and Development.

#### **REVIEWERS OF JOURNAL**

- **1.** African Journal of Biotechnology
- 2. Agronomy for sustainable development
- 3. Archives of Agroinomy and Crop Science
- 4. African Journal of Microbial Research
- 5. Cogent Food and Agriculture (Taylor and Frencise)
- 6. Journal of Earth Science and Climate Change
- 7. Journal of Cleaner Production
- 8. Soil Science and Plant nutrition
- 9. Plant Physiology and Molecular Biology
- **10.** Science of the Total Environment

#### **PROJECTS ASSOCIATED**

Sl. No.	Title of the project	Funding agency	Date of start /Cost	Role as
1.	Impact of Climate change with reference to low rainfall on sustainable productivity of pulse crops in Assam	University Grant Commission (UGC) (MRP)	1 <sup>st</sup> February, 2011 for 3 years <b>Rs.</b> 11,18,300.00 15,658.52 (USD)	Principal Investigator
2.	Evaluation of carbon sequestration and enhancing carbon sinks in rice based agroecosystems of Assam	Department of Science and Technology (DST) (Govt. of India)	1 <sup>st</sup> April, 2012 for 3 years <b>Rs. 62,42,751.00</b> <b>87,411.45 (USD)</b>	Co-Principal Investigator
3.	Production of biochar from various bio wastes and its soil application for sustainable soil management and mitigation of GHG emission	University Grant Commission (UGC) (MRP)	1 <sup>st</sup> April, 2013 for 3 years <b>Rs. 12,95,800.00</b> 18,143.88 (USD)	Co-Principal Investigator

4.	Soil plant atmosphere studyin relation to net CO2 flux from terrestrial ecosystem of Assam	Ministry of Earth Science, Govt. of India	September, 2012   initially for 5 years   Rs. 54,89,000.00   76,857.37 (USD)   Again extended for   another 3 years   April, 2018 to March,   2021   Rs. 47,90,000.00   67,069.92 (USD)	Principal Investigator
5.	Strengthening Education, research and innovation for climate smart crops in India	Erasmus <sup>+</sup> capacity building in higher education	March, 2019 for three years 105,428.75 Euros	Co-Principal Investigator

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(Nirmali Gogoi)