# **CURRICULUM VITAE**

**DR. ANUSHREE BARUAH** 

MSc (Botany), PhD (Environmental Sciences)

**Assistant Professor** 

Dept. Of Botany,

Royal Global University, Guwahati

Life Member: Indian Lichenological Society

Life Member: Botanical Society of Assam

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## **Career Objective**

To obtain a position that will enable me to use exceptional interpersonal, communication, technical and teaching skills in biological sciences with emphasis to flora, agriculture, and climate of the region.

## **Academic Qualifications**

Ph.D., (Environmental Science), Tezpur Central University, Tezpur, Assam (2017)

M.Sc., (Botany), Cotton College, Gauhati University, Assam (2007),1st class (68.6%)

**B.Sc.**, (**Botany Honors'**), D.C.B. Girls College, Dibrugarh University, (2005),1<sup>st</sup>class (63.5%)

AISSCE, (Science), Kendriya Vidyalaya, AFS, Jorhat, CBSE, (2002), 1st division (68.4%)

AISSE, Kendriya Vidyalaya, AFS, Jorhat, CBSE, (2000), 1<sup>st</sup>division (71.6%)

## **Professional and Research Experience**

Lead analyst & Scientific Consultant, Eastern Envo Protect, Guwahati, February 2018 - July 2018

**Head – QC**, Alliance India Pvt Ltd., A Franchisee Partner of Hindustan Unilever Ltd., Guwahati, March 2017 – August 2017

Lecturer (Biology), Pragati Study Centre, Golaghat, March 2016 – December 2017

Research Scholar (Environmental Science), Tezpur Central University, January 2010 - February 2016

Executive- QC (Microbiology), S.C. Johnson Products Pvt. Ltd., December 2007 - October 2009

Master's project supervised: 23 passed out; 6 continuing

Bachelor's project supervised: 03 passed out.

PhD supervised (continuing): 03

#### **Research Interest**

Environmental pollution and remediation, Greenhouse gas emission and mitigation from Agriculture Sector and Carbon Sequestration of terrestrial ecosystem; plant nutrition and soil health management.

## **Awards/ Recognition**

Institutional fellowship for Ph. D research

Internal auditor of **Integrated management system** of **ISO 9001:2008**, **ISO 14001:2004**, Certified by PMG consultants, Gurgaon, India, 2009

Quality control microbiologist, Certified by FDA, Guwahati, Assam, 2008

### **Implant Training**

Internal auditor course on **Integrated management system** of **ISO 9001:2008, ISO 14001-2004** held at S.C. Johnson Products Pvt. Ltd. Guwahati delivered by PMG consultants, Gurgaon, India.

Training on Computer-Based Statistical Programme (SPSS) held at NECRD, IGNOU, Guwahati.

National workshop on **Climate change** held at Dept. of Environmental Science, Tezpur University.

Short – term training course on **Cheminformatics and computer aided drug designing** held at bioinformatics infrastructure Facility, Biotechnology, CSIR-NEIST, Jorhat, Assam.

National orientation workshop in **Micro-organisms: let us observe and learn** held at department of Botany, Cotton College, Guwahati, Assam.

Workshop on **Bioinformatics and its prospects** held at Department of Botany, Gauhati University, Assam.

## **Research projects:**

## **Doctoral research**

Title: Mitigation of Nitrous oxide emission from Rice-Wheat ecosystem of Assam with reference to soil management

Supervisor: Prof. Kushal Kumar Baruah, Dept. of Environmental Science, Tezpur Central University

**Brief details:** 

- $\checkmark$  Estimation of nitrous oxide (N<sub>2</sub>O) emission from rice-wheat ecosystem.
- ✓ Reduction of N₂O emission in rice and wheat cropping system in Assam through application of readily available organic waste of the farmers having different C-N ratios.
- ✓ Affect of organic amendments on soil qualities and crop productivity.
- ✓ To regulate the microbial production potential of  $N_2O$  in the soil by the use of organic amendment and use of biological inhibitors may affect  $N_2O$  emission.
- ✓ Contributing to national budget for N₂O emission from India.

## <u>Seminars/ Conferences participated and papers presented:</u>

- International Conference on Multidisciplinary Approaches in Lichenology, held at CSIR-NBRI,
   Lucknow, 28 30 September 2022
- International conference on "Recent Trend and Practices in Science, Technology, Management and Humanities for Sustainable Rural Development (STMH - 2019)" held at University of Science and Technology, Meghalaya, September 2019.
- National conference on "Recent advancements in Environmental Research" held at Centre for the Environment, IIT, Guwahati, Assam, June 2016
- 4<sup>th</sup> International Rice Congress held at Bangkok, Thailand organized by IRRI, October 2014
- National Seminar on "Climate change and sustainable development" held at Dept. of Environmental Science, Tezpur University, Tezpur, Assam, April, 2010
- UGC sponsored National seminar on "Management and utilization of Resources for Sustainable
   Development and prospects of Eco-friendly Industrialization in N.E. India" held at Department
   of Geography, Tezpur College, Tezpur, Assam, January 2011.
- UGC sponsored National seminar on "Challenges to mitigation of global warming" held at Nazira
   College, Sivasagar, Assam, October 2008.

## **Publications:**

#### **Book Chapter:**

**Baruah A.** and Deb M. (2022). Microbial community structure and climate change: Impact of agricultural management practices in mountainous landscapes. In **Understanding Soils Of Mountainous Landscapes: Sustainable Use Of Soil Ecosystem Services And Management**. Edtrs. Bhadouria R., et al., Elsevier Pub. P 151 – 159; **ISBN** 978-0-323-95925-4

Baruah, K.K., Borah L. and **Baruah A.** (2012). An overview of mitigation option for greenhouse gas emissions from rice based agro-ecosystems in the northeastern region. In **Land management in marginal mountain** 

**Regions: L Adaptation and vulnerability to global change**. Edtrs. Saxena K.G. et al., Bishen Singh Mahendra Pal Singh Pub. (New Delhi) p 245-263; **ISBN** 978-81-211-0836-2

#### **Journal Publication (International):**

Baruah, A., Baruah, K. K., and Bhattacharyya, P. (2016) Comparative Effectiveness of Organic Substitution in Fertilizer Schedule: Impacts on Nitrous Oxide Emission, Photosynthesis, and Crop Productivity in a Tropical Summer Rice Paddy. **Water Air Soil Pollution**, 227:410, DOI 10.1007/s11270-016-3111-9.

Baruah, A. Baruah, K. K., Gorh, D., and Gupta, P. K. (2016) Effect of Organic Residues with Varied Carbon-Nitrogen Ratios on Grain Yield, Soil Health and Nitrous Oxide Emission from a Rice Agroecosystem, **Communications in Soil Science and Plant Analysis**, DOI: 10.1080/00103624.2016.1178764

Baruah A., Bordoloi N., and Baruah K. K. (2016) Effect of organic amendments with varied C-N ratios on grain productivity and nitrous oxide ( $N_2O$ ) emission from wheat grown in alluvial soil. **Australian Journal of Crop Science**, 10(4):460-469

Baruah, A. and Baruah, K.K. (2015) Organic Manures and Crop Residues as Fertilizer Substitutes: Impact on Nitrous Oxide Emission, Plant Growth and Grain Yield in Pre-Monsoon Rice Cropping System. **Journal of Environmental Protection**, 6, 755-770. http://dx.doi.org/10.4236/jep.2015.67069

#### **Conference Proceedings (National/International):**

**Anushree Baruah,** Sabnam Sultana, Sneha Mudoi and Kaberi Bordoloi (2022). Assessment of bioactive molecules and antimicrobial activities in lichens species of Golaghat District of Assam, India. ILS – 2022, Lucknow

**Baruah A.** and Baruah K. K. (2019) Biological mitigation of N2O emission through application of plant-based nitrification inhibitors in wheat field. STMH – 2019, USTM - Meghalaya

**Baruah A.** and Baruah K. K. (2016) Influence of organic residues with varied C:N as amendments on Nitrous oxide emission and grain productivity in pre-monsoon rice ecosystem of Assam". RAER 2016, IIT – Guwahati, Assam.

**Baruah A.**, Gorh D. and Baruah K. K. (2014) Effect of organic manures with varied C/N ratios on nitrous oxide emission from winter rice (Oryza sativa). 4th International Rice Congress (IRC-2014) at Bangkok, Thailand.

**Baruah, A.**, Bordoloi, N., and Baruah K. K (2013). "Organic management of soil with C: N for mitigation of Nitrous oxide from wheat agriculture". Indian Science Congress.

Baruah K. K., Borah L., and **Baruah A**., (2012). "Management of plant genotypes and soil C-N ratio as biological mitigation option for nitrous oxide emission from wheat (*Triticum aestivum*) agriculture" **IGAC**, **Beijing**, China.

## **Practical Experience in Instrument handling**

Expertise in Gas chromatograph, TOC analyzer and Automated soil CO<sub>2</sub> flux system.

Operation and handling of Ion Chromatograph, Atomic absorption Spectrophotometer, Photosynthesis system, Leaf area Meter, Gel electrophoresis, Quantum photometer, Ultra Centrifugation.

## **References:**

Dr. Kushal Kumar Baruah, Former Professor, Dept. of Environmental Science, Tezpur (Central) University, Tezpur, Assam. Tel: +91-9365120550

Dr. Binoy Kr. Saikia, Scientist& Head, Coal Chemistry Division, CSIR-NEIST, Jorhat, Assam.Tel: +91-9435058087

I declare that the information above is true to the best of my knowledge.

**Place: Guwahati** 

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