

**Name** Dr. Neelanjana Baruah.

**Designation** Professor.

**Department** Instrumentation Engineering, Jorhat Engineering College, Jorhat-785007, Assam

**Mail Id.** neelanjana.bb@gmail.com

**Phone no.** 9435353450

**Area of Specialization:**

Instrumentation and Control Engineering,  
Non-conventional energy  
Power system stability and Power Plant Instrumentation

**Educational Qualification:**

**PhD** Department of Instrumentation Engineering& USIC, Gauhati University, Guwahati; 2011  
Thesis: Voltage Stability Analysis of a Power System

**M. Tech** Specialization: Instrumentation;  
Department of Electrical Engineering;  
Indian Institute of Technology, Kharagpur; 1989

**BE** Electrical Engineering; Assam Engineering College; Guwahati; 1983

**Professional Experience:**

1984-1985: Assistant Engineer, Assam State Electricity Board

1985- till date: Faculty Jorhat Engineering College.

**Courses Taught:**

Basic Electrical Engineering, Basic Electronics, Power Systems, Automatic Control Theory, Electrical Circuit Theory, Electrical Measurement and Measuring Instruments, Power Electronics, Opto Electronics, Communication Engineering, Analytical Instruments, Transducers, Drawing and Design of Instrumentation System Components.

**Projects guided:**

BE: More than 100.  
ME: 06

**PhD. guided:** 02

### Membership:

- Member of Technical Committee for “Cardiac Cath lab, Heart Lung & Hemotherm Machine” for Assam Medical College & Hospital, Dibrugarh; 2014
- Member of Syllabus Committee of AICTE, held in IIT Kharagpur for syllabus modification of Instrumentation Engineering; 1995
- Life Member of Instrument Society of India
- Chairman of 1st Board of Studies (BOS) meeting of Assam Science and Technology University (ASTU) B. Tech Instrumentation Engineering held on 06/04/2018

### Sponsored Projects:

Coordinator of Five Projects, a total of over Rs. 55.5 lakhs, with external funding from AICTE under MODROB. The projects to develop have been successfully completed and the students of the departments of Electrical Engineering & Instrumentation Engineering are the direct beneficiaries.

MODROB Project detail:

- i) **Control System** : Sanctioned Amount: Rs 13lakh ; Completed
- ii) **Instrumentation** : Sanctioned Amount: Rs 5lakh; Completed
- iii) **Software** : Sanctioned Amount: Rs 11lakh; Completed
- iv) **Transducer** : Sanctioned Amount: Rs 13lakh; Completed
- v) **Analog and Digital Electronics** : Sanctioned Amount: Rs 13lakh; Completed

### Publication:

1. **N Baruah** ,L. Phukan “Fuzzy Logic based Speed Control of an Induction Motor using Indirect Vector Control Method” ; International Journal of Emerging Trends in Science & Technology; Vol 02, Issue of January, 2015
2. **N Baruah** ,L. Phukan “Design of Fuzzy Logic Controller for Performance Optimization of Induction Motor using Indirect Vector Control Method”; International Journal of Electrical, Electronics and Data Communication; vol 2, Issue 12,2015
3. **N Baruah** ,D.Hazarika, K C Sarma: “Static Voltage Stability Indication in a Power System using ANN” National Conference on Computational Intelligence and Signal Processing Don Bosco University; 2011
4. **N Baruah**, D.Hazarika, K Khaparde ,K C Sarma: “Monitoring of Voltage Stability Condition in a Power System using the Measurement of System Variables” Proceedings of International Conference on Electrical Power and Energy Systems; N.I.T. Bhopal; 2010
5. D.Hazarika, K C Sarma, **N Baruah**: “Method for Determining Load Margin of a Bus in terms of its Voltage Collapse Limit in an Interconnected Power System ” Proceedings of Conference 15<sup>th</sup> National Power System Conference; I.I.T. Bombay; 2008

6. **N. Baruah**, P. B Dutta Gupta, P.K. Kulkarni: "*Artificial Heart Assist System and its Drive Circuit Controlled by a Microprocessor*" Proceedings of conference the 13<sup>th</sup> National Systems Conference, I.I.T. Kharagpur, 1989