

## BIO-DATA

1. Name: Dr. Kuntala Boruah.
2. Designation: Assistant Professor
3. Educational Qualifications: MCA, PhD
4. Date of Joining: 01/07/2019
5. Date of Birth: 17/07/1987
6. Email ID: [kuntala17@gmail.com](mailto:kuntala17@gmail.com)
7. Area of interest: DNA Computing, Bioinformatics
8. Achievements: UGC BSR Junior Research Fellow (JRF) & Senior Research Fellow (SRF), December 2013 – December, 2018.
9. Orientation/Refresher/Short Term course Attended: Nil
10. Workshop Attended:

<b>Sl. No</b>	<b>Name of the Seminar etc</b>	<b>Date</b>	<b>Venue</b>	<b>Sponsored by</b>
1	Recent Advances in Mathematical and Computational Biology	18 <sup>th</sup> & 19 <sup>th</sup> October 2014	Department of Molecular Biology & Biotechnology, Tezpur University, Tezpur	National Network for Mathematical and Computational Biology
2	2 – Day Familiarization Workshop on Nanofabrication Technologies	25 <sup>th</sup> & 26 <sup>th</sup> April 2015	Tezpur University, Tezpur	DeitY, MCIT, IIT Bombay and IISc
3	Weeklong Workshop on Research Methodology	19 <sup>th</sup> – 24 <sup>th</sup> June 2017	Tezpur University, Tezpur	MHRD

## 11. List of Journal/Conference/eBook Chapter publications:

- i. Boruah, K. and Dutta, J. C. An improved generalized DNA computing model to simulate logic functions and combinational circuits. *International Journal of Information Technology*, 10(3): 379-390, 2018, Springer.
- ii. Boruah, K., and Dutta, J. C. Algorithm to Simulate a Chemically Induced DNA Logic Gate and Boolean Circuit. *Current Trends in Biotechnology and Pharmacy*, 11(2): 160-166, 2017.
- iii. Boruah, K. and Dutta, J. C. A DNA computing algorithm of realization of DNA Boolean logic based on micro-cantilever deflection, *International Journal of Pharmaceutical Sciences Review and Research*, 42(1): 111-116, 2017.
- iv. Boruah, K. and Dutta, J. C. DNA Computing Model for Realization of Boolean circuit, *International Journal of Control Theory and Applications*, 9(21):281-287, 2016.
- v. Boruah, K. and Dutta, J. C. Development of a DNA computing model for Boolean Circuit. In 2nd International Conference on Advances in Electrical, Electronics, Information, Communication and Bio-Informatics (AEEICB), pages 301-304, Chennai, India, 27-28 Febuary 2016, IEEE.
- vi. Boruah, K. and Dutta, J. C. DNA Computing Models for Boolean Circuits and Logic Gates. In IEEE International Conference Computational Intelligence & Communication Technology (CICT), pages 529-533, Ghaziabad, India, 13-14 February 2015, IEEE.
- vii. Boruah, K. and Dutta, J. C. Twenty years of DNA computing: From complex combinatorial problems to the Boolean circuits. In International Conference on Electronic Design, Computer Networks & Automated Verification (EDCAV), pages 52-57, Shillong, India, 29-30 January 2015, IEEE.
- viii. Boruah, K. and Dutta, J. C. A Model to Demonstrate the Universality of DNA-NAND Gate. *Advances in Electronics, Communication and Computing*, vol 443, 67-76, 2018, Springer.
- ix. Deka, R., Boruah, K., & Dutta, J. C. Optimization of Hodgkin–Huxley Conductance-Based Model Using Particle Swarm Optimization and Firefly Method. In *Advances in Electronics, Communication and Computing*, vol 443, 61-65, 2018, Springer.