## Dr. Rajib Lochan Sarma

**Position:** Assistant Professor
**Department:** Chemistry
**Institution:** Bhattadev University, Bajali, Assam, India
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### Profile Summary


With over a decade of experience in the academic area, expertise in chemistry and education has been developed. Research is focused on computational chemistry, particularly the analysis of reactive intermediates and their implications in biological systems. A deep understanding of chemistry is fostered among students at Bhattadev University, where the position of Associate Professor is held. Research in the field is advanced, with a deep interest shown in performing research toward social implementation.


### Education

- **Ph.D. in Chemistry** (2010)
  *Gauhati University*
  Thesis: Analysis of Reactive Intermediates and DNA Damage
- **M.Sc. in Chemistry** (2002)
  *Gauhati University*
  Specialization: Physical Chemistry
- **B.Sc. in Chemistry** (2000)
  *Gauhati University*
- **NET (LS) in Chemical Science** (2003)

### Research Experience

My research journey began with a focus on the dynamics of reactive intermediates, contributing to significant findings in the context of anticancer drug action. I have been a Project Fellow in a DST-sponsored research initiative, which has allowed me to collaborate with esteemed colleagues and contribute to impactful publications.

### Journal Publications


1. **Rajib Lochan Sarma**, C.Medhi; Structure and stability of sugar radical nucleotides, ***Journal of Molecular Structure,*** vol.763, 51-57, **2006**

http://dx.doi.org/10.1016/j.theochem.2005.12.037

2. **Rajib L. Sarma**, Murshida Karim, Chitrani Medhi; *Ab initio* and DFT studies on nucleobase radicals of nucleotides; ***Journal of Molecular Structure,*** vol. 805, 17-25, **2007**

https://doi.org/10.1016/j.theochem.2006.09.031

3. **Rajib L Sarma**, Rituraj Kalita, Murshida Karim, Bipul Bezbaruah and C Medhi; *Ab initio* molecular orbital and force field calculation on the interaction of daunomycin with GC base pair and interaction within DNA; ***Indian Journal of Chemistry,*** vol 47B, 1605-1610, **2008**

http://nopr.niscpr.res.in/handle/123456789/2261

4. Bipul Bezbaruah, Manash L Das, **Rajib L Sarma**, Murshida Karim & C Medhi; *Ab initio* study on the nature of stacking between azzcridine -4-carboxamides with base pairs of DNA ***Journal of Molecular Structure,*** vol.947, 107-114, **2010**

https://doi.org/10.1016/j.theochem.2010.02.003

5. Raghab Parajuli, **Rajib L. Sarma**, Manas L. Das & C Medhi; Model study on the sequence specific stacking by chromophore of an anticancer drug, acridine carboxamide with base pairs of DNA; ***Indian Journal of Chemistry,*** vol. 46B, 1483, **2007**

http://nopr.niscpr.res.in/handle/123456789/3853

6**.** Murshida Karim, **Rajib L. Sarma**, & C Medhi; Theoretical studies on the initiation of alkylation pathway by aziridine ring of mitomycin C at guanine nucleobase of DNA; ***Indian Journal of Chemistry ,*** vol. 47B, 892-902, **2008**

http://nopr.niscpr.res.in/handle/123456789/1739

7. P Hazarika, **, Rajib L Sarma**, M Krim, B Bezbaruah, R Kalita & C Medhi; Prediction of *p*Ka from basic principles: *Ab initio* and DFT studies on some molecules**;** ***Indian Journal of Chemistry,*** vol 48A, 520-525, **2009**

http://nopr.niscpr.res.in/handle/123456789/3900

8. Nitesh Boro, Ashis Borah , **Rajib L Sarma** , Dianta Narzary; Beer production potentiality of some non-Saccharomyces yeast obtained from a traditional beer starter emao; ***Brazilian Journal of Microbiology***, 53, 1515–1531, **2022**
https://doi.org/10.1007/s42770-022-00765-7

9. Ridip Das , Rajib Lochan Sarma and Dipjyoti Kalita; Electronic Spectroscopy and Molecular Modelling Study of Supramolecular Receptors based on Azo Compound of o-Toluidine Capable of Sensing Mercuric Ion., *Asian Journal of Chemistry*; Vol. 35, No. 9 (2023), 2265-2274
https://doi.org/10.14233/ajchem.2023.28243