Dr. Jayanta Madhab Borah
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Department of Chemistry
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Education:

1. **B.Sc**.: J. B. College, Dibrugarh University, 2003
2. **M.Sc**.: University Classes, Gauhati University, Guwahati, 2005
3. **PhD** in Chemistry: Gauhati University, Guwahati, 2011
   (Thesis title: ***Adsorption of Simple Aromatic Organic Acids/Anions at the Alumina/Water Interface: Influence of Functionality and background Electrolytes.*** Thesis Supervisor: Dr. Sekh Mahiuddin, Retired Chief Scientist, Materials Science Division, CSIR-North-East Institute of Science and Technology, Jorhat-785006, Assam, INDIA.)

Teaching Experience:

1. Working as an Assistant Professor in Department of Chemistry of Nanda Nath Saikia College, Titabar, Jorhat from September, 2016 to till date.
2. Worked as Assistant Professor in Department of Chemistry of Lumding College, Lumding, Nagaon from June, 2013 to September, 2016 .
3. Worked as Assistant Professor (contractual) in Department of Chemistry of D. C. B. Girls' College, Jorhat from February, 2012 to May, 2013.

Research Experience:

1. Worked as a Senior Research Fellow from 24/10/2008 to 10/01/2011 at the Materials Science Division, North-East Institute of Science and Technology, CSIR, Jorhat, Assam, INDIA

2. Worked as a Research Fellow from 20/06/2006 to 22/10/2008 at the Materials Science Division, North-East Institute of Science & Technology, CSIR, Jorhat, Assam, INDIA

Area of Interest:

1. Surface chemistry of small organic acids at the metal oxide/water interface

2. Hoffmeister ion series studies at the solid/liquid interface

3. Propensity of small organic acids at the liquid/vapor interface

4. Synthesis of Nanozyme basesd materials and application in water purification

List of Publications

1. **Jayanta M. Borah**, Manash R. Das and Sekh Mahiuddin
   Influence of Anions on the Adsorption Kinetics of Salicylate onto α-alumina in Aqueous Medium
   ***J. Colloid Interface Sci.* 2007*, 316*, 260-267.**
   Elsevier, ISSN: 0021-9797

2. **Jayanta M. Borah** and Sekh Mahiuddin
   Adsorption and Surface Complexation of Trimesic Acid at the α-Alumina-Electrolyte Interface
   ***J. Colloid Interface Sci.* 2008*, 322*, 6-12.**
   Elsevier, ISSN: 0021-9797
3. Sekh Mahiuddin, Babak Minofar, **Jayanta M. Borah**, Manash R Das and Pavel Jungwirth
   Propensity of Citric, Maleic, Oxalic, and Succinic acids for the Aqueous Solution/Vapour Interface: Surface Tension Measurements and Molecular Dynamics Simulations
   ***Chem. Phys. Lett.* 2008, *264*, 217-221.**
   Elsevier, ISSN: 0009-2614
4. Manash R. Das, **Jayanta M. Borah**, Werner Kunz, Barry Ninham and Sekh Mahiuddin
   Ion specificity of the zeta potential of α-alumina, and of the adsorption of *p*-hydroxybenzoate at the α-alumina-water interface
   ***J Colloid Interface Sci.* 2010, *344*, 482-491.**
   Elsevier, ISSN: 0021-9797
5. **Jayanta M. Borah,** Jyotirmoy Sarma and Sekh Mahiuddin
   Influence of Functional Groups on the Adsorption of Substituted Benzoic acids onto α-Alumina-Electrolyte Interface
   ***Colloid and Surface A:* 2011, *375*, 42-49. (I.F. 2.236)**
   Elsevier, ISSN: 0927-7757
6. **Jayanta M. Borah**, Sekh Mahiuddin, Namrata Sarma, Drew F. Parsons, Barry W. Ninham
   Specific Ion Effects in Adsorption at the Solid/Electrolyte Interface: A Probe into the Concentration Limit
   Langmuir, 2011*, 27*(14), 8710–871).
   American Chemical Society, ISSN: 0743-7463

7. Namrata Sarma, **Jayanta M. Borah**, Sekh Mahiuddin, Harun Al Rasid Gazi, Biswajit Guchhait and Ranjit Biswas
   Influence of Chain Length of alcohols on Stokes' Shift Dynamics in Catanionics Vesicles
   (J Phys Chem B, 2011,* 115 *(29), 9040–9049).
   American Chemical Society, ISSN: 1520-6106
8. **Jayanta M. Borah,** Jyotirmoy Sarma and Sekh Mahiuddin
   Adsorption Comparison at the α-Alumina/Water Interface: 3,4-dihydroxybenzoic acid vs catechol
   (Colloid and Surface A: 2011, 387, 50– 56).
   Elsevier, ISSN: 0927-7757

9. Nabanita Sakia, Jyotirmoy Sarma, **Jayanta M Borah,** Sekh Mahiuddin
   Adsorption and Surface Complexation of 3,4-dihydroxy benzoic acid and Catechol at the hematite-Electrolyte Interface
   J Colloid Interface Sci. 2013, 398, 227-233
   Elsevier, ISSN: 0021-9797

10. Rupshikha Patowary, Kaustuvmani Patowary, Mohan Chandra Kalita, Suresh Deka, **Jayanta Madhab Borah**, Sanket J Joshi, Ming Zhang, Wanxi Peng, Gaurav Sharma, Jörg Rinklebe
    Biodegradation of hazardous naphthalene and cleaner production of rhamnolipids-Green approaches of pollution mitigation
    Environmental Research 209, 2022, 112875-112882
    Elsevier, ISSN: 0013-9351