

A. Publication in Peer reviewed journals (2012):

1. Jiban Saikia, **Bedabrata Saha**, Gopal Das (2012) Controlling the morphological evolution of ZnO NPs from single precursor source and its application for beta-lactoglobulin adsorption, *Journal Nano. Res*, 14, 1226-1239.
2. Nadeem Akhtar, Ashish Sharma, **Deepmoni Deka**, Mohammad Jawed, Dinesh Goyal and Arun Goyal (2012) Characterization of cellulase producing *Bacillus* sp. for effective degradation of leaf litter biomass. *Environmental progress and Sustainable energy* (Wiley) doi: 10.1002/ep.11726.
3. Jiban Saikia, **Bedabrata Saha**, Gopal Das (2012) Morphosynthesis of framboidal stable vaterite using a salicylic acid-aniline dye as an additive, *RSC Advances*. 2, 10015-10019.
4. **Surya Singh**, Aeshala, L.M., Anil Verma. (2012) Sustainable production of fuel from electrochemical reduction of carbon dioxide” *International Journal of Innovative Research and Development*, 1(7), 155-160.
5. **Bharti Brahmacharimayum** and Pranab K. Ghosh. (2012) A study on efficiency of five different carbon sources on sulfate reduction.” *Journal of Environmental Research and Development*, 7(1) 416-420.
6. **Biju Prava Sahariah** and Saswati Chakraborty. (2012) Effect of feed concentration and hydraulic retention time on removal of phenol, thiocyanate and nitrate – nitrogen in anoxic fed batch moving bed reactor. *Toxicological and environmental chemistry* 94 (9) 1629-1645.
7. **Sushant Singh**, Anil Verma and Vikash Kumar Dubey. (2012) Effectivity of antioxidative enzymatic system on diminishing the oxidative stress induced by aluminium in chickpea (*Cicer arietinum* L.) seedlings. *Braz. J. Plant Physiol.* 24(1): 47-54.
8. **J. Anandkumar** and Bishnupada Mandal. (2012) Single, binary and ternary metal adsorption using acid-treated *Ae15.gle marmelos Correa* shell: kinetic, mechanistic and thermodynamic study. *Asia-Pacific Journal of Chemical Engineering*, 7(6), 928-939.
9. Ratul K Das, **Nayanmoni Gogoi**, Babu P.J, P. Sharma, Chandan Mahanta, Utpal Bora (2012) The Synthesis of gold nanoparticles using *Amaranthus spinosus* leaf extract and study of their optical properties, *Advanced Materials Physics and Chemistry*.
10. Ratul K. Das , PJ Babu, **Nayanmoni Gogoi**, P. Sharma, Utpal Bora (2012) Microwave mediated rapid synthesis of gold nanoparticles using *Calotropis procera* latex and study of optical properties. *ISRN Nanomaterials* 2012: 1:6.
11. Kumar A and **Bora U** (2012) In silico inhibition studies of Jun-Fos-DNA complex formation by curcumin derivatives. *International Journal of Medicinal Chemistry*, 2012, 8.

12. Sharma P, Babu PJ, **Bora U** (2012) *Sapindus mukorossi* aqueous fruit extract as reducing, capping and dispersing agents in synthesis of gold nanoparticles. *Micro & Nano Letters*, 7(12), 1296 – 1299.
13. Kumar A and **Bora U** (2012) Molecular docking studies on inhibition of Stat3 dimerization by curcumin natural derivatives and its conjugates with amino acids. *Bioinformation*, 8(20), 988-993.
14. Babu PJ, Sibyala S, Sharma P, Tamuli R, **Bora U** (2012) Gold nanoparticles: sonocatalytic synthesis using ethanolic extract of *Andrographis aniculata* and functionalization with polycaprolactone–gelatin composites. *Front. Mater. Sci.*, 6(3), 236–249.
15. Sett A, Das S, Sharma P, **Bora U**. (2012) Aptasensors in Health, Environment and Food Safety Monitoring. *Open Journal of Applied Biosensor*, (1), 9-19.

B. CONFERENCES AND SEMINARS (2012):

1. **Surya Singh** and Anil Verma (2012) “Electrochemical Reduction of Carbon Dioxide "One Day Symposium on Environment and Us" organized by Centre for the Environment, IIT Guwahati, Assam on June 5, 2012.
2. **Surya Singh**, Leela Manohar Aeshala and Anil Verma (2012) “Sustainable Production of Green Fuel from Electrochemical Reduction of Carbon Dioxide”, Int conference and workshop on environment, sustainability and development (Iswesd 2012), Oct 12-14, Sibsagar, Assam.
3. **Nayanmoni Gogoi**, Anil Kumar, Utpal Bora and Chandan Mahanta (2012) “Development of Majuli Bioresource Database,” Poster presented in “International Symposium on Bioengineering,” organized by IITG Biotech Hub, Centre for the Environment, Indian Institute of Technology, Guwahati, Assam, India, 10th December, 2012.
4. **Nayanmoni Gogoi**, Utpal Bora and Chandan Mahanta (2012) “Life Cycle Assessment and Ecology,” Poster presented in One Day Symposium on “Environment and Us,” organized by Centre for the Environment, Indian Institute of Technology, Guwahati, Assam, India, 5th June, 2012.
5. **Sushant Singh** and Vikash Kumar Dubey (2012) “Biomarkers: Effect of pollutants on biological systems. Quality improvement programme (QIP) on “Green Chemistry and Clean Technology”. Organized by the Centre for Environment, IIT Guwahati. November 26-28, 2012.
6. **Sushant Singh**, Abhay Narayan Singh, Anil Verma and Vikash Kumar Dubey (2012) “Nanoencapsulating superoxide dismutase/catalase towards enhancing antioxidative defense against generated oxidative stress”. 81st Annual Meeting of the Society of Biological Chemists (India) & Symposium on Chemistry and Biology: Two Weapons against Diseases. Science city, Kolkata (W.B). November 8-11, 2012. (*Poster presentation*)

7. **Deepmoni Deka**, Arun Goyal (2012) "Role of Bioethanol in global climate change. One day symposium on "Environment and Us". IIT Guwahati, Guwahati. June 05, 2012. (*Poster presentation*).
8. **Sushant Singh**, Abhay Narayan Singh, Anil Verma and Vikash Kumar Dubey (2012) "Response to metal stress in plant: Superoxide dismutase, its purification and characterization from *Cicer arietinum* L.seedlings". One day symposium on "Environment and Us". IIT Guwahati, Guwahati. June 05, 2012. (*Poster presentation*).
9. **Deepmoni Deka**, Saprativ P. Das, Rajeev Ravindran and Arun Goyal (2012) "Water hyacinth as a potential source of biofuel for sustainable development. Oral presentation, "International Conference on Environmentally Sustainable Urban Ecosystems", February 24-26, 2012, IIT Guwahati, Assam.
10. **Bharati Brahmacharimayum** and Pranab. K. Ghosh (2012) "Biological sulfate reduction." Poster session presented at World Congress on Biotechnology, May 4-6, 2012, Hyderabad.
11. **Bharati Brahmacharimayum** and P.K. Ghosh. (2012) "Bioreactors for sulfate reduction." International Conference on Environmentally Sustainable Urban Ecosystems 'ENSURE-2012', February 24-26, 2012, IIT Guwahati, India.
12. **Bharati Brahmacharimayum** and P.K.Ghosh (2012) "Acid mine drainage (AMD) treatment to reduce sulfate into elemental sulfur by microaerobic process." Poster session presented at National Conference on Forest, Environment and Climate change: Issues and Challenges, January 30-31, 2012, Bilaspur, India.
13. **J. Anandkumar** and Biplab Mandal (2012) "Multi contaminant adsorption behaviour of activated carbon: Kinetic and mechanistic approach". International Conference on Environmentally Sustainable Urban Ecosystems (ENSURE-2012), February 24-26, IIT Guwahati, INDIA.
14. **Atreyi Ghosh** (2012) "A comparative study between a pure strain and a mixed consortium regarding utilization of different carbon sources for perchlorate degradation". World congress on biotechnology, May 4-6, Hyderabad.
15. Arup K. Sarma and **Banasri Sarma** (2012) "Optimal Ecological Management Practices for Minimizing Impact of Climate Change and Watershed Degradation Due to Urbanization", presented in the Seventh International Conference on Interdisciplinary Social Science 2012, 25th to 28th June, Barcelona, Spain.
16. **Anandkumar J** and Mandal, B. (2012) "Multi contaminant adsorption behavior of activated carbon: Kinetic and mechanistic approach". "International Conference on Environmentally Sustainable Urban Ecosystems" (ENSURE- 2012), February 24-26, IIT Guwahati, Guwahati, INDIA.
17. **B. P. Sahariah** and S. Chakraborty, (2012) "Performance evaluation of Anoxic Fed Batch Reactor Treating Synthetic Wastewater Containing Phenol, Thiocyanate, and Nitrate-N at different HRT".

International Conference on Environmentally Sustainable Urban Ecosystems (ENSURE 2012). Indian Institute of Technology Guwahati, Guwahati, Assam, February 24-26, India.

18. **Nayanmoni Gogoi**, Chandan Mahanta and Utpal Bora (2012) “Ecological Perspective of Brahmaputra River Floodplain” Paper presented in International Conference on “Environmentally Sustainable Urban Ecosystems, 2012,” organized by the Department of Civil Engineering, Indian Institute of Technology, Guwahati, 24th to 26th February, 2012
19. **Bhaskar Das**, Tapas K Mandal, Sanjukta Patra (2012) “Microalgae in remediation of organic pollutants”, Symposium on Environment and Us, 5 th June 2012, IIT Guwahati
20. **Bhaskar Das**, Mukesh Meher, Sanjukta Patra (2012) “Bioinformatics: An Environmental Perspective, Symposium on Environment and Us, 5 th June 2012, IIT Guwahati.
21. **Rajib L. Deka**, Lalit Saikia ,Chandan Mahanta and Mrinal K. Dutta (2012). ‘Increasing extreme temperature events in the Guwahati city during 1971-2010’. International Conference on Environmentally Sustainable Urban Ecosystems”(ENSURE-2012), February 24-26, IIT Guwahati, Guwahati, INDIA.

C. Book Chapter

N.K. Sahoo, A. Ramesh and **K. Pakshirajan (2012)** Bacterial degradation of aromatics: An overview on metabolic pathways. In: *Microorganisms in Environmental Management*, Satyanarayana, T., Johri, B.N. and. Anil Prakash (Eds), Springer, New York, pp 201-220.