

### **Research Publication 2016**

1. Barua, VB and Kalamdhad, A.S. Water Hyacinth To Biogas: A Review. Poll. Res. 2016, 35, 63-73.
2. Deka RL, Mahanta C, Nath KK and Dutta MK. Spatio-temporal variability of rainfall regime in the Brahmaputra valley of North East India. Theor, Appl, Climatol. 2016; 124, 3, 793-806
3. Naik PK, Dehury P, Paul S, Banerjee T. Evaluation of Deep Eutectic Solvent for the selective extraction of toluene and quinoline at  $T = 308.15\text{ K}$  and  $p = 1\text{ bar}$ . Fluid Phase Equilibr. 2016; 423,146-155
4. Kumar VR, Goswami L, Pakshirajan K, Pugazhenth G. Dairy Wastewater Treatment using a Novel Low Cost Tubular Ceramic Membrane and Membrane Fouling Mechanism using Pore Blocking Models. J. Water Proc. Eng. 2016.
5. Kiran MG, Pakshirajan K, Das G. Heavy metal removal from multicomponent system by sulfate reducing bacteria: Mechanism and cell surface characterization. J. Hazard. Mater. 2016; 324 Part A 62-70, doi:10.1016/j.jhazmat.2015.12.042.
6. Manikandan NA, Alemu AK, Goswami L, Pakshirajan K and Pugazhenth G. Waste Litchi Peels for Cr(VI) Removal from Synthetic Wastewater in Batch and Continuous Systems: Sorbent Characterization, Regeneration and Reuse Study. J. Environ. Eng. 2016; © ASCE, ISSN 0733-9372. DOI: 10.1061/(ASCE)EE.1943-7870.0001099
7. Das B, Mandal TK, Patra S. Biodegradation of phenol by a novel diatom BD1IITG-kinetics and biochemical studies. Int.J. Environ. Sc. Technol. 2016; 13 (2), pp. 529-542.
8. Singh S, Dubey VK. Multiwalled carbon nanotube-Superoxide dismutase conjugate towards alleviating induced oxidative stress. Int. J. Pept. Res. Ther. 2016;22: 171-177
9. Sahariah, BP, Anandkumar J, Chakraborty S. Treatment of coke oven wastewater in an anaerobic–anoxic–aerobic moving bed bioreactor system. Desalination and Water Treatment 2016;57 (31), 14396-14402.

### **Conferences and Seminars**

1. NN. Deshavath, SK. Sahoo, MM. Panda, S. Mahanta, DSN. Goutham, VV. Goud, VV. Dasu. Annapurna Jetty (2016). The cost effective stirred tank reactor for cellulase production from alkaline pretreated agriculture waste biomass. 6<sup>th</sup> international conference on solid waste management (6<sup>th</sup> IconSWM 2106), November 24-26, Jadavpur university, Kolkata, India.

2. Barua, V.B. and Kalamdhad, A.S. Effect of microwave pretreatment on the hydrolysis of water hyacinth. National Conference on Recent Advancements in Environmental Research (RAER, 4-5 June 2016) held at IIT Guwahati, India.
3. Barua, V.B. and Kalamdhad, A.S. Effect of hot air oven pretreatment on the hydrolysis of water hyacinth. RECYCLE- International Conference on Waste Management, 1-2 April 2016 held at IIT Guwahati, India.
4. Tanushree Paul and Arun Goyal (2016) "Molecular cloning, expression and purification of a recombinant Glycoside Hydrolase family (GH10) xylanase from *Pedobacter saltans* DSM 12145." National Conference on "*Recent Advancements in Environmental Research 2016*", 4- IIT Guwahati.
5. Somnath Chanda, G. Das and **M. K. Purkait** (2016) Revelling 3D-structured activated carbon particle by electron microscopy. National workshop on advanced probing techniques in TEM, 15-16 February, 2016, IIT Guwahati. (**Best poster**)
6. Somnath Chanda, G. Das and **M. K. Purkait** (2016) Magnetically responsive carbon based adsorbent for removal of congo red, Recycle-2016: International conference on waste management, 1-2 April, 2016, IIT Guwahati.
7. Somnath Chanda, G. Das and **M. K. Purkait**, (2016) Formulation of herbal cosmeceuticals & neutraceuticals from Assam green tea leaves, IITG-TIC innovation competition, 29<sup>th</sup> October, 2016, IIT Guwahati. (**1<sup>st</sup> prize**)

### **Book Chapters**

Bhaskar Das, Sanjukta Patra, Antimicrobials: Meeting challenges of antibiotic resistance through nanotechnology. Therapeutic Nanostructures, Elsevier (Accepted for publication).

### **ACHIEVEMENTS**

**Ms. Visva Bharati Barua received ISWA-SWIS full scholarship 2016 to attend winter school at The University of Texas at Arlington, Texas, USA.**