

Research Publications

Department of Environmental Sciences

S.N.	List of Publications
1	Urdukhe Amruta, Dalvi Sunil and Nimbalkar Deepali (2019). Treatment of spray-pond overflow wastewater of sugar mills using microalgae. Proceedings of the International Society of Sugar Cane Technologists, volume 30, 234-241, 2019
2	Alhat Enath, Uphade Kapil, Chauhan SS, Nimbalkar Deepali (2019). A case study of injection channel/spray pond overflow treatment plant at UPSCL. Proceedings of the 77 th Annual Convention of STAI, pp 529-535
3	Patil, V.P., Patil, S.S., (2019). Anaerobically digested spentwash degradation by application of MW assisted O ₃ and H ₂ O ₂ process. International Journal of Research in Advent Technology (7) 2: 872-876 (Published in Feb 2019)
4	Patil, V.P., Tantak, M.B., Nimbalkar, D.S., Patil, S.S., (2019). COD Reduction of Anaerobically Digested Distillery Spentwash By Electro-Fenton Process. International Journal of Research in Advent Technology (7) 4: 591-594
5	Patil V. P., Nimbalkar D. S., Patil S. S. (2019). COD and color removal of anaerobically digested distillery spentwash by electrocoagulation process. International Multidisciplinary Research conference on 'Biodiversity, Climate Change, Environment and Life Science'. July, 2019.
6	Deshmane Amol, Darandale Vikas, Nimbalkar Deepali, Nikam T.D. and Ghole Vikram (2015). Sugar mill effluent treatment using <i>Spirulina</i> for recycling of water, saving energy and producing protein. International Journal of Environmental Science and Technology:(Published online on 7 th Oct 2015) DOI 10.1007/s13762-015-0891-1
7	Deshmane Amol, Nimbalkar Deepali, Darandale Vikas, Rao Pawan Kumar, and Ghole Vikram (2015). Economical and Energy Saving Option for Sugar Mill Effluent Treatment. 45th Annual Convention of The South Indian Sugarcane & Sugar Technologists' Association scheduled on July 11 th , 2015 at Bangalore, India
8	Deshmane, A, Nimbalkar, D., Nikam T.D., Ghole, V.S. (2015). Exploring alternative treatment method for sugar industry effluent using ' <i>Spirulina platensis</i> '. <i>Sugar Tech</i>
9	Deshmane, A, Patil, Y, Langade, R., Nimbalkar, D., Ghole, V.S. (2014). Bio-Fixation of carbon dioxide using carbonic anhydrase through synthesis of bicarbonate. International Journal of Advanced Research in Science, Engineering and Technology, Vol.3, 18031-38

10	Kolte, H. S., Walke, A., Nimbalkar, D., Ghole, V.S., (2014). Combine Ozonation Treatment Followed by Biological Treatment to Anaerobically Digested Spentwash. International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering, Vol. 3, pp .2320 – 3765, 2014.
11	Kolte, H. S., Wadake, A., Nimbalkar, D., Ghole, V.S., (2014). Evaluation of Fenton Reagent Treatment to Anaerobically Digested Spentwash in Combination with Biological Treatment. International Journal of Advanced Research in Science, Engineering and Technology, Vol.3, 2320 – 3765, 2014.
12	Alhat, EP, Nimbalkar, DS, Ghole VS,(2014). Enhancement of Calorific Value of Bagasse with Distillery Spentwash through Briquetting, International Journal of Innovative Research in Science, Engineering and Technology. Vol.3, pp: 17376-17381
13	Alhat EP., Duraphe VV., Nimbalkar DS., Ghole VS., (2014). Carbon Electrodes for the Electro Accumulation of Potassium from Distillery Spentwash, International Journal of Innovative Research in Science, Engineering and Technology. Vol.3, pp: 18084-18088
14	Nimbalkar, D.S., Ghole V.S., Patil, A.S. 2010. A comparative study of solid and liquid based microbial cultures for the composting of distillery spentwash. 9 th Joint Convention of the Sugar Technologists Association of India, New Delhi and South Indian Sugarcane and Sugar Technologists Association held at Chennai in August 2010
15	Deshmane, A.B., Nimbalkar, D.S., Ghole, V.S. 2010. Environmental Impact Assessment (EIA): Issues for consolidation of process. 97 th Indian Science Congress held at Trivandrum, January 2010
16	Nimbalkar, D.S., Gaikwad, M.B., Varalaxmi, H.D., Ghole, V.S. 2009. Use of different agrowastes as filler material for biocomposting with distillery spentwash. 70 th annual convention of the Sugar Technologists Association of India, New Delhi held at Udaipur in August 2009
17	Nimbalkar, D.S., Gaikwad, M.B., Varalaxmi, H.D., Ghole, V.S. 2009. Use of some agrowastes as supplementary filler material for biocomposting of biomethanated distillery spentwash with pressmud. SISSTA Sugar Journal, September 2009
18	Nimbalkar, D.S., Kasurde, S., Gunjal, H. 2008. Life Cycle Assessment: A tool for improving environmental performance in the sugar industry. SISSTA Sugar Journal, September 2008
19	Nimbalkar, D.S., Kasurde S., Gunjal, H. 2008. Life Cycle Assessment of Sugar Production. 69 th annual convention of the Sugar Technologists Association of India, New Delhi held at Aurangabad in August 2008
20	Nimbalkar, D.S. 2008. Climate Change and You. VSI bulletin. Vol 7 Issue 2. June 2008
21	Nimbalkar, D.S. 2008. Climate Change Mitigation: CDM opportunities in the sugar industry. National seminar on CDM organized by STAI at Jaisalmer in January 2008

22	Nimbalkar, D.S. 2007. Implementation of CREP norms in distilleries in Maharashtra Training Program of Distillery Effluent Treatment: Meeting the challenge of zero discharge, Centre for Environmental Science and Engineering, IIT, Powai, Nov 2007
23	Nimbalkar, D.S. 2007. Combating Climate Change with CDM. Workshop on Carbon Trading in the Sugar Industry held at VSI in October 2007
24	Nimbalkar, D.S., Dani R.V. 2007. CDM and Carbon Trading in the Indian Sugar Industry. 68 th annual convention of the Sugar Technologists Association of India, New Delhi held at Goa in August 2007
25	Nimbalkar, D.S. 2007. Water Conservation in Distilleries. Environment Science and Technology. March 2007
26	Nimbalkar, D.S. 2006. Water Conservation in the Sugar and Distillery Industry. Sixth IAELP International Conference on Water Saving Technologies held at Amritsar in February 2006
27	Nimbalkar, D.S. 2004. High rate biphasic anaerobic treatment for distillery spentwash. Invited presentation at the Technology Meet on Water Management at CII- Green Business Centre Hyderabad on 17-18 th June 2004
28	Nimbalkar, D.S., Gunjal, B.B., Rale, V.P., Kumar, S. 2002. Pilot scale studies on UASB in biphasic reactor system for the treatment of distillery spentwash. 62 nd annual convention of the Sugar Technologists Association of India, New Delhi held at Cochin in August 2002
29	Gunjal, B.B., Nimbalkar, D.S. 2002. Distillery spentwash treatment and utilization in Maharashtra state. Invited paper presented at the seminar on effluent treatment in distilleries organized by the Tamil Nadu Pollution Control Board and South Indian Sugar Technologists Association at Bannari Amman Sugar Factory, Tamil Nadu
30	Sapkal, D.B., Nimbalkar, D.S., Gunjal, B.B. 2001. Environment management in Sugar Industry. 24 th Congress of the International Society for Sugar Cane Technologists in September 2001 in Brisbane, Australia
31	Nimbalkar, D.S., Gunjal, B.B., Sankpal, N.V., Dongare, M.K. 2000. Non-conventional Oxidation and Disinfection Processes For Sugar Industries: A Review. 49 th Annual Convention of DSTA, Pune
32	Gunjal, B.B., Nimbalkar, D.S., Sapkal D.B. 2000. Energy generation from sugar factory press mud cake. 87 th Indian Science Congress held at Pune University, Pune in January 2000
33	Nimbalkar, D.S., Gunjal B.B., Saswadkar A.A., Mujawar, I.P. 1999. Two-phase anaerobic digestion of continuous fermentation based distillery spentwash. 48 th Annual Convention of Deccan Sugar Technologists Association, Pune

34	Nimbalkar, D.S., Gunjal B.B., Kumar P., Arya, P.V., Kumar, J. 1998. Effect of agitation speed on the performance of an anaerobic CSTR treating distillery spentwash. 60 th Annual Convention of the Sugar Technologists Association of India (STAI), New Delhi, held at Shimla, September 19-21
35	Nimbalkar, D.S., Jagtap, N.A., Gunjal B.B. 1998. Fixed film reactor for the treatment of spentwash from a continuous fermentation based distillery. National Seminar on Anaerobic Technologies held at Anna University, Chennai Dec. 11-12
36	Sapkal, D.B., Nimbalkar D.S., Gunjal B.B. 1997. Environmental Management System: New challenges for sugar Industry. 46 th Annual Convention of the Deccan Sugar Technologists Association, Pune
37	Jagtap, N.A., Nimbalkar D.S., Gunjal B.B. 1997. Performance studies on anaerobic digestion using continuous stirred tank reactor (CSTR) for distillery spentwash. 46 th Annual Convention of Deccan Sugar Technologists Association, Pune
Patent	
1	A process for the decolorization of molasses based distillery effluent. B B Gunjal, D S Nimbalkar, M K Dongare, N V Sankpal (Patent no 218309 dated 31-03-2008)