

Publications

1. Multer A, McGraw N, Hohn K, Vadlani PV (2012) Production of methyl ethyl ketone from biomass using a hybrid biochemical/catalytic approach. *Industrial & Engineering Chemistry Research*(accepted)
2. Walker, K, Vadlani PV, Madl R, Ugorowski P, Hohn K (2012) Ethanol fermentation from food processing waste. *Environmental Progress* (accepted)
3. Yoo J, Alavi S*, Vadlani PV, Behnke K (2012). Soybean hulls pretreated using thermo-mechanical extrusion - hydrolysis efficiency, fermentation inhibitors and ethanol yield. *Applied Biochemistry and Biotechnology* 166(3): 576-589
4. Theerarattananoon K, Xu F, Wilson J, Ballard R, McKinney L, Staggenborg S, Vadlani PV, Pei ZJ, Wang D* (2012) Effects of the pelletizing conditions on chemical composition and sugar yield of corn stover, big bluestem, wheat straw, and sorghum stalk pellets. *Bioprocess and Biosystems Engineering* 35(4): 615-623
5. Oberoi HS*, Kaur SS, Vadlani PV (2012). Statistical optimization of hydrolysis process for banana peels using cellulolytic and pectinolytic enzymes. *Food and Bioproducts Processing* 90 (2): 257-265
6. Nkosi BD*, Vadlani PV, Brijwani K, Nanjunda A, Meeske R (2012) Effects of bacterial inoculants and an enzyme on the fermentation quality and aerobic stability of ensiled whole-crop sweet sorghum. *S. Afr. J. Anim Sci* 42(3) 232- 240
7. Oberoi HS*, Babbar N, Dhaliwal SS, Kaur S, Vadlani PV, Bhargav VK, Patil RT (2012) Enhanced Oil Recovery by Pre-treatment of Mustard Seeds Using Crude Enzyme Extract Obtained from Mixed-Culture Solid-State Fermentation of Kinnow (*Citrus reticulata*) Waste and Wheat Bran. *Food Bioprocess Technol* 5(2): 759-767
8. Ananda N*, Vadlani PV (2011) Carotenoid value addition of cereal products by monoculture and mixed culture fermentation of *Phaffia rhodozyma* and *Sporobolomyces roseus*. *Cereal Chemistry* 88(5):467-472
9. Yoo, J., Alavi, S., Vadlani, P., and Behnke, K. Soybean hulls pretreated using thermo-mechanical extrusion - hydrolysis efficiency, fermentation inhibitors and ethanol yield. *Applied Biochemistry and Biotechnology* 166(3): 576-589
10. Brijwani K, Vadlani PV, Hohn K, Maier DE (2011) Experimental and theoretical analysis of a novel deep-bed solid-state bioreactor for cellulolytic enzymes production. *Biochemical Engineering Journal* 58-59:110-123 [KAES: 11-315-J]
11. Brijwani K, Vadlani PV* (2011) Cellulolytic enzymes production via solid-state fermentation: Effect of pretreatment methods on physiochemical

characteristics of substrate. Enzyme Research doi:
10.4061/2011/860134 [KAES: 10-301-J]

12. Yoo J, Alavi S*, Vadlani PV Amanor-Boadu V (2011) Thermo-mechanical extrusion pretreatment for conversion of soybean hulls to fermentable sugars. *Bioresource Technology* 102 (16): 7583-7590
13. Ananda N*, Vadlani PV (2011) Substrates Influence Stimulatory Effect of Mevalonic Acid on Carotenoid Production in Red Yeasts. *Cereal Chemistry* 88(3): 310-314.
14. Theerarattananoon K, Xu F, Wilson J, Ballard R, McKinney L, Staggenborg S, Vadlani PV, Pei ZJ, Wang D* (2011) Physical properties of pellets made from sorghum stalk, corn stover, wheat straw, and big bluestem. *Industrial Crops and Products* 33:325–332
15. Ananda, N, Vadlani PV*, Prasad PVV (2011) Evaluation of drought and heat stressed grain sorghum (*Sorghum bicolor*) for ethanol production. *Industrial Crops and Products* 33 (3): 779-782
16. Oberoi HS*, Vadlani PV, Ananda N, Bansal S, Singh S, Kaur S, Babbar N (2011) Enhanced ethanol production from kinnow mandarin (*Citrus reticulata*) waste via a statistically optimized simultaneous saccharification and fermentation process. *Bioresource Technology* 102(2): 1593 – 1601.
17. Oberoi HS*, Vadlani PV, Saida L, Bansal, S, Hughes JD (2011) Ethanol production from banana peels using statistically optimized simultaneous saccharification and fermentation process. *Waste Management* 31(7): 1576-1584.
18. Ananda N, Vadlani PV*, Madl RL (2010) Rice bran is an effective substitute for yeast extract in ethanol fermentation. *Journal of Biobased materials and Bioenergy* 5(1): 70-74
19. Ananda N, Vadlani PV* (2010) Fiber reduction and lipid enrichment in carotenoid-enriched distillers dried grain with solubles (DDGS) by secondary fermentation of red yeasts. *Journal of Agricultural and Food Chemistry* 58 (24): 12585–12591
20. Brijwani K, Rigdon A, Vadlani PV* (2010) Fungal laccases: production, function and applications in food processing, *Enzyme Research*, Special Issue: Enzymes as Additives or Processing Aids in Food Biotechnology doi:10.4061/2010/149748
21. Brijwani K, Vadlani PV* (2010), Lipase-mediated hydrolysis of corn DDGS oil: Kinetics of linoleic acid production, *Biochem. Eng. J.* 52: 289-295
22. Ananda N, Vadlani PV* (2010) Production and optimization of carotenoid-enriched DDGS by *Phaffia rhodozyma* and *Sporobolomyces roseus* fermentation of whole stillage. *Journal of Industrial Microbiology& Biotechnology* 37(11): 1183-1192

23. Brijwani K, Oberoi HS, Vadtani PV* (2010) Production of a Cellulolytic Enzyme System in Mixed-Culture Solid-State Fermentation of Soybean Hulls Supplemented with Wheat Bran. *Process Biochem* 45(1):120-128
24. Pfromm PH*, Amanor-Boadu V, Nelson R, Vadtani PV, Madl R(2010) Bio-butanol vs. bio-ethanol: A technical and economic assessment. *Biomass and Bioenergy* 34 : 515-524
25. Oberoi HS, Vadtani PV*, Madl R, Saida L, Abeykoon JP (2010) Ethanol production from orange peels: two-stage hydrolysis and fermentation studies using optimized parameters through experimental design. *J. Agric. Food Chem.* 58(6): 3422-3429 Oberoi HS*, Vadtani PV, Brijwani K, Bhargav VK, Patil RT (2010) Enhanced ethanol production via fermentation of rice straw with hydrolysate-adapted *Candida tropicalis* ATCC 13803. *Process Biochem* 45(8): 1299-1306
26. Oberoi HS*, Babbar N, Dhaliwal SS, Kaur S, Vadtani PV, Bhargav VK, Patil RT Enhanced Oil Recovery by Pre-treatment of Mustard Seeds Using Crude Enzyme Extract Obtained from Mixed-Culture Solid-State Fermentation of Kinnow (*Citrus reticulata*) Waste and Wheat Bran. *Food Bioprocess Technol* DOI 10.1007/s11947-010-0380-y
27. Singh R, Vadtani PV, Harrison M, G.N. Bennett GN, San K-Y* (2008) Aerobic production of isoamyl acetate by overexpression of the yeast alcohol acetyl-transferase AFT1 and AFT2 in *Escherichia coli* and using low-cost fermentation ingredients. *Bioprocess and Biosystems Engineering* 31(4): 299-306
28. Vadtani PV*, Matthews AP, Karr GS (2008) A two-stage fermentation process: production of propionate and acetate salt as road deicer from cheese whey. *Biological Engineering* 1(1): 95-104
29. Vadtani PV*, Ramachandran KB (2008) Evaluation of influent composition and concentration in a batch reactor for effective start-up of the UASB reactors. *J Environmental Engineering* 134(12): 1023-1029
30. Vadtani PV, Ramachandran KB* (2008) Evaluation of UASB reactor performance during start-up operation using synthetic mixed acid waste. *Bioresource Technology* 99(17): 8231-8236
31. Vadtani PV*, Mathews AP, Karr GS (2008) Low-cost propionate salt as road deicer: evaluation of cheese whey and other media components. *World J Microbiol Biotechnol* 24: 825-832
32. Agamuthu, Choong LC, Hasan S, Vadtani PV (2000) Kinetic evaluation of composting of agricultural wastes. *Environmental Technology*. 21, 185-192, (2000).
33. Singhal A, Gomes J, Vadtani PV, Ramachandran KB (1998) Axial dispersion model for upflow anaerobic sludge blanket reactors, *Biotechnology Progress*, 14, 645 – 648 (1998).