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Education

Dr.rer.nat. (Biochemical Engineering), University of Stuttgart

M.Eng. (Ferment. Technology), Hiroshima University

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Expertise

Bioprocess engineering Fermentation technology

Selected Works

1. Wannawilai, S., Y. Chisti and S. Sirisunsaneeyakul. 2017. A model of furfural-inhibited growth and xylitol production by *Candida magnoliae* TISTR 5663. *Food Bioprod. Process.* 105, 129-140.
2. Wannawilai, S., W.C. Lee, Y. Chisti and S. Sirisunsaneeyakul. 2017. Furfural and glucose can enhance conversion of xylose to xylitol by *Candida magnoliae* TISTR 5663. *J. Biotechnol.* 241, 147-157.
3. Prado-Rubio, O.A., H. Hernández-Escoto, D. Rodríguez-Gomez, S. Sirisunsaneeyakul and R. Morales-Rodríguez. 2015. Enhancing xylitol bio-production by an optimal feeding policy during fed-batch operation. *Computer Aided Chemical Engineering* 37, 1757-1762
4. Wannawilai, S. and S. Sirisunsaneeyakul. 2015. Economical production of xylitol from *Candida magnoliae* TISTR 5663 using sugarcane bagasse hydrolysate. *Kasetsart J. (Nat.Sci.)* 49(4), 583-596.
5. Tochampa, W., S. Sirisunsaneeyakul, W. Vanichsriratana, P. Srinophakun, H.H.C. Bakker, S. Wannawilai and Y. Chisti. 2015. Optimal control of feeding in fed-batch production of xylitol. *Ind. Eng. Chem. Res.* 54(7), 1992-2000.
6. Wannawilai, S., S. Sirisunsaneeyakul and Y. Chisti. 2015. Benzoate-induced stress enhances xylitol yield in aerobic fed-batch culture of *Candida mogii* TISTR 5892. *J. Biotechnol.* 194, 58-66.
7. Sirisunsaneeyakul, S., B. Kop, W. Tochampa, S. Wannawilai, R. Chaveesuk and W.C. Lee. 2014. Sodium benzoate stimulates xylitol production by *Candida mogii*. *Journal of the Taiwan Institute of Chemical Engineers* 45(3), 734-743.

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9. Sirisansaneeyakul, S., R. Chainoy, W. Vanichsriratana, T. Srinophakun and Y. Chisti. 2009. Xylitol production by liquid emulsion membrane encapsulated yeast cells. *J. Chem. Technol. Biotechnol.* 84, 1218-1228.
10. Tochampa, W., S. Sirisansaneeyakul, W. Vanichsriratana, P. Srinophakun, H. H. C. Bakker and Y. Chisti. 2005. A model of xylitol production by the yeast *Candida mogii*. *Bioprocess Biosyst. Eng.* 28, 175-183.
11. Sirisansaneeyakul, S., W. Tochampa, I. Bashir, M. Rizzi and S. Bhuwapathanapun. 2000. Continuous production of xylitol by cell recycling system. *Thai J. Agric. Sci.* 33(3-4), 99-106.
12. Sirisansaneeyakul, S., W. Tochampa, I. Bashir, M. Rizzi and S. Bhuwapathanapun. 2000. Kinetic modeling of pH affecting xylitol production by *Candida mogii*. *Thai J. Agric. Sci.* 33(3-4), 159-166
13. Sirisansaneeyakul, S. and M. Rizzi. 1998. Hydrolysis of wheat straw hemicellulose. *Kasetsart J. (Nat. Sci.)* 32, 224-233.
14. Sirisansaneeyakul, S. and M. Rizzi. 1997. UV-mutation of *Candida mogii* for xylitol production. *Thai J. Agric. Sci.* 30, 511-520.
15. Sirisansaneeyakul S., K. Nakano and M. Matsumura. 1995. Diffusivity of xylitol in granular activated charcoal. *Kasetsart J. (Nat. Sci.)* 29, 115-126.
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17. Prangviset, K., M. Songpim, N. Yodsuwan, S. Wannawilai, M. Dejsungkranont, P. Changlek and S. Sirisansaneeyakul. 2018. Fructose production from Jerusalem artichoke inulin using mixed inulinases. *Agr. Nat. Resour.* 52(2), 132-139.
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42. Yodsuwan, N., P. Kamonpatana, Y. Chisti and S. Sirisansaneeyakul. 2018. Ohmic heating pretreatment of algal slurry for production of biodiesel. *J. Biotechnol.* 267, 71–78.
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43. Bouyam, S., W. Choorit, S. Sirisansaneeyakul and Y. Chisti. 2017. Heterotrophic production of *Chlorella* sp. TISTR 8990—biomass growth and composition under various production conditions. *Biotechnol. Progr.* 33(6), 1589–1600. (doi:10.1002/btpr.2518).
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