

เอกสารอ้างอิง

- ศิริพงษ์ วิงวอน. 2539. การควบคุมอัตราส่วนของคาร์บอนต่อไนโตรเจนในสารป้อนเพื่อเพิ่มอัตราการผลิตของพอลิ-บีตา-ไฮดรอกซีบีวทิเรต จาก *Alcaligenes eutrophus* ATCC 17697 ในถังปฏิกรณ์ชีวมวลแบบกึ่งต่อเนื่อง. วิทยานิพนธ์มหาบัณฑิต ภาควิชาวิศวกรรมเคมี คณะวิศวกรรมศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย.
- เสริมพล รัตนสุข และ ไชยยุทธ กลิ่นสุคนธ์. 2525. การกำจัดน้ำทิ้งจากอุตสาหกรรมแหล่งชุมชน. กรุงเทพฯ. สถาบันวิทยาศาสตร์และเทคโนโลยีแห่งประเทศไทย.
- Alexander, S. and Tina, L. E. 2003. Metabolic and pathway construction for biotechnological production of relevant polyhydroxyalkanoates in microorganisms. *J. Biochem. Eng.* 16 : 81-96.
- Anderson, A. J. and Wynn, J. P. 1995. Microbial Polyhydroxyalkanoates, Polysaccharides and Lipids. *In Basic Biotechnology*. 2nd ed. (Ratledge, C. and Kristiansen, B., eds.). p.325-333. Cambridge University Press. Cambridge.
- A.O.A.C. 1999. Official of Analysis of Association of Official Analytical Chemists. 16th ed. The Association of Official Analytical Chemists, Inc.
- APHA, AWWA and WPCF. 1998. Standard Method for Examination of Waste and Wastewater. 18th ed. American Public Health Association. New York.
- Arunpan, N. 1998. Production of Poly-β-hydroxyalkanoate from Microorganism. Master of Science Thesis in Biotechnology. Prince of Songkla University.
- Beyatli Y. 2002. Accumulation of polyhydroxybutyrate in *Streptomyces* specie during growth with difference nitrogen source. *Turk. J. Biol.* 26 : 71-74.
- Boom, S. K., Seung, C. L., Sang, Y. L., Ho, N. C., Yong, K. C. and Seong, I. W. 1994. Production of poly (3-hydroxybutyric acid) by fed batch culture of *Alcaligenes eutrophus* with glucose concentration control. *Biotechnol. Bioeng.* 43 : 892-898.
- Bomann, E. J. and Roth, M. 1999. The production of polyhydroxybutyrate by *Methylobacterium rhododesianum* and *Ralstonia eutropha* in medium containing glycerol and casein hydrolysate. *Biotechnol. Lett.* 21 : 1059-1063.
- Doi, Y. 1990. *Microbial Polyester*. VCH, New York. 156 pp.

- Ganzeveld, K. J., Hagen, A. V., Agteren, M. H. V., Koning, W. D. and Uiterkamp, A. J. M. S. 1999. Upgrading of organic waste: production of copolymer poly-3-hydroxybutyrate-co-valerate by *Ralstonia eutrophus* with organic waste as sole carbon source. *J. Clean. Prod.* 7 : 413-419.
- Grothe, E., Murray, M. Y. and Yusuf, C. 1999. Fermentation optimization for the production of poly (β -hydroxybutyric acid) microbial thermoplastic. *Enzyme Microb. Tech.* 25 : 132 – 141.
- Hocking, P. J. and Marchessault R. H. 1992. Chemistry and technology of biodegradable polymers. *Biopolyesters.* 48 - 95.
- Huang, Y. L., Wu, Z., Zang, L., Cheug, C. M. and Yang, S. T. 2002. Production of carboxylic acids from hydrolyzed corn meal by immobilized cell fermentation in fibrous-bed bioreactor. *Bioresource Technol.* 1 : 51-59.
- Jogdand, S. N. 2004. Welcome to the Eco-Friendly Plastic (online). Available: <http://www.biotechsupportindae.com/jogsn/.html> (2004, March)
- Khanna, S. and Srivastava, A. K. 2005. Recent advances in microbial polyhydroxyalkanoates. *Process Biochem.* 40: 607-619
- Kim, B. S., Lee, S. Y., Chang Y. K. and Woo, S. I. 1994. Production of poly(3-hydroxybutyric acid) by fed-batch culture of *Alcaligenes eutrophus* with glucose concentration control. *Biotechnol. Bioeng.* 48: 892-898.
- Lakshman, K., Rastogi N. K., and Shamala T. R., 2004. Simultaneous and comparative assessment of parent and mutant strain of *Rhizobium meliloti* for nutrient limitation and enhanced polyhydroxyalkanoate (PHA) production using optimization studies. *Process Biochem.* 39 : 1977-1983.
- Lee, S. P. 1995. Bacterial Polyhydroxyalkanoates. *Rev. Biotechnol. Bioeng.* 49 : 1 –14.
- Lee, S. and Yu J., 1997. Production of biodegradable thermoplastics from municipal sludge by a two-stage bioprocess. *Conserv. Recycling.* 19: 51-64.
- Lee, H. W., Mohd, N. M. and Sudesh, K. 2004. Effects of culture conditions on the composition of poly (3-hydroxybutyrate-co-4-hydroxybutyrate) synthesized by *Comamonas acidovorans*. *Polym. Degrad. Stabil.* 84: 129 – 134.
- Luengo, M. J., Garcia, B., Sandoval, A., Noharro, G. and Olivera, R. E. 2003. Bioplastics from microorganisms. *Curr.Opin. Biotech.* 6 : 251-260.

- Netravali, A. N. and Lou, S. 2003. A study of physical and mechanical properties of poly(hydroxybutyrate-co-hydroxyvalerate) during composting. *Polym. Degrad. Stabil.* 80 : 59-66.
- Reddy, C. S. K., Rashmi, R. G. and Kalia, V. C. 2003. Polyhydroxyalkanoates : an overview. *Bioresource Technol.* 4 : 137 - 146.
- Ryu, H. W. , Hahn, S. K., Chang, Y. K. and Chang, H. N. 1996. Production of poly (3 - hydroxybutyrate) by high cell density fed–batch culture of *Alcaligenes eutrophus* with phosphate limitation. *Biotechnol. Bioeng.* 55 : 28 –32.
- Shimizu, H., Shioya, S. and Suya, K. I. 1990 Cultivation condition for production of biodegradable poly-β-hydroxybutyric acid by *Alcaligenes eutrophus* H16. In Annual Report of IC biotech (ed. Oshima, Y.) Osaka University. Osaka. pp. 113-119.
- Slater, S., Gallaher, T. and Dennis, D. 1992. Production of poly-(3-hydroxybutyrate-co-3-hydroxyvalerate) in a recombinant *Escherichia coli* strain. *Appl. Environ. Microb.* 58 : 1089-1094.
- Sudesh, H., Abe, H. and Doi, Y. 2000. Synthesis, structure and properties of Polyhydroxyalkanoates : biological polyesters. *Prog. Polym. Sci.* 25 : 1503 –1555
- Thanakoses, P., Black, A.S. and Holtzapple, M.T. 2003. Fermentation of corn stover to carboxylic acids. *Biotechnol. Bioeng.* 83 : 191 – 200.
- Yagi, K., Miyawaki, I., Kayashita, A., Kondo, M., Kitano, Y., Murakami, Y., Maeda, I., Umeda, F., Miura, Y., Kawase, M. and Mizoguchi, T. 1996. Biosynthesis of poly(3-hydroxyalkanoic acid) copolymer from CO₂ in *Pseudomonas acidophila* through introduction of the DNA fragment responsible for chemolithoautotrophic growth of *Alcaligenes hydrogenophilus*. *Appl. Environ. Microb.* 62 :1004-1007.
- Yan, Q., Du, G. and Chen, J. 2003. Biosynthesis of polyhydroxyalkanoates (PHAs) with continuous feeding of mixed organic acids as carbon sources by *Ralstonia eutropha*. *Process Biochem.* 39 : 387 – 391.
- Yu, J. 2001. Production of PHA from starchy wastewater via organic acids. *J. Biotechnol.* 86 : 105 – 112.