

BIBLIOGRAPHY

- Arbia, W., Arbia, L. Adour, L., and Amrane, A. 2013. Chitin extraction from crustacean shells using biological methods – A Review. *Food Technology Biotechnology* 51(1): 12-25.
- Arslan, D., and Özcan, M. M. 2010. Study the effect of sun, oven and microwave drying on quality of onion slices. *LWT-Food Science and Technology* 43(7): 1121-1127.
- Association of Official Analytical Chemist [AOAC]. 2005. Official Methods of Analysis of the Association of Official Analytical Chemist. Association of Official Analytical Chemist Inc, Virginia.
- Ayangbenro, A. S. 2017. Biodegradation of natural bitumen by *Providencia stuartii* isolated from heavy oil contaminated soil. *NEST Journal* 19(2): 353-358.
- Brzezinska, M. S., Jankiewicz, U., Burkowska, A., and Walczak, M. 2014. Chitinolytic microorganisms and their possible application in environmental protection. *Journal Current Microbiology* 68(1): 71-81.
- Chamberland, R. R., TeKippe, E. M., Burnham, C. A. D., and Kennedy, D. J. 2013. Renal abscess caused by a *Providencia stuartii* isolate biochemically misidentified as *Pasteurella*. *Journal of Clinical Microbiology* 51(8): 2775-2777.
- Cheba, B. A. 2011. Chitin and chitosan: marine biopolymers with unique properties and versatile applications. *Global Journal of Biotechnology & Biochemistry* 6(3): 149-153.
- Coates, P. M., Marc, R. B., Gordon, M. C., Mark, L., and Jeffrey, D. W. 2004. Encyclopedia of Dietary Supplements. Marcel Dekker, New York.
- Czechowska-Biskup, R., Jarosińska, D., Rokita, B., Ułański, P., and Rosiak, J. M. 2012. Determination of degree of deacetylation of chitosan-comparision of methods. *Progress on Chemistry and Application of Chitin and its Derivatives* 17: 5-20.
- Demir, D., Fatma, O., Seda, C., and Nimet, B. K. 2016. Extraction and characterization of chitin and chitosan from blue crab and synthesis of chitosan cryogel scaffolds. *Journal of The Turkish Chemical Society* 3(3): 131-144.

- Eş, I., Vieira, J. D. G., and Amaral, A. C. 2015. Principles, techniques, and applications of biocatalyst immobilization for industrial application. *Applied Microbiology and Biotechnology* 99(5): 2065-2082.
- Escócio, V. A., Pacheco, E. B., De Sousa, A. M. F., Brigida, M. A. C. S., Soares, A. G., and Visconte L. L. Y. 2017. Study of natural fibers from waste from sponge gourd, peach palm tree and papaya pseudostem. *International Journal of Environmental & Agriculture Research* 3(2): 11-24.
- FAOSTAT. 2001. FAO Statistical databases: Fisheries Data. Food and Agriculture Organization of the United Nations, Rome.
- Food and Agriculture Organizations. *Penaeus vannamei*, FAO Online. Home page online. Available from http://www.fao.org/fishery/culturedspecies/Penaeus_vannamei/e; Internet; Accessed 18th November 2019.
- Guo, J., Zhou, J., Wang, D., Tian, C., Wang, P., Uddin, M. S., and Yu, H. 2007. Biocalalyst effects of immobilized anthraquinone on the anaerobic reduction of azo dyes by the salt-tolerant bacteria. *Water Research* 41(2): 426-432.
- Halim, Y., Hardoko, H., Handayani, R., and Lucida, V. 2018. Optimum conditions for n-acetyl glucosamine production from tiger shrimp (penaeus monodon) shell by serratia marcescens. *Asian Journal of Pharmaceutical and Clinical Research* 11(12): 488-493.
- Handoyo, B. C. 2019. Produksi N-Asetilglukosamin dengan Fermentasi Menggunakan Spora Mucor circinelloides Terimobilisasi pada Kalsium Alginat. Thesis, Universitas Pelita Harapan, Tangerang.
- Hendarlim, B. D. 2019. Immobilization of Semi-Pure Intracellular Chitinase Obtained from *Providencia stuartii* In Calcium Alginate and Its Appication for N-Acetylglucosamine Production. Thesis, Universitas Pelita Harapan, Tangerang.
- Hidayat, H. 2015. Identifikasi morfologi dan uji aktivitas antimikroba terhadap bakteri *Escherichia coli* dari fermentasi buah markisa (*Passiflora* sp.). *Eksakta* 15(1-2): 76-85.
- Hrenovic, J., Ivankovic, T., and Tibljas, D. 2009. The effect of mineral carrier composition on phosphate-accumulating bacteria immobilization. *Journal of Hazardous Materials* 166(2-3): 1377-1382.
- Integrated Taxonomic Information System. *Litopenaeus vannamei*. ITIS Report Online. Home page on-line. Available from

https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=551682#null; Internet; Accessed 27th November 2019.

- Iqbal, M., & Saeed, A. 2005. Novel method for cell immobilization and its application for production of organic acid. *Letters in Applied Microbiology* 40(3): 178-182.
- Jauhiainen, J., Hooijer, A., and Page, S. E. 2012. Carbon dioxide emissions from an Acacia plantation on peatland in Sumatra, Indonesia. *Biogeosciences* 9: 617-630.
- Josephine, C. 2018. Uji Indeks Kitinolitik Bakteri yang Diisolasi dari Kulit Udang Windu (*Penaeus monodon*). Thesis, Universitas Pelita Harapan, Tangerang.
- Khor, E. and Lee, Y. L. 2003. Implantable applications of chitin and chitosan. *Biomaterials* 24(13): 2339-2349.
- Kim, J. S., Lee, Y. Y., and Kim, T. H. 2016. A review on alkaline pretreatment technology for bioconversion of lignocellulosic biomass. *Bioresource Technology* 199: 42-48.
- Kim, S-K. and Mendis, E. 2006. Bioactive compounds from marine processing byproducts—A Review. *Food Res Int.* 39 (4):383–393.
- Kim, S-K. 2011. Chitin, Chitosan, Oligosaccharides, and Their Derivatives: Biological Activities and Applications. CRC Press, Boca Raton.
- Kurmasheva, N., Vorobiev, V., Sharipova, M., Efremova, T., and Mardanova, A. 2018. The potential virulence factors of *Providencia stuartii*: motility, adherence, and invasion. *BioMed Research International*.
- Kuyukina, M. S., Ivshina, I. B., Gavrin, A. Y., Podorozhko, E. A., Lozinsky, V. I., Jeffree, C. E., and Philp, J. C. 2006. Immobilization of hydrocarbon-oxidizing bacteria in poly (vinyl alcohol) cryogels hydrophobized using a biosurfactant. *Journal of Microbiological Methods* 65(3): 596-603.
- Mahon, C. R., Lehman, D. C., and Manuselis, G. 2015. Textbook of Diagnostic Microbiology Fifth Edition. Elsevier, Missouri.
- Manos, J. and Belas, R. 2006. The Genera *Proteus*, *Providencia*, and *Morganella*. *The Prokaryotes* 6: 245-269.
- Ma, Y. L., Yang, B. L., and Zhao, J. L. 2006. Removal of H₂S by *Thiobacillus denitrificans* immobilized on different matrices. *Bioresource Technology* 97(16): 2041-2046.

- Nielsen, S. 2010. Food Analysis 4th ed. Springer Science+Business Media, LLC, New York.
- Percot, A., Viton, C., and Domard, A. 2003. Optimization of chitin extraction from shrimp shells. *Biomacromolecules* 4(1): 12-18.
- Priest, F. G. and Campbell, I. 2002. Brewing Microbiology, 3rd ed. Springer, New York.
- Rangabhashiyam, S., Sujata, L., and Balasubramanian, P. 2017. Bioabsorption characteristics of methylene blue and malachite green from simulated wastewater onto carica papaya wood biosorbent. *Surfaces and Interfaces* 10: 197-215.
- Rinaudo, M. 2006. Chitin and chitosan: properties and application. *Progress in Polymer Science* 31(7): 603-632.
- Saeed, A., Muhammed, W. A., Muhammed, I. 2005. Removal and recovery of heavy metals from aqueous solution using papaya wood as a new biosorbent. *Separation and Purification Technology* 45(1): 25-31.
- Sanusi, M. 2004. Transformasi Kitin dari Hasil Isolasi Limbah Industri Udang Beku Menjadi Kitosan. *Mar. Chim Acta*. 5(2): 28-32.
- Saparianti, E. 2012. Amobilisasi sel *Pediococcus acidilactici* F11 penghasil bakteriosin pada gel kalsium alginate. *Jurnal Teknologi Pertanian* 2(1): 1-9.
- Saxena, S. 2015. Applied Microbiology. Springer India, New Delhi.
- Selig, M. J., Vinzant, T. B., Himmel, M. E., and Decker, S. R. 2009. The effect of lignin removal by alkaline peroxide pretreatment on the susceptibility of corn stover to purified cellulolytic and xylanolytic enzymes. *Applied Biochemistry and Biotechnology* 155(1-3): 94-103.
- Sriket, P., Benjakul, S., Visessanguan, W., and Kijroongrojana, K. 2007. Comparative studies on chemical composition and thermal properties of black tiger shrimp (*Penaeus monodon*) and white shrimp (*Penaeus vannamei*) meats. *Food Chemistry* 103(4): 1199-1207.
- Suo, Z., Avci, R., Yang, X., and Pascual, D. W. 2008. Efficient immobilization and patterning of live bacterial cells. *Langmuir* 24(8): 4161-4167.
- Tanaka, T., Toshiaki, F., and Tadayuki, I. 2001. Different cleavage specificities of the dual catalytic domains in chitinase from the hyperthermophilic

- Archaeon *Thermococcus*. *Journal of Biological Chemistry* 276(38): 35629-35635.
- Tanasale, M. F. J. D. P., Killay, A., and Saily, M. 2006. Kitosan dari limbah udang windu (*Penaeus monodon*) sebagai adsorben fenol. *J. Alchemy* 5(1): 23-30.
- Thomas, M. S., Rekha, R. K., Siji, K. M., Sabu, T., and Laly, A. P. 2019. Starch, Chitin, and Chitosan Based Composites and Nanocomposites. Springer, Switzerland.
- Uno, K., Chawepack, T., and Ruangpan, L. 2010. Pharmacokinetics and bioavailability of oxytetracycline in vannamei shrimp (*Penaeus vannamei*) and the effect of processing on the residues in muscle and shell. *Aquaculture International* 18(6): 1003-1015.
- Valdez-Peña, A. U., Espinoza-Perez, J. D., Sandoval-Fabian, G. C., Balagurusamy, N., Hernandez-Rivera, A., De-la-Garza-Rodriguez, I. M., and Contreras-Esquivel, J. C. 2010. Screening of industrial enzymes for deproteinization of shrimp head for chitin recovery. *Food Science and Biotechnology* 19(2): 553-557.
- Vasquez, J. A., Ramos, P., Miron, J., Valcarcel, J., Sotelo, C., and Perez-Martin, R. 2017. Production of chitin from *Penaeus vannamei* by-products to pilot plant scale using a combination of enzymatic and chemical processes and subsequent optimization of the chemical production of chitosan by response surface methodology. *Marine Drugs* 15(6): 180.
- Wu, S. C., and Lia, Y. K. 2008. Application of bacterial cellulose pellets in enzyme immobilization. *Journal of Molecular Catalysis B: Enzymatic* 54(3-4): 103-108.
- Yamashita, Y., Shono, M., Sasaki, C., and Nakamura, Y. 2010. Alkaline peroxide pretreatment for efficient enzymatic saccharification of bamboo. *Carbohydrate Polymers* 79(4): 914-920.
- Younes, I. and Rinaudo, M. 2015. Chitin and chitosan preparation from marine sources, structure, properties, and applications. *Mar. Drugs* 13(3): 1133-1174.
- Zagrodnik, R., Thiel, M., Seifert, K., Włodarczak, M., and Łaniecki, M. 2013. Application of immobilized Rhodobacter sphaeroides bacteria in hydrogen generation process under semi-continuous conditions. *International Journal of Hydrogen Energy* 38(18): 7632-7639.

Zhang, J., Shen, Z. Y., Tang, X. D., Xu, L., and Zhu, F. 2013. Isolation and identification of a pathogen, *Providencia rettgeri*, in *Bombyx mori*. *African Journal of Bacteriology Research* 5(2): 22-28.

Zhang, J. and Yan, N. 2017. Production of glucosamine from chitin via co-solvent promoted hydrolysis and deacetylation. *ChemCatChem* 9(14): 2790-2796.

