REFERENCES

1. Fechner, P. K., and M. K. Fechner: "Methylcellulose and Lens Implantation,"Brit. J. Opthamology:67,1983.
2. Illum, L.,and S. S. Davis: "Polymers in Controlled-drug Delivery,":pp. 203, Wright, Bistol, 1987.
3. Rungsriwong, N.,: "Cassava Starch-based High Water Absorbing Polymer for Agricultural Applications," Thesis of Master Degree of Science, Interdisciplanary Program Petrochemical and Polymer, Graduate School, Chulalongkorn University, 1988.
4. Wurzburg, O. B.: "Modified Starches : Properties and Uses," pp.___ , CRC Press. Inc., Boca Raton, Florida, 1986.
5. Jones, D.: "Use of Microencapsulated feed in Shrimp Hatcheries, Frippak News, 1: 4, 1987.
6. Deasy, P. B.: "Microencapsulation and Related Drug Process,": pp. 861,Marcel Dekker, Inc., New York & Basel, 1984.
7. Planning Division, Department of Industrial Promotion, Ministry of Industry, Fact Sheets on Thailand, Thai lacquerware, No. 7 (July): pp.4, Government Public Relation Department, Bangkok.
8. Mayer, A. M.: "Polyphenol Oxidases in Plants," Phytochemistry, 26(1): 11, 1987.
9. Mayer, A. M., and E. Hartel: "Polyphenol Oxidase in Plants,", Phytochemistry, 18: 193, 1979.
10. Nakamura, T.: "Purification and Physico-Chemical Properties of Laccase," Biochem. Biophys. Acta, 30: 44, 1958.

11. Kumanotani, J.: "Laccase-Catalysed Polymerization of Urushiol in Precisely Confined Japanese Lacquer System," Makromol. Chem., 179: 47, 1978.

12. Yoshida, H.: J. Chem. Soc., 43: 472, 1883.

13. Tissieres, A.:"Constitution and Properties of Laccase," Nature, 163: 480, 1949.

14. Bligny, R. and R. Douce: "Excretion of Laccase by Sycamore (*Acer pseudoplatanus L.*) cells," Biochem J., 209: 489, 1983.

15. Koudelka, G. B., F. B. Hansen, and M. J. Ettinger, "Solvent Isotope Effects and the pH Dependence of Laccase Activity under Steady-State Conditions," The Journal of Biological Chemistry, 260(29): 1, 1975.

16. Harkin, J. M., and J. R. Obst: "Syringaldazine, an Effective Reagent for Detecting Laccase and Peroxidase in Fungi," Experientia, 29: 381, 1973.

17. Wrigley, S. K., and J. F. Gibson: "Electron Paramagnetic Resonance Studies of Type 1 copper in Type 2 Depleted Fungal Laccase A," Biochimica et Biophysica Acta, 916: 259, 1987.

18. Kumanotani, J., T. Kato: IUPAC International Symposium on Macromolecular Chemistry, Budapes, vol. V: pp. 105, 1969. (reprints)

19. Jefferson, A., and S. Wangchareontrakul:" long chain phenols urushiol, laccol thitsiiol and phenylalkyl catechol compounds in Burmese lac from Melanorrhoea usitata," Journal of Chromatography, 367: 145, 1986.

20. ศรีประพันธ์ ฟุ้งเกียรติ, "รักและกรรมวิธีผลิตเครื่องเขิน," กองแผนงาน กรมส่งเสริมอุตสาหกรรม กระทรวงอุตสาหกรรม, 2521.

21. วีระนันท์ นีลตนุวงศ์, ศูนย์ส่งเสริมอุตสาหกรรมภาคเหนือ.

22. Du, Y., R. Oshima, Y. Yamauchi, J. Kumanotani, and T. Miyakoshi: "Long Chain Phenols from the Burmese Lac Tree, Melanorrhoea usitata," Phytochemistry, 25(9): 2211, 1986.

23. Bligny, R.: "First Culturing the Sycamore Cells (*Acer pseudoplatanus L.*)," Plant Physiol, 59: 502, 1977.

24. Bligny, R., J. Gaillard, and R. Douce: "Excretion of Laccase by Sycamore (*Acer pseudoplatanus L.*) cells," Biochem. J., 237: 583, 1986.

25. Bligny, R., and R. Douce: "Mitochondria of Isolated Plant Cells (*Acer pseudoplatanus L.*)," Plant Physiol, 60: 675, 1977.

26. Reinhammar, B.: Biochem. Biophys. Acta, 205: 35, 1970.

27. Devries, O. M. H., W. H. C. F. Kooistra, and J. G. H. Wessels: "Formation of an Extracellular Laccase by Schizophyllum commune Dikaryon," Journal of General Microbiology, 132: 2817, 1986.

28. Ishihara, T.: "The Role of Laccase in Lignin Biodegradation," 2: 18, 1978.

29. Marbach, I., E. Harel,and A. M. Mayer: Phytochemistry, 24(11): 2559, 1985.

30. Grueger, W.,and A. Crueger: Biotechnology : A Textbook of Industrial Microbiology, Science Tech Inc.: pp.]]]]], Madison, 1982.

31. Froehner, S. C., and K. E. Erikson: J. Bacteriology, 120: 458, 1974.

32. Kato, T., J. Kumanotani: Bulletin of the Chemical Society of Japan, 42: 2375, 1969.

33. Hunolstein, V. C., P. Valenti, P. Visca, G. Antonini, L. Nicolini, and N. Orsi: "Production of Laccase A & B by a Mutant Strain of Trametes versicolor," J. Gen. Appl. Microbiol., 32: 185, 1986.

34. Malkin, R.: "The Copper-Containing Oxidases," Inorganic Biochemistry, 1: 689, 1975.

35. Wollenberger, U., F. Scheller, and D. Pfeiffer: "Laccase /Glucose Oxidase Electrode for Determination of Glucose," Analytic Chimica. Acta., 187: 39, 1986.

36. Tarasevich, M. R., A. I. Yaropolov, A. Bogalanovskaya, and S. D. Varfolomeev: Bioelectrochem. Bioeng., 6: 397, 1975.

37. Inman, D. J., and W. E. Hornby: Biochem. J., 129: 255, 1972.

38. Campbell, J., W. E. Hornby, and D. L. Morris: Biochem. Biophys. Acta., 384: 307, 1975.

39. Chibata, I.:"Principles of Immobilized Enzymes and Microbial Cells," Proceedings of a Regional Workshop (Flegel, T. W., V. Meevootisom, A. Bhumiratana, and P. Matangkasombut): pp. 3-17, 1982.

40. Williams and Reisfeld: "Disc Electrophoresis in Polyacrylamide Gels : Extension to New Conditions of pH and Buffer," N. Y. Acad. Annals., 121(2): 373, 1964.

41. Lowry, O. H., N. J. Rosebrough, A. L. Farr, and R. J. Randall: "Protein Measurement with Folin Phenol Reagent," J. Biol. Chem., 193: 265, 1951.

42. Nilsson, H., R. Mosbash, and K. Mosbach: "The Use of Bead Polymerization of Acrylic Monomers for Immobilization of Enzymes," Biochem. Biophys. Acta., 268: 253, 1972.

43. Hjerten, S.,and R. Mosbach: Anal. Biochem., 3:109,1962.

44. Tantipaiboonwat, S.: "Dephenolization of Waste Water by Laccase," 4th Year Project, Department of Biotechnology, Mahidol University, 1985.

45. Atlow, S. C., L. B. Aparo, and A. M. Klibanov: "Dephenolization of Industrial Wastewaters Catalyzed by Polyphenol Oxidase," Biotechnology and Bioengineering, 16: 599, 1984.

46. ธนิต ผิวนิ่ม :"การตรึงอินเวอเตส," เอกสารประกอบการประชุมเชิงปฏิบัติการ(วันชัย ศิริชนะ): หน้า 89-92,จุฬาลงกรณ์มหาวิทยาลัย, 2530.

47. Trevan, M. D.: Immobilized Enzymes: pp. 138, John Wiley & Sons, Toronto, 1980.

48. Klibanov, A. M., B. N. Alberti, E. D. Morris, and L. M. Felshin: " Enzymatic Removal of Toxic Phenols and Anilines from Waste Waters," Journal of Applied Biochemistry, 2: 414, 1980.

49. Klibanov, A. M., E. D. Morris: "Horseradish peroxidase for the removal of carcinogenic aromatic amines from water," Enzyme Microb. Technol.,3:119,1981.

50. Neidleman, S. L.: "Waste-water clean-up with horseradish peroxidase," Trend in Biotechnology, 2(4): 107, 1984.

51. Chibata,I.,and T. Tosa:"Immobilized Enzyme Principles," :pp. 334, L. Academic Press, Wingard, 1976.

VITAE

I, Miss Supaluk Termvoratham, was born on October 20, 1962 in Bangkok, Thailand. I received my B.Sc. in General Science from the Faculty of Science, Chulalongkorn University in 1984. After graduating, I worked as a Customer Service in the marketing department of Thai Petrochemical Industry for two years.