

## REFERENCES

- Cetinkaya, B., Cetinkaya, E., Brookhart, M., and White, P.S. (1998). Rutheuium (III) complexes with 2,6-pyridyl-diimine ligands: synthesis, characterization and catalytic activity in epoxidation reaction. Journal of Molecular Catalysis A: Chemical, 142, 101-112.
- Deshpande, S., Patil, S., Kuchibhatla, S.V., and Seal, S. (2005). Size dependency variation in lattice parameter and valency states in nanocrystalline cerium oxide. Applied Physics Letters, 81, 113-133.
- Fraile, J.M., Garcia, J.I., Mayoral, J.A., and Vispe, E. (2003). Optimization of cyclohexene epoxidation with dilute hydrogen peroxide and silica-supported titanium catalysts. Applied Catalysis A: General, 245, 363-376.
- Kanai, H., Ikeda, Y., and Imamura, S. (2003). Epoxidation of allyl acetate with tert-butyl hydroperoxide catalyzed by MoO<sub>3</sub>/TiO<sub>2</sub>. Applied Catalysis A: General, 247, 185-191.
- Lambert, R.M., Williams, F.J., Cropley, R.L., and Palermo, A. (2005). Heterogeneous alkene epoxidation: past, present and future. Journal of Molecular Catalysis A: Chemical, 228, 27-23.
- Mandelli, D., Vliet, M.C.A., Sheldon, R.A., and Schuchardt, U. (2001). Alumina-catalyzed alkene epoxidation with hydrogen peroxide. Journal of Molecular Catalysis A: Chemical, 219, 209-213.
- Muelle, R., Kammler, H.K., Pratsinis, E.S., and Pratsinis, E.W. (2003). OH surface density of SiO<sub>2</sub> and TiO<sub>2</sub> by thermogravimetric analysis. Langmuir, 19, 160-165.
- Murakami, Y., Matsumoto, T., and Takasu, Y. (1999). Salt catalysts containing basic anions and acidic cations for the sol-gel process of titanium alkoxide: Controlling the kinetics and dimensionality of the resultant titanium oxide. Journal of Physical Chemistry B, 103, 1836-1840.
- O'Commell, A., Smyth, T., and Hodnett, B.K. (1996). The epoxidation of cyclohexene by dioxiranes over ketone catalysts. Catalysis Today, 32, 273-276

- Oyama, S.T. (2008). Mechanisms in Homogeneous and Heterogeneous Epoxidation Catalysis. Amsterdam: Elsevier.
- Pavasupree, S., Suzuki, Y., Pivsa-Art, S., and Yoshikazu, S. (2004). Preparation and characterization of mesoporous TiO<sub>2</sub>-CeO<sub>2</sub> nanopowders respond to visible wavelength. Journal of Solid State Chemistry, 178, 128-134.
- Qin, J. and Aika, K.I. (1997). Catalytic wet air oxidation of ammonia over alumina supported metals. Applied Catalysis B: Environmental, 16, 261-268.
- Reddy, A., Chien, C., Chen, C., Chien, S., Lin, C., Lin, K., Chen, C., and Chang, S. (2010). Synthesis and characterization of Fe/CeO<sub>2</sub> catalysts: epoxidation of cyclohexene. Journal of Molecular Catalysis A: Chemical, 318, 60-67.
- Rouquerol, F., Rouquerol, J., and Sing, K. (1999). Adsorption by Powders and Porous Solid: Principle, Methodology and Applications. San Diego: Academic Press.
- Satterfield, C.N. (1991). Heterogeneous Catalysis in Industrial Practice. New York: McGraw-Hill, Inc.
- Smith J.V., Editor. (1960). X-ray Powder Data File, American Society for Testing Materials.
- Sreethawong, T., Yamada, Y., Kobayashi, T., and Yoshikawa, S. (2005). Catalysis of nanocrystalline mesoporous TiO<sub>2</sub> on cyclohexene epoxidation with H<sub>2</sub>O<sub>2</sub>: Effect of mesoporosity and metal oxide additives. Journal of Molecular Catalysis A: Chemical, 241, 23-32.
- Sreethawong, T., Yamada, Y., Kobayashi, T., and Yoshikawa, S. (2006). Optimization of reaction conditions for cyclohexene epoxidation with H<sub>2</sub>O<sub>2</sub> over nanocrystalline mesoporous TiO<sub>2</sub> loaded with RuO<sub>2</sub>. Journal of Molecular Catalysis A: Chemical, 248, 226-232.
- Sreethawong, T., Suzuki, Y., and Yoshikawa, S. (2005). Synthesis, characterization, and photocatalytic activity for hydrogen evolution of nanocrystalline mesoporous titania prepared by surfactant-assisted templating sol-gel process. Journal of Solid State Chemistry, 178, 329-338.

- Wang, C. and Ying, J. (1999). Sol-gel synthesis and hydrothermal processing of anatase and rutile titania nanocrystals. Chemistry of Materials, 11, 3113-3120.
- Woragamon, K. (2009) Catalytic Epoxidation of Cyclohexene over Different Oxide Catalysts. M.S. Thesis, The Petroleum and Petrochemical College, Chulalongkorn University, Thailand
- Woragamon, K., Jongpatiwut, S., and Sreethawong, T. (2010). Liquid-phase cyclohexene epoxidation with H<sub>2</sub>O<sub>2</sub> over RuO<sub>2</sub>-loaded mesoporous-assembled TiO<sub>2</sub> nanocrystals: catalyst preparation and recyclability. Catalysis Letters, 136, 249-259.
- Wu, J.C. and Chen, C.H. (2004). A visible-light response vanadium-doped titania nanocatalyst by sol-gel method. Journal of Photochemistry and Photobiology A: Chemistry, 163, 509-515.
- Zou, H. and Lin, Y.S. (2004). Structural and surface chemical properties of sol-gel derived TiO<sub>2</sub>-ZrO<sub>2</sub> oxides. Applied Catalysis A: General, 265, 35-42.

## CURRICULUM VITAE

**Name:** Ms. Titada Rattanapunyakun

**Date of Birth:** September 2, 1987

**Nationality:** Thai

**University Education:**

2005-2008 Bachelor Degree of Engineering (Chemical Engineering), Faculty of Engineering, Burapha University, Chonburi, Thailand

**Work Experience:**

October 2007-March 2008	Position: Internship
	Company name: Usui International Corporation
	Thailand Co. Ltd

**Proceedings:**

1. Rattanapunyakun, T., Sreethawong, T., and Jongpatiwut, S. (2011, April 26) Liquid-Phase Cyclohexene Epoxidation over Mesoporous-Assembled TiO<sub>2</sub>-CeO<sub>2</sub> Mixed Oxide Catalysts. Proceedings of The 2<sup>nd</sup> Research Symposium on Petroleum, Petrochemicals, and Advanced Materials and The 17<sup>th</sup> PPC Symposium on Petroleum, Petrochemicals, and Polymers, Bangkok, Thailand.

