

REFERENCES

- Barsoum, M.W. (1997). Fundamentals of ceramics. London: The McGraw-Hill Companies.
- Bradley, D.C., Mehrotra, R.C., and Gaur, D.P. (1978). Metal Alkoxides. Academic Press Inc. (London) Ltd.
- Charoenpanijkarn,W., Wongkasemjit, S., and Jamieson, A.M. (2001). European Polymer Journal, 37, 1441.
- Ding, X., and Liu, X. (1997). Synthesis and microstructure control of nanocrystalline titania powders via a sol-gel process. Materials Science and Engineering A, 224, 210-215.
- Fukushima, K., amd Yamada I. (1989). Journal of Applied Physics, 65, 619.
- Gainsford, G.J., Kemmitt, T., Lensink, C., and Milestone, N.B. (1995). Isolation and Characterization of Anionic Titanium Tris(glycolate) Complexes. Inorganic Chemistry, 34, 746-748.
- Hsu, S.H., and Jamieson, A. M. (1993). Viscoelastic studies of the sol-gel transition of gelatin. Polymer, 34, 2602-2608.
- Izutsu, H., Nair, P.K., and Mizukami, J. (1997). Preparation of anatase titania nanoparticles by the hydrolysis of titanium tetraisopropoxide (TTIP) using freeze-dry method. Journal of Materials Chemistry, 7, 855.
- Jung, K.Y., and Park, S.B. (2000). Enhanced photoactivity of silica-embedded titania particles prepared by sol-gel process for the decomposition of trichloroethylene. Applied Catalysis B: Environmental, 25, 249-256.
- Klein, L.C. (1988). Sol-Gel Technology for Thin Films, Fibers, Preforms, Electronics, and Speciality Shapes. New Jersey: Noyes Publications.
- Kim, E.J., and Hahn, S. (2001). Microstructural changes of microemulsion-mediated TiO₂ particles during calcinations. Materials Letters, 49, 244-249.
- Kumar, K.N.P., Keizer, K., and Burggraaf, A.J. (1993). Journal of Materials Chemistry, 3, 1141.
- Laine, R.M. (1992). Inorganic and Organometallic Polymers with Special Properties. Netherlands: Khuwer Academic Publishes.

- Livage, J., Henry, M., and Sanchez, C. (1988). Progress in Solid State Chemistry, 18, 259.
- Muzio, F.D., Masi, M., and Carra, S. (2000). Modeling of aerosol decomposition of titania thin films. Materials Chemistry and Physics, 66, 286-293.
- Reed, J.S. (1989). Introduction to the principles of ceramic processing. New York: John Willey and Sons.
- Romano, S.D., and Kurlat, D.H. (2000). Rheological measurements in titania gels synthesized from reverse micelles. Chemical Physics Letters, 323, 93-97.
- Rude, E., Llorens, J., and Mans, C. (1996). Viscoelastic properties in the course of hydrolysis and condensation reactions of modified titanium alkoxides leading to gelation. Colloids and Surfaces A: Physicalchemical and Engineering Aspects, 119, 57-65.
- Santos, L.R.B., Santilli, C.V., and Pulcinelli, S.H. (1999). Sol-gel transition in SnO_2 colloidal suspensions: viscoelastic properties. Journal of Non-Crystalline Solids, 247, 153-157.
- Stocker, C., and Baiker, A. (1998). Zirconia aerogels: effect of acid-to-alkoxide ratio, alcoholic solvent and supercritical drying method on structural properties. Journal of Non-Crystalline Solids, 223, 165-178.
- Sun, Y., Li, A., Qi, M., Zhang, L., and Yao, Xi. (2001). High surface area anatase titania nanoparticles prepared by MOCVD. Materials Science and Engineering B, 86, 185-188.
- Suzuki, E., Kusano, S., Hatayama, H., Okamoto, M., and Ono, Y. (1997). Synthesis of titanium tetraalkoxides from hydrous titanium dioxide and dialkyl carbonates. Journal of Materials Chemistry, 7(10), 2049-2051.
- Van der Vorst, B., Van den Ende, D., Tekin, N.A., and Mellema, J. (1998). Viscoelastic behavior of an ordering latex suspension in a steady shear flow. Physical Review E, 57, 3115-3122.
- Wang, D., Yu, R., Kumada, N., and Kinomura, N. (1999). Hydrothermal Synthesis and Characterization of a Novel One-Dimensional Titanium Glycolate Complex Single Crystal: $\text{Ti}(\text{OCH}_2\text{CH}_2\text{O})_2$ Chemistry of Materials, 11, 2008-2012.

- Ward, D.A., and Ko, E.I. (1993). Synthesis and Structural Transformation of Zirconia Aerogels. Chemistry of Materials, 5, 956-969.
- Wei, Y., Wu, R., and Zhang, Y. (1999). Preparation of monodispersed spherical TiO_2 powder by force hydrolysis of $\text{Ti}(\text{SO}_4)_2$ solution. Materials Letters, 41, 101-103.
- Zhang, Q., Gao, L., and Guo, J. (2000). Effects of calcinations on the photocatalytic properties of nanosized TiO_2 powders prepared by TiCl_4 hydrolysis. Applied Catalysis B, 26, 207-215.
- Zhang, Y., Weidenkaff, A., and Reller, A. (2002). Mesoporous structure and phase transition of nanocrystalline TiO_2 . Materials Letters, 54, 375-381.

CURRICULUM VITAE

Name: Mr. Tossaporn Chairassameewong

Date of Birth: August 20, 1979

Nationality: Thai

University Education:

1997-2000 Bachelor Degree of Science in Industrial Chemistry (First Class Honors), Faculty of Science, King Mongkut's Institute of Technology North Bangkok, Bangkok, Thailand.