

## REFERENCES

- Anderson, A. and Choe S. Ethylene Hydrogenation Mechanism on the Pt(111) Surface Theoretical Determination Journal of Physical Chemistry 93 (1989): 6145-6149
- Anduriz, H., Bodnariuk, P., Dennehy, M. and Gigola, C. Activity and Selectivity of Pd/  $\alpha$  -  $\text{Al}_2\text{O}_3$  for Ethyne Hydrogenation in a Large Excess of Ethene and Hydrogen Applied Catalysis 58 (1990): 227-239
- Battiston, G., Dalloro, L. and Tauszik, G. Performance and Aging of Catalyst for the Selective Hydrogenation of Acetylene: a Micropilot Plant Study, Applied Catalysis, 2 (1982): 1
- Beebe, T. and Yate, J. An in Situ Infrared Spectroscopic Investigation of the Role of Ethylidyne in the Ethylene Hydrogenation Reaction on Pd/ $\text{Al}_2\text{O}_3$  Journal of American Chemical Society, 108 (1986) : 663-671
- Bond, G., Catalysis by Metals, London : Academic press, 1962
- Borodzinski, A. Surface Heterogeneity of Supported Palladium Catalyst for the Hydrogenation of Acetylene -Ethylene Mixtures Langmuir 13 (1997): 883-887
- Bos, A. and Westerterp, K., Mechanism and Kinetics of the Selective Hydrogenation of Ethyne and Ethene Chemical Engineering and Processing 32 (1993):1-7
- Cattania, M., Penka, V., Behm, R., Christmann, K. and Ertl, G. Interaction of Hydrogen with a Palladium (110) Surface Surface Science 126 (1983): 382-391

- Cordatos, H, Bunluesin, T. and Gorte, R. Study of CO, NO and H<sub>2</sub> Adsorption on Model Pd/  $\alpha$ -Al<sub>2</sub>O<sub>3</sub> (0001) Catalysts Surface Science 323 (1995): 219-227
- Cortright, R., Goddard, S., Rekoske, J., and Dumesic, J. Kinetic Study of Ethylene Hydrogenation Journal of Catalysis 127 (1991), 342-353
- Dumesic, J., Rudd, D., Aparicio, L., Rekoske, J. and Trevino, A. Microkinetic of Heterogeneous catalysis. Washington DC: ACS Professional Reference Book, 1993
- Gigola, C., Aduriz, H. and Bodnariuk, P. Particle Size Effect in the Hydrogenation of Acetylene under Industrial Conditions, Applied Catalysis 27 (1986): 133-144
- Guczi, J. and Weiss, A. Reaction of Acetylene during Hydrogenation on Pd Black Catalyst Journal of Catalysis 72 (1981): 185-198
- Gva, L. and Kho, K. Kinetics of Acetylene Hydrogenation on Palladium Deposited on Alumina Kinetics Catalysis 29 (1988) :381-386
- LeViness, S., Nair, V. and Weiss, A. Acetylene Hydrogenation Selectivity Control on PdCu/Al<sub>2</sub>O<sub>3</sub> Catalyst Journal of Molecular Catalysis 25 (1984): 131-140
- Nakasuji, H., Hada, M. and Yonezawa, T. Theoretical Study on the Catalyst Activity of Palladium for the Hydrogenation of Acetylene Surface Science 185 (1987): 319-342
- Margitfalvi, J., Guzzi, L. And Weiss, A. Reaction of Acetylene during Hydrogenation on Pd Black Catalyst Journal of Catalysis 72 (1981): 185-198

- Mavrikakis, M., Schwank, J. and Gland, J. A Mean-field Modeling Study of the Interaction between Hydrogen and a Palladium (110) Single Crystal Journal of Chemical Physics 105 (1996) : 1-6
- Mavrikakis, M., Schwank, J. and Gland, J. The Effects of Exposure Time and Pressure on the Temperature Programmed Desorption Spectra of System with Bulk States Surface Science 355 (1996): L 385-L392
- McGown, W., Kambel, C. and Whan, D. Hydrogenation of Acetylene in Excess of Ethylene on a Alumina Supported Palladium Catalyst at Atmospheric Pressure in a Spinning Basket Reactor Journal of Catalysis 51 (1978): 173-184
- Moses, M., Weiss, A., Matusek, K., and Guzi, L. The Effect of Catalyst Treatment on the Selective Hydrogenation of Acetylene over Palladium/Alumina. Journal of catalysis 86 (1984): 417-426
- Pradier, C., Mazina, M. Berthier, Y. and Oudar, J. Hydrogenation of Acetylene on Palladium Journal of Molecular Catalysis 89 (1994): 211-220
- Sarkany, A., Guzi, L. and Weiss A. On the Aging Phenomenon in Palladium Catalysed Acetylene Hydrogenation Applied Catalysis 10 (1984): 591-600
- Takasu, Y., Sakuma, T. and Matsuda, Y. Hydrogenation of Ethylene on Small Palladium Particle Chemistry Letter 1985: 1179-1182
- Zaera, F. and Somorjai, G. Hydrogenation of Ethylene over Platinum (111) Single - Crystal Surface Journal of American Chemical Society 106 (1984) : 2288-2293

## **CIRRICULUM VITAE**

**Name** : Ms Piyaporn Pongbhai

**Birthdate** : 28 February 1974

**Nationality** : Thai

**University Education:**

1991-1995 B.Eng. in Chem. Eng., Chemical  
Engineering, Faculty of Engineering, Kasetsart  
University, Bangkok, Thailand