

เอกสารอ้างอิง

- [1] H. Scott Fogler. **Elementary of Chemical Reaction Engineering**. 3rd ED. New Jersey : Prentice Hall. 1999.
- [2] Otave Levenspiel. **Chemical Reaction Engineering**. 3rd ED. New Jersey : John Wiley & Sons. 1999.
- [3] J.M. Smith. **Chemical Engineering Kinetics**. 3rd ED. McGraw-Hill. 1981.
- [4] Muraki, H. and Fujitani, Y. “NO reduction by CO over Noble Metal Catalysts under Cycled Feedstreams.” **Ind. Eng. Chem. Prod. Res. Dev.**, vol. 25, 1986. pp. 414-419
- [5] Silveston, P. L., Hudgins, R. R. and Renken, A. “Periodic Operation of Catalytic Reactors Introduction and Overview” **Catalysis Today**., vol.25, 1995. pp. 91-122 .
- [6] Shelef, M. and Graham, G.W. “Why Rhodium in Automotive Three-way Catalyst?” **Catal. Rev.-Sci. Eng.**, vol. 36, no.3, 1994. pp. 433-457.
- [7] Tayler, K. C. “Nitric oxide Catalysis in Automotive Exhaust systems” **Catal. Rev.-Sci. Eng.**, vol. 35, No.4. 1993. pp. 457-481.
- [8] Marin, G. B., Jozef, H.B., Hoebink, J. “Kinetic Modelling of Automotive Exhaust Catalysis” 1997.
- [9] Yang, A. C. and Garland, C. W. “Infrared Studies of Carbon Monoxide Chemisorbed on Rhodium” **J. Phys. Chem.**, vol. 61. 1957. pp. 1504-1512.
- [10] Yate, J.T., Duncan, T.M., Warle, S.D. and Vaughan, R.W. “Infrared Spectra of Chemisorbed CO on Rh” **J. Chem. Phys.**, vol. 70, No.3. 1979. pp.1219-1224.
- [11] Arai, H., Tominaga, H. “An infrared study of Nitric Oxide Adsorbed on Rhodium-Alumina Catalyst” **J. Catal.**, vol. 43, 1976. pp. 131-142.
- [12] Zhdanov, V.P. and Kasemo, B. “Mechanism and Kinetics of the NO-CO reaction on Rh” **Surf. Sci. Reports.**, vol.29. 1997. pp.31-90.
- [13] Hecker, W. C. and Bell, A. T. “Reduction of NO by CO over Silica-Supported Rhodium: Infrared and Kinetic Studies” **J. Catal.**, vol. 84. 1983. pp. 200-215.
- [14] Permana, H., Simon, Ng K.Y., Charles, H.F.Peden, Schmieg, S. J., Lambert, D. K. and Belton, D. N. “Adsorbed Species and Reaction Rates for NO-CO over Rh(111)” **J. Catal.**, vol. 164. 1996. pp. 194-206.

- [15] Granger, P., Dathy, C., Lecomte, J.J., Leclercq, L., Prigent, M., Mabilon, G. and Leclercq, G. "Kinetics of the NO and CO Reaction over Platinum Catalysts I. Influence of the Support" **J. Catal.** vol. 173. 1998. pp. 304-314.
- [16] Kruse, N. "Nitric Oxide Interaction with Rh Metal: Kinetics of Elementary Steps and Reaction with Carbon Monoxide" **J. Mol. Catal.**, vol. 163. 2000. pp. 79-89.
- [17] Granger, P., Dujardin, C., Paul, J. F. and Leclercq, G. "An Overview of Kinetic and Spectroscopic Investigations on Three-Way Catalysts: Mechanistic Aspects of the CO + NO and CO + N₂O Reactions" **J. Mol. Catal.**, vol. 208. 2005. pp. 241-253.
- [18] Dubois, L.H., Hansma, P.K. and Somorjai, G.A. "Evidence for an Oxygen Intermediate in Catalytic Reduction of NO by CO on Rhodium Surface" **J. Catal.** vol. 65. 1980. pp. 318-327.
- [19] Zaera, F. and Gopinath, C. S. "Surface Intermediates during the Catalytic Reduction of NO on Rhodium Catalysts: A Kinetic Inference" **J. Mol. Catal.**, vol. 167. 2001. pp. 23-31
- [20] Kondarides, D. I., Chafik, T. and Verykios, X. E. "Catalytic Reduction of NO by CO over Rhodium Catalysts 3. The Role of Surface Isocyanate Species" **J. Catal.** Vol. 193. 2000. pp. 303-307.
- [21] Avalos, L.A., Bustos, V., Unac, R., Zaera, F. and Zgrablich, G. "Toward a Realistic Model for Kinetics of the NO + CO Reaction on Rhodium Surfaces" **J. Mol. Catal.**, vol. 228. 2005. pp. 89-95.
- [22] Shinjoh, H., Muraki, H. and Fujitani, Y. "Periodic Operation Effects in Propane and Propylene Oxidation over Noble Metal Catalysts" **Appl. Catal.** vol.49. 1989. pp. 195-204.
- [23] Aida, T., Kawakami, R. and Niiyama, H. "Periodic Operation Effects in Selective Catalytic Reduction of Nitrogen Monoxide with Propane over Alumina." **Journal of Chemical Engineering of Japan**, vol.30, 1997. pp. 321-327.
- [24] Chanchlani, K.G., Hudgins, R.R. and Silveston, P.L. "Methanol Synthesis under Periodic Operation: An Experimental Investigation." **Can. J. Chem. Eng.**, vol.72, August, 1994. pp. 657-671.
- [25] Muraki, H. and Fujitani, Y. "NO reduction by CO over Noble Metal Catalysts under Cycled Feedstreams" **Ind. Eng. Chem. Prod. Res. Dev.**, vol. 25, 1986. pp. 414-419.

- [26] Na-Ranong, D., Aida, T. and Niiyama, H. "Application of Periodic Operation to Kinetic Study for NO-CO Reaction over Pt/Al₂O₃," **Appl. Catal.**, vol.234, 2002. pp. 103-110.
- [27] Aida, T., Na-Ranong, D., Kobayashi, R. and Niiyama, H. "Effect of Diffusion and Adsorption-Desorption on Periodic Operation Performance of NO-CO Reaction over Supported Noble Metal Catalysts" **Chem. Eng. Sci.**, vol.54. 1999. pp. 4449-4457.
- [28] Lie, A.B.K., Hoebink, J. and Marin, G.B. "The Effects of Oscillatory Feeding of CO and O₂ on the Performance of a Monolithic Catalytic Converter of Automobile Exhaust Gas: a Modelling Study" **Chem. Eng. J.**, vol.53. 1993. pp.47-54.
- [29] Rancine, B. N., Sally, M. J., Wade, B. and Herz, R. K. "Dynamic CO Oxidation over Pt/Al₂O₃" **J. Catal.**, vol.127. 1991. pp.307-331.
- [30] Silveston, P.L. "Catalytic Oxidation of carbon Monoxide Under Periodic Operation" **Can. J. Chem. Eng.**, vol.69. 1991. pp.1106-1120.
- [31] Gulari, E., Zhou, X. and Sze C. "Catalytic Oxidation of Carbon Monoxide under Periodic and Transient Operation" **Catalysis Today.**, vol.25 1995. pp. 145-157.
- [32] Cho, B., K. and West, L., A. "Cyclic Operation of Pt/Al₂O₃ Catalysts for CO Oxidation" **Ind. Eng. Chem. Fundam.**, vol.25. No.1. 1986. pp. 158-164.
- [33] Bailey, J.E. and Horn, F.J.M. "Cyclic Operation of Reaction System: the Influence of Diffusion on Catalyst Selectivity." **Chem. Eng. Sci.**, vol.27, 1972. pp. 109-119.
- [34] Barshad, Y., Zhou, X, C. and Gulari, E. "Carbon Monoxide Oxidation under Transient Conditions: A Fourier-Transform Infrared Transmission Spectroscopy Study" **J. Catal.**, vol.94 1985. pp 128-141.
- [35] Na-Ranong D. "NO-CO Reaction over Noble Metal Catalysts under Periodic Operation." Ph.D. Thesis of Tokyo Institute of Technology. 2002.