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Tetsuya Shishido was born in 1970 in Yokohama, Japan. He received his Ph.D. (1997) from Hokkaido University (Thesis Director: Prof. H. Hattori). He became an assistant professor of Hiroshima University (1997) and promoted to an associate professor of Tokyo Gakugei University (2003). He moved to Kyoto University as an associate professor (2005), and currently is a professor in Tokyo Metropolitan University and Elements Strategy Initiative for Catalysts and Batteries, Kyoto University since 2013. Recently, he received Incentive Award of the Catalysis Society of Japan (2009), and Incentive Award of The Japan Petroleum Institute (2009). He is Editor of Catalysis Science and Technology (2014-), and a Fellow of Royal Society of Chemistry (2014-). He also serves as international advisory board of the International Symposium on Catalysis and Fine Chemicals (2011-). His group focused on the design of a new and high-performance catalyst for selective transformation of chemicals, and for the reduction of environmental pollutants on the basis of understanding at the atomic or molecular scale. His research targets include solid acid-base catalysts, photocatalysts, and highly functionalized metal or alloy catalysts. In addition, to understand the reaction mechanisms at catalyst surfaces, this group is performing several *in situ* spectroscopic techniques.

Selected Recent Publications

1. S. Imai, H. Miura, T. Shishido, Tetsuya, “Selective catalytic reduction of NO with CO and C_3H_6 over Rh/$NbOPO_4$”, *Catal. Today*, **2018**, *in press*
2. L. Deng, H. Miura, Hiroki, T. Shishido, Z. Wang, S. Hosokawa, K. Teramura, T. Tanaka, “Elucidating strong metal-support interactions in Pt-Sn/SiO_2 catalyst and its consequences for dehydrogenation of lower alkanes”, *J. Catal.*, **2018**, 365, 277-291.
3. H. Miura, Y. Tanaka, K. Nakahara, Y. Hachiya, K. Endo, T. Shishido, “Concerted Catalysis by Adjacent Palladium and Gold in Alloy Nanoparticles for the Versatile and Practical [2+2+2] Cycloaddition of Alkynes”, *Angew. Chem. Int. Ed.* **2018**, 57, 6236-6140.
4. H. Miura, S. Sasaki, R. Ogawa, T. Shishido, “Hydrosilylation of Allenes over Palladium-Gold Alloy Catalysts: Enhancing Activity and Switching Selectivity by the Incorporation of Palladium into Gold Nanoparticles “, *Eur. J. Org. Chem.*, **2018**, 1858-1862.
5. H. Asakura, S. Hosokawa, T. Ina, K. Kato, K. Nitta, K. Uera, T. Uruga, H. Miura, T. Shishido, J. Ohyama, A. Satsuma, K. Sato, A. Yamamoto, S. Hinokuma, H. Yoshida, M. Machida, S. Yamazoe, T. Tsukuda, K. Teramura, T. Tanaka, “Dynamic Behavior of Rh Species of Rh/Al_2O_3 Model Catalyst During Three-Way Catalytic Reaction - An Operando XAS Study”, *J. Am. Chem. Soc.,* **2018**, 140, 176-184
6. H. Miura, K. Nakahara, T. Kitajima, T. Shishido, “Concerted Functions of Surface Acid-Base Pairs and Supported Copper Catalysts for Dehydrogenative Synthesis of Esters from Primary Alcohols“, *ACS Omega*, **2017**, *2*, 6167-6173.
7. H. Miura, K. Endo, R. Ogawa, and T. Shishido, “Supported Palladium−Gold Alloy Catalysts for Efficient and Selective Hydrosilylation under Mild Conditions; Isolated Single Palladium Atoms in Alloy Nanoparticles as the Main Active Site“, *ACS Catal*., **2017**, *7*, 1543-1553.