

Catalyst Innovation for Methane Chemistry and Technology Development

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Industrial processes, that can make balanced use of diverse natural carbon resources, become nowadays highly demanded. What we need are “Innovative Catalysts” and new methodology to create catalyst and analyze. In 2015, Japan Science and Technology Agency (JST) has started a new research entitled “Innovative Catalysts”, which aims at creating innovative catalysts that can efficiently convert natural carbon resources, particularly methane, to useful chemicals or energy carrier materials. JST has been supporting these scientists for designing of novel catalyst materials, theoretical modeling of catalytic materials, new chemical process engineering, and development of advanced *in-situ* analysis of catalytic functions. The project is headed by Prof. Wataru Ueda(Kanagawa University) and Prof. Hiroshi Kitagawa(Kyoto University) with the advisory board consisting of leading senior scientists in Japan. We expect that this project will successfully promote the creation of “innovative catalysts” that can convert methane and other alkane gas resources to useful chemicals and energy carriers.