で尺で 第192回触媒化学研究センター談話会

演題: Catalyst and Chemisorption

講演者: Martin A. Thomas 博士

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16:00 - 17:00

会場:北海道大学創成科学研究棟

4階 セミナー室 04-213 号室

講演内容:

Heterogeneous catalysts are able to catalyze reactions between reactants because of adsorption at the surface reduces activation energy in most cases. Therefore, to understand fully the nature of the catalyst surface it is necessary to quantify various parameters. This seminar will describe the characterization methods available to quantify surface area, pore size and pore volume of catalyst supports by physisorption techniques and liquid porosimetry. Chemisorption methods to determine selectively the active component such as exposed metal area and dispersion will be discussed, and briefly water sorption for special applications. In addition, temperature programmed methods such as TPR, TPO and TPD will be described as complementary techniques, and will include combination of these techniques with mass-spectrometry.

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