

Title **Fundamental Studies on Photocatalysis**

Speaker Dr. Bunsho OHTANI
Professor, Catalysis Research Center, Hokkaido University



Date & Time Friday, July 22, 2011 4:00p.m.

Place INAMORI Hall, Ito campus, Kyushu University

Abstract

In spite of its relatively long history, principle and detailed mechanism of photocatalysis has not yet been clarified, e.g., a conventional interpretation of photocatalysis, photoexcited electrons and positive holes reduce and oxidize surface-adsorbed substrates, requires detailed information, e.g., density and energy of trapping states to enhance electron migration and recombination of electrons and positive holes. One of the plausible reasons is that photocatalysis lies in the boundary of various fields, e.g., catalytic chemistry, electrochemistry, photochemistry and materials chemistry, and therefore discussion on photocatalysis seems to had been made on different planes. In this lecture, fundamental studies on photocatalysis in our laboratory, that is specialized in photocatalysis, will be introduced.

About the Speaker

A research work on photocatalysis by Professor Ohtani started in 1981 when he was a Ph. D. course student in Department of Hydrocarbon Chemistry, Faculty of Engineering, Kyoto University under the supervision of Professor Tsutomu Kagiya. Since then he has been studying photocatalysis and relating topics for more than 25 years and published more than 170 original papers and two single-author books. After getting Ph. D. degree in Kyoto University in 1985, he became an assistance professor in the university. In 1996, he was promoted to an associate professor in Division of Chemistry, Graduate School of Science, Hokkaido University. After collaboration work with Professor Kohei Uosaki for about 2 and half years including a period of studying in Kansas University for approximately 3 months, he got a full professor position in Catalysis Research Center, Hokkaido University in 1998. For education of graduate students, Professor Ohtani's laboratory belongs to Graduate School of Environmental Science since 1999. He was awarded 2005 Scientific Achievement Award of The Electrochemical Society of Japan and The Japanese Photochemistry Association Award, 2006 for his works on photocatalysis.

Host: Professor Tatsumi ISHIHARA

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CONTACT: Research Support and International Affairs division
International Institute for Carbon-Neutral Energy Research
TEL:092-802-6934