

KOBAYASHI Hirokazu (小林 広和)



Ph.D. in Engineering

Assistant Professor, Institute for Catalysis, Hokkaido University

Address: Kita 21 Nishi 10, Kita-ku, Sapporo, Hokkaido 001-0021, Japan

Education: 2004 BS (Tokyo Institute of Technology, Prof. K. Otsuka and Prof. I. Yamanaka)
2006 MS (Tokyo Institute of Technology, Prof. I. Yamanaka)
2009 PhD (Tokyo Institute of Technology, Prof. I. Yamanaka)

Professional Carrier

2006-2009 JSPS Research Fellow DC1, Tokyo Institute of Technology
2009-2015 Assistant Professor, Catalysis Research Center, Hokkaido University
2015- Current position

Scientific Activities

2009-2011 Local Arrangement, TOCAT6/APCAT5
2012-2014 Treasurer & Secretary, Hokkaido Branch, Catalysis Society of Japan
2013- Local Arrangement, ZMPC2015
2014 Secretary & Treasurer, TOCAT7 Pre-symposium in Shiretoko
2015-2016 Organizing Committee, 16th International Congress on Catalysis, Pre-symposium in Sapporo
2015-2017 Editorial Committee, Catalysis Society of Japan
2019-2020 Treasurer, Hokkaido Branch, Chemical Society of Japan

Awards and Honors

2007 Poster Presentation Award, GSC-AON2007
2013 Young Scientist Oral Presentation Award (Meeting B), Catalysis Society of Japan
2014 Hokkaido University President's Award for Outstanding Research, Encouraging Award
2015 Hokkaido University President's Award for Outstanding Research, Encouraging Award
2016 Chemical Society of Japan Award for Young Chemists
2020 Catalysis Society of Japan Award for Young Researchers

Research Interests

1. Catalytic Biomass Conversion
2. Selective Oxidation of Alkane

Representative Publications

1. "Development of Solid Catalyst-Solid Substrate Reactions for Efficient Utilization of Biomass", *Bull. Chem. Soc. Jpn.* **91**, 29 (2018). (Award Accounts)
2. "Trace mono-atomically dispersed rhodium on zeolite-supported cobalt catalyst for the efficient methane oxidation", *Commun. Chem.* **1**, 41 (2018).
3. "Catalytic Depolymerization of Chitin with Retention of N-Acetyl Group", *ChemSusChem* **8**, 3760 (2015).
4. "High-Yielding One-Pot Synthesis of Glucose from Cellulose Using Simple Activated Carbons and Trace Hydrochloric Acid", *ACS Catal.* **3**, 581 (2013).
5. "Oxidation of adamantane with O₂ catalysed by VO(acac)₂ and reactivity of active species in acetic acid", *J. Mol. Catal. A* **294**, 37 (2008).