

# The 99<sup>th</sup> GREEN Seminar



Design and development of high-performance catalysts based on nanostructure control of complex oxides

*Chair: Dr. Ken Sakaushi (GREEN)*

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We develop efficient heterogeneous catalytic systems based on the unique redox and acid-base properties of complex oxides due to their diverse compositions and crystal structures. In this presentation, we will show catalyst design focusing on the crystal structures of various complex oxides such as perovskites, manganese oxides, and metal phosphates. In addition, our synthesis methods of complex oxide nanoparticles and their catalytic application to several reactions such as difficult selective oxidation using only O<sub>2</sub>, biomonomer synthesis, one-pot synthesis, direct CH<sub>4</sub> conversion, and water electrolysis will be introduced.

**Venue:** Auditorium, 1F, WPI-MANA Bldg., Namiki-site

**Date:** Thursday, February 29<sup>th</sup>, 2024

**Time:** 13:30-14:30

**Language:** English

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