

## ICBiotech Seminar

### Research collaboration with NSTDA on Clean Fuel Technology and Advanced Chemistry

Date & Time; 11:00-11:45, 25 September

Venue; International Center for Biotechnology (ICBiotech), The University of Osaka  
<https://www.icb.osaka-u.ac.jp/home-en/>

## **Journey through Innovation: Advancements in Material Science for Sustainable Energy Solutions**

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This presentation offers an exploration of material science innovations driving sustainable energy solutions in fuel cells, microbial fuel cells, and the oil and gas industry. It tracks the evolution of fuel cell technologies, starting from proton exchange membrane fuel cells (PEMFCs), micro fuel cell (MFC) development and extending to the investigation of electroco-generation processes and novel material formulations. Additionally, it showcases collaborative endeavors targeting industrial challenges like chemical formulation and deformation. Through this concise narrative, the fusion of material science with sustainable energy objectives and industrial problem-solving is highlighted, underlining the pivotal role of interdisciplinary research in addressing pressing global challenges.

*Organized by;*

International Center for Biotechnology (ICBiotech),  
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Industrial Biotechnology Initiative Division,  
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