



# Osaka University - Advanced Seminar in Bioscience and Biotechnology

**19 December 2019**

Room K546 Faculty of Science, Mahidol University, Thailand

13:15-13:30 **Registration**

## Session I: Microbial and Enzyme Biotechnology

13:30-13:50 **Metabolic engineering of lactic acid bacteria for production of optically pure lactic acid**  
Asst. Prof. Kenji Okano (Synthetic Bioengineering Lab)

13:50-14:10 **Protein engineering and applications of enzymes from extremophiles**  
Assoc. Prof. Yuichi Koga (Industrial Biochemical and Cellular Engineering Lab)

14:10-14:30 **Antibiotic discovery by activation of cryptic secondary metabolism in actinomycetes**  
Assoc. Prof. Shigeru Kitani (Molecular Microbiology Lab)

14:30-14:50 **Adaptation mechanism to high-temperature stress in *Saccharomyces cerevisiae* SPY3**  
Assoc. Prof. Minetaka Sugiyama (Macromolecular Biotechnology Lab)

14:50-15:00 **Break**

## Session II: Plant and Animal Cell Biotechnology

15:00-15:20 **Elucidation of biosynthesis mechanism of plant-derived biopolymers and its utilization**  
Asst. Prof. Hiroyuki Kajjura (Applied Microbiology Lab)

15:20-15:40 **Application of genome editing technology to reduce toxic steroidal glycoalkaloids in potato**  
Asst. Prof. Shuhei Yasumoto (Cell Technology Lab)

15:40-16:00 **Design of stable cell production system for regenerative therapy**  
Asst. Prof. Ikki Horiguchi (BioProcess Systems Engineering Lab)

16:00-16:30 **Discussion for future collaboration**

**Pre-registration:**  
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