

Microbiology and Engineering – how does it fit together?



Dr. Susanne Lackner

Professor,
Technical University of Darmstadt, Germany

Thursday, June **27** 2019, 15:00 ~ 16:30

言語/英語
Language/English

どなたでもご聴講
いただけます
Everyone is welcome
to attend.

東京農工大学 小金井キャンパス 科学博物館 3階講堂
Lecture Hall, 3rd Fl., Nature and Science Museum, Koganei Campus, TUAT

Abstract

Microbes are omnipresent in natural and technical environments, and understanding their behavior in and impact on these environments allows us to effectively use their potentials for our benefits. Wastewater treatment is a classic example where engineers have adopted natural processes to clean up water. Biological processes play a key role in wastewater treatment for removing organic carbon, nitrogen and phosphorous. On the other side, microbes such as pathogens and antibiotic resistant bacteria should be contained and prevented from re-entering the environment esp. in high or harmful concentrations.

This presentation will address these topics by giving three examples where the abundance and activity of bacteria are key for reaching and keeping high qualities of our wastewater treatment plant effluents. The examples will touch on advanced nitrogen removal processes, enhanced biological removal of micropollutants and refractory COD, and abundance of pathogens and antibiotic resistance genes.

■共催 / Co-Organized by

グローバルイノベーション研究院 エネルギー分野 寺田研究チーム
Institute of Global Innovation "Energy" Terada Team

卓越大学院プログラム
Excellent Leader Development for Super Smart Society
by New Industry Creation and Diversity

■お問合せ先 / Contact

グローバルイノベーション研究院 工学研究院 寺田 昭彦
Institute of Global Innovation Research, Institute of Engineering,
Prof. Akihiko Terada
Email: akte (ここに@を入れてください) cc.tuat.ac.jp

