2021 Webinar Series on River Basin Environmental Issues

(Webinar 1)

Elimination of biological contaminants during excess sludge treatment

Abstract: Several bio-contaminants such as virus, human pathogenic bacteria (HPB) and resistance genes (RGs) have accompanied human beings for thousands of years in the earth. The outbreak of the bio-contaminants in the nature can threaten the human health seriously, for instance, the recent outbreak of COVID-19. The domestic wastewater treatment plants, as a city gut, receive high abundances of virus, HPB, and RGs in the environment and finally release to the excess sludge. The bio-contaminants in excess sludge are causing global concern, and thus there is significance and importance of developing effective and sustainable methods to mitigate the dissemination of bio-contaminants in the ecosystem. This seminar will provide an updated and comprehensive information on the fate of virus, HPB, and RGs in excess sludges and their treatment methods such as composting, vermicomposting and anaerobic digestion for eliminating the bio-contaminants.

ZOOM Meeting

Date: July 21 Time: 15:00 - 16:30 (Japan Time) Registration: <u>https://www.green.gifu-</u> u.ac.jp/BWEL/eng/webinar_series.html

About the speaker



Dr. Huang Kui is an associate professor and chairman of Environmental Ecological Engineering department in School of Environmental and Municipal Engineering of Lanzhou Jiaotong University, China. He received his BS and MS from Lanzhou Jiaotong University, and PhD from Gifu University, Japan. During the PhD period, he joined the BWEL Program in 2011 and, was awarded the outstanding graduate student in 2014. After that, he worked as a researcher in River Basin Research Center of Gifu University and joined Lanzhou Jiaotong University in 2015. His research interests include biological contaminants reduction, aerobic biodegradation process, water quality safety in river basin, organic solids recycling, with a focus on the biological and sustainable treated system of wastes by earthworms. He has published more than 30 papers in Journal of hazardous materials, Bioresource Technology, Science of the Total Environment, Chemosphere, etc., and has given many reports at conferences. His research was funded by the National Natural Science Foundation of China, the National Science Foundation of Gansu Province, the Foundation of Outstanding Doctors in Gansu Province, the Scientific Research Foundation for Returned Scholars of Gansu Province, A Hundred Youth Talents Training Program of Lanzhou Jiaotong University, and Lanzhou Railway Design Institute Co., Ltd. He has won the Young Teacher Achievement Award of Gansu Province, Zhan Tianyou Science and Technology Award of China Railway Construction Corporation, and First Prize of Teaching Competition and Outstanding Supervisor Award in Lanzhou Jiaotong University.

Organized by: Promotion Office of Gifu University Rearing Program for Basin Water Environment Leaders (BWEL); River Basin Research Center, Gifu University, Japan Contact: bwel@green.gifu-u.ac.jp