



***Strong impacts of emerging
organic contaminants (EOCs)
on aquatic microbiome***

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Prof. Dr. Anyi Hu

**Lecture hall of IMI
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Colloquium of the Institute for Medical Research and Occupational Medicine

Lecture title: Strong impacts of emerging organic contaminants (EOCs) on aquatic microbiome

Lecturer: Prof. Dr. Anyi Hu, Institute of Urban Environment, Chinese Academy of Sciences

Time and place: September 6, 2023 at 1 pm, Lecture hall of Institute for Medical Research and Occupational Health, Ksaverska Cesta 2, Zagreb, Croatia

Abstract

Emerging organic contaminants (EOCs) received more and more attention due to their sublethal (disrupting) effects on organisms in recent years. However, there is very limited information about the potential influence of EOCs on aquatic microbiome. This talk will discuss new data delineating the ecological disrupting effects of EOCs on the planktonic microbiome of subtropical rivers in Southeast China. Using LC-MS/MS, amplicon sequencing, and multivariate statistical analysis, we revealed that EOCs had strong impacts on the distribution, succession, and bio-interactions of the riverine microbiome. Some critical EOCs were identified based on extensive field surveys and laboratory microcosm experiments. Moreover, the combined effects of EOCs and microplastic on the commensal (gill and gut) microbiome of a model fish were also investigated.

Curriculum Vitae

Prof. Anyi Hu is currently a Professor at the Institute of Urban Environment, Chinese Academy of Sciences, and has nearly 20 years of research experience in aquatic microbial ecology. He received his Ph.D. degree from Xiamen University in 2010. He has been a visiting scholar at the University of Oklahoma in the USA and Taiwan University in Taipei, China. He has published over 100 papers in international journals including Environmental International, Journal of Hazardous Materials, and ISME Communications, etc. Prof. Hu's main research interests are urban water microbial biogeography, antimicrobial resistance, and the disrupting effects of emerging contaminants. He served as a peer reviewer for >35 SCI journals (e.g., Microbiome, mSystems, Water Research, and Environment International, etc.), and also served as a youth editor for the iMeta.

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