- ✤ What is the role of biofilms in the urban water cycle ?
- ✤ What is the impact of biofilms ?
- ✤ What can be done to improve detection & water treatment quality ?

Time	Agenda	Presented by
10.00 – 10.02 am	Opening & Housekeeping	SWA
10.02 – 10.10 am	Welcome address	SWA
10.10 – 10.20 am	Introduction to SCELSE and SNBC	<b>Prof Staffan Kjelleberg</b> Centre Director (SCELSE) & Director (SNBC)
10.20 – 10.35 am	Role of biofilms in the overall urban water cycle	Dr Law Yingyu Program Manager (SNBC)
10.35 – 10.45 am	Rapid and Gold-standard Pathogen Detection	<b>Dr Amit Kumar</b> Co-founder & CEO (Biopsin)
10.45 – 10.55 am	Biofilm sensors and real-time application & benefits for water treatment.	Mr Andy Wirjawan Director (United Water Technologies)
10.55 – 11.00 am	Q & A and Closing	SWA

SINGAPORE WATER ASSOCIATION





Complimentary Webinar

Biofilms in the Urban Water Cycle

> **20 August 2020** Thursday 10:00am – 11:00am

(Seats are limited, register early) Should you have any questions regarding this webinar, please contact SWA at T: 6515 0812 or enquiry@swa.org.sg

# Register Here



#### Prof Staffan Kjelleberg

Centre Director, Singapore Centre for Environmental Life Sciences Engineering (SCELSE) Director, Singapore National Biofilm Consortium (SNBC)

As SCELSE's centre director, Prof. Staffan Kjelleberg promotes interdisciplinary research that focuses on overall community structure, function and performance of microbial biofilms as well as mechanisms behind their communication and micro-ecological interactions. Commonalities in biofilm biology underpin this research. He brings together complementary top-down metaomics/systems biology and bottom-up biofilm mechanism approaches, with translational outcomes in biotechnology and environmental/public health domains. Prof. Kjelleberg also leads SNBC, a technology consortium, that aims to foster significant interactions and close collaborations among IHLs, research institutes, government agencies and industry, from startups to MNCs in Singapore, to enable technology translation and deliver economic impact.



### **Dr Law Yingyu**

Program Manager, Singapore National Biofilm Consortium (SNBC)

Ying joined the Singapore National Biofilm Consortium in September 2019. She started her Scientific career as a Research Fellow and later Senior Research Fellow at SCELSE since 2012. She has had experience in providing technical and regulatory solutions to water utilities and building collaborations both in Australia and in Singapore, during and after her PhD. She is also part of the International Water Association Nutrient Removal and Recovery Management Committee. She has worked with colleagues across different disciplines in SCELSE and have also provided consulting service to local startup in bioprocess and systems biological aspects of environmental biotechnologies and associated complex ecosystems. Ying holds a BSc Honours in Biotechnology from Murdoch University, and PhD in Chemical Engineering from The University of Queensland.



## **Dr Amit Kumar** Cofounder & CEO, Biopsin Pte Ltd

As a co-founder and director, Amit is responsible for leading business communication, strategy and innovation at BIOPSIN. Prior to this, he was working at Nanyang Technological University, Singapore on a PUB funded multidisciplinary project to understand and improve the safety and quality of surface water stored in underground rock caverns. As a Research Fellow at National University of Singapore, he led an A\*STAR funded project to mitigate food spoilage by improving microbiological quality of food. Amit holds a PhD in Chemical & Biomolecular Engineering from National University of Singapore and has over a decade of experience working with industries and Government agencies on their microbial safety and detection needs.



## Mr Andy Wirjawan Director, United Water Technologies Pte Ltd

Andy has more than 23-years of professional experience in water and wastewater treatment industry. He started his career with GE Water & Infrastructure Inc. in Australia and Singapore, and later on established United Water Technologies Pte Ltd – Singapore in 2005. He has completed various process design improvement projects, and has overseen construction of numerous industrial and municipal scale water and wastewater treatment plants in a number of APAC countries. He holds B.Eng. Chemical Engineering (Hons) from Curtin University, and MBA from University of Western Australia.