



**Inter-Graduate School Program for  
Sustainable Development and Survivable Societies**

**Interdisciplinary Seminar  
[#80-(1)]**

**Wastewater Treatment  
– The Future Instincts and Survivability**

**By: Associate Professor Dr Norhayati Abdullah**  
International Liaison Coordinator,  
Malaysia-Japan International Institute of Technology (MJIT),  
Department of Environmental Engineering & Green Technology,  
Universiti Teknologi Malaysia (UTM)



Visiting Researcher at Graduate School of Advanced  
Integrated Studies in Human Survivability (Shishukan),  
Kyoto University, 2019  
L'Oreal-UNESCO For Women in Science Fellowship Award 2018  
Fulbright US-ASEAN Visiting Scholar to University of Michigan, USA 2017

**Date: February 4, 2019 , 10:30-12:00**

**Venue: 201 Lecture Hall (2<sup>nd</sup> floor),  
Higashi-Ichijo-Kan, Kyoto University**

**< Summary >**

*Abstract:* In September 2015, the United Nations General Assembly adopted its 2030 Agenda for Sustainable Development that aims at achieving ambitious targets by 2030. In this Agenda, solving Water and Sanitation challenges is recognised as a top global priority alongside 16 other overarching Sustainable Development Goals (SDGs). The SDG 6 - Ensure access to water and sanitation for all - includes 8 water-related Targets within the Goal dedicated to water (SDG 6) and in addition there are several other water-related Targets in other Goals. The adoption of these Targets provides guidance to all governments to revise, if appropriate, their policies to address effectively the water and sanitation challenges. The success of the many water-related SDG targets requires action by water professionals, who are key players towards

implementation of national policies that should result from the ambitious 2030 Agenda. Water is invaluable to all economic sectors and an instrument to facilitating sustainable development. Malaysia has received worldwide recognition for its historic successes in integrated water-sewerage management, increasing priority for clean drinkable water and this is the vision of the Sustainable Development Goals (SDGs). With this newly integrated global vision, most important global water and sewerage challenges associated with increasing water scarcity, pollution of wastewater flows, and disaster related risks are being resolved. The Malaysian sewerage sector is driven through compliance addressed by several local organisations responsible for various segments of wastewater treatment outputs. Service providers are challenged and burdened to meet compliance and as such wastewater treatment is costly. The challenge increases even further with the loss of opportunity to optimize and tweak processes to recover inherent resources in wastewater – namely water, energy, nutrient. On top of this are the pressure from rapid urbanization, a growing population, and rising demand for water and waste management services. As populations increase by leaps and bounds, it places more pressure on the environment, threatening sources of fresh water supplies. From early 1900s, there has been a steady evolution in the development of sewerage treatment plants to produce high quality effluent, which can be safely discharged to the environment or reused. In this regards, what would be the future instincts for betterment of water and sewerage management to successfully achieve the ambitious 2030 agenda?

**< Active type >**

Interdisciplinary Seminar with a Malaysian visiting scientist

**<Obligation of attendee >**

Making questions and discussions, if any, in the seminar.

GSS students should register their names at the seminar room (201 Lecture Hall in Higashi-Ichijo-Kan, Kyoto University) to confirm their attendance.