



Alia DAMAYANTI

Home Country
Indonesia

Degree
PhD in Environmental
Engineering

Expertise
Environmental
Engineering

Research Focus
Wastewater Treatment

Host University
Technological University
of Malaysia

Fellowship Awarded
2006

Alia Damayanti was born in Jombang and grew up in Surabaya, Indonesia. The youngest in her family, she has two brothers and one sister. She lists her hobbies as reading and listening to music. Alia and her husband have one daughter.

Ever since Alia was young her parents supported her studies—her mother taught her to read when she was only five years old, and maintained a rigorous discipline of study and a hard work ethic. After graduating in 2000 with an undergraduate degree in environmental engineering from the Faculty of Civil Engineering and Planning at the Institute Technology of Sepuluh Nopember(ITS) in Surabaya, Alia obtained her master's degree in environmental engineering at ITS in 2003, and in 2007 she began pursuing full-time doctoral research at the Technological University of Malaysia (ITM).

At ITM, her research focus is on wastewater treatment. In the past she has studied the feasibility of using water lettuce for the management of tofu wastewater, the environmental impacts of closing a landfill site, and the influence on tiger shrimp and milk fish of using mangrove density to reduce heavy metals in wastewater. She is currently interested in developing a Hybrid Membrane Bioreactor (MBR) for biotransformation of palm oil mill effluent (POME).

Palm oil mill effluent contributes significantly to the generation of wastewater in Indonesia and Malaysia. Membrane bioreactor technology is considered essential for treating palm oil mill effluent, and systems based on membrane technology show high potential for eliminating many environmental problems. In addition, membrane bioreactor technology may prove to be useful as an alternative treatment system for water recycling.

When she completes her studies, Alia plans to go back home to teach at the Institute Technology of Sepuluh Nopember in Surabaya, Indonesia.