

Failure of MSW Management in Thailand and a Possible Solution

by Prof. Dr. Kua-anan **Techato**; on April 2, 2019 at 12:30 p.m.

The next 'Science Talk', which is organized by the Institute of Systems Sciences, Innovation and Sustainability Research, will be presented by Prof. Dr. Kua-anan Techato (Prince of Songkhla University, Thailand). His topic" is "Failure of Municipal Solid Waste (MSW) Management in Thailand and a Possible Solution and his talk will take place on Tuesday, 2 April 2019 at 12.30 pm in the **meeting room of SIS (Merangasse 18, 1st floor)**.

Duration: **Approximately one hour** including discussion.

The participation is free of charge and there is no need to register.

SIS offers three to five guest talks each semester, covering its research areas systems sciences, innovation and sustainability research.

Bio-sketch

Prof. Techato is Dean of the Faculty of Environmental Management of the Prince of Songkhla University in the South of Thailand. With integration of engineering, management, and science, the Faculty is a key stakeholder for solving actual research problems in the context of environmental management. The Faculty's experience from working for both as in-house consultant for the Thai government (The Department of Alternative Energy Development and Efficiency) and private sector/international organizations (such as The Thai Royal Danish Embassy) provides a good network used for academic service and research.

Prof. Techato's main research interests are energy efficiency, renewable energy, environmental management, and "green" roof/wall - with a particular focus on Thailand. He holds a B.Eng. from Prince of Songkhla University, an M.Ind.Eng. from University of Warwick, and a Ph.D. degree from Chulalongkorn University, Bangkok.

Abstract

Songkhla as the southern center of Thailand has an area of 7,360 km² and 1.34 million population. The 141 municipalities produce 1,600 ton of waste per day. Koh Yor is one of the municipalities with an area of 15 km² and a population of 4,459. The landscape is mainly a hill area with flat land around the island. Koh Yor produces 6 tons of waste per day (60% organic waste, 30% single use plastic, and 10% others). Most of the island's inhabitants work in agriculture, fishery, restaurant, and homestay. The elements of a solution approach for a future Municipal Solid Waste (MSW) management of Koh Yor are as follows:

- Smart MSW bin
- Smart recyclable station
- Smart system of composting
- Center of natural packaging
- Center of real time reporting on the situation of waste on the island