

SEMINAR THEME: SUSTAINABLE PACKAGING

Date: 22nd April 2009 Wednesday

Time: 1:30 - 5:30pm

Venue: Singapore Polytechnic MLT 1

500 Dover Road

Singapore 139651

Please see Grid A3 on [Campus map](#)

Co-organiser

SINGAPORE
POLYTECHNIC



Polymer Engineering & Technology Section
School of Chemical & Life Sciences

Introduction

The world's production and usage of non-degradable and non-recyclable packaging have been enormously greater than before, exacerbating the problem of waste disposal. The use of renewable materials will support the development of sustainable packaging through improving its environmental footprint and provide a source of future packaging materials. This will support a sustainable packaging system depicting the cradle-to-grave flow of packaging materials within an economically robust system. Invited speakers from Tetra Pak Jurong Pte Ltd (Winner of 2007 MAXA) and Sustainability and Technology Assessment Section (STA SIMTech) will present and highlight their work in sustainable packaging. This seminar also aims to provide a platform for interactive forum/discussion for potential collaborative research between SP, STA SIMTech and industry. The aim is to work towards a shared vision, tapping on each organisation's capabilities, research facilities and promote innovative and functional packaging through materials development, processing & application and product life cycle management.

Who Should Attend

This seminar is open to all Singapore Polytechnic staff, industry players and researchers working in related areas as well as those who want to know more about sustainable packaging and manufacturing.

Programme:

1:30 - 2:00 pm	Registration
2:00 - 2:05 pm	Welcome Address (Mr Joel Lee Wah Ling, Section Head, Polymer Engineering & Technology)
2:05 - 2:35 pm	Sustainable Model for Milk & Juice Carton – Keynote presentation (Mr Ong Lye Huat, Safety, Health, Environment & Hygiene Manager for Tetra Pak Jurong Pte Ltd)
2:35 - 2:55 pm	Packaging in a Close-loop Food Manufacturing System (Dr Song Bin, Section Head, STA SIMTech)
2:55 - 3:30 pm	Tea-break + Networking
3:30 - 3:50 pm	Biopolymeric Materials for Sustainable Packaging (Dr Lee Mun Wai, STA SIMTech)
3:50 – 4:10 pm	Carbon Footprint of Food Packaging (Dr Fatida Rugrungruang, STA SIMTech)
4:10 – 4:20 pm	Q & A Session
4:20 pm	End of Seminar
4:20 – 5:30 pm	Polymer Workshop & Packaging Lab Tour (OPTIONAL)

Speakers' Credentials

Mr Ong Lye Huat is the Safety, Health, Environment & Hygiene Manager for Tetra Pak Jurong Pte Ltd. His main responsibility includes maintaining the overall health and safety of the staff working in the company as well as ensuring that all processes are carried out with due regards to environmental impact and protection. He also advises the management on safety, health and environment legal requirement. Mr Ong has a Master Degree in Engineering Science. He is a Registered Safety Officer with the Ministry of Manpower as well as a Fire Safety Manager for the Singapore Civil Defence Force. He is also an ordinary Member of the Singapore Institute of Safety Officers (SISO) since 1995. In 2007, he was a recipient of the ECO Friend Award under the private sector category organised by the National Environment Agency (NEA). Mr Ong can be contacted at lyehuat.ong@tetrapak.com

Dr Song Bin is the Head of Sustainability and Technology Assessment (STA) section in SIMTech. His current focus is on life cycle modeling, analysis, and optimization for minimization of emissions and wastes in manufacturing. The coverage includes life cycle cost and environmental impacts by alternative materials, eco-performance of manufacturing processes, and product end-of-life management. He has led and participated in many research and industrial funded projects in the areas of sustainability assessment of new technologies and products, eco-efficiency improvement, life cycle cost modeling, and product life cycle management. Dr Song can be contacted at bsong@SIMTech.a-star.edu.sg

Dr Lee Mun Wai received her BAsC from School of Materials Engineering, Nanyang Technological University (NTU). She graduated with a PhD specialising in liquid crystalline polymer blends and hybrid nanocomposites in 2002. Thereafter, she continued to focus research on Polymer Science and Technology as a NTU post-doctoral fellow. Currently, she is a Senior Research Engineer with SIMTech. Her research expertise pertains to the areas on multiphase polymer systems, polymer behavioural studies, development of degradable polymeric materials for engineering, biomedical and environmental applications. Dr Lee can be contacted at mwlee@SIMTech.a-star.edu.sg

Dr Fatida Rugrungruang has joined SIMTech as a Research Engineer. She has specialised in products and components reuse, reverse logistics and technology forecasting. Her current research focuses on carbon footprint assessment and the development of decision-making tools for sustainable manufacturing. She holds a PhD and a Bachelor degree with First-Class Honours in Manufacturing Engineering from University of New South Wales, Australia. Dr Rugrungruang can be contacted at fatidar@SIMTech.a-star.edu.sg

Registration

Pre-registration for this free seminar is necessary. Seats are available on a first-come-first-served basis. To register, please email your particulars (Name, Organisation and Email Address) to Dr Ng Ting Ting at tng@sp.edu.sg. For any enquiries, please contact Dr Ng Ting Ting at 68708067 or tng@sp.edu.sg

Closing date of registration: 17th April 2009 Friday

Acknowledgements:

Catering sponsored
by PRIS



Packet drinks sponsored
by Tetra Pak



Event supported by FIRC



Note: A Post Consumer Cartons (PCC) collection point will be set up at MLT 1 to allow disposal of empty drink cartons.