



## SEMINAR

### Balance Wave Technology

Date: Thursday, 9 July 2009  
Time: 10.30 am – 12.00 noon  
Venue: Seminar Room II, ISEAS

#### About the Speaker

##### **Mr Kwon Young-Dae**

President  
KSE Co., Ltd  
Korea



Young-Dae, Kwon was born in Daegu-City, Korea, on Aug 15,1958.

He graduated from Youngnam University. and completed his PhD in application electronics from the Graduate School of Youngnam University. He was a professor of Daegu Hanny University that specializes Oriental Medical in 2004.

Mr Kwon is a member of a Technical Evaluation Committee of Techno Park in Chungbuk province since 2008. He is a government appointed Materials Technical Consultant since 1994. He is Founder and President of KSE Co., Ltd, the manufacturer of e-Clean Energy Saver with operations in Korea and US.

He is also the Inventor and Patent holder of e-Clean Energy Saver and Power Optimizer. His special field of interest is in artificial control of electrons using synthetic infra red rays to conserve energy and improve health.



## **Mr Shih Teck Kee**

Director  
Nishat Pte Ltd  
Singapore



Mr Shih Teck Kee is Director of NISHAT Pte Ltd, a leading Clean Tech company in Singapore. Mr. Shih founded the company to market e-Clean Energy Saver™ a proven and patented energy saving technology from Korean.

Prior to NISHAT Pte Ltd, Mr Shih was in the rechargeable battery business with Varta Batteries Pte Ltd. He co-founded companies marketing environmental friendly products in Singapore and Malaysia.

He holds a Master Craftsman Title in Industrial Engineering from Hamburg, Germany.

## About the Seminar

The Balanced Wave Technology is used to mitigate excessive vibration of free electrons by relieving the friction of electrons. It was announced at the 2005 International Conference on Electrical Engineering, synthetic infrared rays could be used to mitigate excessive vibration of electrons by relieving the friction of electrons. This is known as the Balanced Wave technology. It works on the principle of “photoelectric effects” by introducing a filtered synthetic Infrared wave (a specific band of wavelength 815nm-1448nm, intensity at  $3.48 \times 10^2 \text{w/m}^2 \mu\text{m}$ ) to a semiconductor (PLZT, optic ceramic). Under this developed photosynthetic irradiation facility, a newly generated “mixed infrared wave energy” would be released to mitigate the excessive electron movements upon continuous detection of the conditions of the power lines.

The benefits to the energy industry are as follows. E-clean helps to improve the power factor; to reduce the current, the harmonics, the reactive power, the apparent power;



to stabilize the electric system; to maximize the electric energy efficiency of the power supply network and hence reduces the overall electric power consumption. Depending on the environment, age and conditions of original power circuit, the positioning and duration of the installed e-Clean, and the metering measurement sensitivity, significant power savings of 7% - 15% have been reported. The parallel connection of "e-Clean" allows easy installation and "on-off" checking of impacts to the power supply to the load. This invention can be used to avoid losses in power transmissions to electric motors, electric heaters, electric lighting, via the power lines, which are caused by irregular movements of electrons generating heat and vibration.

Mr K T Shih will discuss the application of e-clean technology in the Singapore context and explain how e-clean works. He started marketing e-Clean in April 2009, and since then, his company has already carried out demonstrations with several local companies. The first customer was Storbest Cold Logistics Pte Ltd, which bought 3 units in May 2009. The target market are potential clients who need to keep their cold storage facilities( food storage warehouse) running permanently, as well as food industries and Hotel Industries. His potential clients include the following, with energy savings shown in brackets: Indoguna (17%); Ritz Carlton hotel (26%); SIA Airline House (13%); Alexandra Hospital (16%); Keppel Shipyard (9.4%); and Storbest (20%). The several reasons to use e-clean technology are: lower energy bills; return on investment about 20 months; maintenance free; reduces carbon profile, and it reduces harmful electro-magnetic waves.

*You are cordially invited to this seminar.*