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# NEWSLETTER

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**THE JAPAN SOCIETY OF WASTE MANAGEMENT EXPERTS**

## -New Year Greetings for 2008- JSWME President, Prof. Nobuo Takeda

Allow me to wish all the readers of the JSWME Newsletter a happy new year.

Last year, we hosted our annual conference of JSWME in Tsukuba City. This large event was attended by over 1000 participants, and enthusiastic discussions could be heard throughout the conference center.



At this year's annual conference, the issue of global warming was taken up as the special address. I believe this issue is symbolic of JSWME's present position.

The bestowal of the 2007 Nobel Peace Prize to the IPCC and Mr. Al Gore sent a strong message from Europe and opened the gates pulling America and China into the discussion on the prevention of global warming. It seems that at this point, and for several years in the future, discussion on "environment" will be pivotal on "the issue of global warming", and continue to affect various aspects of global industry, trade, diplomacy and so forth.

If we think about "global warming prevention" in earnest, we should change how society plays its role in development and growth, and place importance on a sustainable society, and retrieval of our earth. However, can we say this is actually what has been taking place?

In 2004, Ms. Wangari Maathai, the first Nobel Peace prizewinner in the environmental field, was deeply impressed by the Japanese word "Mottainai", and the word has since gained notoriety throughout the world. The following definitions are given for "Mottainai" in the authoritative Japanese dictionary, the *Kōjien*:

1. The violation of a sacred object (e.g. in Shinto and Buddhism)
2. Overwhelming excessiveness
3. Disappointment over squandering something, not making use of its value

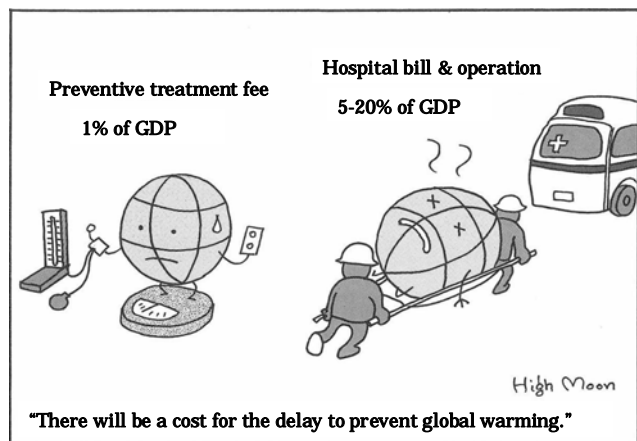
However, these days I fear the meaning of "mottainai" has been left at the third definition, whereas, in my opinion, the first and second definitions, rather, are the ones that make a statement toward the shared human

thesis of reverence towards nature. The idea of "value" is a relevant term, indicating the reality where "waste" in one country is in fact a "resource" elsewhere.

In the past, Japanese have simultaneously valued, or placed priority on, material and conceptual matters; however, in recent years we have shown a tendency to value that which is practical and immediate.

This gathering of experts of the JSWME, who have directed their interest toward the underlying current of material and information flow, are in a position to promptly identify the problems in our society and sound the alarm. Or, might I say, it is time we did so.

(Nobuo Takeda)



Comments by High Moon:

They say global warming will be serious when the margin of the average temperature has risen above 2 .

## Revision to Food Waste Recycling Law

In Japan, the "Food Waste Recycling Law" was enacted in 2000 and put into effect in 2001 to encourage the food industry, businesses involved in the commercial production of food, to recycle food waste.

Based on a provision set to review the law after five years, three major amendments were announced on 13 June 2007 for the revised Food Waste Recycling Law.

The first amendment is the requirement for periodic government reporting by producers of large quantities of food waste concerning the amount generated and their

recycling efforts as a measure to advocate the control of food industry waste output. Based on the results of these reports, it is possible to provide the food industry with the necessary advice and guidance, as well as apply this system, as a nation, to encourage companies to voluntarily implement waste control measures and recycling through providing information other than trade secrets that will enable companies to review their own waste control and recycling efforts in comparison with others in the food industry and deepen the understanding of what efforts by the food industry are preferred by consumers. Also, since the food industry includes many small stores that develop into large franchise businesses, branches under the main office fulfil certain requirements as part of leadership and guidance pertaining to the disposal of food waste so that periodic reporting now seeks to get waste quantity information for the entire business as a whole.

The second amendment is for cases where those in the food industry request that the food waste generated at their establishments be reused by producers of animal feed and fertilizer, to then use that animal feed and fertilizer for the production of livestock to once again purchase above the fixed rate, and to construct a self-fulfilling recycling system that is recognized by the government which would enable food waste to be collected in one batch over a large area that straddles multiple municipalities, thus establishing a special case as per the requirements of the Waste Management and Public Cleansing Law where permission for waste collection would be unnecessary for general waste products. In this way, expectations are to advocate a system that covers an even larger area to efficiently recycle food waste.

The third amendment is the conversion of food waste as biomass fuel that will replace fossil fuels, contributing to coping measures for global warming and increasing the use of a new recycling technique known as "heat recovery". However, heat recovery using food wastes is not an easy task. In cases where food waste, (i.e. material recycling), proves difficult, the recognized method of heat recovery is limited to high efficiency usage such as producing energy in the form of electricity and such from the heat generated in the incineration of food waste.

These amendments and the enforcement ordinance and regulations establishing the particulars of their application were enacted as of 1 December 2007.

(Tetsuya Nakano)

### **The 3<sup>rd</sup> Expert Meeting on SWM in Asia and Pacific Islands (SWAPI) held in Okayama city**

The 3<sup>rd</sup> Expert Meeting on Solid Waste Management in Asia and Pacific Islands (hosted by an Executive Committee, including JSWME) was held with the aim to form a network of waste management experts in the

Asia-Pacific region at the Okayama International Center on November 7<sup>th</sup> to the 9<sup>th</sup>. Experts from 15 countries and regions gathered at the conference and an open seminar held at that time was attended by 230 guests.



**The 3<sup>rd</sup> Expert Meeting (SWAPI)**

The expert meeting featured continued discussion on the objectives, structure and activities of SWAPI (Society of Solid Waste Management Experts in Asia & Pacific Islands) that were agreed upon at the previous conference. An agreement was reached as a result of these discussions on a pragmatic operation policy to broaden the establishment of SWAPI without setting strict regulations such as collecting membership fees. At this meeting, an advisory committee composed of solid waste related organizations (chaired by the president of JSWME) was established as a domestic support structure of SWAPI (the international committee will be responsible for secretariat activities). The group chose as its future activities the sharing of examples pertaining to methods to grasp data on solid waste, information on hazardous wastes, and use of solid waste biomass. These discussions and agreements are included in the Chairperson's summary statement.



**Participants of the 3<sup>rd</sup> SWAPI, Okayama**

The open seminar featured six sessions and 28 presentations covering such themes as the conditions and issues of solid waste disposal in each country, industrial and hazardous waste issues, 3R initiatives, methods to grasp data on solid waste, and results of 3R initiative special research. There were also presentations on local

3R-related technology co-hosted by the Business Exhibition of Okayama prefecture. On the last day, there was a technical tour that included a trip to Mizushima Eco-works. The papers presented at the conference will be published in a special issue of the English journal of JSWME.

Considerations are currently underway to hold the next expert meeting after the Toyako Summit in July 2008, where environmental issues will be a central theme. The Korea Society of Waste Management has also expressed their intention to hold the meeting in Seoul.

(Haruo Matsumura & Hideo Azuma)

### The 18<sup>th</sup> Annual Conference of JSWME

The 18<sup>th</sup> Symposium of the Japan Society of Waste Management Experts was held at the Tsukuba International Center on November 19-21, 2007. The central theme of the first day, November 19<sup>th</sup>, was Hazardous Waste Material Flow and Risk Management. The coordinator of the symposium, Ms. Ryoko Sugiyama of the international committee, introduced the four panellists, Dr. Shin'ichi Sakai of Kyoto University, Dr. Atsushi Terazono of the National Institute for Environmental Studies, both from Japan, and Dr. Sung-Goo Kang from the Korean Ministry of Environment, and Dr. Bong-Jin Jung of the University of Suwon, from Korea.



The Panellists at the 18<sup>th</sup> JSWME Annual Conference

Dr. Sakai gave a presentation on chemical substance control, titled "Persistent Chemicals and Waste Management", which covered international trends of persistent chemical management, the importance of the process in recycling and waste management, and lifecycle issues. The theme of Dr. Sung-Goo Kang's presentation, "Hazardous Waste and POPs Management in Korea: Its Status and Perspectives", discussed hazardous waste classification, asbestos control, POPs management and

the manifest system of industrial waste in Korea. Dr. Atsushi Terazono presented on the topics of the domestic material flow of E-waste in Japan, and the flow of trade of used televisions between Japan, China and Hong Kong in his presentation titled "Material Flow Management of Waste Electrical and Electronic Equipment in Asia". Dr. Bong-Jin Jung gave a presentation on the flow of international environmental regulation of electrical and electronic products, the status of regulation development in the EU, China, Japan and California, USA, as well as regulations in Korea titled, "International Environmental Regulations in Electrical and Electronic Products". There was also an active question-and-answer session with members of the audience of about 100 participants.

The international poster session included 43 presentations in total, (26 from Korea and 17 from Japan).

(Akio Suzuki)

### Journal of the Japan Society of Waste Management Experts, Vol. 18, No.5 (September 2007)

Recent issues of the Journal of JSWME contain the following articles. The articles are written in Japanese with the abstract in English.

#### Paper

#### *Simulation of Oxygen Concentration Profiles in Piled Compost and its Application*

Hidehiko Kaneko, Suguru Mochizuki, Keiko Katayama-Hirayama, and Kimiaki Hirayama

#### *Estimation of Export Volume for End-of-Life Vehicles from Japan*

Masaaki Fuse, and Shigeru Kashima

#### *The Study of Shifting of Valuable Metals to Riddling Ash in Municipal Solid Waste Incineration Process*

Hiroshi Tamamoto, Takashi Yokoyama, Kazuyuki Oshita Masaki Takaoka and Nobuo Takeda

#### *Evaluation of Landfill Sites for Municipal Solid Waste by Leachate Quality =Classification and the Usability of EC Measurement=*

Masanao Nagamori, Yusaki Ono, Kiyoshi Kawamura, Masato Yamada and Yoshiro Ono

#### *Potential for and Safety Management of Unintentional Hydrogen Production from Waste Biomass*

Yohei Akutsu and Yu-You-Li

#### *Effect of Adding pH Stabilizer to Wood Matrix in a Garbage Biodegradation System*

Hisayoshi Kofujita, Yasushi Sugawara and Takeki Maeda

#### Note

#### *Moisture Content of Stem and Woody Biomass Evaluation in Thinned of Sugi Seedling Plantation in a Stand with Varying Slopes*

Kazuya Iizuka, Futoshi Ishiguri, Shinso Yokota and Nobuo Yoshizawa

Preface

***Future Potential of the Waste Management Research Society***

Shin-ichi Sakai

Special Issues: Toward Secure and Safe Waste Treatment Facilities

***Accidents and other Safety Issues relater to Waste Treatment***

Masahide Wakakura

***Safety Systems and Effective Counter-measures at Disposal Facilities***

Katsuya Nagata and Takuya Kirikawa

***Effect of Application and Notable Points of Risk Assessment in Waste Management***

Yoshinori Takeshita, Hirotochi Doi and Shigenori Chichibu

***Safety Measures at a Pulverization Waste Processing Center***

Kikuo Arai, Satoshi Miki and Hiroyuki Nemoto

***Safety Measures in MSW Management using the PFI Method***

Shuji Fujiwara, Mitsuhiro Okada and Hideaki Fujiyoshi

Review

***Material Problems in Waste Treatment Facilities***

Takeo Urabe

Report

***Report on the Current Situation of waste Disposal in Teshima***

Kagawa Prefectural Management Committee for disposal of Waste in Teshima

SPECIAL FEATURE: 3R Initiatives and Circular Economy

ORIGINAL ARTICLES

***3R strategies for the establishment of an international sound material-cycle society***

H. Yoshida, K. Shimamura, H. Aizawa

***Material flow indicators to measure progress toward a sound material-cycle society***

Y. Moriguchi

***The circular economy in China***

R. Yong

***European Union waste management strategy and the importance of biogenic waste***

J. Vehlow, B. Bergfeldt, R. Visser, C. Wilen

***International aspects of recycling of electrical and electronic equipment : material circulation in the East Asian region***

E. Hosoda

***End-of-life vehicle recycling and automobile shredder residue management in Japan***

S. Sakai, Y. Noma, A. Kida

***Status of recycling end-of-life vehicles and efforts to reduce automobile shredder residues in Korea***

H.-T. Joung, S.-J. Cho, Y.-C. Seo, W.-H. Kim

ORIGINAL ARTICLES

***Recovery of coagulant from waste supply plant sludge and its effect on clarification***

S. Ishikawa, N. Ueda, Y. Okumura, Y. Iida, K. Baba

***Noncatalytic liquefaction of tar with low-temperature hydrothermal treatment***

Wahyudiono, M. Sasaki, M. Goto

***Production and characterization of KOH-activated carbon derived from polychlorinated biphenyl residue generated by the sodium dispersion process***

H. Huang, N. Kobayashi, M. Sakata,

Y. Suzuki, F. Watanabe, M. Hasatani, K. Matsuyama S. Yoshida, Y. Mitsuahara

***Photodegradation of tetraphenyltin contained in polychlorinated biphenyl-based transformer oil simulants in alkaline 2-propanol solution***

T. Yamamoto, A. Ohara, Y. Noma, K. Nishizawa, A. Yasuhara, S. Sakai

Current Members of JSWME as of November 30, 2007  
 (The figures in parenthesis indicate the difference from June 30, 2007)

Regular Members	3,115	(40)
Students	337	(12)
Non-Japanese Member	26	(-4)
Public Institutions	105	(-)
Supporting Members	151	(2)
Individuals of NPOs	6	(1)
Total	3,740	(51)

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 The Japan Society of Waste Management Experts  
 Edited by Prof. Yasushi Matsufuji, Chairman,  
 International Relations Committee  
 Buzen-ya Bldg. Shiba 5-1-9, Minato-Ku,  
 Tokyo 108-0014, Japan  
 Phone: (+81) 3-3769-5099, Fax: (+81) 3-3769-1492  
<http://www.jswme.gr.jp/>  
 e-mail: [international@jswme.gr.jp](mailto:international@jswme.gr.jp)

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