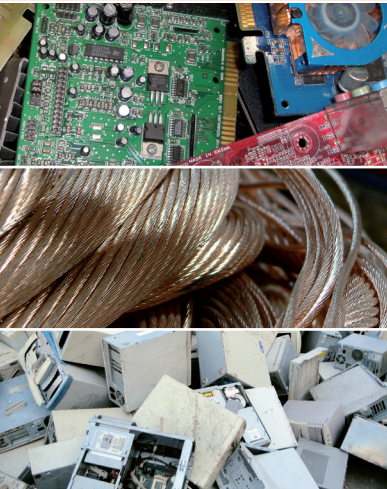


WRF 2015

ELECTRONICS RECYCLING ASIA

November 10 – 13, 2015, Singapore

organized by World Recycling Forum



Conference
E-scrap
Circular Economy
Networking
Workshops
Plant Tours
Exhibition

Supported by:

National Environment Agency (NEA), Singapore

China Resource Recycling Association

Institute for Environmental Science and Technology (INEST), Vietnam

Institute of Scrap Recycling Industries, Inc. (ISRI), USA

Japan Electronics and Information Technology Industries Association (JEITA)

Korea Institute of Geoscience & Mineral Resources (KIGAM)

Waste Management and Recycling Association of Singapore (WMRAS)



Metal Depot



FOREWORD



PROFESSOR JINHUI LI

Chairman of the
Steering Committee
Electronics Recycling Asia


Welcome to Singapore!

On behalf of the Electronics Recycling Asia Steering Committee, I welcome you to the Electronics Recycling Asia 2015, organized by the World Recycling Forum (WRF) in Singapore. With your honorable participation, the Electronics Recycling Asia 2015 is sure to be another successful event.

Singapore is one of the world's major commercial hubs, with the fourth-biggest financial centre and one of the five busiest ports. Along with a free trade economy and a highly efficient workforce, Singapore commands an enormous presence in the world today. Known as "the garden city", Singapore is a very popular resort, with a large number of world-famous scenic spots and historical sites. Moreover, Singapore always keeps green development in mind,

making the fast-running city an eco-harmonious paradise. In particular, Singapore operates E-waste recycling facilities with a high level of technology and management, which are fully in keeping with the subject of the forum.

Electronics Recycling Asia 2015 engages with government officers, experts, scholars and entrepreneurs from all over the world to present the latest information on recycling and its related technologies. At this year's forum, the recovery and recycling of batteries from E-waste and hazardous waste, scrap metal trading, and a range of other technologies will be discussed. As usual, the organizer of the World Recycling Forum is offering various plant tours and giving you the chance to visit electronics recycling companies. The conference is also a platform to exchange infor-



mation, meet new business partners and get easy access to new potential clients.

I hope you will be pleased with the forthcoming Electronics Recycling Asia 2015. I wish all participants an interesting and pleasant stay and look forward to meeting you in beautiful Singapore!



WHO SHOULD ATTEND?



- Original electronic equipment manufacturers (OEMs)
- Electronic components suppliers
- Electronic equipment importers and dealers
- Retailers
- Ferrous & non ferrous metal traders
- Collection and transportation companies
- Recycling and dismantling companies
- Shredding companies
- Plastics industry
- Non ferrous metal industry
- Ferrous and stainless steel industry
- Environmental authorities
- Universities and research institutes
- Laboratories for material science
- Consultants



KEYNOTE SPEAKERS

DAVID SCUDERI

Samsung Electronics Europe
Head of Environment
United Kingdom

“Linear electronics recycling in the framework of a Circular Economy”



PROF. DUAN WENG

Chairman of WRF
Tsinghua University
Institute for Energy & Environment Materials
Director
China

“The current situation of Circular Economy in China”



INTERNATIONAL STEERING COMMITTEE

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Center for Asia and the Pacific
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China

CO-CHAIRMAN



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National Metallurgical Laboratory
Assistant Director / Senior Scientist
India



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Resource Regenerating Co., Ltd.
General Manager
China



FONS KRIST
Aurubis AG
Business Development South-East
Asia, Recycling & Precious Metals
Singapore



DR JAE-CHUN LEE
Korea Institute of Geoscience
and Mineral Resources (KIGAM)
Principal Researcher
Korea



PROF. HSIAO-KANG MA
National Taiwan University
Department of Mechanical
Engineering
Taiwan



CHEE HONG MOK
Fuji Xerox Singapore
Business Development Manager/
Sustainability Ambassador
Singapore



VENKATESHA MURTHY
Vans Chemistry Pte. Ltd.
Managing Director
Singapore



SCOTT NEWELL
The Shredder Company, LLC
Chairman and CEO
USA



KAZUMI NOZAWA
Perry Johnson Registrars, Inc.
Director of Asia Pacific Recycling
Initiatives

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Institute of Scrap Recycling
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USA



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BRIAN TAYLOR
Recycling Today Media Group
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Editorial Director
Hong Kong



XIN ZHAI
Resource Recycling
Chief Editor
China



LOCATION & ACCOMODATION



Electronics Recycling Asia will be held from **November 10 – 13, 2015** in the Shangri-La Hotel Singapore.

Arriving at Shangri-La Hotel Singapore, you will leave the hustle and bustle of the city behind you. Set amidst 15 acres of lush greenery, Shangri-La Hotel Singapore is a place like no other. This is where the legendary Asian hospitality of Shangri-La began more than 40 years ago, and the story continues with you. With luxury guestrooms and suites in three distinctive wings, serviced apartments and luxury residences in four-storey villas, this is where you will find your own Shangri-La.

For the participants of the conference a number of rooms are held at a discounted rate, if you register before October 9, 2015. If you wish, you may also extend your stay at this beautiful hotel at the same rate.

Shangri-La Hotel Singapore*****

22 Orange Grove Road

258350 Singapore

Phone +65 6737 3644

Fax +65 6737 3257

www.shangri-la.com

IMPORTANT NOTICE REGARDING HOTEL BOOKING:

We have been alerted that unofficial housing providers are trying to contact delegates of Electronics Recycling Asia and exhibitors claiming to be associated to ICM and can secure hotel rooms at the designated conference hotel in Singapore.

These companies are not authorized to represent ICM nor Electronics Recycling Asia. Please note that we have no affiliation with any housing coordinator. If you have any concerns, contact us at info@icm.ch.



CONFERENCE STRUCTURE

TUESDAY, NOVEMBER 10, 2015 / WORKSHOPS

13.00 – 19.00	Registration
14.00 – 17.00	Workshop: E-waste opportunities in emerging economies
14.00 – 17.00	Workshop: Substance restrictions
17.00 – 19.00	Welcome reception in the exhibition area
19.00	Steering Committee Meeting (I)

WEDNESDAY, NOVEMBER 11, 2015 / CONFERENCE & EXHIBITION

08.00 – 09.00	Registration and welcome coffee in the exhibition area
08.00 – 17.00	Exhibition
09.00 – 10.30	Opening and Keynote Speakers
11.00 – 12.30	Best Available Recycling Technologies I
12.30 – 14.00	Lunch in the exhibition area
14.00 – 15.30	Circular Economy I
14.00 – 17.00	Company Spotlight and Tech Talks in the exhibition area
16.00 – 17.00	Circular Economy II
19.00	Cocktail reception & networking dinner

THURSDAY, NOVEMBER 12, 2015 / CONFERENCE & EXHIBITION / WORKSHOP

08.00 – 09.00	Welcome coffee in the exhibition area
08.00 – 17.00	Exhibition
09.00 – 10.30	Worldwide Policy and Legislation Issues
11.00 – 12.30	Best Available Recycling Technologies II
12.30 – 14.00	Lunch in the exhibition area
14.00 – 16.00	E-scrap Business Reports
14.00 – 18.00	Workshop: Promising Electronics Recycling Industry in China
16.00	Farewell cocktail in the exhibition area
17.00	Steering Committee Meeting (II)

FRIDAY, NOVEMBER 13, 2015 / PLANT TOURS

09.45 – 15.15	ECO Special Waste Management Pte. Ltd., Singapore
08.30 – 14.30	Tuas South Incineration Plant, Singapore
08.00 – 16.30	Umicore Zinc Chemicals, Malaysia

COSMOPOLITAN SINGAPORE



Singapore's economic achievements have been remarkable, yet the island has not been overwhelmed by development. Visitors will discover a wealth of historical treasures from the past. From the beauty of older buildings, to values and traditions that have survived modernization, you will find Singapore both unique and surprising. Singapore is a bustling cosmopolitan city that offers a world-class living environment, with her landscape populated by high-rise buildings and gardens.

If you are only going to be in Singapore for a few days, you might want to extend your trip. There are just so many places to see and things to do. For art aficionados, there are museums and galleries to visit, while history buffs can explore history museums and heritage

centres. Party animals can revel in a colourful nightlife scene, nature lovers can immerse in the many rainforests and gardens available, and sports enthusiasts can look forward to sporting action. And the whole family can spend time together at theme parks.

Your trip here is not completed till you've tried the various cuisines and signature dishes. To begin with, there is a wide variety of cuisines for you to choose from but the main ones are Chinese, Malay, Indian and Peranakan. Some of the must-try dishes include Hainanese Chicken Rice, Nasi Lemak, Fish Head Curry, and Ayam Buah Keluak. They are sure to leave you lip-smacking, if not full with delight. So get ready for a sumptuous feast, and delight your taste buds.

www.yoursingapore.com

TRAVELLING TO SINGAPORE

Visa for Singapore

Most nationalities can enter Singapore without a visa. Please refer to the Immigration and Checkpoints Authority for current guidelines, including a list of the 30+ nationalities that are required to obtain a visa in advance.

More information: www.ica.gov.sg

By plane

The country's main airport is **Changi International Airport** (airport code: **SIN**) and one of the best airports in the world. The airport is big, pleasant, well organized, and immigration and baggage distribution is remarkably fast. The airport is split into three main terminals (T1, T2 and T3).

More information: www.changiairport.com

Weather/climate

Singapore is characterized by a hot and humid climate. Located just 1 degree north of the equator, it quite naturally enjoys a **tropical/equatorial climate**. The island does not have clear-cut seasons like summer, spring, autumn and winter. The weather is warm and humid all year round. Rainfall is almost an everyday phenomenon, even during the non-monsoon period. These brief showers are usually quite refreshing, as they provide respite from the sun.



WORKSHOPS

Take the chance and participate at the following workshops:

TUESDAY, NOVEMBER 10, 2015

14.00 – 17.00

E-WASTE OPPORTUNITIES IN EMERGING ECONOMIES



organized by Vans Chemistry Pte. Ltd.,
Singapore



14.00 – 17.00

SUBSTANCE RESTRICTIONS



organized by Kummer:Umweltkommunikation GmbH,
Germany



THURSDAY, NOVEMBER 12, 2015

14.00 – 18.00

PROMISING ELECTRONICS RECYCLING INDUSTRY IN CHINA



Organized by Basel Convention Regional Centre for Asia
and the Pacific /Stockholm Convention Regional Centre
for Capacity – building and the Transfer of Technology in
Asia and the Pacific



To register, please use the registration form of ICM AG.

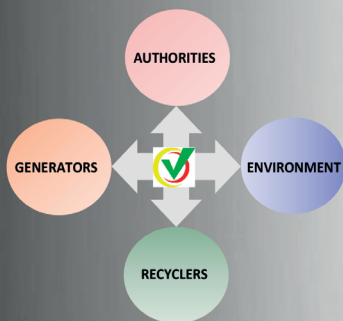
The workshops will be held at the Hotel Shangri-La Singapore and will take place with a minimum of 10 participants.



E-waste Opportunities in Emerging Economies

Big Money Game: Challenges, Issues, Regulations, Potential

Workshop: Potential opportunities & successful business model for Asia



- Sharing the knowledge & experience on EEE-waste management
- Tapping E-waste as a **TREASURE** to the future generation
- Expert advise on customized engineering solution
- Cost-effective techniques for precious metals recovery and refining
- Compliance and regulatory position in emerging economies
- Permits and licenses requirement
- Enumerating the importance of international standards in E-waste management
- Successful E-waste business experience, an ideal solution to start up business

Who should attend the workshop?

- Generators, industries, institutions, individual
- New entrepreneurs and recyclers
- Policy makers, informal sectors
- Academicians



Space is limited! Please register by using the ICM AG registration form

Price: **USD 150.-** before September 30, 2015; **USD 180.-** after September 30, 2015
 Date: Tuesday, November 10, 2015
 Time: 2 pm to 5 pm
 Location: Shangri-La Hotel Singapore

WORKSHOP

Substance restrictions

Workshop on the substance restrictions in REACH, RoHS, for packaging and other products

Moderated by Dr Dipl. Chem Beate Kummer,
Kummer:Umweltkommunikation GmbH,
Germany

Date Tuesday, November 10, 2015

Time 14.00 – 17.00

Location Shangri-La Hotel Singapore

Price USD 150.– (before September 30, 2015)
USD 180.– (after September 30, 2015)

Organizer



WHO SHOULD ATTEND THE WORKSHOP?

- Recyclers
- Take-back systems
- Public authorities
- Auditors and advisers from private organizations
- Interested parties

Worldwide exist substance regulations and restrictions, these apply not only for electric and electronic devices, but also for other products such as batteries and cars.

European Regulations like Battery Directive, the ELV Directive (End-of-Life Vehicle Directive), the WEEE (for electric and electronic devices) and RoHS (which restrict the use of certain hazardous substances) and the Packaging Directive are the basis for the legal framework that has resulted in well-known product requirements and examples of producer responsibility. Producers all over the world are obliged to be compliant with the requirements while selling products to European market.

Moreover, annex XVII of the REACH regulation has been in effect since 2007. The restriction of certain hazardous substances (e.g. lead) in electrical and electronic equipment and a lot of other products aims to minimize the environmental impact.

Unfortunately the existing product regulations have not been harmonized – and this will be discussed in the workshop.

To register, please use the registration form of ICM AG.



Dr Beate Kummer
REACH expert and toxicologist



PROMISING ELECTRONICS RECYCLING INDUSTRY IN CHINA



You know:

China is generally considered to be the world's largest current processor of e-waste.

Do you know:

How is the **e-waste managed** in China?

What is the Chinese **electronics recycling mode**?

How does the **electronics recycling industry** develop in China?

What is the **BAT/BEP** on electronics recycling in China?

How to get **Best Available Techniques** from China?

How to **market your technology and facility** to Chinese enterprises?

How to promote **technology transfer** in Asia?



Register for the workshop Promising Electronics Recycling Industry in China to learn more.

Basel Convention Regional Centre for Asia and the Pacific
Stockholm Convention Regional Centre for Capacity-building and the Transfer of Technology in Asia and the Pacific

Thursday, November 12, 2015 • 14.00 h - 18.00 h • Hotel Shangri-La Singapore

US\$ 150 before September 30, 2015 • US\$ 180 after September 30, 2015

Workshop opens exclusively for WRF 2015 registered delegate.

Space is limited! Please register using the ICM AG registration form.

Experts in WEEE Engineering

SMALL DOMESTIC APPLIANCES AND IT



- Long lasting experience
- World-wide references
- Various fractions available
- Tailor-made solutions

FRIDGE DISPOSAL



- VHC and VFC recovery
- Best fractions resulting
- Throughput up to 5 t/h
- VHC and VFC online destruction

PRINTED CIRCUIT BOARDS



- No need for pre-treatment
- No loss of precious metals
- Maximizing the fraction values
- Precise fraction sampling

**WEEE
KNOW HOW**

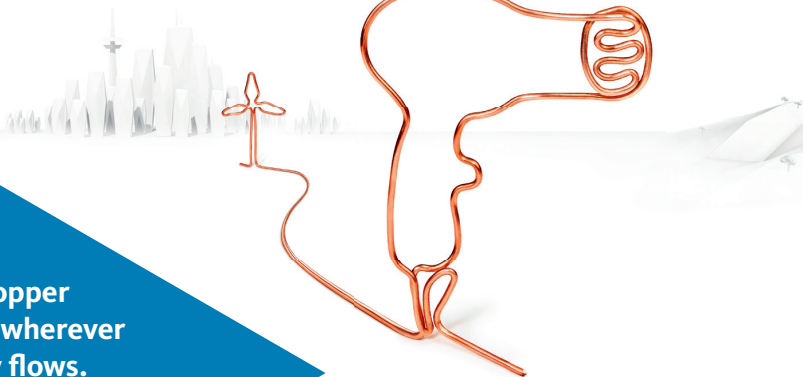


**URT Umwelt- und
Recyclingtechnik GmbH**

Am Hammersteig 5a
97753 Karlstadt, Germany
www.urt-recycling.com



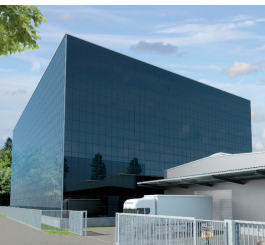
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The Swiss Depot for Industrial Metals

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We buy, store and sell physical metals and master alloys in your name. Metal Depot warehouses are solely located in Switzerland.

We are specialists for all aspects of metal trading. Our service is available for anyone who wants to invest in physical metals.

Contact:

Metal Depot Zurich AG

Phone +41 62 765 8222

Fax +41 62 765 8223

office@metaldepot.ch

www.metaldepot.ch



CONFERENCE PROGRAM

TUESDAY, NOVEMBER 10, 2015

13.00 – 19.00 Registration

14.00 – 17.00 **Workshop – E-waste opportunities in emerging economies**
Moderator: Venkatesha Murthy, Vans Chemistry Pte. Ltd., Singapore

Organized by  VANS CHEMISTRY

14.00 – 17.00 **Workshop – Substance restrictions**
Moderator: Dr Beate Kummer, Kummer:Umweltkommunikation GmbH, Germany

Organized by  KUMMER
umwelt kommunikation

17.00 – 19.00 Welcome reception in the exhibition area

WEDNESDAY, NOVEMBER 11, 2015

08.00 – 09.00 Registration and welcome coffee in the exhibition area

09.00 – 10.30 **OPENING AND KEYNOTE SPEAKERS**

"Welcome and introduction"

Prof. Jinhui Li, Chairman of Electronics Recycling Asia
Roger Burri, Co-Chairman of Electronics Recycling Asia

"Linear electronics recycling in the framework of a Circular Economy"
David Scuderi, Samsung Electronics Europe, United Kingdom

"The current situation of Circular Economy in China"
Prof. Duan Weng, Tsinghua University, China

10.30 – 11.00 Coffee break in the exhibition area



**COMPANY
SPOTLIGHT
AND
TECH TALKS**

Session 1: Best Available Recycling Technologies I
Session Chairman: Stephan Schwarz, ALBA Group, Germany

- 11.00 – 11.30 "The benefits for the industry of certification of end-processing of precious metals and/or copper bearing E-waste"
Thierry Van Kerckhoven, Umicore Precious Metals Refining, Belgium
- 11.30 – 12.00 "Update on E-Recycling Compliance Programs in the United States"
Steve Skurnac, Sims Recycling Solutions, United Kingdom
- 12.00 – 12.30 "Sensor-based sorting replacing conventional ways of sorting in WEEE"
Ted Park, TOMRA Sorting GmbH, Germany

12.30 – 14.00 Lunch in the exhibition area

Session 2: Circular Economy I
Session Chairman: Prof. Hsiao-Kang Ma, National Taiwan University, Taiwan

- 14.00 – 14.30 "Circular Economy – Opportunities and challenges"
Anukka Dickens, Hewlett-Packard Company, USA
- 14.30 – 15.00 "The Circular Economy – Designing out waste"
Russell Ngo, Dell, Singapore
- 15.00 – 15.30 "Electronics recycling from a brand protection perspective"
Jason Teo, Infineon Technologies Asia Pacific, Singapore

14.00 – 17.00 Company Spotlight and Tech Talks in the exhibition area

15.30 – 16.00 Coffee break in the exhibition area

Session 3: Circular Economy II
Session Chairman: Crystynna Ewe, Dell, Singapore

- 16.00 – 16.30 "Is this déjà vu all over again? Will we repeat our experience with CRT recycling when we recycle LCDs or can we do it better this time?"
Joe Yob, 3S International, LLC, USA
- 16.30 – 17.00 "Vietnam recycles – Introducing formal electronics take-back and recycling to Vietnam"
Nadine Rühle-Niestroy, Reverse Logistics GmbH, Germany

From 19.00 Cocktail reception and networking dinner



**COMPANY
SPOTLIGHT
AND
TECH TALKS**

COMPANY SPOTLIGHT AND TECH TALKS

IN THE EXHIBITION AREA

WEDNESDAY, NOVEMBER 11, 2015

14.00 – 17.00

Company Spotlight and Tech Talks

"ALBA integrated waste solutions Hong Kong – WEEE recycling solutions in mega cities"

Stephan Schwarz, ALBA Group, Germany

"Examples for innovative recycling strategies for rare metals with strategic importance"

Dr Wolfram Palitzsch, Loser Chemie GmbH, Germany

"Case study: Recovery of metals from electronics waste using DC plasma arc technology"

Les Liddiard, Tetronics International Ltd., United Kingdom

"Social value recovery program"

Akira Akamine, Anchor Network Service Inc., Japan

"Bunker your metals"

Nico von Burg, Metal Depot Zurich AG, Switzerland

"Breakthrough innovation on CRT lead glass treatment"

Dr Alexandre Comino, Hellatron Recycling Division, Italy

"How to grow in recycling through partnering? Step by step solution"

Ninoslav Milenkovic, JUGO-IMPEX E.E.R. d.o.o., Serbia

"Introduction of our highly efficient scavenger products and their applications in electronics industry"

Dr Andy Xu, PhosphonicS Ltd., United Kingdom

19.00 – 19.30

Cocktail reception in the exhibition area

19.30

Networking dinner

NETWORKING DINNER

On Wednesday, November 11, a memorable networking dinner will be organized in exciting Singapore.

Do not miss this perfect opportunity to socialize with your business partners and register for this evening now!



Meet friends and business partners in a relaxed atmosphere!



CONFERENCE PROGRAM

THURSDAY, NOVEMBER 12, 2015

08.00 – 09.00 Welcome coffee in the exhibition area

Session 4: Worldwide Policy and Legislation Issues
Session Chairman: **Brian Taylor, Recycling Today Media Group, USA**

09.00 – 09.30 "Review & update the status of Asia's recyclers, technology, policy context"
Venkatesha Murthy, Vans Chemistry Pte. Ltd., Singapore

09.30 – 10.00 "Let's start with the basics: The argument for global environmental, health and safety management systems"
Darrell Kendall, RIOS™, USA

10.00 – 10.30 "Responsible waste stewardship – Do it right the first time"
David Chng, CHWMEG, Inc., Singapore

10.30 – 11.00 Coffee break in the exhibition area

Session 5: Best Available Recycling Technologies II
Session Chairman: **Joe Yob, 3S International, LLC, USA**

11.00 – 11.30 "Development of the gold/tin stripping process in a container"
Prof. Hsiao-Kang Ma, National Taiwan University, Taiwan

11.30 – 12.00 "Designing recycled resins with engineering properties: Opportunities and challenges"
Sreepadaraj Karanam, SABIC, Singapore

12.00 – 12.30 "Precious metal recovery technologies from E-waste"
Ekin Kis, Emak Refining and Recycling Systems Co., Turkey

12.30 – 14.00 Lunch in the exhibition area



Session 6:

E-scrap Business Reports

Session Chairman: **Kazumi Nozawa, Perry Johnson Registrars, Inc.**

14.00 – 14.30

“North American electronics recycling: Current trends and issues”
Jerry Powell, E-Scrap News, USA

14.30 – 15.00

“Electronic waste in South East Asia, past, present and future”
Fons Krist, Aurubis AG, Singapore

15.00 – 15.30

“Value recovery and compliance in Asia”
Scott Venhaus, Arrow Electronics, Inc., USA

15.30 – 16.00

“Driving value for OEMs”
Peter Tamblyn, Close the Loop Ltd., Australia

14.00 – 18.00

Workshop – Promising Electronics Recycling Industry in China

Moderator: Prof. Jinhui Li, Tsinghua University, China

Organized by



BASEL CONVENTION

From 16.00

Farewell cocktail in the exhibition area

PLANT TOUR

FRIDAY, NOVEMBER 13, 2015

ECO SPECIAL WASTE MANAGEMENT PTE. LTD.



Visit of the waste management plant

- 09.45** Departure by bus to ECO Special Waste Management Pte. Ltd.
10.45 Arrival at ECO Special Waste Management Pte. Ltd.
10.45 – 13.15 **Visit of the waste management plant**
14.15* Arrival at the Shangri-La Hotel Singapore
15.15* Arrival at Singapore Changi airport

ECO Special Waste Management (ECO) was founded in 2008 and today, the company has well-developed capability in delivering its "Industry Ecology" concept to manage the waste. The company has established its comprehensive integrated waste management centre as well as its innovative and integrated energy recovery centre. This sustainable development centre has set ECO apart from other waste management companies and has been well-recognized for its contribution.

ECO's Sludge Treatment Plant, the largest single sewage incineration plant in South East Asia was awarded for 2010 ASEAN Renewable Energy Award. The plant, first of its kind in Singapore, was recognized as CDM registered project and has been issued for CERs by UNFCCC. Our rotary kiln incinerator is the largest hazardous waste to energy plant in Singapore. The plant is equipped with energy recovery system to generate beneficial steam and electricity for downstream treatment/recovery facilities which helps in reducing the dependency on fossil fuel. ECO will pursue consciously on our industrial ecology business model, as a way to develop the business and protect the environment to achieve sustainable development. ECO can be your trusted waste management partner for your business in Singapore.

More information at: www.eco.com.sg

All are welcome but with kind understanding that visitors from our same industry will not be allowed access.

* No guarantee on arrival time due to traffic conditions.



**“The trusted waste management partner
for your business in Singapore”**

ECO Special Waste Management is one of Singapore’s leading waste management companies.

We provide a range of high quality, reliable services exclusively to our industrial and commercial customers from industries such as petrochemical, pharmaceutical, oil & gas, power generation, electronics, marine, engineering, and semiconductor. Many of our 2,000 customers have been with us from our founding in 1998, trusting ECO to solve their most difficult waste management challenges.

ECO operates out of a single, integrated Special Waste Management Centre comprised of nine main treatment and recovery facilities on a 7 Ha plot of land at 21/23 Tuas View Circuit, Singapore. ECO is fully licensed by the National Environment Agency (NEA) as a Toxic Industrial Waste Collector, a General Waste Collector, and an Asbestos Removal Contractor, among other qualifications. As part of our commitment to environmental protection, proactive health and safety management, and sustainable development, we are certified to ISO14001 Environmental Management System, OHSAS 18001, and Biz Safe Star Level. With more than 200 dedicated staff, we provide tailored, effective solutions for our customers everyday.

Our Services Includes:

- Toxic and Non-Toxic waste management
 - o Collection Services
 - o On Site Waste Management
 - o Site assessment
 - o Recycling Programs on Site
- Industrial Services
 - o Storage tank and process equipment cleaning
 - o Asbestos Management and Removal
 - o Facility and equipment decommissioning
 - o Contaminated land remediation
 - o Crisis Response
- Laboratory and R & D Services
 - o Specialised Environmental and Waste-stream Testing
 - o Transformer oil analysis
 - o Waste treatment system Research & Development

ECO Special Waste Management
23 Tuas View Circuit, Singapore 637768
Main Line : (65) 6517 3600
Hotline : (65) 6517 3653
Fax : (65) 6863 7813
Email : sales@eco.com.sg



CERT NO. 2002-2157
ISO 14001 : 2004
CERT NO. OHS-2010-4289
OHS OHSAS 18001 : 2007



PLANT TOUR

FRIDAY, NOVEMBER 13, 2015



TUAS SOUTH INCINERATION PLANT

Visit of the incineration plant

08.30	Departure by bus to Tuas South Incineration Plant
10.00	Arrival at Tuas South Incineration Plant
10.00 – 12.00	Visit of the incineration plant
13.30*	Arrival at the Shangri-La Hotel Singapore
14.30*	Arrival at Singapore Changi airport

Formed on 1 July 2002, the **National Environment Agency (NEA)** is the leading public organisation responsible for improving and sustaining a clean and green environment in Singapore. The NEA develops and spearheads environmental initiatives and program through its partnership with the People, Public and Private sectors. It is committed to motivating every individual to take up environmental ownership and to care for the environment as a way of life. By protecting Singapore's resources from pollution, maintaining a high level of public health and providing timely meteorological information, the NEA endeavours to ensure sustainable development and a quality living environment for present and future generations.

Tuas South Incineration Plant is the largest refuse incineration plant in Singapore and is one of two incineration plants operated by NEA. Completed in June 2000, it is designed to incinerate 3,000 tons of refuse daily. The plant is sited on 10.5 ha of reclaimed land. Built with state-of-the-art technology, processes at the plant are highly automated and controlled via a digital control system. Modern equipment incorporating advanced technology is used at the plant to ensure a high level of efficiency and reliability.

More information at: www.nea.gov.sg

* No guarantee on arrival time due to traffic conditions.

TUAS SOUTH INCINERATION PLANT

Operated by the National Environment Agency (NEA), Tuas South Incineration Plant is the largest incineration plant in Singapore, designed to incinerate 3,000 tons of solid waste daily. Modern equipment incorporating advanced technology is used at the plant to ensure a high level of efficiency and reliability.



About the National Environment Agency

The National Environment Agency (NEA) is the leading public organisation responsible for improving and sustaining a clean and green environment in Singapore. For more information, please visit <http://www.nea.gov.sg/>.

PLANT TOUR

FRIDAY, NOVEMBER 13, 2015



UMICORE MALAYSIA SDN BHD

Visit of the zinc metal pigment production facility

08.00	Departure by bus to Umicore Malaysia Sdn Bhd, Malaysia
10.00	Arrival at Umicore Malaysia Sdn Bhd, Malaysia
10.00 – 13.00	Visit of the zinc powder production facility
15.30*	Arrival at the Shangri-La Hotel Singapore
16.30*	Arrival at Singapore Changi airport

Umicore Malaysia Sdn Bhd

Zinc Metal Pigment (Fine zinc powder) production facility of Umicore is located at Pasir Gudang on the southern tip of Malaysia, 30 km north of Singapore, near the important port facilities of Johor Bahru. The plant was commissioned in 1994. It processes secondary zinc utilising Lavrik distillation technology to produce fine zinc powder/ dust primarily for anti-corrosion paint markets in Asia and the Middle East. Annual capacity of the plant is 14,000 tonnes.

More information at: www.zincchemicals.umicore.com

For visa application, please check here:

<http://www.imi.gov.my/index.php/en/main-services/visa/visa-requirement-by-country>

* No guarantee on arrival time due to traffic conditions.



Fine Zinc Powders

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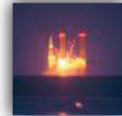


UMICORE ZINC CHEMICALS

Umicore Zinc Chemicals is the leading recycler of galvanising residues in the world.

Over 100,000 tons of recyclable materials are refined and transformed through proprietary processes into high quality products.

With 3 Product lines (Zinc Battery Materials, Fine Zinc Powders, Zinc Oxides), Umicore Zinc Chemicals is also the global leader in the production of Zinc Compounds. Over 180,000 tons of high quality end products are shipped from 11 production sites to serve our global customer base. The specialty chemicals are used in a wide variety of applications for consumer goods (like Zano in sunscreens or fine high purity alloyed powders for alkaline batteries) and industrial applications (like Fine Zinc Powders for anti corrosion paints or Zinc Oxide for the ceramic industry). Through innovation and proximity with our markets, we strive for differentiating our services to our customers. The Umicore sustainability policy ensures a forward looking approach in all aspects of our undertakings.



UMICORE MALAYSIA SDN BHD

Zinc Metal Pigment (Fine zinc powder) production facility of Umicore is located at Pasir Gudang on the southern tip of Malaysia, 30 km north of Singapore, near the important port facilities of Johor Bahru.

The plant was commissioned in 1994. It processes secondary zinc utilising Larvik distillation technology to produce fine zinc powder/ dust primarily for anti-corrosion paint markets in Asia and the Middle east.

Annual capacity of the plant is 14,000 tons.

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One tiny device can reduce the cost of recycling refrigerators by 7.5% and we bet you didn't know it.



specializes in electronic waste management. We are based in Serbia and have strong regional contacts, but our aspirations are global.

Through years of experience, we have developed efficient and environmentally sound ways of recycling WEEE, PET and sorting communal waste, and think we have valuable experiences to share. The controller shown here is one of them.



The fact is, the recycling industry is not the most transparent in the world. We are not so good at sharing what we know. If one technique is developed in, say, Indonesia, chances are that it won't be implemented in Bulgaria for another ten years.

There are many reasons for this. The main one is that jurisdictional laws governing the recycling industry vary from country to country. Also, because waste treatment technologies are big and cumbersome, it's

assumed that transferring knowledge is too complicated and costly.

But what is really costing us is not sharing our knowledge. Not sharing best practices or the challenges we are facing and not engaging in networking and open communication with each other. If other industries behaved like ours, we'd still be using rotary phones and driving Ford T.

We are E-Reciklaža, a recycling company that

We'd love to hear from you. Perhaps it will lead to a successful partnership, joint venture or consulting engagement. I am Ninoslav Milenković, CEO, and would be interested to personally speak with you. You can reach me on +381 63 1085231 (including Wapp) or at ninoslav@ereciklaža.com.



E-RECIKLAŽA
Reciklaža električnog i elektronskog otpada





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AND PROFIT FROM
DISCOUNTED RATES

Registration should be made by means of the registration form or online. Participants registering and paying **before September 30, 2015** will benefit from a reduced registration fee. The registration fee includes the conference, entrance to the exhibition, proceedings and luncheons.

REGISTRATION FEES

Conference Fee	before Sept. 30, 2015	after Sept. 30, 2015
Participants	US\$ 1'590.–	US\$ 1'690.–
Speakers	US\$ 990.–	US\$ 1'090.–
Universities, government & authorities	US\$ 690.–	US\$ 790.–
Networking dinner (Nov. 11, 2015)	US\$ 100.–	US\$ 120.–
Networking dinner for spouse (Nov. 11, 2015)	US\$ 120.–	US\$ 150.–
Tuesday, Nov. 10, 2015 – Workshops (14h – 17h)		
E-waste opportunities in emerging economies	US\$ 150.–	US\$ 180.–
Substance restrictions	US\$ 150.–	US\$ 180.–
Thursday, Nov. 12, 2015 – Workshop (14h – 18h)		
Promising Electronics Recycling Industry in China	US\$ 150.–	US\$ 180.–
Friday, Nov. 13, 2015 – Plant tours		
ECO Special Waste Management, Singapore	US\$ 50.–	US\$ 70.–
Tuas South Incineration Plant, Singapore	US\$ 50.–	US\$ 70.–
Umicore Zinc Chemicals, Malaysia	US\$ 70.–	US\$ 90.–

Conference registration on site US\$ 100.– surcharge

Online registration

You may also register online at: www.icm.ch/wrf-2015

Conference language and additional proceedings

The language of the conference is English. If you cannot attend the conference, you may purchase the complete proceedings at US\$ 350.–. Participants will get the proceedings free of charge.

Payment

Payment should be made in US\$ by bank transfer or by credit card. Wire payment to:

Beneficiary:	ICM AG
Bank:	Neue Aargauer Bank, 5400 Baden, Switzerland
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Swift code:	AHHBCH22XXX
Currency:	US\$

EXHIBITION, DISPLAY BOARD & POSTER PRESENTATION



The exhibition area provides your company with the perfect opportunity to reach key industry decision makers. Promote your products to all conference attendees. The fees for an exhibition booth for the duration of the conference are:

Booth	6 m²	2 m x 3 m	US\$ 3'650.-
Booth	12 m²	3 m x 4 m	US\$ 4'990.-
Display board (board printing)			US\$ 1'250.-
Poster presentation (wall rental)			US\$ 350.-

Space is limited, so take your chance and book today!





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Upcoming ICM Events:

www.icm.ch

20th International Congress for Battery Recycling ICBR 2015

ICBR
2015



September 23 – 25, 2015
Montreux, Switzerland



15th International Electronics Recycling Congress IERC 2016

IERC
2016



January 20 – 22, 2016
Salzburg, Austria



16th International Automobile Recycling Congress IARC 2016

IARC
2016



March 16 – 18, 2016
Berlin, Germany



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