

# 5th World Recycling Forum WRF 2010

International Conference & Exhibition on Electronics, Battery & Car Recycling

November 15 – 18, 2010, Hong Kong





#### Supported by:

Call2Recycle®, USA

China Automotive Technology & Research Center (CATARC) China Industrial Association of Power Sources (CIAPS) Electronic Recyclers' Association (eRA), India Institute of Scrap Recycling Industries, Inc. (ISRI), USA Japan Automobile Manufacturers Association (JAMA) Korea Automobile Manufacturers Association (KAMA) Korea Institute of Geoscience & Mineral Resource (KIGAM) The Rechargeable Battery Association (PRBA), USA WEEE Forum, Belgium































#### **FOREWORD**

#### PROFESSOR DUAN WENG

Chairman of the Steering Committee 5<sup>th</sup> World Recycling Forum Hong Kong

#### Hong Kong – a place where "East meets West"

We welcome you in one of the most booming cities in Asia. It is known as one of the Four Asian Tigers for its high growth rates and rapid development. Hong Kong has many attractions. It is a charming city; it is famous for the very efficient capital services and very well known for its industrial and trading power. More than 7 million people live in Hong Kong with a population density of about 6500 people per sauare kilometer. Despite of the small territory Hong Kong is a very green city with parks, beaches and forests.

The industry of Hong Kong has a great history in the field of manufacturing of all kind of products, recycling and trading of raw materials. The very interesting history of the city created also

a totally different law system. In contrast to mainland China's civil law system, Hong Kong continues to follow the English Common Law tradition established during British rule. Its legal system is independent from the legal system of China. Hong Kong's courts are permitted to refer to decisions rendered by courts of other common law jurisdictions. The history, the law system and also the English lanaugae makes business easier in Hong Kong than in any other Asian cities.

The 5<sup>th</sup> World Recycling Forum (WRF 2010) will be another successful event. Speakers from all over the world tell about the news and challenges of the industry regarding recycling and the circular economy. With the support of many

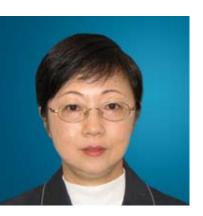
associations, of a diversified Steering Committee, powerful sponsors and interesting exhibitors at a wonderful place, a great and professional forum will be guaranteed. Meet your clients, friends and partners in a nice atmosphere. An excellent networking dinner, cocktail parties and the heartbeat of the city will help you to share your experience among other leaders from the recycling sector. Learn from the others and get the latest information from the markets.

As usual, the organizer of World Recycling Forum is offering many plant tours in the vicinity of Hong Kong. Take the chance and visit outstanding manufacturing and recycling companies. It is a gorgeous program.

I wish all participants an interesting and pleasant stay and look forward to meeting you in beautiful Hona Kona!



# **KEYNOTE SPEAKERS**



DR ELLEN CHAN

Environmental Protection Department Hong Kong SAR Government Assistant Director of Environmental Protection China

"HONG KONG'S WASTE MANAGEMENT STRATEGY"



World Electric Vehicle Association President

University of Hong Kong Honorary Professor China

"GLOBAL OUTLOOK OF ELECTRIC VEHICLES AND SMART GRID"





**DOUGLAS SMITH** 

Sony Electronics Inc. Director Corporate Environment Safety and Health USA

"THE REAL RESULTS OF EXTENDED PRODUCER RESPONSIBILITY PROGRAMS IN THE USA"



# INTERNATIONAL STEERING COMMITTEE

#### **CHAIRMAN**



PROF. DUAN WENG Tsinghua University, Institute for Energy & Environment Materials, Director China





ROGER BURRI Air Mercury AG President Switzerland

#### **MEMBERS**



GENKICHI ANDO Seinan Corporation President Japan



VINCENT BARTIN Bel A Venture s.p.r.l. Manager Belgium



TODD COY
Kinsbursky Brothers, Inc.
Executive Vice President
USA



PROF. HUANZHENG DU Institute of Recycling Economic Technology of the Yangtze Delta Area Zhejiang Province, Director China



JEAN-PHILIPPE FUSIER MTB Recycling General Manager France



ALFRED HAMBSCH GEEP – Global Electric Electronic Processing Inc. President & Chairman Canada



ERIC HARRIS
ISRI, Inc.
Director of Government
and International Affairs
USA



PAUL HEALEY Xstrata Copper Senior Director Recycling Canada



PATRICK HENRION Xstrata Nickel Manager Raw Materials Belgium



JOSEPH M. HOLSTEN LKQ Corporation CEO USA



JILL LEDGER
SAFT
Corporate Communication and
Investor Relations Director
France



SONG JIANG
China Nonferrous Metal Industry
Resource Regenerating Co., Ltd.
General Manager
China



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



GERARD R. KILLEN Oxigen Group Managing Director Ireland



PROF. THEO LEHNER
Boliden Mineral AB
Manager Business Development
Sweden



ANDREAS KREBS
Batrec Industrie AG
Managing Director
Switzerland



PROF. JINHUI LI Tsinghua University China



FONS KRIST GEEP Asia Vice President Singapore



FUKUAN LU Shanghai Society of Environment Sciences (SSES) Vice Chairman China

# INTERNATIONAL STEERING COMMITTEE



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



STEPHAN SCHWARZ environplasma Managing Director Germany



SCOTT NEWELL
The Shredder Company, LLC
Chairman and CEO
USA



PROF. BRUNO SCROSATI Chairman of ICBR University La Sapienza (Rome) Department of Chemistry Italy



KAZUMI NOZAWA

IBM Corporation, Manager,
IBM Corporate Environmental
Affairs Japan (Responsible for
Japan, ASEAN), Japan



CHRIS SLIJKHUIS MBA Polymers, Inc. Director Sourcing Europe USA/Austria



RICHARD PAUL LKQ Corporation Manager Environmental and Sustainability Programs



CARL E. SMITH
Call2Recycle®, operated by RBRC
CEO/President
USA



KUMAR RADHAKRISHNAN Sims Recycling Solutions Senior Vice President – Recycling Solutions – Asia Pacific Australia



DOUGLAS SMITH
Sony Electronics Inc.
Director, Corporate Environment,
Safety and Health
USA



MARK TOMASZEWSKI Inmetco Inc. President USA



DR JAN TYTGAT Umicore Recycling Solutions General Manager Belgium



DR JEAN-POL WIAUX RECHARGE Manager Belgium



DR KAIHUA XU Shenzhen GEM High-Tech Co., Ltd. President China



JOSEPH YOB Creative Recycling Systems, Inc. Business Development Manager USA



NAIJIN ZHENG
China Automotive, Technology &
Research Center, Automotive Data
Center, Deputy Chief Engineer /
Senior Engineer, China



JOE ZHOU Global Metals Co., Ltd. President China





MANFRED BECK
Recycling International Magazine
Publisher & Editor
Netherlands



STEPHAN PETER KRAFZIK Recycling Magazin Senior Editor Germany



XIN ZHAI Resource Recycling Chief Editor China



MIKE THIRD
Auto Recycling Australia Magazine
Publisher
Australia

# LOCATION OF THE FORUM

# HONG KONG - THE PEARL OF ORIENT



The 5<sup>th</sup> World Recycling Forum will be held from **November 15 – 18, 2010** in the beautiful hotel Harbour Grand Kowloon in exciting Hong Kong.

#### Hotel Harbour Grand Kowloon \*\*\*\*\*

20 Tak Fung Street, Whampoa Garden Hunghom, Kowloon, Hong Kong

Phone +852 2621 3188 Fax +852 2621 3311

www.harbourgrand.com/kowloon







Hong Kong is a city that works. It has a solid infrastructure and efficient transportation network. Thousands of lovely restaurants and tastes. A beautiful concentration and diversity of cultures. Vegetation, country parks, and exotic outlying islands. And one of the world's great skylines and waterways – the Victoria Harbour.

Hong Kong is the regional hub for business in Asia. With 7 million residents in just

1,000 square kilometres (400 square miles), this vibrant city possesses an amazing network of the cleanest and most convenient modes of transport and of course a world-class airport. A bustling metropolis? Yes, but Hong Kong is also 70% vegetation, where hikers, climbers and travel groups traverse the land for recreation and relaxation. And its outlying islands prove lovely tropical getaways for residents and visitors.







www.discoverhongkong.com

# HOTEL ACCOMMODATION

For the participants of the forum a number of rooms are held at a special rate if you register **before October 15, 2010.** If you wish, you may also extend your stay at this lovely hotel at the same special rate.







20 Tak Fung Street, Whampoa Garden Hunghom, Kowloon Hong Kong

Phone +852 2621 3188 Fax +852 2621 3311

www.harbourgrand.com/kowloon

(Forum place)







# **FORUM STRUCTURE**

MONDAY, NOVEMBER 15, 2010 / PLANT TOURS			
11.00 – 19.00	Registration		
13.00 – 17.00	Plant tour 1 Electronics recycling plant Li Tong Group, Hong Kong	13.00 – 17.00	Plant tour 2 Chemical waste treatment centre Ecospace, Hong Kong
17.00 – 19.00	Welcome Reception		
19.00	Steering Committee Meeting	(I)	

TUESDAY, NOVEMBER 16, 2010 / CONFERENCE & EXHIBITION		
08.00 - 09.00	Registration, welcome coffee and tea	
09.00 - 12.30	Keynote Speakers & Panel Discussion: "Recycling: What are the business drivers in Asia?"	
12.30 – 14.00	Lunch	
14.00 – 17.00	Overview of global recycling business	
19.00	Networking Dinner	

WEDNESDAY, NOVEMBER 17, 2010 / CONFERENCE & EXHIBITION		
08.00 – 09.00 Coffee and tea		
09.00 – 11.30 Electronics & Battery Recycling (I) "How do OEMs close the reycling loop?"	09.00 – 11.30 Electronics & Battery Recycling (III) "Update on battery recycling"	09.00 – 11.30 Car Recycling (I) "Update of worldwide markets & legislations"
11.30 – 13.00 Lunch		
13.00 – 16.00 Electronics & Battery Recycling (II) "New plants, processes & equipments"	13.00 – 16.00 Electronics & Battery Recycling (IV) "New plants, processes & equipments"	13.00 – 16.00 Car Recycling (II) "New plants, processes & equipments"
16.00 Cocktail Recept	ion	
17.00 Steering Commi	ttee Meeting (II)	

THURSDAY, NOVEMBER 18, 2010 / PLANT TOURS					
07.00 - 19.00 Plastics recycli GISE-MBA, Gu	· ·		Plant tour 4* nufacturing plant hina, Zhongshan	07.00 – 19.00 Metal recycling Global Metals,	gplant
07.00 – 21.00	Plant tour 6* Electronics recycling plant & Car manufacturing plant Shenzhen GEM & BYD, Shenzhen				

<sup>\*</sup> China visa is required to attend these plant tours!

MONDAY, NOVEMBER 15, 2010



#### LI TONG GROUP, HONG KONG

#### Visit of an electronics recycling plant

13.00 Departure by bus from the hotel Harbour Grand Kowloon to Li Tong

14.00 Arrival at Li Tong

14.00 – 15.30 Visit of the electronics recycling plant
 17.00\* Arrival at the hotel Harbour Grand Kowloon

Since its establishment in 2000, **Li Tong Group** strives to provide professional solutions for Product Life-Cycle Management (PLM) that enables products that entering into the phrase of "End of Life" are handled in an appropriately controlled way and products can be reborn and asset recovered.

#### Services:

#### 1. Reverse Supply Chain Management:

We provide "Reverse Logistics and Supply Chain Management" platform which complies with the WEEE directive and other related legislations. Additional service including Asset Management and Recovery Service.

#### 2. E-Waste Management & Electronics Recycling:

We provide Government, Corporations: B2B, B2C and OEM/EMS manufacturers with one stop solution for take-back, dismantling and destruction of their EOL, obsolete products for materials recycling and downstream management.

3. "Data-wipe" and "Degaussing" services for all types of storage media.

More information at: www.litong.com

\* No guarantee on arrival time due to traffic conditions.



MONDAY, NOVEMBER 15, 2010

**ECOSPACE LIMITED** 

#### ECOSPACE LIMITED, HONG KONG

#### 術力化學廢料處理有限公司

#### Visit of a waste management plant

13.00 Departure by bus from the hotel Harbour Grand Kowloon to Ecospace

14.00 Arrival at Ecospace

14.00 – 15.30 Visit of the waste management plant
17.00\* Arrival at the hotel Harbour Grand Kowloon

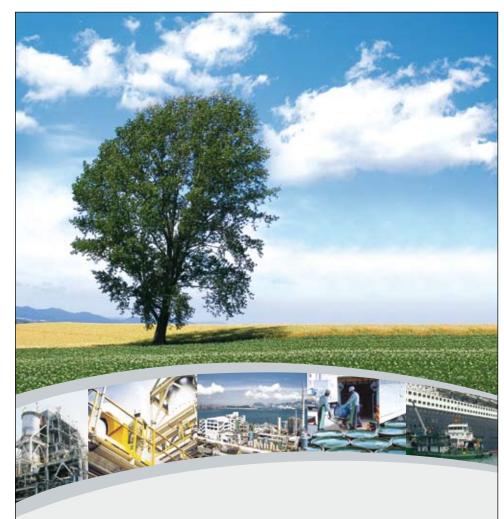
**Ecospace Limited** is the contractor appointed by the Hong Kong SAR Government Environmental Protection Department to operate the Chemical Waste Treatment Centre (CWTC) for 10 years starting from 2009, upgrade the Facility to meet emission standards of the European Union, and construct a reception and storage building for the management of clinical waste.

Located at Tsing Yi Island, the Facility occupies an area of about 2 hectares. It is the only facility of its kind in Hong Kong that provides collection as well as various treatment services for land-based chemical waste generated by local industries and the marine pollutants (MARPOL waste Annex I and II) generated from ocean-going and local vessels. The designed treatment capacity is 100,000 metric tonnes per year. Major treatment processes include incineration, physical/chemical treatment, oil-water separation, chemical stabilization and mercury recovery.

ECOSP

<sup>\*</sup> No guarantee on arrival time due to traffic conditions.





Ecospace offers a cradle-to-grave solution to help the industries comply with applicable chemical waste regulations with minimal disruption to their operations.

- We collect and treat land-based and sea-based chemical waste according to the strictest standards of the world.
- We turn waste into resources, recover and reuse materials at every possible step.
- We manage our environmental performance through a comprehensive monitoring program.

#### **Ecospace Limited**

51 Tsing Yi Road South Tsing Yi, New Territories, Hong Kong Phone: (852) 2435 7700 Fax: (852) 2497 4290

TUESDAY, NOVEMBER 16, 2010

India

08.00 - 09.00	Registration, welcome coffee and tea
09.00 – 09.15	"Welcome & Introduction" by Prof. Duan Weng, Chairman of the Steering Committee Roger Burri, Co-Chairman of the Steering Committee
Keynote Speakers a	and Panel Discussion
09.15 – 10.45	Keynote Speakers:
	"Hong Kong's waste management strategy"  Dr Ellen Chan, Environmental Protection Department of Hong Kong SAR Government, China
	"The real results of Extended Producer Responsibility programs in the USA"  Douglas Smith, Sony Electronics Inc., USA
	"Global outlook of electric vehicles and smart grid"  Prof. C.C. Chan, World Electric Vehicle Association
10.45 – 11.15	Coffee break
11.15 – 12.30	Panel Discussion: "Recycling: What are the business drivers in Asia?"
	Moderator: Roger Burri, Air Mercury AG, Switzerland
	Participants: Fons Krist, GEEP Asia, Singapore Prof. Jinhui Li, Tsinghua University, China Prof. Hsiao-Kang Ma, National Taiwan University, Taiwan Adam Minter, Shanghai Scrap.com, China Kumar Radhakrishnan, Sims Recycling Solutions, Australia Dr Lakshmi Raghupathy, Electronics Recyclers' Association (eRA),

12.30 – 14.00 Lunch

Overview of global recycling business Session Chairman: Prof. Jinhui Li, Tsinghua University, China		
14.00 – 14.30	"Update & challenges of Chinese recycling business" Prof. Duan Weng, Tsinghua University, China	
14.30 – 15.00	"Challenges in global trade of ferrous and non-ferrous scrap" Francis Veys, BIR Bureau of International Recycling, Belgium	
15.00 – 15.30	"Major challenges in transboundary movement of scrap"  Eric Harris, Institute of Scrap Recycling Industries, Inc., USA	
15.30 – 16.00	Coffee break	
16.00 – 16.30	"WEEELABEX – Producer responsibility, standards and certification in the WEEE management process"  Dr Andreas Röthlisberger, WEEE Forum, Belgium	
16.30 – 17.00	"How to stop illegal imports of E-scrap into Asia"  James Wood, Recyclecology.com, Inc., USA	
19.00	Networking dinner	

WEDNESDAY, NOVEMBER 17, 2010

Lunch

08.00 – 09.00 Coffee and tea

Room 1:

11.30 - 13.00

Session I: Session Chairman:	How do OEMs close the recycling loop?  Douglas Smith, Sony Electronics Inc., USA
09.00 – 09.30	"Overview & results of take back systems in Japan"  Kazumi Nozawa, IBM Corporation, Japan (invited)
09.30 – 10.00	"Developing effective takeback programs"  Anne Cheong, Dell Global Business Centre, Malaysia
10.00 – 10.30	Coffee break
10.30 – 11.00	"Managing WEEE in Asia – Can European experiences be applied in different regions"  Nils de Caluwe, Philips Consumer Lifestyle, Netherlands
11.00 – 11.30	"Do manufacturers need to care about raw materials?"  Klaus Hieronymi, Hewlett-Packard GmbH, Germany

Electronics & Battery Recycling I

Room 1:	Electronics & Battery Recycling II	
	11/2	
Session II: Session Chairman:	New plants, processes & equipments Kumar Radhakrishnan, Sims Recycling Solutions, Australia	
13.00 – 13.30	"The evolution within lamp recycling & mercury recovery technology"  Christer Sundberg, MRT System International AB, Sweden	
13.30 – 14.00	"Sustainability risk factors in the Asian recycling industry – Drivers and opportunities" James Pearson, Li Tong Group, China	
14.00 – 14.30	"Cradle to cradle technology and global footprint"  Alfred Hambsch, GEEP – Global Electric Electronic Processing Canada	
14.30 – 15.00	Coffee break	
15.00 – 15.30	"Turning WEEE into raw materials" Phär Oscár, Stena Technoworld AB, Sweden	
15.30 – 16.00	"Major challenges of refrigerator recycling" Peter Hessler, UNTHA Recyclingtechnik GmbH, Germany	
16.00	Cocktail reception sponsored by Bartin GROUP	

WEDNESDAY, NOVEMBER 17, 2010

08.00 – 09.00 Coffee and tea

Room 2:	Electronics & Battery Recycling III
Session III: Session Chairman:	Update on battery recycling Jill Ledger, SAFT, France
09.00 – 09.30	"Recovery of valuable metals from spent hybrid electric vehicle battery module by hydrometallurgical process" Dr Jeong-Soo Sohn, Korea Institute of Geoscience and Mineral Resources, Korea
09.30 – 10.00	"Keeping pace with North American transportation challenges" Carl E. Smith, Call2Recycle®, USA
10.00 – 10.30	Coffee break
10.30 – 11.00	"New vision-based automatic sorting system for low and mid volume battery sorting"  Hans Eric Melin, Optisort AB, Sweden
11.00 – 11.30	"Managing hybrid electric batteries at end of life"  Todd Coy, Kinsbursky Brothers, Inc. / Toxco, USA
11.30 – 13.00	Lunch

Room 2:	Electronics & Battery Recycling IV
Session IV: Session Chairman:	New plants, processes & equipments  Dr Jae-chun Lee, Korea Institute of Geoscience and Mineral Resources, Korea
13.00 – 13.30	"Recycling system and technologies of E-scrap in Japan"  Takashi Nakamura, Tohoku University, Japan
13.30 – 14.00	"environplasma – first results of our two-stage gasification an subsequent plasma conditioning" Stephan Schwarz, environplasma, Germany
14.00 – 14.30	"Recovery of gold from electronic waste and reuse in electroplating"  Peethambaram Parthasarathy, E-Parisaraa Pvt Ltd., India
14.30 – 15.00	Coffee break
15.00 – 15.30	"A 'Zero Waste' policy for establishing a sound WEEE Material cycle Society in Taiwan"  Prof. Hsiao-Kang Ma, National Taiwan University, Taiwan
15.30 – 16.00	"Recycling of liquid crystal displays: Manual or automated processes?"  Timothy McDonnell & Dr Karl Williams, University of Central Lancashire, United Kingdom
16.00	Cocktail reception sponsored by Bartin GROUP

WEDNESDAY, NOVEMBER 17, 2010

08.00 – 09.00 Coffee and tea

Room 3:	Car Recycling I
Session I: Session Chairman:	Update of worldwide markets & legislations Prof. Duan Weng, Tsinghua University, China
09.00 – 09.30	"Newest technical developments in Chinese automotive recycling industry"  Naijin Zheng, China Automotive Technology & Research Center, China
09.30 – 10.00	"10 years ELV-Directive in Europe" Anja Tomazic, General Motors / Adam Opel AG, Germany
10.00 – 10.30	Coffee break
10.30 – 11.00	"The potential impact of RoHS II on the recycling business and especially on the plastics recycling business"  Chris Slijkhuis, MBA Polymers, USA / Austria
11.00 – 11.30	"Recommendations for China ELV policy" Richard Paul, LKQ Corporation, USA
11.30 – 13.00	Lunch

Room 3:	Car Recycling II
Session II: Session Chairman:	New plants, processes & equipments Richard Paul, LKQ Corporation, USA
13.00 – 13.30	"Why shred?" Scott Newell, The Shredder Company, USA
13.30 – 14.00	"High-quality recycled polymers in automotive applications – From ELV into new cars"  Prof. Achim Schmiemann, Ostfalia – Hochschule für angewandte Wissenschaften, Germany
14.00 – 14.30	"Best available recycling technology for ferrous and non-ferrous scrap"  Mark Ridall, Wendt Corp., USA
14.30 – 15.00	Coffee break
15.00 – 15.30	"Recycling of automobiles and industrial batteries"  Salam Al Sharif, Sharif Metals Int'l., United Arab Emirates
15.30 – 16.00	"The current situation of recycle of package waste in China"  Dr Li Li, Chinese Research Academy of Environmental Sciences (CRAES), China
16.00	Cocktail reception sponsored by Bartin GROUP



THURSDAY, NOVEMBER 18, 2010

## GUANGZHOU GISE-MBA NEW PLASTICS TECHNOLOGY CO., LTD. (GMP), GUANGZHOU



#### Visit of a plastics recycling plant

07.00 Departure by bus from the hotel Harbour Grand Kowloon to GMP

11.00 Arrival at GMP

11.00 - 14.30Visit of the plastic recycling plant

19.00\* Arrival at the hotel Harbour Grand Kowloon

Guangzhou GISE-MBA New Plastics Technology Co., Ltd (GMP) is a Sino-US Joint Venture between Guangzhou Iron & Steel Enterprise Group (GISE) and MBA Polymers Inc. (MBA) with a total investment of US \$17 million. GMP is located in the Nansha District of Guangzhou, China. It produces high quality, recycled plastics of ABS, HIPS and PP from 100% post-consumer plastic from durable goods (appliances, electronics and automobiles). Operations began in the 3<sup>rd</sup> quarter of 2005. GMP has the capacity to processes 40,000 tons of mixed scrap plastics per year.

GMP utilizes MBA technology which is entirely mechanical using no chemicals and thus entirely safe environmentally. MBA technology offers a revolutionary solution to post-consumer plastic (PCR) recycling. It shifts the recycling of mixed plastics from impossible to possible, from environmentally dangerous to environmentally safe, from traditionally labor-intensive (and inaccurate manual) sorting to high-tech based automated separation.

GMP produces consistent virgin-like quality PCR plastic resin. Its EvoSourceTM premier finished goods are UL certified and are widely applied to electronic OEM products. Compared to producing virgin plastic, GMP consumes less than 10% of the energy and reduces production of CO<sub>2</sub> from 1.5 kilo to 2.5 kilo for each kilo of PCR resin produced. GMP is proud to contribute to global CO<sub>2</sub> reduction and to play a leading role in the growing global plastic recycling industry.

More information at: www.gisemba.com



# CMP 广州广钢MBA塑料新技术有限公司

Guangzhou GISE-MBA New Plastics Technology Co., Ltd(GMP)



完全再生塑料, 媲美新料品質, 大規模工業化生産'

"World leading technology, post consumer recycled plastic, virgin quality, industrialized production"

#### 產品種類及其適用產業與產品

廣州廣銅MBA塑料新技術有限公司向客户提供高質量的再生ABS/HIPS/PP. 廣泛應用于家電,電腦,汽車等用途。

Guangzhou GISE-MBA New Plastics Technology Co., Ltd(GMP)provides the high quality recycled ABS/HIPS/PP to the customers, multi application in home appliance, computer, autos, etc.

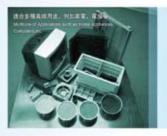












# 技術應用與發展

MBA Polymers has developed a number of revolutionary processes where it is possible to economically recover distinct types and even grades of plastics from highly mixed post consumer . MBA聚合物公司研發了數種革命性的塑料分離技術,能够經濟地從非常混雜的塑料 混合物中按塑料種類甚至塑料的級别將它們分離出來。

MBA Polymers has received international recognition and awards:



named and girls Dr Siddle MSA's technology, Sill Salar also pels the

Dr. Craig Barrett, John









Intel Tech Lescoste for 2006

<sup>\*</sup> No guarantee on arrival time due to traffic conditions.



THURSDAY, NOVEMBER 18, 2010

# WISTRON SOUTH CHINA OPERATION, ZHONGSHAN



#### Visit of an electronics manufacturing plant

07.00 Departure by bus from the hotel Harbour Grand Kowloon to Wistron

11.00 Arrival at Wistron

11.00 – 14.30 Visit of the electronics manufacturing plant 19.00\* Arrival at the hotel Harbour Grand Kowloon

Founded in 1999 **Wistron South China Operation** is one of six manufacturing campuses operated by Wistron Corporation in North America, Europe and Asia. Wistron is among the world's largest original design manufacturer (ODM) companies producing information and communication technology (ICT) products-including mobile and handheld devices, servers and storage, information appliances, LCD TVs and monitors, networking, and communication products. Wistron is a leader in the delivery of a broad range of ICT services to globally recognized companies, aligning extensive engineering resources to develop leading products and services.

Utilizing comprehensive product development experience, as well as partnerships with leading technology companies, Wistron incorporates the latest technology platforms into product offerings for OEM customers. Design teams cover all pre-manufacturing areas from initial product conceptualization and prototyping to design-for-manufacturing, test and service. Manufacturing teams assist with all aspects of product development from PCB layout to full system integration, including CTO. After-sales service teams collaborate with customers' service teams or customers' outsourced service partners to develop customized service business models and integrated reverse logistics programs.

Wistron was included in Forbes magazines' Asia FAB 50 (Asia Pacific's best big public listed companies) in 2007, 2008, and 2009. Wistron employs 40,000 people in 14 offices worldwide with revenue of US\$ 17.1 billion.

More information at: www.wistron.com

\* No guarantee on arrival time due to traffic conditions.

# the 5th World Recycling Forum

Designing the programs protect our planet



Wistron is a top three ODM supplier to leading branded electronics companies. In 2009 we produced over 25M notebook PCs, 10M TVs/monitors, and 8.5M desktop/server PCs. As a major designer, manufacturer, and after-sales service provider for electronics products we are in a prime position to support product's entire life cycle. In partnership with leading recyclers, Wistron is creating the

ny with 45,000 employees. To information about Wistron's a US\$17B company Providing services

Wistron



THURSDAY, NOVEMBER 18, 2010



#### GLOBAL METALS CO., LTD., FOSHAN

#### Visit of a metal recycling plant

07.00 Departure by bus from the hotel Harbour Grand Kowloon to Global Metals

11.00 Arrival at Global Metals

11.00 – 14.00 Visit of the metal recycling plant

19.00\* Arrival at the hotel Harbour Grand Kowloon

Global Metals Co., Ltd. is the biggest recycling company located in southern China, member of BIR, ISRI & Chinese Non Ferrous Industry Association, importing more than 150,000 mt per year of all kinds of non-ferrous metal scrap including Copper, Brass, Aluminum, Zinc, Stainless Steel, Lead, Silicon Steel and Plastic from all over the world. We buy from low grade to high grade material. Such as Insulated Copper Wire, Electric Motor, Transformer, Extrusion, Insulated Alum Wire, etc. The majority of the scrap flows through our yards in China where it is sorted and processes into value-added commodities in readiness for recycling.

We have in excess of 1,500 employees all over the world. Office and largest recycling facility in Nanhai, China; additional recycling facilities in Tianjin, Qiyun and Ningbo, China; combination trading office and recycling facility in Wingfield, Australia, trading offices in Boston and financial office in Hong Kong.

More information at: www.globalmetals.cn

& processor

eading importer

direct contact with **User market** the end

Fast expanding with high demand of sourcing agents

We purchase: Insulated cable, Copper scrap,Shredded material Other Non-ferrous scrap

Phone: +86 75785530978

Fax: +86 757 85598780 Email: info@globalmetals.cn www.globalmetals.cn



<sup>\*</sup> No guarantee on arrival time due to traffic conditions.



THURSDAY, NOVEMBER 18, 2010

# SHENZHEN GEM HIGH-TECH CO., LTD. & BYD AUTO COMPANY LIMITED, SHENZHEN



#### Visit of an electronics recycling plant & a car manufacturing plant

07.00 Departure by bus from the hotel Harbour Grand Kowloon to Shenzhen GEM

10.00 Arrival at Shenzhen GEM

10.00 – 13.00 Visit of the electronics recycling plant

13.00 Departure to BYD14.30 Arrival at BYD

14.30 – 16.30 Visit of the car manufacturing plant

21.00\* Arrival at the hotel Harbour Grand Kowloon

**GEM (Green Eco-Manufacturer)**, headquartered in Shenzhen, China, was founded in 2002. It is a national high-tech enterprise in recycling industry and was successfully listed in Shenzhen A-share in Jan. 2010. It is a practitioner and one of the leading enterprises in low carbon manufacturing.

Confronted with scarce resources and environmental degradation, GEM always follows its philosophy of "eliminating pollution, recycling resources", and is committed to the recycling of e-wastes, used batteries and all kinds of scraps. It is now establishing a recycling network of used batteries & e-wastes, installing more than 15,000 recycling bins and more than 30 e-waste recycling centers. GEM builds a high-end recycling mode of the unlimited waste resources "urban mines", and processes more than 50,000 tons of e-wastes, used batteries and other used cobalt & nickel resources. It produces more than 20 kinds of high-tech materials, such as WPC, ultrafine cobalt & nickel powder and battery materials, with an annual output of RMB 600 million. GEM has been awarded National High-tech Enterprise, Pilot Enterprise of National Circular Economy and Pilot Enterprise of National Innovation.

More information at: www.gemhi-tech.com

\* No guarantee on arrival time due to traffic conditions.

#### BYD COMPANY LIMITED



Established in 1995, **BYD Company Limited** (BYD for short) is a high-tech enterprise listed on the Hong Kong Stock Exchange. It is a top high-tech enterprise in China specializing in IT, automobile, and new energy. BYD has the largest market share for Nickel-batteries, handset Li-ion batteries, cell-phone chargers and keypads worldwide. It is the largest supplier of rechargeable batteries and has the second largest market share for cell-phone shells in the globe. BYD Auto becomes the most innovative independent national auto brand with a growth rate of over 100% for recent consecutive 5 years and leads the field of electric vehicles with unique technologies. In the field of new energy, BYD has developed green products such as Electric Vehicles, Energy Storage Stations and Solar Power Stations. It will continue to lead the new energy revolution in the world!

More information at: www.byd.com





# Green Eco-Manufacturer

Environment-friendly recycling & processing of batteries and electronic wastes!

Establishing a recycling network of batteries and e-wastes, exploring the exploiting mode of "urban mines"

Green recycling system based on centralized collection and centralized transaction



Classify,centralized collection



Centralized transaction

Typical e-wastes recycled by GEM











# **EXHIBITION**

# **NETWORKING DINNER**

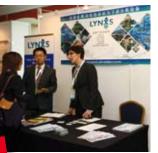


On Tuesday, November 16, a special networking dinner will be organized in exciting Hong Kong.

Do not miss this perfect possibility to meet your business partners and register to this evening now!



Meet friends and business partners in a nice atmosphere!









Eldan Recycling A/S, Denmark



Foshan Winner Metal Co., Ltd., China



GEEP – Global Electric Electronic Processing Inc., Canada





Hamos GmbH, Germany



Hangzhou Fuxing Environmental Protection Machinery Co., Ltd., China



Li Tong Group, China



Loyalty Equipment-Making (Sichuan) Co., Ltd., China



LYNXS Shredder (Project Design) Ltd., United Kingdom



MRT System AB, Sweden



Shenzhen GEM High-Tech Co., Ltd., China



Stena Technoworld AB, Sweden



UNTHA Recyclingtechnik GmbH, Germany



Wendt Corp., USA



Phone +41 62 785 10 00 Fax +41 62 785 10 05

info@icm.ch www.icm.ch





- Electronics, battery and car manufacturers (OEMs)
- Components & parts suppliers
- Ferrous & non ferrous traders
- Shredding companies
- Recycling and dismantling companies
- Collection and transportation companies
- Financing organizations for WEEE, used batteries and ELV
- Plastic industry
- Steel industry
- Non ferrous metal industry
- Ferrous and stainless steel industry
- Environmental authorities
- Universities and research institutes
- Laboratories for materials science
- Consultants

#### **ORGANIZER OF WRF 2010**



**JEANETTE DUTTLINGER** Forum Organizer



YING LIU REICHENBACH Forum Assistant



**CLAUDIA GERSTENDÖRFER** Forum Assistant



SUSANN **SCHMID** Forum Assistant



SIBYLLE ZIMMERLI Forum Assistant



**SANDRA MANNHART** Forum Assistant



Registration for the forum should be made by means of the registration form. Participants registering and paying before September 30, 2010 will benefit from a reduced registration fee. The registration fee includes conference, entrance to the exhibition, proceedings and luncheons.

## **REGISTRATION FEES**

Forum Fee		before Sep. 30, 2010		after Sep. 30, 2010	
rorum ree	sep.	30, 2010	sep.	30, 2010	
Participants	US\$	1'390	US\$	1'490	
Speakers	US\$	990	US\$	1'090	
Universities, government & authorities	US\$	590	US\$	690	
Networking dinner (Nov. 16, 2010)	US\$	100	US\$	120	
Networking dinner for accompanying persons (Nov. 16, 2010)	US\$	120.–	US\$	150.–	
Forum registration on site US\$ 100.– surcharg	ge				
Plant tours on Monday (Nov. 15, 2010):					
Tour 1: Li Tong Group, Hong Kong	US\$	70	US\$	90	
Tour 2: Veolia, Hong Kong	US\$	70	US\$	90	
Plant tours on Thursday (Nov. 18, 2010):					
Tour 3: GISE-MBA, Guangzhou*	US\$	120	US\$	150	
Tour 4: Wistron South China, Zhongshan*	US\$	120	US\$	150	
Tour 5: Global Metals, Foshan*	US\$	120	US\$	150	
Tour 6: Shenzhen GEM & BYD, Shenzhen*	US\$	150	US\$	180	

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#### \* China visa is required to attend these plant tours!

Visa is the responsibility of individual delegates.

#### Conference language and additional proceedings

The language of the conference is English. If it is not possible for you to attend the forum, you may purchase the complete proceedings at US\$ 250.-. 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

Neue Aargauer Bank, 5400 Baden, Switzerland Bank:

Account number: 447941-72-1

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