

## 11th International Electronics **Recycling Congress IERC 2012**

January 18 – 20, 2012, Salzburg, Austria





#### Patronage:

Federal Ministry of Agriculture, Forestry, Environment and Water Management, Austria

European Electronics Recyclers Association (EERA) European Lamp Companies Federation (ELC)

European Committee of Domestic Equipment Manufacturers (CECED)

DIGITALEUROPE

**ORGALIME** 

**PlasticsEurope** 

WEEE Forum









voestalpine Stahlwelt





































#### **WELCOME ADDRESS**

NIKOLAUS
BERLAKOVICH
Federal Minister for
Agriculture, Forestry,
Environment and
Water Management
Austria

Back in the Eighties, Austria embarked on a journev towards waste management. Thanks to the waste management policy of the Nineties, high standards of safety, the efficient use of resources and product responsibility are now integral components of our modern waste policy. On the other side the production of goods primarily depends on the constant exploitation of raw materials. Both the enormous consumption rate of fossil fuels and the amounts of mineral raw materials being exploited are continuing to rise. This gigantic turnover of materials prompted by the economy is leading to ever greater amounts of waste and harmful substances. This could be remedied by curbing the use of materials and increasing the use of cycle management, which takes into account the possibility of re-use and recovery in the goods production phase already and thus helps prevent harmful substances. The root of sustainable economic management is increased eco-efficiency, in which the increase in material efficiency takes on greater importance and is decisive for waste management.

The electrical and electronics sector is marked by rapid product changes. Technical innovation and market expansion has led to an ever increasing rate of goods being replaced. More and more uses are added and there is scarcely an area of modern life that does not involve the use of electrical and electronic equipment. This development has led to a marked increase in the number of electrical and electronic devices. At the European level, the need for more harmonisation has been recognised as a means to come up with new European solutions of the pan-European waste electrical and electronic equipment issue, not least due to the numerous national developments and efforts.

The Austrian implementation of the European Union Directives by the Waste Electrical and Electronic Equipment Ordinance is into force for more than 6 years now and it is a full success story. Because of the joint solution with lowest possible administration expense and expenditure for producers and distributors the collection and recovery could work flawlessly. Owing to the environmental awareness and the co-operation of all citizens Austria exceeded the European Union collecting goal in the previous year by more than 130%.

The transfer of knowledge and the exchange of experience constitute important elements for introducing good solutions and comparable standards in the whole world. I am looking forward to the world of experts meeting in Austria, in Salzburg on the occasion of the IERC 2012, and I wish every success and a nice stay.



lebensministerium.at



#### **FOREWORD**

#### DR VIKTOR HAEFELI

Chairman of the Steering Committee International Electronics Recycling Congress

#### Welcome to Salzburg – the hometown of Amadeus Mozart and "Red Bull"

In the name of the Steering Committee I'm welcoming you to Salzburg for the 11<sup>th</sup> International Electronics Recycling Congress.

For our industries the year 2011 will be probably another good year. Sales, volumes, margins get better and better. It's not only one of the fastest growing industries but it is also one of the best and most interesting businesses. In our industry you need common knowledge about technologies, raw materials, commodity prices, legal requirements for collection, transportation, recycling and you have to take care of the constant change of the electronics products we are talking about.

There are still young entrepreneurs who start their businesses in garages, but no longer in Europe and North America. These pioneers still exist – in Asia. Some of them became the world's largest recycling companies. We will definitely talk about this at the IERC 2012.

Regulations and new laws do not hurt our recycling industry, but the unlevelled international playing field and the total lack of law enforcement are the critical factors of our economy. We definitely need the help of the politicians and authorities of our civilized countries.

EU is trying to preserve raw materials in order to supply European industries. But at the same time, EU does not make sufficient action against illegal export of wastes to Africa and Asia. It is said that rare earth materials are critical. But why does EU allow the export of used electric motors to Asia? Elec-

tric motors contain magnets

– one of the major sources
for rare earth elements!

IERC 2012 will give you the platform to discuss such issues. It is a growing, innovative, neutral and very effective platform to meet clients, listen to the news of the speakers, discuss with the authorities, watch the hottest products of the exhibitors and make business in a relaxed atmosphere.

I look forward to meeting you in beautiful Salzburg – a town full of pioneers and success stories.



#### **KEY MESSAGES**



MICHAEL WIDMER
Bank of America Merrill Lynch
Global Research Strategist
United Kingdom

"HOW DO RAW MATERIAL PRICES DEVELOP"



ROSALINDE VAN DER VLIES

European Commission DG Waste Management Deputy Head of Unit Belgium

"EUROPE'S GOAL OF BECOMING A RESOURCE-EFFICIENT ECONOMY AND A RECYCLING SOCIETY"



JIM PUCKETT
Basel Action Network (BAN)
Environmental Health and Justice Activist
USA

"WHAT ELECTRONIC WASTE CAN TEACH US"



PROF. THEO LEHNER
Boliden Mineral AB
Manager Business Development
Sweden

"END PROCESSING: CHALLENGES IN CLOSING THE LOOP"



MBA Polymers, Inc. Founder and President USA

"WALK THE TALK AND ENCOURAGE OTHERS TO DO THE SAME"



**GRAHAM DAVY** 

Sims Recycling Solutions Chief Executive Officer Europe & Global SRS United Kingdom

> "WHERE WILL MATERIAL RECY-CLING TAKE PLACE IN 10 YEARS?"



#### **CARL HUIJBREGTS**

Inspectorate for Environment and Transport of the Netherlands Project Manager International Waste Shipment Collaboration Netherlands

"DO YOU REALLY KNOW WHERE YOUR E-WASTE ENDS UP?"



#### KOEN DEMESMAEKER

Umicore Precious Metals Refining Senior Vice President Belgium

"SUSTAINABLE RECYCLING
IS THE BASIS TO TACKLE THE
SCARCITY OF RAW MATERIALS"



#### INTERNATIONAL STEERING COMMITTEE



DR VIKTOR HAEFELI Chairman RUAG Schweiz AG CEO RUAG Technology Switzerland



STEPHANE BURBAN Xstrata Copper Canada Manager Recycling Switzerland



Manager Environmental Policy &



ROGER BURRI Air Mercury AG President Switzerland



DR MICHAEL BIDDLE Chairman of the Scientific Committee MBA Polymers, Inc. President and Founder USA

Programs Europe & Japan

Spain



JEAN COX-KEARNS Dell Global Takeback Director of Compliance Ireland



MANFRED BECK
Recycling International
Magazine
Editor
Netherlands



MANFRED FAHRNER ALBA R-plus GmbH Chief Sales Officer Germany



DR MARCO BULETTI
Federal Office for the Environment
(FOEN), Waste Recovery and
Treatment Section
Deputy Head of Section
Switzerland



STEFAN-GEORG FUCHS Aurubis AG Head of Global Electronic Scrap Procurement Germany



DR SVEN GRIEGER ENE EcologyNet Europe GmbH Managing Director Germany



KLAUS HIERONYMI Hewlett-Packard Chairman of the Environmental Board Europe – Middle East – Africa



DR JACO HUISMAN
Delft University of Technology
Associate Professor
Netherlands



PROF. THEO LEHNER
Boliden Mineral AB
Manager Business
Development
Sweden



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



DR THOMAS MARINELLI Philips Lighting B.V. Director WEEE Management Netherlands



VENKATESHA MURTHY Cimelia Resource Recovery Pte. Ltd. Managing Director Singapore



WENDY NEU
Hugo Neu Corporation
Executive Vice President
USA



DR ANDREAS RÖTHLISBERGER WEEE Forum President Switzerland



PROF. YASUHIRO TSUGITA University of EHIME Professor and Consultant Japan



NORBERT ZONNEVELD EERA Executive Secretary Netherlands



For the participants of the congress a number of rooms are held at a special rate until December 16, 2011 at the hotels mentioned below. Reservation after this date will be subject to space and rate availability. If you wish, you may also extend your stay at the same rate.

#### HOTEL ACCOMMODATION



The 11<sup>th</sup> International Electronics Recycling Congress IERC 2012 will be held at the:

#### **Salzburg Congress**

Auerspergstraße 6 5020 Salzburg, Austria

Phone +43 662 889870 +43 662 88987210 www.salzburgcongress.at



Salzburg Congress is located in the centre of Mozart's city. You can easily reach the congress centre by all modes of transport.



#### Salzburg – The city of Mozart

UNESCO nominated Salzburg's city centre as part of the world's cultural and natural heritage. Now the city officially ranks among the most beautiful cities in the world, certainly one deserving a high degree of protection.

www.salzburg.info





















#### Sheraton Salzburg Hotel \*\*\*\*\*

Auerspergstraße 4, 5020 Salzburg Phone +43 662 889990 +43 662 881776

www.sheraton.com/salzburg

next to the congress centre

#### Hotel Bristol Salzburg \*\*\*\*\*

Makartplatz 4, 5020 Salzburg Phone +43 662 873557

Fax +43 662 8735576 www.bristol-salzburg.at

5 minutes walking distance to the congress centre

#### Hotel Crowne Plaza Salzburg \*\*\*\*

Rainerstraße 6-8, 5020 Salzbura

Phone +43 662 889780 Fax +43 662 878893 www.imlauer.com

2 minutes walking distance to the congress centre

#### Best Western Hotel Imlauer \*\*\*\*

Rainerstraße 12, 5020 Salzburg

Phone +43 662 88992 +43 662 8899271

www.imlauer.com

(non smoking hotel, free parking!)

5 minutes walking distance to the congress centre

#### Hotel Zum Hirschen Achat Plaza \*\*\*\*

Saint Julien Straße 21–23, 5020 Salzburg

Phone +43 662 889030 Fax +43 662 8890358 www.zumhirschen.at

5 minutes walking distance to the congress centre

#### CONGRESS PROGRAM IERC 2012

TUESDAY, JANUARY 17, 2012

17.00 – 19.00 Registration

WEDNESDAY, JANUARY 18, 2012

08.30 – 09.30 Registration, welcome coffee and tea

Session 1: Keynote speakers from industry and authorities Session Chairman: Dr Viktor Haefeli, Chairman of the Steering Committee

09.30 - 09.45 "Welcome and Introduction"

Dr Viktor Haefeli, Chairman of the Steering Committee

09.45 – 11.00 **KEYNOTE SPEAKERS** 

"How do raw material prices develop?"

Michael Widmer, Bank of America Merrill Lynch, United Kingdom

"Europe's goal of becoming a resource-efficient economy and a recycling society"

Rosalinde van der Vlies, European Commission, Belgium

"What electronic waste can teach us"

Jim Puckett, Basel Action Network (BAN), USA

11.00 - 11.30 Coffee break

11.30 – 13.00 END PROCESSORS DEBATE: "Where will material recycling take place?"

Moderator: Prof. Theo Lehner, Boliden Mineral AB, Sweden

Participants: Dr Mike Biddle, MBA Polymers, Inc., USA

Graham Davy, Sims Recycling Solutions, United Kingdom

Koen Demesmaeker, Umicore Precious Metals Refining, Belgium

Stefan-Georg Fuchs, Aurubis AG, Germany Paul J. Healey, Xstrata Copper, Canada

PRESENTING THE COWBELL AWARD 2012

13.00 - 14.30 Lunch

Session 2: New challenges Session Chairman: Prof. Hsiao-Kang Ma National Taiwan University, Taiwan

14.30 – 15.00 "Li-ion batteries – Mobile energy and dangerous goods in WEEE"

> Imke May, Stiftung Gemeinsames Rücknahmesystem Batterien, Germany

15.00 – 15.30 "Recycling of high purity selenium from CIGS solar cell materials"

> Anna Gustafsson, Chalmers University of Technology, Sweden

Parallel Session 2: Country reports Session Chairman: Wendy Neu Hugo Neu Corporation, USA

"The recovery and recycling industry in Spain" Alicia García-Franco Zúñiga, Spanish Federation for recovery and recycling Spain

"WEEE management in Romania" Marius Costache, GreenWEEE International SA. Romania

Parallel Session 3: New processes I

ALBA R-plus GmbH, Germany

metals from e-waste"

Session Chairman: Manfred Fahrner

"Novel distributed solutions for sustainable

and economic recovery of base & precious

15.30 - 16.00 Coffee break

Session 3: Standards Session Chairman: Dr Andreas Röthlisberger, WEEE Forum, Switzerland

16.00 - 16.30 "Reuse criteria for WEEE" Dimitri Strybos, OVAM – Public Waste

Agency of Flanders, Belgium

16.30 - 17.00 "Different recycling standards in the EU and the US"

> Jean Cox-Kearns, DELL Global Takeback Ireland

17.00 – 17.30 "Lifting a tip of the veil on WEEELABEX conformity verification"

Privahini Bradoo, BioMine, USA

"How can you reach the highest environmental standards by simple and efficient WEEE-recycling-technology?" Helmut Oberguggenberger, MeWa Recycling, Germany

"Optical sorting in high-definition of WEEE" Felix A. Hottenstein, MSS, Inc., USA

17.30 – 18.30 "Bierfass" reception in the exhibition hall sponsored by

Dr Robert Hediger, WEEE Forum, Belgium





19.30 **Networking dinner** 

#### **CONGRESS PROGRAM IERC 2012**

#### THURSDAY, JANUARY 19, 2012

08 00 - 09 30 Welcome	coffee and toa

	Session 4: <u>Flat panel display recycling</u> Session Chairman: Dr Sven Grieger, ENE EcologyNet Europe GmbH, Germany
09.00 - 09.30	"Feasibility research of E-waste recycling processes in Vietnam: An investigation with CRT glass and PCBs at the small communities"  Prof. Do Quang Trung, Vietnam National University of Hanoi (VNUH), Vietnam
09.30 – 10.00	"Risks and opportunities in the recycling of flat panel displays - Results of a Swiss study"  Heinz Boeni, Empa – Materials Science & Technology, Switzerland
10.00 – 10.30	"Application of environmental practices in the commercial recycling of liquid crystal"  Dr Timothy McDonnell & Dr Karl Williams, University of Central Lancashire, United Kingdom

	Dr Timothy McDonnell & Dr Karl Williams, University of Central Lancashire, United Kin					
10.30 – 11.00	Coffee break					
	Session 5: <u>Strategic metals recycling</u> Session Chairman: <u>Stefan-Georg Fuchs</u> Aurubis AG, Germany	Parallel Session 5: <u>New colletion categories</u> Session Chairman: Dr Marco Buletti Federal Office for the Environment FOEN Switzerland				
11.00 – 11.30	"Reconstituting rare earth permanent magnets from process and end-of-life scrap. A recycling process that maximizes the recovery of added value"  Jack Lifton, Technology Metals Research LLC, USA	"Take back and recycling of end-of-life PV panels: Experiences and results of the European system" Dr Virginia Gómez, PV CYCLE aisbl Belgium				
11.30 – 12.00	"The new Rare Earths urban mine: Rhodia launches an industrial unit for RE recycling from used low consumption lamps" Nicolas Barthel, Rhodia Rare Earth Systems France	"SVEG campaign on the collection of powertools in the Netherlands: Weaknesses and experiences for the future" Wilfred Steeman, Bosch Power Tools Benelux / Dutch Foundation Powertools Recycling (SVEG), Netherlands				

Session 6: Lighting & lamp recycling Session Chairman: Dr Thomas Marinelli Philips Lighting B.V., Netherlands

13.30 – 14.00 "Lamp recycling in changing markets" Christian Bonmann, DELA GmbH **Recycling Solutions, Germany** 

14.00 - 14.30 "The future of LED lighting: Facts & figures"

Harry Verhaar, Philips Lighting B.V. **Netherlands** 

Parallel Session 6: New processes II Session Chairman: Venkatesha Murthy Cimelia Resource Recovery Pte. Ltd., Singapore

"Practical application of a magnetic fluid separator for the processing of e-scrap" Prof. Wijnand Dalmijn, Liquisort Metals B.V. Netherlands

"Recovery of metals from electronics waste using DC plasma arc technology" Dr Tim Johnson, Tetronics Ltd. **United Kingdom** 

#### 14.30 – 15.00 Coffee break

15.00 – 17.00 PANEL DISCUSSION: "Who takes the responsibility for collection?"

"Facts & figures on collection"

Leo Donovan, WEEE Ireland, Ireland Victor Duart, IBM Corporate Environmental Affairs, Spain Dr Jaco Huisman, United Nations University – UNU, Netherlands Dr Kirstie McIntyre, Hewlett-Packard, Europe, Middle East and Africa

Moderator: Norbert Zonneveld, EERA, Netherlands

Participants: Carl Huijbregts, Inspectorate for Environment and Transport, Netherlands

Gerhard Jokic, REMONDIS Electrorecycling GmbH, Germany

Luigi Meli, CECED, Belgium

Jan-Willem Scheijgrond, Philips, Netherlands

Jan Vlak, Wecycle, Netherlands

from 17.00 Cocktail reception in the exhibition hall

FRIDAY, JANUARY 20, 2012

## MONTANWERKE BRIXLEGG AG BRIXLEGG



**08.30** Departure by bus to Montanwerke Brixlegg AG

10.30 Arrival at Montanwerke Brixlegg AG

10.30 – 12.30 **Visit of the copper smelter** 14.30\* Arrival at Salzburg Airport

14.45 Arrival at the Salzburg Congress Centre

**Montanwerke Brixlegg AG** is Austria's only copper producer and has a history stretching back more than 500 years. Today Montanwerke is one of the leading secondary smelters in Europe.

Core business is recycling copper and other precious metals from scrap and in further steps process it into cathodes and billets. For these two highly pure copper products the total output is over 200,000 tons per year.

www.montanwerke-brixlegg.com

 $\ensuremath{^*}$  No guarantee on arrival time due to traffic conditions.





99,99%

### COPPER CONTENT



Each year, the Montanwerke Brixlegg AG processes approximately 130,000 tons of copper containing secondary materials. The recovered highly pure copper has a copper content of 99,99 %. This excellent quality and a wide range of application possibilities have made the brand "BRX" well known worldwide.

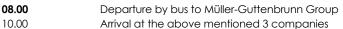
More information about recycling and the production you can find under www.montanwerke-brislegg.com



FRIDAY, JANUARY 20, 2012



## MÜLLER-GUTTENBRUNN, METRAN AND MBA POLYMERS, AMSTETTEN/KEMATEN



10.00 – 14.30 Visit of the shredder plant of Metall Recycling Mü-Gu

Visit of the metal separation plant of Metran

Visit of the plastic recycling plant of MBA Polymers

17.00\* Arrival at Salzburg Airport

17.15 Arrival at the Salzburg Congress Centre

The **Metall Recycling Mü-Gu** in Amstetten de-pollutes the E-Waste in an environ-mentally friendly manner and each of the de-polluted fractions are disposed of in line with the E-Waste directive. The selective shredder separates high quality ferrous metal scrap; most non ferrous metals are further extracted and concentrated by type of metal (copper, aluminium etc.) by the company Metran GmbH.

Metran also creates a valuable plastics fraction, which is delivered to MBA Polymers for further processing. Even metals <1 mm can thus be extracted and re-introduced into the recycling cycle. MBA Polymers recovers high-quality post-consumer ABS, HIPS and PP resins for use in demanding applications. Premium grades are offered under the EvoSource™ brand and are either UL-HB recognized, impact modified and/or available in different colours – replacing virgin plastics and closing the loop. These post-consumer plastics reduce energy consumption by over 80% and protect the environment from between 1 and 3 tons of CO₂ emissions, compared to the production of one ton of "virgin" plastics from petrochemicals. The technical visit will include the MBA Polymers plant in Kematen/Ybbs in Lower Austria, which is one of the most advanced plastics recycling facilities in the world, covering approximately 20,000 m², with a processing capacity of 40,000 tons per year. MBA Polymers Austria employs a staff of 75 highly qualified personnel, operating and supervising the individual production stages, quality assurance, and preventive maintenance.

www.mueller-guttenbrunn.at, www.mbapolymers.com

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



Müller-Guttenbrunn Group

We utilize raw materials from waste fractions Your partner for e-waste, end-of-life vehicles and metals





use of the most modern separation technologies

recovery of valuable resources recycling of small scale metal particles

environmental-friendly-removal of harmful substances

partner of the Lower Austrian Waste Management Associations





Müller-Guttenbrunn Group, Industriestrasse 12, A-3300 Amstetten, Austria
Tel: +43 7472 / 64 181, Fax: +43 7472 / 64 181 38, www.mueller-guttenbrunn.at, office@mueller-guttenbrunn.at



FRIDAY, JANUARY 20, 2012

#### SAUBERMACHER DIENSTLEISTUNGS AG UNTERPREMSTÄTTEN



**08.00** Departure by bus to Saubermacher Dienstleistungs AG

12.00 Arrival at Saubermacher Dienstleistungs AG

12.00 – 14.30 Visit of the e-cycling-park with MeWa Querstromzerspaner in Unterpremstätten

15.00\* Arrival at Graz Airport 19.00\* Arrival at Salzburg Airport

19.15 Arrival at the Salzburg Congress Centre

**Saubermacher** is Austria's leading private waste disposal and recycling specialist. The company is regarded as a highly competent partner for an entire array of environmental issues for more than 1,600 local authorities and 40,000 customers within industry, trade and commerce in Austria.

As an internationally successful company, Saubermacher manages about 100 locations and 75 joint ventures in Austria, Slovenia, Hungary, Czech Republic, Romania, Croatia, Serbia and Macedonia from its headquarters in Feldkirchen bei Graz.

www.saubermacher.com



für eine lebenswei

# Saubermacher





#### Saubermacher e-cycling-park

With this high-tech equipment, up to 15,000 tons of small electric appliances can be processed annually in an environmentally-friendly way. Through the use of the equipment, Saubermacher thus helps to ensure that the entire added value remains in Styria.

A-8141 Unterpremstätten, Am Damm 50 Ing. Alois Grinschgl, Head of E-cycling Services Tel: 059 800 8401, Fax: 059 800 8499, Mobile: 0664 80598 8401 Email: a.grinschgl@saubermacher.at or batterien@saubermacher.at

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

FRIDAY, JANUARY 20, 2012

# S+S SEPARATION AND SORTING TECHNOLOGY GMBH SCHÖNBERG (GERMANY)



**08.00** Departure by bus to S+S Separation and Sorting Technology

10.30 Arrival at S+S Separation and Sorting Technology

10.30 – 13.00 Introduction of S+S Sorting Technology, company tour and demonstration of

S+S sorting machines in action in the S+S technical center

16.00\* Arrival at Salzburg Airport

16.15 Arrival at the Salzburg Congress Centre

At the plant tour to S+S Separation and Sorting Technology GmbH you will get an introduction about the company. After a plant tour you will see some sorting and separation trials in the S+S laboratory.

The VARISORT COMPACT CMN sorter will be used to demonstrate different sorting tasks for the e-scrap recycling industry like metal separation, copper wire separation and plastic type separation.







Engineered solutions for the e-scrap recycling industry.



S+S Separation and Sorting Technology GmbH

- Metal SeparatorsColour Separators
- **Sorting Systems**

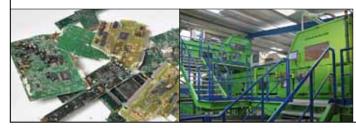
# sorting purity.

For more than 30 years, S+S has been a leading manufacturer of metal detection and sorting technology for companies worldwide. We are focused on providing the highest quality products while utilizing state of the art technology. This attention to detail ensures reliable performance under the harshest operating conditions.

By designing solutions tailored specifically for our customers, we produce results that ensure maximum return on investment.

#### Sorting examples for e-scrap:

- Separation of CRT glass Separation of heavy metals
- Wire separation Separation of PC boards
- Plastic type separation Metal separation





www.sesotec.com/ escrap

FRIDAY, JANUARY 20, 2012

#### VOESTALPINE AG, LINZ



voestalpine Stahlwelt

**09.00** Departure by bus to voestalpine AG

11.00 Arrival at voestalpine AG

11.00 – 14.00 Guided tour at voestalpine Stahlwelt and plant tour at the factory premises

of voestalpine in Linz

16.00\* Arrival at Salzburg Airport

16.15 Arrival at Salzburg Congress Centre

Around the world, **voestalpine** produces, processes and develops steel to make high-quality products and innovative solutions. Be our guest – come and visit voestalpine's world of discovery, where you can learn more about steel and the countless ways it can be used. Discover the fascinating world of steel. Discover the voestalpine Stahlwelt.

Our steel plant is the cleanest and most innovative in the world. A claim many steel plants make – but how many give anyone a glimpse of what's on the other side of the factory gate? We do, and we even go one step further: After you visit the exhibition in the voestalpine Stahlwelt, you're in for an exciting plant tour.

Our multimedia buses will transport you deep inside the plant grounds covering 5.2 square kilometers. Directly to the production facilities, where you will get a behind-the-scenes look at the steel-making process.

Please note: that you must wear sturdy, closed-toed shoes (no sandals, flip-flops, crocs, etc.). We also recommend you wear stain-resistant clothing.

www.voestalpine-stahlwelt.at



## **Discover** a new world.

Our world relies on steel. From cutlery to cars, from razor blades to skyscrapers, from tools to rocket ships, from railway tracks to highway bridges – steel shapes our every day lives, makes life easier for us, moves us forward. Steel connects continents, countries and people. Be our guest – come and visit voestalpine's world of discovery, where you can learn more about steel and the countless ways it can be used. Discover the fascinating world of steel. Discover the voestalpine Stahlwelt.

www.voestalpine-stahlwelt.at





voestalpine Stahlwelt

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

#### **EXHIBITION AND POSTER PRESENTATIONS**

# -35





A large exhibition area will be offered to companies wishing to display their products or advertising materials. The fees for an exhibition booth for the full time of the congress are:

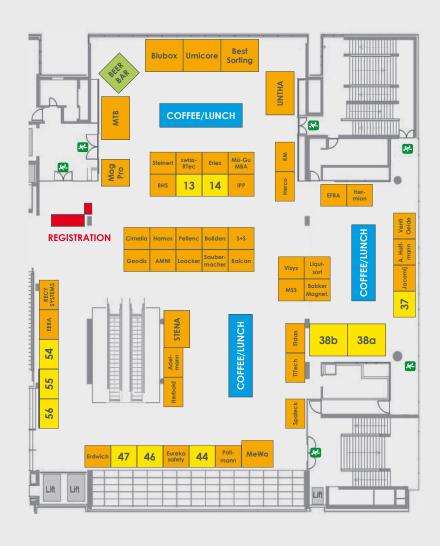
Booth 6 m<sup>2</sup> 2 m x 3 m EUR 3'000.-Booth 12 m<sup>2</sup> 3 m x 4 m EUR 4'500.-

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





# LAYOUT EXHIBITION AS PER OCTOBER 3, 2011



#### **EXHIBITORS**

AS PER OCTOBER 3, 2011







































































































#### **NETWORKING DINNER**

On Wednesday, January 18, a special networking dinner will be organized in beautiful Salzburg.

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





Registration for the congress should be made by means of the registration form. Participants registering and paying before November 30, 2011 will benefit from a reduced registration fee. The registration fee includes congress, entrance to the exhibition, proceedings and luncheons.

# REGISTRATION FEES

Congress Fee		before Nov. 30, 2011		after Nov. 30, 2011	
Fee for participants Fee for speakers	€	1'490 890	€	1'590 990	
Fee for students	€	590.–	€	690.–	
Networking dinner (Jan. 18, 2012)	€	100	€	120	
Networking dinner for spouse (Jan. 18, 2012)	€	120.–	€	140.–	
Plant Tours (Jan. 20, 2012):					
– Montanwerke Brixlegg AG	€	40	€	60	
– Müller-Guttenbrunn, Metran, MBA Polymers	€	40	€	60	
– Saubermacher Dienstleistungs AG	€	40	€	60	
<ul><li>S+S Separation &amp; Sorting Technology GmbH</li></ul>	€	40	€	60	
– voestalpine AG	€	40	€	60.–	

#### All prices excl. 20% Austrian VAT

Congress registration on site € 100.– surcharge

#### **Additional Proceedings**

If it is not possible for you to attend the congress, you may purchase the complete proceedings at  $\in$  350.—. Participants will get the proceedings free of charge.

#### Paymen<sup>1</sup>

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

Beneficiary: ICM AG

Bank: Neue Aargauer Bank, 5400 Baden, Switzerland

IBAN: CH41 0588 1044 7941 7200 0

Swift code: AHHBCH22XXX

#### BEAUTIFUL SALZBURG









The city of Salzburg, best known as the birthplace of Mozart, has a very proud history and is able to magic its visitors back in time. Salzburg is a World Metropolis, Cultural Centre, Festival and Mozart city all rolled into one.

Numerous cultural museums and exhibitions are waiting to be visited. Salzburg offers Tradition and Innovation and also of course outstanding Architecture. There are only a very few cities with such outstanding baroque work within its many churches. Also worth a mention is the Hohensalzburg Fortress a symbol of the Mozart city and the largest complete fortress in middle Europe.

Salzburg, situated on the Salzach (Salt) river is also a city embedded within an imposing mountain world. Discover and experience with us this fascinating city and the amazing natural beauty within the area.

www.salzburg.info



Why not extend your stay in Salzburg and enjoy a beautiful weekend in the mountains only 1 hour car drive from Salzburg?

Obertauern is one of the alpine skiing resorts where snow is guaranteed. And that means: ideal skiing conditions from the end of November until beginning of May!

Obertauern is situated in the fantastic Salzburg mountain world at altitudes between 1630 m and 2313 m. There you will also have great après ski, exciting nightlife, modern hotels, top wellness and fitness facilities and last but not least a wonderfully relaxed holiday atmosphere!

We have organized a skiing weekend in the beautiful hotel "Das Seekarhaus"

www.seekarhaus.at which is situated in the middle of the mountains. A limited number of hotel rooms are reserved, so please book today!

Come and enjoy together with your friends and business partners a great, unforgetable weekend with lots of snow, fun and "Jägertee".

For booking contact: info@icm.ch





ICM AG International Congress & Marketing Schwaderhof 7 5708 Birrwil, Switzerland

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#### 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

#### **ORGANIZER OF IERC 2012**



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#### 6<sup>th</sup> World Recycling Forum WRF 2011 International Conference & Exhibition on Electronics, Battery and Car Recycling

November 15 - 18, 2011, Hong Kong

The next top quality **recycling forum** will focus on:

- How to invest into the raw materials business in Asia
- OEM's success and challenges regarding recycling
- Update of the booming recycling business in China and India
- Best available technologies for dismantling, sorting and recycling
- Global trade and transboundary movement of raw materials and waste
- Update on worldwide recycling laws and regulations

An **exhibition** area is integrated into the conference facility, where vendors meet their clients. Cocktails receptions and a networking dinner create an excellent atmosphere to get in touch with your business partners, friends and competitiors. **Plant fours** to leading manufacturing and recycling companies in the vicinity of Hong Kong, Shenzhen and Guangzhou are offered to all participants.

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#### 12<sup>th</sup> International Automobile Recycling Congress IARC 2012

March 21 – 23, 2012, Budapest, Hungary

The next top quality **congress** in ELV recycling will focus on:

- How do car manufacturers and the industry close the recycling loop?
- New cars and new recycling technologies
- Where are the new cars sold? Where are they going to be recycled?
  Best available recycling technologies
- Reports about illegal export of wrecked vehicles
- Reports about flegal export of whecked verticles
   Hybrid vehicle dismantling and parts reuse
- European ELV Directive A monster with no teeth?
- Recycling High-tech or low-cost technology?

An **exhibition** area is integrated into the conference facility, where vendors meet their clients. Cocktail receptions and a networking dinner create an excellent atmosphere to get in touch with your business partners, friends and competitors.

**Plant tours** to leading recycling companies and car manufacturers in the vicinity of Budapest are offered to all participants.

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