PRESS RELEASE

International Congress focuses on Battery Recycling

Muri, Feb. 05, 2002

Can environmental threats simply be "ruled" away? Despite the fact that most western world countries have established schemes for collection and recycling of spent batteries, considerable amounts of highly noxious substances such as mercury or cadmium are still ending up on unslated landfills or are strewn over the countryside. The national collection and disposal schemes set up in different EU countries exhibit a remarkable lack of coincidence and sometimes of efficiency. More bureaucracy will not automatically prevent further damage to the environment. The assessment of current approaches and the search for better solutions should urgently be performed on an international scale.

The three-day International Battery Recycling Congress 2002 in Vienna (Austria) offers an excellent opportunity for decision-makers and experts to acquire high-level information and to compare their experiences. Main topics of the first day will be the state of the legislation and on the different schemes for collection and recycling of spent batteries and accumulators, as well as on financing questions, rules for battery production and producer responsibilities. The lectures of the of the second day will focus on national recycling approaches and the search for "best practices". Important aspects are the analysis of waste steam ingredients, the assessment of collection rates and ways to cut costs. Questions related to the protection of the environment and to the "design for recycling" will be treated on the third day. Further lectures will deal with technology trends and markets as well as with new approaches to "multi-lifecycle-engineering".

The congress, which will be held from July 3rd to 5th 2002 in Vienna, Austria, is organized by the Swiss based ICM AG in cooperation with associations of the electronic and electric industry as well as national organisations for collection and recycling of batteries in Europe, Japan and the United States. It will take place in the hotel Intercontinental in Vienna. All papers will be presented in English.

For information and bookings contact: ICM AG, Tel. +41-56 664 72 50, e-mail info@icm.ch, www.icm.ch.

International Congress for Battery Recycling
July 3 – 5, 2002
Vienna, Austria

Patronage
European Battery Recycling Association
European Portable Battery Association

Sponsored by:
Foreword

The International Congress for Battery Recycling 2002

Battery technology is in continuous evolution to meet the requests of aggressive markets, such as the automobile sector and the consumer electronics, just to mention the most visible ones. This fact has launched a new series of production of batteries based on a large variety of chemistries and accordingly prototypes of all kind and sizes, which are constantly produced at a monthly rate of several millions.

In the first decades of the past century the battery market was dominated by "classic" systems, e.g. the primary zinc-carbon and the alkaline-manganese, the rechargeable lead-acid and nickel-cadmium.

The turn of the millennium has experienced the booming of new, revolutionary types, such as the nickel-metal hydrides and particularly the lithium-ion. Most of the components of these new battery systems may be toxic for the environment and for the human health. This is the challenge to recycle them properly and safely.

During the past years significant progress has been obtained throughout the world in terms of the development of collection programs and of recycling schemes of exhausted batteries. However, there is still a lot to be done to reach an acceptable compromise between the cost and the efficiency of recycling.

Another issue is the establishment of a constructive dialogue between the battery industry, the authorities, the collectors, the recycling companies and the consumers. This congress provides a perfect forum, where the battery experts can meet, discuss and find suitable solutions to the problems that still prevent a proper treatment of used batteries.

The sessions cover topics devoted to legislative update and country reports, to recycling technologies, plants and collection, to lithium batteries and lithium recycling technologies and other systems. To this exciting scientific program, the 2002 edition of the congress also adds the charm of the location. Welcome to Vienna!

Prof. Dr. Bruno Scrosati
Steering Committee

International Steering Committee

The congress' international Steering Committee is chaired by Mr S. Pietro Amico, who is the President of the European Battery Recycling Association (EBRA).

The Steering Committee consists of:

S. Pietro Amico, Chairman
President of EBRA
Erachem Cornilog Europe
Belgium

Jan Bartels
Managing Director
STIBAT
Netherlands

Manfred Beck
Editor
Recycling International Magazine
Netherlands

Norm England
President
Portable Rechargeable Battery Association (PRBA)
USA

Jürgen Fricke
Chairman of the Board
Foundation GRS Batterien
Germany

Kinya Fujimoto
General Manager
Battery Association of Japan (BAJ)
Japan

Oliver Lindqvist
Professor
Dep. of Inorganic Chemistry
Chalmers University of Technology
Sweden

Toshio Matsuoka
Consultant
Matsuoka Technical
Consul. Ltd.
Japan

Bruno Scrosati
Professor
Department of Chemistry
University of Rome
Italy

Alfons Westgeest
Secretary General
European Portable Battery Association (EPBA)
Belgium
Location of the congress

The International Congress for Battery Recycling (ICBR 2002) will be held in the Hotel Inter-Continental from 3 - 5 July 2002 in Vienna, Austria.

Hotel Inter-Continental*****
Johannesgasse 28
A-1037 Vienna
Phone: +43 1 711 22 0
Fax: +43 1 713 44 89
www.vienna.intercontinental.com
vienna@interconti.com

The Hotel Inter-Continental is located by the famous Stadtpark and just a few minutes walk from the Ringstrasse, State Opera House and Stephansplatz. The hotel is the ideal starting point from which to explore this fascinating city.

For the participants of the congress a number of rooms are held at a special rate (€ 165) if you register before May 24, 2002. If you wish, you may also extend your stay at this beautiful hotel at the same special rate.

Who should attend?

- Battery producers
- Recycling companies
- Waste management companies
- Battery collection companies
- Associations in the field of battery waste management
- Financing organization for battery recycling
- Environmental authorities
- Laboratories for material science
- Universities and research institutes
- Consultants

Organizer of the ICBR

ICM AG
International Congress & Marketing
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Fax: +41 56 664 72 52
E-mail: info@icm.ch
Internet: www.icm.ch

Jeanette Dufflinger
Congress Organizer

Erika Noé
Congress Assistant

Petra Fiorentin
Congress Assistant

Travelling to Vienna

You can easily reach Vienna by plane, train and car. The distance from the international airport to the hotel Inter-Continental is 20 km and takes approx. 20 minutes by taxi.

www.info.wien.at
Congress Program ICBR 2002

Wednesday, 3 July 2002

09.00 - 12.30  Registration
13.00 - 13.15  "Welcome and introduction"
13.15 - 13.30  Key-Note Speech

Session:  Legislative update & country reports I
13.30 - 14.00  "Battery recycling in Taiwan"
               Hsiung-Wen Chen, Shou-Chien Lee, EPA, Taiwan
14.00 - 14.30  "The OECD program for NiCd battery collection and recycling"
               Hugh Morrow, Intern. Cadmium Association, USA
14.30 - 15.00  "Overview on the legislation in Europe and its implementation by
collection and recycling organisations"
               Hans Koefmancher, EPBA/Duracell Europe, Belgium
15.00 - 15.30  Coffee break

Session:  Legislative update & country reports II
15.30 - 16.00  "High targets for collection and recycling - a challenge for the
               German collection system"
               Jürgen Fricke, GRS Batterien, Germany
16.00 - 16.30  "E = mc²"
               Jan Bartels, Frans de Buck, Slabat, Netherlands
16.30 - 17.00  "Financing the recycling loop for consumer batteries and batteries
               for electrical vehicles"
               Robert Eloy, SAFT, France
19.30  Heurigen Evening

Thursday, 4 July 2002

08.00 - 09.00  Morning coffee

Session:  Recycling technologies, plants and collection I
09.00 - 09.30  "Zimaual technologies: Alkaline hydrometallurgy: the battery
               recycling solution"
               Patric Weill, Zimaual, France
09.30 - 10.00  "Solar thermal recycling of batteries: concept, technology
               and economics"
               Nathalie Monnerie, German Aerospace Centre, Germany
10.00 - 10.30  "Battery recycling & collection in Austria"
               Christian Schamburek, Umweltforum Batterien, Austria
10.30 - 11.00  Coffee break
11.00 - 11.30  "Battery recycling through Britannia Zinc’s ISF process"
               Tom Cooney, Britannia Zinc Limited, UK
11.30 - 12.00  "Feasibility of a new closed loop recycling concept for Nickel Metal
               Hydride batteries"
               Bernd Friedrich, IME Process Metallurgy and Metal Recycling,
               Germany
12.00 - 12.30  "VALDI process for battery recycling: simplified study of a life cycle"
               Marion Nicolet, VALDI, France
12.30 - 14.00  Lunch

Session:  Recycling technologies, plants and collection II
14.00 - 14.30  "The Peperzeel model"
               Johan van Peperzeel, WA van Peperzeel b.v., Netherlands
14.30 - 15.00  "How to calculate battery recycling rates in the frame of the new
               Directive"
               Alain Vassart, EBRA, Belgium
15.00 - 15.30  Coffee break
15.30 - 16.00  "Electric and hybrid electric vehicle battery recycling"
               Rudolph G. Jungst, Sandia National Laboratories, USA
16.00 - 16.30  "Collection and recycling of used batteries: how to comply with
               producer responsibility?"
               Emmanuel Beaurepaire, Consultant, France
Friday, 5 July 2002

07.30 - 08.30  Morning coffee

Session:  

Li-batteries and Li-recycling technologies and other systems

08.30 - 09.00  “Bioadsorbers for alkali metals - a novel issue for Li-battery recycling”  
Dirk Lassner, Augustusburg BioTech GmbH, Germany

09.00 - 09.30  “Batrec process for spent Li-batteries”  
Andreas Krebs, Batrec Industrie AG, Switzerland

09.30 - 10.00  “Mechanically rechargeable magnesium-air cells with non aggressive electrolyte”  
Iliya Iliev, Central Lab. of Electrochemical Power Sources, Bulgaria

10.00 - 10.30  Coffee break

10.30 - 11.00  “Dismantling mobile telephone batteries using active disassembly”  
Nicholas Jones, Habib Hussein, Joseph Chiodo, Brunel University, UK

11.00 - 11.30  “Recycling of Li-ion batteries”  
Jacques David, SNAM, France

11.30 - 12.00  “Neutralisation and recycling of Li-batteries of electrochemical system Li/LiBF4/GBL/ICFx”  
V.M. Plakhovsky, Dnepropetrovsk State Technical University of Railway Transport, Ukraine

12.00 - 13.30  Lunch buffet

Excursion program:

Visit of Fernwärme Wien GmbH/Chemtec

13.30  Departure by bus to Fernwärme Wien GmbH

14.00  Visit of the incineration and power plant company “Fernwärme Wien” and the battery recycling plant of the company “Chemtec”

17.30  Arrival at the airport Vienna

18.00  Arrival at the hotel Inter-Continental

Fernwärme Wien GmbH
Simmeringer Haide

The waste treatment plant in Vienna recovers energy out of 100'000 t of hazardous waste and 180'000 t of waste water sewage sludge.

It is in operation since June 30, 1980.

The Chemtec battery recycling plant has a capacity of 3'000 t per year and recycles Alkali-Manganese, Zinc-Carbon and Mercury containing batteries.

This plant is in operation since March 31, 1997.

The owners are: Raiffeisen Umwelt, Fernwärme Wien and Integral Engineering.

The operator of this plant is Chemtec.

Fernwärme Wien GmbH  
Werk Simmeringer Haide  
11. Haidequerstrasse 6  
A-1110 Wien  

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Fax: +43 1 313 26 6158  
E-mail: philipp.krobath@fernwnaermwien.at  
Internet: www.sauberbrenner.at
**"Heurigen" evening**

On Wednesday, 3 July, a special evening will be organized in a "Heurigen" wine tavern.

"Heuriger" is the Viennese expression for the wine of the latest harvest and the name for the places where it is served.

"Let's go to the Heurigen" is the invitation that stands at the beginning of a sociable afternoon or evening full of fun with Heurigen music and wine adding to the enjoyment of the merry group.

The various Heurigen districts are actually located within Vienna's city limits, but mostly have village character.

Don't miss this charming evening!

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**Registration Fees**

Registration for the congress should be made by means of the registration form. Participants registering and paying **before May 10, 2002** will benefit from a reduced registration fee.

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<th>before May 10, 2002</th>
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<tr>
<td>Participants</td>
<td>€ 1'050.-</td>
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<td>Speakers</td>
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<td>Students</td>
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<td>Visit of Chemtec</td>
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<td>Heurigen Evening</td>
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<td>Additional proceedings</td>
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A special exhibition will be organized for companies wishing to display their products or advertising materials.

**Payment**

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

- **Neue Aargauer Bank**
  5300 Turgi, Switzerland

- **Beneficiary:** ICM AG
- **Account no.: 447941-72, Swift code: CRESCHZZ 80A in favour of:** AHHBCH 22
- **Clearing:** 5885
- **Remark:** International Congress for Battery Recycling