International Congress for Battery Recycling
May 2 – 4, 2001
Montreux, Switzerland

Patronage
Federal Office of Environment, Forests and Landscape, Switzerland
European Portable Battery Association, Belgium
European Battery Recyclers Association, Belgium

Sponsored by:
BATREC
ERACHEM
SANYO
STIBAT
REVATECH
SAFT
INMETRO
Foreword

The International Congress for Battery Recycling 2001

During the past two years significant efforts have been made throughout the world to develop collection and recycling schemes of used batteries. But still progress is expected to promote economical solutions for treatment of end-of-life batteries, in the frame of constructive dialogue between the battery industry, regulatory authorities and other industrial players such as collectors and recyclers.

Several recycling companies in Korea, Japan, North America and Europe have started operations and are expecting to increase plant capacity.

Will the current tender in Germany and the expected one in France be a real beginning of recycling in these countries? How will the new EC Directive impact the industry worldwide?

Technical progress has been achieved in sorting of used batteries. What are the possible effects on collection and recycling?

Battery technology and performances continue their impressive evolution. The growth of lithium-ion systems is a good example. What are the trends? What are the tracks contemplated today and tomorrow for a reasonable and economical recycling?

Ni-Cd accumulators are under fire. What is their real future?

As Chairman of the Steering Committee, I would like to invite the International audience to present and discuss national solutions regarding these and other topics.

Looking forward to seeing you in Montreux, a beautiful place in spring...

S. Pietro Amico
Chairman of the Steering Committee
International Congress for Battery Recycling

International Steering Committee

The congress’ International Steering Committee is chaired by Mr S. Pietro Amico, who is the President of the European Battery Recyclers Association (EBRA).

The Steering Committee consists of:

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

S. Pietro Amico, Chairman
President of EBRA
Belgium

Helmut Klammer
Managing Director
Batrec Industrie AG
Switzerland

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
Traveling to Montreux

(Internet: www.montreux.ch)

Montreux is located within 45 minutes from Geneva International Airport, 2 hours from the airport of Zurich and 10 minutes from the main highway, linking north and south.

The Montreux train station is in walking distance to the Hotel Le Montreux Palace.

Location of the congress

The International Congress for Battery Recycling will be held in the Hotel Le Montreux Palace from 2 - 4 May 2001 in Montreux, Switzerland.

Hotel Le Montreux Palace****

Grand-Rue 100
1820 Montreux
Phone: +41 21 962 12 12
Fax: +41 21 962 17 17
(Internet: www.montreux-palace.com)

The Hotel Le Montreux Palace is one of the most beautiful hotels in Switzerland and directly situated at the Lake Geneva. For the participants of the congress a number of rooms are held at a special rate if you register before February 28, 2001. If you wish, you may also extend your stay at this beautiful hotel at the same special rate.
Topics of the Congress Program

Wednesday, 2nd May 2001

Morning: Registration
Afternoon: Laws & regulations and collection
  - Laws and regulations regarding collection, recycling and financing
  - Laws and regulations regarding design and recycling of batteries and its raw materials
  - Product responsibility in the battery business
  - Liability of the battery manufacturing industry and the national Governments
Evening: Swiss Party

Thursday, 3rd May 2001

Morning: Collection & recycling technologies and plants
  - Country reports about battery recycling
  - Processes, technologies and existing plants to recycle used batteries
  - Battery recycling: High or low tech ?
  - How to motivate the consumers & the industry ?
Afternoon: Visit of Batrec Industrie AG, Wimmis
Evening: Return to Montreux

Friday, 4th May 2001

Morning: Environment and battery manufacturing
  - Environmental impact of batteries and components thereof
  - Environmental comparison between recycling of metals and metal production from ores
  - Portable battery applications and markets
Financing systems for recycling of used batteries
  - Economic principles and financing systems
  - Overview of existing national solutions
  - Who shall pay for recycling ?

Batrec – The outstanding solution for the recycling of dry-cell batteries

Activity:
Recycling of used dry batteries and waste containing heavy metals

Recycling = From waste to raw materials

Ferromanganese (FeMn)  Zinc  Slag
Mercury (Hg)

Capacity: 3’500 tons per year, in operation since 1992

Batrec Industrie AG  Phone: +41 33/657 25 55
Postfach 20  Fax: +41 33/657 28 76
CH-3752 Wimmis  E-Mail: batrec@batrec.ch
Who should attend?

- Associations in the field of battery waste management
- Authorities
- Recycling companies
- Battery producers
- Waste management companies
- Politicians
- Battery collection companies
- Universities

Call for papers

Speakers are invited to give a presentation on any aspect of used batteries, including:

- Collection of used batteries
- Battery recycling plants
- Financing of battery recycling
- Portable battery applications & markets
- Environmental impact of batteries and components thereof
- Communications and battery recycling
- Battery technologies and designs
- Environmental comparison between recycling of metals and metal production from ores

If you are interested in having a presentation, please get in contact with:

ICM AG, Ms Jeanette Duttlinger,
Luzernerstrasse 91, 5630 Muri, Switzerland
Phone: +41 56 664 72 50
Fax: +41 56 664 72 52
E-mail: info@icm.ch

The titles of the proposed papers should be sent as soon as possible but no later than January 19, 2001 to ICM AG.

Notes for authors

Confirmation of acceptance will be made by January 31, 2001. Authors who have been selected will be required to submit the final version of their papers no later than March 30, 2001. It will be published in the conference proceedings. Presentation times are planned at 20 minutes duration plus 5 minutes discussion. All papers must be written and presented in English.

Organizer of the International Congress for Battery Recycling

ICM AG
International Congress & Marketing
Luzernerstrasse 91, 5630 Muri, Switzerland
Phone: +41 56 664 72 50
Fax: +41 56 664 72 52
E-mail: info@icm.ch
Internet: www.icm.ch

Jeanette Duttlinger
Congress Organizer

Erika Nöé
Congress Assistant

Cornelia Hägele
Congress Assistant
Swiss Party

On Wednesday, May 2, a special Swiss Party [Gala Dinner] will be organized. Participants and accompanying persons can register on the form.

Sightseeing Tours
(minimum 20 persons)

Wednesday, May 2, 2001

- Romantic boat and castle tours
  Montreux-Vevey & Chillon Castle (half a day)
  - Departure by boat from Montreux
  - Romantic boat tour on the Lake Geneva
  - Visit the charming and well-known Chillon Castle
  - Shopping in Montreux

Thursday, May 3, 2001 & Saturday, May 5, 2001

- From 400 m to 4'000 m within 4 hours...
  Zermatt/Matterhorn (whole day)
  - Departure by bus from Montreux (333 m/1'079 ft) to Täsch
  - By railway train from Täsch to Zermatt
  - Apéro in Zermatt
  - By cable cabin to the Little Matterhorn (3'883 m/12'697 ft)
  - Panoramic view
  - Lunch & shopping in Zermatt
  - Travel back to Montreux

(http://www.zermatt.ch)

Registration Fees

Registration for the congress should be made by means of the registration form. Participants registering and paying before January 12, 2001 will benefit from a reduced registration fee.

<table>
<thead>
<tr>
<th></th>
<th>before January 12, 2001</th>
<th>after January 12, 2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants</td>
<td>CHF 1'450.– (€ 970.–)</td>
<td>CHF 1'650.– (€ 1'100.–)</td>
</tr>
<tr>
<td>Students</td>
<td>CHF 550.– (€ 370.–)</td>
<td>CHF 650.– (€ 435.–)</td>
</tr>
<tr>
<td>Visit of BATREC</td>
<td>CHF 130.– (€ 85.–)</td>
<td>CHF 130.– (€ 85.–)</td>
</tr>
<tr>
<td>Swiss Party/Gala Dinner</td>
<td>CHF 160.– (€ 105.–)</td>
<td>CHF 160.– (€ 105.–)</td>
</tr>
</tbody>
</table>

Sightseeing Tours
Tour 1, May 2, 2001
Montreux & Chillon Castle
- CHF 60.– (€ 40.–)

Tour 2, May 3, 2001
Zermatt & Matterhorn
- CHF 190.– (€ 125.–)

Tour 3, May 5, 2001
Zermatt & Matterhorn
- CHF 190.– (€ 125.–)

Proceedings
Additional proceedings
- CHF 500.– (€ 335.–)

Exhibition
Exhibition stand (1.5 m x 3 m)
- CHF 3’000.– (€ 2’000.–)

A special exhibition will be organized for companies wishing to display their products or advertising materials.

Payment

Payment should be made by bank transfer in Swiss currency (CHF) or by credit card. Wire payment to:

Neue Aargauer Bank, 5300 Turgi, Switzerland
Account no.: 447941-71-1, Swift code: CRESCHZZ B00 in favour to: AHH8CH 22
Clearing: 5885
Remark: International Congress for Battery Recycling

(1 Franc = 0.667 Euro as of November 2000)