



12th International Congress for Battery Recycling

June 20 – 22, 2007
Budapest, Hungary



Patronage:
European Battery Recycling Association
European Portable Battery Association

Sponsored by:



Foreword of ICBR 2007

Batteries are part of our day life. Conventional types, such as the commonly named dry cells, are widely used to power a large variety of house commodities. The problem arises when they become exhausted and we have to discard them. New markets which involve massive use of exotic batteries are also booming. Popular portable devices, such as lap top computers and, particularly, cellular phones, are now diffused by millions. Lithium batteries are the power sources of choice for these devices; in few years they will reach the exhaust state and it is still unclear which will be their fate. The hybrid car, which only few years ago was a motor show curiosity, is now an establish product with many hundred thousands unities in the road. The electric engine of these cars is powered by a nickel-metal hydride battery module, whose life is estimated to be of the order of three or four years. The disposal of these multi-battery modules, which obviously is more complicated than that of single elements, has not yet been planned.

One aspect is clear: all the batteries, conventional or advanced, are based on chemistries which may be dangerous for the human health. Thus, they cannot be simply discarded in the urban waste but all require separate collection and a proper recycling. Although recycling is a growing concern in the European countries, still the number of batteries which reach the recycling plants is a minor fraction of those entering the market. It is reasonable to estimate in about 200.000 tons the average yearly sales of batteries in the European Community. However, the present recycling rate is still lower than the 25% target set by the current EU Directive, and this refers only to conventional portable batteries such as primary alkaline-manganese, zinc-carbon, zinc-air and secondary nickel-cadmium.

There is the need of urgent actions to reach higher recycling levels, also in view of the new Directive which calls for a 45% target within the next 10 years. It is then of paramount importance to develop a common policy to achieve collection procedures more efficient than the present ones and to design appropriate recycling plans, especially considering new types of batteries, e.g., lithium and nickel-metal hydride that will soon invade the waste stream. This important goal can be reached only by promoting technical and environmental discussions among experts who can jointly define the present and future strategies of the collection policy, such as to identify the most acceptable and profitable compromise between cost and efficiency of recycling the various batteries types.

This congress is unique in this respect since it is the only internationally recognized event where attendees may benefit by high level technical presentations, as well as by informative debates on the current environmental legislations. Thus, ICBR cannot be missed by anyone involved in the field. Beside the informative and exciting programs, ICBRs are well known for the high standard of the social activities and for the choice of elegant and beautiful sites. This tradition is maintained also for this 2007 edition and I am sure that you will not be disappointed by having decided to be with us in one of the most beautiful European cities.

Welcome to ICBR 2007, welcome to beautiful Budapest!

Professor Bruno Scrosati

Chairman of the Steering Committee
International Congress for Battery
Recycling

International Steering Committee



Prof. Bruno Scrosati,
Chairman
University of Rome
Department of Chemistry
Italy



Jan Bartels
STIBAT
Managing Director
Netherlands



Manfred Beck
Recycling International
Magazine
Editor
Netherlands



Jacques David
SCRELEC
Managing Director
France



Norm England
Rechargeable Battery
Recycling Corp. (RBRC)
President
USA



Dr. Jürgen Fricke
Foundation GRS Batterien
Chairman of the Board
Germany



Steve Heddle
INMETCO Inc.
President
USA



Andreas Krebs
Batrec Industrie AG
Managing Director
Switzerland
Representative of EBRA



Jill Ledger
SAFT
Communication Director
France



Ernst Locher
Fernwärme Wien
Manager
Austria



Kush Marolia
European Portable
Battery Association (EPBA)
Belgium



Toshio Matsuoka
Matsuoka Tech. Consultant Ltd.
Consultant
Japan



Johan van Peperzeel
W.A. van Peperzeel B.V.
President
Netherlands



Dr. Jean-Pol Wiaux
RECHARGE
Manager
Belgium

Keynote Speaker



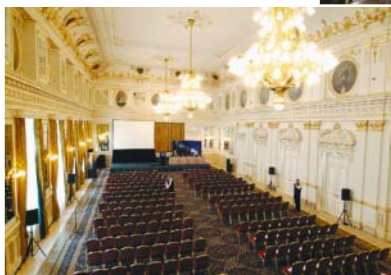
Orsolya CSORBA
European Commission
DG Environment
Sustainable Production
and Consumption
Administrator
Belgium

*“Latest developments of the implementation
of the Battery Directive!”*

Location of the Congress

The 12th International Congress for Battery Recycling (ICBR) will be held in Budapest in the **Corinthia Grand Hotel Royal** from **20 – 22 June 2007**.

Corinthia Grand Hotel Royal *****
Erzsébet krt. 43-49, 1073 Budapest
Hungary
Phone + 36 (0)1 479 40 00
Fax + 36 (0)1 479 43 33
www.corinthiahotels.com



Hotel Accommodation

For the participants of the congress a number of rooms are held **at a special rate** if you register **before May 2, 2007**. If you wish, you may also extend your stay at these beautiful hotels at the same special rate.



Corinthia Grand Hotel Royal *****

Erzsébet krt. 43-49
1073 Budapest
Phone + 36 (0)1 479 40 00
Fax + 36 (0)1 479 43 33
www.corinthiahotels.com

Congress place



Radisson SAS Béke Hotel ****

Teréz körút 43
1067 Budapest
Phone + 36 (0)1 889 39 00
Fax + 36 (0)1 889 39 15
www.radissonsas.com

10 min. walk from the congress place

Travelling to Budapest

Budapest can easily be reached by plane, train and car. The Budapest Ferihegy airport is an international airport which is served by most leading airlines. It is located in southeastern Pest and is within a 40 minutes drive from the city.

The door-to-door Airport Minibus Service or Zona-Taxi are convenient means of transportation to any place in Budapest.

www.budapestinfo.hu/en/



Congress Program ICBR 2007

Wednesday, 20th June 2007

10.00 – 10.30	"Welcome and Introduction" Prof. Bruno Scrosati, Chairman of the Steering Committee KEYNOTE SPEAKERS:
10.30 – 11.00	Opening Speaker
11.00 – 11.30	Orsolya Csorba, European Commission, DG Environment, Belgium
Session 1: <u>European Legislation</u>	
Session Chairman: Prof. Bruno Scrosati, University of Rome, Italy	
11.30 – 12.00	"The EPBA blueprint for successfully achieving the objectives of the Battery Directive: A tool for all" Wim Willems, EPBA, Belgium
12.00 – 12.30	"A report on EBRA's past and coming activities" Bertrand Schutz, EBRA, France
12.30 – 14.00	Lunch
Session 2: <u>Battery Directive implementation issues</u>	
Session Chairman: Jill Ledger, SAFT, France	
14.00 – 14.30	"Implementing the WEEE and the Battery Directives: The selective recovery of spent batteries from WEEE disassembly plants" Dr. Jean-Pol Wiaux, RECHARGE aisbl, Belgium
14.30 – 15.00	"Development of a calculation method for recycling rates of portable recycling processes with regard to the new EU Battery Directive" Prof. Bernd Friedrich, RWTH Aachen University, Germany
15.00 – 15.30	"New requirements on collection and recycling compliance organisations" Dr. Jürgen Fricke, Foundation GRS Batterien, Germany
15.30 – 16.00	Coffee break
Session 3: <u>Country reports</u>	
Session Chairman: Norm England, Rechargeable Battery Recycling Corporation (RBRC), USA	
16.00 – 16.30	"An update of the portable battery market and the rechargeable battery collection in Japan" Mike Takao, Sanyo Electric Co., Ltd., Japan
16.30 – 17.00	"Federal and provincial policy and regulatory initiatives for batteries in Canada" Duncan Bury, Environment Canada, Canada
17.00 – 17.30	"Consequences of landfilling, incinerating or recycling of batteries" Martin K. Meyer, Water Protection and Waste Management Agency Canton of Berne, Switzerland
17.30 – 18.00	"The key to used batteries recycling issue – appealing to legislation for pushing market recycling system" Prof. Qing Sun & Prof. XiangRong Li, Beijing Information Technical Institute, China
19.30	Networking dinner

Thursday, 21st June 2007

Session 4: <u>Recycling plants & processes</u>	
Session Chairman: Johan van Peperzeel, W.A. van Peperzeel B.V., Netherlands	
09.00 – 09.30	"Battery recycling at DK Recycling und Roheisen GmbH, Duisburg" Rolf Minkenber, DK Recycling und Roheisen GmbH, Germany
09.30 – 10.00	"Current activities for increasing the battery recycling efficiency at Fernwärme Wien" Dr. Bernhard Kronberger, Fernwärme Wien GmbH, Austria
10.00 – 10.30	"Alkaline and zink carbon batteries pyrometallurgical recycling standards" Mohamed Abid, VALDI, France
10.30 – 11.00	Coffee break
Session 5: <u>Sharing experiences</u>	
Session Chairman: Andreas Krebs, Batrec Industrie AG, Switzerland	
11.00 – 11.30	"The battery recycling and collection system of Nomurakohsan Co., Ltd." Yoshikazu Komatsu, Nomurakohsan Co., Ltd., Japan
11.30 – 12.00	"Primary collection of batteries and ADR: Results of common work of EPBA-EBRA" Dr. Farouk Tedjar, RECUPYL SA, France
12.00 – 12.30	"Dismantlement of spent lithium primary batteries for recycling" Dr. Jeong-Soo Sohn, Korea Institute of Geoscience & Mineral Resources (KIGAM), Korea
12.30 – 14.00	Lunch
Session 6: <u>New frontiers</u>	
Session Chairman: Khush Marolia, EPBA, Belgium	
14.00 – 14.30	"Collection of spent batteries in Lithuania: Public awareness plan" Ausra Urnikyte, Elektroniniu Masinu Perdirbimas (EMP), Lithuania
14.30 – 15.00	"How to cure the lack of public awareness with a virus" Frans de Buck, STIBAT, Netherlands
15.00 – 15.30	"Recycling processes for consumer batteries" William F. Drinkard, Drinkard Research and Development Corp., USA
15.30 – 16.00	"The EU Directive and the Italian solution for spent lead acid batteries: COBAT" Dr. Giancarlo Morandi & Dr. Franco Macor, COBAT, Italy
16.00 – 16.30	Coffee break
16.30 – 17.30 <u>Round Table Discussion:</u>	
"Impact of REACH and RoHS to the battery manufacturers and recyclers" Introduction: Dr. Alain Vassart, Erachem Comilog S.A., Belgium Moderator: Patrick de Metz, SAFT, France	
From 17.30	Cocktail reception and poster presentations in the exhibition hall

Friday, 22nd June 2007

Every participant may choose one of the following tours:

Tour to Inter-Metalex Kft., Budapest



09.00	Departure by bus to Inter-Metalex
10.00	Arrival at Inter-Metalex
10.00 – 12.30	Visit of the electronics recycling plant
13.30*	Arrival at the airport of Budapest
14.00	Arrival at the Corinthia Grand Hotel Royal

Inter-Metal is a Hungarian company group with facilities in Budapest, specialized in scrap metal trading and preprocessing, and also with notable activity in WEEE collection and treatment. Metals are sold directly to foundries in Hungary and Europe. WEEE treatment includes using shredding and separation technology and CRT dismantling. The company's location in central Hungary is an advantage when offering collection and logistical services.

More information at: www.intermetal.hu

Tour to SANYO Hungary Kft., Dorog



08.30	Departure by bus to SANYO
09.30	Arrival at SANYO
09.30 – 12.00	Visit of the lithium-ion battery packs assembly plant, photovoltaic panels manufacturing plant and AC manufacturing plant
14.30*	Arrival at the airport of Budapest
15.00	Arrival at the Corinthia Grand Hotel Royal

SANYO Hungary Kft. was founded in 1999 and belongs to SANYO Electric Co., Ltd. SANYO Electric is one of the biggest companies which offer wide range of electro technical products all over the world and which is leader in technological innovation. In Europe, the largest SANYO manufacturing subsidiary is SANYO Hungary Ltd., located in Dorog, with about 1400 employees. The main line of business in Hungary is mobile accumulators, dry batteries, solar panels and air conditional equipments. SANYO is the market leader in following products: Li-Ion, NiMH and NiCd batteries. The company philosophy is "Think GAIA – For Life and the Earth", that emphasizes the saving of the environment for the future of our children.

More information at: www.sanyo.com / www.eneloop.info

*No guarantee on arrival time due to traffic conditions

Sightseeing Tour



On Friday, June 22, a guided sightseeing tour in English will be arranged. Delegates interested in this special sightseeing tour may book it by means of the registration form.

09.00 Departure by bus to the sight-seeing tour

13.30 Arrival at the Corinthia Grand Hotel Royal

You will visit the neo-gothic House of Parliament (home of the Holy Hungarian Crown), the Opera, the St. Stephen's Basilica and the Heroes' Square (with statues of the most famous Hungarian kings and dukes).

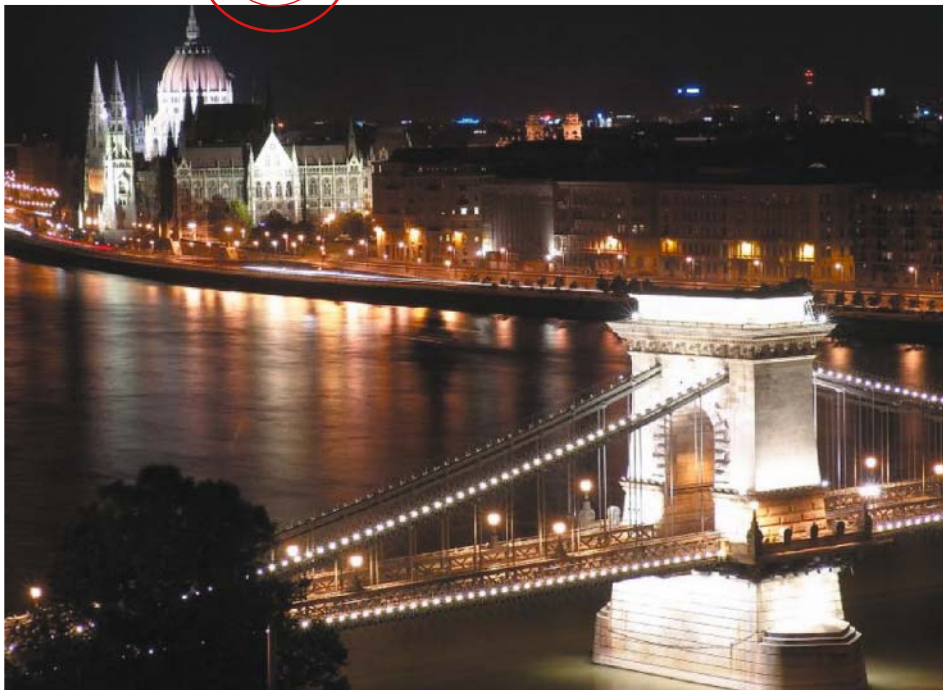
Then on the Buda side, the bus takes you to the Castle district where you visit the Fishermen's Bastion (from where the beautiful panorama over the city and the Danube river can be enjoyed) and you will visit the Matthias Church (interior visit).

During the tour you are offered a brief overview of the last 1000 years of Hungarian history.

“Meet your clients” Networking Dinner

On Wednesday, June 20, a special networking dinner will be organized in beautiful Budapest.

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



Exhibition and Poster Presentation

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

The fee for an exhibition stand (2 m x 3 m) is EUR 2'500.- for the full time of the conference.



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

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
Schwaderhof 524
5708 Birwil, Switzerland

Phone +41 62 785 10 00
Fax +41 62 785 10 05
info@icm.ch
www.icm.ch



Jeanette Duttlinger
Congress Organizer



Ying Liu
Congress Assistant



Yvonne Steiner
Congress Assistant



Sandra Ammann
Congress Assistant



Susann Schmid
Congress Assistant



Petra Fiorentin
Congress Assistant

Registration Fees

Registration for the congress should be made by means of the registration form. Participants registering and paying **before April 30, 2007** will benefit from a reduced registration fee. The registration fee includes congress, entrance to the exhibition, proceedings and luncheons.

	before April 30, 2007	after April 30, 2007
Congress Fee		
Fee for participants	€ 1'290.-	€ 1'390.-
Fee for speakers	€ 690.-	€ 790.-
Fee for students	€ 450.-	€ 490.-
Networking dinner (June 20, 2007)	€ 90.-	€ 100.-
Visit to Inter-Metalex (June 22, 2007)	€ 30.-	€ 50.-
Visit to SANYO (June 22, 2007)	€ 30.-	€ 50.-
Sightseeing tour (June 22, 2007)	€ 30.-	€ 50.-
Accompanying Person (spouse)		
Networking dinner (June 20, 2007)	€ 100.-	€ 110.-
Sightseeing tour (June 22, 2007)	€ 40.-	€ 50.-

Registration on site € 100.- surcharge

Additional Proceedings

If it is not possible for you to attend the congress, you can purchase the complete proceedings at EUR 350.-. Participants will get the proceedings free of charge.

Payment

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

Bank: Neue Aargauer Bank, 5400 Baden, Switzerland
Beneficiary: ICM AG
Account number: 447941-72
IBAN: CH41 0588 1044 7941 7200 0
Clearing number: 5881
Swift code: AHHBCH22XXX



INTER METAL RECYCLING

H-1211 BUDAPEST, BUDAFOKI ÚT 5-7.
TEL.: +36-1 278-5130 - FAX: +36-1 425-1732



Collecting and processing of ferrous and non-ferrous metals scrap are the core activities of Inter-Metal Group. Its member companies hold permissions

Collection is performed by Inter-Metal Recycling which hands on material for further processing to Inter-Metalex. Both companies share the same 40.000 sqm yard including a 7.000 sqm large workshop in Csepel island – in the southern part of the capital city of Budapest.

The associate companies do wholesale trading and offer services for manufacturing companies and major service providers of different industrial fields. Processed scrap is sold directly for smelters or metalworks in Hungary

WEEE treatment activities at the Csepel facility:

- * reception of collected e-scrap
- * weighing by categories and classification according to further treatment
- * manual dismantling and removal of hazardous parts
- * mechanical treatment with shredder technology and separation
- * CRT glass separation



ISO 9001:2002
ISO 14001

The company group as well as the associates are ISO9001 and ISO14001 certified companies.

www.intermetal.hu

Think GAIA
For Life and the Earth

SANYO

Enjoy an eco-friendly life with SANYO



SANYO Hungary Kft., Ipari Park, H-2510 Dorog
Phone: +36 (0)33 531 000, Fax: +36 (0)33 531 003
www.sanyo.com / www.eneloop.info