

International Congress for Battery Recycling
June 18 – 20, 2003
Lugano, Switzerland



Patronage
European Battery Recycling Association
European Portable Battery Association

Sponsored by:



Foreword

The International Congress for Battery Recycling 2003

The progress of the battery technology has been outstanding in the last few years. The production of conventional batteries, such as alkaline dry cells, lead-acid and nickel-cadmium batteries, continues to be massive with several billions of units per year. In addition, many new systems are invading the market: nickel-metal hydride batteries are acquiring a prominent role for electronic and tool applications and the lithium-ion batteries are rapidly becoming the power sources of choice for sophisticated consumer electronics, e.g., notebooks and cellular phones. Finally, the continuous concern on the air quality in large urban areas has promoted the request of a fast introduction on the road of low-emission vehicles. Accordingly, fleet of electric cars are now in demonstration in various cities and an increasing number of hybrid cars is assuming a progressively important role in the automobile sector. This market booming has not yet been accompanied by a proper concern on the appropriate methods of collection, disposal or recycling of the large number of batteries of different chemistries, size and environ-

ment impact which are presently in circulation in all parts of the world. It is then of crucial importance to face the management of the spent batteries in all their aspects and problems. Although significant progress has been obtained in the past years in terms of development of collection programs and of recycling schemes of exhausted batteries, a lot is still to be achieved to reach an acceptable compromise between the cost and the efficiency of recycling.

This congress, which comes as the third edition of a successful series, provides a unique opportunity for approaching this topic by offering a perfect forum where battery experts can meet and share their experiences, discuss and find suitable solutions to the problems that still prevent a proper treatment of spent batteries.

In addition to that of assuring exciting technical program, also the tradition of the choice of elegant and beautiful sites is maintained by this 2003 edition of ICBR. Welcome to the congress center of Lugano, welcome to the lake!

Prof. Bruno Scrosati
Chairman of the Steering Committee



International Steering Committee

consists of:



Jan Bartels
STIBAT
Managing Director
Netherlands



Manfred Beck
Recycling International
Magazine
Editor
Netherlands



Norm England
Portable Rechargeable
Battery Association (PRBA)
President
USA



Jürgen Fricke
Foundation GRS Batterien
Chairman of the Board
Germany



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



Helmut Klammer
Batrec Industrie AG
Managing Director
Switzerland



Jill Ledger
CollectNiCad, Chairman
SAFT, Communication Director
France



Bruno Scrosati, Chairman
University of Rome
Department of Chemistry
Professor
Italy



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



Toshio Matsuoka
Matsuoka Technical
Consul. Ltd.
Consultant
Japan



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



Shane Thompson
INMETCO Inc.
International Accounts
Director
USA



Alain Vassart
European Battery Recycling
Association (EBRA)
President
Belgium



Alfons Westgeest
European Portable Battery
Association (EPBA)
Secretary General
Belgium



Location of the congress

The International Congress for Battery Recycling (ICBR 2003) will be held in the **congress center of Lugano from 18–20 June 2003 in Lugano, Switzerland.**

Congress Center
Piazza Indipendenza 4
6900 Lugano

www.lugano-conventions.com

Travelling to Lugano

You can easily reach Lugano by plane, train and car.

Lugano has an international airport offering direct scheduled flights to all over the world. If you are booking a flight to Zurich, Basel or Geneva, you will have a daily connection-flight to Lugano. The airport is about 5 km from the city.

Lugano has also an excellent railway link to the swiss airports.

The airport of Milano (Malpensa) is about 70 km from Lugano. Shuttle bus service from/to railway station is available.

www.sbb.ch/pv/index_e.htm

www.sea-aeroportoimilano.it/eng/
www.swiss.com

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

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International Congress & Marketing
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Internet: www.icm.ch



Jeanette Duttlinger
Congress Organizer



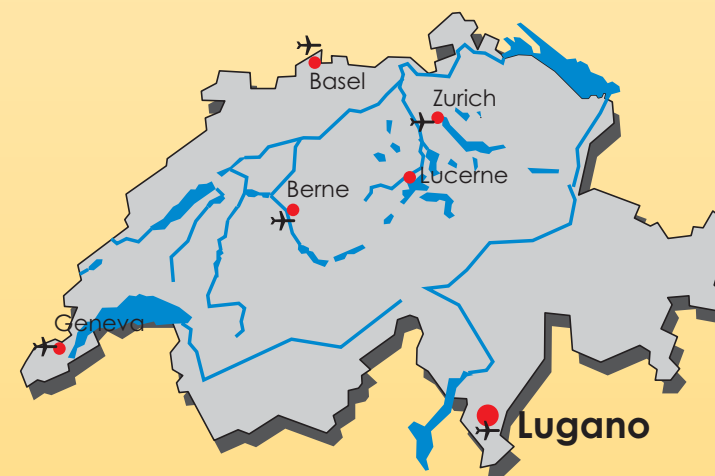
Erika Noé
Congress Assistant



Petra Fiorentin
Congress Assistant



Nicole Erni
Congress Assistant



Congress Program ICBR 2003

Wednesday, 18 June 2003

09.00 – 12.30	Registration
13.00 – 13.10	“Welcome and introduction” Prof. Bruno Scrosati, Chairman of the Steering Committee
13.10 – 13.30	<u>Key-Note Speaker I</u> Alfons Westgeest, EPBA, Belgium
Session: <u>The impact of the recent legislation on batteries and WEEE</u> Session Chairman: Dr. Jürgen Fricke, GRS Batterien, Germany	
13.30 – 14.00	“Industry commitment to legislative development in Europe” Jill Ledger, SAFT, France
14.00 – 14.30	“The impact of the WEEE and RoHS Directives on the collection of spent rechargeable batteries” Ralf zur Steege, SANYO Energy (Europe), Germany
14.30 – 15.00	“What a waste of opportunities” Jan Bartels, STIBAT, Netherlands
15.00 – 15.30	Coffee break

Session: The collection and recycling of spent rechargeable batteries
Session Chairman: Prof. Oliver Lindqvist, Chalmers University, Sweden

15.30 – 16.00	“European battery collection strategy” Colin Thirlaway, Black & Decker, United Kingdom
16.00 – 16.30	“Ten years experience of a private collection program for power tools and spent batteries” Udo Cerowski, Robert Bosch GmbH, Germany
16.30 – 17.00	“Concept for an international battery recycling program” Ken Money & Shane Thompson, INMETCO Inc., USA
19.30	Networking dinner

Thursday, 19 June 2003

Session: Country reports on battery recycling I
Session Chairman: Shane Thompson, INMETCO Inc., USA

09.00 – 09.30	“Battery recycling in Taiwan” Hsiung-Wen Chen, Environmental Protection Administration, Taiwan
09.30 – 10.00	“Optimisation of recycling – how to improve recycling rate & quality not entailing excessive costs” Dr. Jürgen Fricke, GRS Batterien, Germany
10.00 – 10.30	“Swiss battery recycling system: From voluntary arrangements to compulsory rules” Alexander Brun, INOBAT, Switzerland
10.30 – 11.00	Coffee break
11.00 – 11.30	“A review of European risk assessment reports on metals used in batteries” Dr. Jean-Pol Wiaux, CollectNiCad, Belgium
11.30 – 12.00	“Collection and recycling of spent batteries in Korea” Dr. Jeong-Soo Sohn, Korea Institute of Geoscience & Mineral Resources, Korea
12.00 - 12.30	“Recycling of used portable batteries in Europe. The 2002 facts and figures and how to improve them” Alain Vassart, EBRA, Belgium
12.30 – 14.00	Lunch

Session: Country reports on battery recycling II
Session Chairman: Alain Vassart, EBRA, Belgium

14.00 – 14.30	“Batrec news – Industrial recycling of spent Li-batteries” Andreas Krebs, Batrec Industrie AG, Switzerland
14.30 – 15.00	“Overview of communication & awareness-building programmes on battery collection around Europe” Emmanuel Beaurepaire, Consultant (CES), France
15.00 – 15.30	“Progress in Austria's CHEMTEC battery recycling plant” Dr. Volker Pawliska, CHEMTEC, Austria
15.30 – 16.00	Coffee break
16.00 – 16.30	<u>Key-Note Speaker II</u> European Commission (invited)
16.30 – 17.30	Round table “Pillars for a new battery directive” Moderator: Manfred Beck, Recycling International, Netherlands

Friday, 20 June 2003

Session: Market & recycling challenges for new technologies

Session Chairman: Prof. Bruno Scrosati, University of Rome, Italy

- 08.30 – 09.00 "Challenge for recycling new batteries and fuel cells"
Farouk Tedjar, Recupyl, France
- 09.00 – 09.30 "Battery recycling: An other way"
Dr. Rolf Zinniker, ETH Zürich, Institut für Elektronik, Switzerland
- 09.30 – 10.00 "The life cycle analysis of rechargeable batteries"
Dr. Margret Wohlfahrt-Mehrens, Center for Solar Energy, Germany
- 10.00 – 10.30 "The prospect of fuel cell technology and its impact on batteries"
Aik Rosenberg, Metal Tech Ltd., Israel
- 10.30 – 11.00 Coffee break
- 11.00 – 11.30 "A novel approach to alkaline and zinc carbon batteries recycling"
Dr. Massimo Maccagni, Engitec, Italy
- 11.30 – 12.00 "X-ray monitoring & sorting of spent batteries"
Prof. Paolo Massacci, University of Rome "La Sapienza", Italy
- 12.00 – 12.30 "Focus on a recycling rate calculation"
Marion Nicolet, Valdi, France
- 12.30 – 13.30 Lunch buffet

Networking Dinner

On Wednesday, June 18, a special Networking Dinner will be organized. Participants and accompanying persons can register on the form.

Don't miss this unforgettable evening!

Beautiful Lugano

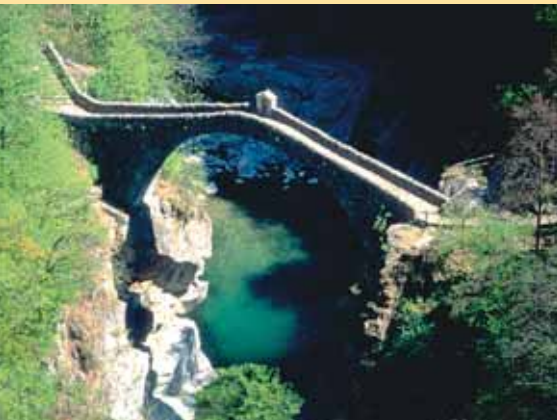
Why not extend your stay in Lugano?

Lugano is renowned for its mild climate, delightful scenery and luxuriant vegetation. There are innumerable excursions from cruises on the lake to cable-car trips in the mountains. A full range of sports activities is an attraction for visitors of all tastes.

The majestic mountain San Salvatore (912 m / 2991 ft) rises into the sky of Lugano, offering a unique perspective of the lake, the Lombardic plain and the magnificent range of the Swiss Savoy Alps.

The funicular takes you in about 10 minutes from the center of Lugano to the top of Switzerland's sunniest mountain.

www.lugano-tourism.ch



Hotel Accommodation

For the participants of the congress a number of rooms are held until **May 9, 2003** at a special rate in various hotels in Lugano.

Rates are per room, per night and **include breakfast**.

Grand Hotel Villa Castagnola*****

Viale Castagnola 31

www.slh.com./villcast/

About 5 min walk from the congress center.



Single room

CHF 360.- (~€ 240.-)

Double room

CHF 460.- (~€ 307.-)

Grand Hotel Eden*****

Riva Paradiso 1

www.edenlugano.ch

About 20 min walk from the congress center.



Single room

CHF 260.- (~€ 174.-)

Double room

CHF 400.- (~€ 294.-)

Hotel Lido Seegarten****

Viale Castagnola 24

www.hotellido-lugano.com

About 5 min walk from the congress center.



Single room

CHF 300.- (~€ 200.-)

Double room

CHF 300.- (~€ 200.-)

Hotel Bellevue au Lac****

Riva A. Caccia 10

www.hotelbellevue.ch

About 15 min walk from the congress center.



Single room

CHF 200.- (~€ 134.-)

Double room

CHF 250.- (~€ 167.-)

Hotel de la Paix****

Via Cattori 18

www.delapaix.ch

About 15 min walk from the congress center.



Single room

CHF 200.- (~€ 134.-)

Double room

CHF 250.- (~€ 167.-)

Hotel Lugano Dante****

Piazza Cioccaro 5

www.hotel-luganodante.com

About 10 min walk from the congress center.



Single room

CHF 200.- (~€ 134.-)

Double room

CHF 260.- (~€ 174.-)

Registration Fees

Registration for the congress should be made by means of the registration form.

Congress Fee	before May 9, 2003	after May 9, 2003
Participants	€ 1'150.-	€ 1'300.-
Speakers	€ 690.-	€ 790.-
Students	€ 390.-	€ 450.-
Networking Dinner	€ 90.-	€ 100.-
Networking Dinner for accompanying persons	€ 100.-	€ 100.-

All prices excluding 7,6%VAT

Additional Proceedings

If it is not possible for you to attend the congress, you can purchase the complete proceedings at EURO 335.-.

Participants will get the proceedings free of charge.

Payment

Payment should be made in EURO by bank transfer or by credit card.

Wire payment plus 7,6% VAT to:

Bank:	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

Exhibition

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

The fee for a typical exhibition stand (1.5 m x 3 m) is EURO 3'000.- for the full time of the conference.

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