

# ICBR 2020



## 25<sup>th</sup> International Congress for Battery Recycling ICBR 2020

September 16 – 18, 2020, Salzburg, Austria



### PATRONAGE:

- Australian Battery Recycling Initiative (ABRI)
- Association of European Automotive and Industrial Battery Manufacturers (EUROBAT)
- Call2Recycle, Inc.
- EUCOBAT
- European Battery Recycling Association (EBRA)
- European Electronics Recyclers Association (EERA)
- European Portable Battery Association (EPBA)
- Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology, Austria
- Light Electric Vehicle Association (LEVA-EU)
- The Advanced Rechargeable & Lithium Batteries Association (RECHARGE)
- The Rechargeable Battery Association (PRBA)



GLENCORE



## WELCOME ADDRESS



### **LEONORE GEWESSLER, BA**

Federal Minister  
for Climate Action,  
Environment, Energy,  
Mobility, Innovation and  
Technology

On 11<sup>th</sup> March 2020, the European Commission adopted a new Circular Economy Action Plan, which is one of the main building blocks of the European Green Deal, Europe's new agenda for sustainable economic development. With measures along the entire life cycle of products, the new Action Plan focuses on the design and production for a circular economy making sustainable products the norm in the EU, fostering sustainable consumption and ensuring less waste by transforming it into high-quality secondary resources. Aiming to ensure that the resources used are kept in the EU economy for as long as possible the new Circular Economy Plan presents measures to the sectors that use most resources and where the potential for circularity is high. This includes for instance electronics and informa-

tion and communication technology, vehicles and batteries.

The import of batteries into the EU brings significant quantities of chemicals and engineered substances used in the manufacture of batteries to the EU market. Their management at end-of-life is at the origin of the Batteries Directive 2006/66/EC. Years after its implementation, the Directive is considered to have delivered positive results in terms of a better environment, promoted recycling and improved the functioning of the internal market for batteries and recycled materials. However, the review of the Directive has also identified a number of key issues that require adaptation of the Directive.

In addition, the European Commission will continue to implement

the Strategic Action Plan on Batteries and support the European Battery Alliance. The Commission's first progress report on the implementation of the Strategic Action Plan on Batteries shows that a variety of actions have been launched to develop a significant battery industry in the EU. To progress swiftly on enhancing sustainability of the emerging battery value chain for e-mobility and boost the circular potential of all batteries, this year the Commission will propose a new regulatory framework of batteries.

The International Congress for Battery Recycling has become a major event in the European waste community. The 25<sup>th</sup> anniversary in Salzburg will particularly focus on battery recycling technologies. The three days are going to be enriching for the international commu-

nity of experts and decision makers of the battery recycling value chain. We can look forward to many interesting presentations, exhibitions and plant tour, as well as mutually fruitful discussions and collaborations.

I wish everybody a successful and a nice stay in Salzburg.

## FOREWORD



**DR JEAN-POL  
WIAUX**

Chairman  
of the Steering Committee  
International Congress for  
Battery Recycling

On October 10, 2019, Nobel Prize in Chemistry laureate **Akira Yoshino** declared:

***"Battery Recycling is  
Key to Meeting Electric  
Car Demand..."***

Advanced Battery Technology became one of the leading intermediate storage technologies for electrical power. Hence, another industrial revolution similar to the development of electricity a century ago is expected. Battery Recycling is key for the development of the battery industry as it will significantly impact the battery supply chain.

The media is now closely following battery technology development. Newspapers inform their readers about local and international developments in e-mobility; policy makers support the use of EVs in major cities; citizens vote

to eliminate "thermal engine cars" by 2050 and in line with this transport policy the moratorium on Coal Fired plants in Germany by 2038 appears to promote the shift to electrical energy production by renewable sources.

The Covid19 pandemic crisis has revealed the weaknesses of a linear economy based on the concept of "too big to fail", leading to a return of concepts such as self-sufficiency (lower global dependence) or rebuilding strategic autonomy, in the field of health care, food and energy supply, among others. These precautionary measures were preoccupations after WW2 and have been progressively abandoned over the last 50 years.

In the 20<sup>th</sup> Century, industrial battery recycling activities developed close to battery production plants,

motivated by the value of recovered materials and the increasing cost of waste management. Manufacturing rejects were the daily feedstock of recycling plant capacity. Today the development of global markets creates an environment where industrial actors are looking for secondary sources of raw materials all around the world.

***The current business  
slowdown may be an  
opportunity for Europe  
to reinforce its expertise  
in the production and  
recycling of batteries  
in a modern circular  
economy context while  
shortening supply  
chains.***

To better integrate the circular economy, the battery (recycling) industry need to cooperate with OEMs to secure collection of materials, to deliver them to recycling plants

and to reintegrate the recovered commercial grade materials such as metals or chemicals into the value chain. The EU Battery Value Chain funding program is aiming at supporting this approach.

Salzburg and Austria are offering a diversified panel of battery related activities: from mining of lithium-containing Spodumene rocks to research on advanced processes for battery material recycling as well as the sustainable development of NF metals applications. Finally EV developments of one of the most famous brand names of the European Car Industry "Porsche" is also contributing to the fame of the city of Salzburg.

Join us at the 25<sup>th</sup> anniversary of ICBR. It will give you the opportunity to forge your personal opinion on the above

questions and more: EU battery policy, Circular Economy, EU Green Deal, EU Battery Alliance, battery second life, recycling technologies...

It will offer you a unique networking opportunity as ICBR has been "the place to be" to meet the experts of the battery recycling business world for a quarter of a century.

## INTERNATIONAL STEERING COMMITTEE



**DR JEAN-POL WIAUX**  
Chairman  
Consultant  
Switzerland



**JACQUES DAVID**  
Consultant  
France



**DR DIETER OFFENTHALER**  
Batrech Industrie AG  
Managing Director  
Switzerland



**JOHAN VAN PEPERZEEL**  
Van Peperzeel B.V.  
Managing Director  
Netherlands



**GEORGIOS CHRYSSOS**  
Chairman of the Lecture  
Group  
Stiftung GRS Batterien  
Managing Director  
Germany



**ARIE DE JONG**  
STIBAT Services  
General Manager  
Netherlands



**CARL E. SMITH**  
Call2Recycle, Inc.  
CEO / President  
USA



**DR ALAIN VASSART**  
EBRA  
General Secretary  
Belgium



**LIBBY CHAPLIN**  
Australian Battery  
Recycling Initiative (ABRI)  
Chief Executive Director  
Australia



**PATRICK DE METZ**  
Saft  
Corporate Environmental  
and Governmental Affairs  
Director  
France



**DR REINER TH. SOJKA**  
ACCUREC Recycling GmbH  
Managing Partner  
Germany



**HANS CRAEN**  
European Portable Battery  
Association (EPBA)  
Secretary General  
Belgium



**GEORGE A. KERCHNER**  
PRBA – The Rechargeable  
Battery Association  
Executive Director  
USA



**HIROHITO TERAOKA**  
FDK Corporation  
Senior Director  
Product Business  
Promotion Office  
Japan

## KEYNOTE SPEAKERS



**LEOPOLD FELLINGER**

Porsche Austria GmbH & Co OG  
Chief Creative Officer  
Head of MOONCITY  
Austria

“MOONCITY: On a Mission to the Future”

**MATTIA PELLEGRINI**

European Commission  
Head of Waste Management & Secondary Materials  
Belgium

“The New Batteries Directive Framework”



**ROMAN STIFTNER**

Austrian Non-Ferrous Metals Federation  
Managing Director  
Austria

“Battery Materials in a Circular Economy:  
Case of Austria”

**PROF. VEENA SAHAJWALLA**

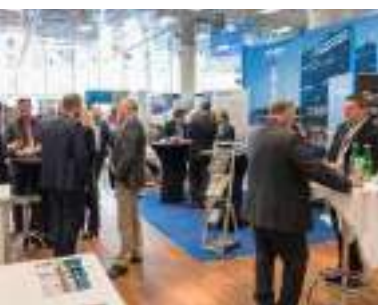
Centre for Sustainable Materials Research & Technology  
University of New South Wales  
Director  
Australia

“SMaRT Microfactories™ Adding Value by  
Creating Circular Economies for Battery  
Materials”





## LOCATION OF THE CONGRESS



The 25<sup>th</sup> International Congress for Battery Recycling ICBR 2020 will be held at the:

**Salzburg Congress**  
Auerspergstrasse 6  
5020 Salzburg, Austria



Phone +43 662 889870  
Fax +43 662 88987210  
[www.salzburgcongress.at](http://www.salzburgcongress.at)



**Salzburg Congress** is located in the centre of Mozart's city. Only 15 minutes from Salzburg Airport and 10 minutes from train station by taxi or bus. Direct trains available from Munich Airport ([www.bahn.de](http://www.bahn.de)) and Vienna Airport ([www.oebb.at](http://www.oebb.at)).



### Important notice:

We have been alerted that unofficial housing providers are trying to contact ICBR delegates and exhibitors claiming to be associated to ICM and can secure hotel rooms at designated ICBR hotels in Salzburg. These companies are not authorized to represent ICM nor ICBR. Please note that we have no affiliation with any housing coordinator. If you have any concerns, contact us at [info@icm.ch](mailto:info@icm.ch).

A number of rooms are held at a discounted rate for the participants booking by July 31, 2020.

## HOTEL ACCOMMODATION



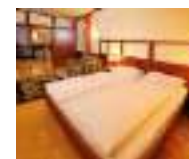
### Hotel Sheraton Grand Salzburg \*\*\*\*\*

Phone +43 662 889990  
[www.sheratongrandsalzburg.com](http://www.sheratongrandsalzburg.com)  
Next to Salzburg Congress



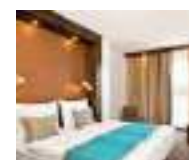
### Hotel Bristol Salzburg \*\*\*\*\*

Phone +43 662 873557  
[www.bristol-salzburg.at](http://www.bristol-salzburg.at)  
5 minutes' walking distance to Salzburg Congress



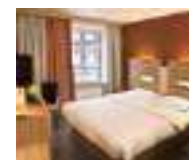
### Hotel ACHAT Plaza Zum Hirschen Salzburg \*\*\*\*

Phone +43 662 889030  
[www.zumhirschen.at](http://www.zumhirschen.at)  
5 minutes' walking distance to Salzburg Congress



### Motel One Salzburg-Mirabell \*\*\*

Phone +43 662 885200  
[www.motel-one.com](http://www.motel-one.com)  
10 minutes' walking distance to Salzburg Congress



### Star Inn Hotel Premium Salzburg Gablerbräu \*\*\*

Phone +43 662 879662  
[www.starinnhotels.com](http://www.starinnhotels.com)  
5 minutes' walking distance to Salzburg Congress



## DISCOVER SALZBURG



### 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.

The question as to what Salzburg has to offer in autumn is easily answered: It's all about the sounds of jazz on the streets, folk culture and leisurely walks without having to fight the throngs. Now is the best time to discover Salzburg's rich beer culture, either enjoyed in authentic folk costume or simply just the way you are. And as the temperatures slowly drop, many expeditions inevitably turn indoors.



[www.salzburg.info/en](http://www.salzburg.info/en)

### Rich harvest – colorful leaves

Autumn time is harvest time. It is now that Salzburg's markets show off the abundance of their crops. Fresh fruit and vegetables as far as the eye can see. But it isn't just the market stands that treat us to a brilliant display of color. Nature becomes every bit as vivid, inviting you to go hiking and walking. There is definitely no shortage of opportunities to do so here in Salzburg – both right in the heart of the city, as well as on the nearby Untersberg.



### Musical Autumn

Anyone who expects Salzburg to turn quiet upon conclusion of the summer festival, couldn't be more wrong. That merely marks the beginning of a season filled with diversity: The sounds of classical music can be heard, for example, during Salzburger Kulturtage, while international and Austrian musicians perform at the coolest locations in Salzburg during Jazz & The City – and admission is free. In autumn, much of the music you hear is performed in public spaces, truly transforming the whole city into a stage.





# CONGRESS PROGRAM ICBR 2020

## TUESDAY, SEPTEMBER 15, 2020

17.00 – 19.00 Pre-registration

## WEDNESDAY, SEPTEMBER 16, 2020

08.00 – 09.00 Registration and welcome coffee in the exhibition area

### Session 1: Opening & Keynote Speakers

- 09.00 – 10.45 "Welcome and Introduction"  
**Dr Jean-Pol Wiaux, Chairman of the Steering Committee**
- "MOONCITY: On a Mission to the Future"  
**Leopold Fellinger, Porsche Austria GmbH & Co OG, MOONCITY, Austria**
- "Battery Materials in a Circular Economy: Case of Austria"  
**Roman Stiftner, Austrian Non-Ferrous Metals Federation, Austria**
- "The New Batteries Directive Framework"  
**Mattia Pellegrini, European Commission, Belgium**
- "SMaRT Microfactories™ Adding Value by Creating Circular Economies for Battery Materials"  
**Prof. Veena Sahajwalla, Centre for Sustainable Materials Research & Technology, University of New South Wales, Australia**

10.45 – 11.00 **Presenting of the "ICBR Honorary Award"**

11.00 – 11.30 Coffee break in the exhibition area

### Session 2: Recycling Strategy & Innovation

**Session Chairman: Georgios Chrysos, Stiftung GRS Batterien, Germany**

- 11.30 – 12.00 "Increasing Added-Value in Diversified End-of-Life Strategies for Li-Ion Battery Systems"  
**Max Weeber, Fraunhofer IPA, Germany**
- 12.00 – 12.30 "From Security of Supply to Risk Control: Global Emergence of the Li-Ion Battery Recycling Industry"  
**Michel Siemon, SMS Group GmbH, Germany**
- 12.30 – 13.00 "Battery Raw Materials and the Financial Markets: A Critical Evolution"  
**Martim Facada, SCB Group, United Kingdom**
- 13.00 – 14.30 Lunch in the exhibition area

### Session 3: Hazard, Risk & Safety

**Session Chairman: Dr Claude Chanson  
RECHARGE, Belgium**

- 14.30 – 15.00 "ADR 2021 – How to Transport Safely Waste Batteries and Equipment"  
**Dr Marco Ottaviani, ANIE-CSI, Italy**
- 15.00 – 15.30 "Lithium Batteries: Hazard Prevention During Transport and Storage"  
**Johan van Peperzeel,  
Van Peperzeel B.V., Netherlands**
- 15.30 – 16.00 "Re-Use of EV-Batteries – View of an Insurance Company"  
**Sebastian Hunold, Allianz Automotive, Germany**

### Session 4: Recycling: Commercial Projects

**Session Chairman: Dr Julia Hobohm,  
Stiftung GRS Batterien, Germany TBC**

- "Eramet Vision and ReLieVe Project for the Li-ion Batteries Recycling"  
**Dr Sophie Lebouil, Eramet Ideas, France**
- "Innovative Closed-Loop for Lithium-Ion Batteries"  
**Dr Farouk Tedjar, TES-AMM Central Europe GmbH, Germany**
- "How Sustainability is Transforming Markets Around the Globe"  
**Danielle Spalding, Battery Solutions, USA**

16.00 – 16.30 Coffee break in the exhibition area

### Session 5: Panel Discussion

**Assessment of Options to Improve the EU Regulatory Framework on Batteries**

**Moderator: Patrick de Metz, Saft, France**

**Participants:**

**Dr Alain Vassart, EBRA, Belgium  
Hans Craen, EPBA, Belgium  
Frédéric Hédouin, EUCOBAT, Belgium  
Dr Georg Mehlhart, Mehlhart Consulting, Germany  
Dr Claude Chanson, RECHARGE, Belgium**

19.00 Cocktail reception in **Piano Bar & Terrace** in Sheraton Hotel

19.45 Departure by bus for the **Mozart Night to St. Peter Stiftskulinarium** in Salzburg  
Meeting point: Lobby of the Hotel Sheraton



# CONGRESS PROGRAM ICBR 2020

## THURSDAY, SEPTEMBER 17, 2020

08.00 – 09.00 Welcome coffee in the exhibition area

<b><u>Session 6: Recycling: Lab &amp; Pilot Projects</u></b> <b>Session Chairman: Arie de Jong, STIBAT Services, Netherlands</b>		<b><u>Session 7: Battery Materials Separation</u></b> <b>Session Chairman: Johan van Peperzeel, Van Peperzeel B.V., Netherlands</b>	
09.00 – 09.30	"Li-Ion Batteries: Requirements for Future Recycling Processes" <b>Alexandra Holzer &amp; Stefan Windisch, Montanuniversität Leoben, Austria</b>		"Mechanical Method for Delamination of Electrodes from Spent Li-B / Quality of Materials Recovered" <b>Denis Werner, TU Bergakademie Freiberg, Germany</b>
09.30 – 10.00	"Li-ion Battery Recycling – A Hydro-Mechanical Process" <b>Dr Jörg Zimmermann, Fraunhofer Institution IWKS, Alzenau and Hanau, Germany</b>		"Application of Magnetic Processing in Li-Ion Battery Recycling" <b>Dr Robert Sommerville, University of Birmingham, United Kingdom</b>
10.00 – 10.30	"Lithion's Hydrometallurgical Pilot Plant – Building The Sustainable Solution" <b>Jean-Christophe Lambert, Lithion Recycling, Canada</b>		"Sensor Based Sorting Technology for Single Use Batteries" <b>Gavin Russell, TOMRA Sorting UK Ltd., United Kingdom</b>

10.30 – 11.00 Coffee break in the exhibition area

<b><u>Session 8: "2<sup>nd</sup> Life": Current Status</u></b> <b>Session Chairman: Arie de Jong, STIBAT Services, Netherlands</b>		<b><u>Session 9: Recycling Technologies Development</u></b> <b>Session Chairman: Johan van Peperzeel, Van Peperzeel B.V., Netherlands</b>	
11.00 – 11.30	"Second Life of Industrial Batteries for E-Mobility: The Regulatory Aspects" <b>Willy Tomboy, Defomserve, Belgium</b>		"Recovery of Graphite from Spent Lithium Ion Batteries" <b>Anna Vanderbruggen, Helmholtz Institute Freiberg, Germany</b>
11.30 – 12.00	"Recycling of E-Mobility Batteries from Authorized Treatment Facilities (ATF)" <b>Fredericq Peigneux, Febelauto, Belgium</b>		"Li-primary Batteries, the 'Great Ignore' in Recycling" <b>Dr Juan Manuel Pérez, Envirobat España, Spain</b>
12.00 – 12.30	"e-Brick, The Upcycled Lithium Battery" <b>Stefan Bahamonde, Libattion GmbH, Switzerland</b>		"The ReCell Center: Working Toward a Cost Effective Battery Recycling Process" <b>Jeffrey Spangenberg, Argonne National Laboratory, USA</b>

12.30 – 14.30 Lunch in the exhibition area

<b><u>Session 10: Circular Economy</u></b> <b>Session Chairman: Georgios Chrysos, Stiftung GRS Batterien, Germany</b>	
14.30 – 15.00	"Creating a Secondary Source of Critical Battery Materials" <b>Ajay Kochhar, Li-Cycle Corp., Canada</b>
15.00 – 15.30	"Circular Economy: Battery Waste and Transport" <b>Pia Alina Lange &amp; Dr Claude Chanson, RECHARGE, Belgium</b>

15.30 – 15.45 "Wrap-up / Closing Remarks"

from 15.45 Farewell Cocktail



# Mozart Night

HAUTE CUISINE MEETS HIGH ART



Experience an amazing candlelight evening that takes you back in time to the year 1790...

**Join us on Wednesday evening, September 16,** to celebrate the 25<sup>th</sup> anniversary of ICBR and listen to the greatest compositions of the city's most well-known son, Wolfgang Amadeus Mozart.

We would be happy to enjoy with you the cocktail reception in the beautiful **Piano Bar & Terrace of the Sheraton hotel from 19.00.**

**At 19.45 we will meet in the lobby of the Sheraton hotel** and head together towards Europe's oldest restaurant, St. Peter Stiftskulinarium, for the delightful dinner.

We look forward to celebrating this special day with you!

# WORKSHOP



## WASTE LI-BATTERIES: CLASSIFICATIONS AND TRANSPORT CASE STUDIES and RECOMMENDATIONS

**Date** Friday, September 18, 2020

**Time** 08.45 – 12.30

**Location** Salzburg Congress

### 1. Workshop Objective

The purpose of the workshop is to review the classification of Waste Lithium Batteries (WLiB) and to recommend a harmonized approach for their classification when transported on a worldwide basis.

### 2. Methodology

The workshop will propose a review of the existing classification of batteries as waste in EU and North America and pave the way for future improvements, particularly the selection of criteria to be considered for the waste classification.

*During the workshop, practical cases will be illustrated where operators have difficulties to implement the Transport Regulation for certain categories of waste batteries and to select the required packaging and shipping instructions mainly taking into consideration the composition of waste batteries and their physical status prior to shipment.*

### 3. Participants and Case Studies

Registered participants to the workshop are invited to prepare their own case study in advance and to communicate to the organizer in order to share knowledge among the audience and increase the level of practical recommendations.

### 4. Moderators

The Workshop will be moderated by Dr Alain Vassart (EBRA) and Dr Claude Chanson (RECHARGE).

The workshop will be held with a minimum of 10 participants and will be limited to 40 participants. A certificate of attendance will be delivered after the workshop.

To register, please contact ICM AG at [info@icm.ch](mailto:info@icm.ch)

## TOUR ICBR 2020

FRIDAY, SEPTEMBER 18, 2020

### MOONCITY, SALZBURG, AUSTRIA



13.00	Departure by bus from the Sheraton Hotel in Salzburg
13.15	Arrival at MOONCITY
13.15 – 15.00	<b>Guided tour in the innovation and competence center for electric mobility and sustainable energy</b>
15.15*	Arrival at the Sheraton Hotel in Salzburg
15.30*	Arrival at Salzburg airport

**MOONCITY** in Salzburg, an exciting experience and discovery centre for e-mobility, charging infrastructure and sustainable forms of energy is opening its doors. The opening of the centre that is yet another Porsche milestone marks the 70<sup>th</sup> anniversary of Porsche Austria, and will help shape upcoming changes in mobility and energy, which constitute the most dramatic transition in the history of the automobile.

Achieving the CO<sub>2</sub> targets in the Paris Agreement on climate change will be vital, and e-mobility must therefore play a central role: battery-based e-mobility is at present the most promising technology for rapid implementation on a large scale. To help ensure that it achieves a breakthrough, a fully-fledged charging infrastructure will be needed.

Porsche Holding Salzburg has therefore established the MOON brand. MOON's mission is to make e-mobility an everyday reality for broad segments of the population. MOON covers all areas of energy management, including the supply, storage and consumption of energy, mainly for mobility purposes. MOON is an enabler for e-mobility, offering consumers and business customers tailored solutions for embarking on this new era. As a system provider with an overarching approach, MOON covers the full spectrum in the field of e-mobility.

Don't miss this exciting opportunity!

<https://www.mooncity-salzburg.at/>

\* No guarantee on arrival time due to traffic conditions.  
The tour will only take place with a minimum of 8 participants.



## Hotspot for new and electric mobility



Come and visit our fascinating experience centre for electric mobility, charging infrastructure and sustainable forms of energy in Salzburg. Join us into the future.

📍 Sterneckstrasse 28-30, 5020 Salzburg, Austria

🌐 [www.mooncity-salzburg.at](http://www.mooncity-salzburg.at)







Now you can

# Der vollelektrische ID.3



Test Drive at  
ICBR 2020

Ab sofort bestellbar

Stromverbrauch: 15,4 kWh/100 km (kombiniert).  
CO<sub>2</sub>-Emission: 0 g/km. Symbolfoto. Stand 08/2020.

[volkswagen.at](http://volkswagen.at)



## Working together towards a circular economy for batteries and accumulators

Stibat facilitates all actors in the circular economy of batteries in realizing reuse of products and materials and ensuring a safe, sound and environmentally friendly treatment of batteries and accumulators. We offer sustainable services and solutions ensuring compliance with national and European law and regulations with regard to batteries and accumulators.



Safe and  
responsible,  
ISO  
certified.



In depth  
knowledge,  
over 20 years of  
experience.



Offering both  
collective and  
customized  
services and  
solutions.



Stibat | Röntgenlaan 7 | 2719 DX | Zoetermeer | The Netherlands  
[www.stibat.nl](http://www.stibat.nl) | Phone: +31 (0)79 - 363 20 90 | E-mail: [info@stibat.nl](mailto:info@stibat.nl)





## You and us: Collection and recycling for portable and industrial batteries

GRS Batterien guarantees you professional collecting, sorting and recycling of spent batteries. Many years of experience in the handling of portable batteries has made it possible to implement the first nationwide collection system for industrial batteries, in particular industrial lithium accumulators from e-bikes.

We offer individual solutions for eco-friendly recycling to all producers and distributors in Germany.

[www.grs-batterien.de](http://www.grs-batterien.de)



## Li-Ion Car Battery Recycling

WEEE KNOW HOW

- RECOVERY:**
- › Black mass
  - › Electrolyte
  - › Aluminum granulate
  - › Plastics granulate
  - › Ferrous particles
  - › Aluminum foil
  - › Plastics foil
  - › Copper foil



[www.URT-RECYCLING.com](http://www.URT-RECYCLING.com)



## INVESTING IN THE DEVELOPMENT OF BATTERY RECYCLING TECHNOLOGY

Working with the  
University of  
Birmingham

High Intensity  
Magnetic Separation

Electrostatic  
Separation

Eddy Current  
Separation

THE FARADAY  
INSTITUTION  
ReLiB  
REUSE & RECYCLING OF LITHIUM ION BATTERIES



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# BATTERIES TRANSPORT

**BATTERIETRANSPORT.ORG**

YOUR PLATFORM FOR BATTERY-SPECIFIC TRANSPORT INFORMATION



The **professional shipment** of cells, batteries and battery-containing equipment is subject to international, national and regional transport regulation. **BatteriesTransport.org** offers free and easy-to-understand information on all battery-related testing, packaging, labeling and reporting instructions - per transport mode.

BatteriesTransport.org is a non-profit industry initiative with the aim of raising awareness of the legal requirements for the safe transport of batteries and battery-containing equipment. For more information, visit [www.batteriestransport.org](http://www.batteriestransport.org).



**THINK GREEN.  
THINK CIRCULAR.  
THINK TES.**

E-waste is still the fastest growing waste stream on the planet and the challenges around it are evolving. Device types are getting more diverse (ex. IoT devices), device lifespans are getting shorter, and deeper restrictions on transboundary movement are just a few of the seismic shifts in the market. Rising to these challenges means we need to start thinking differently about how to solve them. Thinking differently about e-waste starts with TES.



*For more information, visit our website at [www.tes-amm.com](http://www.tes-amm.com)*



## EXHIBITION & ADVERTISING



Reach key industry decision makers and promote your products to all attendees.

The fees are:

<b>Booth 6 m<sup>2</sup></b> (2 m x 3 m)	<b>EUR 3'290</b>
<b>Booth 12 m<sup>2</sup></b> (3 m x 4 m)	<b>EUR 4'790</b>
<b>Display board</b> (1 m x 2 m)	<b>EUR 690</b>
<b>Poster presentation</b> (wall rental)	<b>EUR 390</b>

Space is limited, book today!



## EXHIBITORS

As per August 28, 2020:



**Battery Safety Solutions BV, Netherlands**



**BHS-Sonthofen GmbH, Germany**

**GLENCORE**

**Glencore AG, Switzerland**



**Nickelhütte Aue GmbH, Germany**



**TES, Australia**



**URT Umwelt- und Recyclingtechnik GmbH, Germany**



**Volkswagen, Austria**



**Watt4ever, Belgium**

## WHO SHOULD ATTEND?



- Battery manufacturers
- Battery recycling companies
- Waste management companies
- Electric & hybrid car manufacturers
- Electric car dismantling & recycling companies
- Battery collection schemes
- Battery collection & transportation companies
- Non ferrous metal traders
- Non ferrous metal industry
- Associations in the field of battery waste management
- Financing organization for battery recycling
- Environmental authorities
- Experts in the field of safe transportation & storage



Participants registering and paying **before July 31, 2020** will benefit from a reduced registration fee. The registration fee includes congress, entrance to the exhibition, proceedings and luncheons.

## REGISTRATION FEES

	<b>before July 31, 2020</b>		<b>after July 31, 2020</b>	
<b>Congress fee</b>				
Fee for participants	EUR	1'590	EUR	1'690
Fee for speakers	EUR	990	EUR	1'090
Fee for students*	EUR	690	EUR	790
*only with valid student card and age below 30				
<b>Networking dinner</b> (Sept. 16)	EUR	120	EUR	140
<b>Networking dinner spouse</b> (Sept. 16)	EUR	140	EUR	160
<b>Tour</b> (Sept. 18) MOONCITY	EUR	30	EUR	50
<b>Workshop</b> (Sept. 18) Waste Li-batteries: Classifications and Transport	EUR	150	EUR	190

All Prices excl. 20% Austrian VAT

Congress registration on site EUR 100 surcharge

### Online registration

You may also register online at: <https://icbr.icm.ch/>

### Virtual Event

If you can't attend the congress, you can be a part of the action from any place in the world for only EUR 480. All presentations, workshop and interviews with exhibitors will be available by live broadcast and on demand, so you can stay up to date with all the recent industry insights and developments brought to you directly from Salzburg.

### Payment

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

**Please note, that any attendees, sponsors or exhibitors who have registered for ICBR 2020 would be fully reimbursed if ICBR 2020 was cancelled due to a change in the pandemic situation.**

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IERC  
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SAVE THE DATE



## 20<sup>th</sup> International Electronics Recycling Congress IERC 2021

January 20 – 22, 2021  
Salzburg, Austria



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# MIRU

## NEWS & REPORT

MIRU is an information site that provides daily information on the trends of various batteries including lead (lead-acid / lead-based) batteries, nickel-metal hydride batteries, nickel-cadmium batteries, lithium-ion batteries as well as their raw materials.

We also hold battery-related conferences.

### The Battery Summit 2020, New-year's commemorative forum

01/31/2020 18:15

"All presentations were extremely good. The audience were also quite excited, too", Kazutaka Kitazume of Bayer Holdings Co., Ltd. mentioned with his honest voice. "I think this is because professor Yoshino influenced", he added. When more than 200 business persons, company executives and researchers gathered in Tokyo to join another forum of IRRSG, it was not just about battery but with higher interest on Dr. Akira Yoshino, the latest Nobel prize awardee and one of usual speakers at IRRSG. There was another co-incidence to celebrate his 72nd birthday (30 January) who happens to be a "man-of-the-year-Mice", which reciprocates every 12 years in pursuant to the Chinese zodiac.



Dr. Heulens of Umicore



Dr. Furukawa of Furukawa Battery



Mr. Teraoka of FDK



Dr. Nishi of former SONY

#### Nobel prize lecture

Last but not least, of course, Dr. Akira Yoshino presented again his Nobel prize lecture in Stockholm but in Japanese language, where it was impressive to know that his invention was inspired by Professor Shinkawa's polyacetylene which was predicted by Professor Fukui both of whom were awarded the Nobel prize in chemistry in 1983 and 2000, respectively with 19 years of interval.

Dr. Yoshino referred to another co-incidence to be awarded the same prize after another 19 years. What's been even more impressive was that his vision on future mobility was crystal clear with visual material, and his firm commitment to go further beyond was obviously the most impressive message to the whole audience today.



Dr. Akira Yoshino

©The presentation was a full explosion. Professor Yoshino, the co-incidence of the Nobel prize co-occurred at the

For more details, please refer to the link below :  
[https://www.iru-miru.com/en/article\\_detail.php?id=32930](https://www.iru-miru.com/en/article_detail.php?id=32930)



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# ICBR 2020

25<sup>th</sup> International Congress for  
Battery Recycling ICBR 2020

September 16 – 18, 2020, Salzburg, Austria

## ICBR 2020 IS TAKING PLACE BOTH IN SALZBURG & ONLINE



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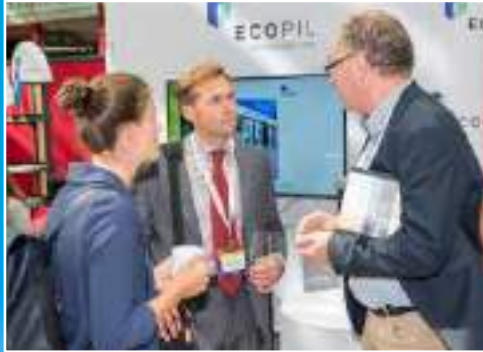
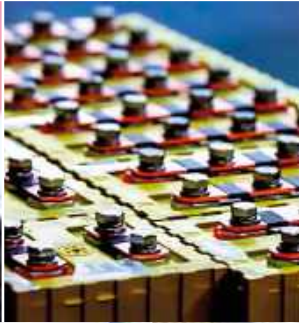
# ICBR 2020



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