

9th Scientific Seminar – Agenda November 30th - December 2nd, 2022 Hesperia Del Mar – Barcelona



The 9th edition of the PROMETIA Scientific Seminar will focus on senior experts' views on the present and future of the mining and recycling sectors. The event will take place from 30 November at 14:00 to 2 December at 12:30 in Barcelona, Spain.

This year's edition will be organised in cooperation with the Novel Circular Economic Approaches for Efficient Extraction of Valuables from Spent Li-Ion Batteries (NEXT-LIB) ERA-MIN project which contributes to a sustainable solution for Lithium-Ion batteries recycling. The workshop, featuring four sessions (Spent LIBs Materials & Characterization, Thermal Treatment & Graphite Separation, LIBs Recycling from the Industrial Perspective and Metal Extraction and Sustainability), will take place from Thursday 1 December at 14:00 to Friday 2 December at 12:30.

| Time (CET) | Topic | Speaker |
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| Wednesday 30 November | | |
| 14:00 | Welcome – Introduction | Andrzej Chmielarz, President Stéphane Bourg, Chairman Patrick D’Hugues, R&D Task Force |
| 14:15 | Mining decarbonisation. A challenge | Jordi Bruno, AMPHOS21 |
| 15:00 | The lithium case | Ioannis Paspaliaris, NTUA |
| 15:45 | Coffee Break | |
| 16:15 | TBD (rare earth value chain) | Alain Rollat, CARESTER |
| 17:00 | The know-how of recycling: from nuclear to battery | Christian Polak, ORANO |
| 17:45 | End of the day | |
| 18:00 | ExCom meeting (restricted) | |
| 19:00 | End of the ExCom | |

| Thursday 1 December | | |
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| 09:00 | Everything can be recycled, cost limits | Christer Forsberg, EuRIC |
| 09:45 | Recycling of passenger and light commercial vehicles – case study The Netherlands | Pieter Kuiper, ARN |
| 10:30 | Coffee Break | |
| 11:00 | Future needs, circular economy and education and training... | Yongxiang Yang, TU DELFT |
| 11:45 | Feedback on 2022 Techtour | Techtour attendees (Nils Zachmann, Léa Rouquette, Waldemar Mijal, Andrea Carlino) |
| 12:30 | Lunch – end of the Seminar | |
| 14:00 | Welcome and Introduction of the NEXT-LiB Project | Dr. Guozhu Ye, Swerim, project coordinator |
| Session 1: Spent LIBs Materials & Characterization | | |
| 14:05 | Black mass characterization & evaluation | Dr. Antonella Cornelio, INSTM |
| 14:25 | Can binders be completely removed without being dissolved? – Evaluation from petrographic analysis | Prof. Bruno Valentin, Porto U |
| 14:45 | The shredding simulator at Swerim | Mr. Ludvig Ånnhagen/Xianfeng Hu, Swerim |
| 15:00 | Hazardous gases formed during shredding and possible electrolyte recovery | Dr. Xianfeng Hu, Swerim |
| 15:20 | Coffee Break | |
| Session 2: Thermal Treatment & Graphite Separation | | |
| 15:40 | Graphite separation: thermal treatment and flotation from lab to pilot scale | Dr. Elsayed Mousa, Swerim/ Dr. Jason Yang, GTK |
| 16:00 | Mechanical activation, summary of test works at LTU | Dr. Hesham, LTU |

| Session 3: LIBs Recycling from the Industrial Perspective | | |
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| 16:20 | Non-ferrous metals for a sustainable future | Dr. Justin Salminen, Boliden |
| 16:35 | LiB recycling – Northvolt perspective and experiences | Mr. Alejandro Gracia Tabuenca, NorthvoltRevolt |
| 16:50 | LIBs recycling at AkkuSer | Mr. Tommi Karjalainen, Akkuser |
| 17:05 | LiB-recycling at Ever Resources | Dr. Athan Fox, Ever |
| 17:20 | End of the day | |
| 17:45 | General Assembly (restricted) | |
| 19:00 | End of the GA | |
| 19:30 | Invited Dinner | |

| Friday 2 December | | |
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| Session 4: Metal Extraction and Sustainability | | |
| 09:00 | Recovery of Li and other valuables using pyrometallurgical approaches | Dr. Guozhu Ye, Swerim |
| 09:20 | Recovery of LiB – hydro approaches Part 1 | Dr. Juan Anaya, Extractive |
| 09:40 | Recovery of LiB – hydro approaches Part 2 | Dr. Oriane Maubert, CEA |
| 10:00 | Innovative study based on microwave for LIBs recycling | Prof. Elza Bontempi, INSTM |
| 10:20 | Sustainability analysis of NEXT-LiB | Dr. Antonella Cornelio, INSTM |
| 10:40 | Coffee Break and group photo | |
| 11:10 | Innovative study on solvent extraction for LIBs recycling: can we separate everything | Dr. Bruno Valentin, Charlotte Badenhorst, Porto U |
| 11:40 | The recycling of critical metals from lithium-ion batteries using combined metallurgy technologies | Léa Rouquette & Nils Zachmann, Chalmers |
| 12:00 | Innovative LiB strategic metals recovery | Albert Martínez Torrents; CTA/EURECAT |
| Session 5: Summary and Final Words | | |
| 12:20 | Words from ERA-MIN and other funding agencies | EraMin Administration, Dr. Dina Carrilho |
| 12:35 | Summary & Closing NEXT-LiB Workshop | Dr. Elsayed Mousa & Dr. Guozhu Ye |
| 12:45 | Final words | Mr. Stephane Bourg, PROMETIA |
| 12:50 | End of the seminar | |