

Self-Healing Batteries: where are we today? BAT4EVER-HIDDEN final event

Date: 31st January 2024

Venue: Vrije Universiteit Brussel (VUB), U-Residence, General Jacqueslaan 271, 1050 Brussels – BELGIUM. View on map [here](#)

| Draft Programme | |
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| From 08:30 | Welcome coffee and registration |
| 09:00 – 10:00 | WELCOME AND INTRODUCTION Moderated by: Philippe Jacques, Managing Director, EMIRI and Coordinator of the AMI2030 initiative |
| Welcome words from VUB | Prof. Dr. Joeri Van Mierlo, Director MOBI Electromobility Research Center, Vrije Universiteit Brussel (VUB) |
| Welcome words from BAT4EVER and HIDDEN coordinators | Dr. K. Burak Dermenci , <i>Senior Researcher</i> , Vrije Universiteit Brussel (VUB) Dr. Marja Vilkmán , <i>Principal scientist</i> , Technical Research Centre of Finland (VTT) |
| EC introduction from the HIDDEN and BAT4EVER Project Officer | Jean-Marie Auger , <i>Project Officer</i> , European Commission (TBC) |
| BATTERY 2030+ | Prof. Kristina Edström , Uppsala University (UU) |
| 10:00 – 11:00 | SESSION 1: DEVELOPING MATERIALS FOR SELF-HEALING BATTERIES Moderated by: Dr.-Ing. habil. Bilge Saruhan-Brings, <i>Senior scientist</i> , German Aerospace Center |
| Self-healing and reprocessable polymer materials in LIBs | Prof. Wolfgang Binder , Martin Luther University Halle-Wittenberg (MLU) |
| Self-healing mechanism in BAT4EVER anode | Assoc. Prof. Neslihan Yuca , <i>Founder</i> , Enwair |
| Thermotropic Ionic Liquid Crystals (TILCs): Dynamically self-assembling/healing electrolytes | Dr. Patrice Rannou , <i>Director of Research</i> , Centre National de Recherche Scientifique (CNRS) |
| Q&A | |
| 11:00 – 11:30 | Coffee Break and poster session |
| 11:30 – 12:45 | SESSION 2: SELF-HEALING BATTERY PROTOTYPING: KEY ASPECTS ON MODELLING, MANUFACTURING, AND TESTING Moderated by: Dr. Marja Vilkmán, <i>Principal scientist</i> , Technical Research Centre of Finland (VTT) |

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| Atomistic modelling of materials: challenges and advances | Rita Magri , PhD, professor of Physics of Matter, Università degli studi di Modena e Reggio Emilia (UNIMORE) |
| Self-Healing batteries: how do we manufacture them? | Dr. K. Burak Dermenci , Senior Researcher, Vrije Universiteit Brussel (VUB) |
| Upscaling of Self-Healing separator manufacturing | Dr. Taina Rauhala , Research scientist, Technical Research Centre of Finland (VTT) |
| Investigating the Role of a P(VDF-TrFE) Ferroelectric Separator in Li-Metal Pouch Cells using Electrochemical Impedance Spectroscopy | Mr. Shubham Bhoir , PhD student, Centre Suisse d'électronique et de microtechnique (CSEM) |
| Q&A | |
| 12:45 – 13:30 | Lunch break and poster session |
| 13:30 – 14:15 | VUB lab tour |
| 14:15 – 15:00 | SESSION 3: A FACTUAL BASED OVERVIEW ON SUSTAINABILITY RESULTS OF SELF-HEALING BATTERIES Moderated by: Dr. K. Burak Dermenci, Senior Researcher, Vrije Universiteit Brussel (VUB) |
| Exploring the environmental sustainability: upscaling and life cycle assessment of self-healing batteries | Anne van den Oever , PhD Researcher, Vrije Universiteit Brussel (VUB) |
| Self-healing battery and its impact for the environment | Ms. Katrin Pangaribuan , Project Engineer, Belenos Clean Power Holding AG |
| Q&A | |
| 15:00 – 15:30 | Coffee Break and poster session |
| 15:30 – 16:45 | ROUND TABLE: USAGE AND CHALLENGES OF SELF-HEALING BATTERIES IN INDUSTRIAL APPLICATIONS Moderated by: Thomas Otuszewski, Business Director, Clerens |
| Presentations: Marketing and industry application | |
| Marketing aspects: achievements and drawbacks to match the smartphone market | Mr. Peter Dooley , CEO, CleanCarb (CCB) |
| Safety evaluation of self-healing cells | Mr. Baran Kılıççioğlu , R&D Battery Reliability & Safety Team Lead, VESTEL |
| Self-Healing from industry perspective | Dr. Cédric Pitteloud , CSO, Belenos Clean Power Holding AG |
| Discussions with industry | |
| Industry: | |

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| (TBC) | |
| 16:45 – 17:00 | CLOSURE |
| Self-healing batteries: what is next? | Dr. K. Burak Dermenci , <i>Senior Researcher</i> , Vrije Universiteit Brussel (VUB) |
| From 17:00 | Networking cocktail |

