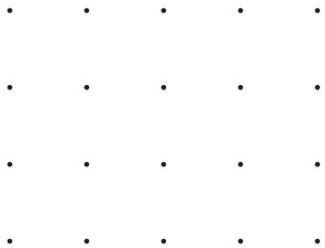




Australian Government



International Symposium on Critical Metals for Battery Production from Primary and Alternative Resources

15-16 July 2024, 09.00-17.00 AEST
Swinburne University of Technology, Melbourne

Critical metals (and broader strategic metals) are used in many applications, technologies, products, and processes that important to support our green economy and energy transition from fossil fuels to cleaner sources. Australia and Indonesia have both primary and secondary resources to supply regional and global critical metals. In terms of primary resources for batteries, Indonesia holds the world's largest nickel reserves (21 million tonnes), while Australia is the largest global lithium producer (47%).

Funded by the Department of Foreign Affairs and Trade (DFAT) Australia, through the Australia-Indonesia Institute, this symposium will bring together key experts, institutions and stakeholders from Australia, Indonesia, and other countries, to showcase works/research, share knowledge and experiences to contribute to the overall effort to secure critical metals and their supply chain.

We look forward to seeing you in July 2024.

Prof Akbar Rhamdhani (Swinburne, Co-Chair)
Prof Mark Pownceby (CSIRO, Co-Chair)
Prof Widi Astuti (BRIN, Co-Chair)

DATE and TIME

15-16 July 2024
9.00 AM - 5.00 PM AEST (Melbourne time)

VENUE

Swinburne University of Technology
EN715, Engineering Building
Hawthorn Campus
Melbourne, Australia

MODE

Hybrid (in person and online attendance)

COST

Free

REGISTRATION

Please register your attendance (for in person or online attendance) of the Symposium by visiting the registration website below.

<https://events.humanitix.com/international-symposium-on-critical-metals-for-battery-production>

CONTACT

Prof Akbar Rhamdhani
(arhamdhani@swin.edu.au)



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International Symposium on

Critical Metals for Battery Production from Primary and Alternative Resources



Swinburne University of Technology, EN715, Engineering Building, Melbourne, Australia
15-16 July 2024, 09-17.00 AEST (Melbourne time)

The symposium mode is hybrid, in person and online.

DAY 1: 15 July 2024 – EN715	
08.30-9.00	Registration
09.00-09.10	Welcoming address – Prof. Emad Gad (Dean of School of Engineering)
09.10-09.40	Indonesian Government Perspective - Dr. Siswo Pramono (Ambassador of Republic of Indonesia)
09.40-10.00	Prof. Akbar Rhamdhani (Swinburne): Introduction to Energy Transition and Critical Metals Research at Swinburne
10.00-10.25	Prof. Ratno Nuryadi (BRIN): Overview of BRIN (RO Nanomaterials) and its Broader Research in Support of Critical Metals/Battery Materials/ RE-Metals
10.25-10.45	Tea Break
Session 1 Resources and Challenges	
Chair	Adj. Prof. Dr. Mark Pownceby
10.45-11.10	Prof. Evvy Kartini (NBRI-National Battery Research Institute) – Challenge, Opportunity, and Landscape of Battery Industry in Indonesia
11.10-11.35	Ms Allison Britt (Geoscience Australia) - Overview on Australia Critical Mineral Resources, Availability, and Industries
11.35-12.00	Dr Suzanne Neville (Australian Critical Minerals R&D Hub) - Overview on Critical Minerals Secondary / Alternative Resource, and its Research in Australia
12.00-12.25	Mr Dany Amrul Ichdan (Mind ID Indonesia) – Critical Metals at Mind ID
12.25-13.50	Group Photo - Lunch Break and Networking Session (DVC R&D Karen Hapgood / PVC Flagship Initiatives Alan Duffy, Dean of SoEng Prof Emad Gad, Ambassador/Consul General of Republic Indonesia, Attache of Education and Culture)
Session 2 Battery Components and Materials	
Chair	Prof. Evvy Kartini
13.50-14.15	Prof. Zaki Mubarok (ITB) - Valorization of HPAL Plant Residue for Cathode Materials of Iron-Based Lithium Ion Battery
14.15-14.40	Prof Jacques Eksteen (Curtin University) – Battery Materials from Recycled and Primary Sources
14.40-15.05	Dr. Anggoro Tri Mursito (BRIN) - Graphite from Coal for Anode Precursor of Lithium Batteries
15.05-15.30	Tea Break
Chair	TBA
15.30-15.55	Assoc. Prof. Mohan Yellishetty (Monash University) – New Energy Commodities and Critical Minerals
15.55-16.20	Prof. Agus Purwanto (UNS) – Direct Synthesis of Cathode Active Materials (NMC) from MHP
16.20-16.45	Prof Geoffrey Brooks (Swinburne) – Antimony: the Forgotten Metal
16.45-17.00	Recap of First Day
CLOSE OF DAY 1	

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DAY 2: 16 July 2024 - EN715	
08.45-9.00	Registration
Session 3 Critical Minerals Extraction and Processing	
Chair	Dr. Anggoro Tri Mursito
09.00-09.25	Adj. Prof. Dr. Mark Pownceby (CSIRO) - An overview of Critical Battery Material Research at CSIRO
09.25-09.50	Prof. Widi Astuti (BRIN) - Extraction of Critical Metals (Ni, Co, Mn, La, Si) from Indonesian Laterite, Spent Catalyst, Coal Fly Ash, and Geothermal Sludge
09.50-10.15	Dr. Ika Kartika (BRIN) - Development and Purification of Chemical Precursors of Lithium, Nickel, Cobalt Titanate, Iron, and Manganese as Active Elements for Lithium Batteries from Primary and Secondary Resources
10.15-10.40	Tea Break
Session 4 Battery and Critical Minerals Recycling	
Chair	TBA
10.40-11.05	Dr. Reiza Mukhlis (Swinburne) - Alkaline Battery Recycling (Zn and Mn Extraction)
11.05-11.30	Assoc. Prof. Nikhil Dhawan (IIT Roorkee) - Recycling of Discarded Lithium-Ion Batteries for Selective Metal Recovery
11.30-11.55	Dr. Bintang Nuraeni (Argonne National Lab, USA) - Current State of Critical Metals in the ReCell Centre ANL
11.55-12.20	Mr Md Rakibul Qadir (RMIT/CSIRO) - Metal Recovery from Spent Li-ion Batteries by Acid Leaching
12.20-13.40	Lunch Break and Networking Session
Session 5 Recycling, Circular Economy and Supply Chain	
Chair	Dr. Reiza Mukhlis
13.40-14.05	Dr. Deddy Nababan (CSIRO/Swinburne) - Lithium Battery Recycling Using Metallothermic Reduction
14.05-14.30	Prof Himawan Tri Bayu Murti Petrus (UGM) - Total Extraction and Circular Economy in Mineral Processing: Towards the Implementation of Green Technology
14.30-14.55	Dr Syarif Riyadi (ECADIN) - Overview of Value Chain Battery Manufacturing and Opportunities
14.55-15.20	Assoc Prof Hadi Ghaderi (Swinburne) - Supply Chain Decarbonisation in Support of Critical Minerals Industry
15.20-15.45	Tea Break
Chair	Prof Himawan Tri Bayu Murti Petrus
15.45-16.05	Mr Dzikra Soefihara (Remind Indonesia) - Recycling Activities at Remind Indonesia: Current Status and Future Outlook
16.05-16.30	Mr Mark Griffiths (Lithium Australia/Envirostream) - Overview of Battery Recycling
16.30-16.55	Mr Thomas Morias (Umicore-Belgium) - Sustainable Battery Recycling at Umicore
16.55-17.00	Closing Remarks - Prof. M. Akbar Rhamdhani
END OF SYMPOSIUM	

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Swinburne University of Technology, EN715, Engineering Building

Post Symposium Program (Limited/Restricted)

DAY 3: 17 July 2024	
09.30-12.00	Strategic Meeting for further Collaboration Room EN609a
2.00-3.30pm	Industry Tour: Envirostream / Lithium Australia Battery Recycling Pre-Processing

DAY 4: 18 July 2024	
09.30-11.30	Swinburne Facilities Tour
1.00-3.00pm	CSIRO Facilities Tour