筑波大学
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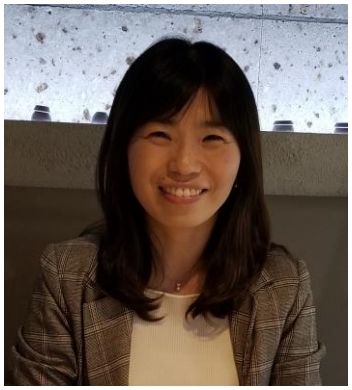
EME International Seminar Series



Next generation rechargeable batteries

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Abstract:

The variable nature of renewable energy resources means that storing energy will play a key role in mitigating climate change. Creating sustainable and competitive energy storage solutions is therefore the next big challenge. Rechargeable batteries are the most efficient way of storing renewable electricity, although weight, volume and cost make some applications impractical. Sustainable batteries will also need to use abundant materials and zero-carbon manufacturing processes. Lithium-ion batteries are currently the most viable short-term battery technology for these applications. However, for low-carbon transport and stable electricity supplies in a net zero world, more powerful, longer-lasting, faster-charging batteries are required such as Na-ion battery, Li-O_2 battery, Zn-ion battery and Li-S battery. To develop viable new batteries, battery research focuses on discovering new materials with higher power density and energy, in addition to more efficient energy storage.

Therefore, this seminar present a comprehensive overview of next generation rechargeable batteries. Batteries could make a very important impact in our fight against climate change.

Thursday, 17 November 2022 15:15 – 16:15, Teams on-site only (Team code: z2y60pz)