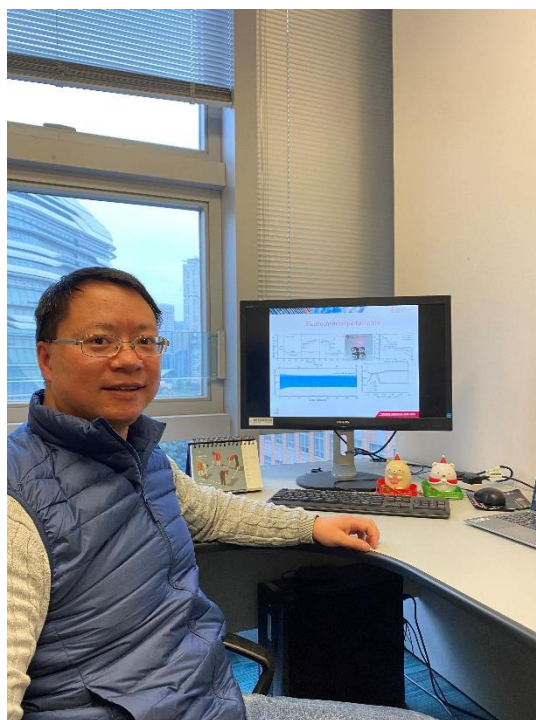


Prof. Meng Ni winning RGC CRF project

Huge congratulations to **Prof. Meng Ni**, Professor and Associate Head (Research) of BRE! Prof. Ni will receive a grant of HK\$4.2 Million from **Research Grant Council (RGC) Collaborative Research Fund (CRF)** for his project “Durable and high-performance zinc-air flow batteries for energy storage”. This is the **first RGC large-scale research grant** received by BRE staff as a project coordinator.

Renewable solar and wind power are intermittent and site specific. Development of high performance and durable rechargeable batteries are essential for successful application of renewable power. Compared with other types of batteries, zin-air batteries have high energy density, cheap and safe. To solve problems of Zn dendrite formation and Zn electrode passivation, Zn-air flow batteries will be developed. To reduce the energy loss at the air electrode, novel perovskite catalyst will be explored. This project will develop high performance and durable Zn-air flow batteries for grid scale energy storage to facilitate the application of renewable solar and wind power.



Prof. Ni will conduct this project in collaboration with **Prof. Dennis Leung** from The University of Hong Kong (HKU) and **Prof. Tianshou Zhao** from The Hong Kong University of Science and Technology (HKUST). Prof. **K.Y. Chan** from HKU and **Prof. Peng Tan** from University of Science and Technology of China (USTC) will serve as collaborator of this project.

Prof. Meng Ni is currently a Professor and Associate Head (Research) of Department of Building and Real Estate. He is a Humboldt Fellow (Germany). His research focuses on high temperature fuel cells, rechargeable metal-air batteries, flow batteries, novel electrochemical cells for low-grade heat harvesting, and energy materials.

He is serving as a **Senior Editor** for *Sustainable Energy Technologies and Assessments*: <https://www.journals.elsevier.com/sustainable-energy-technologies-and-assessments> (Elsevier) and a former Associate Editor for Science Bulletin (Elsevier). Recently, he was invited to be an **Associate Editor** for *International Journal of Green Energy*: <https://www.tandfonline.com/toc/ljge20/current> (Taylor & Francis) and *International Journal of Energy Research*: <https://onlinelibrary.wiley.com/journal/1099114x> (Wiley). He is also one of the founding editors of *Energy and AI*: <https://www.journals.elsevier.com/energy-and-ai/> (Elsevier).

For more details about Prof. Ni, please visit:

<http://www.bre.polyu.edu.hk/staff/bsmengni/index.htm>

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