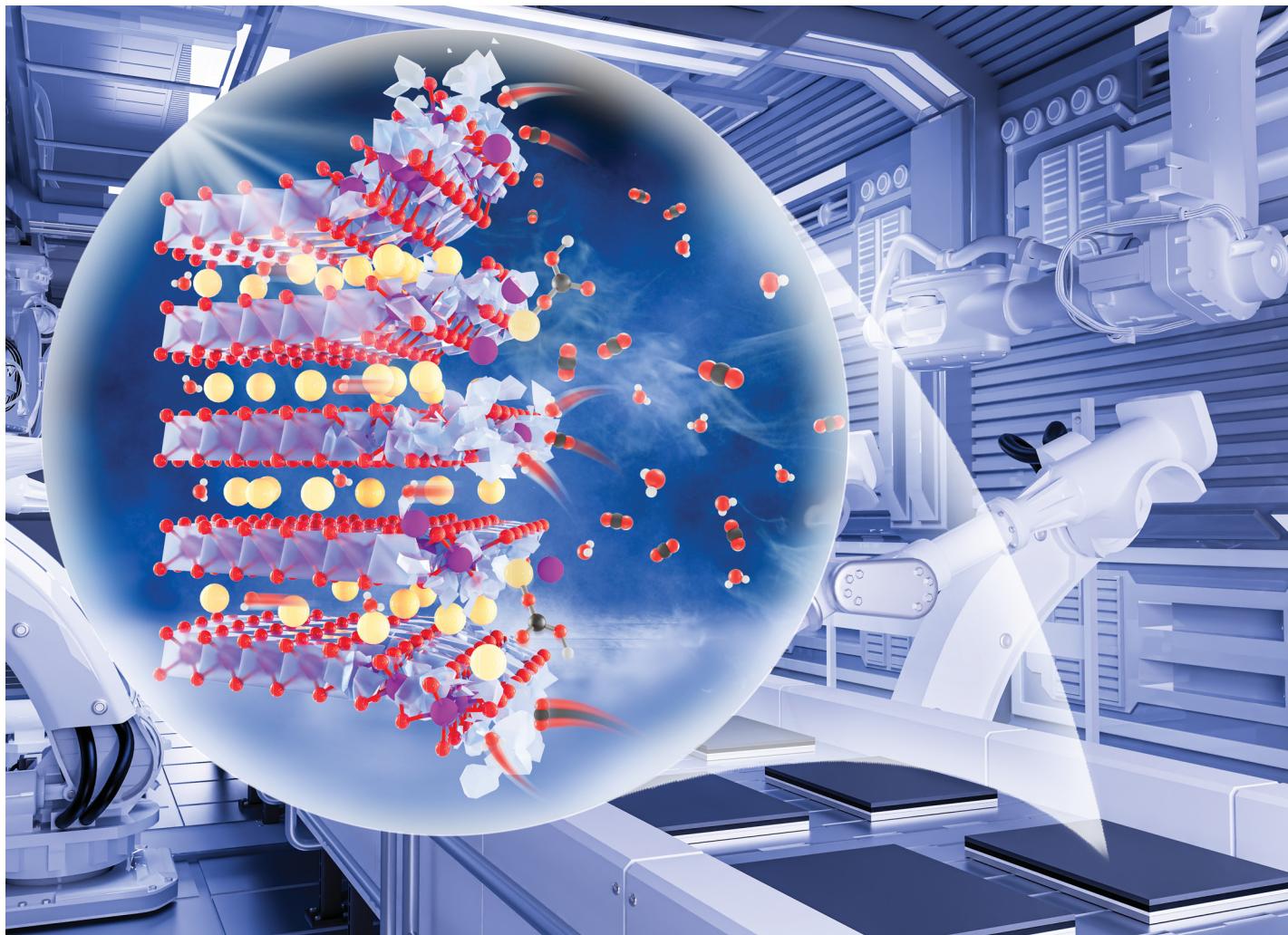




**Showcasing research from Professor McCalla's laboratory,
Chemistry Department, McGill University, Montreal, Canada.**

Unravelling air/moisture stability of cathode materials in sodium ion batteries: characterization, rational design, and perspectives

In this collaboration between McGill University and Umicore, McCalla *et al.* critically review progress made in the development of air stable materials for Na-ion batteries. The cathodes with highest energy density, which show the greatest promise to compete with Li-ion batteries in electric vehicles, are currently impractical for commercialization. They rapidly deteriorate in ambient air due to attack from both water vapour and carbon dioxide. This instability makes the current manufacturing infrastructures unsuitable for these cathodes. The review details future prospects and recommended best practices in developing these important materials.

As featured in:



See Eric McCalla *et al.*,
Energy Environ. Sci., 2024, **17**, 4343.