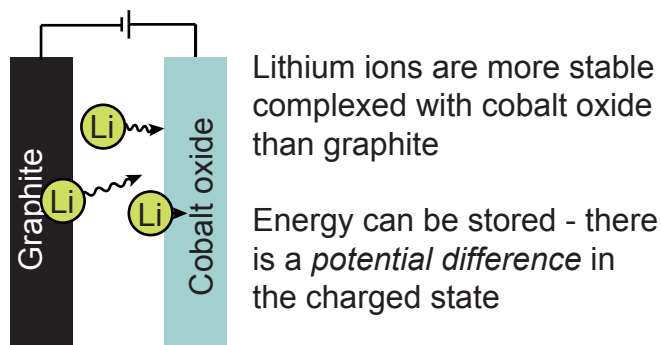


# Energy

Storage  
Conversion  
Environment

University of  
**Kent**

*Batteries use potential to store energy*



Fuel cells: simple chemistry for renewable conversion



*Fuel cells* allow renewable hydrogen to be used in a vehicle

The opposite process is water electrolysis

We need to find the right catalysts to do this cheaply (currently, platinum is used)

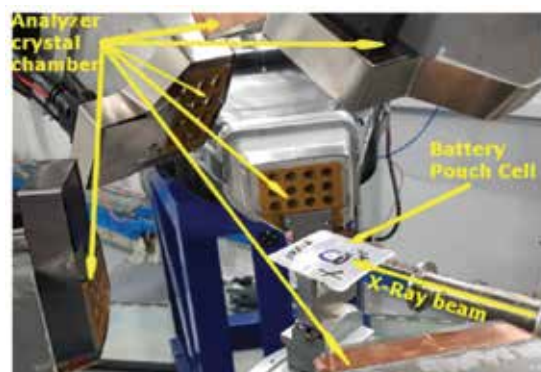


Source: mercedesbenz.com

## What do we do at Kent?

Combining computer simulations and lab experiments to design new materials for 3D printable lithium ion batteries

High power X-ray techniques



J. Phys. Chem. C 2019, 123, 40, 24396

Organic compounds for redox flow batteries - a hybrid of batteries and fuel cells



## What can you do at Kent?

Our curriculum contains the key chemistry for employability in a renewable economy

Our technicians have developed a portable testing device so undergraduates can investigate new energy-related devices

