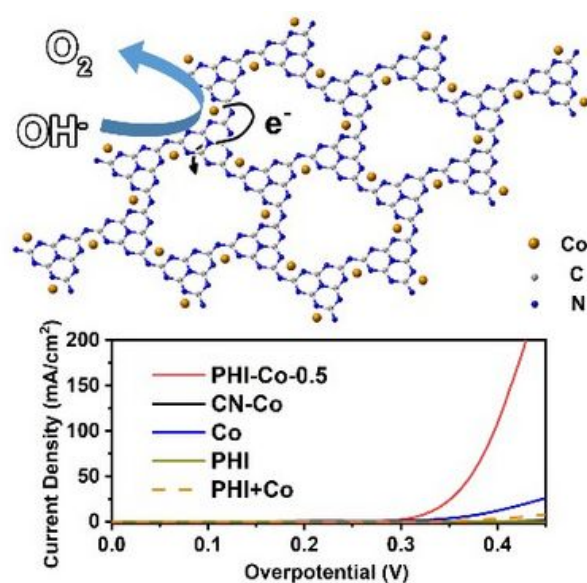


An Oxygen Evolution Reaction via a Noble-metal Free Electrocatalyst

Start Time: Wednesday, March 11, 2020

End Time:



Cobalt-exchanged Poly(heptazine imides) as transition metal-N_x electrocatalysts for the oxygen evolution reaction

Researchers from four institutions in UniSysCat have developed a noble-metal free electrocatalyst for the oxygen evolution reaction (OER).

The material is a poly(heptazine imide), an organic framework with anionic moieties in the backbone, in which Co-ions can be introduced in well-controllable amounts. Such cobalt poly(heptazine imides) can be produced by simple heating of an organic precursor in a mixed salt melt containing a cobalt salt, thus by a facile, cheap and scalable approach.

Due to the enhanced conductivity and abundant, well-distributed Co-N_x catalytic active sites, this cobalt poly(heptazine imides) exhibits an excellent OER activity and stability.

This work provides a novel approach for the development of high performance electrocatalysts with adjustable and highly-dispersed metal-N_x sites by applying poly(heptazine imides) as the support material.

To find out more [click here](#) (Wiley Online Library).

