केन्द्रीय नमक व समुद्री रसायन अनुसंधान संस्थान
CENTRAL SALT & MARINE CHEMICALS RESEARCH INSTITUTE
वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद
COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH

Technology for Licensing & Scale-up

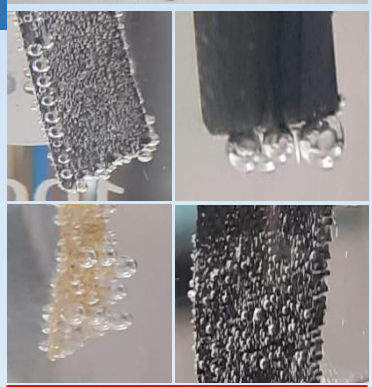
- Planning for/ have an electrochemical venture and obsessed for indigenous?
- Wish to plunge into the Green Hydrogen business?
- Looking for a cost-effective electrode for high current applications?
- Fascinated with market of Biomarker sensing?
- Worried with environment abuses?

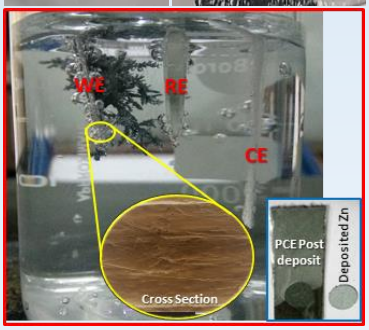
AND looking for Cost-effective, Multipurpose electrode Platform?
We Invite you to try-out

PLASTIC CHIP ELECTRODE (PCE) – A MULTIPURPOSE ELECTRODE PLATFORM

CSMCRI-PCE is a bulk conducting, self standing, cost-effective multipurpose electrode platform made up of carbon (graphite) and polymer (PMMA).

TRL-6





Why CSMCRI-PCE

Potential successor of Screen-Printed Electrode (SPE).

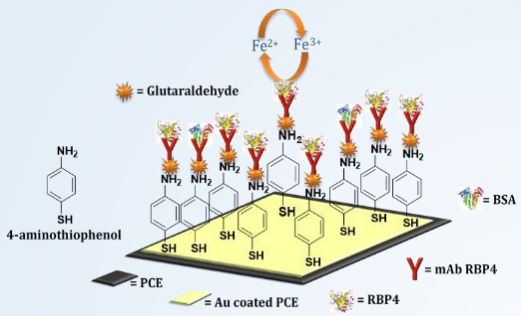
- SPE suffers a bottleneck of fragile conducting layer.
- Can not sustain high current densities.
- Loading of proteins (glucometer trip) require heat treatment. Not required in PCE.

Technical attributes.

- Effectively mitigates the bubble effect in water splitting reaction.
- Catalyst/ receptor can be loaded through Au-thiol/ chemical interactions.
- Sustain current density [tested up to 500 mA/cm^2].
- Stable in wide pH range.
- Scalability & Biodegradability.

Highly simplified and spontaneous fabrication process.

- Negligible initial capital expenditure.
- Cost-effective even at low production level.



Patent: GB 2539862; JP 6779863; WO 2015170344 A1;