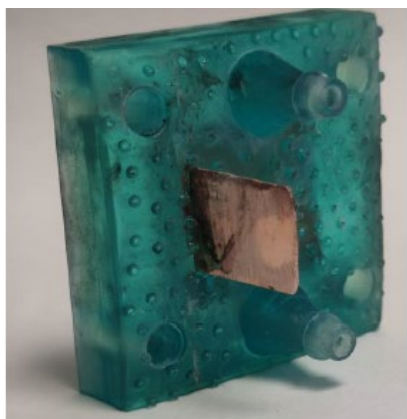


Technology Offer CSIC/AF/022

Compact electrochemical device



New compact electrochemical device that can be adapted to different applications such as: flow cell, fuel cell or electrolyzer to produce H₂.

Intellectual Property

Priority patent application filed

Stage of Development

Device validated in laboratory

Intended Collaboration

Licensing and/or co-development

Contact

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Market need

Electrochemical devices can be designed as flow cells, fuel cells or electrolyzers to produce H₂ and other chemicals. Each of those equipment are the core of crucial applications for energy transition.

Current devices are typically made by many pieces. Skilled and trained personnel is required for their assembly, which is slow. Leakage of fluids frequent because of the elevated pieces.

There is a need of devices which are smaller, lighter, compact, leak free and energetically and cost efficient.



CSIC solution

Our new device has less pieces than the conventional electrochemical devices, which simplify assembly and hinders leakage. What is more, the device is requiring less pressure, allowing a less bulky structure and, at the same time, it ensures optimal electric contacts, minimizing energy losses.

Competitive advantages

- Versatile electrochemical device.
- Compact tailor-made and lightweight design.
- Fast and reliable assembly.
- More resistant to vibrations.
- Ideal for R&D and small stacks.