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The High Tech Incubator

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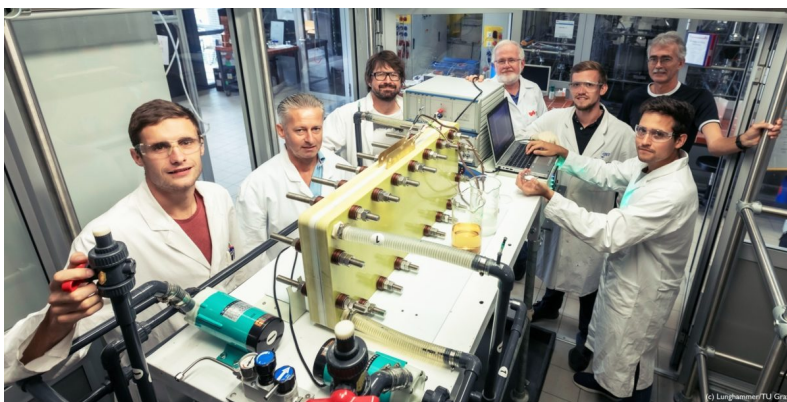


Ecolyte

We design sustainable, safe and non-toxic electrolytes for large scale batteries.

Our mission is the design of sustainable and inherently safe electrolytes for large scale energy storage using redox flow battery technology. We aim to replace current technology that has severe limitation in terms of environmental impact and cost.

Our approach is to produce environmentally friendly electrolytes from waste materials in paper industry. We convert these materials e.g., into vanillin, a well-known flavor compound and ingredient in many food products. We use the vanillin and convert it into an electrochemically active material which can be used in redox flow battery systems. Our patented technology relies on a continuous process which avoids any precious metals or catalysts and does not generate any problematic waste. The battery electrolytes have been tested in prototypes and show excellent properties in simulated test runs for 9 months of full charge and discharge of the battery. Typical applications of the technology involve buffer storage for renewable energy, and e-fuel stations.



TU Graz, Stefan Spirk & Team, Redox Flow Battery



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