



VIDICAT- Versatile Ionomers for Divalent Calcium baTteries

The growth of renewable energy hinges on the development of new energy storage instruments. Lithium batteries (LiB), a reliable solution, are used today in electronic instruments, electric vehicles and stationary storage plants. But in future, the growing storage demand will conflict with the issue of limited resources. Post-LiB solutions such as sodium, magnesium or calcium technologies have emerged. They present high potential in terms of theoretical density, safety and sustainability. However, the absence of trustworthy electrolytes hinders practical research on rechargeable calcium batteries. The EU-funded VIDICAT project intends to develop a new material concept based on nanocomposite ionomers that will offer highly stable electrolytes. The project will also search for positive electrodes in its work towards building trustworthy and safe calcium batteries.

UNIPD Team Leader: Vito di Noto

Department: Department of Industrial Engineering

Coordinator: Universidad Carlos III de Madrid (Spain)

Other Participants:

Karlsruher Institut für Technologie (Germany)

Fundación Cidetec (Spain)

Eras Labo (France)

Forschungszentrum Jülich GmbH (Germany)

Università degli Studi di Padova (Italy)

Centre national de la recherche scientifique CNRS (France)

Total EU Contribution: Euro 2.997.783,75

Call ID: H2020-FETOPEN-2018-2019-2020-01

Project Duration in months: 48

Start Date: 01/03/2019

End Date: 28/02/2023

Find out more: <https://cordis.europa.eu/project/id/829145>