

INNOVATION DAY

ENERGIA 2024

21 de novembre | Barcelona

Bateries de càrrega ràpida realment sostenibles

Dr. Daniel Rueda García
Napptilus Battery Labs



• Som una start-up i spin-off del grup Neo-Energy del ICN2



Jordi Aibar

- Co-Founder & Interim CEO
- MSc Telecommunications UPC (Barcelona)
- Founder of Energy Startups



Daniel Rueda

- CTO
- Ph.D. Nanoscience, UB
- CSIC, ICN2



Verónica Fabián

- Ph.D. Energy Materials
- MSc Industrial Engineering
- CSIC, ICN2



Eugeni Llagostera

- COO
- MSc Industrial Engineering UPC (ETSEIB)
- Ex-Director of R&D in Reby (Mobility)



Pedro Gómez-Romero

- Co-founder & Advisor
- Ph.D. | Chemistry (Georgetown Univ)
- ICN2 Group Leader



Rafa Terradas

- Co-founder
- MBA ESADE, MSc Electrical Engineering
- Napptilus Tech Labs CEO & Founder



Eduard Alarcón

- Co-founder & Advisor
- Ph.D. | Electrical Engineering
- Invited researcher, CU Boulder

SHARED NEO-ENERGY RESEARCH TEAM

Cross-disciplinary engineering team leveraging applied research to create sustainable battery innovations



Lab Technician Team

- 2 x Junior Chemical engineer technician

(a)

Energy capacity (TWh_{electrical})

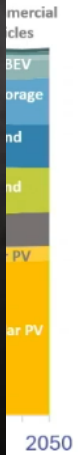
Science NEWS CAREERS COMMENTARY JOURNALS LOG IN BECOME A MEMBER



A DEAD BATTERY DILEMMA

With millions of electric vehicles set to hit the road, scientists are seeking better battery recycling methods

20 MAY 2021 • 12:44 PM ET • BY IAN MORSE

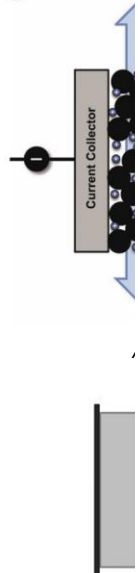


Èlectrodes tipus pasta gruixuts

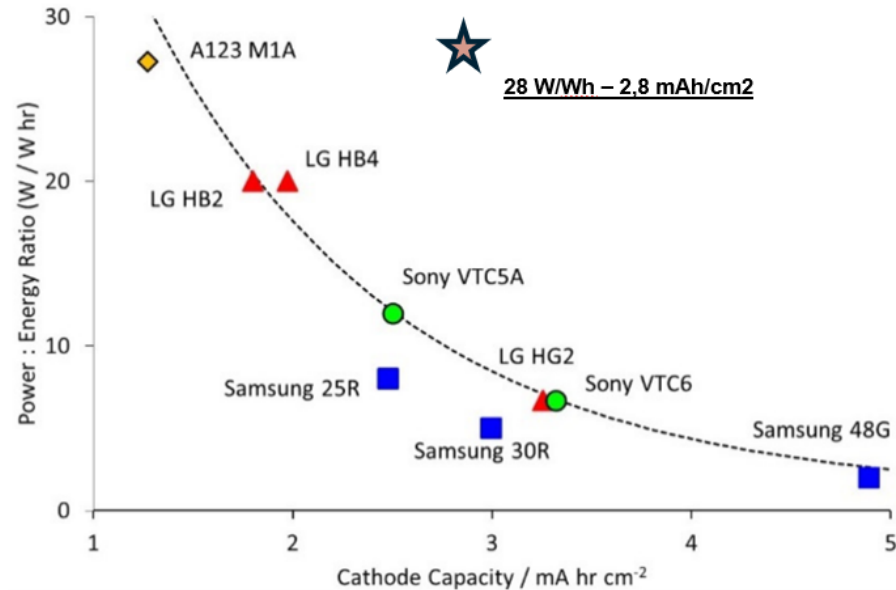
Fabricació per injecció

Tecnologia híbrida, solució integral

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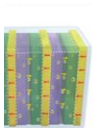


240mg/cm² (5-15mg/cm² commercial cells).
 Paste electrode ambient atmosphere prepared.
 Ambient atmosphere cell assembly.
 Non-flammable electrolyte
 No Li, Co, Ni, Mn, noble metals, rare earths.



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Batteries 2019, 5(4), 64: <https://doi.org/10.3390/batteries5040064>

2024

Pre-industrial cell on development



Large scale manufacturing process under development.

2025

Module

Energy density
50 Wh/kg



Module construction process for optim cell integration ready. Initial BMS developed.

2026

Battery Pack Manufacturing Process



First manufacturing of batteries for electric vehicles to happen