Attività di tirocinio/tesi per gli studenti del 3° anno della L27 e 2° anno della LM54

Prof. Andrea Paolella
Andrea.paolella@unimore.it

1) TIROCINIO/TESI IN BATTERIE LITIO IONE

Tirocinio/Tesi L27-LM54 in NOVAC (MODENA)

- **Innovative start-up** based in **Modena,** since **2020**
- Developing of innovative **solutions** in the **energy storage** sector
- Focus on materials for **batteries** and **supercapacitors**

ucc by novac

High performance current collector

6 patents

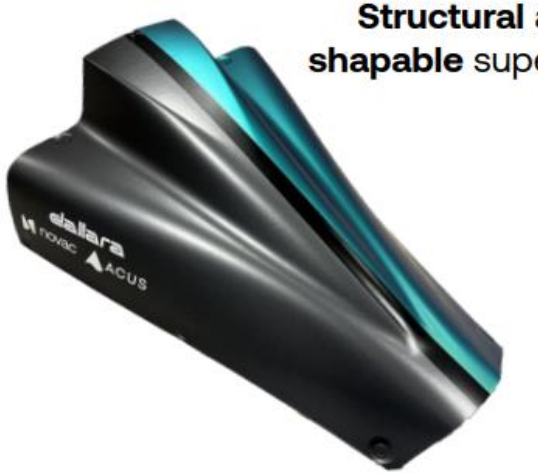
poresel by novac

Solid-state electrolyte

High **performance**
High **mechanical** and **thermal** stability

Pilot line in 2025

Structural and **shapable** supercaps



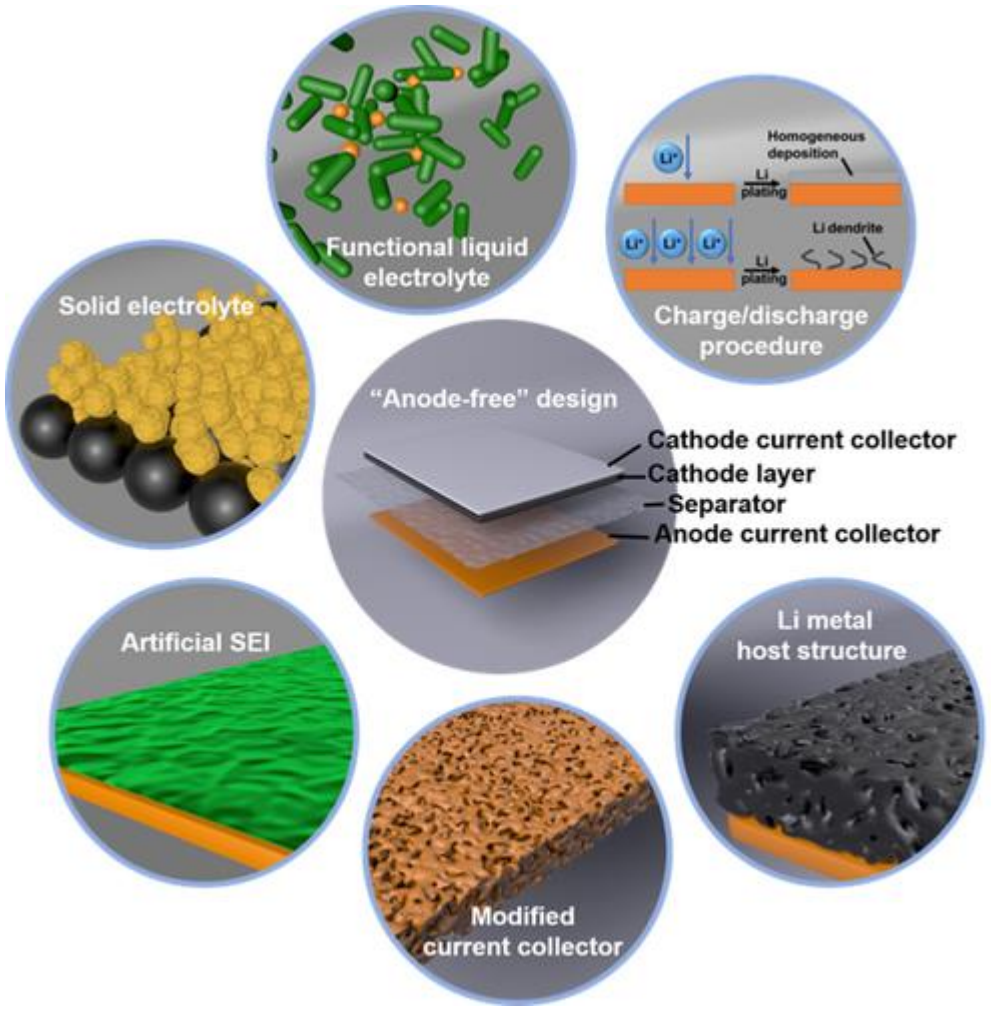
2) TIROCINIO/TESI SU NUOVI COLLETTORI DI CORRENTE

Anode less Li-metal batteries

Current collector:

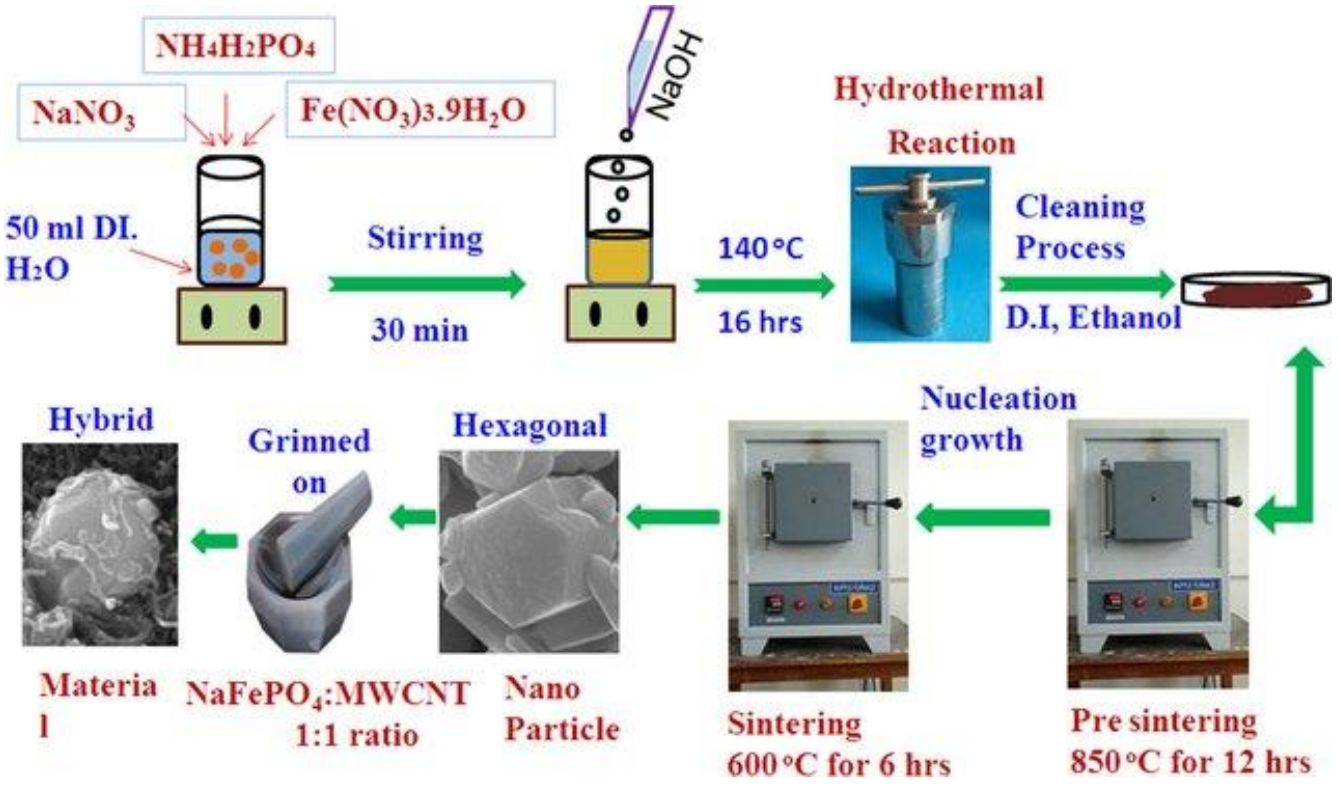
Cu thickness must be < 5 µm

- **Anode less lithium metal batteries**



3) TIROCINIO/TESI SU BATTERIE SODIO IONE

Novel hydrothermal synthesis of $NaFePO_4$ (NFP)



NFP exists in 2 phases:

Olivine (ELECTROCHEMICALLY ACTIVE)

And

Marcitie (ELECETROCHEMICALLY INACTIVE)

We have to develop a new synthesis of NFP having 100% OLIVINE PHASE