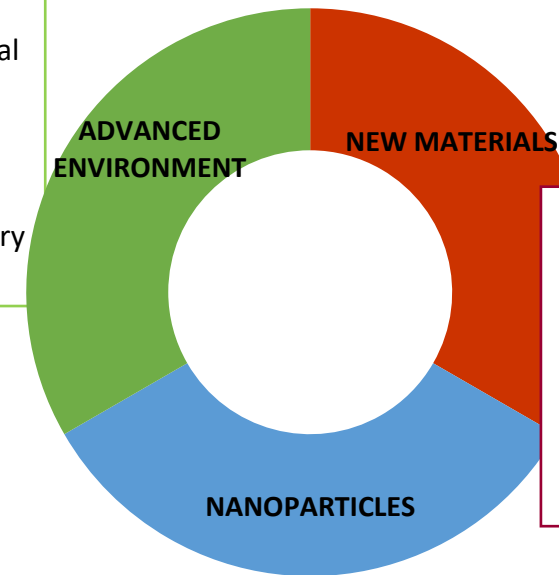


# PITCHING SESSION

# LUREDERRA TECHNOLOGICAL CENTRE



- Wastewater Treatment
- Revalorisation of organic wastes
- Metal decontamination and metal recycling from wastes
- Nanoparticles applied to environment
- Sorbents for removal and recovery pollutants



- Advanced materials development (functionalised)
- Plastic processing technologies.
- Plastics recycling
- Materials for construction with special properties

L'Urederra Foundation, **non-profit private entity created in June 1999**, conducts and promotes research and technological development activities in the service of companies and economic operators, including the subsequent implementation of innovations developed in their own production facilities not only nationally but also internationally.

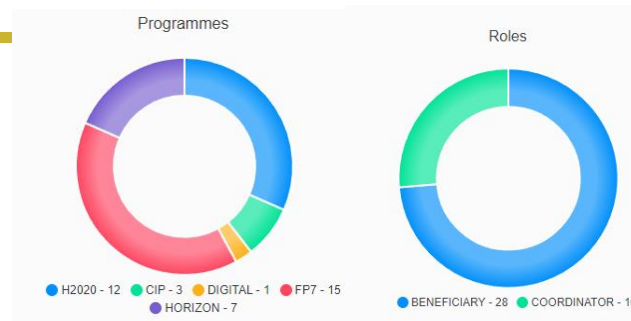
**Industrial vision:** Continuous development of marketable products and technologies quickly transferable and exploitable.

- Advanced nanoparticle production: simple and complex (mixed, doped, core-shell) nanooxides, phosphates and carbonates.
- Production of customised nanoparticle dispersions in different concentrations with high stability.
- Ready-to-use nanoproducts.
- Specific surface treatments
- Synthesis of specific functional compounds.
- Synthesis and modification of nanoclays.

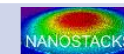
# LUREDERRA TECHNOLOGICAL CENTRE



## H2020 Projects (on-going)



NANOSTACKS: "Nanostack printing for materials research" H2020-EIC-FETPROACT-2019-951949



WASTE2FRESH: "Smart innovative system for recycling wastewater and creating closed loops in textile manufacturing industrial processes" H2020-SPIRE-2020-958491



MAREWIND: MAterials solutions for cost Reduction and Extended service life on WIND off-shore facilities. H2020-NMBP-2020-952960. **COORDINATOR**



SUNRISE: MultiSensor sorting tools in a circular economy approach for the efficient recycling of PVB interlayer material in high-quality products from laminated glass construction and demolition wastes. H2020-LCCI-2020-958243. **COORDINATOR**



## Horizon Europe

SUSAAN "SUStainable Antimicrobial and Antiviral Nanocoating" HORIZON-CL4-2021-101057988 **COORDINATOR**



FREE4LIB "Feasible recovery of critical raw materials through a new circular ecosystem for a Li-ion battery cross-value chain in Europe" HORIZON-CL5-2021-101069890



Platform-ZERO "Customizable AI-based in-line process monitoring platform for achieving zero-defect manufacturing in the PV industry" HORIZON-CL4-2021-101058459



SUNRISE "Safe and sUstainable by design: integRated approaches for Impact aSsessment of advanced matERials" HORIZON-CL4-2023-RESILIENCE-101137324



SOLINDARITY "SOLar-driven INDustrial power And heat upgRaded with high-temperature heaT pumps for enhanced integrated process efficienCY" HORIZON-CL5-2023-D3-101136148

BEETHOVEN "SUBSTITUTION OF RARE-EARTHS FOR ADVANCED NOVEL MAGNETS IN ENERGY AND TRANSPORT APPLICATIONS" HORIZON-CL4-2023-RESILIENCE-101129912



NEOCYCLE "UPCYCLING OF NdFeB MAGNETS IN THE EU FOR GREEN APPLICATIONS (NEO-CYCLE)" HORIZON-CL4-2023-TWIN-TRANSITION-01-101138058



# LUREDERRA in HE CLUSTERS

## 4. DIGITAL, INDUSTRY & SPACE

- ✓ Health
- ✓ Cultural Heritage
- ✓ Manufacturing Industry
- ✓ Raw Materials
- ✓ SSbD alternatives
- ✓ Digital Emerging

**Tailored synthesis of nanoparticles and nanodispersions**  
**FSP production technology.**  
**Dispersion technology / chemical functionalisation:** ultrasonic forces, milling deagglomeration techniques.  
**Thermal treatments.**

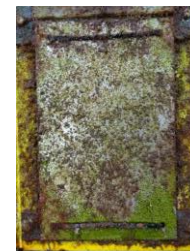


## 5. CLIMATE, ENERGY & MOBILITY

- ✓ Energy storage
- ✓ Renewable Energies (PV, Marine, CSP)
- ✓ Nanocatalysts
- ✓ Highly Energy Efficiency Building

scalability

**Nanosurface treatment / nanoenable materials / coatings:**  
**Different properties on several substrate:** hydrophobicity, oleophobicity, anti-stick, easy to clean, antifouling, anticorrosion, antibacterial....



## 6. BIOECONOMY NATURAL RESOURCES AND ENVIRONMENT

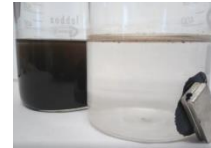
- ✓ Zeropollution
- ✓ Bioeconomy
- ✓ Circular Economy
- ✓ Circ-Bio

Easy to apply  
Real testing

### Waste Water Treatment

**Innovative Materials for pollutants removal and WWT:** Elastomeric materials, novel absorbents and nanoresins ...

**Facilities for testing:** Modular WWTPlant, filtering modules...



### Recycling and wastes valorization

**Materials and metal recycling from WEEE:** Leaching, solvent extraction and precipitation technologies for recovery of CRMs.

**Extraction of added value chemicals from agro industrial-wastes:** milling, extraction, concentration and purification of bioactive compounds



### Plastics processing, functionalization and recycling:

**Addition of plastics and paints:** functionalization and modification.

**Plastics processing capabilities:** rollers, hot and cold plates, extrusion.

**Plastics recycling:** recycling solutions for EoL plastics (PVB recycling line)

Pilot testing

# LUREDERRA TECHNOLOGICAL CENTRE

**NEXUS**  
WHERE NAVARRA  
MEETS EUROPE

**ADItch**  
COORDINADOR SINAI  
Sistema Navarro de I+D+i



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**PARTNER**  
Since V Framework Programme  
&  
**COORDINATOR**  
Since VI Framework Programme  
Currently COO: 2H2020 and 1HE

<b>Cluster 5: Climate, Energy and Mobility</b>	<b>CL5-2024-D3</b>	<b>Deadline: 04/02/2025</b>
HORIZON-CL5-2024-D3-02-02: Development of next generation synthetic renewable fuel technologies (RIA)		
HORIZON-CL5-2024-D3-02-04: Critical technologies for the future ocean energy farms (RIA)		
<b>Cluster 4: Digital, Industry and Space</b>	<b>CL4-INDUSTRY-2025</b>	<b>September 2025</b>
Innovative Advance Materials	Protective Coatings	
<b>Cluster 5: Digital, Industry and Space</b>	<b>CL5-2025- Batteries</b>	<b>2025</b>
Batt4EU Partnership	Active Materials and Catalysts for electrodes	