Company Profile TTZ Gersthofen

Technische Hochschule Augsburg | TTZ Gersthofen Wasserstoff, Leichtbau und digitale Technologien

Markus Fackler

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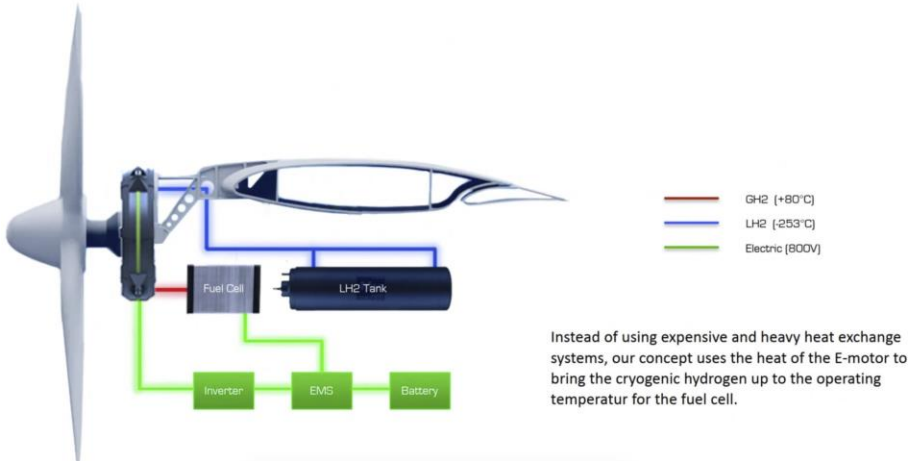
The **Technology Transfer Center Gersthofen** offers industrial research and development for SMEs.
It provides access to expertise and specialized equipment for hydrogen technology, e.g. Hexapod sloshing analysis and tank optimization for gaseous and liquid hydrogen.
We focus on experimental and simulated hydrogen thermal analysis and innovative solutions for safety-critical hydrogen components.



… **what we offer**:

- Experience in modelling complex scenarios in systems engineering
- Hardware-in-the-loop (HIL) testing of H2 components
- System design and optimization with H2 in gaseous & cryogenic state

Relevant markets: Mobility, Aerospace Engineering, Green Energy

… **what we are looking for – cooperation interests**:

- Implementation of joint projects (R&D funding projects)
- Virtual testing & digital twin
- Hydrogen Drivetrain Technology
- Design and Manufacturing of Lightweight Components for Hydrogen Applications

We have wide experience in HEU, with over 25 coordinated projects. In the field of Hydrogen, CIRCE is strong in the integration of H_2 and in supporting the setting up of H_2 valleys (*i.e.*, TH2ICINO, H2B:IMPACT, ALCHEMHY).

Project ideas:

Techno-Economic Assessment Tool	Digital assessment tool to evaluate multiple hydrogen plant configurations across different capacity scales (from MW to GW), integrating Balance of Plant requirements and different electrolyzer technologies.
Business Models and Bankability Assessment	Improvement of existing business models to enhance market readiness and investor attractiveness, including bankability assessment and investment-ready project structures.
Natural Resources and Infrastructure Evaluation	Assessment of grid capability to support up to 1 GW load, including substation upgrade needs and cost impacts. Evaluation of water availability and long-term scarcity risks, including alternative water solutions (reuse, wastewater, desalination) and process water optimization to ensure sustainable and viable plant operation.
Methodology Handbook	Practical guideline synthesizing technical, grid, resource, offtake, and financial analyses, covering plant sizing with current technologies, grid interactions, hydrogen offtake strategies, and investment-ready business models.

Consortium:

Roles under discussion	Missing roles
Toolkit development, infrastructure, synergies with P4P	PEM electrolyzer manufacturer
ALK electrolyzer manufacturer	System integrator
BoP manufacturer	Project developer
TIC (Testing, Inspection and Certification)	Plant operator
Experts on Business Models	End user

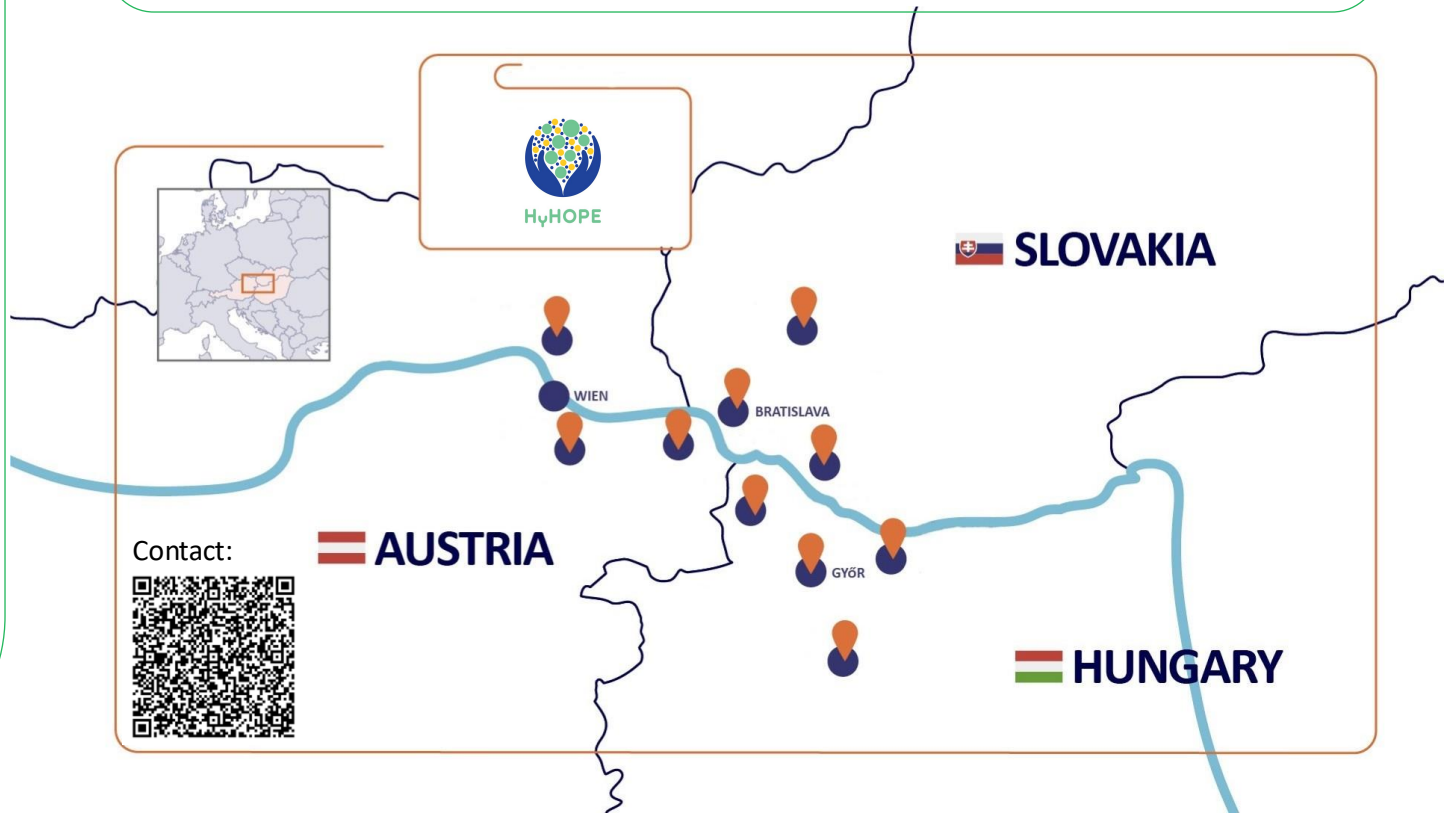
Contact details: Ana María Barrios Jiménez, ambarrios@fcirce.es

HyHOPE – Hydrogen Valley for the Heart of Europe

HyHOPE

- **HyHOPE** is the **first landlocked interregional Hydrogen Valley** in Europe.
- A strong consortium of **20+ partners across three countries** is driving the rapid deployment of a competitive hydrogen economy.
- **More than 10 concrete use cases** in **industry, energy and mobility** will establish a **core hydrogen market in Central and Eastern Europe**.
- Europe's **most important gas hub** is set to evolve into the **leading innovation-driven hydrogen trading and distribution hub** in **Central and Eastern Europe.**
- **HyHOPE Academy**: a dedicated platform for **education, skills development, knowledge building and cross-border know-how exchange**.

EU recognition of excellence: HyHOPE was deemed **eligible for funding in 2025**, awarded the **EU STEP Seal**, and successfully secured **Project Development Assistance (PDA Light)** under the **EU Clean Hydrogen framework**.



GRZ Technologies : H_2 storage, compression and power systems

Looking for partners to build high-impact Clean Hydrogen Partnership consortia

Company overview:

Founded in 2017 as a spin-off from the **Swiss Federal Institute of Technology in Lausanne (EPFL)**, GRZ Technologies employs 30 people and is based in **Switzerland**.

GRZ develops and industrializes **solid-state hydrogen technologies** covering key parts of the hydrogen value chain, from storage and compression to power generation and conversion.

Technology Readiness Levels: ranging from **TRL 4 to TRL 9**, from research activities to industrial deployment.

Collaboration:

Open to collaboration with EPCs, OEMs, utilities, project developers, universities and RTOs for EU and international projects and consortia, including demonstration and deployment projects.

Technology portfolio

DASH – Solid-state hydrogen storage

Low-pressure, high-density hydrogen storage based on metal hydrides.
Use cases: stationary storage, buffering, industrial applications, mobility, purification.

DASH Power – Hydrogen-based power systems

Integration of hydrogen storage with power generation.
Use cases: backup power, grid support, off-grid and energy community applications.

HyCo – Hydrogen compression

Hydrogen compression technology, (waste) heat-powered, without moving mechanical parts and high efficiency.
Use cases: hydrogen refuelling, industrial compression, pipelines.

UPSOM – Methanation reactors

Conversion of hydrogen and CO_2 into synthetic methane.
Use cases: biogas upgrading, renewable methane production, energy storage, CO_2 utilization.

Contact: Alexandre Damourette l Sales Manager l alexandre.damourette@grz-technologies.com l +41 76 264 93 12

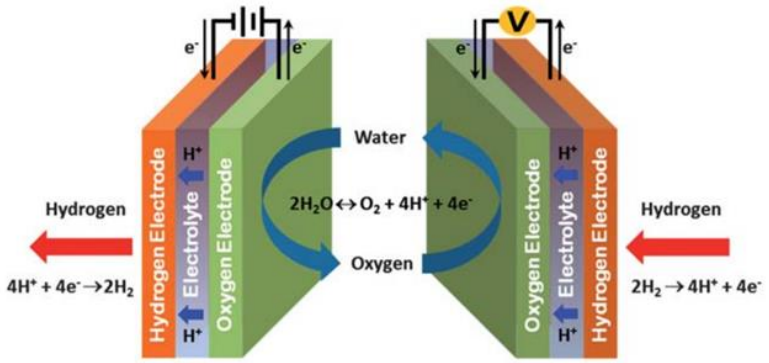
Research Group *"CheMaMSE"* – University of Padova, Italy

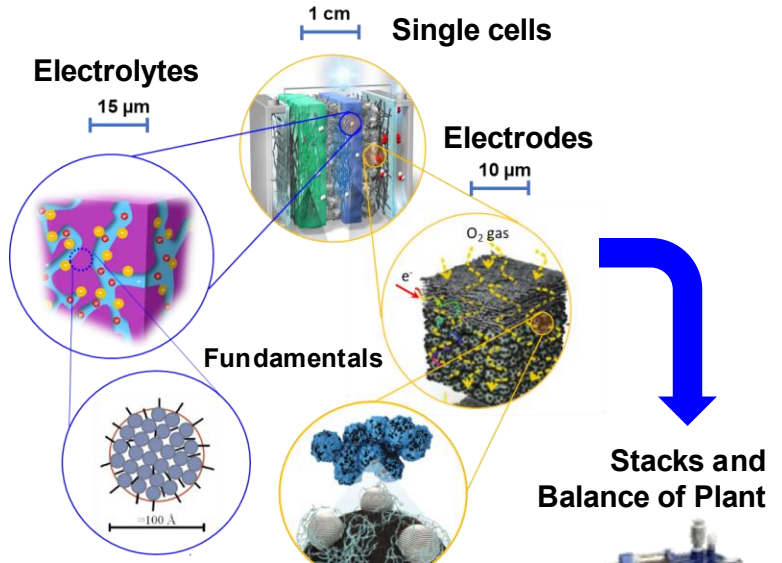
Università degli Studi di Padova

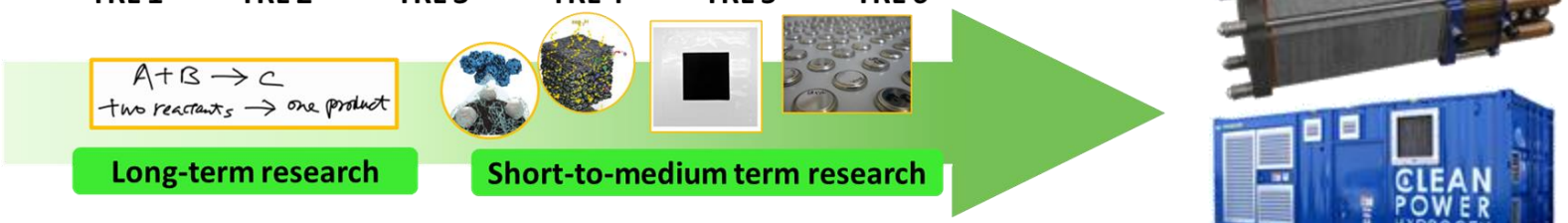
Dipartimento di Ingegneria Industriale

Chemistry of Materials for the Metamorphosis and the Storage of Energy

Low-temperature Fuel Cells (FCs) and Electrolyzers (ELs)





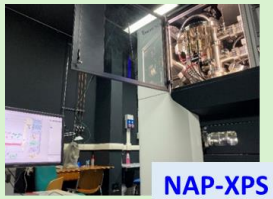


Proprietary facilities for the whole value chain

- Functional materials synthesis
- Physicochemical characterization
- Multiphysics modeling
- Prototype fabrication/testing

Chem Lab

Ultrasonic coating



NAP-XPS

FC and EL testing

Past Experience

PERMANENT

GRAPHENE FLAGSHIP

DURALYS H_2

eit RawMaterials Connecting matters

MOST CENTRO NAZIONALE PER LA MOBILITÀ SOSTENIBILE

CRM geothermal

Main calls of interest

- HORIZON-JU-CLEANH2-2026-01-01
- HORIZON-JU-CLEANH2-2026-01-02
- HORIZON-JU-CLEANH2-2026-01-03
- HORIZON-JU-CLEANH2-2026-03-01

Contact

Prof. Vito Di Noto

E-mail: vito.dinoto@unipd.it

Phone: +39 049 827 5229

Website:

https://research.dii.unipd.it/chemamse/

Bridging H_2 and plastics technologies through applied research by

INSTITUTE FOR PLASTICS PROCESSING

Enabling hydrogen system developers to scale up through plastics and process technologies

Material Competence
- Suitable material selection
- Material characterisation
- Surface technologies

Process Engineering
- Injection & compression moulding
- Towpreg & wet-filament winding
- Scale-up & pilot processes

Network & Transfer
- International bilateral OEM projects
- **H_2 Business & Technology Forum**

Component & Product Design
- Pressure vessels
- Electrolyser & fuel cell components

Digitalisation & Modelling
- Process & material models
- Thermo-mechanical simulations
- Digital twins

Testing & Validation
- High-pressure H_2 testing (<1500 bar)
- In-situ measurement methods
- Component validation (TRL 3–7)

- ✓ **75 years of industry-oriented Plastics Processing and Material Technology Research**
- ✓ **Over 7 years of hydrogen system R&D in 6 publicly funded projects across TRL 3–7**
- ✓ **Proven industrial transfer: Bilateral R&D with int. OEMs of H_2 sector and lead of a 25+ partner network**

Get in contact!

Contact: Richard Frohberg | Innovation and Technology Manager | Institute for Plastics Processing (IKV) at RWTH Aachen University, Germany
Email: h2@ikv.rwth-aachen.de | Website: www.ikv-aachen.de

Stuttgart, January 2026

Bankability-Ready Business Models for Industrial Renewable Hydrogen

Consortium Partner Search

DEKRA proposes a standardized Bankability Evaluation Level that turns project documentation into a traceable, auditable evidence pack aligned with lender due-diligence expectations. It enables early, comparable bankability screening and gap closure through defined quality gates on completeness, consistency, and risk plausibility.

DEKRA, the expert company

DEKRA is one of the world's leading TIC organizations with extensive expertise across the entire hydrogen value chain. Our experts test, inspect and certify hydrogen technologies – from production and storage to transport and end-use applications.

To support the establishment of innovative business models in the hydrogen sector and advance renewable electrolysis integration in the industry DEKRA strives to apply its technical and methodological expertise by developing and applying new validation schemes to evaluate such business models and their bankability.

Proposed DEKRA contribution

- Bankability Checklist: structured due-diligence readiness criteria
- Advisory: align business models with bank and investor expectations
- Verification Framework: technical, regulatory and environmental evidence

Target partners

- Research institutes / academia (open TCA/LCA modelling templates)
- Developers (real, innovative and forensic cases)
- Advisory board: banks, investors, off-takers, EPCs, OEMs, O&Ms, insurers

Potential work package deliverables

- Analyse successful and failed hydrogen projects; derive bankability success criteria
- Align proposed business models with bankability criteria
- Develop standardized cash-flow stress-test and sensitivity model
- Publish open-source due-diligence checklists and verification templates
- Lead or co-author a European white paper and facilitate a structured stakeholder dialogue

Contact: christoph.flink@dekra.com

Independent Engineering & Risk-Reduction Partner for Hydrogen Projects

Santane
Engineering & Technology Consulting

Target Projects: Innovation Actions (IA) • TRL: 4 to 8 • Role: Cross-cutting technical & risk mitigation partner

The Challenge

- Safety & compliance risks
- Weak front-end engineering design (FEED) maturity
- Limited bankability and investor readiness
- Insufficient operability, training, & digitalization

Our Technical Contribution

System & FEED Engineering

Project development • PFDs, P&IDs, BoP, electrical & mechanical integration

HSE & Functional Safety

HAZID / HAZOP / SIL & hazardous area classification • FSA & ISO 13849 / 61511

Digital Twins & Operability

Process simulation & operator training models • Replicable digital twin methodologies

Bankability & Deployment Readiness

Electrolyzer bankability • Technical & financial due diligence • Efficiency & expansion analysis

Regulatory & Compliance

Standard identification • Compliance and test planning • Equipment conformity

Impact for H_2 Projects

- Reduce technical, safety, and schedule risk
- Stronger proposal credibility
- Faster permitting and deployment
- Improved investor readiness and replicability
- Transferable methodologies applicable across EU projects

We are looking to partner with

- IA & Hydrogen Valley coordinators • Electrolyser OEMs & system integrators
- Infrastructure developers & EPCs • Industrial end users and utilities
- Regions and public authorities

Contact Us

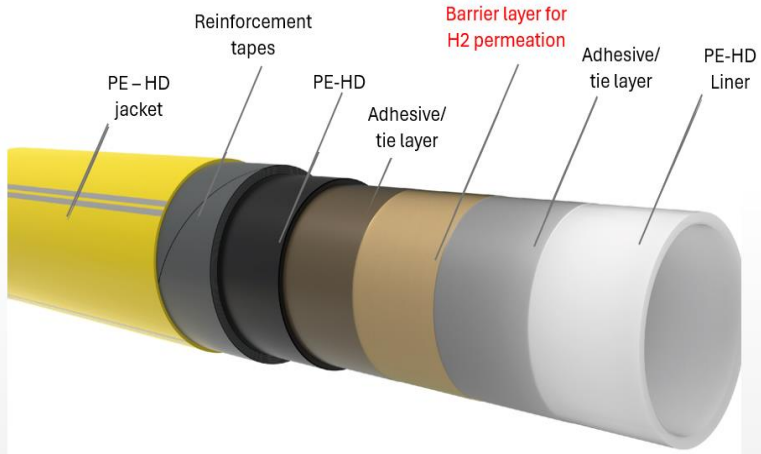
Adeline Hannon
adeline.hannon@santane.co.uk
General: info@santane.co.uk

Clean Hydrogen Partnership

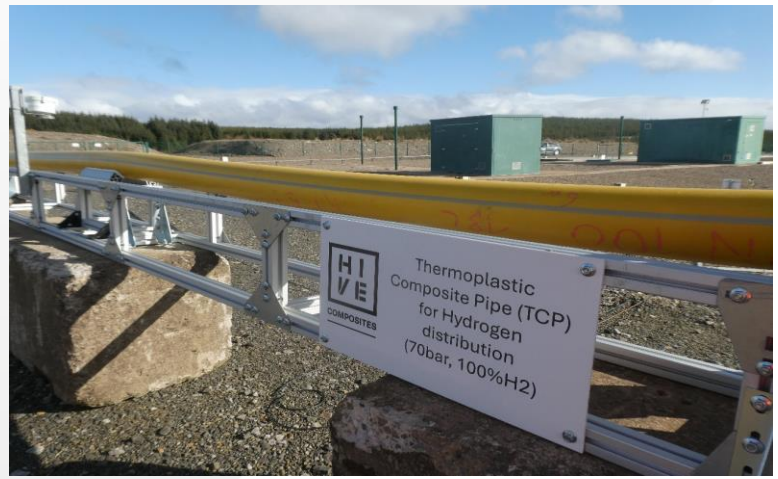
Co-funded by the European Union

Thermoplastic composite pipes (TCP) for hydrogen distribution

- Spoolable, up to 1.1km, road transportable
- High pressure and light weight (-70% lighter vs steel)
- 2” to 6” up to 150 bar operating pressure (H2 typically 32-70bar)
- Smooth bore, non-polar = excellent flow = reduces contamination (eg paraffin) build up = can reduce diameter vs steel
- Reduced joints = lower installed cost / higher reliability (steel welded ~12m)
- Cost effective against corrosion resistant alloys
- Suitable for other energy transition purposes e.g. CCUS.
- Non-metallic, corrosion resistant & resistant to hydrogen embrittlement
- Thermoplastic, recyclable, excellent durability
- 75% lower carbon footprint than steel
- Fully tested at 70bar operating pressure with H2 at 60C
- Ready for deployment in pilot H2 and CCUS projects



TCP with barrier layer is a solution for alternative energy transition uses e.g. CCUS, Ammonia



carbon footprint per Linear Meter of Steel Pipe

38,3 – 49,5 kg CO_2-eq

carbon footprint per Linear Meter of TCP Pipe

10,53 kg CO_2-eq

Contact: Peter Hansen – p.hansen@hivecomposites.com

Sabancı University
Faculty of Engineering & Natural Sciences
Istanbul/Türkiye

Prof. Dr. Selmiye Alkan Gürsel
selmiye@sabanciuniv.edu

THE World University Rankings 2026: **351-400**

THE World University Rankings 2025 Asia: **74**

Interdisciplinary Science Rankings 2026 Powered by THE: **66**

QS WORLD UNIVERSITY RANKINGS 2026: **404**

QS WORLD UNIVERSITY RANKINGS EUROPE 2025: **188**

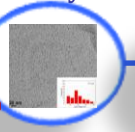
Strong background, long term experience & a wide range of equipment and facilities on hydrogen technologies

Design & Synthesis & Fabrication

Membrane

- *Radiation grafting*
- *Electrospinning*

Catalyst



- *Hydro/solvothermal*
- *Photocatalytic*
- *Electrophoretic*
- *Sol-gel*
- *Microwave*

Electrode

- *Ultrasonic spraying*
- *Screen printing*
- *Electrospinning*

MEA

Ex-situ & In-situ Analysis & Electrochemical Testing

Our contribution

- ✓*Development of advanced* ***components (catalyst, membrane, electrode, MEAs)*** *with* ***improved performance & durability***
- ✓*Development of* ***PGM-free catalysts or low PGM catalysts***
- ✓*Development of* ***innovative processes*** *for large scale* ***catalyst deposition and electrode fabrication***
- ✓*Improvements to* ***electrocatalysts & electrodes*** *for* ***increased lifetime***
- ✓*Development of* ***new/advanced membranes with low PFAS or no PFAS***
- ✓*Development of* ***PEM, AEM & bipolar membranes***
- ✓*Development of methods to produce* ***optimized MEAs***
- ✓***Physical and electrochemical characterization*** *of components (catalysts, membranes, MEAs), single cell testing.*

Selected projects on hydrogen technologies

- ❑ Hydrogen Valley- South Marmara Hydrogen Shore (2023-2028) *(Core partner)*
- ❑ M-ERA.NET Project, Novel Asymmetric Anion-Exchange Membranes for Fuel Cells (2023-2026) *(Coordinator)*
- ❑ Graphene Flagship: Graphene-based Disruptive Technologies — GrapheneCore1 (2016-2018) *(Task leader for fuel cells)*
- ❑ Graphene Flagship: Graphene-Driven Revolutions in ICT and Beyond (2013-2023) *(Task leader for fuel cells)*

Advanced Thermo-Electrochemical Hydrogen Technology

- Ultra-low energy consumption
- Hydrogen delivered the way customers want it:
  - At pressure
  - PFAS-free
  - Pt-free
  - Ir-free
- Flexible operation via metal intermediate buffering/storage
- Low quality water feed

Key industry issues we address :

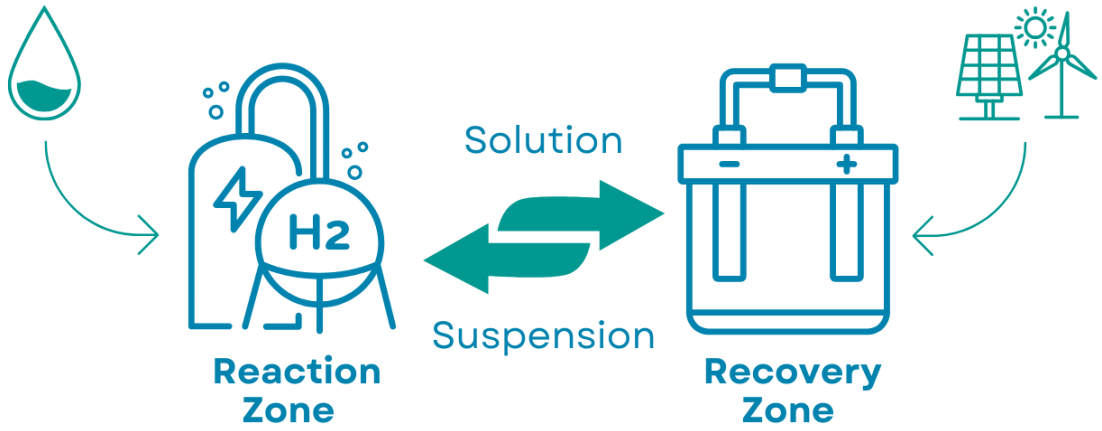
- Cost of hydrogen
- Security of Supply
- Operational flexibility

Project objective:

- Technology scaling for thermochemical hydrogen generation

Partners we seek:

- Non-PGM anode developers
- Project Lead
- Modelling: CFD and system-level
- Demonstration site



David.Hodgson@surreyh2.com

SURREY H_2 CLEAN HYDROGEN

Łukasiewicz–INS - Clean H_2 Partnership Info Day - Call 2026

Łukasiewicz
INS

R&D Institute:

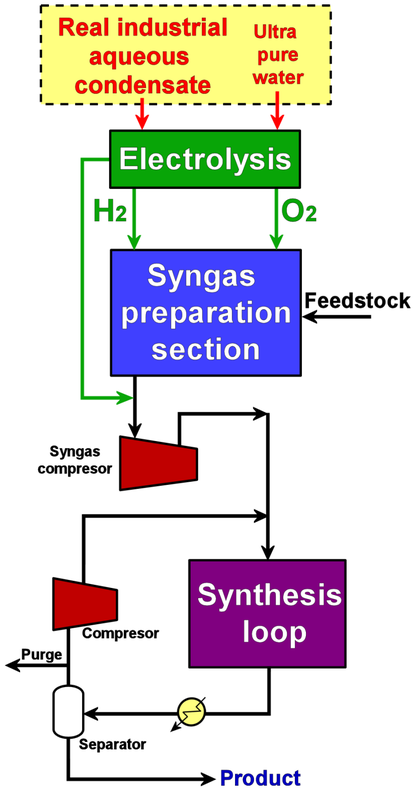
- Strategic priorities; innovative chemistry, energy transformation, technologies for circular economy.
- Wide range of R&D activity; from biopolymers and specific supercritical extracts, to bulk chemicals.
- Broad expertise in flexible technologies of H_2 production and processing, specific sorbents & catalysts & materials for H_2 storage, design and revamping of H_2 pilot plants.

Proposals:

- Integration of industrial aqueous condensates streams for SOEC - use of non-pure water sources for electrolysis,
- Ex-SOEC-electrolysis H_2; purification and processing,
- Solid and LOHC; H_2 sorption capacity and sorption/desorption kinetics,
- Cutting-edge catalysts for WGS, HC pyrolysis - H_2 from various organic sources,
- Catalytic NH_3 cracking, CO_2 hydrogenation, NH_3 synthesis, R-WGS, liquid HC,
- PM free catalysts for H_2 conversion into chemicals; from laboratory to semi-industrial pilot scale.

Service:

- Scaling-up of technologies (from lab to pilot plant),
- Engineering of green and blue/gray H_2 streams for hybrid chemicals,
- Design and preparation of pilot batches of novel catalysts/sorbents. Scaling-up.



ins.lukasiewicz.gov.pl

Innovative hydrogen R&D facilities in the heart of Europe

You have the vision, we enable the realisation

- State-of-the-art hydrogen infrastructure as a lab service.
- 600 m² lab and demo facilities to bridge the gap between knowledge, industry and market.
- A highly controlled environment that complies with all safety regulations.
- A powerful academic and industrial ecosystem which allows you to jump ahead by fostering collaboration.

Operational Q3 2026

GREEN ENERGY PARK

POWERED BY

VUB VRIJE UNIVERSITEIT BRUSSEL

Universitair Ziekenhuis Brussel

FUNDACIÓNHIDRÓGENOARAGÓN

PIC: 997456918 https://hidrogenoaragon.org/en/ smartinez@hidrogenoaragon.org

40 projects in the Clean Hydrogen JU

FHA is your partner for **communication** and also for **S- LCA** & **training activities**

HTP Hydrogen Territories Platform

FHA is your partner for **hydrogen valleys replication**

Hydrogen Europe Research

Mr. Guillermo Figueruelo
Hydrogen Valleys Cross-Technical Committee Leader

FHA is your partner for **component and system level technology validation at TRL 4 to 6**

650 kW wind
150 kW PV

AEL 20 & 250 kW, test bench
AEL 48 kW, 8 Nm^3/h @8 bar
PEMEL 5 kW, 1 Nm^3/h @6 bar
AEMEL 15 kW, 2 Nm^3/h @35 bar

7 kg @35 bar
23 kg @350 bar
60 kg @500-900 bar
700 kg LH2

HRS 200
HRS 300
HRS 700

ReCatalyst: Transforming the way we make Catalysts for Hydrogen Technologies

- Spin out from the National Institute of Chemistry (Ljubljana, Slovenia)
- **R&D team:** 9 people (5 with PhDs)
- **Lab and demo facilities** (Nabertherm furnaces, Eppendorf large centrifuges and Wesemann fumehoods, 50L reactor, pulse combustion reactor, ability to produce up to 180g batch of catalyst)
- Raised **5M€+** through dilutive and non-dilutive funding
- **Experience in Horizon Europe & just finished EIC Transition project – ENABLER**
- **20+ customers from the 5 of the G7 economies**
- **Owner of 3 patent families**

ReCatalyst's Advantages	Concrete Benefits
Validated products	• Already developed next-gen Pt-based catalysts (3 product generations/families) • Heavily validated with top OEMs (up to a 250 cm^2 short-stack for PEM fuel cells and lab-scale single cells for AEM water electrolysis)
Platform technology	Interested in collaborations for a wide range of electrochemical applications: • LT and HT PEM FCs for both mobility as well as stationary applications (both anode and cathode), • PEM & AEM water electrolysis (both anode and cathode), • CCUS (both anode and cathode), • electrochemical ammonia production (anode) as well as other P2X opportunities.
From lab to pilot scale	• We can be both the catalyst development as well as scale-up partner (TRLs 1-6)
Retained quality during scale-up	• Already deployed catalyst production capabilities from multigrams (lab scale) to hundreds of grams per batch (pilot scale)

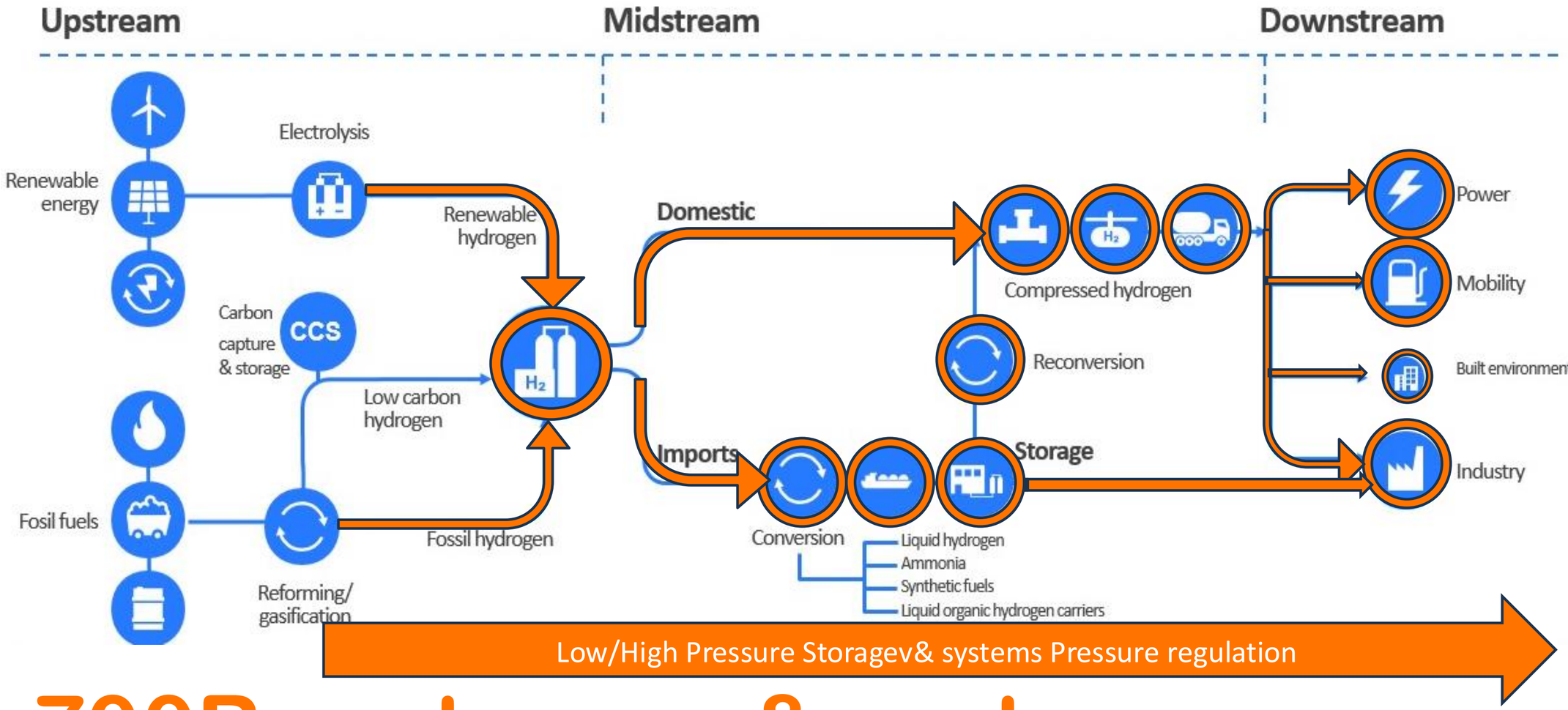
Contact: Nina Meglič, Project Coordinator, nina.meglic@recatalyst.si

ISL Institute of Shipping Economics and Logistics
Expertise in Maritime Hydrogen and PtX

- ISL is a Research Institute based in Bremen and Bremerhaven, Germany
- Active in Hydrogen Research since 2012, Holistic Know-How in Hydrogen and PtX Energy Carriers
- Conducted many Projects and Studies in Maritime and Hinterland Logistics, Ports and Shipping
- Good connections to German and European Port and Terminal Operators as well as Transport Operators (Sea, Road, Rail, Inland Waterway)
- Profound Competence in the Development of Simulations
- Experience in EU Projects, as Partner as well as Coordinator
- Technical Coordinator of Germany's first Hydrogen Valley in Bremen
- Proud Member of Hydrogen Europe Research

- **Possible Roles: Maritime and Logistics Applications and Concepts, Demo Coordination, Simulation, Evaluation and Validation, Dissemination, Replication Partner**

Please contact: **meyer-larsen@isl.org**



- ❑ In your backyard
- ❑ Over the water
- ❑ On the road
- ❑ On the rail
- ❑ On the ship

700Bar storage & systems

- ➢ additional costs of higher compression are offset by more efficient storage and transport
- ➢ Reduction of transport movements and storage surfaces

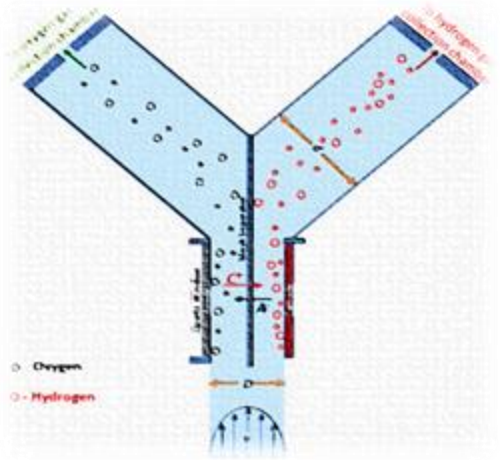
hzstorag

Proposal - Membraneless electrolysis using low-purity water

University of Antwerp

Looking to join a consortium
OR
Find project partners

Name – Rajeshreddy Ninakanti



Expertise we offer – membraneless electrolyzer cell and stack design

Unique selling points (patented design - EP4532798B1)

- Handle impure feed better than membrane based systems
- Low CAPEX with competitive OPEX
- Durable with simpler maintenance

Project proposal

WP1: Catalyst development (low CRM use)
WP2: Degradation of catalyst
WP3: Electrode nano and microstructuring
WP4: Cell and 10 kW stack geometry design
WP5: Stack monitoring, mitigation and maintenance
WP6: 2000h+ stack analysis and optimization
WP7: TEA and LCA
WP8: C&D&E

Contact – rajeshreddy.ninakanti@uantwerpen.be / sammy.verbruggen@uantwerpen.be

eurecat

(private non-profit) **Research & Technology Org.**

in the region of Catalonia (SPAIN)

805 employees in 2024 | **69 M€** Income in 2024 | **230** Patents | **10** Spin-offs

2nd Spanish RTO in return of H2020 | **+ 215** H2020 and HE projects (2014-22) (**+ 38** as coordinator)

CONTACT: **Eduard Piqueras-Jover**, MscEng | European Programmes | Eduard.Piqueras@eurecat.org

TESTING, VALIDATION & SCALE-UP: PRODUCTION / USE (FC)

- **PEM/AEM & FC testing lab** (up to 50 kW).
- **MEA manufacture:** screen printing (*A3*), robotic spray-coating (*1.2 x 1.2 m*), blade coating & roll-to-roll slot die (*30 cm width*).
- **Coatings & surface treatments** (PVD, ion implantation).
- **Pyrolysis/Gasification (400g/h) pilot plant.**
- **Microwave-induced Plasma pilot plant (6kW)** for H_2 production from biomethane, landfill & WWTP gases & steam.
- Prospective LCA & ecodesign method.

MATERIALS / STORAGE

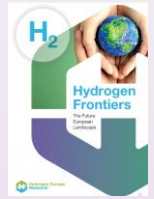
- Virtual **Multiphysics Simulation Lab** (FEM, CFD, electrochem).
- **Composite structures & sheet metal forming** pilot plants.
- **Vitrimeric composite matrices** with enhanced recyclability and chemical resistance.
- **Scale-up** of resin formulations and processing routes (RTM, infusion, lay-up) for H_2 storage **vessel manufacturing.**
- Study of **Hydrogen embrittlement** (*thermal desorption analysis*) **e**ffects in metallic materials mechanical behaviour.

TECHNOLOGY to INNOVATE:

PATENTED

eLEAF/HLEAF - disruptive manufacturing

Success Story in *"Hydrogen Frontiers"*



Large area & high efficiency **printed components & sensors** (struct. health monitoring) for **MEA** systems that improves Electrolyser & Fuel Cells efficiencies by **↓ion diffusion barrier & ↑robustness.**

Lightweight (65 kW/kg) Cost reduction (0,55 €/cm²)

AI-based Digital Twins - Operation & manufacturing

AI-based surrogate models, data analytics, generative AI models (diffusion, VAEs) and eXplainable AI (XAI) to (zero) defect manufacturing and/or operation optimization.

CLEAN HYDROGEN PROJECTS:

Member of: Hydrogen Europe Research

H2 hyield — DT of a Waste-to-Hydrogen Pilot Plant.

HySPRINT — (Zero) Defect Electrolyzer Manufacturing.

The Durable Heart of Fuel Cells and Electrolysers

DI Dr. Sebastian Rohde
Co-Founder, CTO
sebastian.rohde@duramea.com
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Who we are

- Austrian start-up
- Spin-off from Graz University of Technology
- Involved in **6 green hydrogen Projects**

Capabilities

- **AEMEL, PEMFC**
- In-house **electrode production**
- Slot die coating, ultrasonic spray coating, inkjet printing, mayer rod coating, doctor blade coating
- In-house electrochemical testing

Looking for

- **AEMEL partners**
- Electrolyser stack manufacturers
- Component manufacturers (membrane, substrate, catalyst,…)

Baker Hughes™

2024 highlights:

~57,000	$27.8B	$643M
employees	in revenue	in research and development

People & culture

Advanced technology

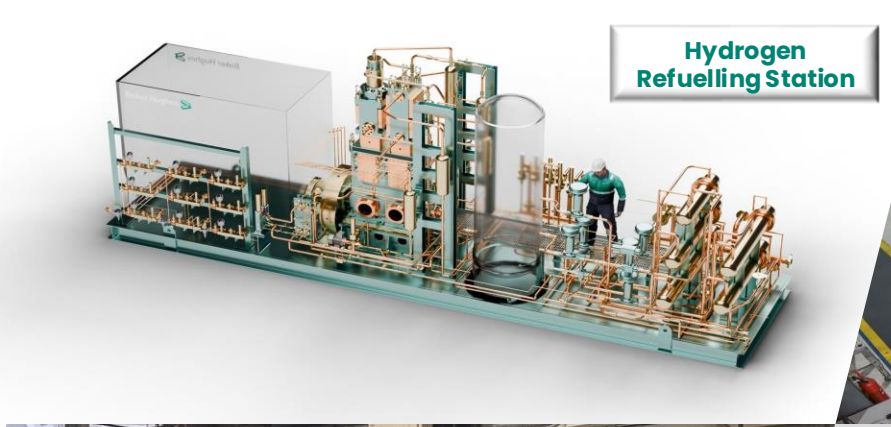
Low carbon & sustainability

Open for discussion on:

TC1-02	Cost-efficient and reliable components and designs towards gigawatt-scale electrolytic hydrogen production plants
TC1-03	Improved components and tools to increase the safety of electrolysers
TC2-04	Cost-efficient small scale hydrogen liquefaction
TC3-03	Flexible and standardized hydrogen storage system
TC4-04	Fuel-flexible gas turbine combustion technology for clean and efficient ammonia firing
TC7-01	Hydrogen Valley

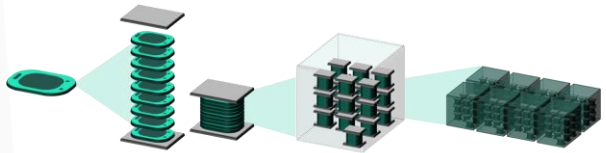
Bringing state of the art **Hydrogen technologies** to market:

Hydrogen Refuelling Station

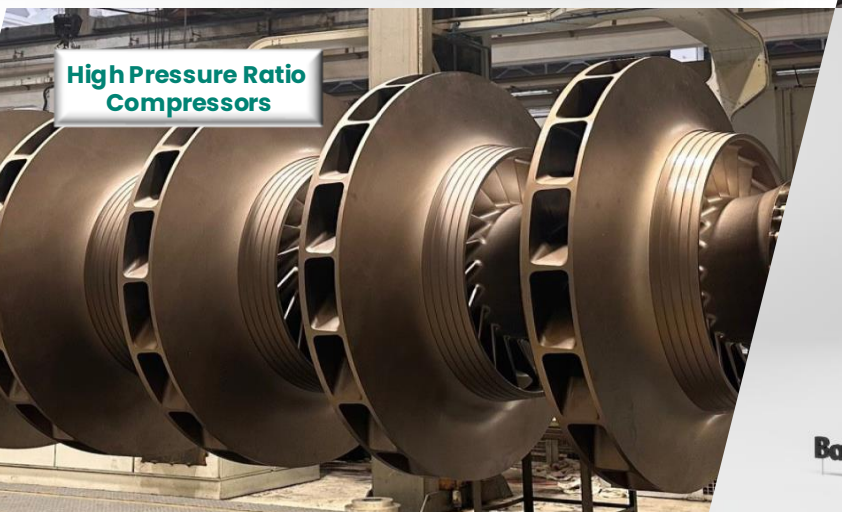


Reciprocating Compressors

AEM & SOEC electrolysers (under development)



High Pressure Ratio Compressors

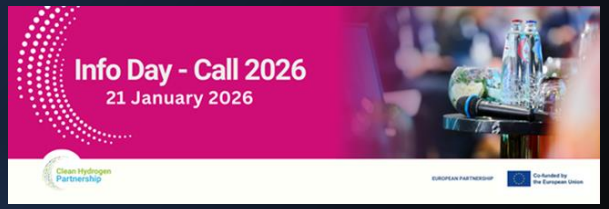


NovaLT™ 16 100% H2

Hydrogen Storage at Florence Campus

π! PARAGON S.A.

https://paragon.gr/



Who We Are

- **PARAGON S.A.** is a versatile SME established in 1995 with the aim to provide advanced R&D, Technical, and Testing solutions and services.
- Based in Athens, Greece.

Experience

- Participation in **>30 research projects** in **AERONAUTICS** (incl. Clean Sky 1, Clean Sky 2) , **DEFENCE** (European Defence Fund) , **ENERGY** (incl. Hydrogen) , **FACTORIES of the FUTURE** , **ICT** , **ENVIRONMENT** , and **SECURITY**.

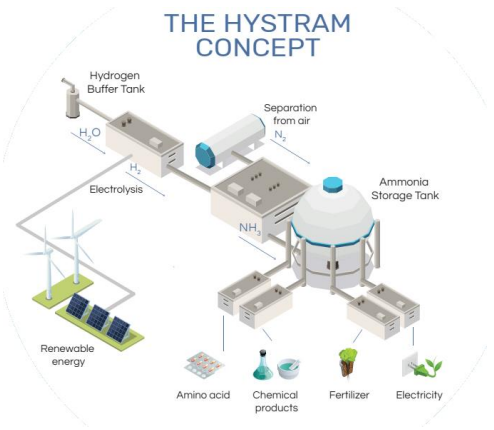
Expertise & Applications

(indicative)

- Artificial Intelligence – Machine Learning – Multi-objective Optimization
- Sensor-Actuator Networks - Test-benches - Testing technical know-how
- Multi-objective Optimization for (a) Sustainable Triple-Bottom-Line (T.B.L.) Production Planning – Scheduling & (b) complex Simulations Workflows (heterogeneous, distributed)
- Acoustics & Vibration -related applications (Measurement - Monitoring - Analysis - Fault Detection - Diagnostics - Active Vibration / Structural Acoustic / Noise Control - Optimization)

HySTrAm

Hydrogen Storage and Transport using Ammonia



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ULEMCo

ULTRA LOW EMISSION

ULEMCo delivers practical, cost-effective hydrogen solutions for heavy duty transport applications including HGV, vessels and specialist off-road equipment.

Visit our website at ulemco.com to find out more!

ULEMCo's expertise and skills are in system integration, hydrogen safety and novel approaches to both fuel cell and hydrogen combustion applications. We are looking to joining collaborations where novel products, services and expertise can support applications in:

- Back to base HGV
- Airport and off-road equipment
- Emergency service vehicles and other specialist heavy duty uses
- Marine

With the following solutions:

- **Zero-emission HyICE™ series hybrid powertrain product**
- **FCRx® fuel-cell based range-extension** plug & play module for upgrading electric trucks
- **H2ICED® our commercially proven hydrogen dual-fuel technology and services**
- **HyTANKa® and Port-a-Bull™** mobile refuelling solutions
- **Patented IP and know-how in hydrogen safety, hydrogen combustion and engine control** that supports specialist design, system integration and engineering services in integration of hydrogen transport systems, onsite generation and mobile refuelling