

HYBRIDPLUS NEWSLETTER: DECEMBER ISSUE

Dear Colleague

We're thrilled to bring you the latest highlights from our EU funded project HYBRIDplus, diving into the happenings of the last 6 months!

Among other impactful dissemination events mentioned in our newsletter, we would like to highlight on the following: Last spring, the Eurotherm seminar hosted by our partner, the University of Lleida, provided a unique platform for researchers and practitioners in Thermal Energy Storage (TES) to exchange ideas and insights, fostering a collaborative spirit that propels our mission forward. Later in June, an interview of our project coordinator Cristina Prieto Rios, published by the Spanish Association for the Promotion of the Concentrated Solar Thermal Industry in Spain (Protermosolar), shared insights explaining why the HYBRIDplus consortium efforts help shaping the future of CSP industrialisation. During the semester our general assemblies in Lleida (GA2) and Stockholm (GA3) were resounding successes, showcasing significant strides in our journey.

But that's not all! We're thrilled to announce in this newsletter the imminent release of our first project video. This captivating visual will unravel the HYBRIDplus concept of hybridization, offering an original and groundbreaking innovation that is set to redefine the landscape of energy storage.

Stay tuned for more updates, breakthroughs, and insights as HYBRIDplus continues to lead the charge in advancing the frontiers of hybrid energy storage solutions!

Sincerely,





Interview of Dr. Cristina Prieto by Protermosolar



June 2023

The Spanish Association for the Promotion of the Thermosolar Industry published an interview with HYBRIDPlus coordinator Cristina Prieto Rios.

" What we do in the project, is to integrate metal wools in the PCM so the heat transfer coefficient is highly enhanced while at the same time we use this metal as an electric heater to hybridize the TES, allowing us to store excess electricity from a PV plant for example. In the end, we are building a bridge for the PCM technology to jump to the big leaguer." the big leagues.

Full article available here: protermosolar.com/interview-cristina-

THE CONSORTIUM

















The consortium met in May in LLeida and in September in Stokholm. Irreplaceable physical meetings!

During these meetings, progress and first results regarding selection of material were shared by University of LLeida (UDL) and STAX. The design of the scaledup plant concept was presented by Build 2 Zero (B2Z), with the collaboration of SEICO in the design of the electric heaters. The conceptual design and modeling of the new hybrid electric/thermal PCM storage module by the University of Seville (USE) is also on track! USE and B2Z presented the work started on the optimisation of the new test rig that will demonstrate the cascade PCM concept for a duration of at least 300h and KTH the work kicked off, setting up the basis of the future techno-economic evaluation of the hybrid CSP-PV systems. In Stockholm, the HYBRIDplus consortium celebrated 1 year of fruitful collaboration aiming to build and test a unique concept of hybrid Thermal Energy Storage pilot plant integrating metal and wool into the PCM to allow storing excess electricity from RE generation system and increase dispatchability of the energy stored.

LATEST NEWS



EUROTHERM SEMINAR

24-26 May 2023

The Eurotherm seminar hosted by the University of Lleida brought together researchers and practitioners of thermal energy storage (TES) from the academia and industry.

Our coordinator Dr. Cristina Prieto presented HYBRIDPlus! https://eurotherm.udl.cat/europes-corner/

Aiming to accelerate the maturation of innovative solutions, the 'Europe's corner workshop' event offered a unique opportunity to encourage the exchange of information between more that 20 EU projects partners working on similar topics.

HYBRIDplus would like to thanks the following project from fruitful discussions:











ASME TURBO EXPO 2023 IN BOSTON

June 2023

KTH Royal Institute of Technology represented HYBRIDPlus during the ASME Turbo Expo 2023 (https://lnkd.in/ePJSyuw) in the panels CO2 projects worldwide and Energy storage projects funded by the European Commission.



MEETINGS AT TYNDALL NATIONAL INSTITUTE

July 2023

HYBRIDPlus coordinators Cristina Prieto Rios and Luisa F. Cabeza presented the project at the Tyndall National Institute. The meetings on thermal storage sought new opportunities of collaboration and highlighted the roles that thermal energy storage could play in future energy systems.



SCARABEUS FINAL DISSEMINATION EVENT

September 2023

The Conference, organized by the Knowledge Center on Organic Rankine Cycle technology – KCORC in cooperation with the Universidad de Sevilla and its Chair of Energy Engineering, took place in Seville.



REDTES (SPANISH NETWORK FOR THERMAL ENERGY STORAGE) SEMINAR

November 2023

HYBRIDplus, proudly showcased its poster in the European corner of the event, exploring the future trends of Thermal Energy Storage (TES) in the realms of industrial heating and cooling.

UPCOMING MILESTONES

Follow us on LinkedIn not to miss our video!



© 87seconds

Release of our first project video that will explain HYBRIDplus concept of hybridization.

PARTNERS FEATURE



UNIVERSITY OF LLEIDA

The University of Lleida was founded in 1300 as the first university in Catalonia. Currently, it offers 38 different bachelor's degrees across 14 fields and a total of 29 master's programs in 12 fields.

In the HYBRIDPlus project, the University of Lleida is being responsible for the TES media characterization and compatibility analysis. They lead the selection of storage system materials and, thereafter, establish thermophysical properties storage materials and test them for corrosion.



DEUTSCHES METALLFASERWERK

Since 1951, STAX mission is to develop and produce metal fiber products out of various materials, such as steel, stainless steel, copper, brass and others.

Out of these metals, STAX produces customer specific Short Fibers,
Continuous Fibers and Fleece.
Depending on the customer application, you find STAX metal fibers in
Automotive, Lightweight Production, construction and many other areas.

STAX contributes to HYBRIDplus by developing specific metal fiber products to the project.

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