



WELCOME ADDRESS

Ready to the next phase!

Our journey started in June 2021. Since then, countless people have visited our channels to be up to date on the VIPERLAB' activities. And now we are so happy you are reading the third newsletter. Thank you!!

After one year of activities, the VIPERALB consortium met in Germany to celebrate the 1st General Assembly meeting. The consortium discussed the developments and updates on the project, as well as the planning of the following phases.

Keep reading to learn more!



Figure 1. The VIPERLAB Consortium during the 1st General Assembly meeting (@ Energy Campus Nuremberg).



PROJECT PROGRESS SO FAR

Joint Research Activities

One of the main joint research activities covers **characterization and standardization of perovskite based single and tandem devices**. In the second half of the first VIPERLAB year, measurement and aging protocols were agreed upon and the 1st Round Robin about measurement protocols was almost finished. A second Round Robin about aging is planned to start in September and will focus on light aging. Stay tuned for more news about the ongoing Round Robins.

For the efficient movement of the samples between the VIPERLAB collaborators, the device layouts were standardized considering different factors such as substrate size, TCO pattern, active area, and other. For the sake of comparability, the partners are considering the use of industrially acceptable solvent systems to obtain efficient perovskite PV cells and inter-comparison of methods to develop monolithic perovskite/Si hybrid tandems.

In parallel, key device architecture and a list of materials were agreed upon and are now used for the evaluation of the environmental, social, and economic impact of new perovskite-based technologies. For a more accurate assessment, the basis for **effective communication and collaboration with similar projects** dealing with the Life Cycle Assessment (LCA) of perovskite technologies is laid in the current months.

Networking activities

VIPERLAB'S networking activities during December 2021 and May 2022 were focused on **harmonization and paths towards standardization**. In this sense a workshop was organized and guidelines for harmonized procedures to facilitate and simplify trans-national and virtual access to all the VIPERLAB infrastructures were established.

These guidelines are dealing with IPR-procedures, publication procedures, and data formats. The fruitful discussions at the **"Apolo Standardization Workshop 2022"** in April paved the way for the continuation of the harmonization and standardization efforts of the Apollo project (which recently ended) within the VIPERLAB project.

All this will be publicly discussed in the upcoming **"1st strategic workshop on harmonization/standardization challenges"** organized by Austrian Institute of Technology on 14-15 September in Vienna.

Communication & Dissemination

Communication and Dissemination activities not only ensures the efficient distribution of the new knowledge developed by the project, but also increase awareness of our goals and encourages collaboration with project members. In addition, it offers added value to inform about the impact



that the project - as a whole - can take on the societal challenges to make new clean and cost-effective energy available.

In the period January-May 2022, we constantly monitored the impact of our communication strategy for the commercialisation of access to infrastructures and for the knowledge of the project. We made extensive use of the [Knowledge Exchange Platform](#) (KEP), the [VIPERLAB website](#) and social media channels. Over 7,500 people visited our infrastructure web pages, and 3,300 accesses event pages. Most of the VIPERLAB activities were shared throughout the VIPERLAB social media channels - [LinkedIn](#), [Twitter](#), and [Facebook](#) to reach key stakeholders. And the results have showed up by reaching more than 4,400 followers on LinkedIn we have Individually contacted to inform them about our project and its added value for the perovskite industry and Research community. We have also published 23 posts with over 76,340 impressions, 1,065 likes and 115 shares

A new release of the KEP will also be available shortly with new features:

- Optimised pages with the description of the infrastructures;
- Improved Expert profiles;
- Advanced access to technical and scientific documentation.
- contact requests by Innovative management and ticketing procedures to evaluate statistics and effectiveness in satisfying

Boosting the European PV manufacturing.

VIPERLAB also promoted the documentary & lobby film [MADE IN EUROPE](#): a very interesting collaborative documentary supported by [EERA-PV](#) and other sponsors to highlight the importance of photovoltaic production in Europe and how to bring it back again. Watch it [here!](#)

The VIPERLAB Exploitation Plan is now ready!

A first draft of the Exploitation Plan of VIPERLAB has been recently written. This document describes the strategy that the members of the Exploitation Board, together with the Work Package leaders have defined as draft within the first months of operation of the VIPERLAB project.

[Read more](#)

TNA/VA Access

In the second half of the first year two more rounds of the VIPERLAB call were completed. As a result, we have granted 16 more projects from 8 different countries (25% non-EU affiliations and 75% - EU) and started their implementation at 8 different VIPERLAB facilities. A faster implementation of the projects is expected due to relatively relaxed COVID restrictions.

The next VIPERLAB call will open on 1st of October.

Stay tuned!

UPCOMING EVENTS

First VIPERLAB strategic workshop on harmonization and standardization

About: This workshop will be held together with key stakeholders with the aim of determining main harmonization and standardization challenges.

When: 14-15 September 2022

Where: Austrian Institute of Technology, Vienna (Austria)

Further information coming soon [here](#).

First VIPERLAB strategic workshop on the SRIA

About: This workshop, organized by IMEC, will be held together with key stakeholders to prepare common roadmaps, white papers and the SRIA related to perovskite PV.

When: 29 September 2022

Where: WCPEC-8 Conference, Milan (Italy)

Further information coming soon [here](#).

8th World Conference on Photovoltaic Energy Conversion (WCPEC-8)

About: The VIPERLAB project will be presented at WCPEC-8 Conference.

When: 26-30 September 2022

Where: MiCo Milano Convention Centre, Milan (Italy)

Programme and registration [here](#).

International Summit on Organic and Hybrid Photovoltaics Stability (ISOS)

About: The VIPERLAB project will be presented at ISOS Conference.

When: 27-30 September 2022

Where: Hotel Alsik, Sønderborg (Denmark)

Programme and registration [here](#).

European Research & Innovation Days

About: European Research and Innovation Days is the European Commission’s annual flagship Research and Innovation event, bringing together policymakers, researchers, entrepreneurs and the public to debate and shape the future of research and innovation in Europe and beyond.

When: 28-29 September 2022

Where: Online

Programme and registration [here](#).

International Conference on Research Infrastructures (ICRI 2022)

About: ICRI provide opportunities for strategic discussions about international cooperation in research infrastructure. A variety of experts and stakeholders from around the world will discuss challenges and emerging trends, highlighting the essential role of research infrastructures.

When: 19-21 October 2022

Where: Brno (Czech Republic), hybrid event

Programme and registration [here](#).

PAST EVENTS

Databases, Modelling and High-Performance Computing for Perovskite PV

On 8 February 2022, VIPERLAB organized a workshop on **“Databases, Modelling and High-Performance Computing for Perovskite PV”**. The content of the workshop was divided in a short introduction on the VIPERLAB project and the presentation of the four virtual infrastructures proposed by the project. Read more [here](#).

8th February 2022 14:00-16:00 on line

Data bases, modelling and High Performance Computing for Perovskite PV

Virtual access to VIPERLAB's VA infrastructures: tutorials



Figure 2. VIPERLAB online workshop organized in February 2022

PV Impact Matchmaking

On 8 March 2022, VIPERLAB project participated at **PV Impact Matchmaking event**. A project's overview was presented to VON ARDENNE GmbH, KIT, Via Solis, IPVF, Dow Silicones Belgium srl, AIT, TNO, Imec. [Read more here.](#)

Apolo Standardization Workshop 2022

On 24-26 April 2022, AIT, UNITOV, CEA together with other partners\, participated at **Apollo Standardization Workshop** in Milan (Italy). [Read more here.](#)

HOPV conference 2022

On 23-25 May 2022, VIPERLAB attended the **HOPV conference in Valencia (Spain)**, A physical booth was installed to welcome and discuss with those attendees interested in the project. [Read more here.](#)

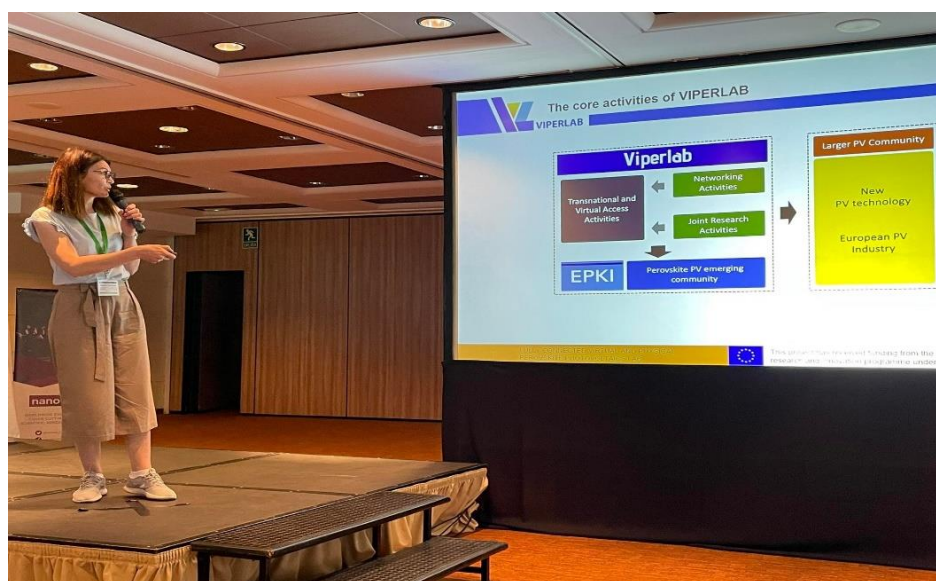


Figure 3. The VIPERLAB project is presented at the HOPV conference in Valencia.

Precise Measurements Workshop

On 2 June 2022, the first VIPERLAB physical **workshop on Precise Measurements** took place. It was organized by Fraunhofer in Freiburg (Germany).



Figure 4. Participants at the first VIPERLAB physical workshop on Precise Measurements.

MEET THE CONSORTIUM



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