



WELCOME ADDRESS

Welcome to the second VIPERLAB Newsletter

One of the many more to come!

The [VIPERLAB project](#) is a research project funded by the European Union's Horizon 2020 research and innovation programme. The project has officially started on 1 June 2021 and will be running for four years until 30 November 2024.

The project has recently entered in its 6th month. This successful milestone was marked with the second executive board meeting on November 17th, 2021. The consortium continues to move full speed ahead to achieve its next goals.

**Data base,
modelling and
High
Performance
Computing for
Perovskite PV**

Virtual access to VIPERLAB's VA
infrastructures: tutorials

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

VIPERLAB

Upcoming on line workshop on the access to Viperlab Virtual Infrastructures: tutorial

What is VIPERLAB project about?

Photovoltaic technology will be the main driver for a carbon neutral energy supply in the future. Within only a few years of systematic research, the unprecedented rise of metal halide

perovskites, as a new class of photovoltaic absorber material, has considerably changed the photovoltaic roadmap. The outcomes show that perovskites are an exciting technology with the highest potential to further decrease the cost while increasing the efficiency of solar cells.

[VIPERLAB](#) aims at accelerating the perovskite PV development in Europe by fostering collaborations between academia and industry as well as facilitating and coordinating access to the best EU-based perovskite research infrastructures.

It will facilitate faster and reliable technology evaluation cycles to enable a swift market entry for Perovskite-based PV products and hence a more wide-spread utilization of renewable energy conversion technology.



HZB-EMIL - Energy Materials In-Situ Laboratory Berlin one of the seventeen Research infrastructures offered by VIPRLAB (13 physical and 4 Virtual). More [information](#).

Project process so far

Last six months were demanding months for the consortium. 16 deliverables were submitted and five project milestones were reached.

- Current **progress** on the project implementation
- **VIPERLAB 1st call** for proposals launched on 15 October 2021 has attracted 15 proposals and the **2nd VIPERLAB call** was launched on 3 January 2022.
- **A deep Communication and dissemination campaign** put on the ground by the Knowledge Exchange platform and by LinkedIn (more than 2300 subscribers today!).

First call for proposals successfully attracted 15 proposals! Deadline for the second call is 28 February.

The VIPERLAB project offers a great opportunity to interested growing scientific perovskite communities as well as industry and SMEs, to realize their project at one of the state-of-the-art EU infrastructures that cover the whole innovation/value chain from material preparation



to characterization of perovskite devices and modules. For many of the physical infrastructures virtual or remote access is also possible.

The VIPERLAB project's [first call for proposals](#) was launched on 15 October 2021 with December 3rd deadline. Researchers were invited to submit their innovative research proposals to access in VIPERLAB Infrastructures. This call attracted 15 promising proposals out of which 12 were granted and 3 excluded not respecting the transnational eligibility criteria. Researchers from both industry and academia are now in the process of planning and implementing their projects.

The [second call for proposals](#) has been launched on 3rd Jan.2022. The submission deadline of the call is 28 February 2022. The review outcomes will be announced in March 2022. This call aims, again, at attracting researchers from academia and industry active in perovskite research from and beyond Europe. Check the links below to find out more about the application process and available VIPERLAB infrastructures.

[Find more](#)
[about submission procedures and about](#)
[offered infrastructures](#)

VIPERLAB is online!

All dissemination and communication tools ([website](#), [social media](#), and [promotional materials](#)) are ready to support the entire project's implementation period and beyond.

VIPERLAB project website and Knowledge Exchange Portal (KEP) are now active

The VIPERLAB project [website](#) is running since mid-October 2021 to inform about the project goal and objectives, the consortium, and the available infrastructures.

In addition, a powerful and dedicated [Knowledge Exchange Portal \(KEP\)](#) representing a progress beyond the State of art is running with the aim of providing access to technical documents, webinars, online courses, technical meetings and joint remote tests which will foster reciprocal discussion, saving time and costs, between the partners involved in Joint Research Activities and Networking activities.

Also, [VAPo-Vitual Access point](#), is offering an efficient and uniform platform to share data, modelling tools and access to HPC-High Performance Computing based on the FAIR (Findable, Accessible, Interoperable, Reusable) principles.

REGISTRATION



A unified platform to register in

VIPERLAB-KEP Knowledge Exchange Platform
VIPERLAB-VAPo Virtual Access Point Platform

Only new users need to register to the VIPERLAB KEP & VAPo Platform. If you have already done it access directly by [clicking here](#)

>> [What about VIPERLAB KEP & VAPo???](#)

VIPERLAB fosters discussion, disseminates information and result from experiments or modeling by following the FAIR concept, which is Findable, Accessible, Interoperable and Re-usable. The data management is also compliant with OpenAIRE and OpenAIRE-Advance towards the development of the European Open Science Cloud (EOSC)

KEP & VAPo are the two platforms support the project in knowledge and data exchange by offering free access to data, technical documents, webinar/on line courses, etc.



KEP-Knowledge Exchange Platform, is the web platform based on SQL-Structured Query Language and Dynamic Database Management System (DBMS) that supports the project in transferring the information available by its databases (infrastructures data, technical reports, files, contacts) and the educational content offered by our on-line courses and webinars



VAPo (Virtual Access Portal) unifies the access to all Virtual Access infrastructures of VIPERLAB project as a single point of access to the databases generated during the project regarding materials characteristics performance and durability of different perovskite materials and devices and it provides the access point on modeling and simulation results available by the project together with simulation tools benchmarking

Follow us on VIPERLAB LinkedIn!

[Viperlab's LinkedIn](#) has attracted over 2300 subscribers as today! Most of which are relevant stakeholders and very active in the perovskite research and industry.

VIPERLAB workshops

Standardization workshop: under Work Package 4, several participants have participated in a half-day workshop organized to discuss harmonized procedures and protocols for standardization.

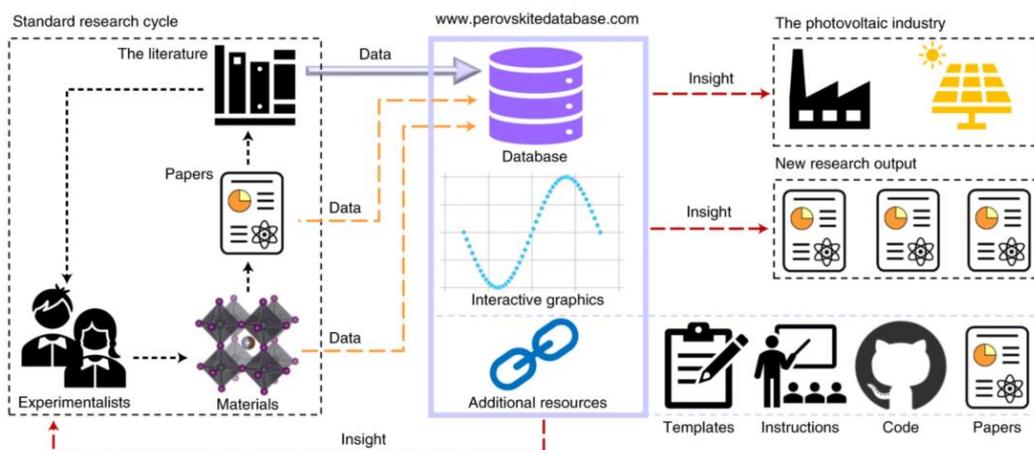
Dissemination and communication workshop: the aim of the workshop was to ensure a common understanding of Viperlabs's Dissemination & Communication procedures in the upcoming years.

VIPERLAB highlights

Exciting news for Perovskite solar cell research! An international team of researchers led by **Helmholtz Zentrum Berlin (HZB)** – one of the partners at VIPERLAB - has collected [data on metal halide perovskite solar cells](#) from more than 15,000 specialist publications and made them available in an open-access database. VIPERLAB will further expand the impact of this database by extending it to tandems and/or meta-data, by shedding light on stability, scalability, and reliability.

Fig. 1: Expanding the standard research cycle in experimental material science.

From: [An open-access database and analysis tool for perovskite solar cells based on the FAIR data principles](#)



Past events

- VIPERLAB project presented at the 38th European PV Solar energy Conference and Exhibition, September 2021. [More info](#)



- PV IMPACT - Matchmaking Event on Perovskite-Silicon Tandems, December 2021. [More info](#)





MEET THE CONSORTIUM

If you wish to receive more updates subscribe to VIPERLAB’s news & newsletters mailing list [here](#), follow us on [LinkedIn](#) AND/OR check out the news section of KEP and [VIPERLAB website](#).

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