OSCARS
Open Science Clusters' Action for Research & Society

Funded Project

Advanced Materials Open Science Centre at the Precarpathian National University

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Implemented by

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CHALLENGE ADDRESSED

PNU-OpenLab

✓*The PNU-OpenLab project aims to solve several key problems of Ukrainian researchers. First, it aims to bridge gaps in the Open Access scientific infrastructure by providing transparent and efficient access to data, research tools, and resources.*

✓*PNU-OpenLab will improve research infrastructure by standardising data management practices based on FAIR principles, which will improve the availability and usability of scientific data, facilitating cooperation within Ukraine and with European institutions.*

✓ *The project will also support cooperation between academia and industry, a critical need given the recent relocation of high-tech production to Western Ukraine, by providing accredited material analysis and fostering innovation at the national level.*

SOLUTION

- *PNU-OpenLab becomes a superstructural facility for PNU research ecosystem (for example PNU-NanoLab - Nanotechnology Lab for Materials Science, Energy, and Medicine)*
- *Creation of a thematic Invenio-drived repository*
- *Providing open access to the research infrastructure of the PNU*
- *Providing certified services to industry in the field of material properties investigation, which is important for defence capabilities and the needs of Ukraine's critical infrastructure*

PNU-NanoLab

PNU-OpenLab

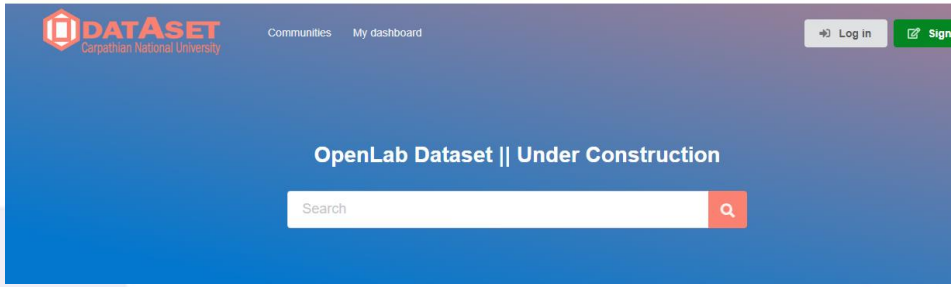
https://nano-lab.pnu.edu.ua/en/contact/

RESULTS

OSCARS

- ✓ *Better access to research data*
- ✓*Consulting and methodological support for researchers*
- ✓*Opportunities for interdisciplinary collaboration*
- ✓*Certification and standardization of research facilities*
- ✓*Integration into the European research network*
- ✓ *Long-term sustainability of research practices*

PNU-OpenLab



RISKS

- *Limited technical expertise and human resources to manage and maintain advanced equipment at PNU-OpenLab and PNU-NanoLab.*
- *Rising costs due to unforeseen expenses in equipment maintenance or certification processes.*
- *Data security and integrity issues in the open-access repository.*
- *Geopolitical instability in Ukraine affecting research activities and infrastructure security.*
- *Low adoption of Open Science principles among Ukrainian researchers due to cultural or institutional resistance.*

TEAM

VOLODYMYR KOTSIUBYNSKYI
Team manager
Professional skills: Knowledge of physics and material science. Expertise area: nanomaterials synthesis; XRD, XRF, Raman, nitrogen porosimetry, Mossbauer spectroscopy, data analysis.

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