DELIVERABLE REPORT D3.10

DELIVERABLE

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PROJECT DETAILS

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QUALITY CONTROL ASSESSMENT SHEET

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v0.2	11. 6. 2021	Review first draft	Tomáš Šikola (BUT)
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v0.5	21. 6. 2021	Review (section 4)	Monika Goikoetxea (NGU)
v1.0	28. 6. 2021	Final draft and submission	Božena Čechalová

DISCLAIMER

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SUMMARY

PETER is part of the H2020 Open Research Data Pilot programme. This deliverable report D3.10 explains how PETER aims to enable access to and use of data generated by the project. For this purpose, it references the following deliverables: the Data Management Plan (D3.4), and the Scientific Communication (D3.9). The information on the repositories for data and metadata is also included in this report.

INTRODUCTION

Open data is data that is free to use, reuse, and redistribute. The Open Research Data Pilot (ORDP) aims to make the research data generated by Horizon 2020 projects open.

Projects who opted into the ORDP are expected to:

- Deposit the data, including associated metadata, needed to validate the results presented in scientific publications.
- Create a Data Management Plan (DMP) following the template provided by the EC.
- Deposit preferably in a research data repository to enable third parties to access, mine, exploit, reproduce, validate and disseminate (free of charge to any user).

In accordance with the principles of Open Access to research data and publications generated within H2020 programmes, the PETER project participates in the ORDP. Following this, the Data Management Plan has been created as a distinct deliverable (D3.4, M6) and we have established repositories for raw research data, metadata, and publications. This deliverable introduces the repositories selected.

1. DATA MANAGEMENT PLAN

The PETER project aims to uphold all principles of good data management. To provide a management lifecycle of the data collected, processed, and generated within the PETER project, a Data Management Plan (DMP) has been prepared as deliverable D3.4 and submitted on 23. 6. 2018.

The D3.4 report presents the initial Data Management Plan (DMP) for the PETER project. It addresses the data collected and produced as part of the execution, dissemination and management of disruptive research that will be commercially exploited in the following years. This DMP describes how the research data are kept findable, accessible, interoperable, and reusable (FAIR principle).

During the project implementation, no major revisions of the initial DMP have been necessary.

2. RESEARCH DATA REPOSITORY

To ensure access to data in the long-term following the project end, we selected the ResearchGate repository, (https://www.researchgate.net/project/Plasmon-Enhanced-Terahertz-Electron-Paramagnetic-Resonance) as a central repository for PETER-generated raw experimental data. This data repository is freely accessible to individuals, consortia, working groups and institutes, enabling them to find and access the data.

Hereby we provide the summary of datasets uploaded to the repository within the project lifetime:

Dataset	Name of the dataset	DOI
1.	Raw underlying data for the ACS Photonics, 2018, 5 (8), pp 3372–3378	10.13140/RG.2.2.19079.65441
2.	Raw Underlying Data for the ACS Photonics 2019, 6, 5, pp 1279-1288	10.13140/RG.2.2.28694.50246
3.	Raw underlying data for the Phys. Rev. Applied 13, 054045	10.13140/RG.2.2.18865.81766
4.	Raw experimental data for the Kern M. et al., Hybrid Spintronic Materials from Conducting Polymers with Molecular Quantum Bits, Adv. Funct. Mater. 2020, 20006882	10.13140/RG.2.2.34444.33920
5.	Raw data for Chen et al., Terahertz Nanoimaging and Nanospectroscopy of Chalcogenide Phase-Change Materials, ACS Photonics 2020, 7, 12, 3499–3506	10.13140/RG.2.2.34913.63845

3. METADATA REPOSITORY

Metadata are created to describe the data and aid discovery. Beneficiaries will complete all mandatory metadata required by the repository and metadata recommended by the repository - Type of Data, DOI, Publication Date, Title, Authors, Description, Terms for Access Rights, and a link to a ResearchGate Project (as outlined in the repository instructions https://explore.researchgate.net/display/support/Data).

In addition to the in-built ResearchGate metadata entry, we have also created a central repository for metadata on all project-generated public data. This repository is available on the PETER project website https://www.peter-instruments.eu/inpage/metadata/ and allows to search within the data according to file description, dataset type, authors, related journal pf publication, data format, and keywords.

4. PUBLICATIONS REPOSITORY

PETER project complies with the H2020 programme requirements for open access to scientific publications. The publications (papers in peer-reviewed journals) are made either Gold Open Access (accessible to anyone free of charge directly on the publisher's website) or Green Open Access (self-archiving of the accepted manuscript including all reviews and editorial input).

For self-archiving the publications in Green Open Access, we have selected the ZENODO repository. A central metadata repository (allowing search by title, publication date, DOI, journal citation, authors, and keywords in abstract) on project publications is created on the PETER project website https://www.peter-instruments.eu/inpage/publications/.

A comprehensive overview of scientific communication on the project is provided in the deliverable D3.9 (Scientific Communications) Hereby we also provide a short summary table:

Name	DOI	OA	Link to publication
Understanding the Image Contrast of Material Boundaries in IR Nanoscopy Reaching 5 nm Spatial Resolution	10.1021/acsphotonics.8b00636	Green	https://zenodo.org/record/4736982#.YLdIq6gzYuX
Probes for Ultrasensitive THz Nanoscopy	10.1021/acsphotonics.9b00324	Green	https://zenodo.org/record/4737029#.YLdIz6gzYuX
Plasmonic Antennas with Electric, Magnetic, and Electromagnetic Hot Spots Based on Babinet's Principle	10.1103/PhysRevApplied.13.054045	Gold	https://journals.aps.org/prapplied/abstract/10.1103/PhysRevApplied.13.054045
Hybrid Spintronic Materials from Conducting Molecular Quantum Bits	10.1002/adfm.202006882	Gold	https://onlinelibrary.wiley.com/doi/10.1002/adfm.202006882
Terahertz Nanoimaging and Nanospectroscopy of Chalcogenide Phase-Change Materials	10.1021/acsphotonics.0c01541	Gold	https://pubs.acs.org/doi/10.1021/acsphotonics.0c01541