DATA MANAGEMENT PLAN

# 1. Data description and collection or re-use of existing data

## How will new data be collected or produced and/or how will existing data be re-used?

The data generated will come from performed measurements using listed in the project analytical equipment.

Information about the participants of the project, products etc. will be generated as the result of prepared

questionnaires.

Information about the analytical investigations will be obetined using simulations and analysis of results.

[w języku angielskim]

## What data (for example the types, formats, and volumes) will be collected or produced?

The data generated are in various formats depending on analytical equipment, but typically they are in Excel (xls, csv or

xlsx), Notepad (txt) or pdf compatible formats. The size of a single data set is typically <1 MB. Around twenty five such

files are expected to be created during a single analysis.

# 2. Documentation and data quality

## What metadata and documentation (for example methodology or data collection and way of organising data) will accompany data?

Raw data are typically generated by the equipment or applied analytical device. Data files are stored in computer

assigned to analytical device as well as on the external hard drive in a case of unexpected equipment error or

destruction. Selected data generated from experiments will be deposited in the MOST Wiedzy Open Research Data

Catalog – repository provided by the Gdańsk University of Technology - and described using attributes compatible with

general metadata standards. Metadata description will be stored in JSON-LD format. Author will be identified and

authorized by ORCID number.

## What data quality control measures will be used?

The analytical chemistry data will be subject to standard quality control/quality assurance protocols and good

laboratory practice. They are developed and well established in analytical chemistry using several types of analytical

tests or statistical tools. The data will be cataloged in a standardized way fulfilling the requirements of FAIR standards.

The data available in an open repository will have DOI assigned and they will be positioned to ensure its accessibility.

The reliability of the results obtained will be possible thanks to the use of high-quality analytical standards and

software available with the analytical equipment.

# 3. Storage and backup during the research process

## How will data and metadata be stored and backed up during the research process?

All the data will be stored on computers assigned to analytical device and on portable disks or pendrives. The backup

will be carried out once every 2 months or immediately after the completion of a given stage of research.

## How will data security and protection of sensitive data be taken care of during the research?

Due to the work involving potentially sensitive information, clear procedures and policies will be implemented when

working with surveys. Access to the surveys will be limited only to the PI of the project and the expert responsible for

survey analysis. Moreover, to minimise as much as possible the leakage of sensitive information, a secure storage

methods will be implemented. Additionally, all questionnaires will be anonymous. Data recovery will be possible thanks

to backup procedures. Only the members of the research team will have access to obtained data, all computers will be

protected by a password and antivirus, as well as the portable disks will be kept in lockers.

# 4. Legal requirements, codes of conduct

## If personal data are processed, how will compliance with legislation on personal data and on data security be ensured?

Nie dotyczy

## How will other legal issues, such as intelectual property rights and ownership, be managed? What legislation is applicable?

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Intellectual property for any results of the Project will be owned by Gdansk University of Technology regulations

(Resolution of the Senate of the Gdańsk University of Technology No. 117/2021/XXV of 19 May 2021

https://link.pg.edu.pl/GdańskTech\_intprop). The data and results will be published in open-access model under the

one of the Creative Commons licenses (CC0 or CC BY). Metadata created for datasets deposited in the MOST Wiedzy

Open Research Data Catalog will be always available without any restrictions (CC0).

# 5. Data sharing and long-term preservation

## How and when will data be shared? Are there possible restrictions to data sharing or embargo reasons?

The part of data will be shared via in the MOST Wiedzy Open Research Data Catalog and will be placed there after

finishing each task/step of the project. No embargos will be applied.

## How will data for preservation be selected, and where will data be preserved long-term (for example a data repository or archive)?

The data will be stored in The MOST Wiedzy Open Research Data Catalog.

The repository is the only service in Poland CoreTrustSeal certified, which means that it has established good

preservation and dissemination practices.The data provided in the repository will fulfill FAIR requirements and will be

labeled and categorized according to standard file formats. Moreover, all data will be stored for at least 10 years after

the project is finished and access to them will be possible only with the PI consent.

## What methods or software tools will be needed to access and use the data?

The MOST Wiedzy Open Research Data Catalog will be produced in standard xls, xlsx, pdf or txt formats, therefore it is

assessable to every user.

## How will the application of a unique and persistent identifier (such us a Digital Object Identifier (DOI)) to each data set be ensured?

The MOST Wiedzy Open Research Data Catalog will offer DOI number to each dataset.

# 6. Data management responsibilities and resources

## Who (for example role, position, and institution) will be responsible for data management (i.e the data steward)?

Open Science Competence Center at Gdansk University of Technology will be responsible for DMP and quality of

metadata descriptions of datasets deposited in MOST Wiedzy repository. Project PI will be responsible for the data

quality.

## What resources (for example financial and time) will be dedicated to data management and ensuring the data will be FAIR (Findable, Accessible, Interoperable, Re-usable)?

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