

# *Plan upravljanja istraživačkim podacima kao primer dobre prakse*

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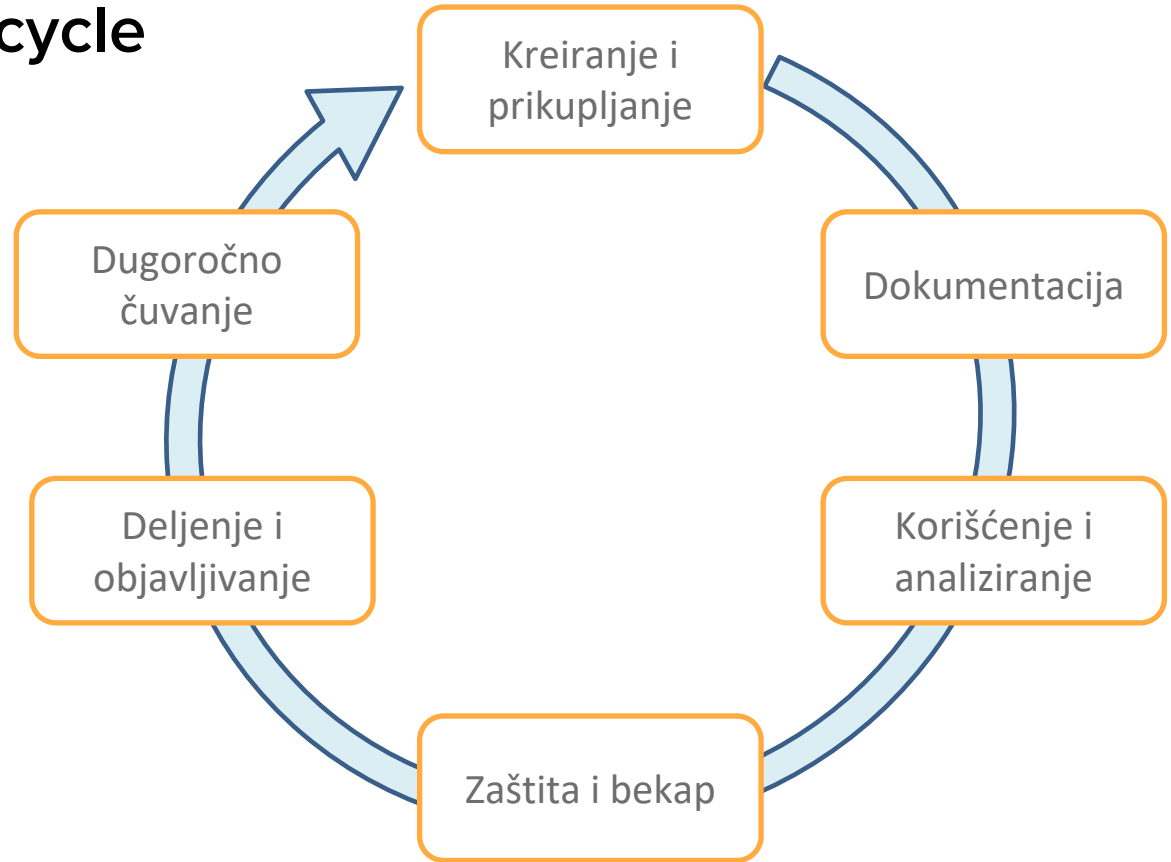
# UPRAVLJANJE ISTRAŽIVAČKIM PODACIMA

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# Upravljanje istraživačkim podacima

Upravljanje istraživačkim podacima (engl. *research data management*, skr. *RDM*) se odnosi na niz aktivnosti sa namerom da se na najefikasniji način prikupe i organizuju podaci i pripreme za buduću upotrebu i deljenje sa drugima.

# Research Data Lifecycle





# FAIR principi

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# FAIR principi



**F**indable

**A**ccessable



**I**nteroperable

**R**eusable



# FAIR principi

## Findable

(pristupačnost, pretraživost)

- jedinstveni i perzistentni identifikatori;
- opisani detaljnim metapodacima;
- (meta)podaci se indeksiraju u pretraživom repozitorijumu.

## Accessible

(dostupnost)

- (meta)podaci se preuzimaju putem standardizovanih komunikacionih protokola;
- metapodaci su uvek dostupni.

## Interoperable

(interoperabilnost)

- metapodaci koriste rečnik koji prati FAIR principe;
- metapodaci obuhvataju kvalifikovane reference na druge metapodatke.

## Reusable

(ponovna upotrebljivost)

- metapodaci imaju jasnu i pristupačnu licencu za korišćenje;
- detaljne informacije o poreklu podataka (eng. *provenance*).

A close-up photograph of a desk setup. In the foreground, the keyboard of a silver laptop is visible. In the center, a gold-colored smartphone lies on an open, blank notebook. To the right, a black pen rests on the notebook's pages. The desk surface is made of dark, textured wood. The background is softly blurred, showing a wooden chair.

## Plan upravljanja podacima



# Plan upravljanja podacima

Dokument koji služi kao okvir svim učesnicima na projektu kako da upravljaju podacima i na koji način da ih čuvaju.

Donosi se na početku projekta i svi učesnici bi trebali da su upoznati sa njim.

Izrada Plana je postala obavezna kod većine sponzora istraživanja u svetu.

# Plan upravljanja podacima



*Data usage - u programima PROMIS i IDEJE Fonda za nauku Republike Srbije*

*Uputstvo za pisanje Plana upravljanja podacima za program IDEJE Fonda za nauku Republike Srbije (DOI: [10.5281/zenodo.4496935](https://doi.org/10.5281/zenodo.4496935))*

# Alati za DMP

## 3.1.15 Will you use standardised formats for your data?

Different Types Of Data Are Acquired, Processed And Stored (Preserved And/or Archived) In Different Ways And Can Be Discipline Specific. Many Proprietary File Formats Are "Containers" For Standard File Formats. By Packaging Them Into These Containers, A Software And/or Hardware Developer Can Provide Additional Functionality, Usually By Streamlining A Process, To Analyse Data Acquired On Their Platform. However, This Has The Negative Consequence Of Making These Data Less Interoperable.

*You May Find Some Best Practices For File Formats: <https://library.stanford.edu/research/data-management-services/data-best-practices/best-practices-file-formats>*

Da  Ne

## 3.1.18 Are the file formats you will use open?

Open File Formats Provide The Software Specifications To Anyone For Free And Enable Re-use. Examples: .Png, .Xml, .Rtf, .Wav

Da  Ne

Obavezno

Navedite

Navedite dodatne informacije ili obrazložite izbor

# Alati za DMP

DMPOnline - DCC & Univ. of Edinburgh  
DMP Tool - California Digital Library

human readable (PDF, DOCX)

Argos (OpenAIRE)  
Data Stewardship Wizard (Elixir CZ/ND)

human readable (PDF, DOCX)  
machine readable (JSON, RDF/XML)

# Alati za DMP



- machine-actionable (prema *RDA Common Standards for maDMP*)
- free and open-source
- dozvoljen prevod na druge jezike pored engleskog
- omogućena izrada obrazaca finansijera

# DMP alati: Argos

## Datasets

**Title:** NewSiest\_DMP

**Template:** Horizon 2020

**External References**

*Data Repositories*

*External Datasets*

*Registries*

*Services*

## Dataset Description

### 1 Data Summary

1.1 What is the purpose of the data collection/generation and its relation to the objectives of the project?

**Purpose of data collection/generation:** To study the optimal nanoparticle (NP) concentration and thermal modification conditions to improve the UV stability of wood surfaces. Data will be useful for academic and scientific readers and also has construction, industrial importance.

**Relation to objectives of project:** The main research objectives of the action are: i) to introduce and optimize envelope treatment of wood with UV protecting nanoparticles ii) to set up the process of heat treatment of wood with nanoparticles in the envelope iii) to evaluate UV and fungal resistance of the novel wood-based material for industrial/commercial application. The collected data will therefore include: i) Experimental procedures and reaction conditions to achieve wood envelope treatment. Data on basic liquid properties of NP dispersion, retention and depth of penetration of the nanomaterial onto wood. ii) the generated data includes standard methodology of the thermal modification of wood and data on percent mass loss, mechanical properties, contact angle variations, colour and chemical changes. iii) Data from evaluation of wood against light (UV) and fungal stability where change in wood properties will be accessed by weight loss, colour change, Scanning Electron Microscopy (SEM), and changes in chemical constituents using FTIR spectroscopy.

1.2 What types and formats of data will the project generate/collect?

**Types and formats of data generated:** 1. Envelope treatment of wood using

# DMP alati: Argos

## Datasets

Title: NewSiest\_DMP

Template: Horizon 2020

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{
  "dmp" : {
    "contact" : {
      "contact_id" : {
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        "type" : "other"
      },
      "mbox" : "obrad.vuckovac@gmail.com",
      "name" : "Obrad Vuckovac"
    },
    "contributor" : [ {
      "contributor_id" : {
        "identifier" : "http://orcid.org/0000-0001-5616-2680",
        "type" : "orcid"
      },
      "name" : "Obrad Vučkovac"
    } ],
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    "created" : "2020-08-06T18:19:38Z",
    "dataset" : [ {
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        "identifier" : "62c5029c-2322-4eb7-ba52-bf808de1c615",
        "type" : "other"
      }
    } ],
  },
}
```

of the data collection/generation and its relation to the objectives

generation: To study the optimal nanoparticle (NP) in conditions to improve the UV stability of wood surfaces. Data readers and also has construction, industrial importance. Main research objectives of the action are: i) to introduce and with UV protecting nanoparticles ii) to set up the process of heat in the envelope iii) to evaluate UV and fungal resistance of the al/commercial application. The collected data will therefore d reaction conditions to achieve wood envelope treatment. Data ion, retention and depth of penetration of the nanomaterial onto standard methodology of thermal modification of wood and data erties, contact angle variations, colour and chemical changes. iii) ight (UV) and fungal stability where change in wood properties change, Scanning Electron Microscopy (SEM), and changes in roscopy.

ats of data will the project generate/collect?

a generated: 1. Envelope treatment of wood using



# Dataverse repozitorijum



# Dataverse Data repository

Repozitorijum podataka se može opisati kao lokacija na koju istraživači mogu pohraniti svoje podatke, učiniti ih dostupnim za upotrebu i organizovati ih na logičan način.

Naš repozitorijum: SERDAR - Serbian Research Data Repository

- Skupovi podataka dobijaju DOI broj
- Open-source softver - Dataverse

# Hvala na pažnji

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