## 7 Research Data Management - The Basics

You learn to identify the relevant strategies and tools to implement research data management in your research practices.

- Life cycle of research data
- Adequate metadata documentation for your code and data
- Storing and publishing data
- Writing Data Management Plans (DMP) and using OpenBIS (ELN)

**Participants:** max. 20 (please bring your laptop)

**Trainers:** Federico Cantini, Fabian Felder

(Lib4RI), experts from Eawag, Empa,

PSI & WSL

Sessions: Eawag-Empa Dübendorf

Forum Chriesbach, FC-D24

Tue, 28.11.2023, 09:00 - 12:00

**PSI Villigen** 

PSI Education Centre, OSGA/OG08

Thu, 23.11.2023, 09:00 – 12:00

**WSL Birmensdorf, Flurysaal** Thu, 02.11.2023, 09:00 – 12:00

# 7\* Load, Work & Plot Your Data Using Python, Pandas & Jupyter Notebook

You will learn how to treat, explore and analyse your data using Python with the Pandas library. You will learn how to use the JupyterLab environment to work with, but also to publish your data. The course requires a basic knowledge of Python (importing modules, defining variables, defining and calling functions, accessing properties of objects).

- Using Jupyter Notebook and coupling it with OpenBIS
- Analyzing and plotting data with Pandas (Python library)
- Publishing your code with Voilà and Binder

**Participants:** max. 20 (please bring your laptop)

Trainers: Antoine Masson (Youmi), Federico Cantini

Session: Eawag-Empa Dübendorf

Forum Chriesbach, FC-C24

Thu, 21.09.2023, 09:30 - 17:30

**Required:** Please have Anaconda installed on your laptop. A 2-hour online session (optional) will be held on 20 Sep 2023, 13.00-15.00 to deal with installation issues. Details (incl. Zoom link) are sent via email upon registration for the main course.

#### Registration:

Each venue is open to all members of the four research institutes Eawag, Empa, PSI and WSL. Please register online at <a href="https://www.lib4ri.ch/trainings">www.lib4ri.ch/trainings</a> (closes a week prior to each event).

#### Course Notes:

Presentation slides and supplementary material will be available for download from our trainings website at www.lib4ri.ch/trainings a couple of days prior to the sessions.

#### **ECTS Credit points:**

On request, students attending at least 4 modules will receive a recommendation for 1 ECTS credit point.

#### Training on demand:

- We are happy to visit your group or department to discuss individual topics
- Customised training sessions at all locations of the federal research institutes can be arranged
- Contact us for your training on demand

As a scientific library, we provide all affiliates of the four research institutes with literature and technical information, both electronic and printed, for research, teaching and consulting.

#### Contact:

Lib4RI, Überlandstrasse 133, CH-8600 Dübendorf | +41 58 765 57 00 | info@lib4ri.ch | www.lib4ri.ch

Lib4RI – Library for the Research Institutes within the ETH Domain: Eawag, Empa, PSI & WSL



# **Searching & Managing Scientific Information**

# Training series

Autumn 2023

#### Modules:

- 1 Searching Scientific Information
- 2 Scientific Publishing –From Writing to Sharing
- 3 Open Access & Copyright
- 4 Literature Management with EndNote
- 5 Getting Started with LaTeX
- 6 Work on Your Own Project
- 7 Research Data Management The Basics
- 7<sup>+</sup>Load, Work & Plot Your Data Using Python, Pandas & Jupyter Notebook

#### Course sites:

Eawag: Dübendorf Empa: Dübendorf PSI: Villigen WSL: Birmensdorf

Online registration: www.lib4ri.ch/trainings

### 1 Searching Scientific Information

You become skilled in finding relevant scientific information using suitable tools offered by Lib4RI.

- How to use Lib4RI's resources for guick information retrieval
- Formulating systematic search queries including Boolean operators, wildcards and truncations
- Examples/exercises from the swisscovery library catalogue, Scopus and Web of Science

Participants: max. 20 (please bring your laptop)

Trainers: Stephanie Hofmann, Bobby Neuhold

Sessions: Eawag-Empa Dübendorf

Forum Chriesbach, FC-C24 Mon, 25.09.2023, 09:00 – 12:00

**PSI Villigen** 

PSI Education Centre, OSGA/OG09

 $Wed,\, 20.09.2023,\, 09:00-12:00$ 

**WSL Birmensdorf, EP D1**Mon. 18.09.2023. 09:00 – 12:00

# 2 Scientific Publishing – From Writing to Sharing

You will be guided through the scientific publication process from start to finish.

- Steps prior to writing a paper
- Grammar and writing style
- Tips on the publication process
- Author identification, impact and visibility

**Participants:** max. 20 (please bring your laptop)

**Trainers:** Nina Helg-Kurmann, Laura Konstantaki

Sessions: Eawag-Empa Dübendorf

Forum Chriesbach, FC-C24 Thu, 07.12.2023, 09:00 - 12:00

PSI Villigen

**PSI Education Centre, OSGA/OG08** Thu, 30.11.2023, 09:00 – 12:00

**WSL Birmensdorf, Flurysaal** Thu, 21.11.2023, 09:00 – 12:00

#### 3 Open Access & Copyright

You gain knowledge on the principles of Open Access (OA) publishing and learn how to deal with copyright questions related to scientific works.

- Apply OA to your publications and gain more impact for your research
- Funding opportunities for OA publications
- How to make your publications OA in the repository DORA
- Principles of copyright and their applications in science
- Creative Commons (CC) licences and how to use them
- Copyright transfer agreements and author rights

Participants: max. 20 (please bring your laptop)

Trainers: Jochen Bihn, Lothar Nunnenmacher

Sessions: Eawag-Empa Dübendorf

Forum Chriesbach, FC-C24 Thu, 07.12.2023, 13:00 – 16:00

**PSI Villigen** 

PSI Education Centre, OSGA/OG08

Thu, 30.11.2023, 13:00 - 16:00

**WSL Birmensdorf, Flurysaal** Thu, 21.11.2023, 13:00 – 16:00

## 4 Literature Management with Endnote

You get introduced to scientific literature management with EndNote.

- How to import and organise literature information including fulltext PDFs
- Citing references and creating bibliographies in your scientific document using EndNote's MS Word plugin Cite-While-You-Write
- How to modify/create output styles using Endnote's style editor

Participants: max. 12 (computers provided)

Trainers: Stephanie Hofmann, Bobby Neuhold

Sessions: Eawag-Empa Dübendorf

Forum Chriesbach, FC-B15 Tue, 31.10.2023, 09:00 – 12:30 or Thu, 09.11.2023, 09:00 – 12:30 or Wed, 15.11.2023, 09:00 – 12:30

#### **5 Getting Started with Latex**

You are guided in creating your first LaTeX document, with special attention to scientific writing oriented features. The course is for LaTeX beginners.

- A not so short summary of LaTeX basics
- Tables, figures and formulae
- The LaTeX error log and common errors to avoid
- BibTeX and citation styles

Participants: max. 20 (please bring your laptop)

Trainers: Federico Cantini, Frank Hösli

Sessions: Eawag-Empa Dübendorf

Forum Chriesbach, FC-C24 Thu, 19.10.2023, 09:00 – 16:00

**PSI Villigen** 

PSI Education Centre, OSGA/EG06

Thu, 12.10.2023, 09:00 - 16:00

**Required:** Please have LaTeX installed on your laptop. Brief instructions for example installations will be available on our trainings website at <a href="https://www.lib4ri.ch/trainings">www.lib4ri.ch/trainings</a> ca.1 week prior to the sessions. Please contact us before the course should you require assistance with your installation.

# 6 Work on Your Own Project

You work on your own literature project receiving individual assistance.

- Develop your search strategy and set up your systematic topic search with bibliographic databases such as Scopus & Web of Science
- Critically evaluate your search results
- Tweak your reference management & citation tools (particularly EndNote)

Participants: max. 20 (please bring your laptop)

Trainers: Stephanie Hofmann, Bobby Neuhold

Sessions: Eawag-Empa Dübendorf

**Forum Chriesbach, FC-B81** Tue, 05.12.2023, 09:00 - 12:00

PSI Villigen,

PSI Education Centre, OSGA/OG08,

Fri, 01.12.2023, 09:00 – 12:00