Bibliographic resources and research tools for Industrial Engineering

A presentation for PhD students

Susanna Valpreda, Sara Meneghin, Marica Milotti
Biblioteche di Ingegneria
info biblio.inge@unipd.it
Index

Section 1 | Bibliographic research and databases

Section 2 | Bibliometrics and bibliometric indicators

Section 3 | Engineering databases

Section 4 | Open Access - Padua Research Archive

Section 5 | Open Data - Research Data Unipd

Section 6 | Reference management
Workshop materials

Workshop slides are available here:

http://biblioingegneriacentrale.cab.unipd.it/usa/laboratori/materiali
Section 1 | Bibliographic research and databases

Bibliographic research main steps

- Identify your topic and keywords
- Choose the proper tools (catalogues, databases...)
- Collect and evaluate useful documents (articles, papers, technical reports...)
- Create your bibliography using the correct citation style and citing the source
What are Bibliographic Databases?

- A **bibliographic database** is a database of bibliographic records, an organized digital collection of references to published literature, including journal and newspaper articles, conference proceedings, reports, government and legal publications, patents, books, etc. In contrast to library catalogue entries, a large proportion of the bibliographic records in bibliographic databases describe articles, conference papers, etc., rather than complete monographs, and they generally contain very rich subject descriptions in the form of keywords, subject classification terms, or abstracts.

- A **bibliographic database** may be general in scope or cover a specific academic discipline.
Why use Bibliographic Databases?

• Bibliographic databases allow you to use keywords to search across thousands of different journal titles and conference proceedings at the same time for papers in a specific subject area.

• This saves you a lot of time as you do not have to search through individual publications.

• The papers have been through some form of "quality control" to ensure that the information is more reliable and valid than information you may find by searching the internet (better than Google search!).

• Bibliographic databases allow you to create a structured search by helping you to identify relevant keywords, to combine keywords together and to limit your search.
Why use Bibliographic Databases?

- Bibliographic databases give you the citation or reference details about the articles you have found so that you can locate the full text.

- Bibliographic databases usually provide links to the abstract or summary of the article so you can evaluate its relevance.

- If the University has an electronic subscription to the journal or conference proceedings, you will have online access to the full text of the paper.

- Bibliographic databases are regularly updated giving you access to the most current research.
Bibliographic databases

Multidisciplinary Bibliographic Databases

**Web of Science** (Clarivate bibliographic and citation database of peer-reviewed literature)

**Scopus** (Elsevier bibliographic and citation database of peer-reviewed literature)
Bibliographic databases

Engineering Bibliographic Databases

**Engineering Village** (the most comprehensive interdisciplinary engineering database in the world)

**IEEE Xplore** (full-text electrical engineering, computer science, and electronics bibliographic database)

**Business Source Complete** (bibliographic database about management, economics, finance, business...)

**Reaxys** (web-based search and retrieval system for chemical compounds, bibliographic data and chemical reactions)
Web of Science (WOS)

COVERAGE: multidisciplinary
TIME RANGE: 1985-
DOCUMENT TYPES: articles, proceedings papers
Scopus

COVERAGE: multidisciplinary
TIME RANGE: 1970-
DOCUMENT TYPES: articles, proceedings papers
BIBLIOMETRICS is a set of mathematical and statistical methods used to analyze and measure the quantity and quality of books, articles, and other forms of publications.

Bibliometrics
- identifies the best journals of a specific discipline
- defines the prestige of a specific journal
- determines the impact of published research

Bibliometrics evaluates:
- scientific journals
- single researchers
- research groups
Bibliometric indicators are very important for researchers and organizations, as these measurements are often used in funding decisions and promotions of researchers. They are becoming increasingly important since published research results are read and then quoted by other researchers.

- **quantity indicators**: measure the productivity of a particular researcher (Impact Factor; SNIP, SCImago)

- **quality indicators**: measure the quality or performance of a researcher's output; corresponds to the so called “peer-review”, a review by colleague-scientists (*h-index*)
The **impact factor (IF)** is a measure of the frequency with which the average article in a journal has been cited in a particular year. It is used to measure the importance or rank of a journal by calculating the times its articles are cited.

**How Impact Factor is Calculated?**

The calculation is based on a two-year period and involves dividing the number of times articles were cited by the number of articles that are citable. The **Impact Factor** is used to compare different journals within a specific disciplinary field.

The **Journal of Citation Report** indexes more than 11,000 science and social science journals. It is important to note that Impact Factor is a journal metric and should not be used to assess individual researchers or institutions.
H-Index

The *h-index* quantifies an individual’s scientific research output (cit. J.E. Hirsch).

The *h-index* evaluates an author impact inside a specific scientific community on the basis of the number of his/her publications and citations obtained.

The *h-index* is one of the most important function in **Scopus**.
SCImago Journal Ranking

SCImago, a database that can be accessed for free online, which allows you to obtain statistics on the citations of articles published in peer-reviewed journals. It provides statistics and compares the number of published articles and citations in each country.

Journal ranking

Country rankings
Quick Reference Cards for Research Impact Metrics

Section 3 | Engineering databases
Section 3 | Engineering databases

Business Source Complete

Search Options

Search Modes and Expanders

Search modes
- Boolean/Phrase
- Find all my search terms
- Find any of my search terms
- SmartText Searching

Apply related words
- Also search within the full text of the articles
- Apply equivalent subjects

Limit your results
- Full Text
- Scholarly (Peer Reviewed) Journals

Published Date
- Month
- Year
- Month
- Year

Publication Type
- All
- Academic Journal
- Book
- Case Study
Section 3 | Engineering databases
Google Scholar

Stand on the shoulders of giants

Go to Google Scholar
Section 4 | Open access

The research lifecycle

Adapted original source: Joint Information Systems Committee (JISC), *Stages of the research and data lifecycle*, viewed 10th January 2020

https://www.researchgate.net/figure/Joint-Information-Systems-Committee-JISC-Stages-of-the-research-and-data-lifecycle_fig1_51476349
Introduction to Open Science

“Open science is the movement to make scientific research, data and dissemination accessible to all levels of an inquiring society”

FOSTER consortium

Open Science

- Open Data
- Open Source
- Open Methodology
- Open Peer Review
- Open Access
- Open Educational Resources

Andreas E. Neuhold – Opera propria – CC BY 3.0
Welcome to Padua@research

WARNING

If you need to submit your document for the evaluation of research (VQR), please remember that you have to use the institutional repository Padua Research Archive (IRIS).

Padua@research is the Institutional Repository for University of Padova Research Works. This Archive contains digital documents derived by the scientific activity of teaching staff, researchers and fellow-workers of this Athenaeum. In Padua@research are also stored Ph.D. thesis.

All the operations to deposit, modify and access to the works are very simple.

The self-archiving procedure makes visible on the web the full text of the stored works. [Continue...]

What do you want to do?

- Search for a work
- Register
- Deposit a document / Access to my area
- Deposit a Ph.D. thesis
- Tell me more

Padua@Research supports OAI 2.0 with a base URL of http://paduaresearch.cab.unipd.it/cgi/oai2
Section 4 | Padua Research Archive (IRIS)

Padua Research Archive, the institutional repository of the scientific production of the University of Padua, aims to collect, document, preserve and publish, also in open access, the scientific production of the University of Padua. Padua Research Archive is based on IRIS (Institutional Research Information System) developed by Cineca.
Padua Research Archive (PRA) as an Open Access archive: IRIS beyond Research evaluation

PADUA RESEARCH ARCHIVE
https://www.research.unipd.it/

Institutional archive
OPEN ACCESS
Versions permitted by publishers or published with open access

Repository for RESEARCH EVALUATION (ANVUR, MIUR...)
Metadata and editorial version
The authors and researchers benefit because their research papers are given a much wider dissemination;

- Articles self-archived by author receive between 50-250% more citation (Brody, 2007);

- The institutional archives guarantee long-term preservation;

- Researchers benefit because they will increasingly be able to access and use the full text of all research published in that area.
Padua Research Archive (PRA) as an Open Access archive: IRIS beyond Research evaluation

- Check the possibility of open access publication of the attachments uploaded according to the publisher's rules.
- Check the embargo dates and send the attachment validation.
- Supports authors via SBA Help - Research Support - OA.

For all contributions in IRIS-PRA the research support group valid the full-text attachments for publication!

The validation process involves a delay in the publication of the OA content in PRA, but protects the author.
It is possible to report contributions that need to be displayed on the faster public portal.
Padua Research Archive (PRA) as an Open Access archive: IRIS beyond Research evaluation

Who uploads research products to PRA?
Authors and departmental representatives take care of the loading of products

Who to contact for technical problems related to PRA?
For technical problems:
- Research Office – Settore Supporto Informativo
- Valutazione Ricerca

Who to contact for uploading open access content?
Author support via Library Helpline – queue:
- Supporto Open access (supporto ricerca)
For the author: what to insert in PRA for evaluation and what for Open Access

**For evaluation**

Contribution for which publication rights are transferred to the publisher: the attachment will be visible only to the evaluators

Contribution published immediately in OA: the attachment will be made visible to everyone

*Attachments declared completely open access by authors are still checked*

**For Open Access**

pre-print
post-print (with possible embargo)
editorial version (if an addendum to the contract has been agreed)

Contribution published in Open Access
Use Sherpa Romeo who collects the content policies of publishers and academic journals by exemplifying them.

SHERPA ROMEO is available directly in IRIS or at the URL:
http://www.sherpa.ac.uk/romeo/index.php

Think. Check. Submit.

Through a range of tools and practical resources, this international, cross-sector initiative allows you to critically judge and identify the most suitable and highest quality open access magazine.
OA and minimum instructions for the author: what to do before and after publication

RECOMMENDED ACTIONS:
before publishing in an OA magazine

- Check the magazine or publisher, probing the contents and verifying their effective presence in directories such as DOAJ (directory that indexes and provides access to quality journals, peer-reviewed open access), disciplinary and multidisciplinary databases
- Choose a Creative Commons license
- Check the APC costs
OA and minimum instructions for the author: what to do before and after publication

**RECOMMENDED ACTIONS:**

during publication

Keep the different versions of the contributions:
- version sent to the publisher without peer-review (pre-print)
- version «accepted» (post-print) without minor revisions, logos etc.

**RECOMMENDED ACTIONS:**

during publication

Keep the different versions of the contributions:
- version sent to the publisher without peer-review (pre-print)
- version «accepted» (post-print) without minor revisions, logos etc.
OA and minimum instructions for the author: what to do before and after publication

Open Access: discounts for authors - University Library System

Thanks to specific agreements between University and publishers, if a scientific contribution is published in Open Access mode, there are currently some discounts on the payment of APCs (Article Processing Charge) and some reductions on the cost of publication.
Where to find copyright and self-archiving information

Sherpa Romeo

Contact OA Research Support – Aiuto SBA

Publisher sites

OA@unito.it

Think. Check. Submit.
Open Data are online, free of cost, accessible data that can be used, reused and distributed, provided that the data source is attributed.

FOSTER Consortium
Accessible data / Open data

• Data must be accessible both to users of the scientific community of reference and to ordinary citizens (citizen science)

Open data

• Data are open if they can be freely consulted, used, modified, extracted and shared by anyone and for any purpose

Checklist: How much open are your data?
[Codata] Legal Interoperability of Research Data: Principles and Implementation Guidelines

Useful tools
The five stars of open data

a star if the data...
- is distributed with an open license
- is structured data encoded with proprietary software
- is encoded with non-proprietary software
- has a URL
- is linked to other data sets
The FAIR principles

Findable: Persistent Identifiers (PIDs)
Accessible: Standard communications protocol
Interoperable: Vocabularies
Reusable: Metadata have multiple attributes

Rich metadata: Open, free protocol
Vocabularies are FAIR
Metadata have multiple attributes

Indexed data repositories: Authentication, where necessary
Linked metadata

PIIDs in metadata: Metadata is always available
Community standards

https://www.ands.org.au/working-with-data/fairdata/training Entire FAIR resources graphic is licensed under a Creative Commons Attribution 4.0 International License
What is research data?

Recorded information (regardless of the form or the media in which they may exist), necessary to support or validate a research project’s observations, findings or outputs.

**BUT ALSO...**
- Computer Aided Design (CAD)
- Waveforms
- Computer codes
- Statistics (SPSS, SAS)
- File Matlab
- Artistics products
- File Web
- ...

- **Digital copies of images**
- **GIS and spatial data**
- **Spreadsheet**
- **Audio**
- **Digital texts or digital copies of text**
- **Database**
- **Charts**
- **Genetic or protein sequences**
- **Video**
General categories of data

Derived or compiled
(e.g. compiled databases, text or data mining)
reproducible but expensive

Reference
(e.g. gene sequences databases, chemical structures, portals with spatial data)

Observational
(e.g. sensor readings, survey instruments)
acquired in real time and usually irreplaceable and not replicable

Experimental
(e.g. gene sequences, magnetic fields data)
laboratory equipment readings, generally reproducible but expensive

Simulation
(e.g. climate models)
data generated from test models, not always replicable
The Research Data Curation Lifecycle

- Data Search / Reuse
- Data Management Plan
- Collection
- Description
- Analysis
- Data Storage
- Re-collection
- Archive
- Publication
- Research Question
- Research data: life cycle
Raw data collected or generated during the research, but not yet analyzed or manipulated.

The data are then processed and analyzed, they can lead to positive, negative or inconclusive results.

Only a very small part of the data collected during a research becomes included in a publication.
Manage research data: 5 step

1. Collect research data
2. Reasonably name the data
3. Structuring data in hierarchical systems
4. Record the data through the metadata
5. Pay attention to the file formats (Guide on "naming and version control")

Tips on metadata standard for different disciplines
Privacy, personal and sensitive data

Works containing sensitive data relating to identifiable persons must not be disseminated in Open Access!

**BEFORE collecting data:**
- Carry out a risk assessment
- Choose which data to collect ensuring compliance with the minimization principle
- Prepare informed consent, with information on: research, sharing of data and their storage, subjects involved, rights of the interested party

**AFTER collecting data:**
- Protect identities (e.g. pseudonymisation, keeping the information that allows identification in a separate archive)
- Anonymize whenever possible
- Aggregate the data
- Adjust access where necessary

GDPR (General Data Protection Regulation)

Information on research integrity and research ethics
Data Management Plan (DMP)

- Defines what data will be opened and how
- Records activities related to the structure, storage and security of data
- It is a "living" document that can be updated

It is a formal document that:
- has to be decided at the beginning of the project
- indicates in detail how data should be managed both during a research project and after its completion

Research Office – Settore Supporto Informativo Valutazione Ricerca

Library Helpline – queue: 09 Tesi di dottorato (Padua@research)
Why and where to collect research data?

From 1st December 2018 the Unipd «Policy sulla gestione dei dati della ricerca» is in force.

Policy sulla gestione dei dati della ricerca

1) Premessa

L'Università degli Studi di Padova riconosce l'importanza fondamentale dei dati prodotti durante l'attività di ricerca. Pertanto riconosce la rilevanza della loro gestione per il mantenimento della qualità della ricerca scientifica e si impegna ad applicare i più elevati standard per la loro raccolta, archiviazione e conservazione.

L'Università degli Studi di Padova riconosce che dati della ricerca affidabili e facilmente reperibili sono alla base di ogni progetto di ricerca e sono altresì necessari per la verifica di attendibilità e correttezza della conduzione e dei risultati del progetto e per la sua riproducibilità.

L'Università degli Studi di Padova riconosce che i dati della ricerca, costituiscono patrimonio dell'istituzione universitaria, nonché risorsa - anche a lungo termine - per la ricerca, la didattica universitaria ed il progresso della società.

Ai fini della presente policy si considera la definizione di "dati della ricerca" e di "afferenzi all'Università di Padova" così come cia allegato 1.

2) Ambiti di applicazione

La presente "policy" si applica a tutti i progetti di ricerca dell'Università limitatamente alle parti di cui essa è responsabile attraverso i propri afferenti che sono tenuti ad osservarla. Nel caso in cui la ricerca sia stata finanziata da parti terze ed esistano accordi specifici relativi al controllo dei dati, al loro accesso e conservazione, tali accordi prevalgono sulla presente policy.

3) Trattamento dei dati della ricerca

Nel rispetto della vigente normativa in materia di protezione dei dati personali e di proprietà intellettuale, nonché delle disposizioni contenute nello Statuto e nei regolamenti dell'Università e fatti salvi gli specifici accordi per il finanziamento della ricerca stipulati con terze parti, i dati della ricerca, una volta pubblicati, sono archiviati e resi liberamente disponibili all'uso per finalità di ricerca scientifica o storica, o di pubblico interesse.

I dati della ricerca devono essere archiviati nell'archivio digitale dell'Università degli Studi di Padova denominato "Research Data UniPD" oppure in un archivio digitale che rispetti gli standard internazionali.

Tali dati devono essere archiviati in modo corretto, completo, affidabile, rispettandone l'integrità. Devono inoltre essere accessibili, identificabili, tracciabili, interoperabili e, laddove possibile, disponibili per usi successivi (principi FAIR*).
Research Data Unipd

is a platform for long-term management and archiving of research data and for the access and re-use of data necessary to validate the results of scientific publication.
Research Data Unipd

Connection between dataset and articles from the publisher's website or stored in Padua Research Archive / IRIS

Authentication via SSO of the University

DOI attribution

ERC subjects
It allows the self-archiving of datasets of any format with FAIR mode, as recommended by the European Commission.
About Research Data Unipd

Research Data Unipd supports research produced by members of the University of Padova. The service aims to facilitate data discovery, data sharing, and reuse as required by funding institutions (e.g., European Commission).

Quality

Datasets published in the Archive have a set of metadata that ensure that data are described and discoverable. Before publication, dataset records are checked by Editors for presence of appropriate metadata.

Metadata Policy

All published metadata are released under a CC0 licence.

Re-using data

We encourage Researchers to use licences on their datasets to promote reuse of the research data. The licence to be preferred is Creative Commons Attribution 4.0, but several others are used. Any re-use must acknowledge the Creators in an appropriate manner, ideally through a citation similar to that provided with the record.

Recommended formats and data files

Formats and data files.

Submission policy

Submission policy concerning depositors, quality & copyright.

Data deposit agreement

Agreement to terms and conditions.
HowTo

Before you start to upload data ...

- If you have a large number of files, zip them into manageable bundles before you start.
- Name your files in a significant way and avoid using spaces, dots and special characters; use hyphens (-) or underscores (_) to separate elements.
- You can upload any type of file, but we ask you to use open formats whenever possible to ensure long-term preservation and accessibility.
- Locate any data you want to upload along with any supplementary materials, such as a readme file. Of course it should not be included into a compressed folder.
- If you have an ORCID make sure you have it to hand, you can enter this along with your personal details and with those of your co-authors.
- If the data underpins a published paper you will need to include the identifier (DOI, handle, etc.) of the paper in the dataset record.
- If you’re funded you will need to enter the funder name and your grant number.
- Have you checked your funder policy on research data? There may be specific requirements.
- Do you know how long your data needs to be kept? Your funder may specify a retention period.

Walk-through guide to depositing

This guide takes you through the steps required to deposit a data set on Research Data Unipd.

Log in and User area
A dataset for hand-eye calibration evaluation


Related publications: https://ieeexplore.ieee.org/abstract/document/ (Publisher)

Collection description

Description: This dataset aims to assess the accuracy of hand-eye calibration methods (i.e., estimation of the transformation between a robot end effector frame and a camera mounted on it). It contains two sets of images and corresponding robot hand poses. The first one (calib_test) contains images of a calibration pattern to estimate the hand-eye transformation. The second one (spint_reconstr) contains images of a pattern to be 3D reconstructed and manually annotated 2D feature points on the images. By performing multi-view 3D reconstruction on the second set and checking the flatness of the reconstructed points, the calibration accuracy can be assessed. The dimension of the calibration pattern in this dataset is 32 mm. Paper: Kenji Koide and Emanuele Menegatti, General Hand-Eye Calibration based on Reprojection Error Minimization, IEEE Robotics and Automation Letters/ICRA2019

Available Files

Data

Additional details

Cite As

Your DOI: 10.25430/researchdata.cab.unipd.it:00000122
Select Formatting Style: (Help)
Begin typing (e.g., Chicago or IEEE) or use the drop down menu.
Select Language and Country: INT
Begin typing (e.g., en-GB for English, Great Britain) or use the drop down menu.

Details of the dataset

<table>
<thead>
<tr>
<th>Additional details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Creators/Authors:</strong></td>
</tr>
<tr>
<td>Zane, Antonella</td>
</tr>
<tr>
<td><strong>Email:</strong></td>
</tr>
<tr>
<td><a href="mailto:antonella.zane@unipd.it">antonella.zane@unipd.it</a></td>
</tr>
<tr>
<td><strong>ORCID:</strong></td>
</tr>
<tr>
<td>orcid.org/0000-0001-7218-6068</td>
</tr>
<tr>
<td><strong>Type of data:</strong></td>
</tr>
<tr>
<td>Text</td>
</tr>
<tr>
<td><strong>Contribution Name Email:</strong></td>
</tr>
<tr>
<td>Editor Chavaria Amau, Alexandra</td>
</tr>
<tr>
<td>Editor Brogiolo, Giampietro</td>
</tr>
<tr>
<td><strong>Collection period:</strong> From 1999 To 2000</td>
</tr>
<tr>
<td><strong>Geographic coverage:</strong> Italia - Veneto</td>
</tr>
<tr>
<td><strong>Data collection method:</strong> Utilizzata microsonda elettronica (EMPA), microscopio a trasmissione elettronica (TEM), diffrazione RX su polveri, analisi petrografica al microscopio polarizzatore.</td>
</tr>
<tr>
<td><strong>Statement on legal, ethical and access issues:</strong> La ricerca non ha prodotto dati sensibili né altri tipi di dati con rilevanza etica.</td>
</tr>
<tr>
<td><strong>Data processing and preparation activities:</strong> Campioni di roccia provenienti da cave di pietra ollare delle Alpi centro-occidentali; frammenti di reperti archeologici provenienti da recipienti di pietra ollare rivenuto in Veneto.</td>
</tr>
</tbody>
</table>

### Available Files

- **Monselice_ollar ..._cl_Zane2017.PNG**
- **Monselice_ollar ..._lo_Zane2017.PNG**

**Visible to:** Anyone

**Content:** Data type:

**Description:** microscopia

**Metadata Revision:**

**Mime Type:** image/png

**License:** Creative Commons Attribution 4.0

**File size:** 381kB

**Read me**

- **Monselice_readme_file.txt**

**Visible to:** Anyone

**Content:** Content

**Metadata Revision:**

**Mime Type:** text/plain

**License:** Creative Commons Attribution 4.0

**File size:** 922B
Descriptive elements

Studio mineralogico-petrografico dei reperti in pietra ollare della rocca di Monselice

Collection description

Keywords

Department
Licenses for use
Research Data Unipd. Back end

Authors

Type of data

- Text: If the dataset is mainly composed of text
- Audio: If the dataset is mainly composed of audios
- Video: If the dataset is mainly composed of videos
- Image: If the dataset is mainly composed of images
- Model: If the dataset is mainly composed of models
- Software: If the dataset is mainly composed of software
- Code: If the dataset is mainly composed of code
- Machine/Instrument Log: If the dataset is mainly composed of Machine/Instrument log
- Database: If the dataset is mainly composed of databases
- Mixed: If the dataset is composed of mixed types
- Other: If the dataset is mainly composed of other types not listed
Research Data Unipd. Back end

Fields reserved for information on lenders

Links to documents on publishers websites or in Padua Research Archive / IRIS
License for archiving and dissemination

For work being deposited by its own author: In self-archiving this collection of files and associated bibliographic metadata, I grant Research Data Unipd the right to store them and to make them permanently available publicly for free on-line. I declare that this material is my own intellectual property and I understand that Research Data Unipd does not assume any responsibility if there is any breach of copyright in distributing these files or metadata.

Clicking on the deposit button indicates your agreement to these terms.
Deposit and publication flow

The researchers upload the datasets and add the metadata

Validation of metadata

Publication:
- the complete record
- only metadata (in case of embargo)
Science research data: guidelines & tools

The **American Chemical Society Publications (ACS)** is a non-profit scholarly publisher that provides a comprehensive collection, in any medium, of high-quality information products and services that advance the practice of the chemical and related sciences.

The **U.S. Energy Information Administration (EIA)** provides a wide range of information and data products covering energy production, stocks, demand, imports, exports, and prices. EIA is committed to enhancing the value of its free and open data by making it available through open data tools.

The **Open Access Scholarly Publishers Association (OASPA)** is a non-profit trade association representing the interests of open access journal publishers globally in all scientific, technical and scholarly disciplines.

“**S-légami! Open Access – Manuale d'uso per ricercatori**” is a freely available manual that was born in the APRE Working Group dedicated to Open Science and contains the answers to the most frequent questions and concerns of researchers on open access and open data.

**OpenAIRE** is a pan-European research information system, which provides services for finding, storing, linking and analyzing research results from all disciplines. Its mission is to move academic communication towards openness and transparency and to facilitate innovative ways to communicate and monitor research.
What is a bibliography?

For the purposes of a research project, the bibliography is an **organised list** of the documents, books, articles, essays and web pages that have been consulted.

When drawing up a bibliography, the author/s has to decide on a **citation style**.
Why use reference management software?

These applications can help you:

- import citations from catalogues, databases and websites
- create and organize bibliographies for theses, books and articles
- insert and format citations within the text of documents
What are the types of citation management tools?

Many applications are available, but here are the most popular softwares:

**Mendeley** (free) – [help guides](https://mendeley.com)

**Zotero** (free) – [help guides](https://zotero.org)

If you’re not sure which citation management software is best for you, check out [our comparison chart](https://libraryguides.temple.edu/citing) (Italian version).
The University Library System periodically organize training courses of Mendeley and Zotero.

To verify available dates, you just have to check this link and choose your location: http://bibliotecadigitale.cab.unipd.it/en/training-courses

You can access to the courses in all the libraries of the University, so not only in Engineering Libraries.
• Engineering libraries contacts:
  biblio.inge@unipd.it – biblio.dim@unipd.it

• for any information about the credits, please ask to the administrative office of your Department.
Satisfaction survey

http://www.cab.unipd.it/corsi-sba-questionario

Username: 24346
Password:

The collected information will be used only for statistical purposes in order to improve the quality of the courses for library users.

We will appreciate your cooperation and help!