Academic Social Networks and their Alternatives

Academic social networks

Academic social networks are very popular. What exactly are they and what should you know about them?

Academic social networks connect academics with shared or similar interests. These networks feel like "Facebook or LinkedIn for the academic community".
The best-known services are ResearchGate and Academia.edu, both of which are run by commercial companies.

Both platforms allow their users to create personal profiles, to upload publications, to find and read publications by others, to find and follow other academics, and to create automatic alerts and platform specific metrics.

Although these academic networks may seem useful and attractive, they should be viewed critically.
- They do not function as open access repositories because their content is accessible for registered users only. They are NOT interoperable and do not allow for long time archiving.
- Whether the information and content placed there remain available long-term depends on the continuation and commercial success of the businesses behind them.
- These platforms are known as "information silos" because it is easy to fill them but not easy to extract or use information once it has been uploaded.
- Academics are NOT primarily users but the commercialized product of these services. The platforms monitor user behaviour and use what they learn for advertising purposes.
- The lack of transparency when it comes to factors and criteria relating to the metrics applied on these platforms has led to the term "black box" being employed in this context.
- Finally, the upload of full texts frequently breach copyright, especially when publisher versions without free licenses are used.

If academics are aware of these restrictions, ResearchGate and Academia.edu can be useful services that allow researchers to increase their own visibility and to connect with others. Academics are recommended to use these services as "landing pages" in order to make their u:cris profiles and ORCID records known.

Which alternatives to academic social networks are there that allow academics to collect and present their research output in a sustainable manner?

The University of Vienna recommends **repositories** and **research information systems** for this purpose.

Repositories

Repositories are servers, mostly run by universities or research institutions, which are used to archive academic material (publications, digitised objects/resources, research data, software, metadata, etc.). As a rule, this material is made freely accessible across the globe, without log-in barriers.

Standards such as unique identifiers, permanent links and certain long-term archiving formats guarantee interoperability, sustainability and reusability.

There are different types of repositories:
- Institutional repositories: comprise the output of an institution (e.g. a university) and can be actively used by all members of the organisation. **PHAIDRA** is the repository of the University of Vienna: https://phaidra.univie.ac.at/
  u:scholar is a separate section of PHAIDRA and exclusively contains scholarly and scientific publications: https://uscholar.univie.ac.at/
- Subject repositories: offer content (publications, research data) relating to a specific subject/a discipline
- Open Access repositories: content is freely available without log in and has been provided with an appropriate Open Access license.
- Publications repositories: contain full texts of publications and their metadata
- Software repositories: contain software (frequently Open Source)

Special search engines allow for searchability across repositories. Examples include OpenDOAR (for Open Access repositories) https://v2.sherpa.ac.uk/opendoar/ and re3data (for research data repositories) https://www.re3data.org/. The initiatives behind these search engines aim at supporting the free exchange of information about and in repositories across institutions and countries and at increasing their visibility.

Research information systems (RIS) / Current Research Information Systems (CRIS)

A RIS (usually referred to as CRIS in English, German Forschungsinformationssystem FIS) is a database in which the research output of an institution, including publications, (third-party funded) projects and other activities, is documented.
The underlying software is either an Open Source product, a development of the institution itself or the product of a commercial provider.

The research information system of the University of Vienna is called **u:cris** (https://ucrisinfo.univie.ac.at/).

As it functions as a university's bibliography, a RIS offers an overview over the research accomplishments in an institution and provides data for reporting and analysis (knowledge balance sheet, evaluations, etc.)
The indexing in leading search engines via the institutional portal (https://ucris.univie.ac.at/portal/en/) based on this database increases the visibility of individual researchers as well as that of the whole institution to the general public. Additionally, a RIS can serve as a data source for secondary websites (e.g. websites of departments) and other systems and platforms (e.g. ORCID).
Usually, a RIS contains metadata that describe its content in a structured manner. In addition, it can be used to store full texts and research data, which means it can be a kind of repository. However, a RIS is not suitable for long-term archiving. This is why the University of Vienna uses the repository PHAIDRA for this purpose.

Academic social networks, repositories and RIS in comparison (overview)

	Academic social networks	Repositories	RIS / CRIS
Operator	commercial	mostly non-commercial	mostly non-commercial
Purpose			
Networking	X		
Documentation		(X)	X
Long-term archiving		X	(X)
Evaluation			X
Available content			
Metadata	X	X	X
Full texts	(X)	X	(X)
Research data		X	(X)
Software		X	
Interoperability			
Export options		X	X
Harvesting		X	X