

White Paper on Citation Analysis for Promotion & Tenure

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http://www.library.njit.edu/howto/Whitepaper_citation_searching.pdf

SCOPUS and the Web of Science (WOS) are the two most important index, abstract and citation analysis databases in science, technology, and medicine (STM).

NJIT has SCOPUS

The NJIT Library has a subscription to the SCOPUS database but not WOS. Scopus was chosen over the Web of Science by the NJIT Library-Faculty Committee as an excellent index to STM literature better meeting NJIT needs.

NJIT uses Web of Science at Rutgers with limitations

- While NJIT does not have a Web of Science subscription, it is freely accessible to NJIT researchers at the Rutgers library or at the UMDNJ, Newark libraries.
- WOS must be used onsite since remote access is not permitted to NJIT users at either of these libraries.

NJIT Librarians use both databases

Because SCOPUS and the Web of Science are complementary, librarians check both when asked to perform a citation search. If there is any discrepancy between the databases in the citation count for an article, the librarian will assign the higher number to that article. Librarians record citation counts.

Years of Coverage

Rutgers Web of Science subscription covers the period 1995 to present while UMDNJ covers 1980 to the present. NJIT librarians can access the full WOS database (1960 to present) on a pay-as-you-go basis so that they can still use it for the official citation search requested when a faculty member is up for promotion and/or tenure.

Some other sources of cited references

1. Google Scholar (search engine free on the Web); 2. Scifinder Scholar (NJIT subscribes); 3. Business Source Premier (NJIT has access through State Library program).

Sometimes faculty use citation search tools in addition to SCOPUS and WOS. Therefore, the P&T Committee should be aware that there may be more citations listed by faculty in their P&T packets than reported by librarian searches of Scopus and WOS.

Summary of Tools with Citation Search Feature

SCOPUS, owned by Elsevier, covering approximately 15,000 titles from 1996 to the present, of which 99% are peer-reviewed journals and conference proceedings and they have plans to later cover prior to 1996. Scopus now has an enhanced citation tool called Citation Tracker that provides users with a simple way to investigate citation behavior.

Web of Science, owned by Thomson ISI, is highly selective in choosing publications covering about 8700 high quality peer-reviewed titles of journals, conference proceedings and book chapters as appropriate from 1960 to the present. This 8700 titles is comprised of the Science Citation Index, Social Science Citation Index, and Arts and Humanities Citation Index. WOS also includes the Journal Citation reports. There is overlap and differences between Scopus and WOS. Scopus has some coverage of the Social Sciences, and no coverage of the Arts and Humanities. Rutgers subscription covers 1995 to present; UMDNJ covers 1980 to present).

Cite-Seer, primarily covering Computer and Information Science, harvests research articles from the open Web to create a database that uses autonomous citation indexing (ACI) to automatically create a citation index. Coverage varies.

SciFinder Scholar is the current name for an online version of Chemical Abstracts. It began a cited reference service in 1998 and there is no cited reference information available prior to that year. It is exhaustive in Chemistry, Chemical Engineering, and Environmental Engineering. It includes some coverage of physics and related disciplines. Sources are peer-reviewed.

Business Source Premier is limited in scope and coverage, but enables cited reference searching of 1100 peer-reviewed business publications. Coverage varies.

CumIn CAD (Cumulative Index of Computer Aided Architectural Design), is a bibliographic index that compiles papers related to computer aided architectural design. Implemented with a database, it allows searching and browsing in the ways usual on the Web. It provides a 'historical evolution' to learn from previous efforts and draws attention to older original works that could have been ignored because they could not be found on the Web otherwise. CUMINCAD work started in 1998. It contains papers from the 1960s to the present.

A Word about Google Scholar. It is a search engine, not a database and as such shows many extraneous sources in a results list that may or may not be peer reviewed. For example letters to the editor or duplicate references may show up in a search result. There is no articulated pool of sources, but rather uses the index created by its web crawler. It is not as comprehensive among the peer reviewed literature.

References

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