University of Wisconsin Milwaukee
UWM Libraries
October 12, 2018

Faculty & Instructors
Fall Into Research
Elevate Your Scholarly Output

Web of Science and more…
Agenda

- 8:30am-9:00am registration; 9:00-10:30am session

**Faculty & Instructors**
- Tips for effective topic searching
- Create citation alerts to monitor citation activity around a paper
- Identifying potential collaborators
- Discover sources of funding in your field
- Finding your own work and viewing citation performance statistics like h-index and average citations per item
- Viewing and understanding Journal Impact Factor
- Link to relevant research data sets, data studies, and software on external repositories
- Kopernio: browser plug-in for one-click access to research articles
- Publons: get recognized for your peer review activity
- Digital Measures: build your publication profile to showcase your work
Tips for Effective Topic Searching

- Don’t be too limiting at first with your search terms, you can always refine along the way. Web of Science will include an “AND” (see below) between terms if you simply enter them as a plain string of terms.
- Use wildcard characters to cover more ground efficiently.

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Retrieves</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>*</td>
<td>Zero or more characters</td>
<td>hydroxy* = hydroxylase hydroxydopamine hydroxyethyl</td>
</tr>
<tr>
<td>?</td>
<td>One character only</td>
<td>en?oblast = entoblast endoblast</td>
</tr>
<tr>
<td>$</td>
<td>Zero or one character</td>
<td>eight$ = eight eighth eighty</td>
</tr>
</tbody>
</table>

**Phrase Searching**

- Exact matches for phrases can be found by searching on terms enclosed in quotation marks. Wildcard characters can be used inside quotation marks.
  - “electromagnetic field” = electromagnetic field
  - “electromag* field” = electromagnetic field electromagnet’s field

**Near/**

- Finds terms in the same field; user specifies proximity. Default is 15 words if user does not specify a number.
  - electromag* near/3 field = electromagnetic field electromagnetic radiation field field pattern in electromagnetism electromagnets created a strong field

**Same**

- Terms must occur within the same sentence. Use in Address field only.

**AND**

- All search terms must occur to be retrieved.
  - **TOPIC: aspartame AND cancer**
  - Retrieves documents that contain both aspartame and cancer*.

**OR**

- Any one of the search terms must occur to be retrieved. Use when searching variants and synonyms.
  - **TOPIC: aspartame OR saccharine OR sweetener**
  - Retrieves documents that contain at least one of the terms.

**NOT**

- Excludes records that contain a given search term.
  - **TOPIC: aids NOT hearing**
  - Retrieves documents with aids, excluding any which also contain hearing.
Tips for Effective Topic Searching

• Take advantage of Web of Science Citation pathways for discovery!
  - Within your TOPIC search results click on Times Cited, Cited References, and Related Records within articles of great interest to you and follow these to additional relevant Information.

• Make use of what you see in full records, terms within titles, abstracts, and keywords and add those that are significant to your Topic search terms.

Please – utilize the assistance that Web of Science provides in the interface itself.
Create citation alerts to monitor citation activity around a paper

A citation alert notifies you by email whenever an article you choose has been cited by a new item that has been added to the Web of Science.

When viewing a full record for an article of interest, create a Citation Alert in seconds! – another reason to make sure you sign in to Web of Science.
Identifying potential collaborators

There are several routes one may take, though the most common is typically through a Topic search – key terms, often refined to recent years to ensure current activity, often refined to particular disciplines.

Analyze Results by Author will allow you to very quickly see those publishing most frequently in this realm, in this case over just the past few years.

One may select one or more authors and click View Selected at the bottom of the page to review each paper in detail.
Identifying potential collaborators

To look for authors with a track record of influential work, one may wish to sort results by Times Cited and, for example, save the top 25 papers to a Marked List. Analyze Results is also presented within a Marked List, and this content may then be analyzed, and the authors of these recent, top cited papers reviewed.

- If you’ve published and have been cited, those citing your work are certainly potential collaborators. Just click on the Times Cited link for your paper. Of course this applies to any paper that may fall within your own area of scholarly/research interest.
- Create a Citation Alert for your papers (and others that are “on target”) to maintain ongoing awareness of who is citing yours and other publications.
Discover sources of funding in your field

Whether you’ve searched by Topic, Author, Cited Reference, etc. – whatever the method, your search results can be analyzed through Analyze Results to reveal the “who, what, and where” behind that published body of work. This includes identification of the Funders behind this research and scholarship. From 2008, Web of Science core collection journal files have captured funding acknowledgements within published research.

It may be helpful in this case to first analyze by country, select USA and view these works, and then analyze again by Funder to ensure a view of funders of US research.
Finding your own work and viewing citation performance statistics – such as h-index and average citations per published item

- Be sure to use the appropriate search format for Author Name – and of course the form that you use to publish.
- Selecting exact span of years in which you’ve published can greatly reduce “noise”.
- Refining results by the Institutions with which you’ve been affiliated is another way to work toward an accurate set of results.
Finding your own work and viewing citation performance statistics – such as h-index and average citations per published item
Viewing and understanding Journal Impact Factor (JIF)

**Journal Impact Factor is...**
- A valuable indicator of journal influence.
- Comparative *within but not between subject areas*.

**Journal Impact Factor is Not...**
- A measurement of the quality of an individual’s, department’s, or institution’s scientific/scholarly contribution.

---

**Journal Impact Factor, the calculation is very Easy to Understand**

Citations captured from Web of Science journals during the JIF publication year to any/all items published within a particular journal in the prior two years.

\[
\frac{\text{Citations}}{\text{Number of Articles and Reviews}}
\]

The number of Articles and Reviews (citable items) published in that particular journal in the prior two years.

---

**2017 JIF for the journal BUILDING AND ENVIRONMENT**

\[
\text{2017 Journal Impact Factor} = \frac{3,627}{799} = 4.539
\]

---

**How is Journal Impact Factor Calculated?**

\[
\text{JIF} = \frac{\text{Citations in 2017 to items published in 2015 (2152) + 2016 (1475)}}{\text{Number of citable items in 2015 (413) + 2016 (386)}} = \frac{3,627}{799}
\]
Viewing and understanding Journal Impact Factor

From within Web of Science itself one can get key Journal Impact Factor (JIF) information. JIF must be viewed within the context of a JCR category of journals – this is the only way to put it into the appropriate perspective.

For more detailed exploration around JIFs and other journal metrics you may access the JCR directly from the Web of Science home page.
### Viewing and understanding Journal Impact Factor

Exploring journals by category is often the best place to start as the appropriate context for comparison is presented.

![Journal Citation Reports](https://example.com/journal_citation_reports)

#### Journals By Rank

<table>
<thead>
<tr>
<th>JCR Year</th>
<th>Select JCR Year</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edition</td>
<td>Open Access</td>
<td>Open Access</td>
</tr>
<tr>
<td>Category</td>
<td>Category Schema</td>
<td>Web of Science</td>
</tr>
</tbody>
</table>

#### Categories By Rank

<table>
<thead>
<tr>
<th>Category</th>
<th>Full Journal Title</th>
<th>Total Cites</th>
<th>Journal Impact Factor</th>
<th>Impact Factor without Journal Self Cites</th>
<th>5 Year Impact Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGINEERING, AEROSPACE</td>
<td>COMPUTER-AIDED CIVIL AND INFRASTRUCTURE ENGINEERING</td>
<td>2,683</td>
<td>5.475</td>
<td>4.197</td>
<td>4.66</td>
</tr>
<tr>
<td>ENGINEERING, BIOMEDICAL</td>
<td>BUILDING AND ENVIRONMENT</td>
<td>21,261</td>
<td>4.639</td>
<td>3.489</td>
<td>5.22</td>
</tr>
<tr>
<td>ENGINEERING, CHEMICAL</td>
<td>ENERGY AND BUILDINGS</td>
<td>31,065</td>
<td>4.457</td>
<td>3.494</td>
<td>4.77</td>
</tr>
<tr>
<td>ENGINEERING, CIVIL</td>
<td>TRANSPORTATION RESEARCH PART B: METHODOLOGICAL</td>
<td>10,457</td>
<td>4.681</td>
<td>2.949</td>
<td>6.10</td>
</tr>
<tr>
<td>ENGINEERING, ELECTRICAL &amp; ELECTRONIC</td>
<td>IEEE TRANSACTIONS ON INTELLIGENT TRANSPORTATION SYSTEMS</td>
<td>8,926</td>
<td>4.651</td>
<td>3.675</td>
<td>4.71</td>
</tr>
<tr>
<td>ENGINEERING, CIVIL</td>
<td>AUTOMATION IN CONSTRUCTION</td>
<td>6,520</td>
<td>4.632</td>
<td>3.332</td>
<td>4.43</td>
</tr>
<tr>
<td>ENGINEERING, CIVIL</td>
<td>JOURNAL OF HYDROLOGY</td>
<td>46,099</td>
<td>3.727</td>
<td>3.219</td>
<td>4.31</td>
</tr>
<tr>
<td>ENGINEERING, CIVIL</td>
<td>Structural Control &amp; Health Monitoring</td>
<td>2,472</td>
<td>3.622</td>
<td>2.848</td>
<td>3.26</td>
</tr>
</tbody>
</table>
Link to relevant research data sets, data studies, and software on external repositories.

Table 1

<table>
<thead>
<tr>
<th>FIELD HISTORY</th>
<th>THIAMETHOXAM LOD = 1.0</th>
<th>CLOTHIANIDIN LOD = 2.0</th>
<th>IMIDACLOPRID LOD = 1.0</th>
<th>METOLACHLOR LOD = 2.0</th>
<th>ATRAZINE LOD = 0.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAIZE-MAIZE¹</td>
<td>ND</td>
<td>6.3</td>
<td>2.9</td>
<td>5.9</td>
<td>52.0</td>
</tr>
<tr>
<td>SOY-SOY</td>
<td>ND</td>
<td>9.6</td>
<td>7.3</td>
<td>11.1</td>
<td>7.8</td>
</tr>
<tr>
<td>MAIZE-SOY</td>
<td>ND</td>
<td>4.9</td>
<td>ND</td>
<td>8.5</td>
<td>ND</td>
</tr>
<tr>
<td>SOY-MAIZE</td>
<td>ND</td>
<td>2.1</td>
<td>ND</td>
<td>ND</td>
<td>22</td>
</tr>
</tbody>
</table>

¹ND = Not detected.
² = Experimental field where bees were placed in 2010.
doi: 10.1371/journal.pone.0029268.t001
Link to relevant research data sets, data studies, and software on external repositories
Kopernio provides one-click access to legal PDFs

Kopernio is a browser plug-in that delivers the best available PDF at your point of need, based on your library’s subscription.

- Individuals can install and use Kopernio for free.
- “Next generation” link resolver that finds PDFs as you browse the internet.
- Integrates with Google Scholar and Pubmed.
- Records usage in your library usage reports.

Learn More: https://kopernio.com/
Library Guides

Install in Chrome
Firefox Extension
Publons: get recognized for your peer review activity

What is Publons?
Publons is a profiling system that provides a verified, quantifiable record of the peer reviews that faculty members perform for thousands of journals.

- Individual faculty members can sign up and use Publons for free.
- Publons tracks completed peer reviews, not papers authored.
- The reviewed article is NOT disclosed publicly, nor is the text of the review itself.
- You can see the number of completed reviews, and the journals that a faculty member has reviewed for.
- Journal publishers verify reviews manually entered into the system. Publons also integrates with many publishers’ journal management systems, so that a reviewer’s activities can be captured and made public automatically.

400,000+ Researchers
2 million+ Reviews
25,000+ Journals
Digital Measures: build your publication profile to showcase your work

https://www.digitalmeasures.com/activity-insight/docs/wos.html

Overview
We have repeatedly heard that the biggest challenge to success with Activity Insight is loading publication citation information. This is especially frustrating when the information already resides in other software systems. In response, we made it a top priority to enable faculty to easily bring publication data into Activity Insight.

Web of Science Imports is our fifth major import feature in this regard, following BibTeX Imports, PubMed Imports, Crossref Imports, and Web of Science Imports features. With Web of Science Imports, faculty can now pull their citations into Activity Insight directly from Web of Science without first saving them into a BibTeX file.

What is Web of Science?
Web of Science contains more than a billion cited references and counting, including books, journal articles, patents, websites, conference proceedings and Open Access materials dating back to 1900. Web of Science is a painstakingly selected, actively curated database of the journals that researchers themselves have judged to be the most important and useful in their fields.
Digital Measures: build your publication profile to showcase your work

As Activity Insight accepts BibTeX imports – an option is to simply export your articles from Web of Science in this format, and then import into Activity Insight.