ARDI Portal/Other Resources
Module 6
Module 6: ARDI Portal/Other Resources

- Reference Tools
- Databases
Type in user name and password exactly as provided by your institution. Passwords are case-sensitive. Click **Login**.

Note: To have access to the full test articles and ebooks, you must properly login.
Click on the *ARDI* logo to open the program.

All the programs your institution is registered for are listed. Login to any of the other programs by returning to this page (use the *R4L Portal – Applications* tab at the top of the web browser). To open another program, click on the specific *logo*. Your ARDIi username and password will grant access to the other programs (and ditto for your institution’s AGORA, ARDI GOALI or OARE logins).
From the ARDI Content Home page, click on the Reference Sources link.
The numerous Reference Sources link are listed on this page.
From the ARDI Content Home page, click on the **Databases for discovery** link.
From the Databases for Discovery list, open CiteSeerX.
From this list, open CiteSeerX and complete a search for *wind turbine*.
There are 6,326 citations for the *Wind Turbine* search. Note the *Sorted by* options that can be used.
For each article, there is an abstract. To get full-text articles, copy the citation (or add to MetaCart) and look in ARDI or another R4L programs’ portals.
Now displayed is the **Advanced Search** option of CiteSeerX.
Exercises

- Complete the exercises for CiteSeerX in the Module 7 exercises document
From the Databases for Discovery list, open Google Scholar.
From the Browse Databases list, open Google Scholar - an excellent search tool for academic/research material.

Search for ‘antibacterial AND (“leptospermum scoparium” OR manuka)”
For the search, there are 2770 results. Note the link to the PDF. See subsequent slide for explanation.

Note the Scholar options to limit the year(s), sort by relevance or by date and include patents and citations.
Research Article

Identification and quantification of methylglyoxal as the dominant antibacterial constituent of Manuka (Leptospermum scoparium) honeys from New Zealand

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The 1,2-dicarbonyl compounds 3-deoxyglucosulose (3-DG), glyoxal (GO), and methylglyoxal (MGO) were measured as the corresponding quinoxalines after derivatization with orthophenylendiamine using RP-HPLC and UV-detection in commercially available honey samples. Whereas for most of the samples values for 3-DG, MGO, and GO were comparable to previously published data, for six samples of New Zealand Manuka (Leptospermum scoparium) honey very high amounts of MGO were found, ranging from 38 to 761 mg/kg, which is up to 100-fold higher compared to conventional honeys. MGO was unambiguously identified as the corresponding quinoxaline via photodiodearray detection as well as by means of mass spectroscopy. Antibacterial activity of honey and solutions of 1,2-dicarbonyl towards Escherichia coli (E. coli) and Staphylococcus aureus (S. aureus) were analyzed using an agar well diffusion assay. Minimum concentrations needed for inhibition of bacterial growth (minimum inhibitory concentration, MIC) of MGO were 1.1 mM for both types of bacteria. MIC for GO was 6.9 mM (E. coli) or 4.3 mM (S. aureus), respectively. 3-DG showed no inhibition in concentrations up to 60 mM. Whereas most of the honey samples investigated showed no inhibition in dilutions of 80% (v/v with water) or below, the samples of Manuka honey exhibited antibacterial activity when diluted to 15–30%, which corresponded to MGO concentrations of 1.1–1.8 mM. This clearly demonstrates that the pronounced antibacterial activity of New Zealand Manuka honey...
In Google Scholar, WIPO and ARDI are the search terms. The results are either an article about the program or one with WIPO or ARDI being the author’s name. This is in contrast to Google search results which are directed to the ARDI website.

Note that, in the right column, there are full-text access links to the articles. If an Open Access journal or Repository (psu.edu), the link will work. For the commercial publishers, you must use the ARDI link to Scholar or the ARDI Journals collection A-Z list, or you will be asked to login or pay for the article.
Displayed is the Advanced Scholar Search option of Google Scholar. Note the various options for refining a search and also that you can change the number of results per page.
Exercises

- Complete the exercises for the Google Scholar in Module 6 exercises document
- Updated - July, 2018
From the Databases for Discovery list, open *Microsoft Academic Search*. 
From the Browse Databases list, open Microsoft’s Academic Search – another useful tool. Search for *(solar panel*)*.

Note the broad Fields limits.
Now displayed are the 7361 publications on (solar panel*). Note the subcategories for the search results. Remember – many of the specific journal articles will be available via the ARDI Journal Content A-Z list.
Click on **Advanced Search** to limit the search by Author, Conference, Journal, Organization and Year.
Exercises

- Complete the exercises for Microsoft Academic Search in the Module 6 exercises document.
From the Databases for Discovery list, open Scopus (Elsevier).
Scopus (Elsevier) Coverage

- Scopus is a large abstract and citation database of peer-reviewed literature with smart tools that track, analyze and visualize research.
- Contains 20,500 journals from 500 publishers plus more than 49 million records - 78% with abstracts; over 5.3 million conference papers.
- Some of the journal titles and full-text articles are available from ARDI.
- Most of the conference papers will be available directly from Scopus.
From the top navigational bar on the Search page, there is access to the Scopus options. There are available at the top of the Scopus website, regardless of the page that is open.
Enter a search for solar panels AND developing countries. The default is Article Title, Abstract or Keywords. In the Limit to section, retain the default Date Range, Document Type and Subject Areas options. Click on magnifying glass.
The SCOPUS database allows you to search about 75% of the scientific titles in ARDI. Some links are direct while others are via the ARDI Journal collection A-Z list.

The Scopus search resulted in 102 citations for journal articles and conferences. For each citation, you can View at Publisher or Show Abstract or Related documents.
Scopus has the options to refine the search by Year, Author Name, Subject Area, Document Type and other options.
The Show all abstracts icon has been activated for one of the citations. There also is a View at publisher option.
In ScienceDirect, the article has been opened with the option to Download PDF. Note the Logged in via Research4Life message that allows the access to the full-text article.

Remember that some Scopus links are direct while others are via the ARDI Journal collection A-Z list.
Performance study on a grid connected 20 kWp solar photovoltaic installation in an industry in Tiruchirappalli (India)

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Abstract
This paper discusses the details and results obtained from a study carried out on a roof top 20 kWp solar photovoltaic (PV) power plant in a reputed manufacturing industry in India. Although there is plenty of sunshine, various financial supports and government policies, the growth of photovoltaic (PV) power plants in developing countries is still facing significant barriers due to unclear techno-economic aspects of the PV power plant. Therefore, this paper highlights a few salient features of the installation, operational performance and economic calculations of a grid connected solar photovoltaic (PV) power plant. A few important aspects of solar power plant installation such as the feasibility of loading in power of approximated data, interconnection and diesel interface.
There are the following options: Download, PDF, Export, Print, Email, Create Bibliography – plus the Sort by options.
The Document results for this revised search is 43.
Now opened is the **Export** option. Check the citations’ boxes, click on **Text** and **Export**.
Displayed is the Text version of the Export option.
More options are displayed here including Create Bibliography, Email and Print.
Due to the Research4Life login process, the Alerts option is not available.
Exercises

- This is the end of the ARDI Basic Course Module 6

- Complete the exercises for the Scopus database in the Module 6 exercises document.

- Updated - July, 2018