Research Databases for Computer Science and Engineering

Research databases contain abstracts and citations from scientific journals, conference proceedings, books, technical reports, patents, etc. Databases are a good starting point for searching on a research topic for your dissertation or a research project. They are subject specific or multidisciplinary in coverage and provide information about published research, going back in time. You may need to search more than one database to cover different aspects of your research.

A Scopus

Scopus is a multidisciplinary bibliographic database covering many subjects, such as physical sciences, engineering, life sciences, healthcare and medical sciences research. To start your search:

- Go to SOLO: [http://solo.bodleian.ox.ac.uk/](http://solo.bodleian.ox.ac.uk/)
- Type Scopus and click on the ‘View Online’ link to access its search screen
- In Scopus it is easiest to put each distinct concept on a separate line in the search form eg. in the example below the key concepts are tide and energy. By default Scopus adds AND between each line to ensure that your search results include all search concepts. Click on the ‘plus’ icon to add a search box.
- Select Keywords from the search criteria drop-down menu. Use the search terms in the example below and click Search.

  * finds alternative word endings eg. tid* for tides, tidal
  OR finds alternative words and is useful for synonyms eg. energy OR power
  Quotation marks finds an exact phrase eg. “ocean current”

- A list of results will be displayed. Refine them by subject area, year, etc., by using the filters on the left
- Sort your results by ‘Cited By’ (near the top right)
- Click on an article title to see its abstract. You can use some of the author keywords and indexed keywords listed below the abstract as additional search terms to try.

All sources of research information are listed in subject library guides. They are produced by science subject librarians and are available from the Radcliffe Science Library website.

In this task, you will be asked to explore databases of research in your subject area. Choose a database from sections A, B or C, and conduct a search on your research topic. You may want to try exporting selected references into reference management software, such as RefWorks (see over the page).

Engineering Library guide: [http://libguides.bodleian.ox.ac.uk/engineering](http://libguides.bodleian.ox.ac.uk/engineering)
Computer Science Library Guide: [http://libguides.bodleian.ox.ac.uk/computer_science](http://libguides.bodleian.ox.ac.uk/computer_science)
Contact your subject librarian at: alessandra.vetrugno@bodleian.ox.ac.uk
B INSPEC
INSPEC is a database focussing on computer science, electrical and electronic engineering, manufacturing and mechanical engineering. To start your search:

- Go to SOLO: [http://solo.bodleian.ox.ac.uk/](http://solo.bodleian.ox.ac.uk/)
- Type INSPEC and click on the ‘View Online’ link to access its search screen. Alternatively you can access Web of Science from SOLO and select INSPEC from the All Database drop-down menu.
- On the main page click Add Another Field to add a search box. Search boxes are connected by default with the AND operator.
- Search for a topic using keywords and combining them with Boolean operators and wildcards eg. OR, AND, *, quotation marks.
- Scroll down the search criteria dropdown menu to use Numerical Data (e.g. ‘frequency’, ‘current’)

C Proquest Technology Research Database
Technology Research Database is a bibliographic database covering technology, engineering and applied science. To start your search:

- Go to SOLO: [http://solo.bodleian.ox.ac.uk/](http://solo.bodleian.ox.ac.uk/)
- Type Technology Research Database and click on the ‘View Online’ link to access its search screen.
- Click on Advanced search. Enter your keywords and limit your search to Peer Reviewed items.
- Select Specific Date Range at the bottom of the Publication date dropdown menu to limit your results to items published between 2012 and 2016.
- Refine your results list using the options on the left-hand side of the Results page. Extend Subject and click on more options. Select subjects you want to include/exclude from your results list.

These search features are common to all Proquest Databases. If your Research field is interdisciplinary click All Databases at the top left corner and explore databases in your subject areas of interest.

D Export search results to reference managers
You can easily send search results to reference managers such as Refworks or Endnote.

- In Scopus from the results page click Export and choose the reference manager.
- In Inspec click the down arrow next to Save to Endnote Online.
- In Proquest Technology Research Database click on Save and select the reference manager from the Save/Export menu.

For instructions on using BibTex with Latex please ask for the instruction sheet. For more information on Reference Management Software, such as RefWorks, EndNote, Zotero, Mendeley, Papers: [http://libguides.bodleian.ox.ac.uk/reference-management/](http://libguides.bodleian.ox.ac.uk/reference-management/)