



Engineering Village: Compendex, INSPEC & NTIS A Guide to Searching the Databases

Engineering Village provides access to three important bibliographic databases in the engineering field – *Compendex*, *INSPEC* and *NTIS* – which can be searched either in combination or separately. The combined databases allow for searching on the broadest possible range of topics within the scientific, applied science, technical and engineering disciplines and include journal articles, proceedings, unclassified government reports, and more. The databases are updated weekly.

Compendex provides international coverage of the literature of the engineering field, including civil and structural engineering, computer and electrical engineering, energy technology, materials science and metallurgy, bioengineering, air and water pollution, chemical engineering, and solid waste and hazardous waste management. Citations are drawn from 2,600 journals, technical reports, and conference papers and proceedings. Indexing coverage is from 1970 to the present.

INSPEC provides access to the worldwide scientific and technical literature in physics, electrical engineering, electronics, control engineering, computers and computing, and information technology. The indexing covers more than 4,000 scholarly journals and conference proceedings, and also includes books, reports, and dissertations. Coverage is from 1969 to the present.

The *NTIS* (National Technical Information Service) database is the premier source for accessing unclassified reports from influential U.S. and international government agencies. It provides immediate access to over two million critical report citations from government departments including NASA, the U.S. Department of Energy and the U.S. Department of Defense. Coverage is from 1899 to the present.

Accessing the Engineering Village Databases

From the Owen Library home page at <http://www.library.pitt.edu/john/owen.html> select Find Articles. Then choose **By TITLE** under **Databases** and click on either *Compendex*, *INSPEC* or *NTIS* to access *Engineering Village*. Then click on <CONNECT to the database>. The Engineering Village Quick Search screen will appear:

Engineering Village

Search History - Selected Records - My Profile - My Alerts End Session

Tags + Groups Easy Search Quick Search Expert Search Thesaurus Ask an Expert Help

Databases

- Compendex**
Compendex is the most comprehensive bibliographic database...
- Inspec**
Inspec includes bibliographic citations and indexed...
- NTIS**
NTIS (The National Technical Information Service) is the...

Personal Account

Register or Login:
Username:
Password:

SELECT DATABASE

All Compendex Inspec NTIS ?

SEARCH FOR

SEARCH IN

Document type not available ?
Treatment type not available ?
Discipline type not available ?
All languages

SORT BY

Relevance ? Publication year
 Autostemming off ?

1884 TO 2009
1 Updates ?

Search Reset

Browse Indexes ?

- Author
- Author affiliation
- Controlled term

Searching in Engineering Village interface

Select one or more database(s) to search, by typing search terms (words or short phrases) into the SEARCH FOR boxes on the Quick Search screen, and combine them by selecting the AND, OR and NOT operators. Ask a librarian or use reference books such as the *McGraw-Hill Dictionary of Engineering* and the *Mechanical Engineers' Handbook* for help in choosing search terms.

The AND operator will limit results to records containing **all** of your search terms, while the OR operator will expand your search to records containing **any** of your search terms. The NOT operator will limit results to records containing one search term but not another.

After typing your search terms, click the <Search> button to submit your search to the database. If your search retrieved any results, a page will display a list of bibliographic citations called records. The number of records your search retrieved is indicated at the top of the list. Each record provides you with enough information about an article to identify, locate and retrieve it in print and/or electronic format. The first line of the record (in bold type) is the article title. The second line lists the names of the authors, followed by the source – i.e., the title, date and issue number of the journal or research report that contains the relevant material:

Search Results

239 records found in Compendex, Inspec & NTIS for: (((fuel cells) WN All fields) AND ((wind turbines) WN All fields)), 1884-2005 [Save Search](#) | [Create Alert](#)

[Compendex : 91 Results](#) [Inspec : 94 Results](#) [NTIS : 54 Results](#) [Compendex, Inspec & NTIS : 239 Results](#)

Sort by: Relevance [Date](#) [Author](#)

Remove duplicate records from the first 500 results from: Compendex Inspec

- 1. **System and process for production of methanol from combined wind-turbine and fuel-cell power**
[Spiegel, R.J.](#) (Nat. Risk Manage. Res. Lab., U.S. Environ. Protection Agency Res., Triangle Park, NC, USA) **Source:** *Wind Engineering*, v 27, n 2, 2003, p 121-34
Database: Inspec
[Abstract](#) | [Detailed Record](#) | [Full-text](#)
- 2. **Modeling and control of an integrated fuel cell-wind turbine system**
[Delfino, B.](#) (Dept. of Electr. Eng., Genoa Univ., Italy,); [Fornari, F.](#) **Source:** *2003 IEEE Bologna PowerTech (IEEE Cat. No.03EX719)*, 2003, pt. 2, p 6 pp. Vol.2
Database: Inspec
[Abstract](#) | [Detailed Record](#)
- 3. **Model of a regenerative fuel cell-supported wind turbine AC power generating system**
[Carter, W.](#) (Dept. of Mech. & Ind. Eng., Texas Univ., El Paso, TX, USA,); [Diong, B.M.](#) **Source:** *Conference Record of the 2004 IEEE Industry Applications Conference. 39th IAS Annual Meeting (IEEE Cat. No.04CH37569)*, 2004, pt. 4, p 2778-85 vol.4
Database: Inspec
[Abstract](#) | [Detailed Record](#)
- 4. **Modeling and control of a wind fuel cell hybrid energy system**
[Iqbal, M.T.](#) (Fac. of Eng., Memorial Univ. of Newfoundland, St. John's, Nfld., Canada) **Source:** *Renewable Energy*, v 28, n 2, Feb. 2003, p 223-37
Database: Inspec
[Abstract](#) | [Detailed Record](#) | [Full-text](#)
- 5. **System and process for production of methanol from combined wind-turbine and fuel-cell power**
[Spiegel, R.J.](#) (Nat. Risk Mgmt. Research Laboratory, U.S. Environmental Agency Research) **Source:** *Wind Engineering*, v 27, n 22003, p 121-134
Database: Compendex
[Abstract](#) | [Detailed Record](#) | [Full-text](#)
- 6. **Simulation of a small wind fuel cell hybrid energy system**
[Iqbal, M.T.](#) (Fac. of Eng., Memorial Univ. of Newfoundland, St. John's, Nfld., Canada) **Source:** *Renewable Energy*, v 28, n 4, April 2003, p 511-22

Click the blue underlined <Abstract> and <Detailed Record> links for a summary of the article and detailed information about the author and source publication. If it is available, click the <Full-text> link to download and print the full-text of the article. If the full-text is not available through Engineering Village, search the University of Pittsburgh Library System online catalog PITTCat+ (<http://library.pitt.edu/>) by journal title or the source publication, or ask a librarian for assistance to find out if Owen Library owns the cited publication in either print or electronic format. If Owen Library does not own the cited item, it may be requested through Interlibrary Loan. Please allow approximately one to two weeks to receive items requested through Interlibrary Loan.

Wildcards and Truncation

The internal wildcard is a question mark (?) to replace a single character.

Examples:

wom?n will search for both woman and women
t??th will search for tooth, teeth, truth, tenth

The multi-character wildcard is the asterisk (*). It replaces zero or more characters anywhere in a word being searched. An example:

h*emoglobin will search hemoglobin, haemoglobin, hemidemiphosphorylmontotremoglobin

The asterisk truncation command at the end of a word retrieves all the words that start with the same letters as the truncated term, up to the point where the truncation symbol is used.

Example:

comput* searches for computer, computerized, computation, computational, etc.

Left truncation finds all terms ending with the same letters as the truncated term.

Example:

*sorption searches for adsorption, absorption, desorption

To avoid unexpected results, truncation should be used with care.

Example:

color* retrieves color, colored, colors, Colorado

Exact Phrase Searching

Phrases entered without brackets or quotation marks will return good results because of the relevance sort, but to guarantee that the phrase is an exact match, brackets or quotation marks should be used.

Examples:

"International Space Station"
{solar energy}

Stemming

Stemming allows you to retrieve variants of a word based on the root. For example, the search term "management" returns managing, managed, manager, manage, managers, etc. Search terms are automatically stemmed in Quick Search (except terms searched in the author field), unless the Autostemming Off box is checked or the terms are surrounded by quotation marks or braces.

Sorting from the Search Form

Search results for Compendex, INSPEC and NTIS can be sorted by either relevance or publication year. Records sorted by publication year are listed by year in descending order, with most recent years displayed first: 2005, 2004, 2003, 2002, etc.

The relevance sort is based on an algorithm that takes into account the following:

- Whether the words are found as an exact phrase or separately

- When words are found separately, closer proximity ranks higher
- The number of times that the word/phrase appears in the record
- The word's location within the document (words found at the beginning of the field rank higher than words found towards the end)
- Whether the words are found within fields designated as particularly relevant, i.e., the title field
- How often the word appears in the database as a whole (words used often are less relevant than words that are less common)

You can choose how your search results are sorted by selecting one of the SORT BY radio buttons (either <Relevance> or <Publication year>) on the Engineering Village Quick Search screen. The default sort is Relevance.