



# SciFinder

## - Help Sheet -

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## Introduction

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SciFinder is the premier database to abstracts of the chemical literature, but also has extensive coverage of all chemically related sciences.

- **Scope:**
  - *Chemical Abstracts* from the Chemical Abstracts Service (CAS) (including related substance and reaction databases).
  - *MEDLINE* from 1950-

The main aim of this handout is to allow you to navigate your way around the main search options. Please use the online help for more specific assistance.

## Starting Up

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SciFinder requires you to [register](#) the first time you use it. (You must provide a valid Massey email: ...@massey.ac.nz.) Thereafter you sign in each time you go to the SciFinder page: <http://ezproxy.massey.ac.nz/login?url=https://scifinder.cas.org/>

It is helpful to click **Sign Out** when you have finished to ensure your session is securely ended.

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## The Explore (ie: Search) Options:

### REFERENCES

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Explore allows direct searches of the references or abstracts:

- **Research topic (default search)**

Allows keyword/subject searching. However it uses a natural language algorithm, so just enter your query as a sentence and see what happens. (This works best if you use words like 'in' 'with' 'on' or 'of' between your keywords/phrases. Leave 's' off the end as it automatically pluralises the words. For example, search on: *pasture with emission of carbon dioxide*)
- **Author Name**

Author entries are not uniform. However you can check for variants of names. (Example: enter *Schaeffer, Henry* and *F* in the relevant boxes)
- **Company Name**

Searches relevant address fields (For example: *massey fundamental sciences*)
- **Document Identifier**

Enter specific CAS document numbers to locate specific abstracts
- **Journal**

Finds an article abstract when you know the details (title, journal, volume, pages, date, etc.)
- **Patent**

Finds a patent abstract when you know the details (title, inventor, patent no., etc)
- **Tags**

Search for any tags defined by you.

**Note:** The substance/reaction options below search the CAS registry database rather than the literature. To find articles, select substance(s) and click Get References. These options do not include *Medline* records.

## SUBSTANCES

- **Substance Identifier**  
This is the easiest way to find specific compounds. Search on the substance's common name, trade name, CAS Registry number, etc. to get compounds from the Registry file. Select the desired compound(s) and click **Get References** to get to the list of References that mention the compound(s).
- **Chemical Structure (including generic/Markush structures)**  
SciFinder allows the literature to be searched and linked by chemical structures that CAS has indexed. Basic instructions are on **SciFinder Help**. Refer to your lecturer if more advanced searching is required.
- **Molecular Formula**  
Searches formulas in the correct format (Carbons, Hydrogens, then alphabetical). As compounds can have the same formulas, it is better to use the **Substance Identifier** option for specific compounds.
- **Property**  
Search on specified values for compound properties (boiling/melting points, magnetic moments, etc)

## REACTIONS

- **Reaction Structure Searching**  
SciFinder allows substance structures in reactions to be searched (eg: for products, catalysts, etc.)

## Viewing Reference Results

- **Full Reference [1]**  
Click on the hyperlinked article title to view the full CAS or Medline reference (including abstract, references, indexing, etc where available)
- **Get Full Text via Other Sources [2]**  
SciFinder provides a link through to possible fulltext of the selected reference(s) via ChemPort and/or MasseyLink. Access is available if it is a title the Library subscribes to. If you can't get in using ChemPort, it will automatically generate a MasseyLink panel you can use to check for access.

The screenshot shows the SciFinder REFERENCES interface. At the top, there are buttons for 'Get Substances', 'Get Reactions', and 'Get Related Citations', with callout [5] pointing to the 'Get Substances' button. Below these are 'Tools' and 'Create Keep Me Posted Alert' buttons. The main area shows a search result for 'Nitrous oxide and greenhouse gas emissions from grazed pastures as affected by use of nitrification inhibitor and restricted grazing regime'. Callout [1] points to the article title, [2] to the 'Quick View' and 'Other Sources' links, [3] to the 'Analyze', 'Refine', and 'Categorize' buttons on the left sidebar, [4] to the 'Get Full Text' icon (a magnifying glass over a document) at the end of the article title, and [5] to the 'Get Full Text' icon. The sidebar also shows a table of document types: Journal (181), Online Computer File (42), General Review (16), and Article (6).

## Modifying Your Search

When you have a list of references or substances, SciFinder allows you to modify your results by:

- **Analyze/Refine/Categorize [3]**  
Available on the right menu bar, this graphically displays or limits the exiting search by your selected search options. Click on your desired option to limit to those results.
- **Get Related: Cited/Citing [4]**  
Searches for articles that are cited by or cited in your selected reference(s) (to a maximum of 500 if none are selected). The tilde number (~) indicates how many records cite this one.
- **Get Substances/Reactions [5]**  
Searches for other references that have the substance(s) or reaction(s) mentioned in your selected reference(s). If you have a list of substances or reactions you can limit by role, properties, etc.

## Navigating Your Results

- **Search History Results [1]**  
Click on these to go back to an earlier result list or search. Access full history via **Saved Searches [4]**
- **Sorting Results [2]**  
Reference results are sorted by accession number by default. Unfortunately this places all the CAS references before the Medline ones. Change the option to **Publication Year** to interfile them. Substance or reaction results can be sorted by the number of references to bring up more common ones to the top.

## Managing Your References

- **Save: References, Structures or Reactions [3]**  
This saves your results to the CAS server. You can retrieve them at any time by going to the **Saved Searches [4]** link. You can then also combine any saved answer set results.
- **Export: Results to Your Computer (including EndNote)**  
Click **Export [5]** and follow the prompts for saving options.  
**Note:** To export to Endnote, select the **Citation export format (\*.ris)**. If prompted, click open to export the file to EndNote. The references will need checking.  
**Note:** If no references are selected SciFinder defaults to exporting the first 100 in the list.
- **Keep Me Posted Alert [6]**  
Select this option to have your search saved and be notified if new results occur for it. Tick the *Exclude previously retrieved references* box if you only want any new references to appear.
- **Preferences [7]** will give you the option of having Keep Me Posted alerts emailed to you. You can also select automatic duplicate removal and the default starting page search.
- **SciPlanner [8]**  
A workspace where you can visually combine and organize relevant search results, including references, substances, and reactions. (For further assistance, refer to **SciFinder Help [10].**)

## To Finish

It is important to click on **Sign Out [9]** when you have finished, ensuring your session is securely ended.

## Further Help:

Remember to click on **SciFinder Help [10]** link when stuck.

- **Online Support:**  
- Official SciFinder Training Support: <http://www.cas.org/training/scifinder>
- **Still Need Help?**  
Contact the Science Librarians: [SciLib@massey.ac.nz](mailto:SciLib@massey.ac.nz), or phone 0800 MASSEY ext. 85555

## Useful Tip: Magic numbers – CAS Registry Numbers

Every single chemical substance mentioned in the literature is indexed with its own unique **Chemical Abstracts Service (CAS) Registry Number**. You can use this number to pull up a registry record that gives information about the substance, and allows you to **Get References** to it in the literature. Use this number if it has been quoted.

Example: Registry result (see below) from a **Substance Identifier** search on *aspirin*:  
**CAS Registry Number = 50-78-2**

The screenshot shows the SciFinder interface. At the top, there's a navigation bar with 'Explore', 'Saved Searches', and 'SciPlanner'. Below that, a search bar contains 'Substance Identifier "aspirin" > substances (1)'. The main area shows search results for '1. Substance Detail 50-78-2'. A chemical structure of aspirin is displayed, with a red circle [1] around the 'Substance Detail' entry. A red arrow [2] points to the '>>' icon next to the structure. A red arrow [3] points to the 'Explore by Structure' menu option in the context menu.

## Useful Tip: Structure Information and Searching

Click on >> in a structure diagram [1] for further options for that compound. Select **Explore by Structure** and **Chemical Structure** or **Reactions** to paste it into the Structure Editor ([2] below) where you can then modify and search it. Or select other options as desired.

The screenshot shows the Structure Editor interface. The main area displays the chemical structure of aspirin. A red arrow [1] points to the '>>' icon in the top right corner of the structure diagram. A red arrow [2] points to the 'Structure' option in the Drawing Editor panel on the right. A red arrow [3] points to the 'Import' icon in the top left corner of the Structure Editor.

Chemical structures can also be **Imported** [3] into the Structure Editor (in .cfx or .mol formats).

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Massey University Library  
Te Putanga Ki Te Ao Mātauranga  
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