

# How to... Create a Reference Answer Set

## Find references quickly and easily

In SciFinder®, you search bibliographic content from two of the world's largest sources of publicly available references for chemistry and related sciences: CPlus<sup>SM</sup> from CAS and MEDLINE® (PubMed) from the National Library of Medicine®. Select from various reference search options, based on the information at hand and your research needs. This guide explains how to conduct each type of reference search. When you have your answer set, refer to "How to ... Work with Reference Answer Sets" for ways to evaluate the results and target the most relevant answers. For more detailed information about SciFinder, consult the online help or visit [www.cas.org/training/scifinder](http://www.cas.org/training/scifinder).

## Types of Reference Searches

The screenshot shows the SciFinder interface. On the left, a navigation menu is visible with categories: REFERENCES, SUBSTANCES, and REACTIONS. Under REFERENCES, several search options are listed: Research Topic, Author Name, Company Name, Document Identifier, Journal, Patent, and Tags. A red diamond with the number '1' is positioned over the REFERENCES menu item. In the main content area, under the heading 'REFERENCES: RESEARCH TOPIC', there is a search input field with a 'Search' button below it. A red diamond with the number '2' is positioned over the 'Advanced Search' link below the search field. To the right of the search area, there is a 'SAVED ANSWER SETS' section with a list of examples: reactant search example, PPAk examples, derivatives of pyrimidine for immune disease, Hemiaminal polymers, Arylketone synthesis final answer set, and Arylketone search. Below this is a 'KEEP ME POSTED' section with a list of citations for Thiazole Research.

### Tip

- For most keyword searches, it is often best to start with a broad search and narrow the results later.
- To find specific references, add **Advanced Search** criteria.

1 On the **Explore** tab, under **REFERENCES**, you can search by any of the seven options.

2 Click **Advanced Search** to see criteria for narrowing a search:

The screenshot shows the 'Advanced Search' form. At the top, there is a 'Publication Years' field with a dropdown menu and a list of examples: 1995, 1995-1999, 1995-, -1995. Below this is a 'Document Types' section with a grid of checkboxes for various document types: Biography, Book, Clinical Trial, Commentary, Conference, Dissertation, Editorial, Historical, Journal, Letter, Patent, Preprint, Report, and Review. The 'Languages' section has checkboxes for Chinese, English, French, German, Italian, Japanese, Polish, Russian, and Spanish. At the bottom, there is an 'Author' section with fields for Last Name, First, and Middle, and a 'Company' field.

These search limiters are available as part of the **Refine** and **Analyze** functions, so you can also apply them later in your search process.

# Search by Research Topic

1 REFERENCES

- Research Topic
- Author Name
- Company Name
- Document Identifier
- Journal
- Patent
- Tags

2 clean up of oil spill in ocean

Examples:  
The effect of antibiotic residues on dairy products  
Photocyanation of aromatic compounds

Search

3 Advanced Search  Always Show

SUBSTANCES  
Chemical Structure

1 To begin, click **Research Topic**.

2 Enter your search concept(s) in the text box.

- A search concept, or keyword, is a term or phrase relevant to your topic of interest.
- Enter up to seven concepts, separated by prepositions, in English.
  - Recommendation: enter two or three concepts, separating each concept with a preposition. Use additional concepts to refine your answer set later.
- Use “not” or “except” to exclude a term.

3 Click **Search**.

## Tip

You can include up to three synonyms or acronyms for a concept. Place them in parentheses immediately following the concept and separate them with commas. E.g., cat (kitten, feline, felis catus)

Continued

Select All Deselect All

1 of 11 Research Topic Candidates Selected

References

<input type="checkbox"/>	193 references were found containing all of the concepts "clean", "oil spill" and "ocean" closely associated with one another.	193
<input checked="" type="checkbox"/>	670 references were found where all of the concepts "clean", "oil spill" and "ocean" were present anywhere in the reference.	670
<input type="checkbox"/>	1578 references were found containing the two concepts "clean" and "oil spill" closely associated with one another.	1578
<input type="checkbox"/>	2403 references were found where the two concepts "clean" and "oil spill" were present anywhere in the reference.	2403
<input type="checkbox"/>	3306 references were found containing the two concepts "clean" and "ocean" closely associated with one another.	3306
<input type="checkbox"/>	8579 references were found where the two concepts "clean" and "ocean" were present anywhere in the reference.	8579
<input type="checkbox"/>	3685 references were found containing the two concepts "oil spill" and "ocean" closely associated with one another.	3685
<input type="checkbox"/>	5291 references were found where the two concepts "oil spill" and "ocean" were present anywhere in the reference.	5291
<input type="checkbox"/>	645013 references were found containing the concept "clean".	645013
<input type="checkbox"/>	15717 references were found containing the concept "oil spill".	15717
<input type="checkbox"/>	562745 references were found containing the concept "ocean".	562745

Get References

SciFinder returns a set of **Topic Candidates**.

- 4 Select the answer set that you want to use.
- Click the box to select an option.
  - A checkmark indicates it has been selected.

5 Click **Get References**.

SciFinder Considers Terms to be...	When the Terms Are Found...
"As entered"	Exactly as you have entered them
"Closely associated with one another"	Within the same sentence or title
"Present anywhere within a reference"	Anywhere (perhaps widely separated) within a record's title, abstract, or indexing
"Containing the concept"	Somewhere in the record

### Now what?

After you click **Get References**, SciFinder will retrieve the answers which meet your query requirements. To learn about working with the answers, please see the companion document titled, "How to... Work with Reference Answer Sets."

### Tip

All concepts "present anywhere in the reference" is often a good starting point if comprehensiveness is important. If the number of references is too large or you only need a few good answers, consider selecting the narrower option in which all of the concepts are "closely associated with one another."

# Search by Author Name

Explore ▾ Saved Searches ▾ SciPlanner

REFERENCES

Research Topic  
1 Author Name  
Company Name  
Document Identifier  
Journal  
Patent  
Tags

REFERENCES: AUTHOR NAME ?

Last Name \* First Middle

2 Kobilka Brian

Look for alternate spellings of the last name

3 Search

**Tips**

- For complicated names, try multiple searches and determine which search gives the best results.
- Under the Tools drop down, you can also combine answer sets.

REFERENCES

Select All Deselect All

4 4 of 4 Author Name Candidates Selected

	References
<input checked="" type="checkbox"/> KOBILKA B	17
<input checked="" type="checkbox"/> KOBILKA B K	111
<input checked="" type="checkbox"/> <b>KOBILKA BRIAN</b>	110
<input checked="" type="checkbox"/> KOBILKA BRIAN K	284

5 Get References

1 To begin, click **Author Name**.

2 Enter as much of the name as you know.

- Only the **Last** name is required. Include the **First** and **Middle** names or initials to improve the search results.
- Enter punctuation (spaces, hyphens, etc.) as if you were writing the name.
- Replace special characters with equivalent character(s), e.g., ae replaces ä.
- For optimal retrieval, “Look for alternative spellings of the last name” is selected by default.

3 Click **Search**.

4 SciFinder returns a list of authors. The number of references associated with each name appears on the right.

- Click the box next to any name(s) you want to select and a checkmark appears.

5 Click **Get References**.

## Tip

Create a Keep Me Posted (KMP) automatic alert if you want to know when new records for this author become available. See “How to Create a Keep Me Posted (KMP) Alert” for more information.

## Now what?

After you click **Get References**, SciFinder will retrieve the answers which meet your query requirements. To learn about working with the answers, please see the companion document titled, “How to... Work with Reference Answer Sets.”

# Search by Company Name

The screenshot shows the SciFinder interface with the 'Company Name' search option selected in the left sidebar. The main search area contains a text box with 'Owens Corning Fiberglas' entered, a 'Search' button, and a list of examples: '3M' and 'DuPont'. Three numbered callouts (1, 2, 3) are overlaid on the interface to guide the user through the steps: 1. Clicking 'Company Name' in the sidebar, 2. Entering the company name in the text box, and 3. Clicking the 'Search' button.

1 To begin, click **Company Name**.

2 Enter the name of one organization into the query entry text box.

3 Click **Search**.

## Tip

Create a Keep Me Posted (KMP) automatic alert if you want to know when new records for this author become available. See the "Create and Manage Alerts (KMPs)" guide for more information.

## Company Name Searching Guidelines

- SciFinder considers various spellings, acronyms, abbreviations, and related terms when retrieving results. It does not consider mergers and acquisitions.
- SciFinder automatically searches common synonyms and abbreviations. For example, entering "Company" or "Co." returns the same results.

### Now what?

After you click **Get References**, SciFinder will retrieve the answers which meet your query requirements. To learn about working with the answers, please see the companion document titled, "How to... Work with Reference Answer Sets."

# Search by Document Identifier

The screenshot shows the SciFinder interface. At the top, there are navigation tabs: 'Explore', 'Saved Searches', and 'SciPlanner'. On the left, a sidebar contains two main sections: 'REFERENCES' and 'SUBSTANCES'. Under 'REFERENCES', there is a list of search criteria: 'Research Topic', 'Author Name', 'Company Name', 'Document Identifier', 'Journal', 'Patent', and 'Tags'. A blue diamond with the number '1' points to the 'Document Identifier' option. The main area is titled 'REFERENCES: DOCUMENT IDENTIFIER'. It features a text input box containing the identifiers '1981:481636' and '107:12935'. A blue diamond with the number '2' points to this input box. Below the input box, there is a prompt 'Enter one per line.' followed by 'Examples:' and three example identifiers: '1983:4296', '107:12935', and '10.1021/np050327j'. At the bottom of the main area, there is a blue 'Search' button, with a blue diamond and the number '3' pointing to it.

1 To begin, click **Document Identifier**.

2 Enter up to 25 identifiers, one per line, in the query entry text box.

3 Click **Search**.

## Tip

SciFinder ignores punctuation and accepts both two-digit and four-digit formats for years. Therefore, the search term 1983:4296 will retrieve both the PubMed ID 834296 and the CAlus Accession Number 1983:4296. Select the document of interest when you review the answers.

## Searchable Document Identifiers

Type of Identifier	Example
Accession number: A unique number applied to a record when it is created. It begins with the year followed by sequential numbering.	CAplus: 2012:1527010 MEDLINE: 1998010009
Digital object identifier (DOI): an alphanumeric character string that uniquely identifies an electronic document over the course of its lifetime.	10.1021/jp204843r

## Now what?

After you click **Get References**, SciFinder will retrieve the answers which meet your query requirements. To learn about working with the answers, please see the companion document titled, "How to... Work with Reference Answer Sets."

# Search by Journal

1 To begin, click **Journal**.

2 Enter a **Journal Name** (required).  
 ▪ Enter data in additional fields to retrieve more specific answers.

3 Click **Search**.

### Tip

Create a broad search and then narrow search results by using refine and analyze options.

Field	Data Accepted
Journal Name	<ul style="list-style-type: none"> <li>Full name, abbreviation, or acronym                             <ul style="list-style-type: none"> <li>Abbreviations or acronyms must not contain spaces or punctuation</li> </ul> </li> <li>Maximum of 30 characters</li> </ul>
Volume	Number (38) or alphanumeric string (45a) <ul style="list-style-type: none"> <li>A Journal Name must be specified before a Volume, Issue, or Starting Page can be recognized</li> </ul>
Issue	Number (16) or month (June)
Starting Page	Number (46), letters (iii), or alphanumeric string (m287)
Title Word(s)	Key words, a partial title or a full title

### Now what?

After you click **Get References**, SciFinder will retrieve the answers which meet your query requirements. To learn about working with the answers, please see the companion document titled, "How to... Work with Reference Answer Sets."

# Search by Patent

Explore ▾ Saved Searches ▾ SciPlanner

**REFERENCES**

- Research Topic
- Author Name
- Company Name
- Document Identifier
- Journal
- Patent
- Tags

**SUBSTANCES**

- Chemical Structure
- Markush
- Molecular Formula
- Property
- Substance Identifier

**REACTIONS**

- Reaction Structure

**REFERENCES: PATENT**

Patent Number  
US 6448377  
Examples: WO 2001011365

Assignee Name  
Examples: Cancer Research Technology Limited

Inventor Last Name \*    First    Middle

Publication Year  
Examples: 1995, 1995-1999, 1995-, -1995

Search

**Tip**  
One number can retrieve both a granted patent and an unrelated patent application. You can easily select the record of interest while reviewing the search results.

1 To begin, click **Patent**.

2 Enter a **Patent Number**.

- Acceptable patent numbers include any number that identifies a patent, such as patent application numbers, priority application numbers, and patent numbers.

Type of Identifier	Example
Patent Application Number	WO 2012-US29090
Priority Application Number	US 1996-15450P
Patent Number	JP 2001519650

Alternatively, you can enter an **Assignee Name** or **Inventor Name**.

- Enter data in several fields to create a narrower search.

3 Click **Search**.

## Now what?

After you click **Get References**, SciFinder will retrieve the answers which meet your query requirements. To learn about working with the answers, please see the companion document titled, "How to... Work with Reference Answer Sets."

# Search by Tags

Explore ▼ Saved Searches ▼ SciPlanner

**REFERENCES**

- Research Topic
- Author Name
- Company Name
- Document Identifier
- Journal
- Patent
- 1** Tags

**SUBSTANCES**

- Chemical Structure
- Markush
- Molecular Formula
- Property
- Substance Identifier

**REACTIONS**

- Reaction Structure

**REFERENCES: TAGS** ⓘ

Click a tag to retrieve references associated with that tag.

**B**

- 2** biosensors

**C**

- coffee
- comment

**G**

- g-protein-coupled receptors
- gpcr

**I**

- ice cubes

**K**

- kobilka

**P**

- pharmacology

**Tip**  
Search a tag to create a new answer set that contains documents from different answer sets that have the same tag.

A tag is a user-defined keyword that you can apply to references in one or more answer sets. When you save an answer set, the tag is saved with the associated reference. Search a tag to retrieve any references to which the tag was applied.

**1** To begin, click **Tags**.

**2** From the displayed list, select the tag that you want to search.

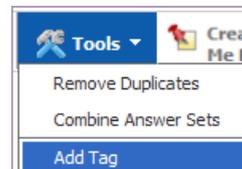
SciFinder retrieves all of the records to which that tag has been applied. This feature allows you to pull references from several different answer sets and place them all into a new answer set.

## Now what?

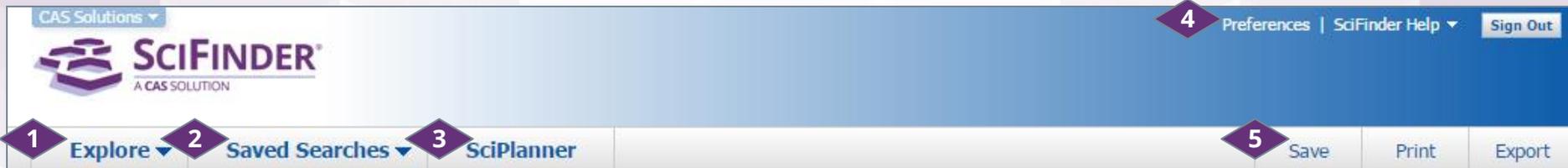
After you click **Get References**, SciFinder will retrieve the answers which meet your query requirements. To learn about working with the answers, please see the companion document titled, "How to... Work with Reference Answer Sets."

## Tip

When reviewing your search, you can apply tags to records by selecting Add Tag from the Tools menu. In the dialog box, enter the key word(s) that you want to apply as a tag. After they are created, tags become searchable.



# Manage Your Search



1 Start a new **References**, **Substances** or **Reactions** search.

2 Access **Saved Answer Sets**, **Keep Me Posted** automated alert results, and your search **History**.

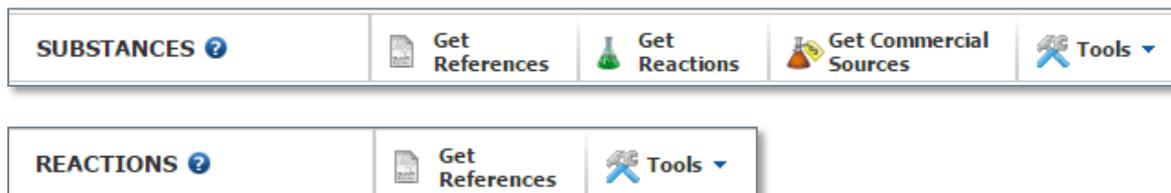
3 Open the **SciPlanner** interactive workspace where you can organize your reference, substance and reaction search results.

4 Access **Preferences** and **SciFinder Help** options: **Help**, **Training**, **What's New** and **Contact Us**.

5 Click **Save**, **Print** or **Export** to open a dialog window and initiate these procedures. See "How to... Save, Print and Export Answers" for more information.

## Tip: Other Ways to Create a Reference Answer Set

You can also create a reference answer set by starting with a reaction or substance search. After you get a reaction or substance answer set, just click the "Get References" icon at the top of the page.



## CAS Customer Care Center

E-mail: [help@cas.org](mailto:help@cas.org)

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