

How to... Work with a Reference Answer Set

Easily identify and isolate references of interest

Use SciFinder® to quickly retrieve relevant information from the world's largest, publicly available reference content for chemistry related sciences. This guide provides an overview of some of the sort, refine, and analyze tools for confidently evaluating and narrowing even a large answer set. From there, a single click retrieves substances or reactions associated with your references. For more detailed information and additional training resources, consult the online help or visit www.cas.org/training/scifinder.

Reference Search Results

The screenshot shows the SciFinder interface with search results for 'oil spills'. The top navigation bar includes 'Get Substances', 'Get Reactions', 'Get Related Citations', and 'Tools'. The search results are sorted by 'Accession Number'. The first three results are visible, each with a checkbox for selection and a 'Quick View' link. The first result is 'A review of polymer nanofibres by electrospinning and their application in oil-water separation for cleaning up marine oil spills'. The second result is 'Facile and cost-effective technique for separation of oil from water using polymer-coated iron oxide nanoparticles'. The third result is 'Device for removal of surface layer of oil-containing liquids'. A 'Tip' box is overlaid on the bottom left of the screenshot.

Tip

An **Accession Number** is a unique identifier given to a record when it is processed. In CAPLUSSM, it begins with the year in which the record is processed, followed by a colon and sequential numbering (e.g., 2011:792373).

1

By default, references in your answer set are sorted by **Accession Number**.

Click the drop-down arrow for other sort options.

- The blue arrow indicates the sort order (e.g., newest to oldest or alphabetical). Click the arrow to reverse the order.

The dropdown menu shows the following options: 'Accession Number' (selected), 'Author Name', 'Citing References', 'Publication Year', and 'Title'. A blue arrow points to the right of the 'Accession Number' option.

2

Below the **Sort by** options are the number of references in the answer set and the number that are selected.

- To select individual answers, click the box to the left of an answer number.
- Click the blue drop-down arrow for select options.

The dropdown menu shows the following options: 'Select All', 'Deselect All', 'Keep Selected', and 'Remove Selected'. A blue arrow points to the right of the 'Select All' option.

Continued

The screenshot shows the SciFinder search results page. At the top, there are navigation tabs: Get Substances, Get Reactions, Get Related Citations, Tools, Create Keep Me Posted Alert, and Send to SciPlanner. Below these, the search results are sorted by Accession Number. A callout '3' points to the 'Display Options' link. A callout '4' points to the page navigation controls showing 'Page: 1 of 34'. A callout '5' points to the first search result, which is a 'Quick View' of a document. A callout '6' points to the molecule icon next to the search results. The first result is titled '1. A review of polymer nanofibres by electrospinning and their application in oil-water separation for cleaning up marine oil spills'.

3 Click **Display Options** to select:

The 'Display Options' dialog box is shown. It has two sections: 'Answers per Page' and 'Layout Options'. Under 'Answers per Page', there are radio buttons for 15, 20, 25, 50, 75, and 100. The '25' option is selected. A note below says 'Displaying more answers per page may increase page-loading time.' Under 'Layout Options', there are radio buttons for 'No Abstract', 'Partial Abstract', and 'Full Abstract'. The 'Partial Abstract' option is selected. At the bottom right, there are 'OK' and 'Cancel' buttons.

4 Use the page controls to navigate your answer set.

5 The magnifying glass opens a “**Quick View**.” Click it to open a new window that contains many of the reference details. Close the window to return to your active session.

6 Click the molecule icon to see the **Substances** indexed for a document (not shown). CAS analysts identified these substances as being important to the science reported in the document.

Click the **Citings** icon to retrieve the documents that have cited this reference.

Tip
PATENTPAK™ offers immediate access to full text PDFs for indexed patents and their patent families and includes page numbers for substances from covered patents. Learn more about this add-on product at <http://www.cas.org/products/scifinder/patentpak>.

Narrow an Answer Set with Refine Options

1 Refine Categorize

Get Substances Get Reactions Get Related Citations Tools Create Keep Me Posted Alert Send to SciPlanner

Sort by: Accession Number ↓ Display Options

0 of 670 References Selected Page: 1 of 34

Refine by:

- Research Topic
- Author
- Company Name
- Document Type
- Publication Year
- Language
- Database

2 Research Topic
method (process)
Examples:
The effect of antibiotic residues on dairy products
Photocyanation of aromatic compounds

3 Refine

1. **A review of polymer nanofibres by electrospinning and their application in oil-water separation for cleaning up marine oil spills**
Quick View Other Sources
By Sarbatly, Rosalam; Krishnaiah, Duduku; Kamin, Zykamilia
From Marine Pollution Bulletin (2016), Ahead of Print. | Language: English, Database: CAPLUS

The growths of **oil** and gas exploration and **prodn.** activities have increased environmental problems, such as **oil spillage** and the resulting pollution. The study of the methods for **cleaning up oil spills** is a crit. issue to protect the environment. Various techniques are available to contain **oil spills**, but they are typically time consuming, energy inefficient and create secondary pollution. The use of a sorbent, such as a nanofibre sorbent, is a technique for controlling **oil spills** because of its good phys. and **oil** sorption properties. This review discusses about the application of nanofibr...

2. **Facile and cost-effective technique for separation of oil from water using polymer-coated iron oxide nanoparticles**
Quick View Other Sources
By Mirshahghassemi, Seyyedali; Lead, Jamie
From Abstracts of Papers, 251st ACS National Meeting & Exposition, San Diego, CA, United States, March 13-17, 2016 (2016), ENVR-217.
| Language: English, Database: CAPLUS

Large **oil spills** and **oily** wastewater discharges from ships and industrial activities can have serious impacts on the aquatic systems. Current **oil clean-up** techniques are detergents, booms, skimmers and in situ burning and showed low removal efficiency and some with unknown environmental consequences. The limitations of current **oil** remediation techniques inspired researchers to **produce** novel sorbent nanomaterials. Application of

1 Click the **Refine** tab and click a radio button to select a **Refine by:** option.

2 Specify additional criteria below the refine options.

- Here, the answer set is refined to include answers with two additional concepts.
- A synonym is included in parentheses.

3 Click **Refine**.

The Answer Set is Narrowed to 307 References

Create Keep Me Posted Alert Send to SciPlanner

Sort by: Accession Number ↓ Display Options

0 of 307 References Selected Page: 1 of 16

1. **A review of polymer nanofibres by electrospinning and their application in oil-water separation for cleaning up marine oil spills**
Quick View Other Sources
By Sarbatly, Rosalam; Krishnaiah, Duduku; Kamin, Zykamilia
From Marine Pollution Bulletin (2016), Ahead of Print. | Language: English, Database: CAPLUS

The growths of **oil** and gas exploration and **prodn.** activities have increased environmental problems, such as **oil spillage** and the resulting pollution. The study of the **methods** for **cleaning up oil spills** is a crit. issue to protect the environment. Various techniques are available to contain **oil spills**, but they are typically time consuming, energy inefficient and create secondary pollution. The use of a sorbent, such as a nanofibre sorbent, is a technique for controlling **oil spills** because of its good phys. and **oil** sorption properties. This review discusses about the application of nanofibr...

Tips

- To save you time and increase comprehensiveness, SciFinder automatically returns both singular and plural forms of a word (**method; methods**), alternate word endings and forms (**clean; cleaning**), and common synonyms (**ocean; sea; marine**).
- When searching or refining by **Research Topic**, you can tell SciFinder to include up to three synonyms, separated by commas and enclosed in one set of parentheses.
- When you refine by **Research Topic**, both the original and new hit terms are highlighted in the title and are bolded in the abstract.

Evaluate Answers with Analyze Options

The screenshot shows the SciFinder interface with the **Analyze** tab selected. The left sidebar lists various analysis options, with **Document Type** highlighted. The main area displays a list of references, with the first one selected. A dialog box titled **Analyze - Document Type** is open, showing a list of document types with their counts. The **Patent** type is selected. The dialog also shows the number of items (17) and the current selection (1).

1 Click the **Analyze** tab. By default, the answer set is analyzed by **Author Name**.

2 Click the drop-down arrow to see the available **Analyze by:** options.

3 Click **Show More** to see additional data when it is available (see inset), or to select more than one analysis subset.

- E.g., Use **Show More** to select several variations of an author's name.

Analyze - Document Type

17 Items 1 Selected Export

Sort by: Frequency

Select bars to view only those references within the current answer set.

| Document Type | Count |
|--|-------|
| <input type="checkbox"/> Journal | 206 |
| <input checked="" type="checkbox"/> Patent | 68 |
| <input type="checkbox"/> Article | 51 |
| <input type="checkbox"/> JOURNAL ARTICLE | 51 |
| <input type="checkbox"/> Online Computer File | 33 |
| <input type="checkbox"/> RESEARCH SUPPORT NONUS GOVT | 29 |
| <input type="checkbox"/> General Review | 26 |
| <input type="checkbox"/> Conference | 21 |
| <input type="checkbox"/> Report | 11 |
| <input type="checkbox"/> Meeting Abstract | 6 |

Apply Cancel

Tip

Some document types are listed in all capital letters such as JOURNAL ARTICLE. These capitalized subsets are unique to MEDLINE® (aka PubMed). The **Journal** subset includes the documents from both MEDLINE and CAPLUS.

Use Analyze to Narrow an Answer Set

Explore ▾ Saved Searches ▾ SciPlanner Save Print Export

68 references with the Document Type **Patent** are displayed **2** Keep Analysis Clear Analysis

Research Topic "clean of oil spill in ocean" > references (670) > refine "method (process)" (307)

REFERENCES **1** Get Substances Get Reactions Get Related Citations Tools Create Keep Me Posted Alert Send to SciPlanner

Analyze Refine Categorize Sort by: Accession Number ↓ Display Options

0 of 307 References Selected Page: 1 of 4

Analyze by: Document Type

| | |
|-----------------------------|-----------|
| Journal | 206 |
| Patent | 68 |
| Article | 51 |
| JOURNAL ARTICLE | 51 |
| Online Computer File | 33 |
| RESEARCH SUPPORT NONUS GOVT | 29 |
| General Review | 26 |
| Conference | 21 |
| Report | 11 |
| Meeting Abstract | 6 |

Show More

3. Device for removal of surface layer of oil-containing liquids
Q Quick View PATENTPAK
By Karev, E. A.; Krivov, Yu. G.; Akhsyanov, R. N.; Kudryashov, I. A.
From Russ. (2016), RU 2574260 C1 20160210. | Language: Russian, Database: CAPLUS

The invention relates to devices for removal of the surface layer of **oily** liqs. and can be used in water and wastewater treatment facilities sewage, chem., metalworking industries industry in the purifn. **process**, coolants and **cleaning** solns. from extraneous org. impurities, as well as for the removal of **petroleum products** from the surfaces of ponds, rivers, **seas, oceans**. The device for removal of the surface layer of **oil**-contg. liqs. contains a floating **oil** gathering device in the form of a sector belt conveyor, comprising an endless belt with perforated edges made of an **oil**-resistant materia...

4. Device for removal of surface layer of oil-containing liquids
Q Quick View PATENTPAK
By Karev, E. A.; Krivov, Yu. G.; Akhsyanov, R. N.; Zamal'dinov, B. F.
From Russ. (2016), RU 2574259 C1 20160210. | Language: Russian, Database: CAPLUS

The invention is a device for removal of a surface layer of **oily** liqs. and may be used in a purifn. **process**, cutting fluids, and **cleaning** solns. of org. impurities, as well as for the removal of **oil** from the surface of a pond, river, **seas**, or **oceans**. Said device contains a floating **oil** gathering device formed as a belt conveyor, comprising an endless belt perforated along edges made out of **oil**-resistant material, and installed on three hollow sealed drums, one of which is a drive, and other two - driven, at the end they have one sprocket to drive the belt with perforated edges, and are secured...

8. Separated - combined marine oil spill recovery method and system [Machine Translation].
Q Quick View PATENTPAK
By Yue, Jingxia; Liu, Yuliang; Zhang, Chi; Dang, Zhifan
From Faming Zhuanli Shenqing (2015), CN 105129036 A 20151209. | Language: Chinese, Database: CAPLUS

[Machine Translation of Descriptors]. The present invention discloses a separated - combined **marine oil spill** recovery **method** and system,

Here, the answer set has been analyzed by **Document Type**.

1 Click an analysis bar to display that subset of answers.

- Parts of other analysis bars turn yellow if any records fall into more than one subset.

2 The yellow status bar indicates the answers that are currently displayed.

- Click **Keep Analysis** to make these answers your new answer set.
- Click **Clear Analysis** to return to your original answer set.

Or, select a different subset on the **Analyze** tab to view those records.

Reference Details

REFERENCE DETAIL Get Substances Get Related Citations View with PATENTPAK Link to Other Sources Send to SciPlanner

[Return](#) [Previous](#) [Next](#)

1 18. **Method of separation of two immiscible fluids, for example, oil in water**

By: Elagin, Andrey Aleksandrovich; Mironov, Maksim Anatolevich; Ponomarev, Vladislav Sergeevich
Assignee: OOO "NPO BioMikroGel", Russia

The group of inventions relates to the field of org. chem. and can be used for cleaning water, industrial and domestic waste water or waste water sediment, and for the containment and recovery of petroleum and petroleum product spills in large bodies of water, rivers, lakes and seas. In the claimed group of inventions, aq. solns. of polysaccharide microgels, having a mol. mass of 20000-200000 daltons and a particle size of 50-600 nm, are used as a substance for cleaning water of petroleum and petroleum products. Moreover, low concns. of polysaccharide microgels in water, ranging from 0.1 to 20 g/l, are used. Said solns. are used as a surface modifier for a filter used in sepg. water-oil emulsions, as a sorbent for the containment and recovery of oil spills in an aq. medium, and also as a coagulant for the cleaning of water polluted by petroleum and petroleum products. The tech. result is in making it possible to recover a com. product, recovered during the process of cleaning water of petroleum or petroleum products, and to recover the starting substance for the reuse thereof, while simultaneously simplifying the slurry utilization process.

2 **Patent Information**

| Patent No. | Kind | Language | Date | Application No. | Date |
|----------------|------|----------|--------------|------------------|--------------|
| WO 2013191590 | A1 | | Dec 27, 2013 | WO 2013-RU506 | Jun 18, 2013 |
| RU 2492905 | C1 | Russian | Sep 20, 2013 | RU 2012-125534 | Jun 19, 2012 |
| RU 2514645 | C1 | Russian | Apr 27, 2014 | RU 2012-136757 | Aug 27, 2012 |
| RU 2535858 | C1 | Russian | Dec 20, 2014 | RU 2013-123536 | May 22, 2013 |
| CA 2876623 | A1 | | Dec 27, 2013 | CA 2013-2876623 | Jun 18, 2013 |
| EP 2862843 | A1 | English | Apr 22, 2015 | EP 2013-806672 | Jun 18, 2013 |
| CN 104661969 | A | Chinese | May 27, 2015 | CN 2013-80036171 | Jun 18, 2013 |
| US 20150191368 | A1 | English | Jul 9, 2015 | US 2014-14408656 | Dec 17, 2014 |
| IN 2015MN00132 | A | | Oct 16, 2015 | IN 2015-MN132 | Jan 17, 2015 |

Priority Application

| | | |
|----------------|---|--------------|
| RU 2012-125534 | A | Jun 19, 2012 |
| RU 2012-136757 | A | Aug 27, 2012 |
| RU 2013-123536 | A | May 22, 2013 |
| WO 2013-RU506 | | |

3 **QUICK LINKS**
0 Tags, 0 Comments

3 **PATENT INFORMATION**
Dec 27, 2013
WO 2013191590
A1

APPLICATION
Jun 18, 2013
WO 2013-RU506

PRIORITY
Jun 19, 2012
RU 2012-125534
Aug 27, 2012
RU 2012-136757
May 22, 2013
RU 2013-123536
Jun 18, 2013
WO 2013-RU506

SOURCE
PCT Int. Appl.
26pp.; Chemical Indexing
Equivalent to 159:488405
(RU)
Patent
2013
CODEN:PIXXD2

NUMBER

When you click the blue title of a reference, you see all of the **Reference Detail(s)**.

1 At the top are the title, authors, and abstract.

2 For patents, below the abstract you see the **Patent Information** table.

- The first patent in the table is called the basic patent and was used for indexing the document.

- In the Priority Application section, for WIPO patents, you always see the WO patent application number as well as the first country where the patent application was filed.

3 On the right side are details about the publication **Source**, the associated **Company/Organization**, the **Accession Number**, the **Publisher** and the original **Language** (after 1967).

Tip

If your company purchases journal subscriptions, your Knowledge Center or SciFinder Administrator can set up the CAS Full Text Options page, available when you click Link to Other Sources, to let you immediately access those journal articles from your desktop.

Link to Other Sources

Continued

4

Indexing

Unit Operations and Processes (Section48-1)

Concepts

| | |
|-----------------|------------------------|
| Cotton textiles | Filtration |
| Fluids | Linen textiles |
| Microgels | Oil-in-water emulsions |
| Paper | Separation |

method of sepn. of two immiscible fluids, for example, oil in water

Polysaccharides

method of sepn. of two immiscible fluids, for example, oil in water

Other use, unclassified; Uses

Polyamide fibers Polyamides

method of sepn. of two immiscible fluids, for example, oil in water

Technical or engineered material use; Uses

Supplementary Terms

immiscible fluid example oil water sepn

5

Citations

AVRAMENKO VALENTIN ALEKSANDROV; RU 2279405 C2 2006 [?](#)
 Anon; RU 73618 U1 2008
 BAVUZE BRJUNO; RU 2276161 C2 2006 [?](#)
 KABLOV VIKTOR FEDOROVICH; RU 2352388 C1 2009 [?](#)
 RATNIKOV A JU; RU 2148425 C1 2000 [?](#)

6

Tags

0 Tags | [Edit Tags](#)

7

Comments

0 Comments Sort by: Newer First Older First

No comments

Substances

9000-11-7 [?](#)
 9000-69-5 Pectin [?](#)
 9004-32-4 [?](#)
 9012-76-4 Chitosan [?](#)

method of sepn. of two immiscible fluids, for example, oil in water

Other use, unclassified; Uses

25038-54-4 Poly[imino(1-oxo-1,6-hexanediy)], uses [?](#)

method of sepn. of two immiscible fluids, for example, oil in water

Technical or engineered material use; Uses

2013:1992144
 CAN160:76177
 CAPLUS

LANGUAGE

Russian

4

CAS scientists extract key scientific terms and concepts from each document. This **Indexing** is added to each reference.

- Each of the 80 Chemical Abstracts **Section** codes covers one broad scientific discipline.
- The **Concepts** are standardized, uniform index terms (controlled vocabulary).
- Substances** are the chemical compounds important to the science of the document.
- Supplementary Terms** are relevant keywords for that document. They are not controlled vocabulary.

5

Below the **Indexing** are the **Citations** for the document.

- If the citation is blue, you can click it to see the record for that reference.

6

You can apply or **Edit Tags** to documents here.

- You can search **Tags**. This feature allows you to combine records from many answer sets into one answer set.
- You can also add a tag (up to 500 records) under the **Tools** button on the toolbar.

7

You can add **Comments** to individual records as reminders about important information or as project identifiers.

Tip

CAS scientists routinely update the standardized **Indexing** in the CAS Thesaurus to reflect current topics in science after a significant number of records are available for a new topic. Since **Supplementary Terms** are not standardized (controlled) vocabulary, terms related to the leading edge of science are often found here.

Use Categorize to Identify Specific Records

REFERENCES ?

Analyze Refine **Categorize**

Categorize ?

1. Select a heading and category. 2. Select index terms of interest.

| 1 Category Heading | 2 Category | 3 Index Terms | 4 Selected Terms |
|------------------------------|--|---|--|
| All | Materials & products (95) | Select All Deselect All | Click 'x' to remove the category from 'Selected Terms' |
| Technology | Substances in technology (123) | <input checked="" type="checkbox"/> Water purification 7 | <input checked="" type="checkbox"/> Technology > Processes & apparatus (8 Terms) |
| Environmental chemistry | Processes & apparatus (61) | <input checked="" type="checkbox"/> Cleaning 4 | |
| General chemistry | Power & fuel topics (13) | <input type="checkbox"/> Control apparatus 4 | |
| Genetics & protein chemistry | Formed, removed, & other substances (13) | <input type="checkbox"/> Wastewater treatment 4 | |
| Physical chemistry | Construction (5) | <input type="checkbox"/> Conveyor belts 3 | |
| Polymer chemistry | Ceramics (2) | <input checked="" type="checkbox"/> Magnetic separation 3 | |
| Biology | | <input checked="" type="checkbox"/> Petroleum recovery 3 | |
| Biotechnology | | <input checked="" type="checkbox"/> Phase separation 3 | |
| Synthetic chemistry | | <input type="checkbox"/> Ships 3 | |
| Catalysis | | <input checked="" type="checkbox"/> Adsorption 2 | |
| | | <input checked="" type="checkbox"/> Centrifugation 2 | |
| | | <input type="checkbox"/> Cleaning apparatus 2 | |
| | | <input type="checkbox"/> Conveyors 2 | |
| | | <input type="checkbox"/> Cooling apparatus 2 | |
| | | <input type="checkbox"/> Drum containers 2 | |
| | | <input checked="" type="checkbox"/> Emulsification 2 | |

Technology > Processes & apparatus > 8 Index Term(s) Selected

5 OK Cancel

CAS scientists identify key terms and concepts that they include in the indexing of each record. These index terms are standardized and uniform to describe the science in the original document.

Categorize lets you find the references associated with selected indexing.

Click the **Categorize** button to launch the **Categorize** window.

- 1 Select a **Category Heading**.
- 2 Select a **Category** of interest.
- 3 To select one or more **Index Terms**, click the box to the left of a term.
- 4 In the **Selected Terms** summary box, click the blue circle with the white "X" to delete a term.
- 5 Click **OK** to narrow your search based on the selected index terms.

Tip

Add **Index Terms** to your search query. Begin with a broad research topic search. In the answer set, find a couple records that are very relevant. Look at the index terms for those documents. Then, re-run the search with these index terms added to your search query.

Manage Your Searching

The screenshot shows the SciFinder web interface. At the top, there is a navigation bar with 'CAS Solutions' on the left and 'Preferences | SciFinder Help | Sign Out' on the right. Below this is a main menu with 'Explore', 'Saved Searches', and 'SciPlanner'. A search breadcrumb trail is visible: 'Research Topic "clean of oil spill in ocean" > references (670) > refine "method (process)" (307) > keep analysis "Document Type" (68) > refine by categories'. Below the breadcrumb are several action buttons: 'REFERENCES', 'Get Substances', 'Get Reactions', 'Get Related Citations', 'Tools', 'Create Keep Me Posted Alert', and 'Send to SciPlanner'. Numbered callouts (1-12) point to these elements: 1 (Preferences/Help/Sign Out), 2 (Explore), 3 (Saved Searches), 4 (SciPlanner), 5 (Save/Print/Export), 6 (Breadcrumb trail), 7 (Get Substances), 8 (Get Reactions), 9 (Get Related Citations), 10 (Tools), 11 (Create Keep Me Posted Alert), and 12 (Send to SciPlanner).

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

2 Click the **Explore** drop-down arrow to start a new references, substances or reactions search.

3 Click the **Saved Searches** drop-down arrow to access **Saved Answer Sets, Keep Me Posted** answer sets and your search **History**.

4 Click **SciPlanner™** to open the SciPlanner workspace.

- SciPlanner is an interactive window where you can store and organize reference, substance and reaction search results.

5 Click **Save, Print** or **Export** to open a dialog window and initiate each of these processes.

- See "How to... Print, Save and Export" for more information.

6 The breadcrumb navigation trail shows each step in your current search history. Mouse over a step to see more information about it. Click a step to return to that part of the search.

7 Click **Get Substances** to retrieve substances for part or all of your answer set.

8 Click **Get Reactions** to retrieve reactions for part or all of your answer set.

9 Click **Get Related Citations** to **Get Citing** or **Get Cited** references.

10 Click the **Tools** drop-down arrow to access **Remove Duplicates, Combine Answer Sets** and **Add Tags**.

11 **Create Keep Me Posted Alert**, when active, allows you to create an automated alert based on the current search strategy.

- See "How to... Create and Manage KMP Alerts" for more information.

12 Click **Send to SciPlanner** to send selected answers to the SciPlanner workspace.

- Use it to gather information for a project, create a report or export research to share with colleagues.

CAS Customer Care Center

E-mail: help@cas.org

Phone numbers: <http://www.cas.org/contact-us/cas-customer-center>

