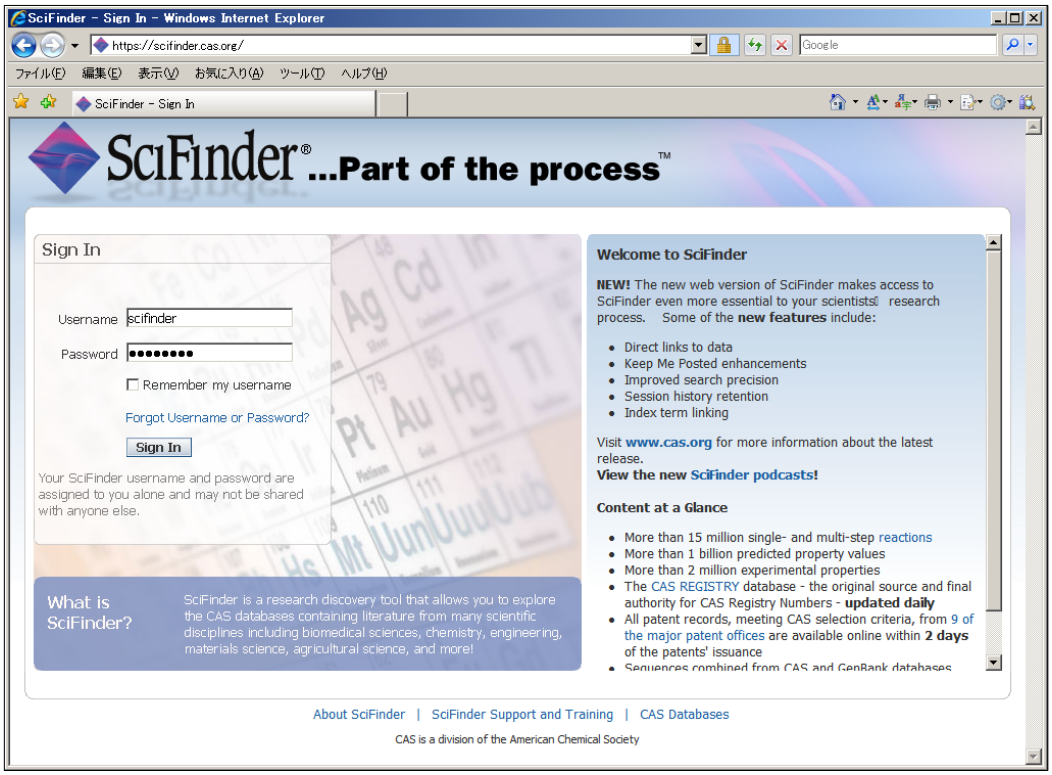
SciFinder
（Web version）
Presentation Material

January 2009 (Revised)



Note

- For personal research purposes only
- Over downloaded of data is prohibited

JAICI 社団法人 化学情報協会

情報事業部 ヘルプデスク

〒113-0021　東京都文京区本駒込6-25-4 中居ビル
TEL: 0120-003-462　FAX: 03-5978-3600
URL: www.jaici.or.jp
E-mail: support@jaici.or.jp

Table of Contents

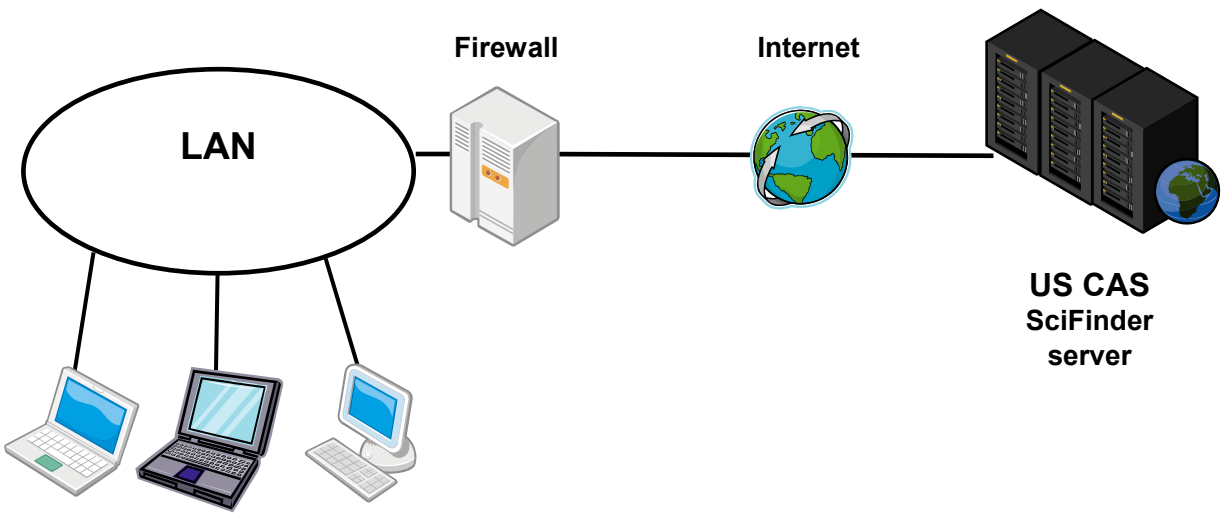
Introducing SciFinder

- SciFinder (Web version) is an online search service designed to provide scientific information focusing on chemistry such as medical, bioscience, physics, engineering necessary for scientists to use in their own research. Today, it is used as a leading edge and standard tool of research and development by researchers in enterprises, universities and research institute worldwide. Now, the Web version is released.

- With complete integration with CAS database, famous for its world's highest level of information volume, SciFinder can cover an extensive range of research. From its excellent interface, it can quickly extract the necessary information from a huge amount of information.

Usage Format

Researchers will access SciFinder using a browser from a PC that is connected to a local area network they use every day, and various processes will take place on the CAS SciFinder server through the Internet. Unlike previous SciFinder, Web version SciFinder does not require setting up such as software installation.



Information Provided by SciFinder

SciFinder can extract the necessary information from the following databases.

(As of June 2010)

Types of Information	Contents
Reference Information	More than 32 million reference information on essays and patents with abstracts since 1808 [CAplus File]*2
Chemical Substance Information	More than 54 million organic, inorganic chemical substances and more than 62 million proteins and nucleic acid information found in essays and patents since 1907. [REGISTRY File]*1
Organic Chemistry Reaction Data	Organic chemistry reaction information published in essays and patents since 1840 (24 million single step reactions and multi-steps reactions) [CASREACT File]
Reagents & Chemical Catalog	Catalog information of approximately 41 million reagents and chemicals from 1,100 types of catalog issued by 1,000 companies [CHEMCATS File]
Existing Chemical Substances Registry Data	Existing chemical substances registry and various regulatory information from Japan, US, EU, Canada, Korea, Australia, Switzerland, The Philippines, Israel, and New Zealand [CHEMLIST File]
Medical References Data	More than 18 million information on essays with abstracts since 1947 [MEDLINE File]

*1 Contains all chemical substances listed in the CA (Chemical Abstracts) Chemical Substance Index and all nucleic acid registered in GENBANK.

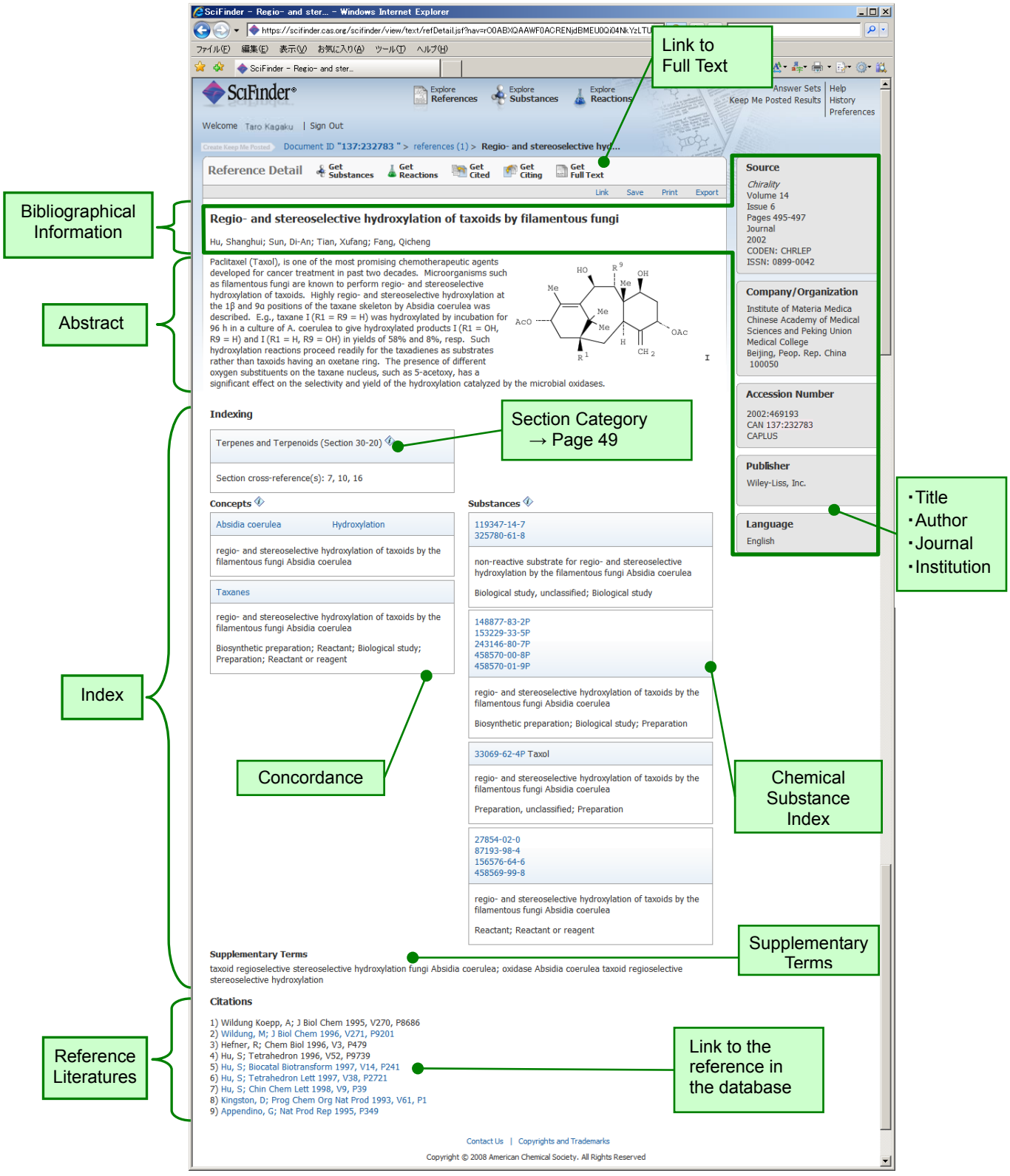
*2 Contains all reference listed in CA, and all articles from periodicals using CA as its information source (approximately 100 million journals) including approximately 19 million major journals whose essays contained little chemical elements since 1994. The information from these major journals can be look up using SciFinder within a week of its arrival at CAS.

In addition, concerning patents issued in major countries (Japan, the US, Germany, Great Britain, France, Russia, European Patents, Canada, PCT application), along with extensive listing of patents outside of CA contents, the bibliographic information and abstract can be searched after 2 days of announcement, and the index within 27 days (CA content patents only).

See the following sites for major journals that accepted publications (See also p 48).
http://www.cas.org/expertise/cascontent/caplus/corejournals.html
Information published from these 1,900 journals dominated approximately 50% of this database.

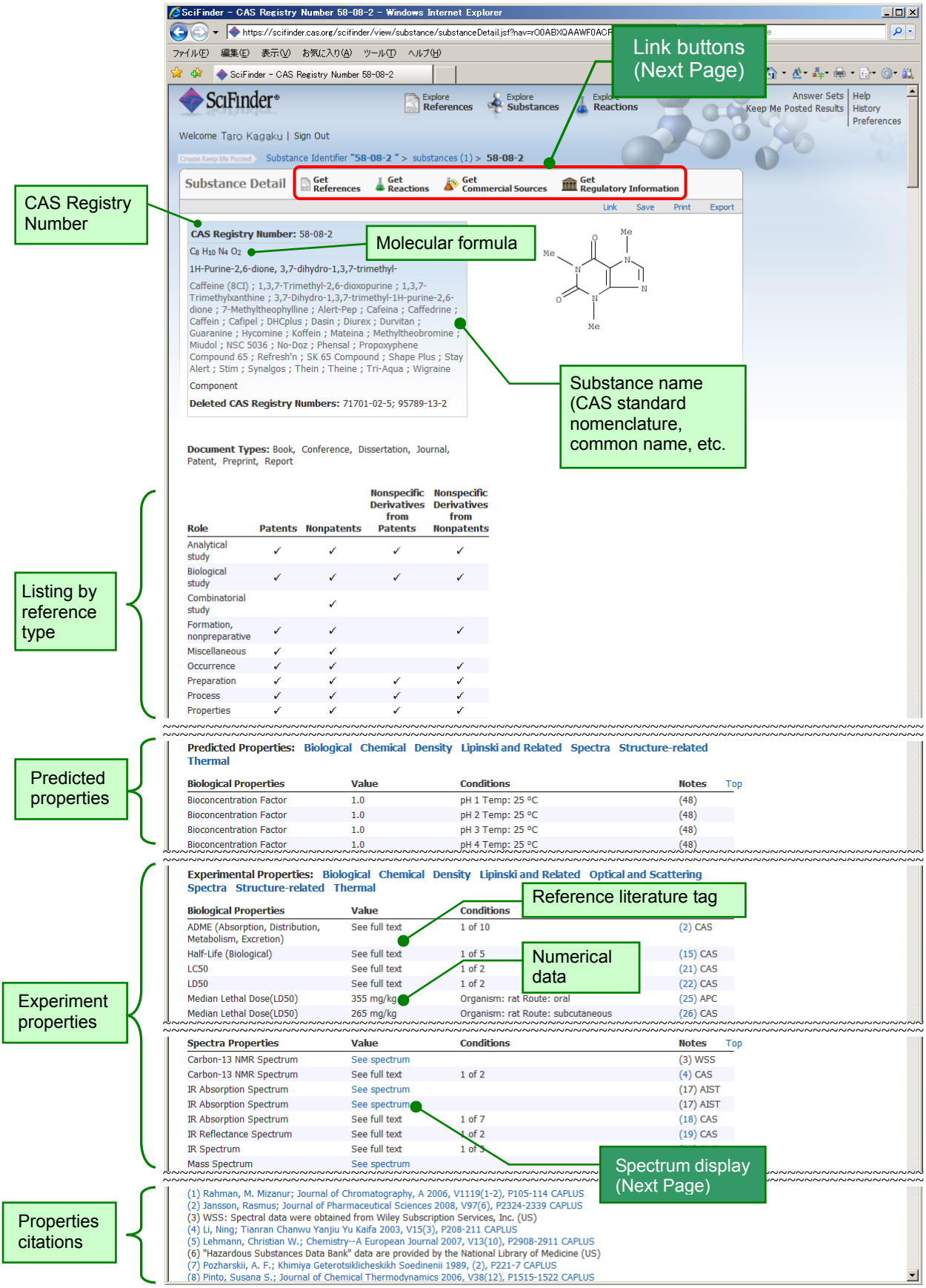
Record Samples

◆ Reference Details (CAplus File)



Record Samples

◆ Substance Details (REGISTRY File)



Record Samples

【Link buttons】

Get References **Link button to references → page 4**

Get Reactions **Link button to reactions → page 7**

It is possible to search for reactions the substance involved in.

Get Commercial Sources **Link button to catalog information → page 8**

It is possible to view the catalog information (supplier, price, unit packaging) immediately.

Get Regulatory Information **Link button to existing chemical substance registry and regulatory information → page 9**

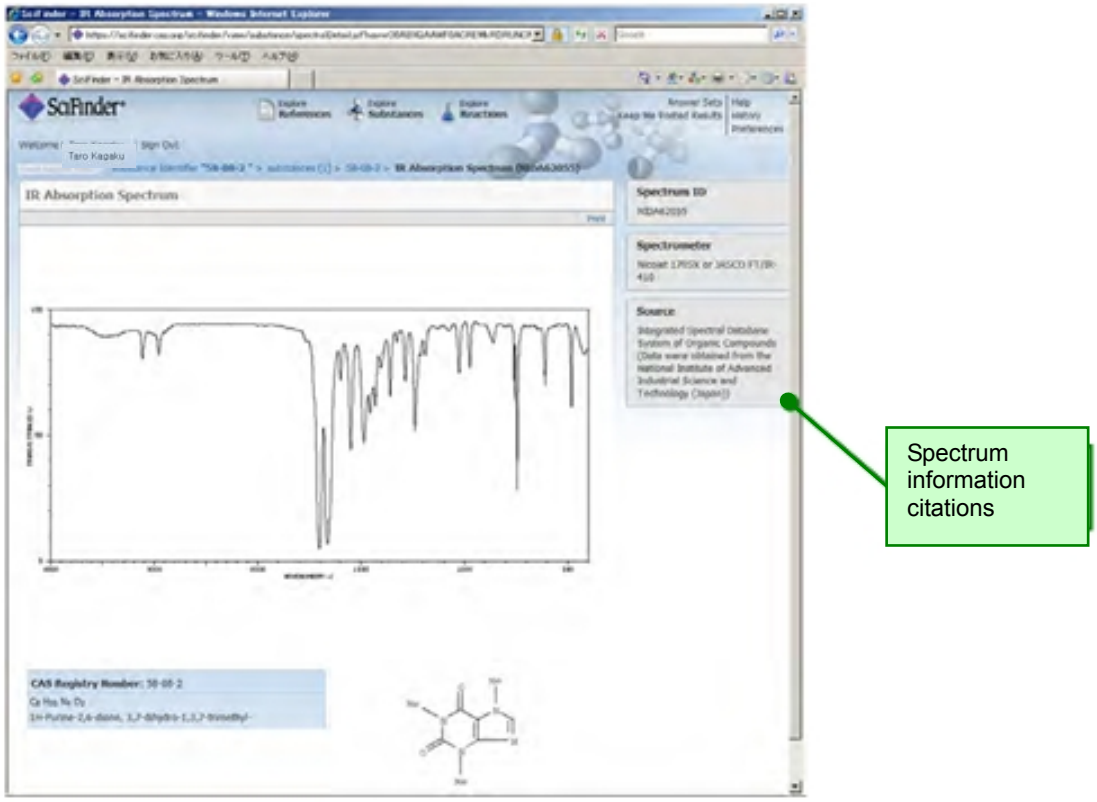
It is possible to view regulatory information in various countries or regions, and existing chemical substance registry information (such as Japan Chemical Council No., or EINECS No.) in either one of these countries - Japan, US, EU, Canada, Korea, Australia, Switzerland, The Philippines, Israel, Taiwan and New Zealand. However, the Registry information is limited to chemical substances assigned with CAS Registry Number, so with only this information, it is not possible to determine the substance listing in the Japanese and Korean Registry where there are many substances with general names.

【Spectrum Display】

Spectrum will be displayed by clicking the "See spectrum" in properties.

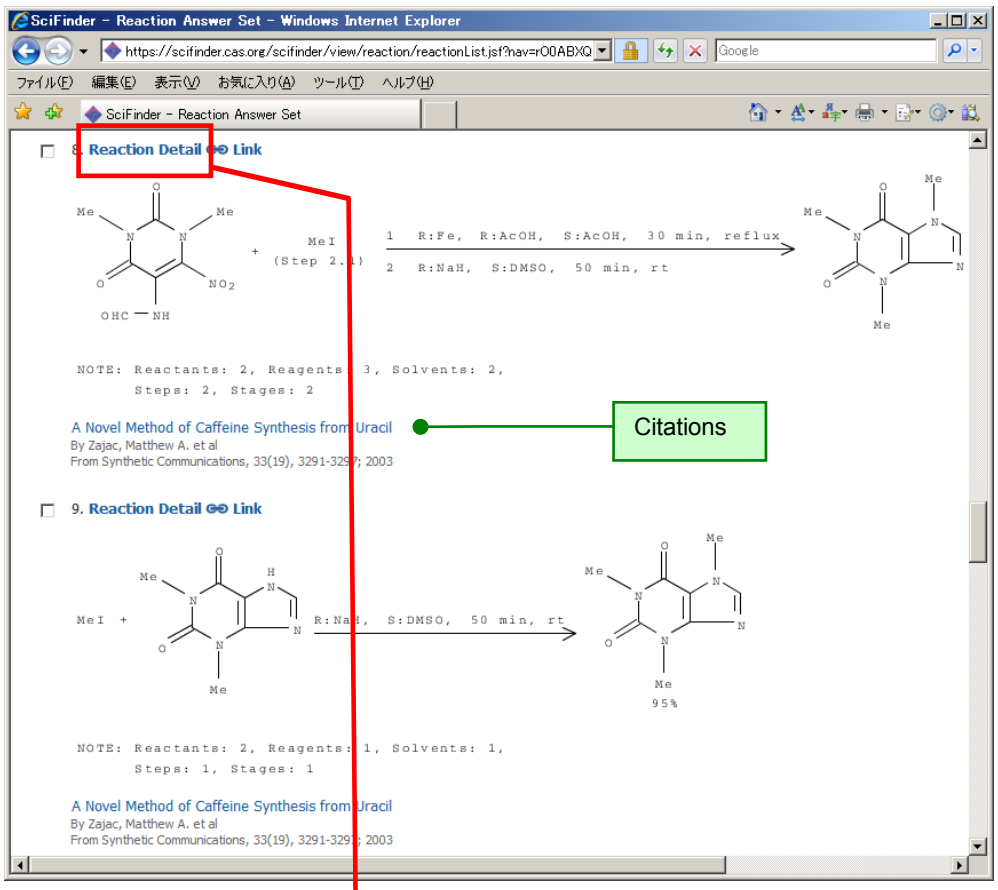
<Currently displayed spectrum values>

- ^{1}H-NMR
- ^{13}C-NMR
- ^{19}F-NMR
- ^{29}Si-NMR
- ^{31}P-NMR
- IR
- MASS
- Raman

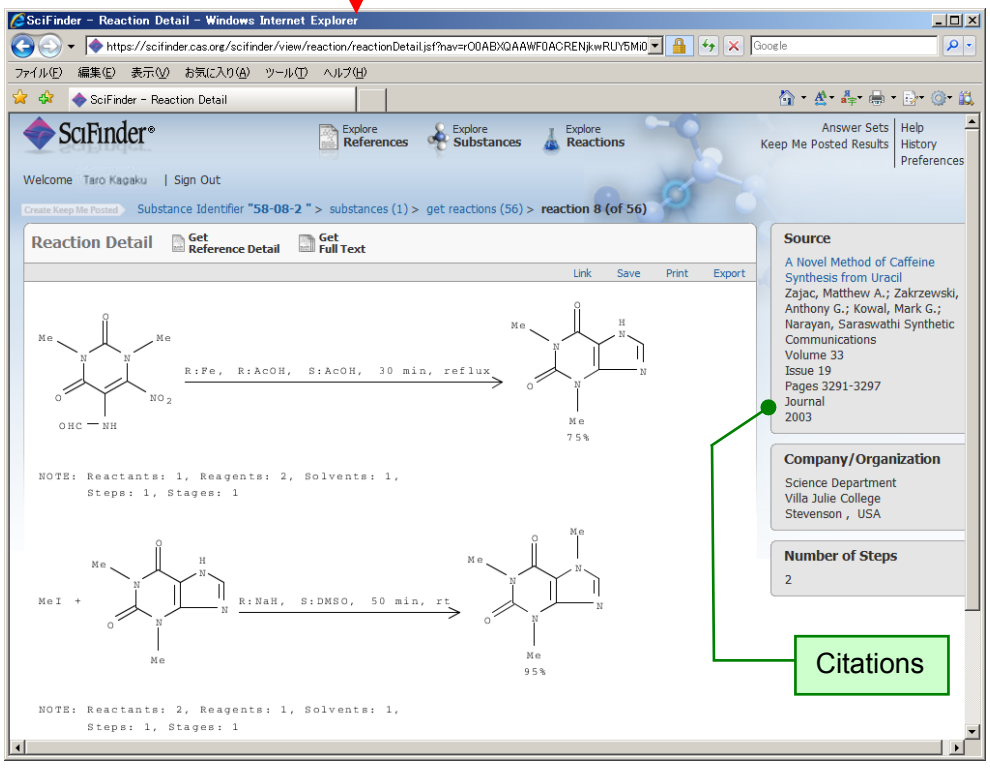


Record Samples

◆ Chemical reaction information (CASREACT File)

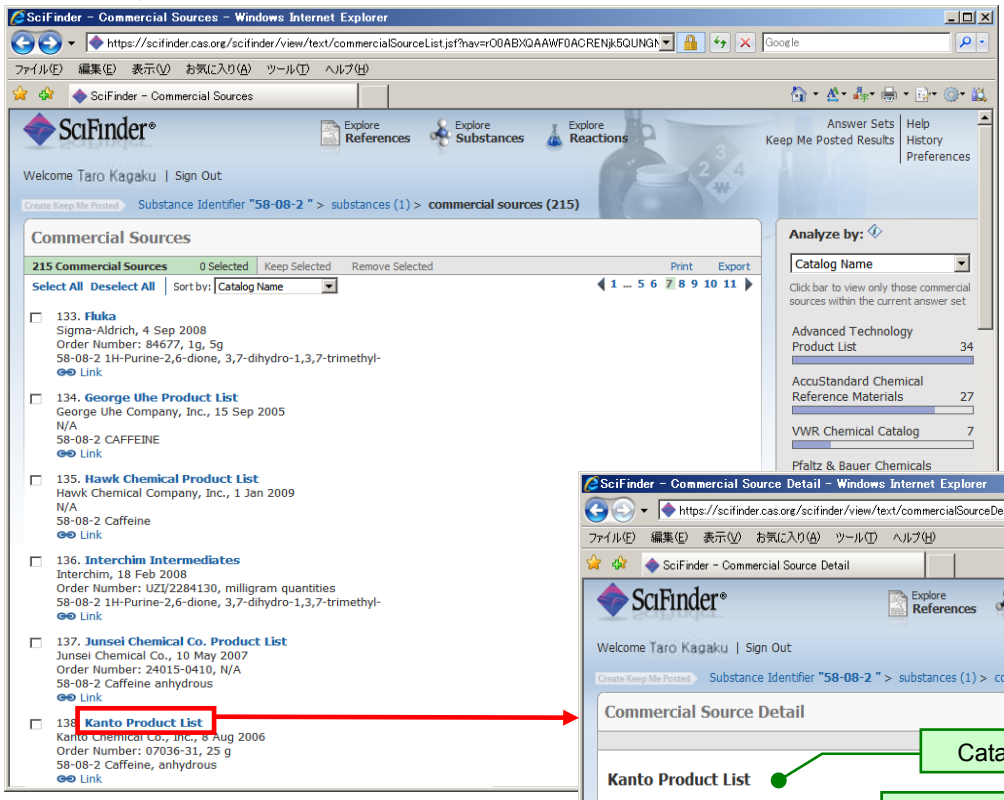


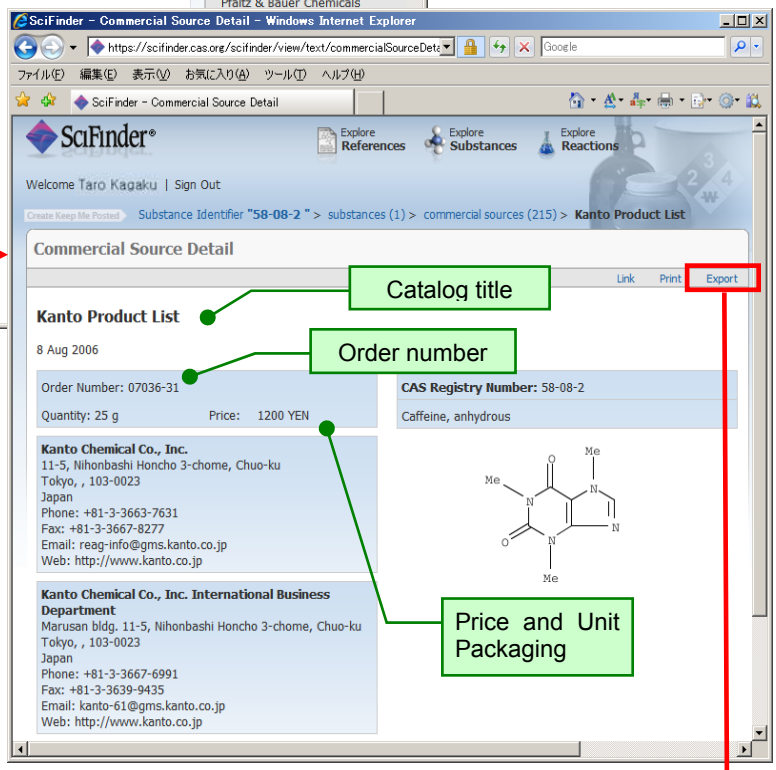
【Intermediary steps display】



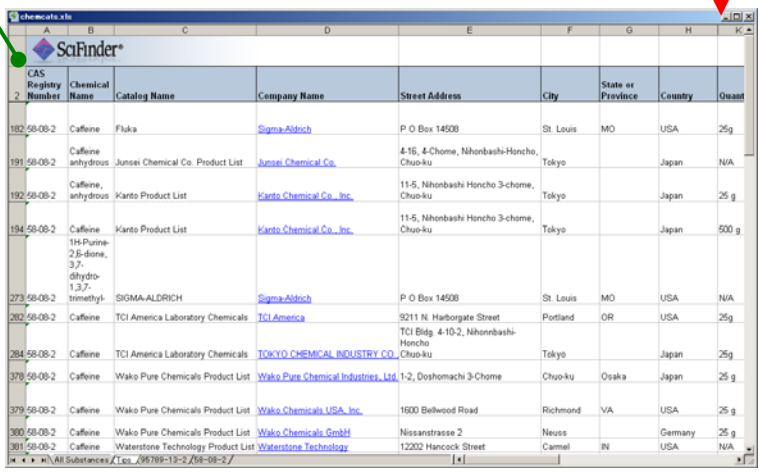
Record Samples

◆ Catalog Details (CHEMCATS File)





Download in Excel format



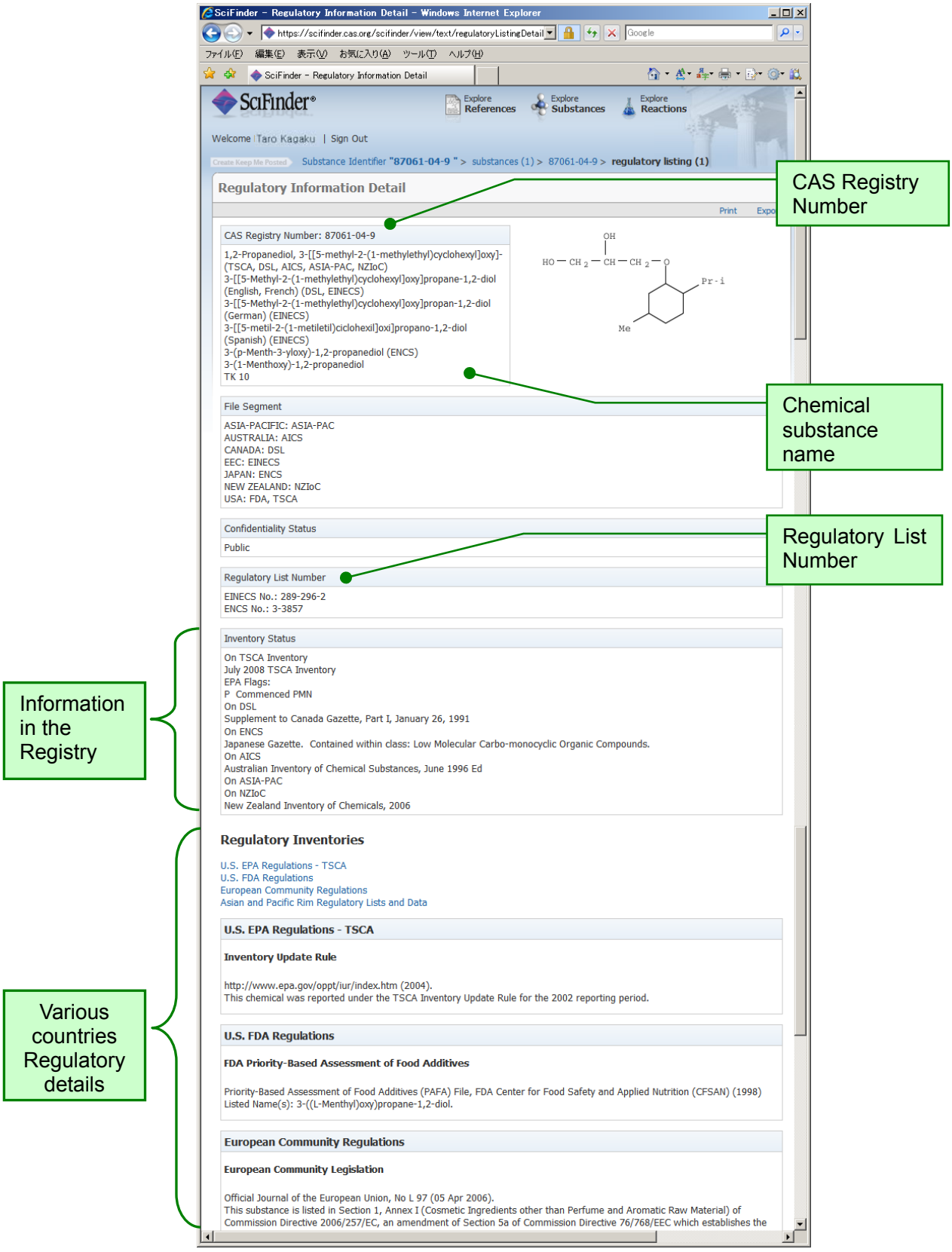
* Bulk display multiple substances is also available

Data upload to catalogs is free and available.
Contact our Information Technology Department at TEL: 03-5978-3606.

* http://www.jaici.or.jp/chemcats/chemcats.htm

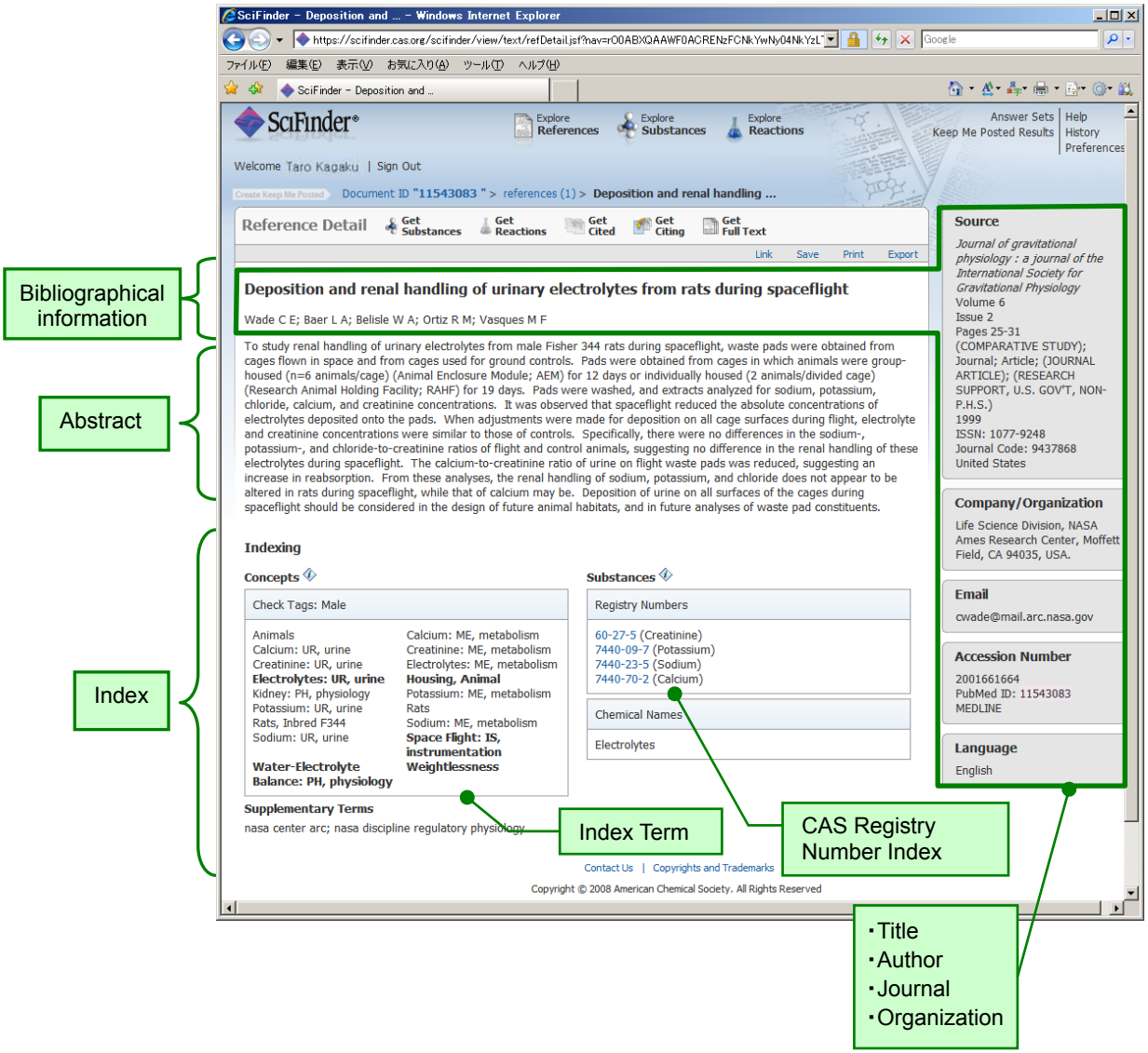
Record Samples

◆ Existing Chemical Substances Registry Details (CHEMLIST File)



Record Samples

◆ Reference Details (MEDLINE File)

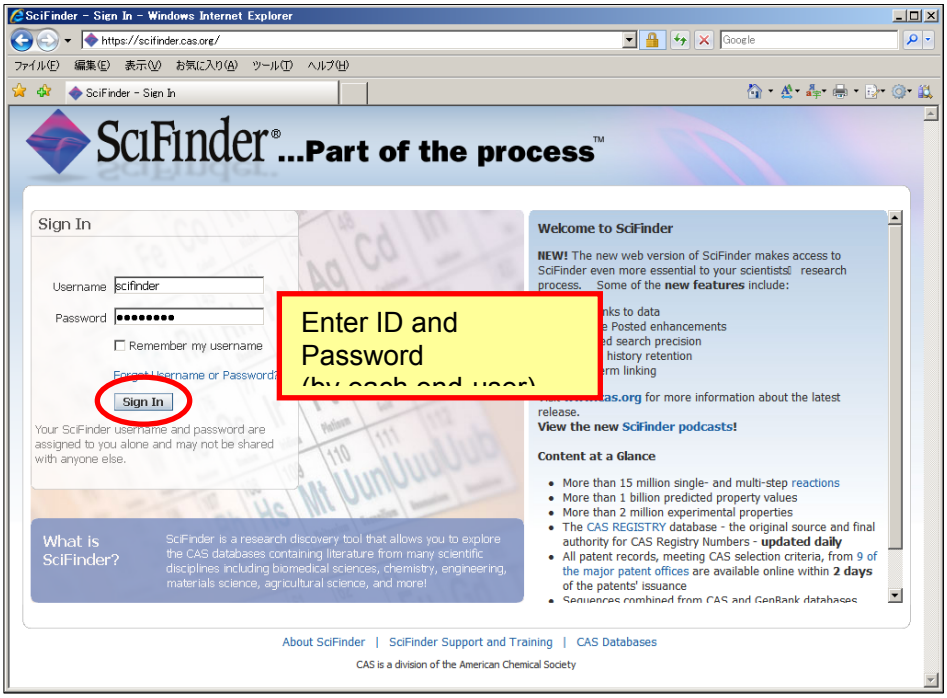


Accessing SciFinder

◆ Accessing SciFinder (Web version)

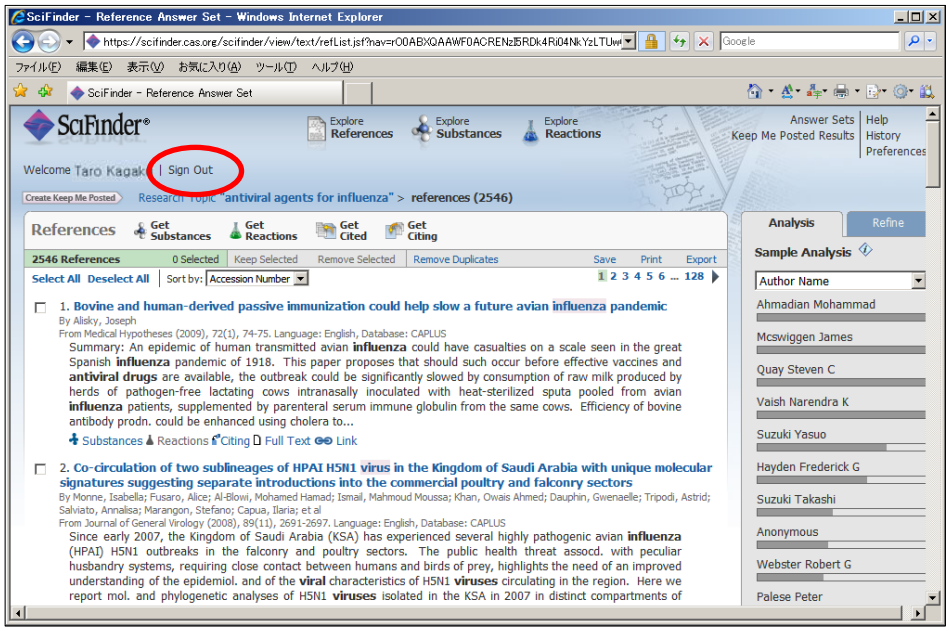
Access URL： https://scifinder.cas.org

Click the Sign in button after entering your ID password when prompted in the screen below. Contact your system administrator for ID and password. System requirements are listed on the last page of this document.



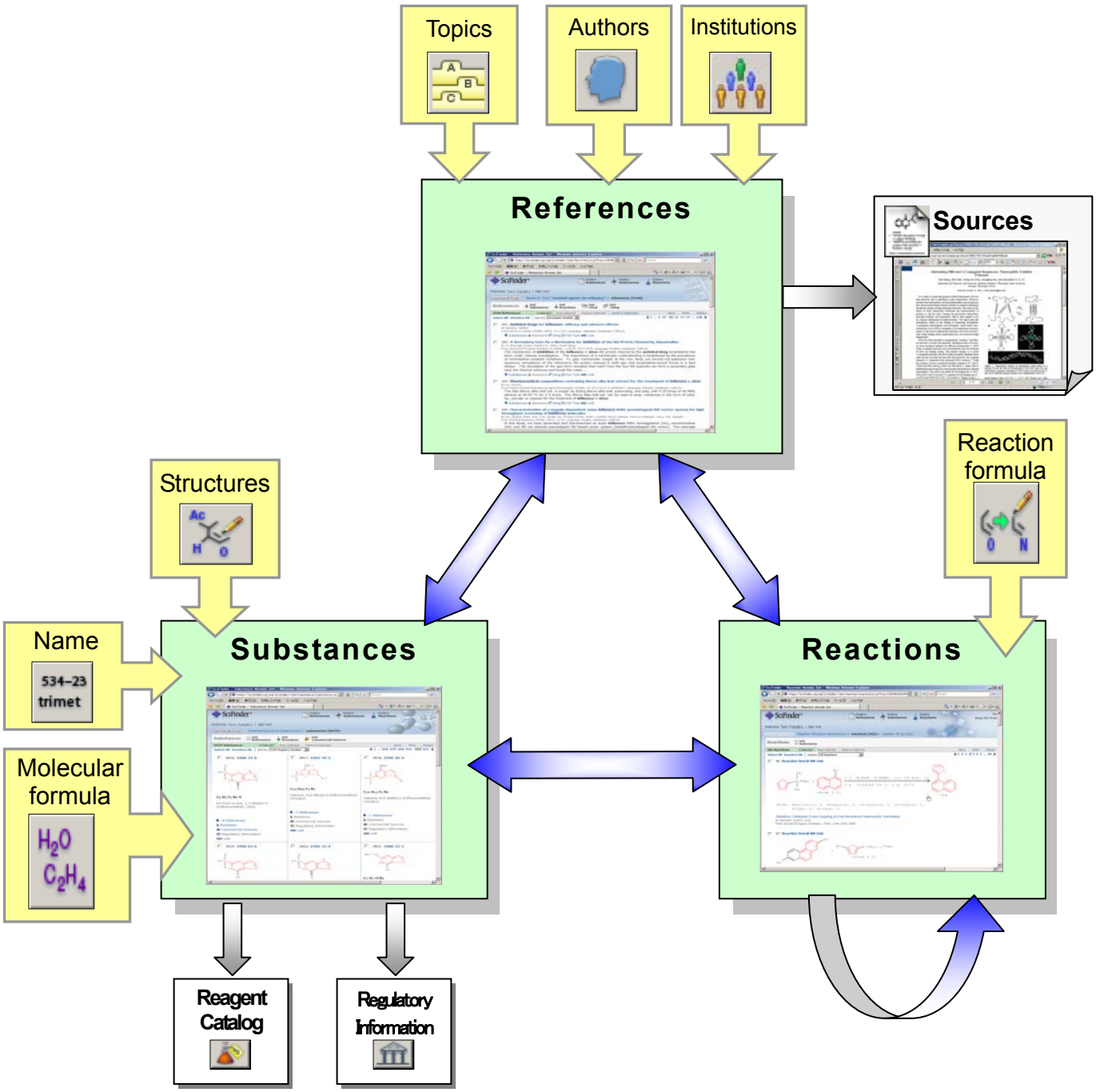
◆ Existing SciFinder (Web version)

Click “Sign Out” when you exit.



SciFinder search overview

- SciFinder Search overall image



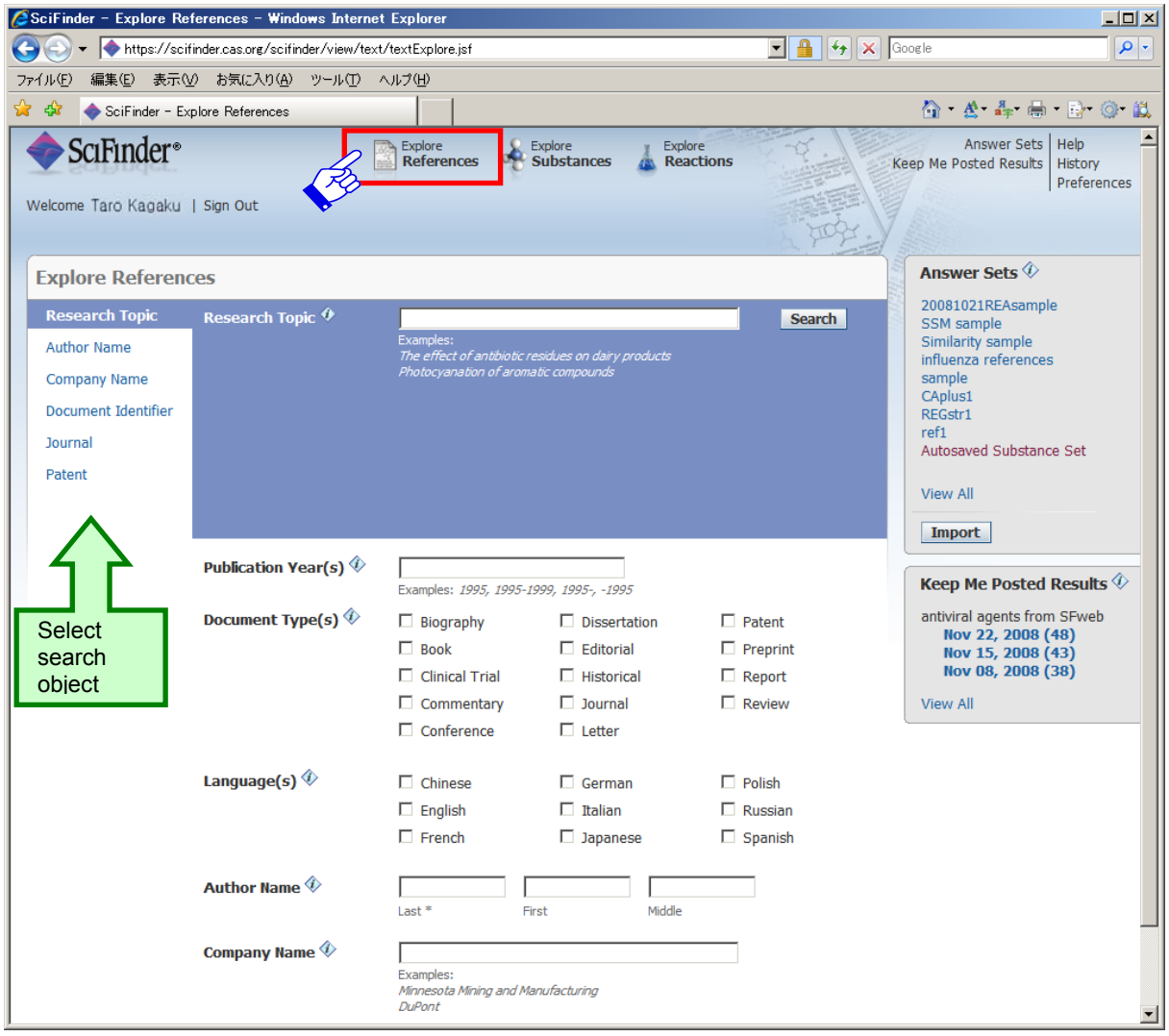
* As at December 2008, array search and journal table of content browsing cannot be used.

SciFinder search overview

◆ SciFinder search initial screen:

- ➢ You can find the required information on chemical substances, essays and patents for your research in SciFinder.
- ➢ First, select search object (references, substances and reactions).

【Reference search initial screen】

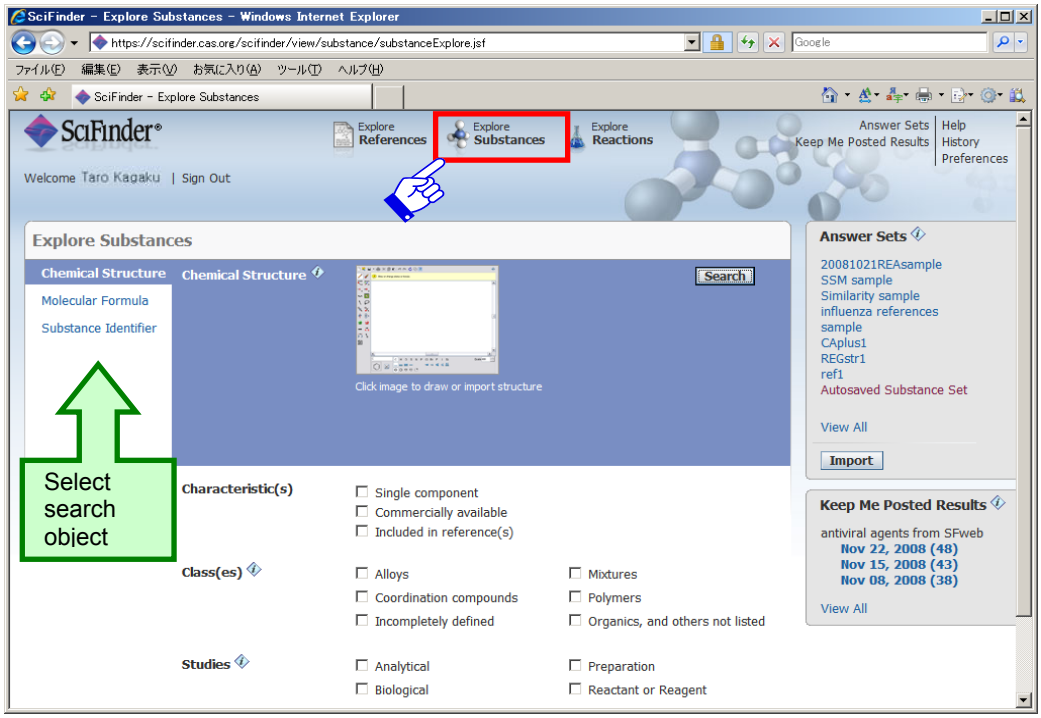


Reference search object

- Research Topic → Search research topics (keywords) P.15
- Author Name → Search authors P.37
- Company Name → Search companies (universities) P.38
- Document Identifier → Search patent numbers
- Journal → Search from reference information P.38
- Patent → Search from patent information

SciFinder search overview

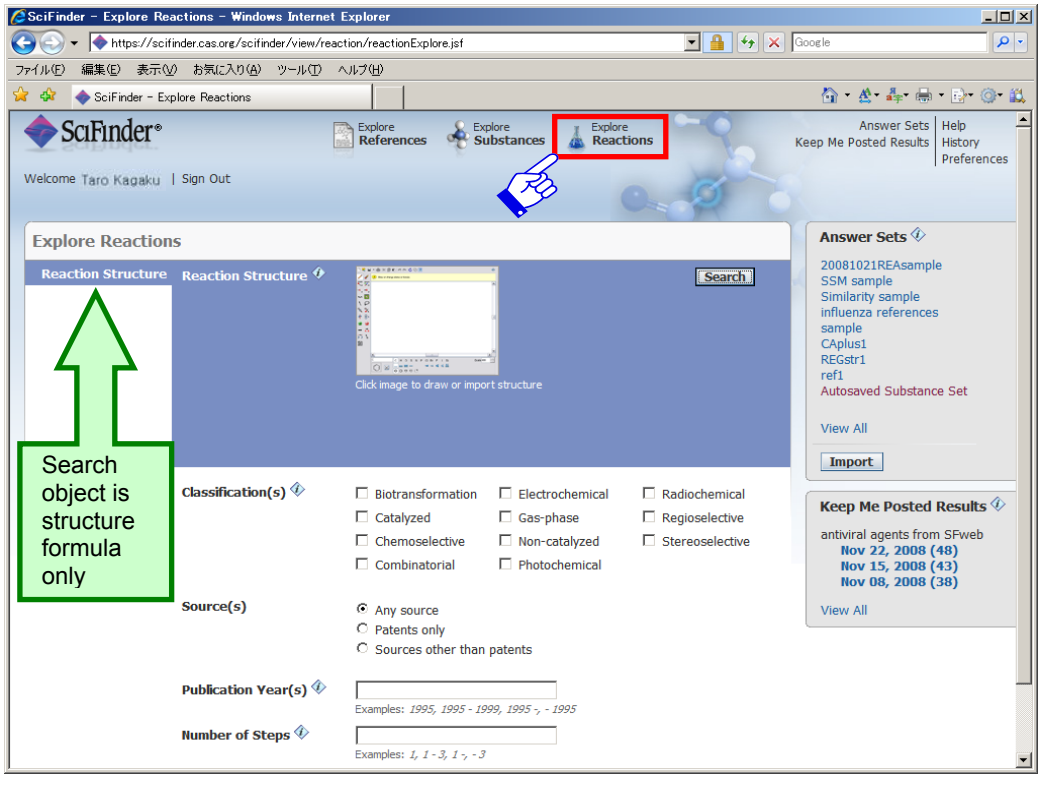
【Chemical substance search initial screen】



Substance search objects

- Chemical Structure → Chemical structure P.27
- Molecular Formula → Molecular formula P.26
- Substance Identifier → Chemical substance name, CAS Registry Number P.24

【Chemical reaction search initial screen】 P.32

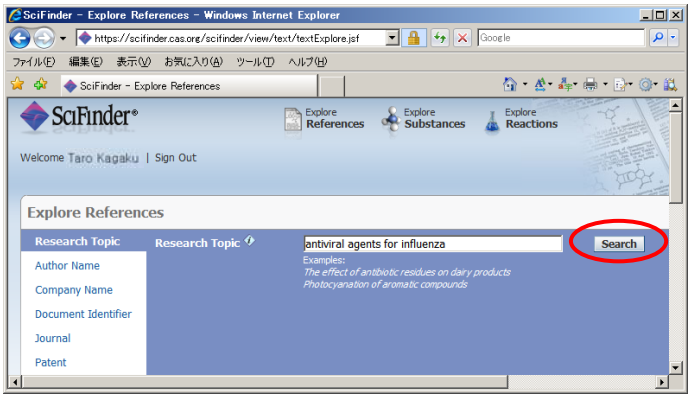


Research Topic Search

◆ Research topic search (keywords) <CAplus file, MEDLINE File>

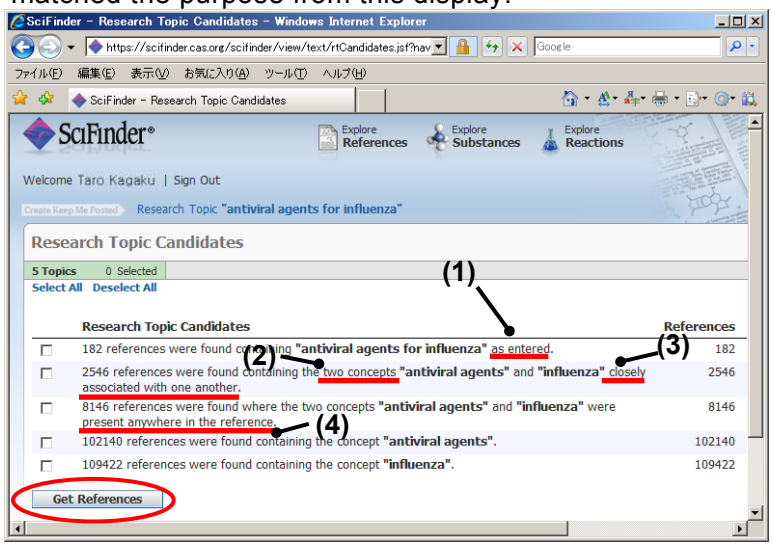
➢ The look cup can be done by just entering appropriate English phrase expressing the search topic.

① Enter the relevant keywords in English. In this example, we are searching for "***Antiviral agents for influenza***".



* Not case sensitive.
* Other than preposition, AND, OR and NOT can be used as keywords conjunction.
* Do not use "?" or "*" symbols in queries

② The number of results is displayed according to a number of search formulas, from high relevancy search formula to open search formula. Select the search formula that matched the purpose from this display.



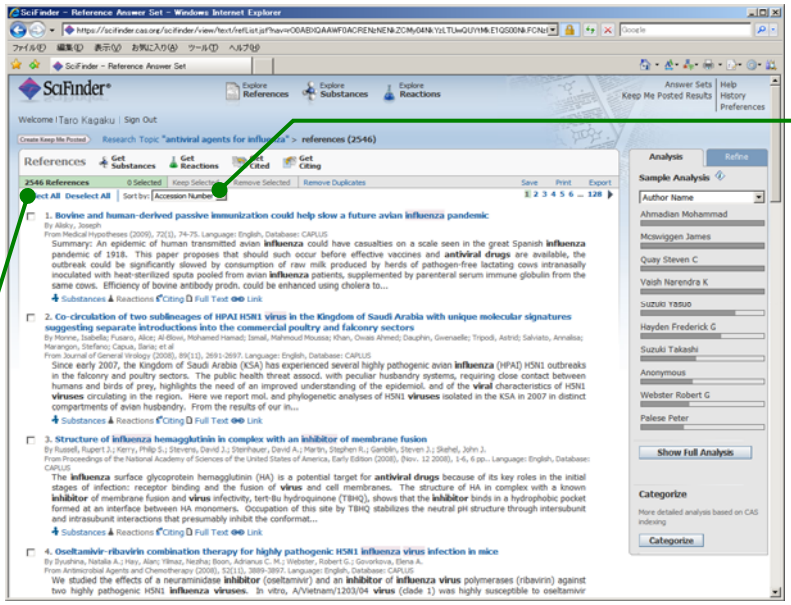
(1) "antiviral agents" and "influenza" are lined up with a space between them

(2) Taking into accounts synonyms, different word forms (discrepancies due to part of speech, singular, plural, etc.) abbreviation, and difference in American and British spelling.

(3) Within the same sentence (In the title, in abstract sentences, in the same index, within the range of supplementary term separated by semicolon)

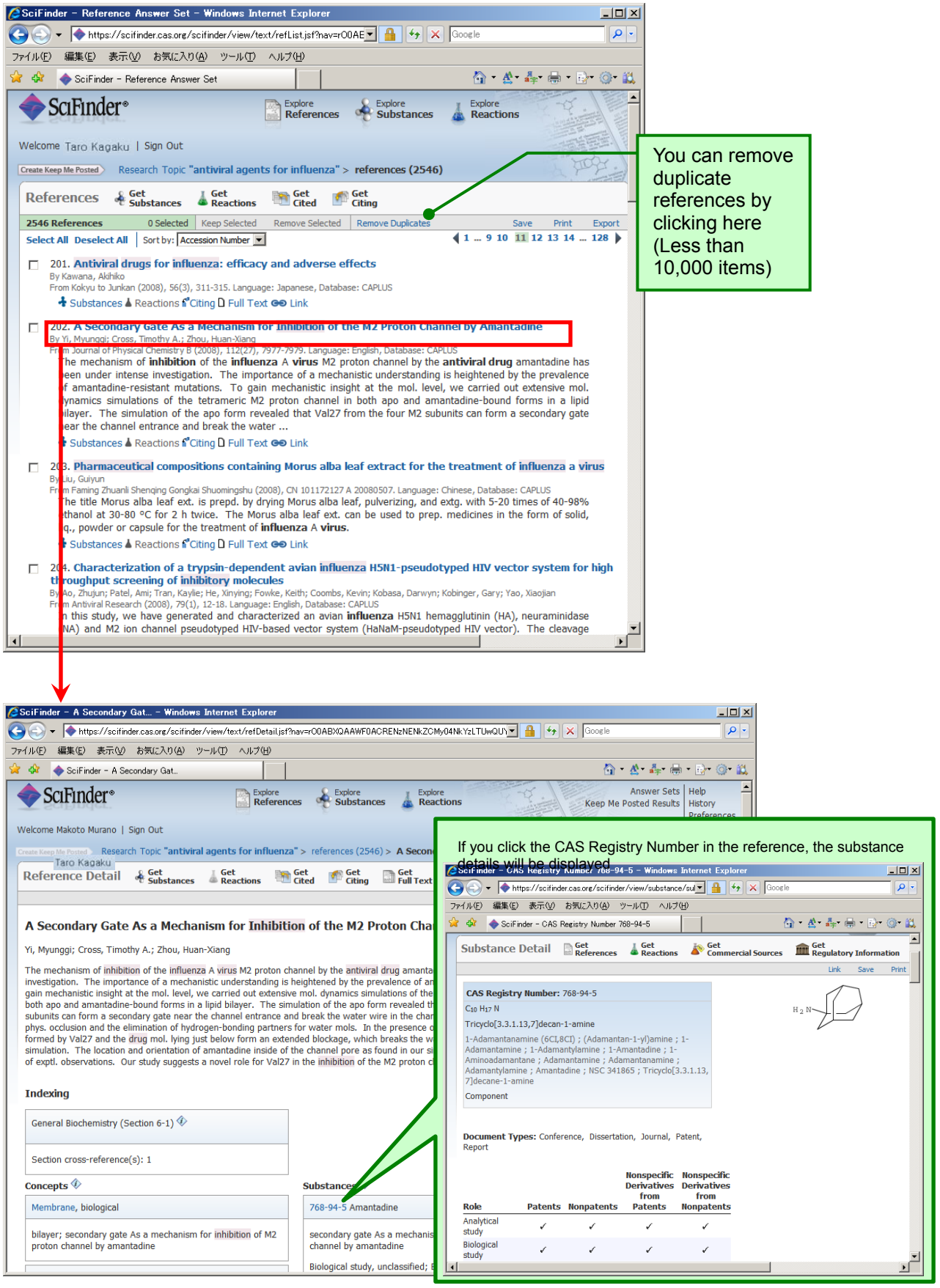
(4) Within the same record (Title, abstract, index, supplementary terms)

③ Once the "Get References" button is clicked, the relevant reference list is displayed.



Research Topics Search

- Click the title to display detailed information on abstract and such.



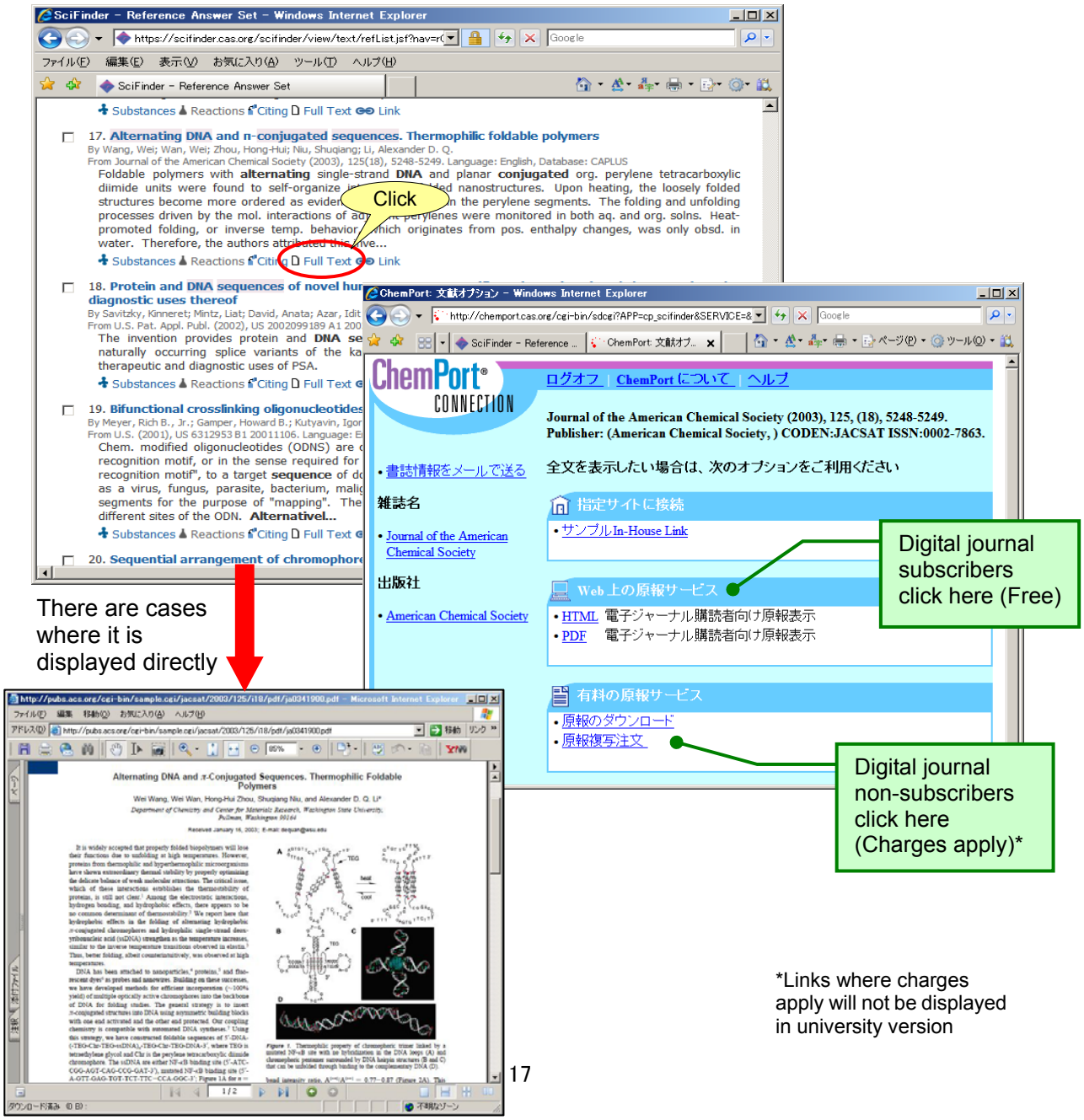
Linking to Original Reference

■ When you click the Full text (document) link button in the acquired literature list, the following will be available to you via ChemPort.

- Essays published in approximately 7,400 journals delivered in digital journal published by major technical publishers (360 publishers) such as American Chemical Society, Royal Science College, Academic Press, Elsevier, and Wiley are available free of charge for digital journal subscribers only in HTML and PDF format. The latest list of publishers linked her can be verified at ChemPort home page (http://chemport.cas.org/.

- Even if you are not a subscriber, you can access essays in journals published by 14 publishers such as ACS, RSC, Springer-Verlag, and Karger by paying its individual fee (Pay-per-view). In this case, the fee will be invoiced in the following month (Only for industrical version).

- For a part of journal and patent detailed description, you can view the full text directly without going through ChemPort Connection screen.



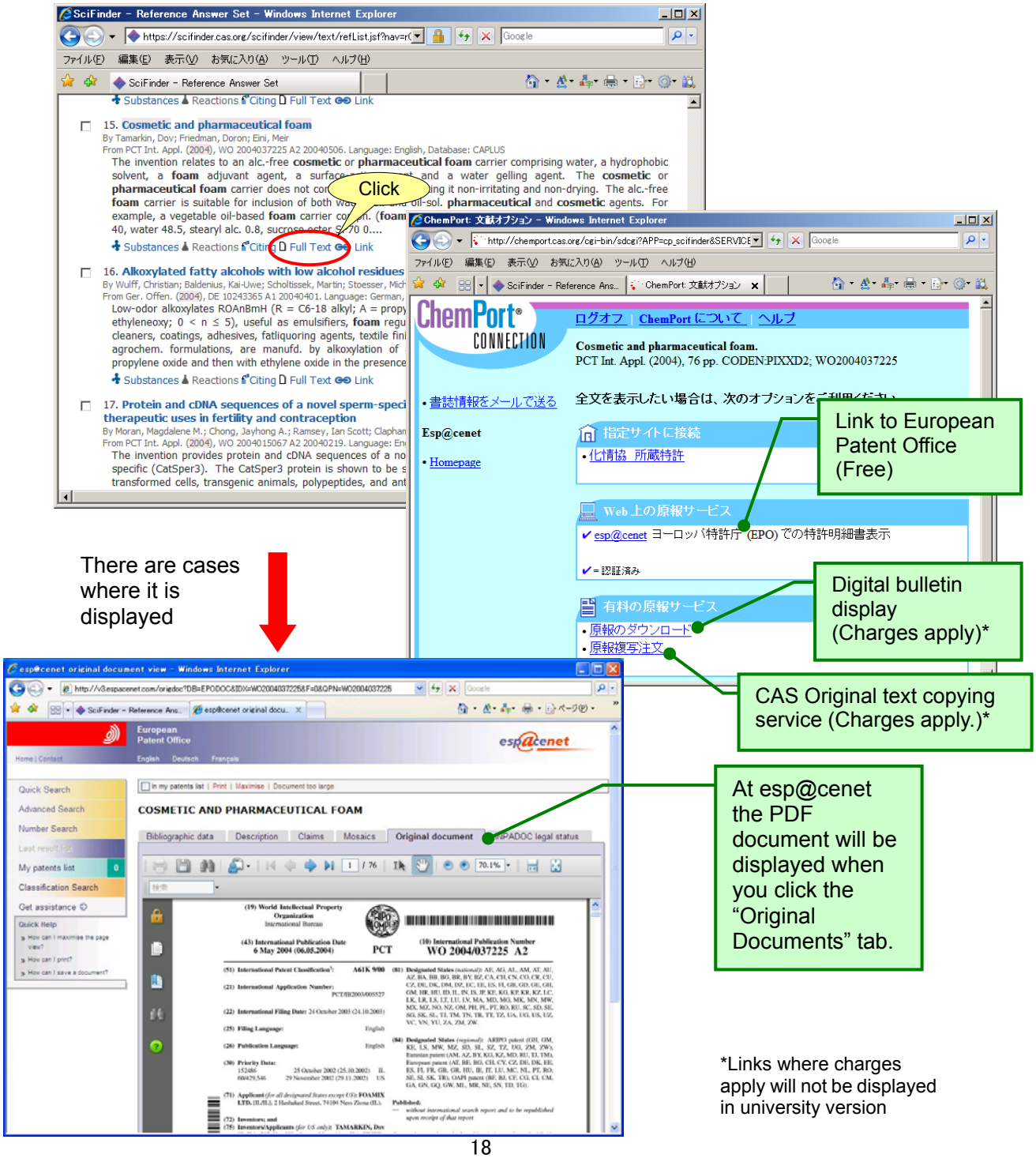
*Links where charges apply will not be displayed in university version

Linking to Original Reference

- From the US Patent and Trademark Office (USPTO, http://www.uspto.gov/, HTML and TIFF format), European Patent Office (EPO, esp@centet, PDF format), Japan Patent Office, Korea Patent and Information Institute, Chinese Patent Office (State Intellectual Property Office, SIPO) home page, you can view patent details from the US, Japan, Switzerland, Germany, EP, France, the UK, PCT, Korea and Chine free of charge.

- MicroPatent's Global TOPS Subscirbers will be able to view the whole document of pat ent details provided by MicroPatent free of charge.

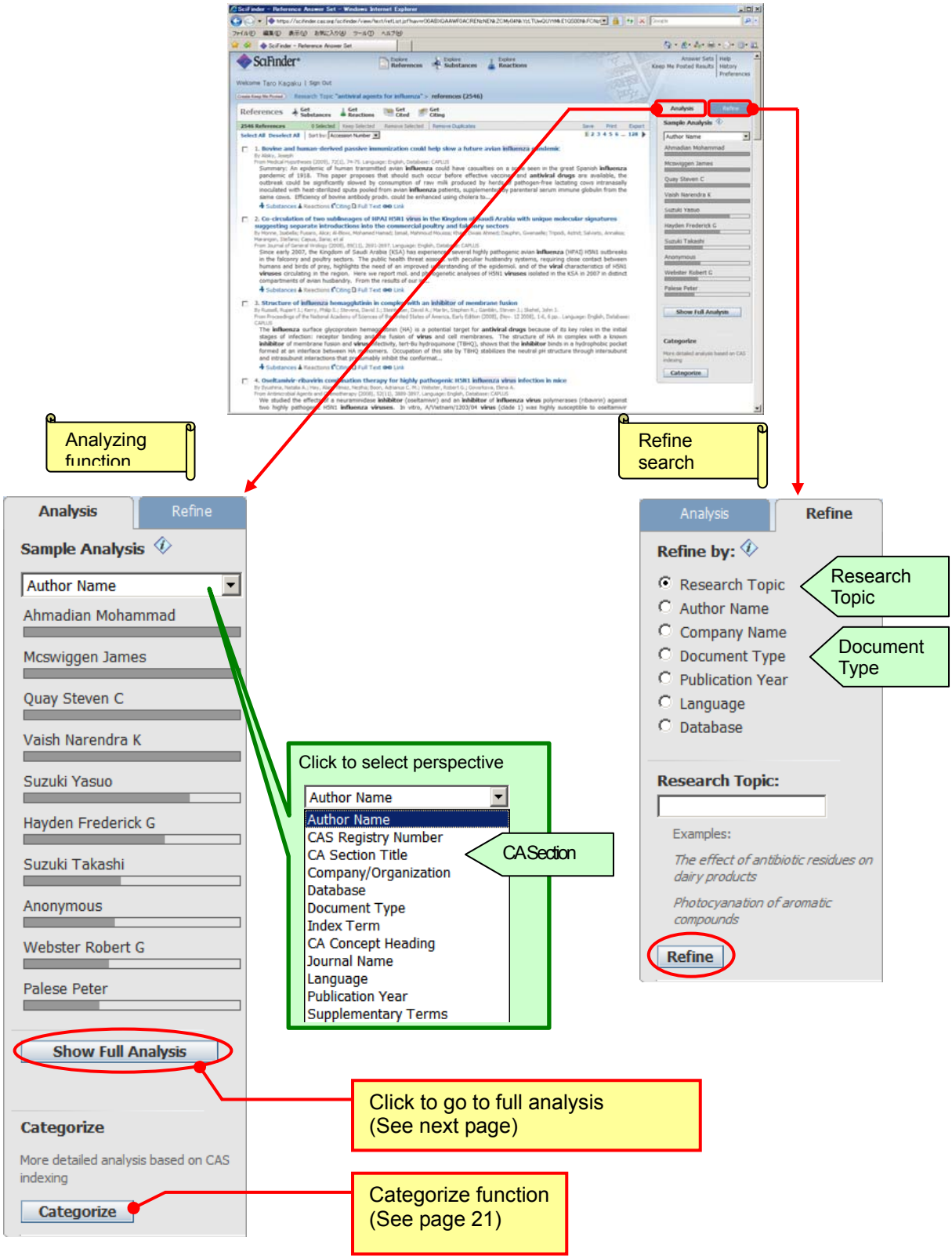
- — A portion of patent details can be viewed for a certain fee (Pay-per-view). In this case, the charge will be invoiced in the following month (industrial version only).



*Links where charges apply will not be displayed in university version

■ A function that restrict and analyze search result (Analyze/Refine)

➢ After analyzing result list of references acquired by various searches based on 12 types of data, if necessary, the list can be restricted to these 12 types of data or refined to 7 types of perspectives.

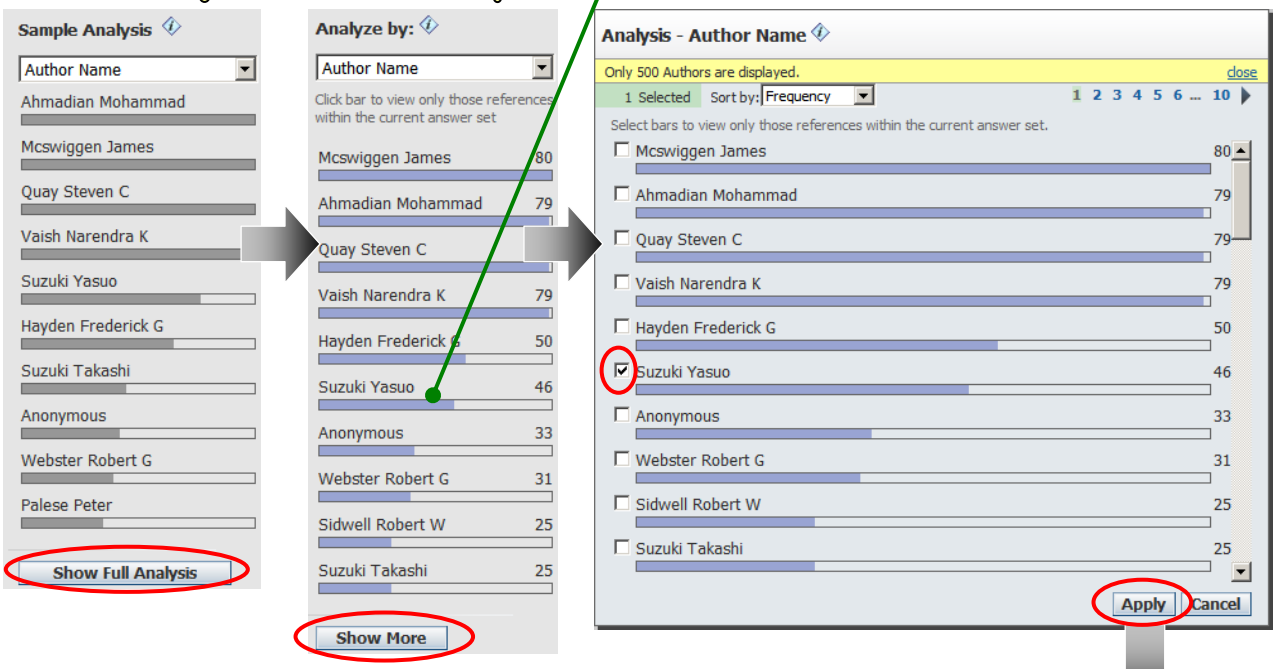


Restrict and Analyze References Results Function

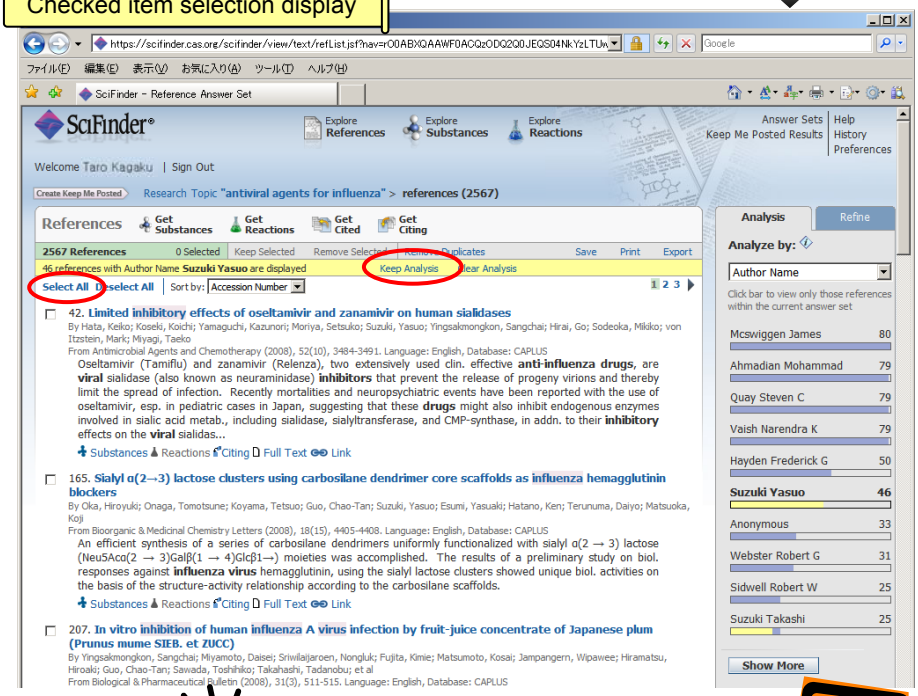
Sample analysis

Full analysis

It is possible to click and select display of relevant items



Checked item selection display



Hints

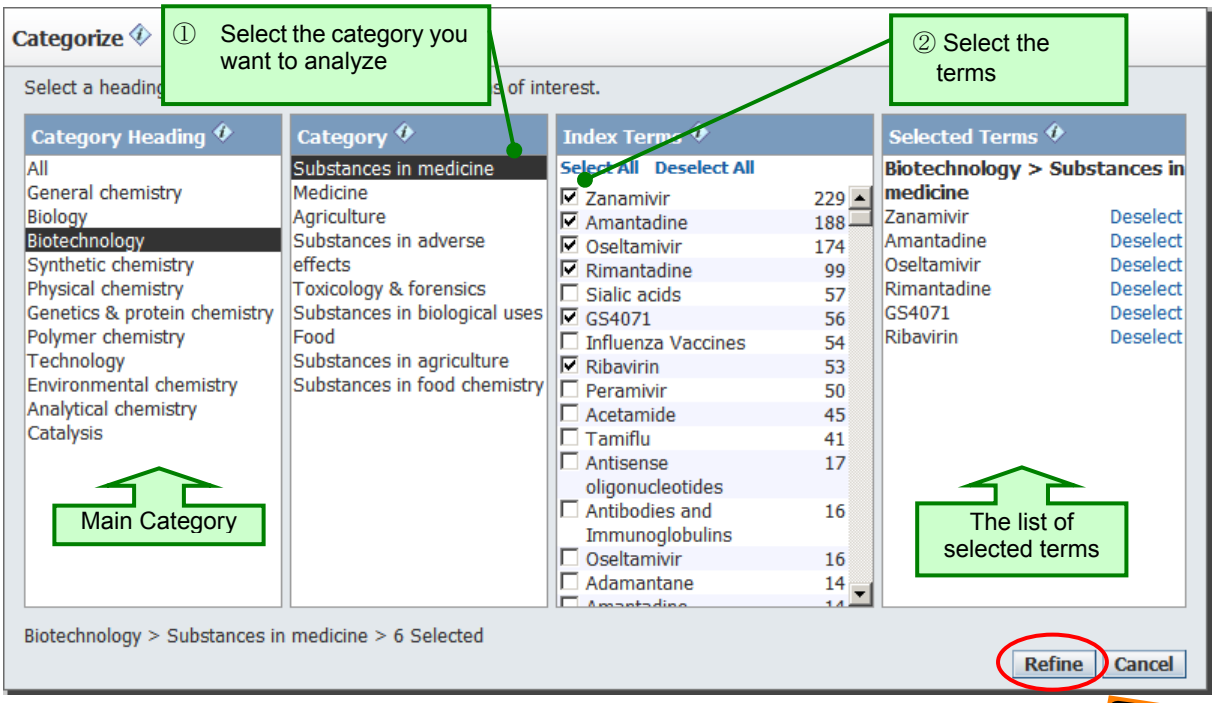
After selection display of checked items, to perform further analysis or refining, create a list using "Keep Analysis".

System limitation information

- Maximum analysis data is 20,000 hits
- Sample analysis is not displayed in a list of less than 1,000 hits
- In full analysis detailed display, a maximum of 500 items will be displayed in frequency sorting

■ Categorize Function

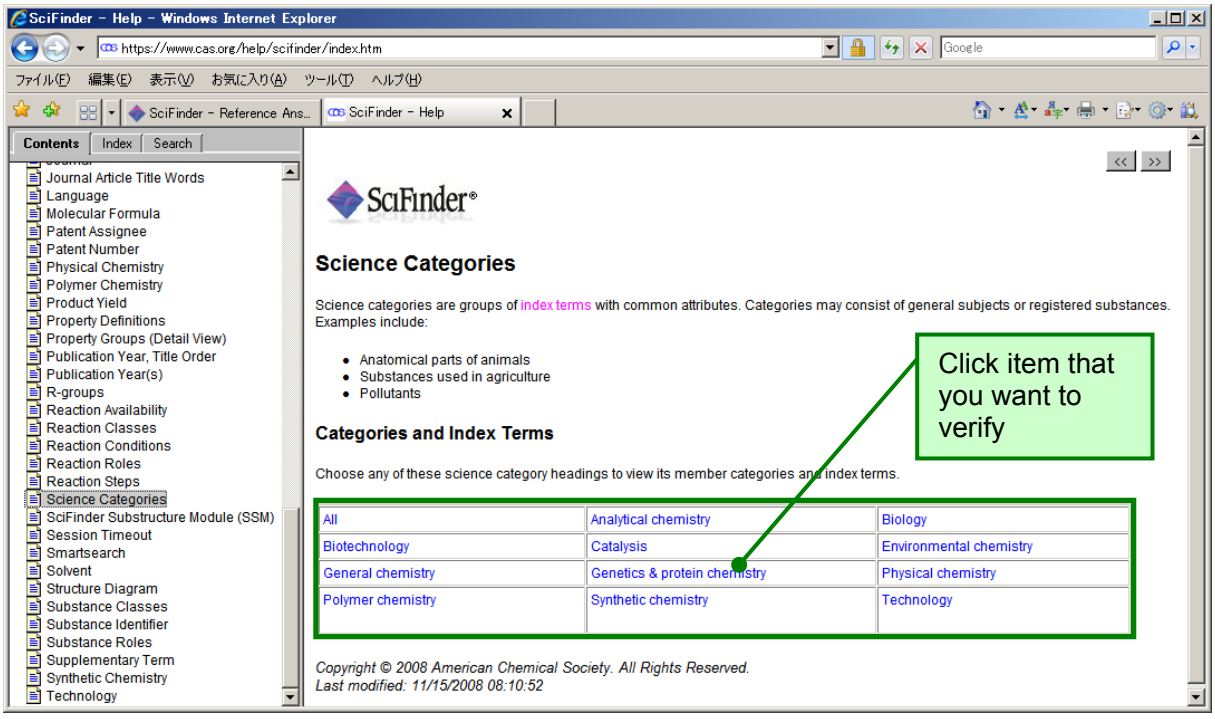
➢ Indexed terms and chemical substances can be analyzed for reference hit list acquired from various searches.



♣ System limitation information

・Maximum data included in the analysis will be 15,000

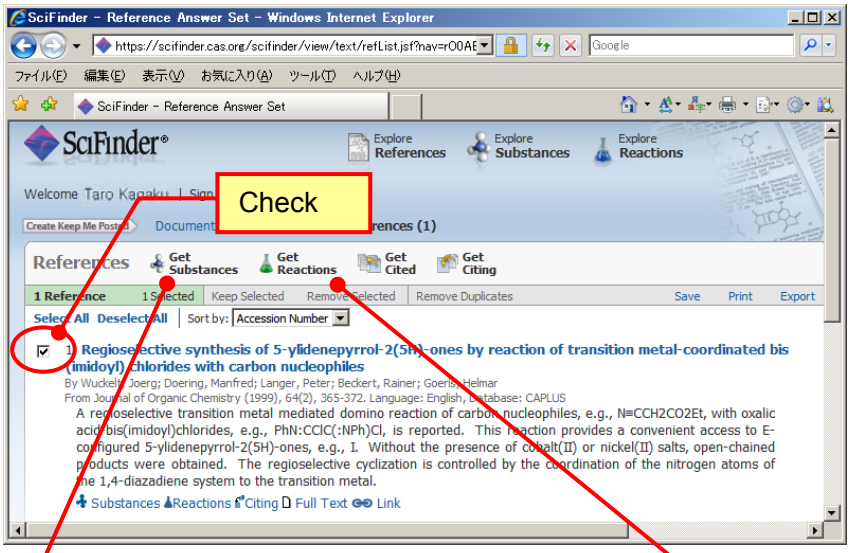
*See Help for Category definition.

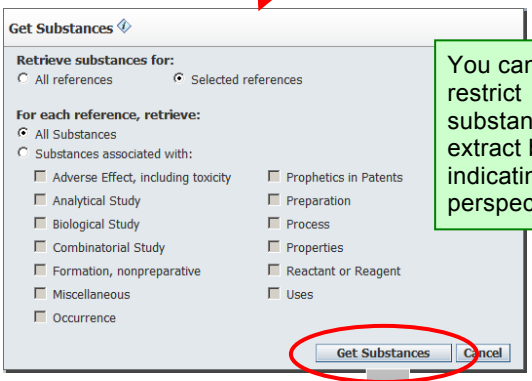


Extracting related information from reference results

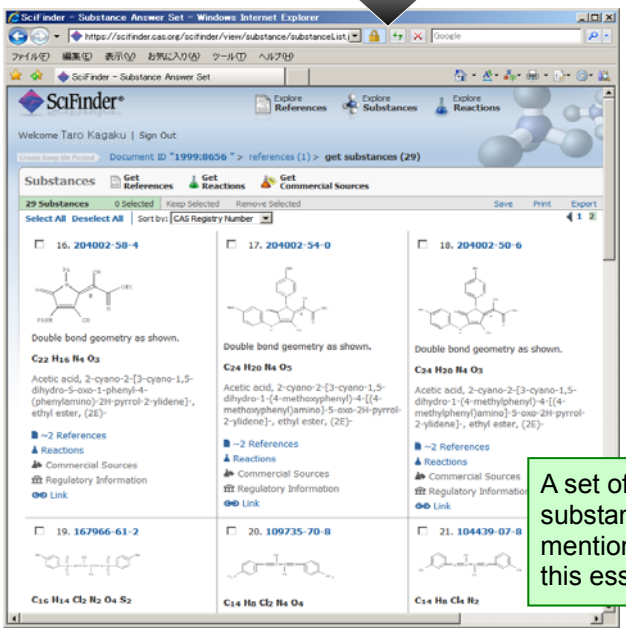
■ Related information extracting function

➢ Allowing you to extract related substances and reaction information from references.

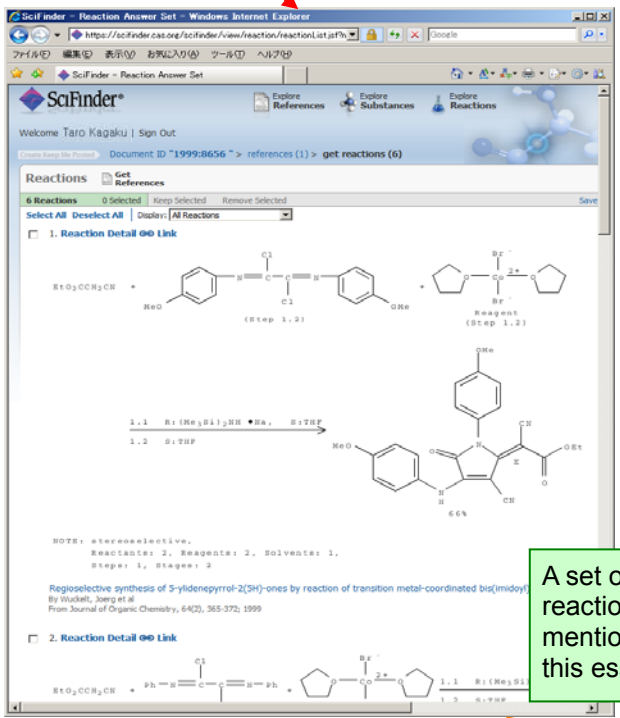




You can also restrict substances to extract by indicating perspective.



A set of substances mentioned in this essay



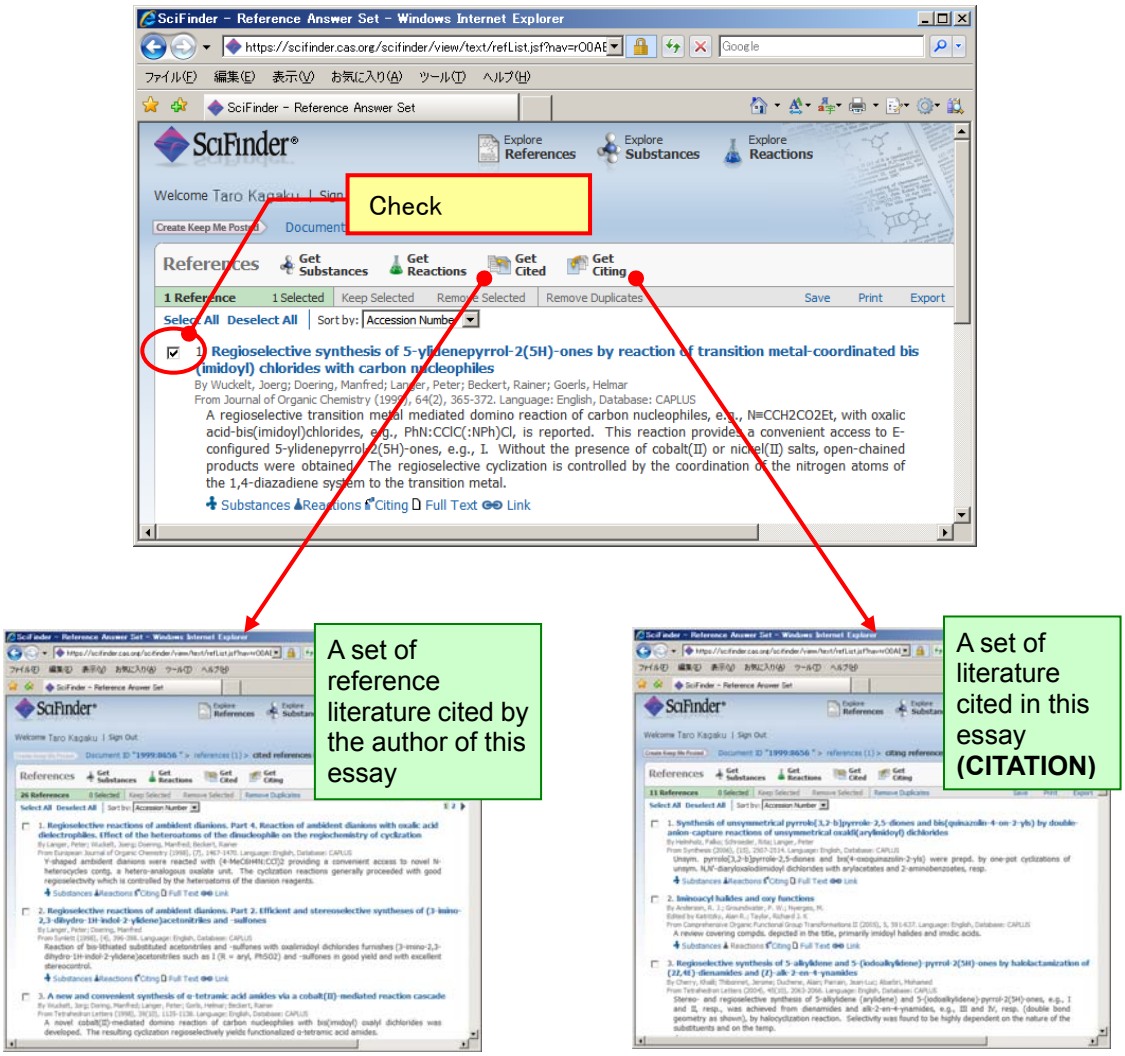
A set of reactions mentioned in this essay

♣ System limitation information

- The maximum number of item in creating substance and reaction lists are 1,000
- Maximum results for citation information search is 500 hits

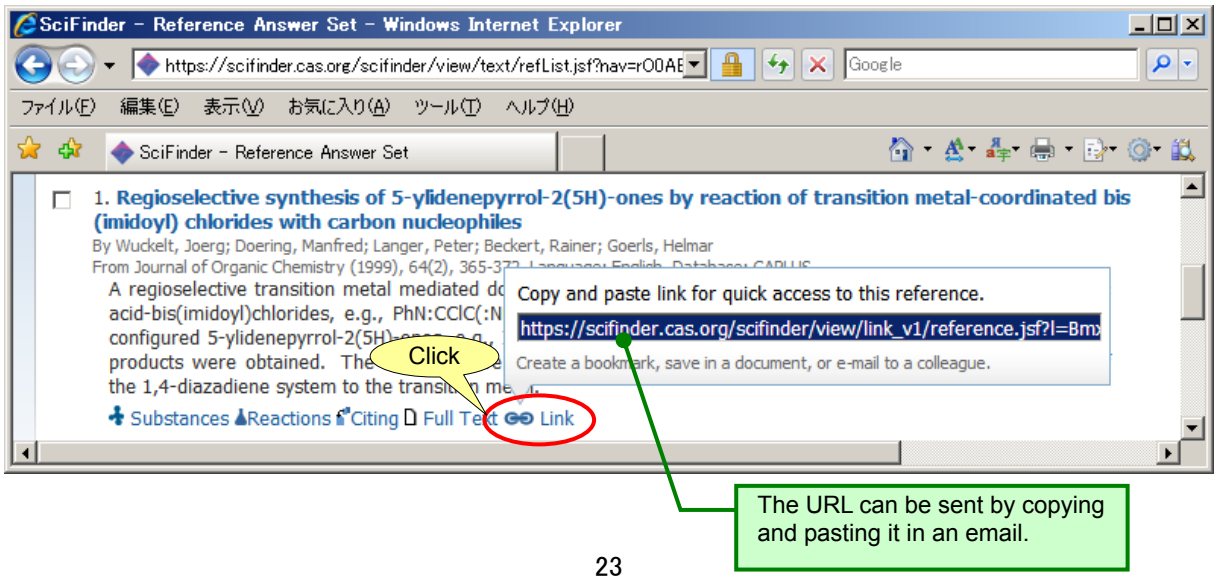
Extracting related information from reference results

- You can search for citation information of the reference being studied.



■ Information sharing function (Link function)

- You can share the reference being studied with other users using the URL assigned to each record.

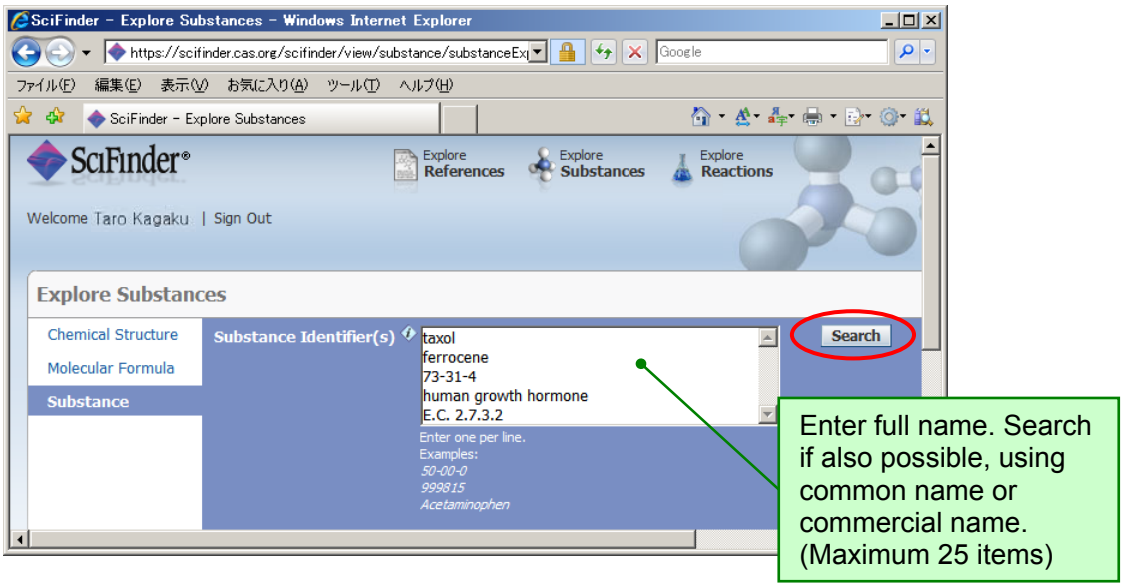


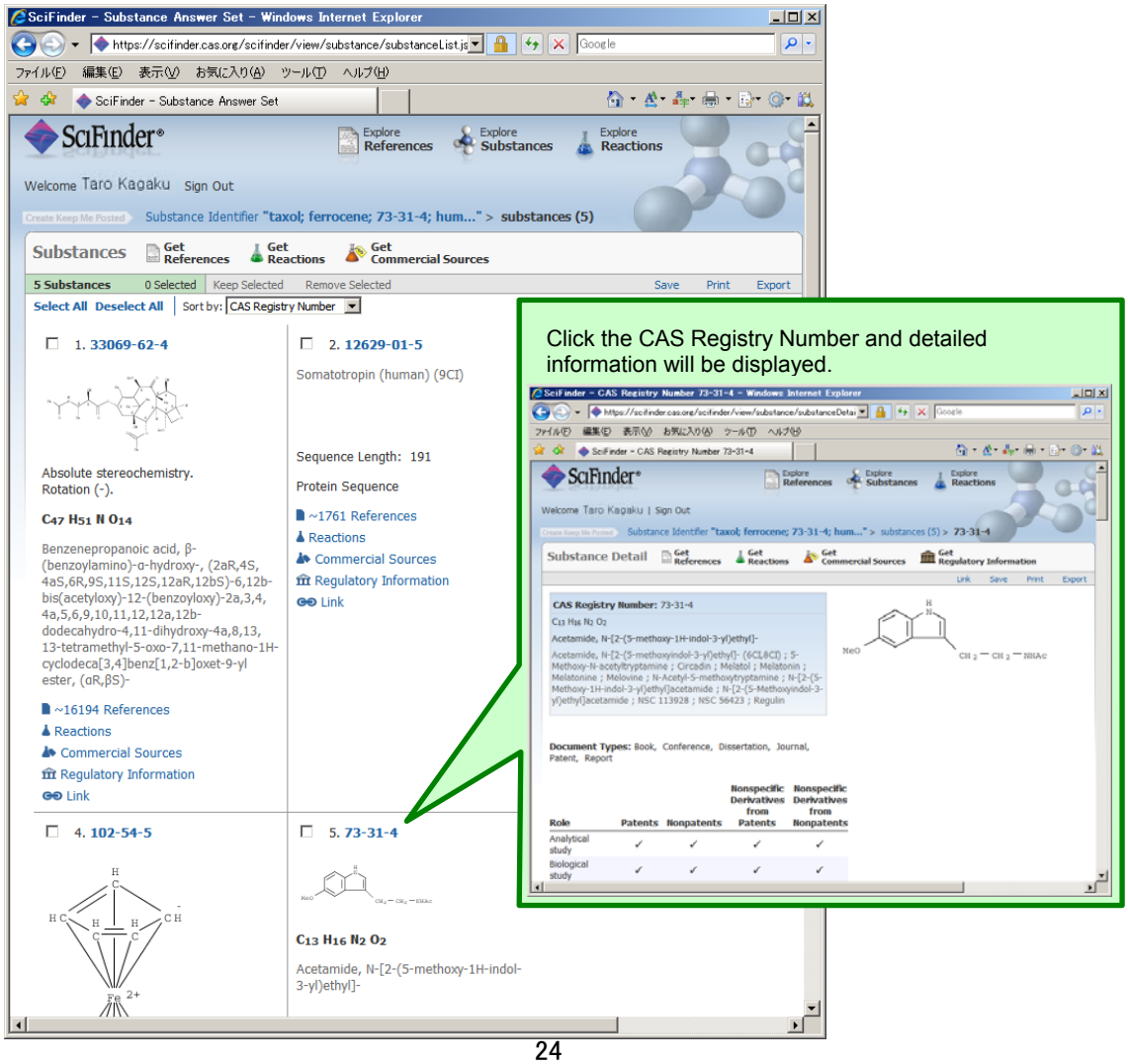
Search from Substance Information

◆ Chemical substance search (chemical substance name, CAS Registry Number) <REGISTRY file)

534-23
trimet

➢ Substance can be retrieved from CAS Registry Number and name.



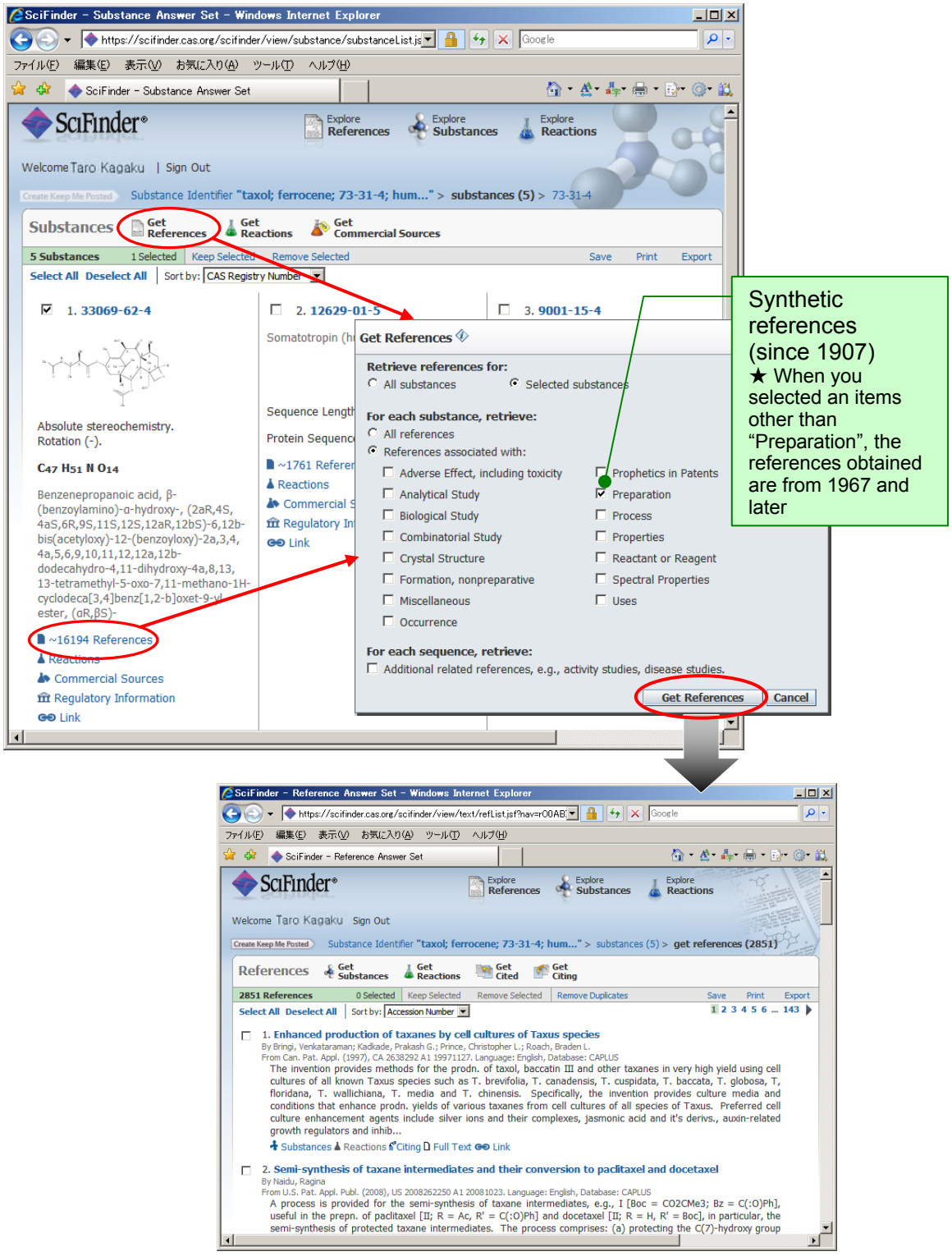


Search from Substance Information

- Link function to chemical substance related information.

  - Link to reference information ~16194 References Get References

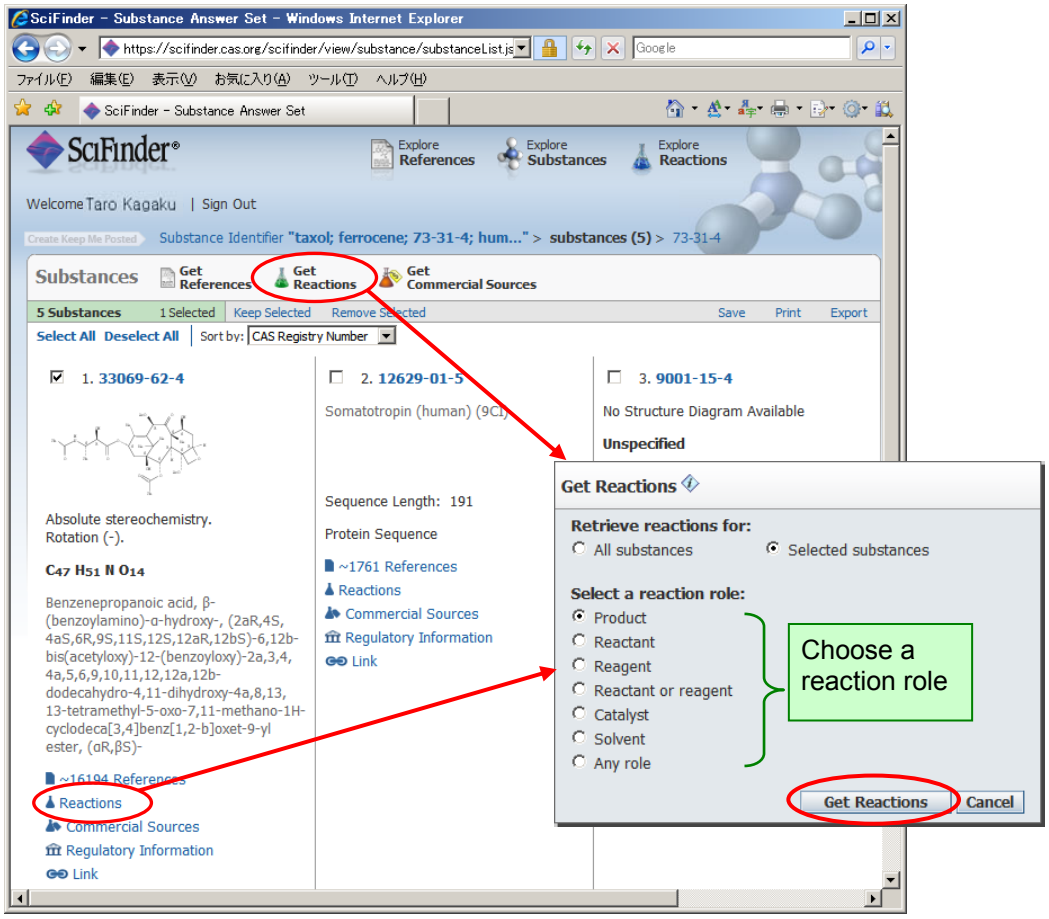
    You can search for references by using the text button beneath each substance (for single substance), or “Get References” link button at the top of the screen (for single substance and multiple substances). In that instance, you can also restrict the references by the following 15 types of perspectives.



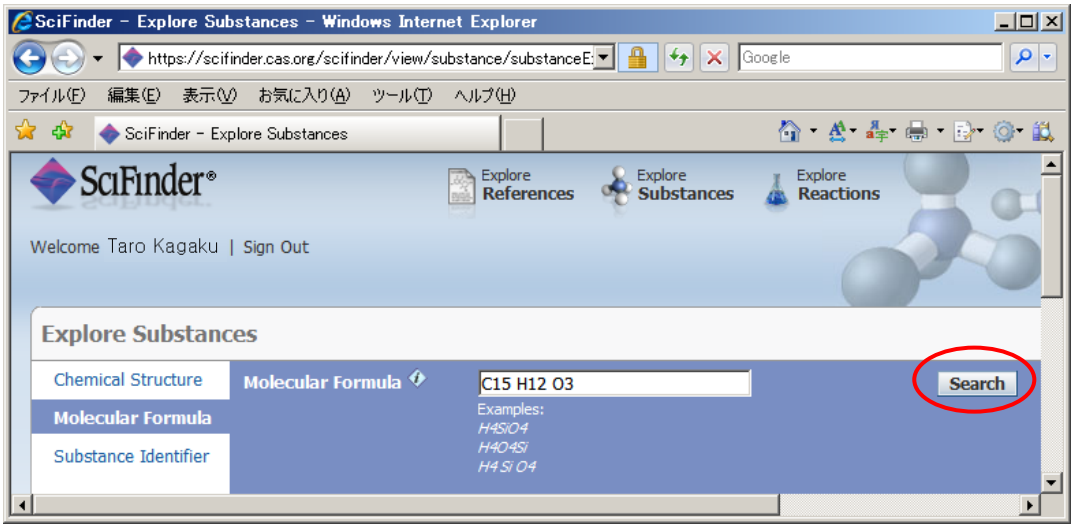
Search from Substance Information

➢ Link to reaction information 

You can search for chemical reaction by using the conical flask icon beneath each substance (for single substance), or the “Get Reactions” link button at the top of the screen (for single substance and multiple substances).



◆ Chemical substances search (Molecular formula) <REGISTRY File>

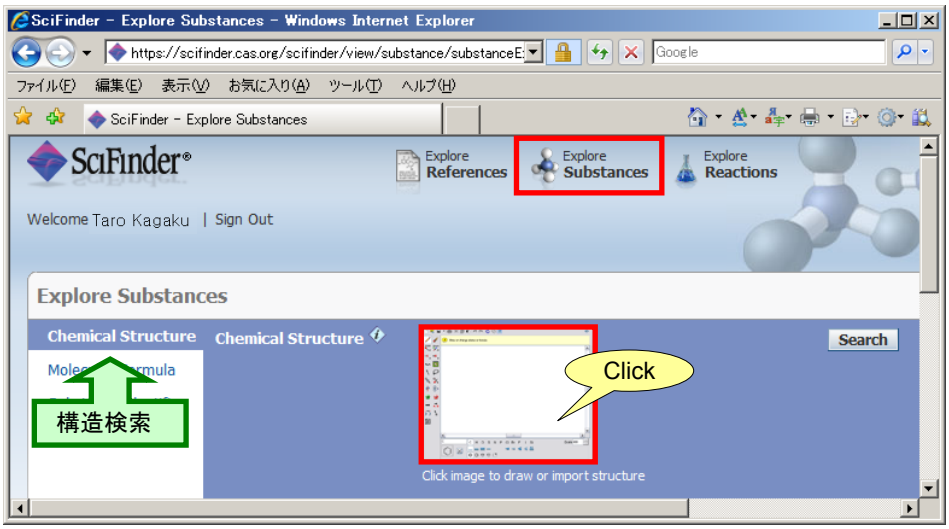


Chemical Structure Search

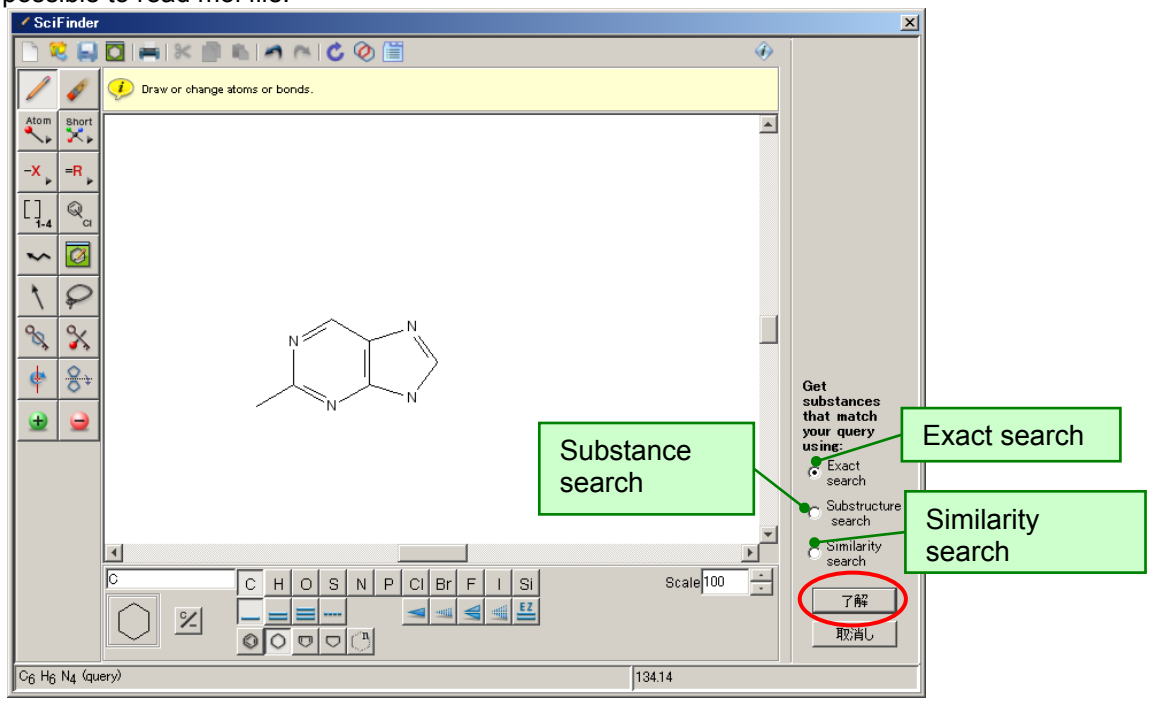
◆ Chemical substance search (Chemical structure formula) <REGISTRY File>

➢ It is possible to directly search for chemical substances from structure (including salt, compounds and copolymers).

① Start structure search screen. You will need Java plugins in order to start it.

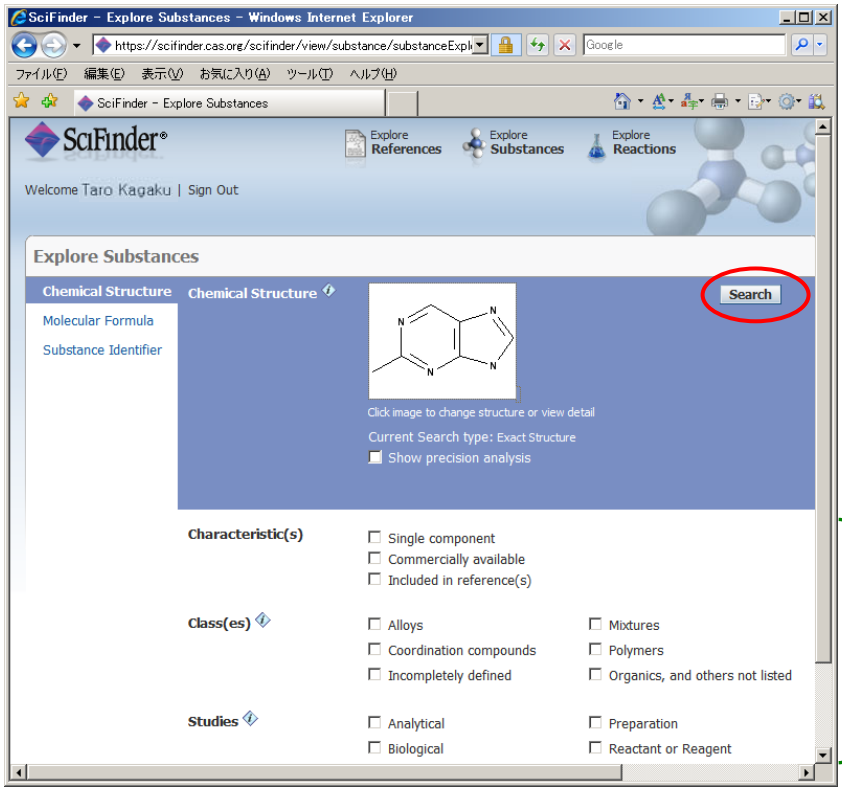


② Draw the backbone you are interested in and select search options. In addition, it is also possible to read mol file.

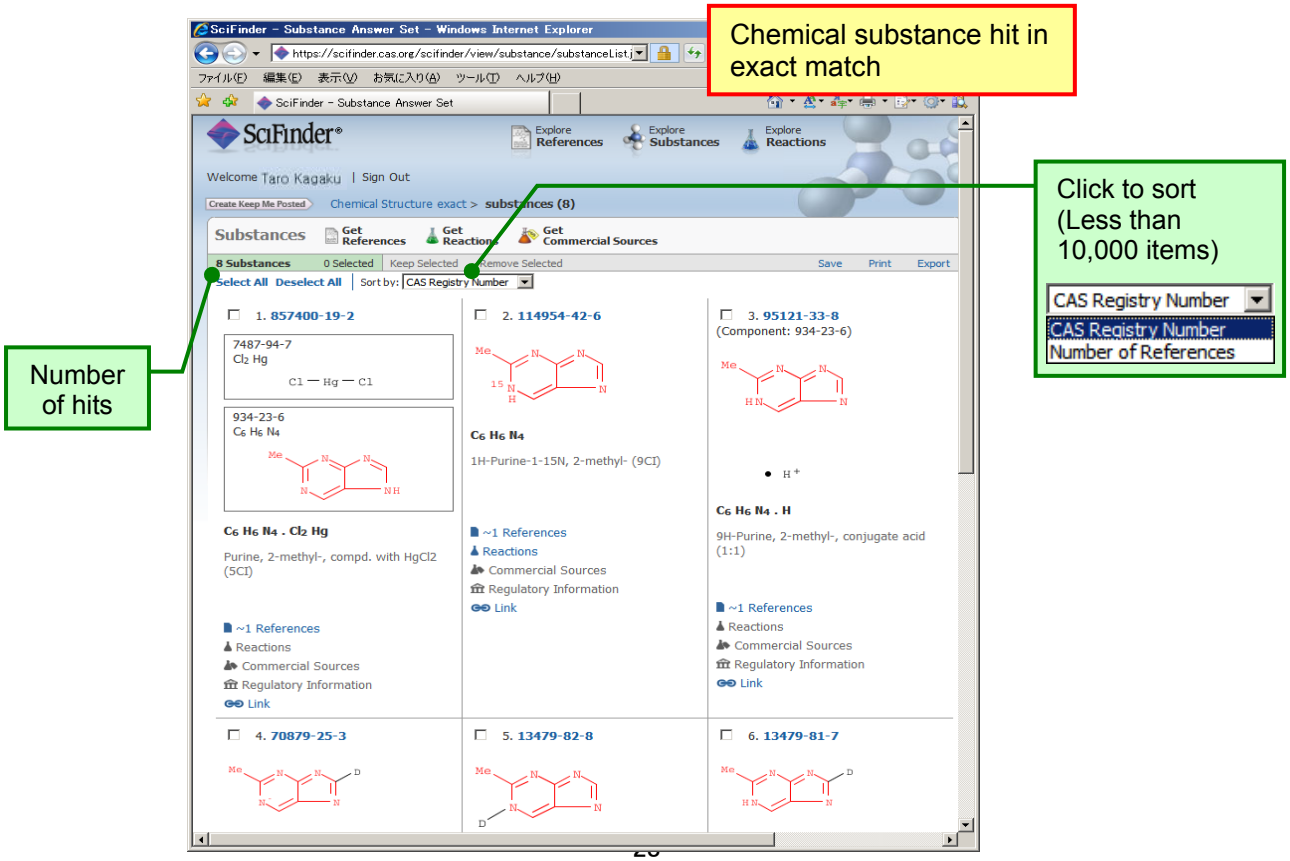


- Substructure search will comprehensively search every structure that contain the structure drawn, and display recent records first. You will need substructure search option agreement to use this search.
- Similar structure search will search for structures beyond the prescribed structure similarity and display the structures with high similarity on top. You will need substructure search option agreement to use this search.

③ Execute the search after selecting the substance to search as necessary. You can also restrict the search to polymers, coordination compound and single component substances in this screen.



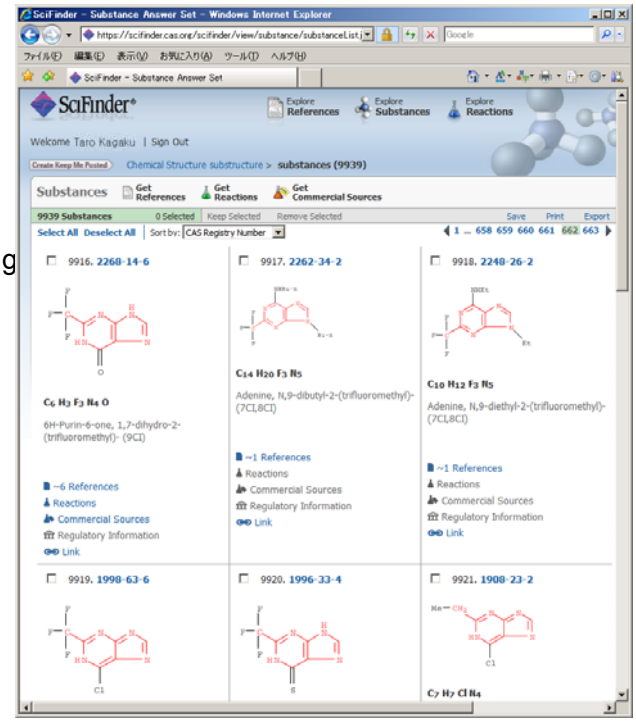
④ Search result is displayed. You can also perform reference search after this.



Chemical Structure Search

【When you executed substructure search】

- You can use variable substituents Such as “halogen”, “alkyl group”, and “heterocyclic ring” in the structure drawing.
- You can restrict the search result using another substructure, reference availability, and substance information availability and the like.
- The number of substance uploaded by SciFinder is the largest in the world.



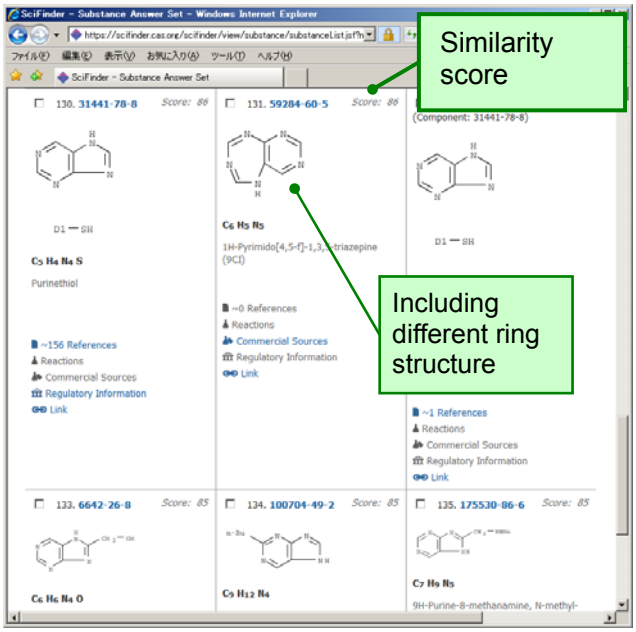
【When you executed similar structure search】

- The score is calculated based on Tanimoto algorithm and the number of items is displayed by the score at first.
- Because the hit included even substances with different ring size or type of elements, you will find structures that you did not expect.

Histogram

Similarity Candidates	Substances
≥ 99 (most similar)	8
95-98	10
90-94	5
85-89	112
80-84	47
75-79	540
70-74	325
65-69	697
60-64 (least similar)	1432

Get Substances



* Ambiguous structures such as variable atoms or R Groups cannot be used in similar structure search Queries.

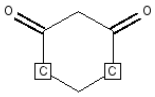
Chemical Structure Search

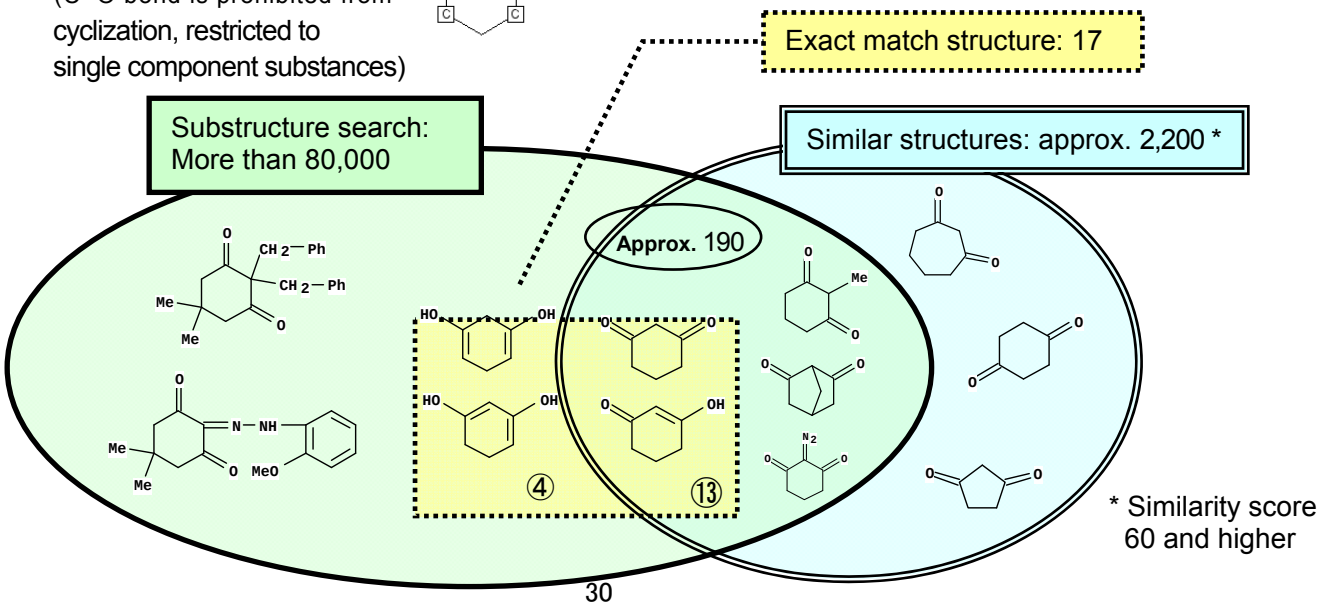
- Differences in results obtained with various search types.

Search type	Results you will obtain	Results you will not obtain
Exact Search (Perfect match structure search)	・Substances matching structure drawn and multi-component substances that contain the drawn structure (salts, Polymers, compounds, etc.) ・Tautomers	・Substances with substituents at the free space in the drawn structure
Substructure Search (Partial structure search)	・Substances matching the structure drawn and multi-component substances containing the said structure (such as salts, polymers, and compounds) ・Tautomers **・Substances with substituents at the free space in the drawn structure**	・Structures with less matching part than the structure drawn (For example, methyl groups will not be included if you draw ethyl group).
Similarity Search (Similar structure search)	・Substances matching the structure drawn and multi-component substances containing the said structure (such as salts, polymers, and compounds) ・Substances having different structural elements, substituents and its position, but similar structures ot the drawn structure. ・Substances with less parts matching the drawn structure, but having similar structure ・Substances with different ring structure and size to the drawn structure (You may draw 6-5 membered ring and get 6-6 membered ring)	・Substances with larger substituent parts than the parts drawn (because the similarity level becomes low

- Relationship between search types

Query example:
(C=O bond is prohibited from cyclization, restricted to single component substances)

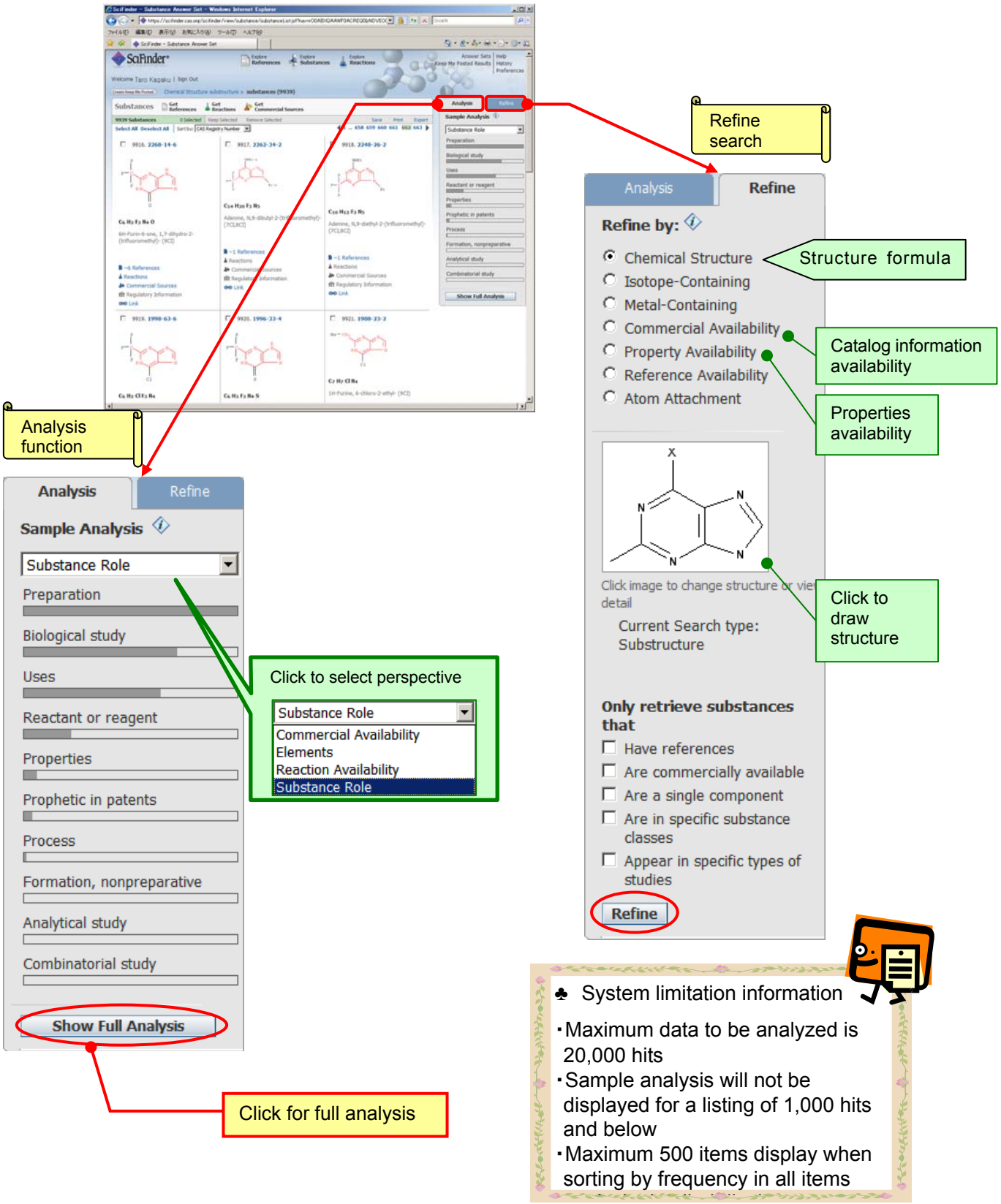




Chemical Structure Search

■ Search Result Restrict and Analyzing Function (Analyze/Refine)

➢ After analyzing based on 4 types of data, you can restrict it as necessary, or refine it with 7 types of perspectives for result listings of substances obtained from various search.

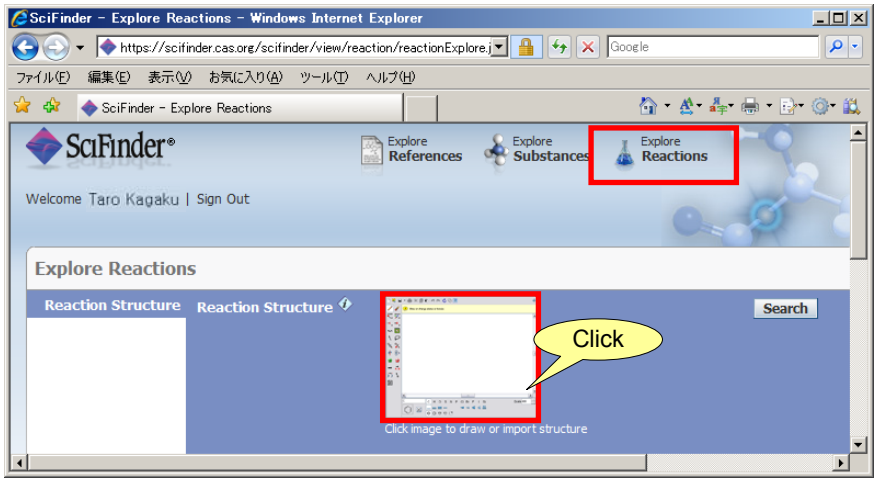


Chemical Reaction Search

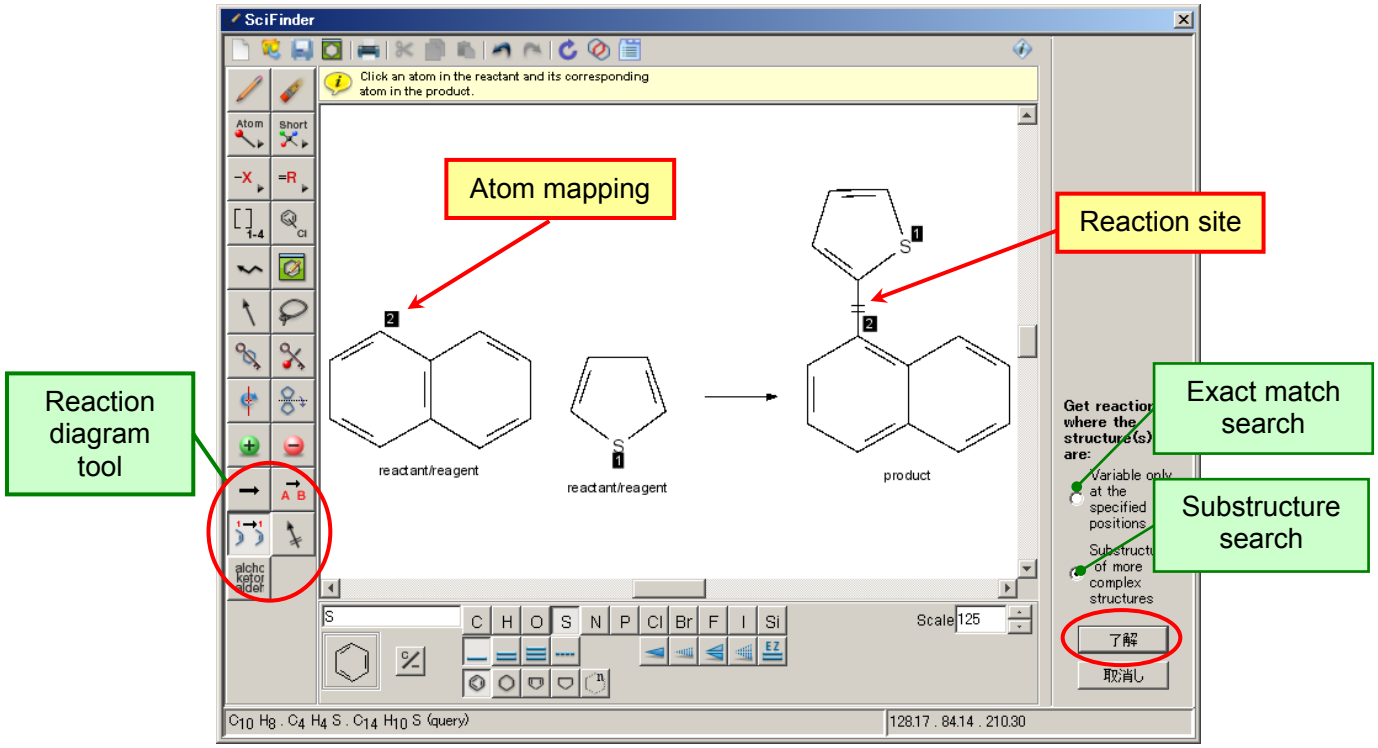
◆ Chemical Reaction Search <CASREACT File>

- You can designate the product and reactant/reagent and search the chemical reaction with substructure search.
- You can increase the search accuracy by indicating reaction site, and atom mapping in the reactants and products.
- You can also draw multiple structure fragments for reactants and products separately.

① Start reaction diagram screen. To start it, you will need Java plugin.

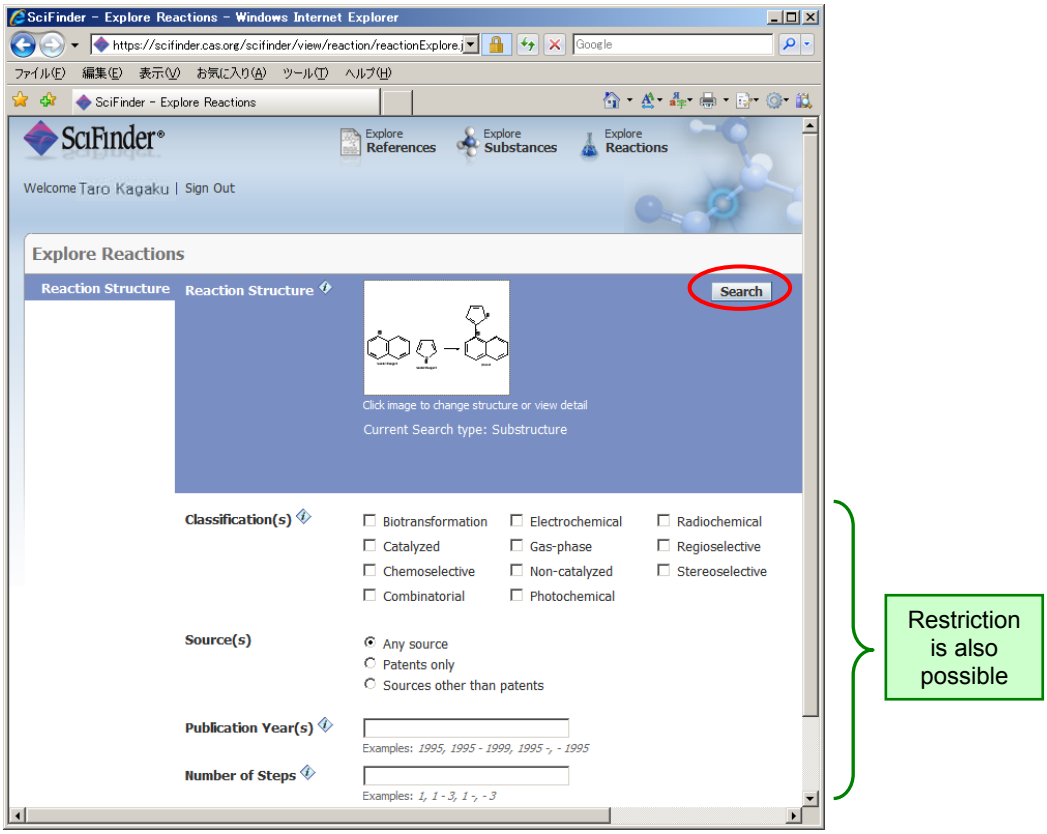


② Draw the backbone you are interested in, and select search options.

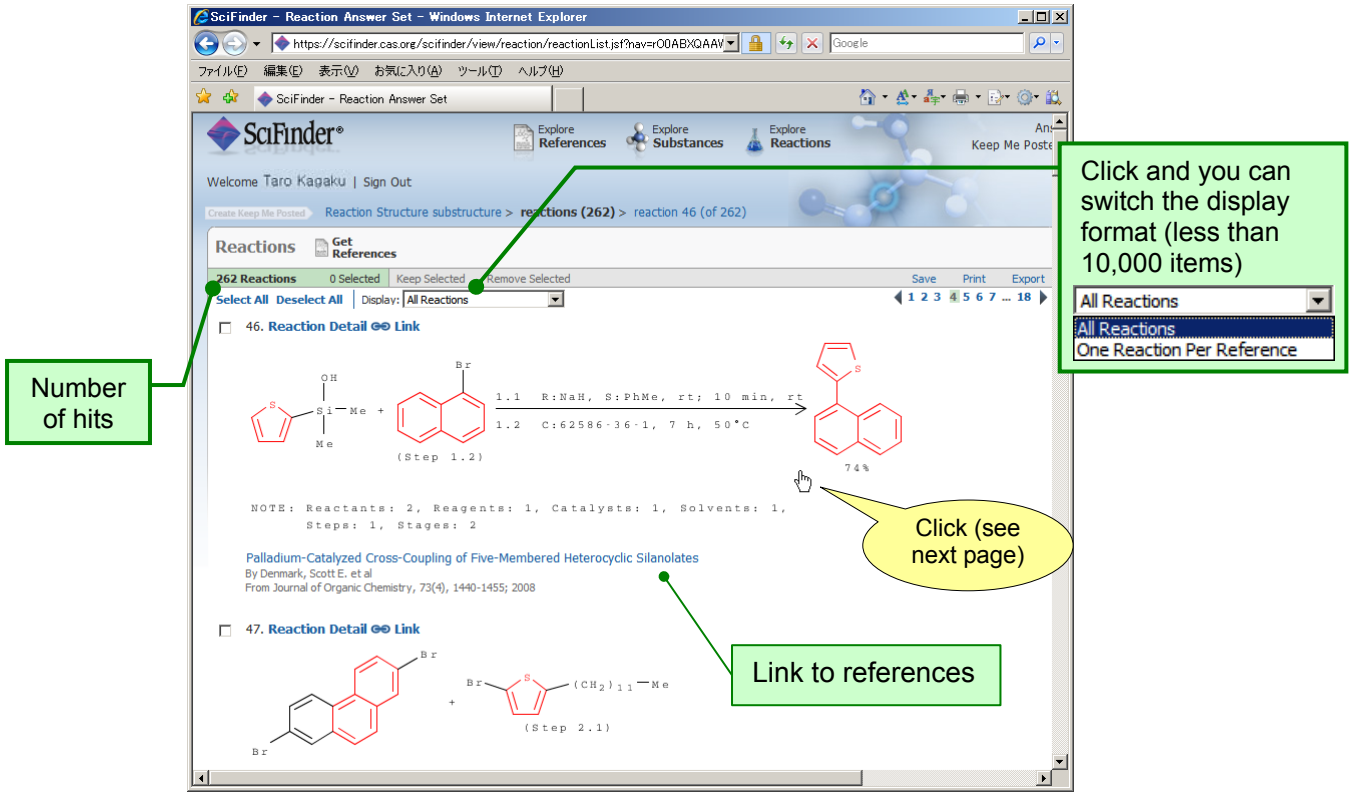


Chemical Reaction Search

③ Perform the search after selecting the substance to be searched as necessary. In this screen, you can also restrict the search to the source of reaction information or the number of steps in this screen.

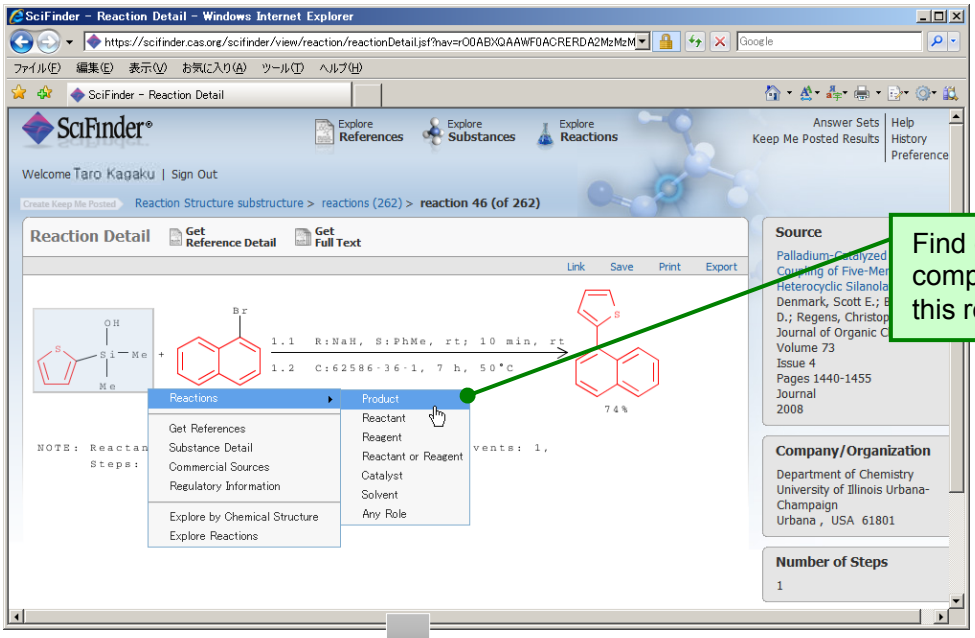


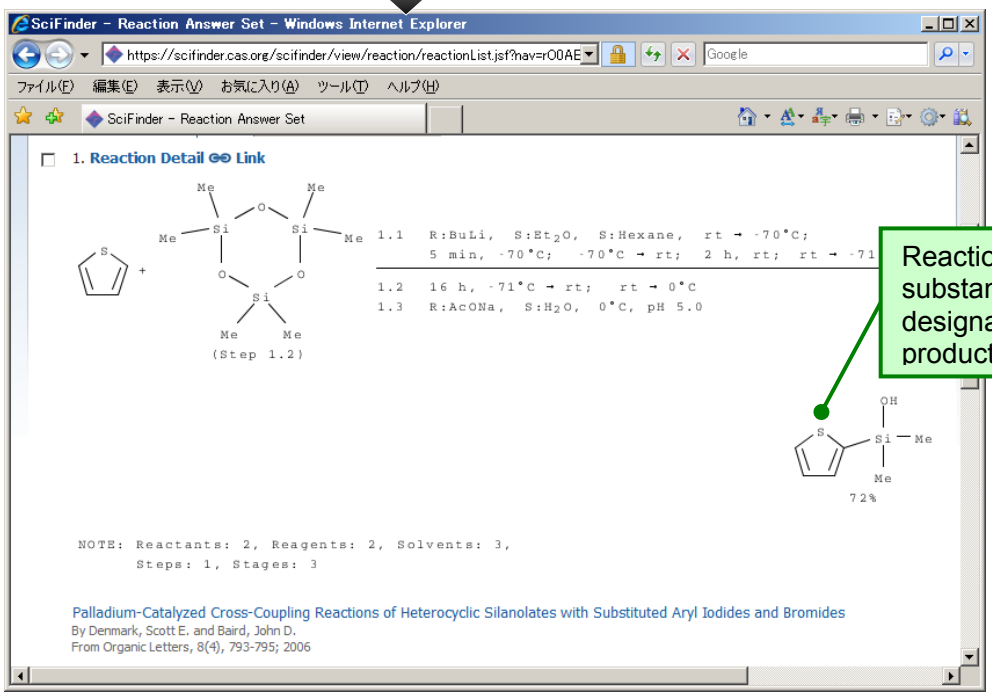
⑤ Search result is displayed. When you click the reaction scheme, you can see its detailed information.



Chemical Reaction Search

⑤ You can confirm the intermediary of multi-steps reaction, or yield for each step in the reaction details screen. In addition, you can also search and display various information related to each substance such as its details, reference, catalog or reactions.



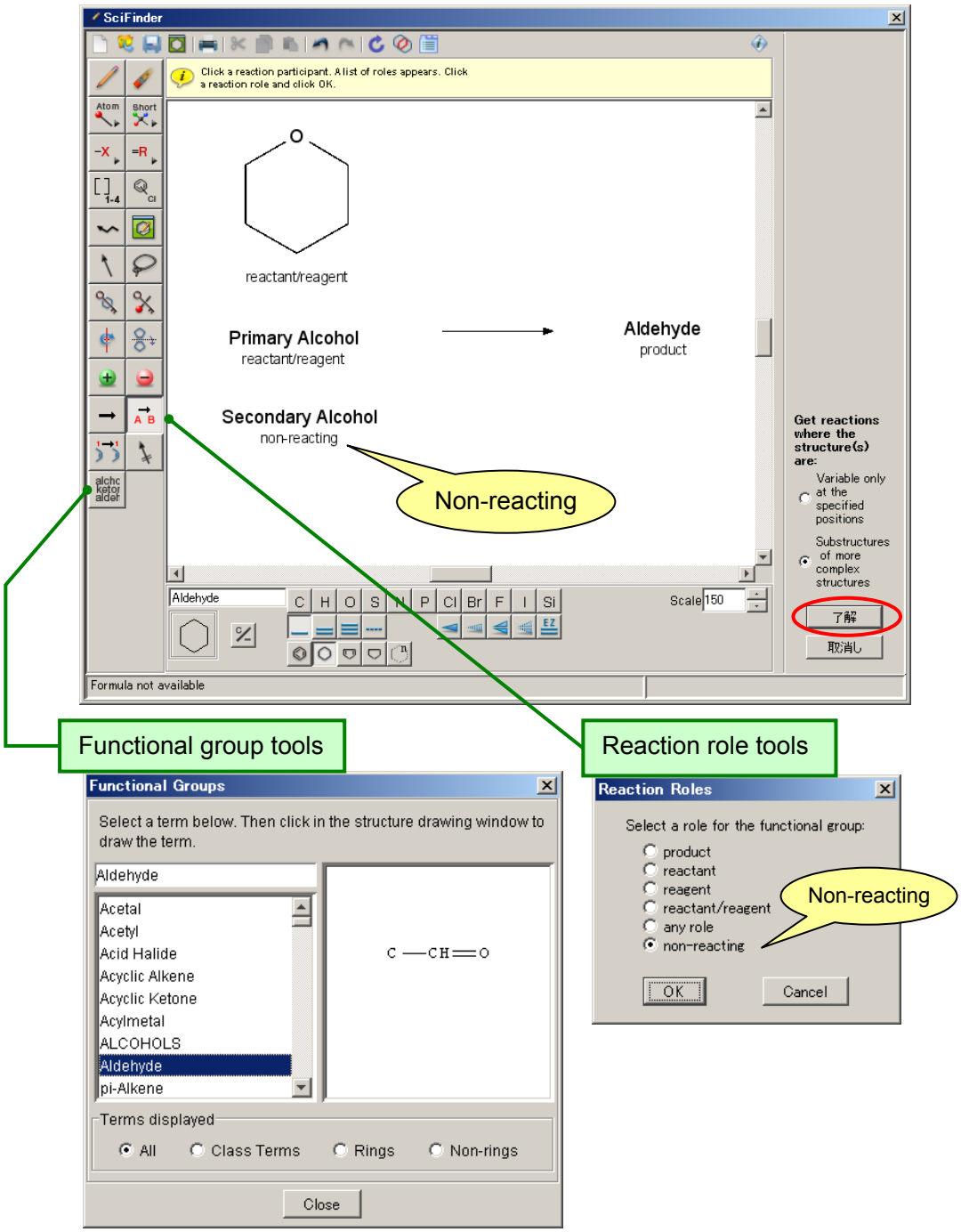


Hint

You can also perform reaction search by using "Get Reactions" from chemical substances.
(→ p.26)

【Reference】

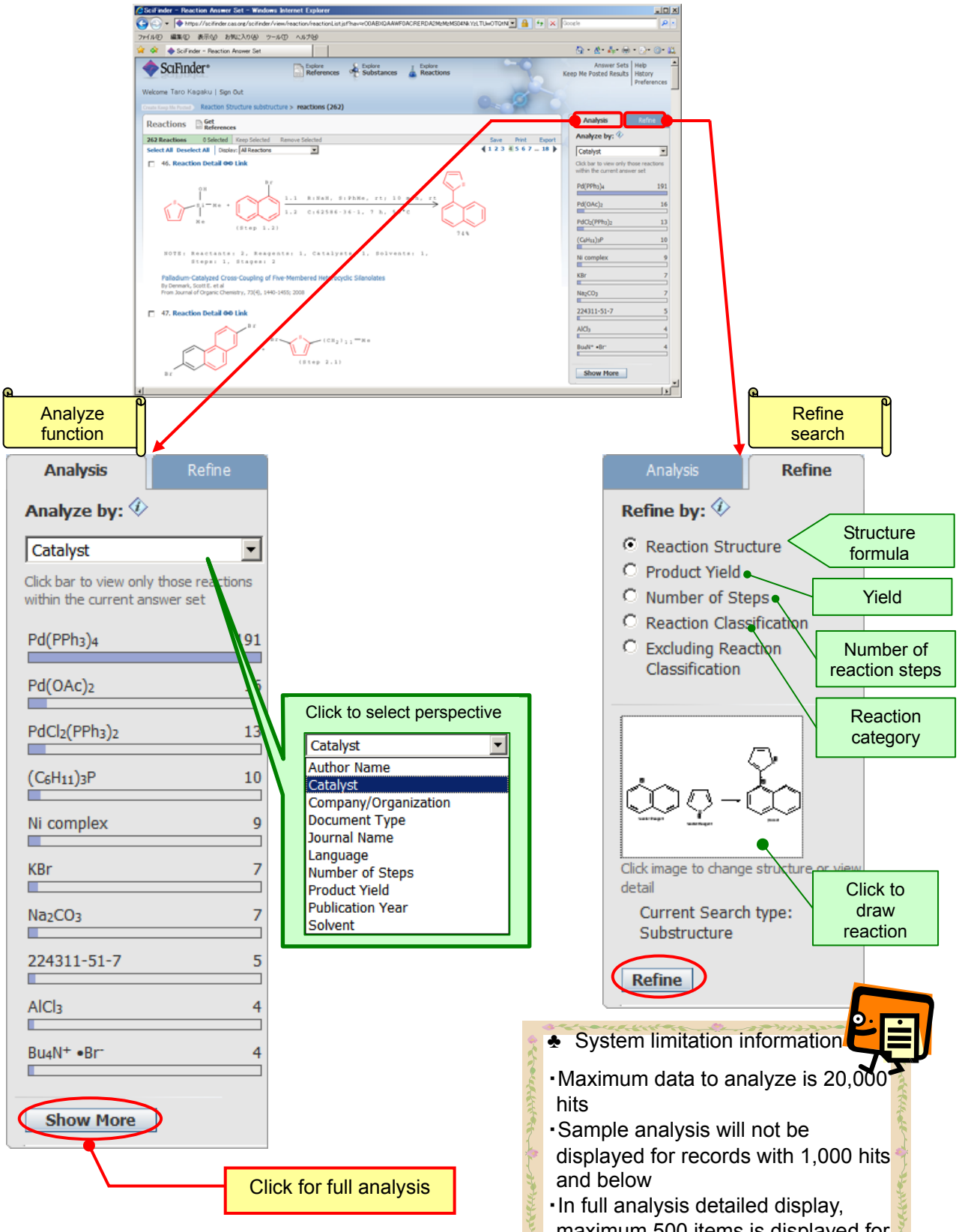
- You can also have a comprehensive search if you use functional group names. You can also indicate the “Non-reacting functional groups” in functional group names.



Chemical Reaction Search

◆ Search result restrict and analyze function (Analyze/Refine)

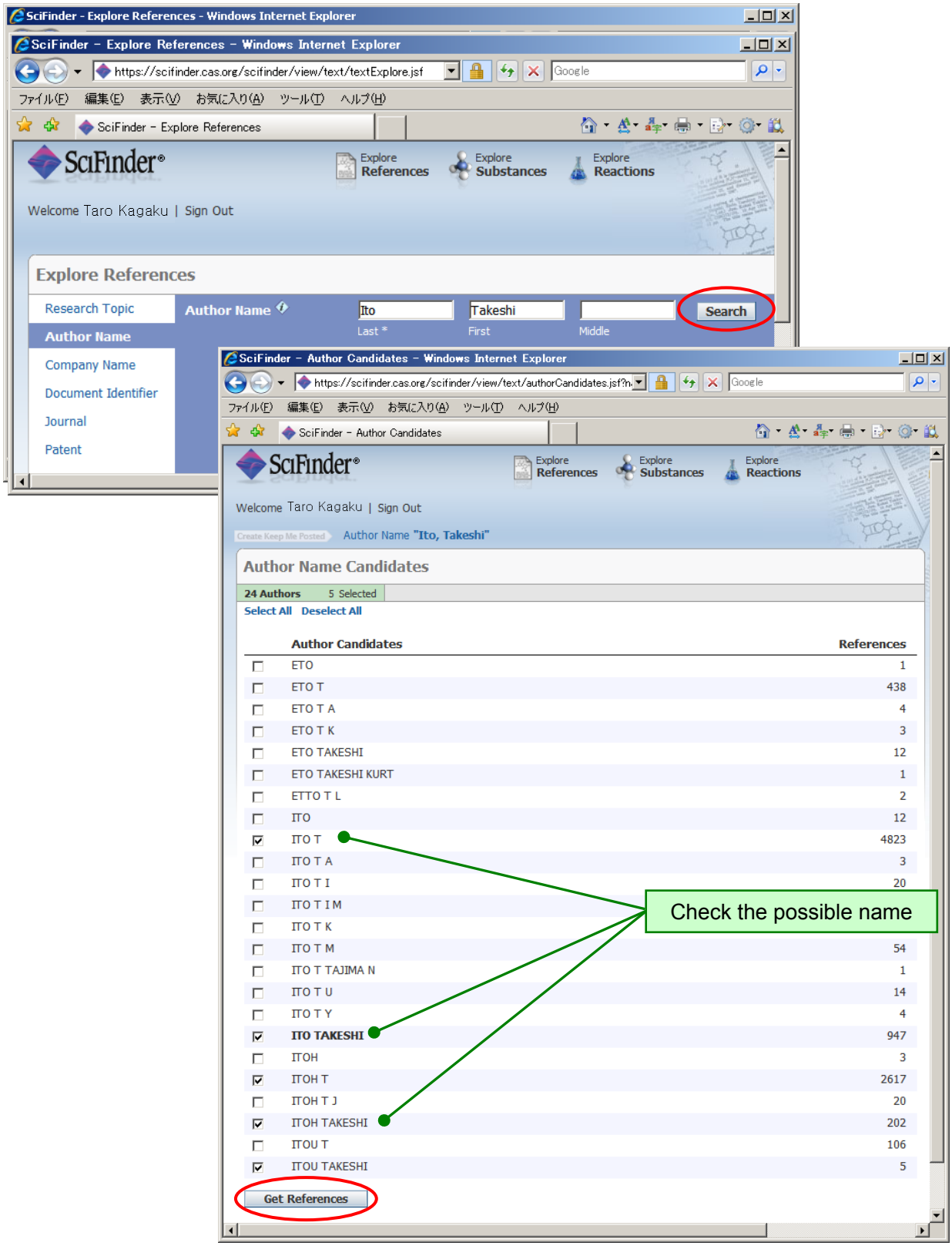
➢ For result records obtained by reaction search, you can analyze the based on 5 types of data and refine it with 5 types of perspectives.



Author Name Search

- Author name search

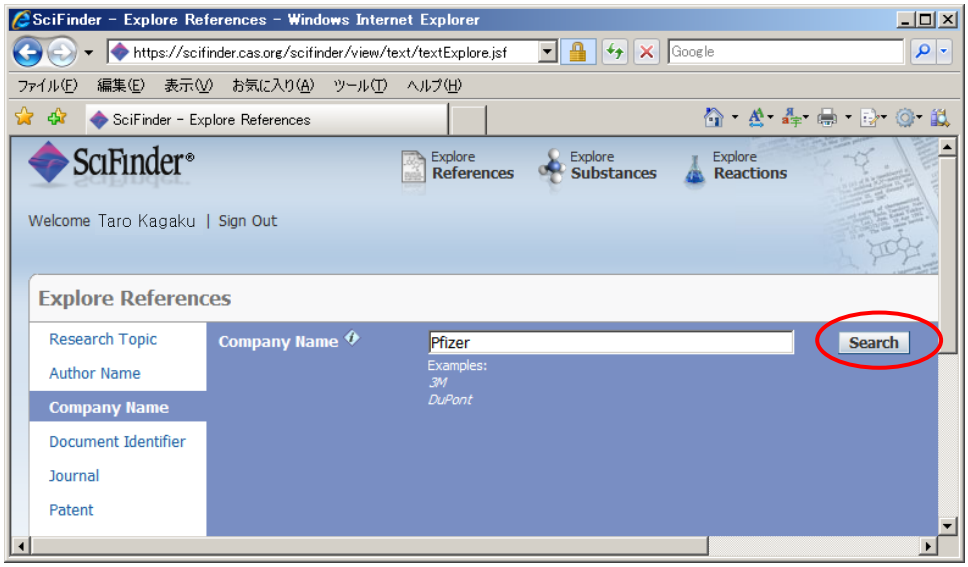
  - In a search related to author name (invertor for patents), the many spelling for the name (for example, Ito, itoh, Itou) will be displayed. You can choose the appropriate spelling and search.



Other Search

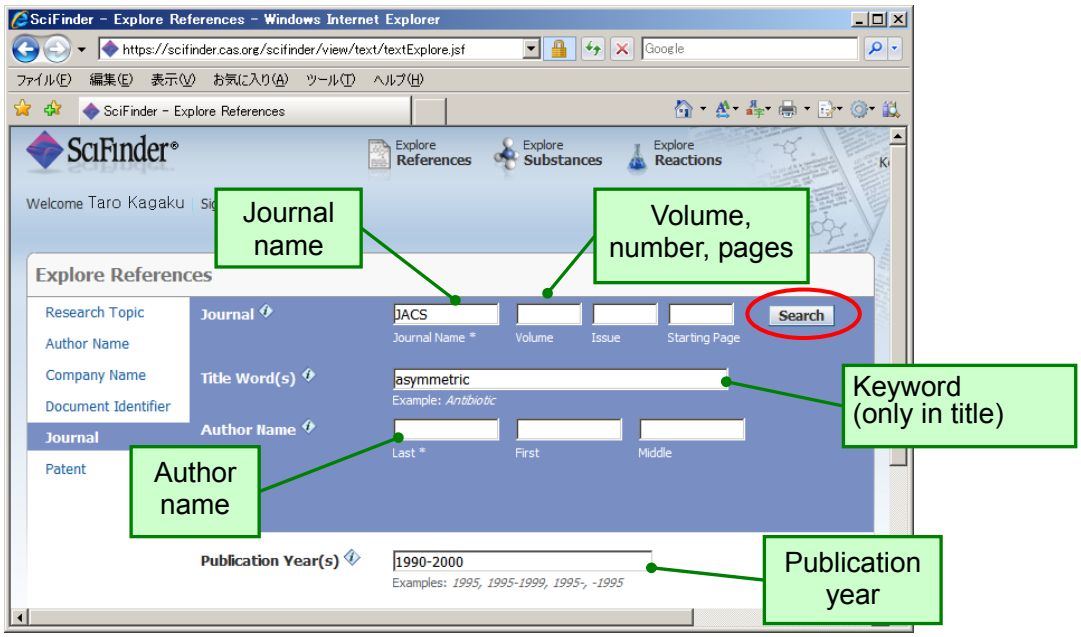
◆ Company name (University name) Search

➢ You can search for references by combining words that contain the name of the institution the author belongs to, or patent applications.



◆ Search from reference information

➢ You can search for reference from fragmentary information as author name, journal name, volume number, or number of pages.

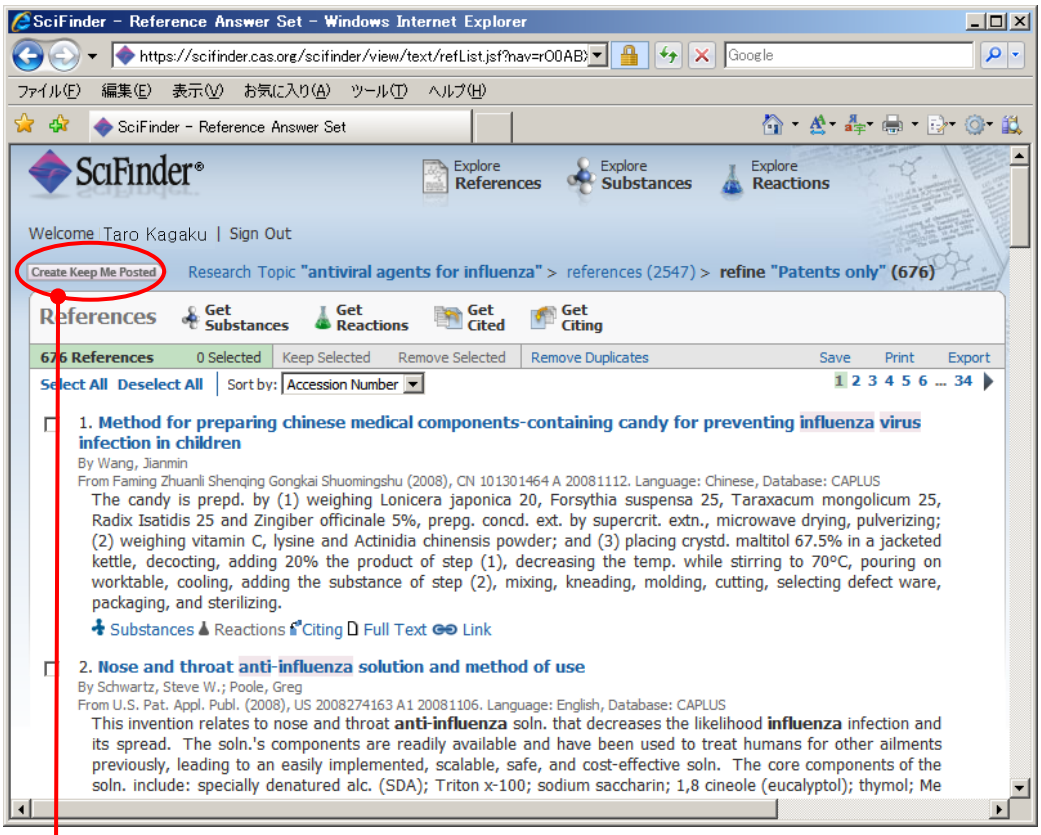


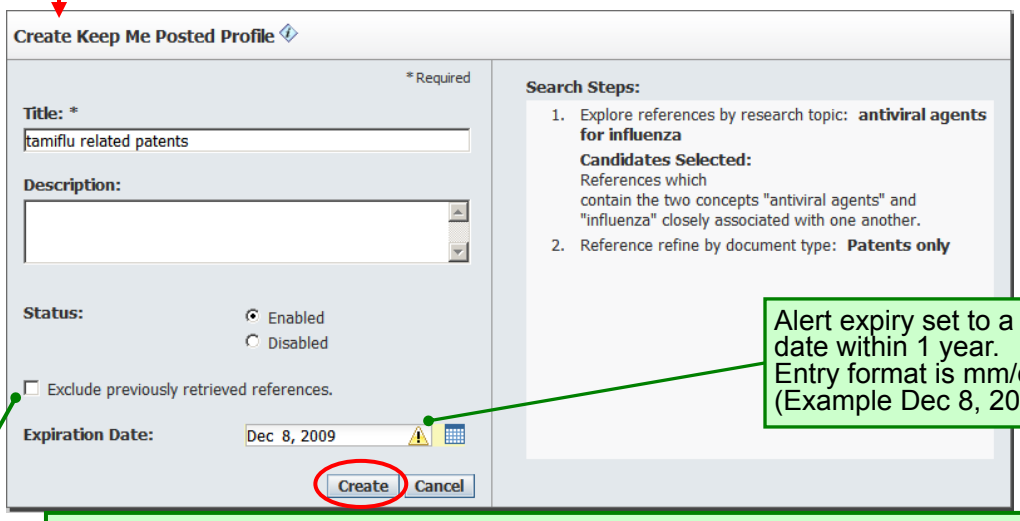
- You can use “JACS”, “J Am Chem Soc”, “Journal of the American Chemical Society” for journal name.
- Should there be any unintended references listed, you can exclude those by analyzing it by journal name..

Keep Me Posted Function

◆ Keep Me Posted Function (Alerts Search Function)

➢ You can get recent information by using “Keep Me Posted” (KMP) function that automatically performs a search periodically for queries registered previously.





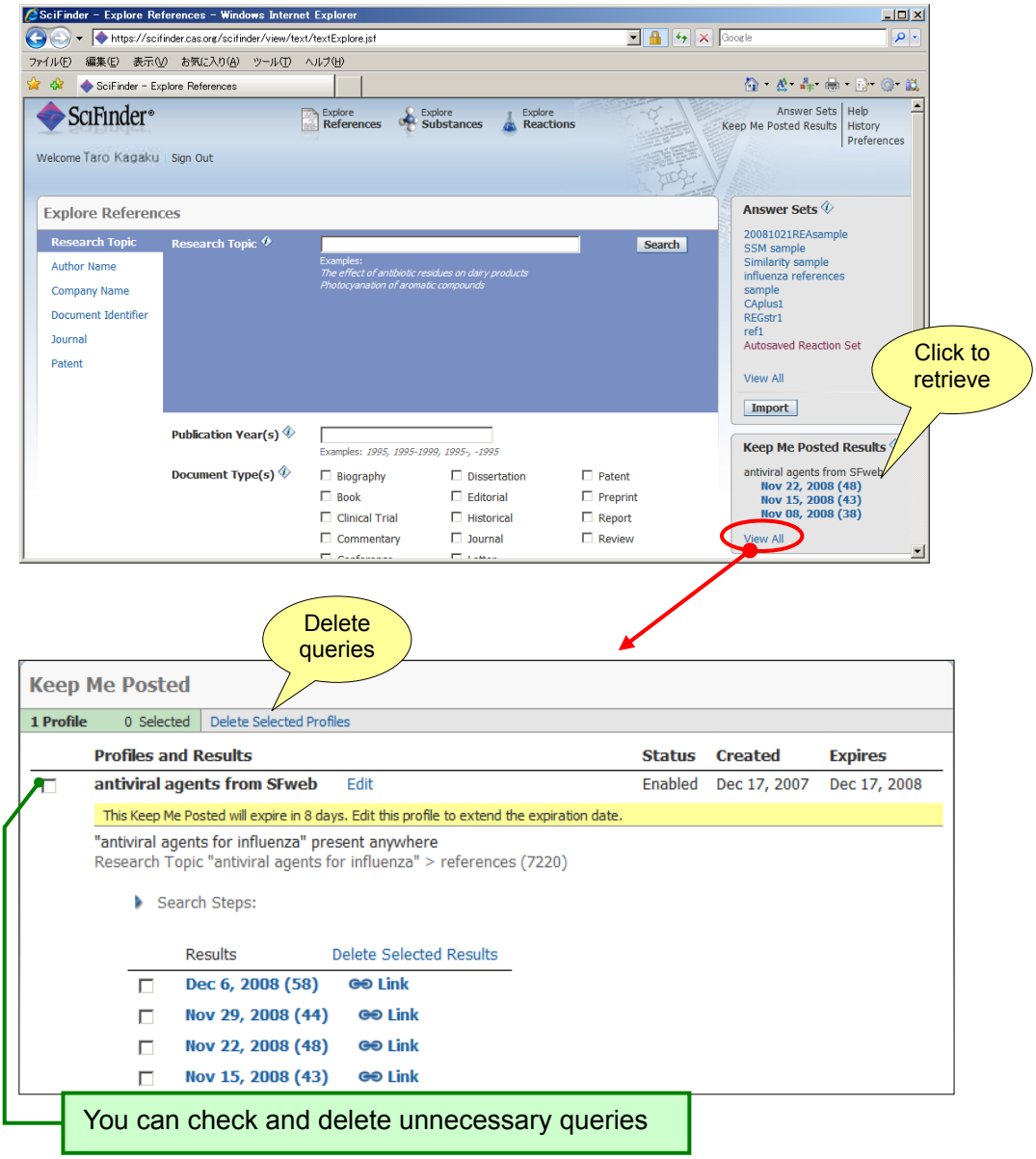
Alert expiry set to a date within 1 year. Entry format is mm/d/y (Example Dec 8, 2009)

If you don’t check this box, you will get updated information with previously acquired results

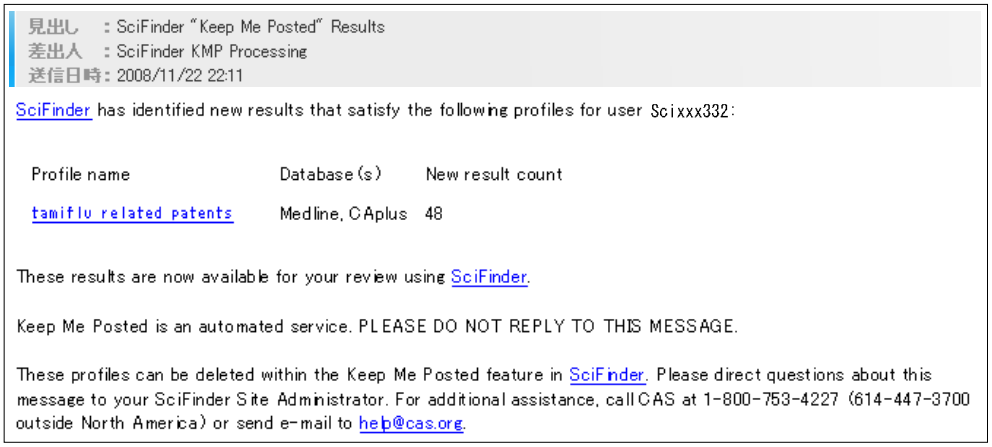
- Weekly search
- You can set it to send mail with the number of hits after the search (You can set it up in Preferences, and it will not send mail when there is no hit).
- Mail will be sent to the mail address registered with the user ID
- You cannot register the query in the result set where you cannot click the “Create Keep Me Posted” button

Keep Me Posted Function

- Retrieve result



- Submitted mail sample



見出し　：SciFinder "Keep Me Posted" Results
差出人　：SciFinder KMP Processing
送信日時：2008/11/22 22:11

SciFinder has identified new results that satisfy the following profiles for user Scixxx332:

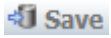
Profile name	Database(s)	New result count
tamiflu related patents	Medline, CAplus	48

These results are now available for your review using SciFinder.

Keep Me Posted is an automated service. PLEASE DO NOT REPLY TO THIS MESSAGE.

These profiles can be deleted within the Keep Me Posted feature in SciFinder. Please direct questions about this message to your SciFinder Site Administrator. For additional assistance, call CAS at 1-800-753-4227 (614-447-3700 outside North America) or send e-mail to help@cas.org.

Saving and Printing Results

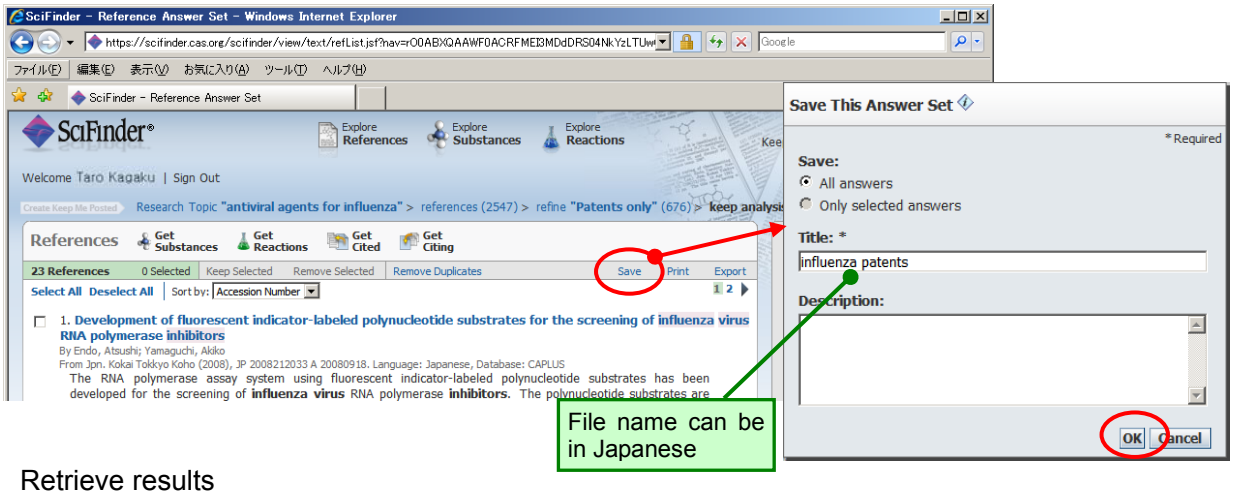
◆ Saving search result  

➢ There are three ways to save SciFinder results.

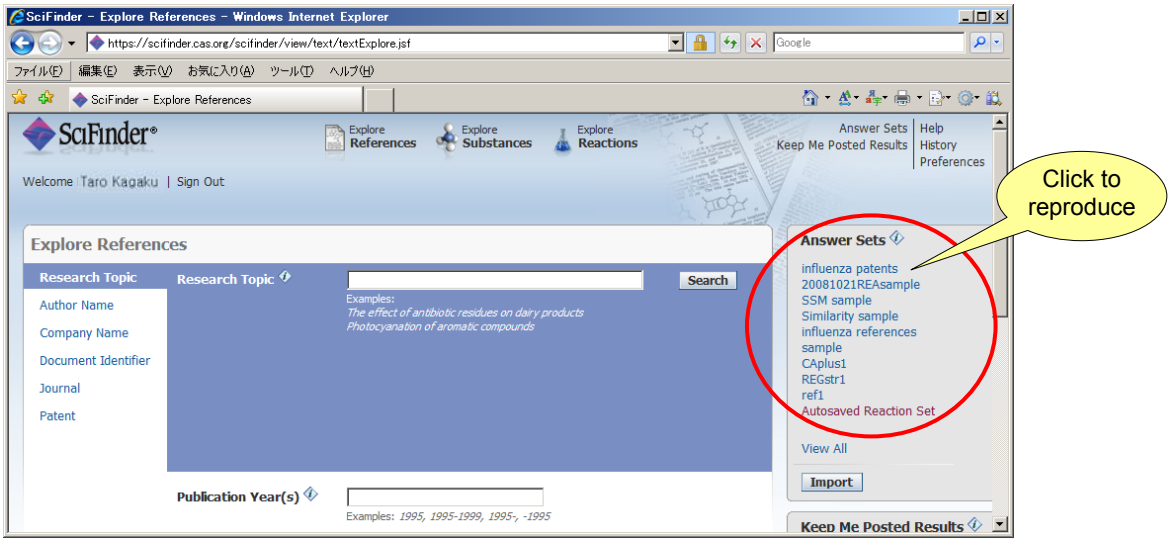
Save method	① Save to server【**Recommended**】 
Description	Saving the data on the server (industries up to 100 records, universities up to 20 record)
Reproducing results with SciFinder	Possible
Maximum number of these items per save	**20,000 items**
Others	The structures with hits will be highlighted during reproductions, but the text hit term highlight or similarity score will not be displayed. When you are idle for 20 minutes, you will be automatically logout. The records created at that moment will be saved to the server automatically.

When you want to save items over the upper limit, segregate and refine your results with Refine function, and save after your items are within the allowable range.

● Saving results



● Retrieve results

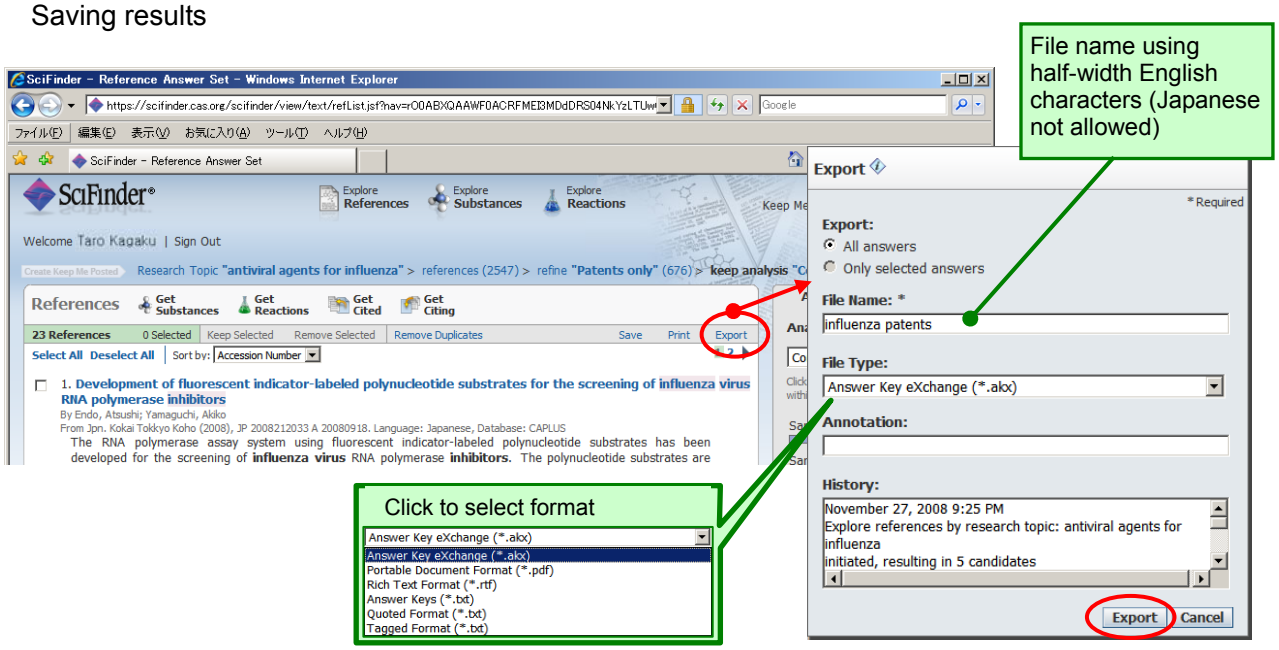


Saving and Printing Results

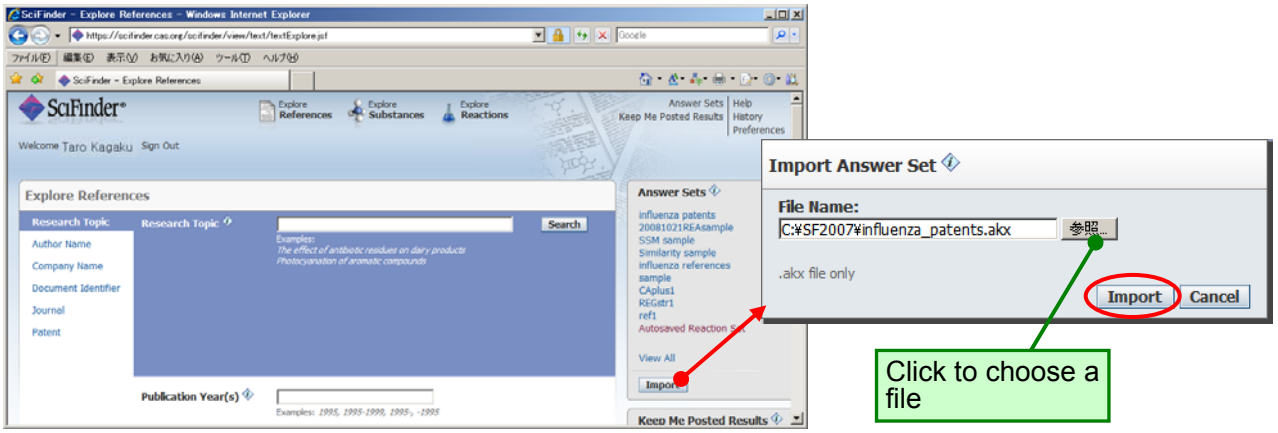
Save method	② SciFinder Web Format Export	③ Download Export
Description	Save the result to hard disk in a format that can be reproduced with SciFinder later	Download the data to hard disk or other medias
File format	akx (Answers Key eXchange) format	PDF format and text format (comma delimited format or tab-delimited format)
Result reproduction with SciFinder	Possible	Impossible
Maximum per save	**20,000 items**	**500 items (industry) 100 items (university)***
Usage Reminders	**There are limitations on the saved result usage**	**There are limitations on the number of the downloaded data to save. ***
Others	Queries are not saved, but highlights will be the same as saving to the server	Take longer to save, and file size will be larger compared to SciFinder Web format

＊ Limitations on the number of downloaded date to save.
③ In downloading, saving the results exceeding a total of 5,000 items is prohibited by the agreement. Make sure that you do not exceed 5,000 items by deleting unnecessary data.

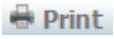
- Saving results



- Retrieve results

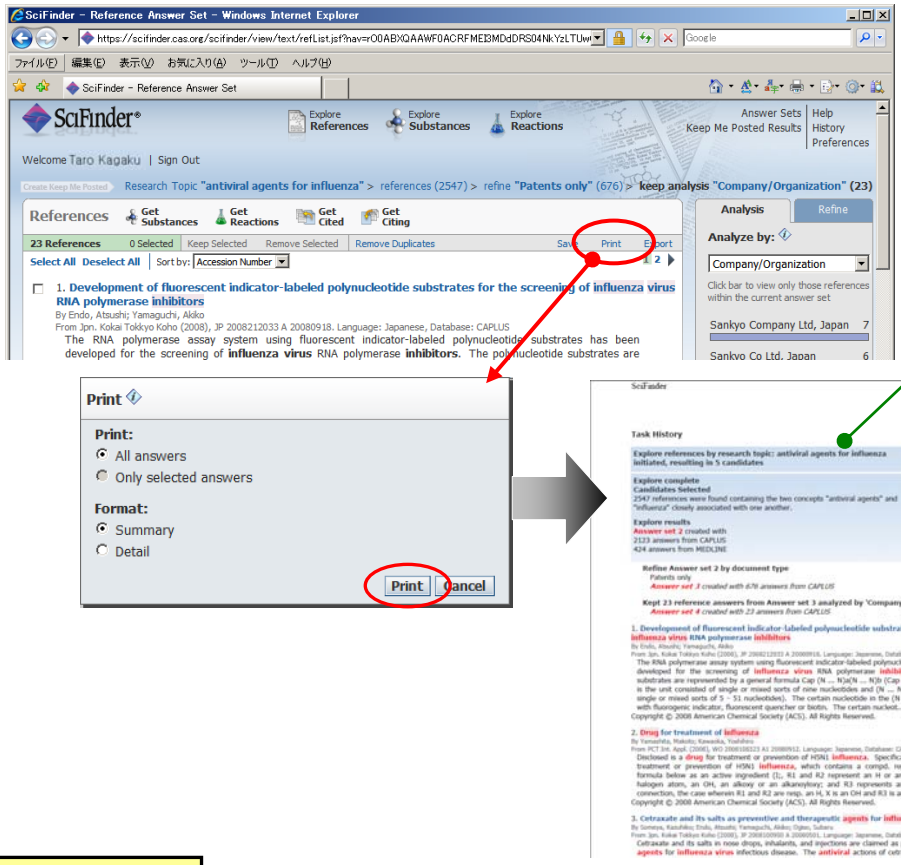


Saving and Printing Results

◆ Printing search result 

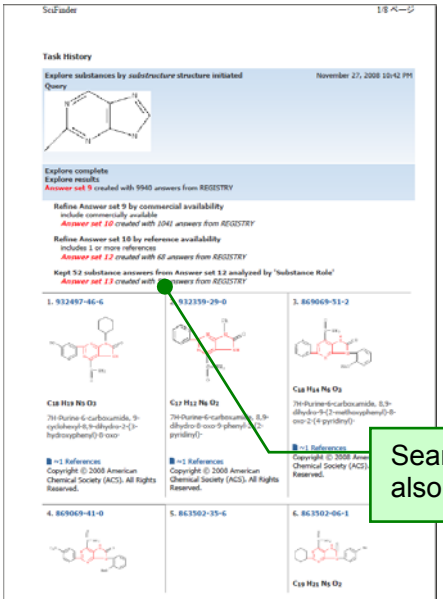
➢ Click Print link button (print up to 500 items in summary format, 100 items in detail format)

Print sample (Reference)

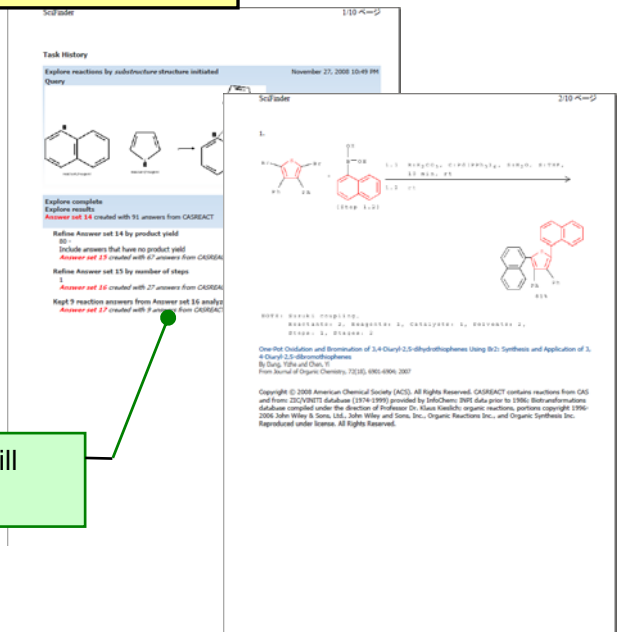


Search history will also be printed

Print sample (Substances)

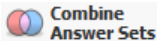


Print sample (Reactions)

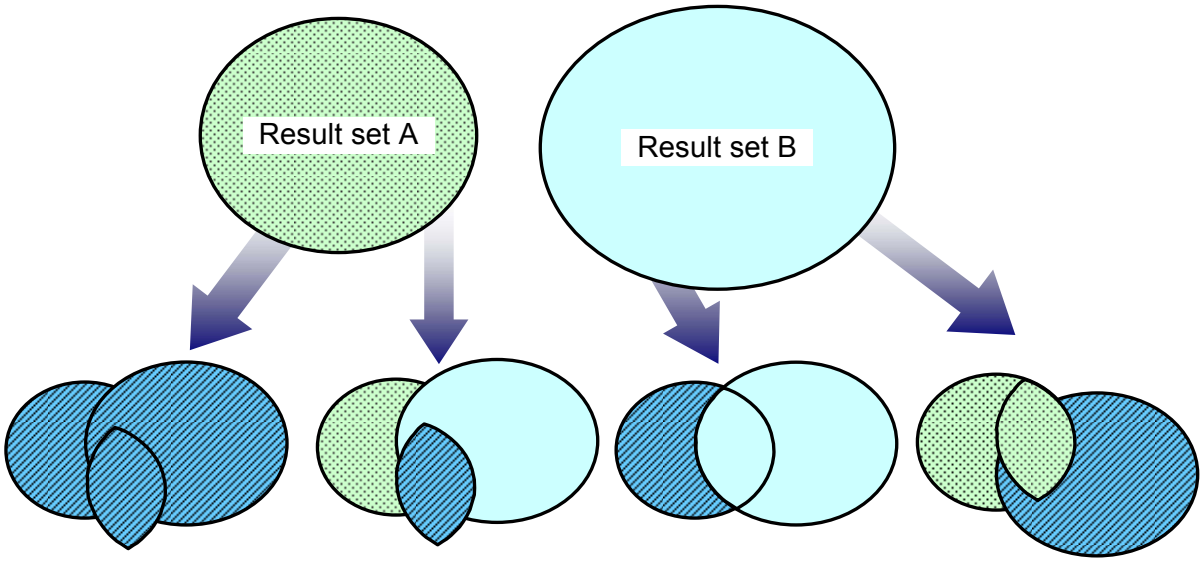


Search history will also be printed

Combine Function機能

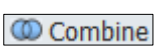
◆ Combine function 

➢ You can assign operators among result sets obtained with SciFinder. By using this function, you will be able to combine the results split into a number of sets and saved, exclude the results obtained previously, and look at only the information recently obtained.



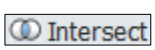
A OR B

- You want to combine the results that are split and saved into one result set.
- You want to combine the results of two companies obtained from institution name search and perform being an analysis, reference set function.
- You want to combine reference set and substance composition reference obtained from reaction search.



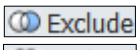
A AND B

- You want to find reference that contained the two reference sets obtained from performing structure and reference search using two types of structure queries
- You want to find references that are indexing the two CAS Registry Numbers.
- You want to retrieve references containing all multiple substances studied after analyzing the using Analyze and Categorize from the substance perspective.



A NOT B

- The search equation is being executed periodically, but you would like to exclude the information obtained during the last search.
- You want to exclude reactions that used a specific reagent from the result obtained in reaction search.
- You want to selectively get the reference set that is not contained in “closely associated” from references obtained with “present anywhere” in the search from research topics.
- You want to retrieve a substance set that is not obtained in substructure search from substances obtained after performing similar structure search using certain structure queries.
- You want to exclude your own citations from cited literature set.



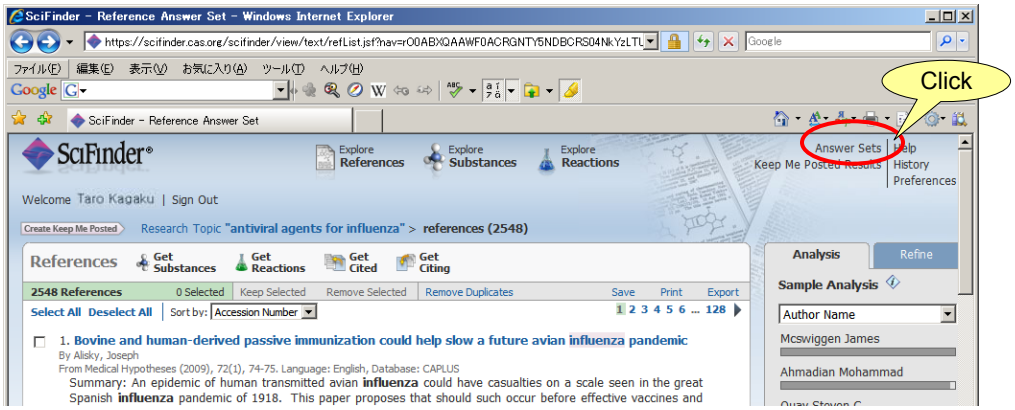
B NOT A

Note: Results that can be assigned operators are limited to substance record sets, reference record sets and reaction record sets.

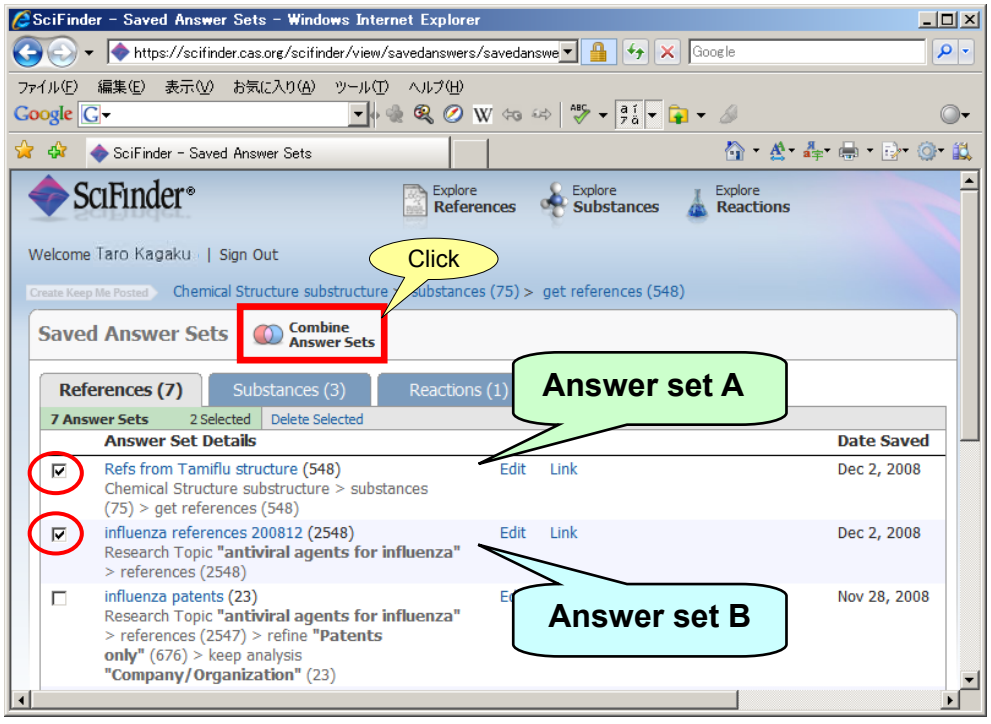
Combine Function

① Save to the server all the answer sets you want to combine（→ p41）.

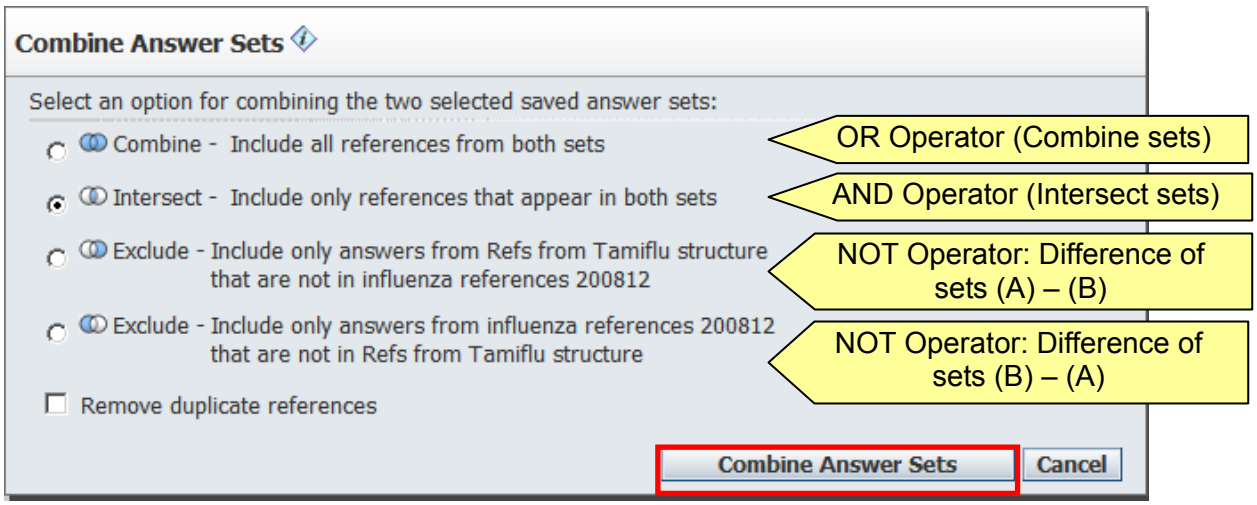
② Click the “Answer Sets” at the screen top right, and list screen of answer sets will be displayed.



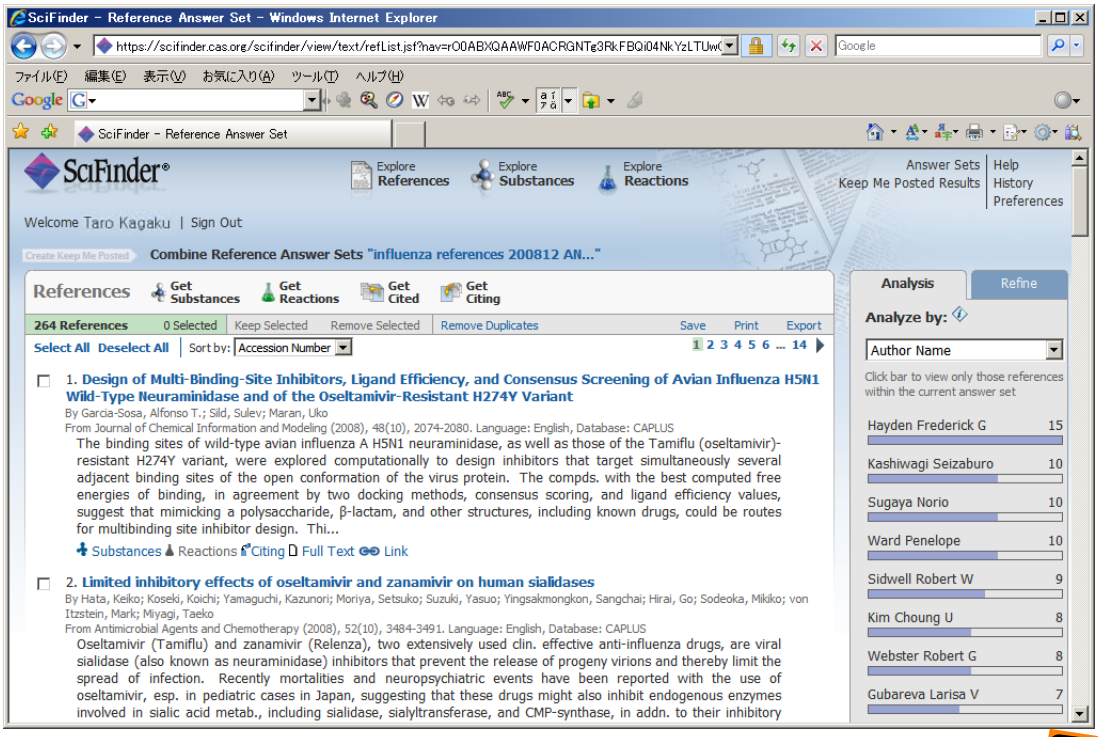
③ Check all the sets you want to combine, and click “Combine Answer Sets”. You can select more than three sets.



④ Select the operators you want to execute. In a combination of 3 sets and more, Exclude (NOT operator) option is not displayed （→ p47）.



⑤ Operation results are displayed. You can perform restriction or analysis later.

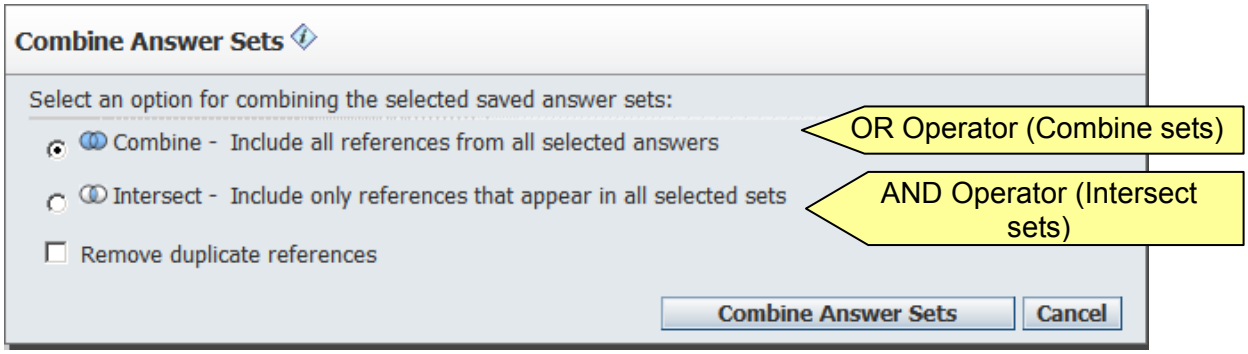


♣ System limitation information

- Highlights during search will not be reflected.
- Keep Me Posted registration cannot be done for sets after operation.
- The similar structure search score will not be displayed.

Combine Function

* As mentioned in □ previous page, when you select 3 or more sets, operator selection screen will be as shown below.



◆ Reference Information: SciFinder user case example

Japan Association for International Chemical Information is introducing SciFinder user case examples at the SciFinder site. Please make sure to refer to it. For those who are interested in data collection, please contact our information division.
http://www.jaici.or.jp/sci/SCIFINDER/user.html

APPENDIX

◆ Reference information containing Chemical Abstracts

SciFinder has been selectively compiling reference information related to substances from approximately 10,000 scientific journals and patents. A wide spectrum of references related to research that used substances, not only chemistry, but from physics to biology are being compiled. Among these journals, SciFinder has been compiling all articles since 1994 from 1,900 major journals.

○ Examples

◆ Physics
- Journal of Applied Physics
- Physical Review (A, B, C, D, E)
- Physical Review Letters
- European Physical Journal (A, B, C, D, E)
- Physics Letters (A, B)
- Journal of Experimental and Theoretical Physics
- Journal of Chemical Physics
- Japanese Journal of Applied Physics (Part 1, 2)

◆ Chemistry
- Journal of the American Chemical Society
- Journal of Physical Chemistry (A, B)
- Macromolecules
- Journal of Organic Chemistry
- Tetrahedron Letters
- Chemistry of Materials
- Journal of the Electrochemical Society
- Solid State Ionics

◆ Environmental Sciences
- Chemosphere
- Environmental Pollution (Amsterdam, Netherlands)
- Journal of Environmental Quality
- Environmental Science and Technology
- Environmental Toxicology and Pharmacology
- Journal of Environmental Science & Engineering
- Water Environment Research
- Water Research

◆ Biology
- Cell
- Molecular Biology of the Cell
- Molecular Biology and Evolution
- Journal of Biochemistry
- Plant Physiology
- Journal of Cell Biology
- Brain Research
- Nucleic Acids Research

◆ Pharmaceutical
- Bioorganic & Medicinal Chemistry
- Bioorganic & Medicinal Chemistry Letters
- Basic & Clinical Pharmacology & Toxicology
- Chemical & Pharmaceutical Bulletin
- European Journal of Pharmaceutical Sciences
- British Journal of Pharmacology
- Journal of Pharmaceutical Sciences
- Pharmaceutical Development and Technology

◆ Medicine
- Annual Review of Medicine
- Birth Defects Research, Part A, B
- New England Journal of Medicine
- Clinical and Diagnostic Laboratory Immunology
- Nature Medicine (New York, NY, United States)
- Experimental and Clinical Endocrinology & Diabetes
- Experimental and Molecular Medicine
- Journal of Clinical Investigation

◆ Agriculture & Nutrition
- Experimental Animals
- Journal of Insect Physiology
- Journal of Animal Science (Savoy, IL, U. S.)
- Journal of Agricultural and Food Chemistry
- Journal of Oleo Science
- Journal of Nutritional Science and Vitaminology
- Journal of the Science of Food and Agriculture
- Fisheries Science (Carlton, Australia)

◆ Material Science & Engineering
- Materials Science & Engineering (A, B, C)
- Biomacromolecules
- Journal of Biomedical Materials Research（A, B）
- Journal of Material Science
- International Journal of Hydrogen Energy
- Journal of the American Ceramic Society
- Materials Transactions
- Particulates and Powder Metallurgy

◆ Electrical and Electronic Engineering
- Applied Surface Science
- Ferroelectrics
- IEEE Journal of Quantum Electronics
- Journal of Electronic Materials
- Journal of Vacuum Science & Technology, B
- Quantum Electronics
- Microelectronic Engineering
- Superconductor Science and Technology

◆ Mechanical Engineering
- Corrosion Science
- Materials Science and Technology
- Journal of Thermophysics and Heat Transfer
- Combustion Science and Technology
- Archivum Combustionis
- ISIJ International
- Wear
- Journal of Japan Institute of Metals

You can view a list of published major journals at the following site

http://www.cas.org/expertise/cascontent/caplus/corejournals.html

APPENDIX

◆ Chemical Abstracts Compiling Division (CA section list)

- Compiled divisions are entered in reference record one by one (see page 4).
- Compiled divisions can also be used in refining references (see page 19).

Biochemistry

1. Pharmacology
2. Mammalian Hormones
3. Biochemical Genetics
4. Toxicology
5. Agrochemical Bioregulators
6. General Biochemistry
7. Enzymes
8. Radiation Biochemistry
9. Biochemical Methods
10. Microbial, Algal, and Fungal Biochemistry
11. Plant Biochemistry
12. Nonmammalian Biochemistry
13. Mammalian Biochemistry
14. Mammalian Pathological Biochemistry
15. Immunochemistry
16. Fermentation and Bioindustrial Biochemistry
17. Food and Feed Chemistry
18. Animal Nutrition
19. Fertilizers, Soils, and Plant Nutrition
20. History, Education, and Documentation

Organic Chemistry

21. General Organic Chemistry
22. Physical Organic Chemistry
23. Aliphatic Compounds
24. Alicyclic Compounds
25. Benzene, Its Derivatives, and Condensed Benzenoid Compounds
26. Biomolecules and Their Synthetic Analogs
27. Heterocyclic Compounds (One Hetero Atom)
28. Heterocyclic Compounds (More Than One Hetero Atom)
29. Organometallic and Organometalloidal Compounds
30. Terpenes and Terpenoids
31. Alkaloids
32. Steroids
33. Carbohydrates
34. Amino Acids, Peptides, and Proteins

High Polymers Chemistry

35. Chemistry of Synthetic High Polymers
36. Physical Properties of Synthetic High Polymers
37. Plastics Manufacture and Processing
38. Plastics Fabrication and Uses
39. Synthetic Elastomers and Natural Rubber
40. Textiles and Fibers
41. Dyes, Organic Pigments, Fluorescent
42. Coatings, Inks, and Related Products
43. Cellulose, Lignin, Paper, and Other Wood Products
44. Industrial Carbohydrates
45. Industrial Organic Chemicals, Leather, Fats, and Waxes
46. Surface-Active Agents and Detergents

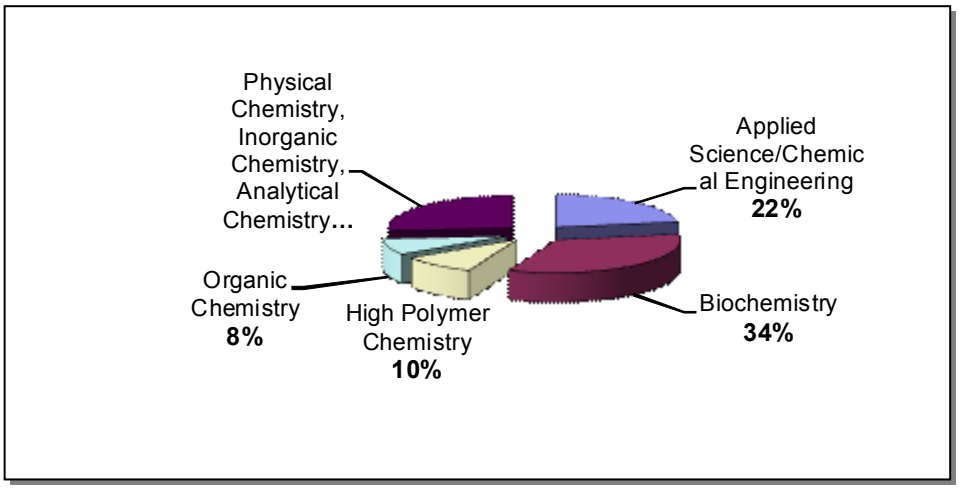
APPENDIX

Applied Chemistry and Chemical Engineering

47. Apparatus and Plant Equipment
48. Unit Operations and Processes
49. Industrial Inorganic Chemicals
50. Propellants and Explosives
51. Fossil Fuels, Derivatives, and Related Products
52. Electrochemical, Radiational, and Thermal Energy Technology
53. Mineralogical and Geological Chemistry
54. Extractive Metallurgy
55. Ferrous Metals and Alloys
56. Nonferrous Metals and Alloys
57. Ceramics
58. Cement, concrete, and Related Building Materials
59. Air Pollution and Industrial Hygiene
60. Waste Treatment and Disposal
61. Water
62. Essential Oils and Cosmetics
63. Pharmaceuticals
64. Pharmaceutical Analysis

Physical Chemistry, Inorganic Chemistry and Analytical Chemistry

65. General Physical Chemistry
66. Surface Chemistry and Colloids
67. Catalysis, Reaction Kinetics, and Inorganic Reaction Mechanisms
68. Phase Equilibriums, Chemical Equilibriums, and Solutions
69. Thermodynamics, Thermochemistry, and Thermal Properties
70. Nuclear Phenomena
71. Nuclear Technology
72. Electrochemistry
73. Optical, Electron, and Mass Spectroscopy and Other Related Properties
74. Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes
75. Crystallography and Liquid Crystals
76. Electric Phenomena
77. Magnetic Phenomena
78. Inorganic Chemicals and Reactions
79. Inorganic Analytical Chemistry
80. Organic Analytical Chemistry



SciFinder Environment

◆ Requirements to use SciFinder (Web version)

Refer to following URL for current information about the Recommended OS and browser.
(http://www.cas.org/support/scifi/sysreqs.html)

・ Recommended OS and browser (Tested OS and browser) (As of June 2010)

Recommended OS	Recommended browser
Windows XP Professional * (SP1 or later)	Internet Explorer 7.0・8.0 Firefox 3.0・3.5
Windows Vista * (Business, Enterprise, Ultimate)	Internet Explorer 7.0・8.0 Firefox 3.0・3.5
Mac OS X 10.4.11	Firefox 3.0・3.5 Safari 3.x・4.0
Mac OS X 10.5 and 10.6	Firefox 3.0・3.5 Safari 3.x・4.0

*Windows 64bit OS is not supported.

・ Java and Jave Script enabled
(Jave plugin (Java Runtime Environment (JRE) 5 or later) Installation is required)
http://www.cas.org/misc/downloads/jreplugin.html （English）
・ Cookies enabled
・ ActiveX enabled（For Internet Explorer）

ActiveX control and plugin	Internet Explorer 7・8
ActiveX control and plugin execution	Enabled
ActiveX display dialog for ActiveX control	Disabled
Scriplets permission	Disabled
Run ActiveX that is not marked safe even after running the script	Disabled
Run ActiveX that is marked safe even after running the script	Enabled
Binary behavior and script behavior	Enabled
Display Web page video or animation that is not using external media player	Disabled
Download signed ActiveX control	Display dialog
Allow ActiveX control not used previously to run without warning.	Disabled
Download unsigned ActiveX control	Disabled

◆ Support (Help Desk)

Please do not hesitate to contact our help desk should you have any questions regarding SciFinder (Web Version). You can phone, fax or e-mail your questions (see cover page for our contact number).