 SciFinder®  
インターネットセミナー

キーワード検索の活用

**JAICI**  
化学情報協会

2014年7月



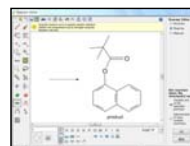
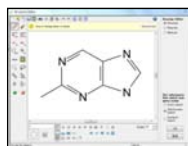
1

## 本日の内容

### キーワード検索の活用

- ◆まだ利用されていない方  
有用なツールであることの紹介
- ◆すでに利用している方  
より活用いただけるテクニックの紹介

 SciFinder® =



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# 本日の内容

1. SciFinder のキーワード検索の特徴
2. キーワード検索のしくみ
3. よくある質問と回答
4. まとめ

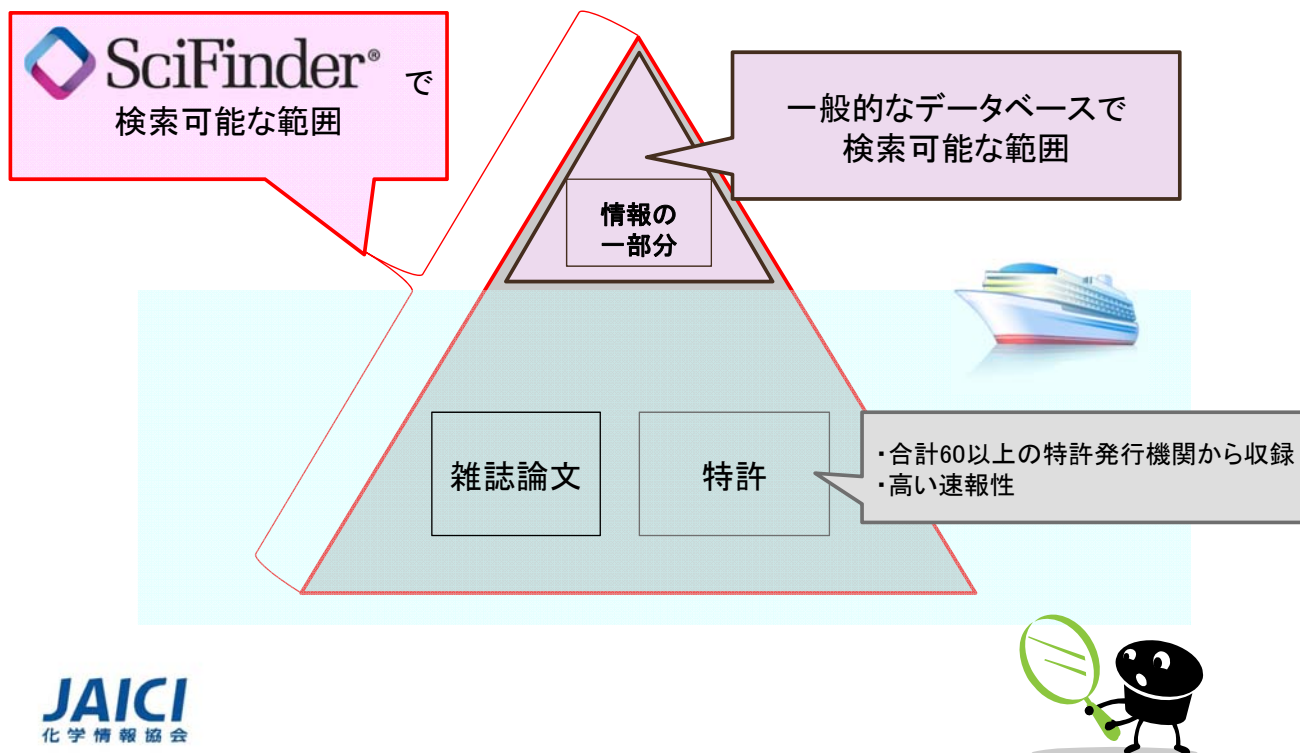
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# 1. SciFinder のキーワード検索の特徴

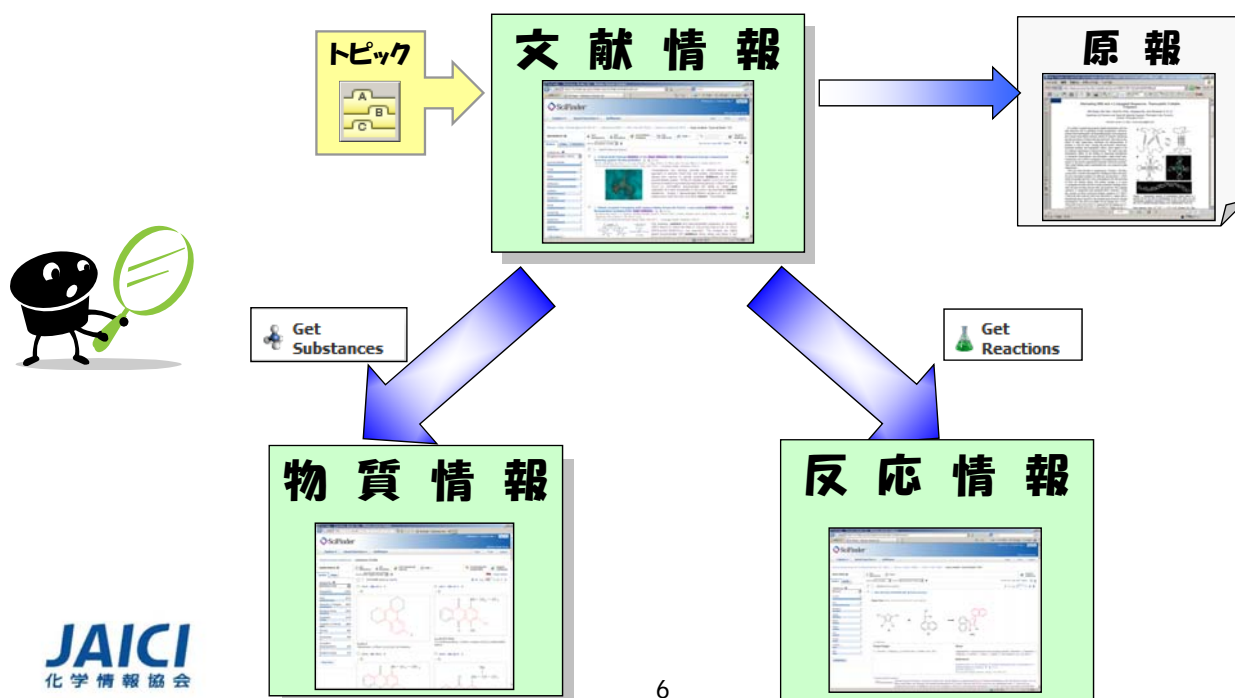
- (1) 幅広いデータを検索できる
- (2) 類義語も含めた検索ができる
- (3) 的確な情報が得られる
- (4) 文献の物質・反応情報を参照できる



# 幅広いデータを検索できる



# 文献の物質・反応情報を参照できる



# 操作画面拡大

クリック

REFERENCE DETAIL

Get Substances Get Reactions Get Related Citations Get Full Text

Return Previous Next

### 43. Anti-influenza activity of phenethylphenylphthalimide analogs derived from thalidomide

By: Iwai, Yuma; Takahashi, Hitoshi; Hatakeyama, Dai; Motoshima, Kazunori; Ishikawa, Minoru; Sugita, Kazuyuki; Hashimoto, Yuichi; Harada, Yuichi; Itamura, Shigeyuki; Odagiri, Takato; Tashiro, Masato; Sei, Yoshihisa; Yamaguchi, Kentaro; Kuzuhara, Takashi

Swine-origin influenza A virus has caused pandemics throughout the world and influenza A is regarded as a serious global health issue. Hence, novel drugs that will target these viruses are very desirable. Influenza A expresses an RNA polymerase essential for its transcription and replication which comprises PA, PB1, and PB2 subunits. We identified potential novel anti-influenza agents from a screen of 34 synthesized phenethylphenylphthalimide analogs derived from thalidomide (PPT analogs). For this screen we used a PA endonuclease inhibition assay, a PB2 pathogenicity-determinant domain-binding assay, and an anti-influenza A virus assay. Three PPT analogs, PPT-65, PPT-66, and PPT-67, were found to both inhibit PA endonuclease activity and retard the growth of influenza A, suggesting a correlation between their activities. PPT-28 was also found to inhibit the growth of influenza A. These four analogs have a 3,4-dihydroxyphenethyl group in common. We also discuss the possibility that 3,4-dihydroxyphenethyl group flexibility may play an important functional role in PA endonuclease inhibition. Another analog harboring a dimethoxyphenethyl group, PPT-62, showed PB2 pathogenicity-determinant domain-binding activity, but did not inhibit the growth of the virus. Our present results indicate the utility of the PA endonuclease assay in the screening of anti-influenza drugs and are therefore useful for future strategies to develop novel anti-influenza A drugs and for mapping the function of the influenza A RNA polymerase subunits.

Indexing

Heterocyclic Compounds (One Hetero Atom) (Section 27-11)

Section cross-reference(s): 1, 10

Concepts

Antiviral agents Influenza A virus

prepn. and anti-influenza A activity of N-(phenethylphenyl)phthalimides

Substances

- 115978-06-8P
- 174624-72-7P
- 1186335-51-2P
- 1186335-53-4P
- 1186335-54-5P
- 1186335-55-6P
- 1186335-57-8P
- 1186335-58-9P
- 1186335-59-0P
- 1186335-61-1P

1. 1240372-98-8

C<sub>24</sub>H<sub>15</sub>Cl<sub>4</sub>N<sub>2</sub>O<sub>4</sub>

1# isoindole-1,3(2H)-dione, 4,5,6,7-tetrachloro-2-[(2-(3,4-dimethoxyphenyl)ethenyl)phenyl]-

Experimental Properties

2. 1240372-97-7

C<sub>22</sub>H<sub>11</sub>Cl<sub>4</sub>N<sub>2</sub>O<sub>2</sub>

1# isoindole-1,3(2H)-dione, 4,5,6,7-tetrachloro-2-[(2-phenylethenyl)phenyl]-

Experimental Properties

3. 1240372-96-6

C<sub>22</sub>H<sub>11</sub>Cl<sub>4</sub>N<sub>2</sub>O<sub>4</sub>

4. 1240372-95-5

C<sub>24</sub>H<sub>15</sub>Cl<sub>4</sub>N<sub>2</sub>O<sub>4</sub>

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## 本日の内容

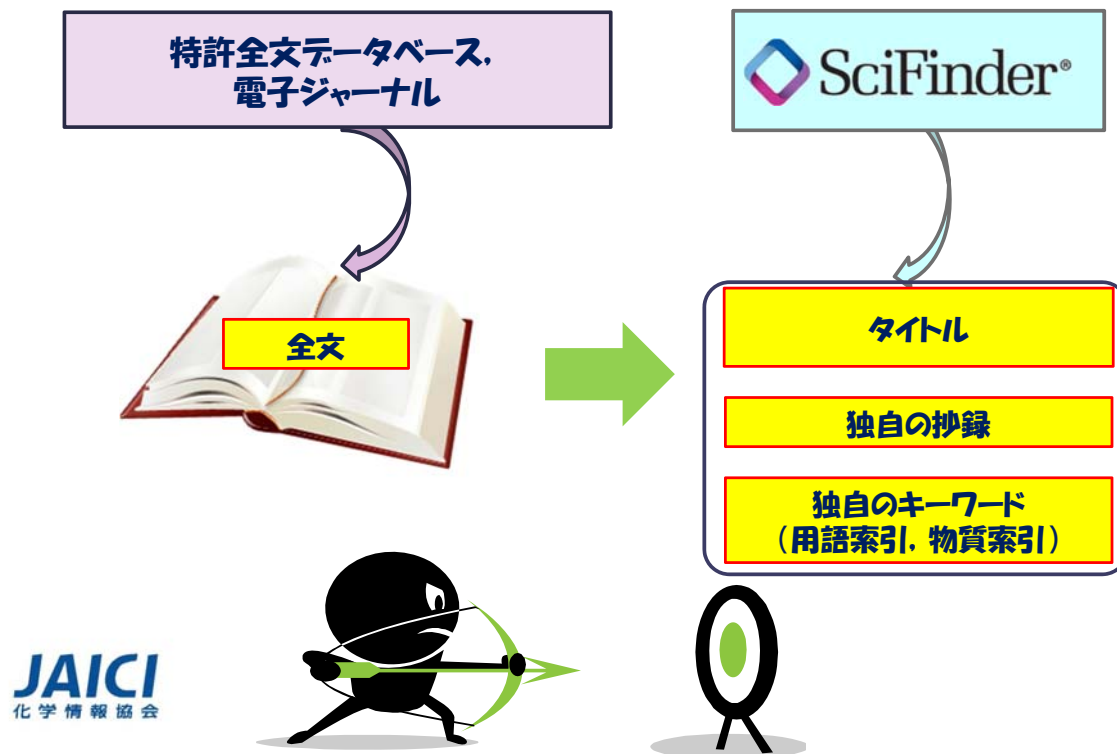
1. SciFinder のキーワード検索の特徴

2. キーワード検索のしくみ

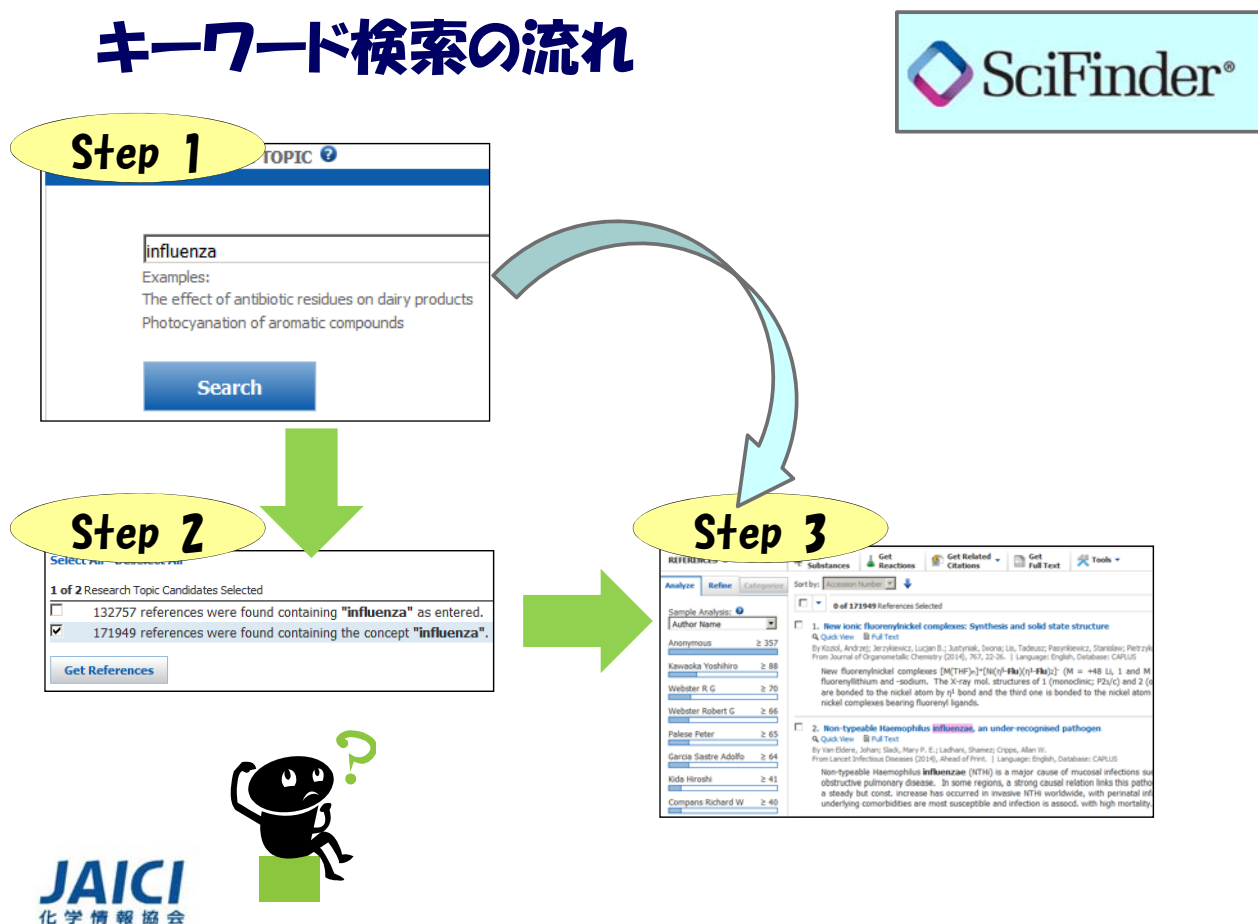
3. よくある質問と回答

4. まとめ

# 検索対象と仕組みが異なります



# キーワード検索の流れ



## Step 2 の意味 (1)

キーワード(フレーズ)を1つ入力した場合

例)インフルエンザについての調査

0 of 2 Research Topic Candidates Selected

- 132747 references were found containing "influenza" as entered.
- 171933 references were found containing the concept "influenza".

Get References

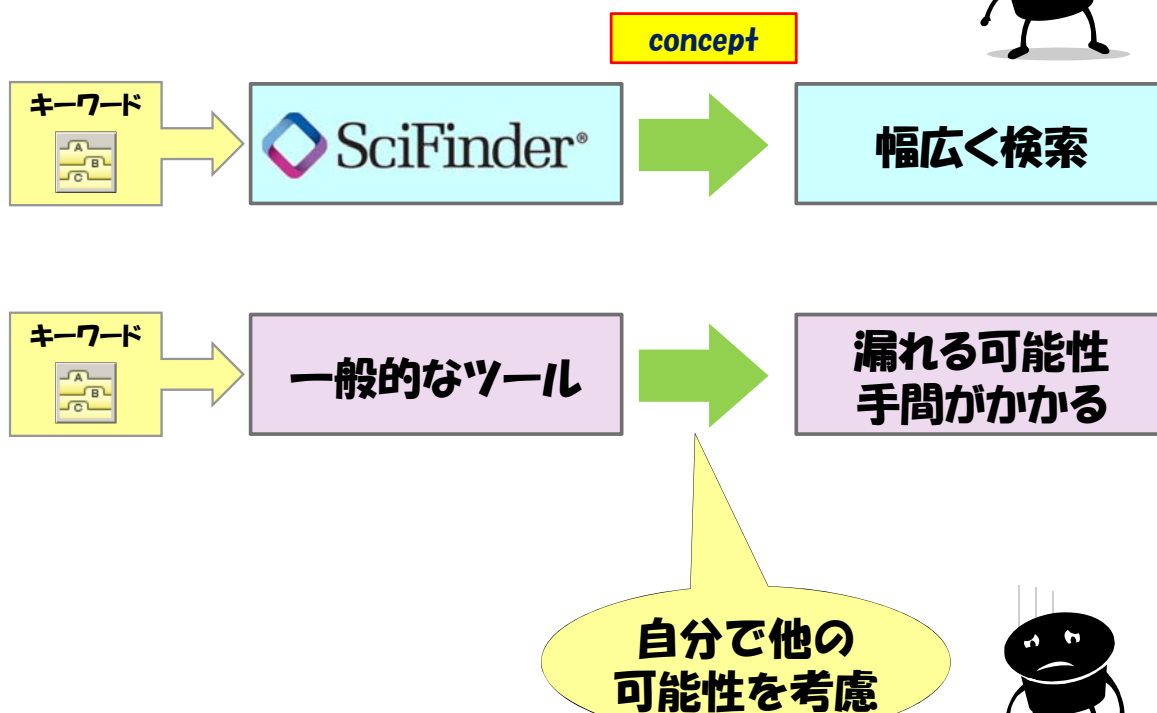
ズバリ

幅広く

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## 他のツールとの違い



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## Step 2 の意味 (2)

キーワード(フレーズ)を2つ以上入力した場合

例)北京の大気汚染についての調査

スペース

air pollution Beijing

ズバリ

幅広く

0 of 2 Research Topic Candidates Selected

- 227 references were found containing "air pollution Beijing" as entered.
- 1387 references were found containing the concept "air pollution Beijing".

キーワード(フレーズ)を2つ以上入力した場合

AND

air pollution and Beijing

ズバリ

同じ文献中

0 of 5 Research Topic Candidates Selected

- 358 references were found containing "air pollution and Beijing" as entered.
- 2319 references were found containing both of the concepts "air pollution" and "Beijing".
- 376367 references were found containing either the concept "air pollution" or the concept "Beijing".
- 358717 references were found containing the concept "air pollution".
- 19969 references were found containing the concept "Beijing".

# キーワード(フレーズ)を2つ以上入力した場合

## 前置詞

air pollution **in** Beijing

ズバリ

同じ文献中

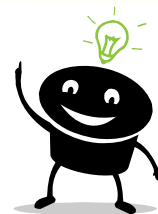
同じ文章中



0 of 5 Research Topic Candidates Selected

- 358 references were found containing "air pollution in Beijing" as entered.
- 1387 references were found containing the two concepts "air pollution" and "Beijing" closely associated with one another.
- 2319 references were found where the two concepts "air pollution" and "Beijing" were present anywhere in the reference.
- 358717 references were found containing the concept "air pollution".
- 19969 references were found containing the concept "Beijing".

# ふたつ以上のキーワードの掛け合わせ



## スペース

air pollution Beijing

ズバリ

## AND

air pollution **and** Beijing

同じ文献中

## 前置詞

air pollution **in** Beijing

同じ文章中



# ノイズが多いと感じた場合

## 解析項目 Index Term を活用する



**クリック**

The screenshot shows the SciFinder interface. On the left, the 'Analyze by:' dropdown is set to 'Index Term', with a list of terms and their counts: Air Pollution (115), Airborne particles (515), Atmospheric aerosols (225), Air analysis (183), Humidity (173), Wind (164), Environmental transport (157), Dust (146), and Particle Size (130). A yellow callout bubble points to the 'Index Term' dropdown with the text 'クリック'. The main area shows search results for 'Air Pollution and Industrial Hygiene (Section59-2)'. A 'Keywords' box highlights the search term 'Air pollution'. Below this, a table lists related substances with their IDs and names.

Substances
50-32-8 Benzo[a]pyrene, occurrence
53-70-3 Dibenzo[a,h]anthracene
56-55-3 Benzo[a]anthracene
83-32-9 Acenaphthene
85-01-8 Phenanthrene, occurrence
86-72-7 Fluorene
91-20-3 Naphthalene, occurrence
129-12-7 Anthracene, occurrence
129-00-0 Pyrene, occurrence
191-24-2 Benzo[ghi]perylene
193-39-5 Indeno[1,2,3-cd]pyrene
205-99-2 Benzo[b]fluoranthene
206-44-0 Fluoranthene
207-08-9 Benzo[k]fluoranthene
208-96-8 Acenaphthylene
218-01-9 Chrysene

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## SciFinder のキーワード検索の特徴

(1) 幅広いデータを検索できる

(2) 類義語も含めた検索ができる

(3) 的確な情報が得られる

(4) 文献の物質・反応情報を参照できる

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# 本日の内容

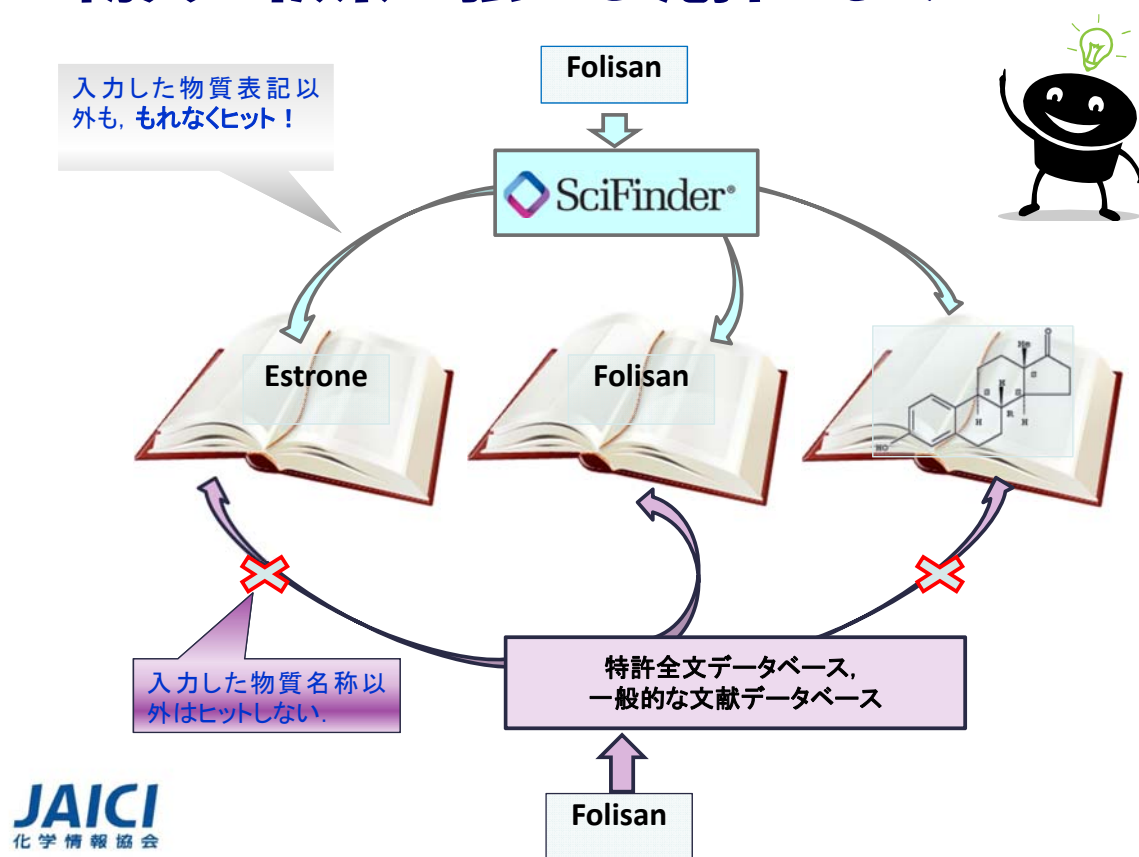
1. SciFinder のキーワード検索の特徴
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## Question !



- (1) AND, OR, NOT は使えますか？
- (2) 前方一致記号( ? や\* )は, 使った方がよいですか？
- (3) 絞り込みでは, 入れた言葉だけが検索されるのですか, または幅広く検索してくれるのですか？  
( "as entered" か？ "concept" か？ )
- (4) 今後は物質の名前から検索するときは, 他のツールでなく SciFinder でキーワード検索がよいですね？

# 物質の検索に強みを発揮します



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## SciFinder のキーワード検索の特徴

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## 検索操作上の留意点

- (1) “as entered” と “concept” の違い
- (2) “closely associated” と “present anywhere” の違い
- (3) 複数のテーマを最初から掛け合わせたら、前置詞で結び、closely associated を選ぶ
- (4) ノイズが多ければ、Index Term で解析
- (5) 物質名称は Substance Identifier から

