Software-Supported Method Development

The New Scanview™ Application Database, Version 2015

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Introduction

The new Scanview version 2015 is an application database that contains full method descriptions and literature references for gas and liquid chromatographical analyses, sample preparation, optical spectroscopy applications (NMR, UV, IR, ICP-MS/ICP-OES and AA) and chemical cleanup and reaction monitoring. Almost 5000 application notes are contained in the Scanview database. The user-friendly front-end allows you to search/filter on a variety of categories – the top five categories are the most used.

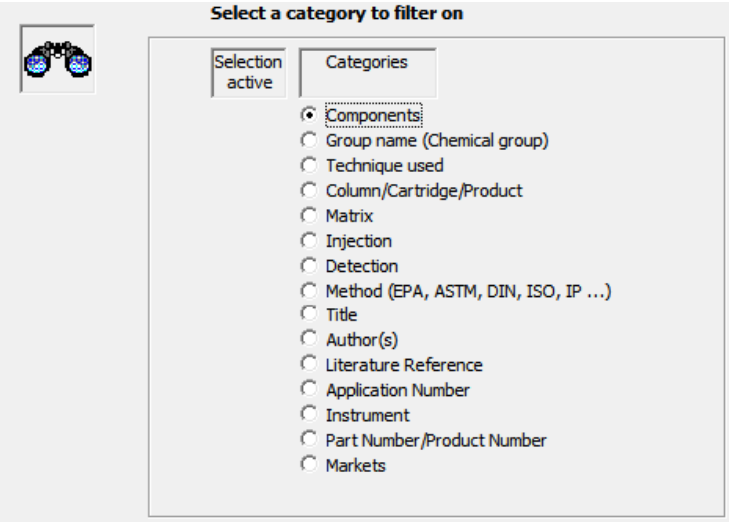
Installation

Scanview comes as only one ZIP file – *ScanviewPortable.zip*. This file contains the complete application database in a sub-directory named ScanviewPortable. Scanview is a so-called portable application, i. e. you do not need to install it, just copy the ScanviewPortable folder to a place on your SSD or HDD and run Scanview.exe. The full installation requires approximately 30 MB free disk space. The program is compatible with Microsoft Windows®.

Users of previous versions of Scanview can still use the older version parallel as the portable version does not overwrite any older files. The difference in Scanview 2015 is that all application notes are in Agilent's online eLibrary and are downloaded the moment you want to see them. The change was made because all the application notes exceed 2.5 GB data and downloading all of those could be an issue, but this change guarantees that you will always see the newest version of an application note.

Filter Wizard

After starting the program the splash screen shows the version number. It disappears after a few seconds and the FILTER WIZARD INTRO screen appears. If you check the option to never see the INTRO screen again, the FILTER WIZARD screen appears instead.



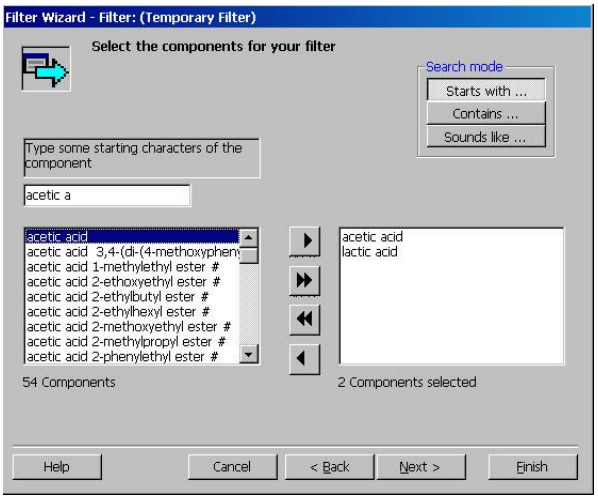
From here you can access all possible categories. The list of categories is sorted by access frequency, i.e. categories that are searched most often. Most people filter on component names first.

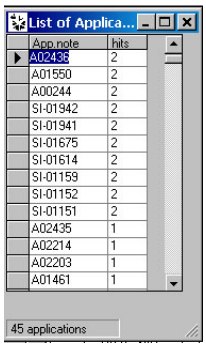
Click the category you want to search, for example COMPONENT, click the NEXT button and then enter the filter criteria.

SEARCH MODES:

- If STARTS WITH is used, every character you type is extended to the closest name in the database.
- CONTAINS gives you the option to search for two text blocks within all names.
- SOUNDS LIKE takes care of unknown spellings or the typical problems with T vs. TH, P vs. PH or B vs. P.

Typically, the official IUPAC name of a component and synonym names are in the database. For example, the IUPAC name for lactic acid is 2-Hydroxypropanoic acid. In Scanview, prefixes are placed behind the name, so you could search for this particular component by either “LACTIC ACID” or “PROPANOIC ACID 2-HYDROXY“. It is also possible to add another component or a list of them, for example we added acetic acid.





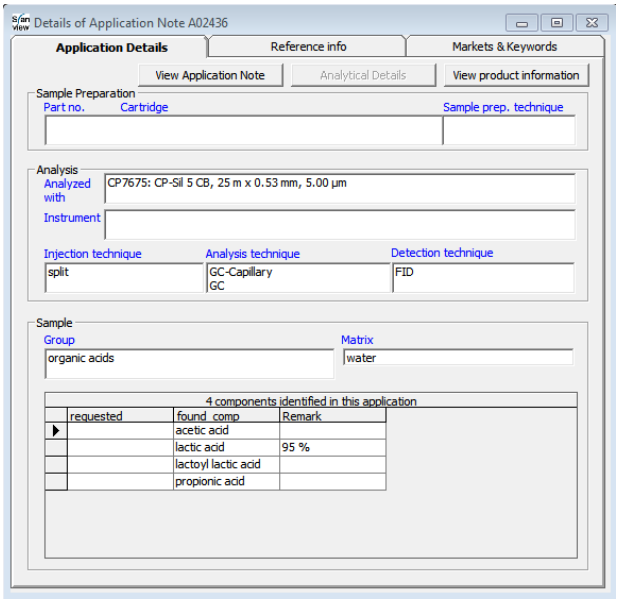
The component of interest is then chosen from the result list (left column) and transferred to the select box on the right. The double arrow transfers all components from the left to the right box.

After choosing the components there are two ways to continue:

- NEXT lets you choose another category to filter, for example to filter for lactic acid done with GC or to add a second component.
- FINISH shows you the results of your request (in this case a search for lactic acid and acetic acid).

Once you add all of the search categories/criteria and click FINISH, the LIST OF APPLICATIONS window opens showing all application notes that contain at least one of the components in your query/filter. The number in the HITS column indicates how many of the components are present in the application note.

For our example, Scanview found 45 applications and the top 10 entries contain both components.



This is application number A02436, a gas chromatographical application note. The column used is mentioned as well as injection technique and detector, the chemical group, the matrix and all components of this application note.

As you will see all analytical techniques are mentioned in the result list. If you only want to have, for example, HPLC application notes, you can edit the filter and add ANALYTICAL TECHNIQUE = HPLC. The result list would then contain 12 application notes.

Note: it is not possible to combine categories with the component list that do not exist (like in common Internet search engines) to get no results. Scanview shows you only those entries in categories where a match is possible. In our acid example there will only be several GC entries, HPLC and SPE.

The application notes are downloaded directly from Agilent's online eLibrary. If no detailed PDF-file exists or the application note comes from literature, you will see REFERENCE ONLY instead of a VIEW APPLICATION NOTE button. Due to international copyright laws we may not supply copies of literature references. You will need to contact your local library or an Internet document delivery service for the copy.

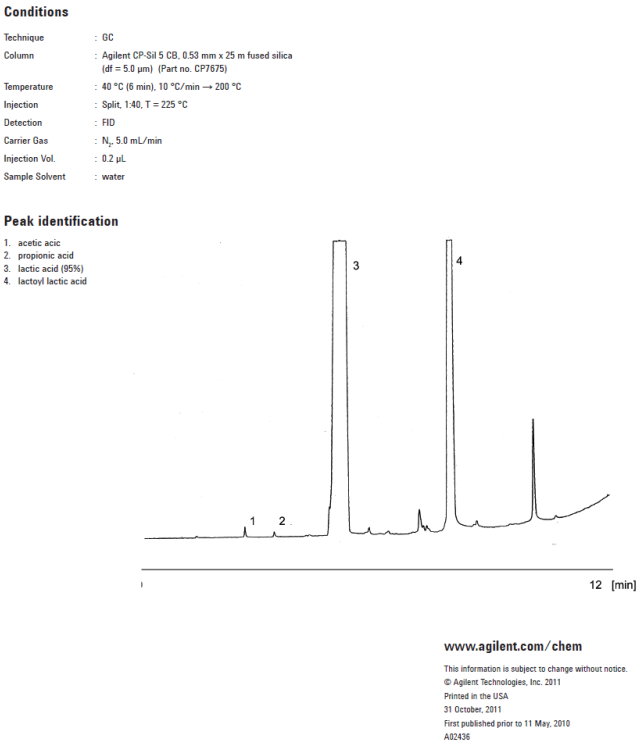
When you click on one of the entries, you will see the detailed information shown in the Figure on the left.

The REFERENCE INFO tab includes title, author and, if available, bibliographic data. If this reference comes from a scientific journal you also will find a small globe button on the right site of the citation. Clicking it will bring you to the publisher's website, where you might be able to buy this article. Due to international copyright laws Agilent cannot supply these articles to the user.

On the APPLICATION DETAILS tab:

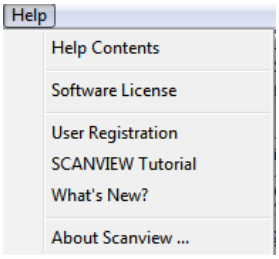
- The VIEW PRODUCT INFORMATION button shows all available columns with the mentioned phase, for example all CP-Sil 5 CB columns

- The VIEW APPLICATION NOTE button opens the application PDF-file with additional method parameters:



For some, mainly sample preparation, application notes the ANALYTICAL DETAILS button is enabled and you can see these details in a text box, ready to print if necessary.

Additional Resources



These additional resources are included:

- Registered users receive notifications when there is something new with Scanview
- A tutorial (PowerPoint®-based)
- A list of new features (What's new?)

Conclusions

Scanview is a versatile and valuable tool to assist you in the development of analytical methods.

Download Scanview from AGILENT.COM