New features in Profex 3.12

December 2017, Nicola Döbelin
Filter phases in Add/Remove Phase dialog

1. Enter a filter string

2. The structure list will be filtered instantly.
Favorite phases in Add/Remove Phase dialog

1. Select favorite phases
2. Only display favorites
The same favorites also apply to the reference structure list.

Configure favorites in preferences dialog.
Auto-completion in reference structure menu

1. Start typing in the menu box
2. Auto-completion will propose a reference phase
3. Press «Enter» to accept
New Tool: Calculate Absorption Coefficients

Abs. Coefficient...
... For phases
... For the sample
Penetration depth

From refinement project
User-specified

**Absorption Coefficient**

<table>
<thead>
<tr>
<th>Phase</th>
<th>Empirical Formula</th>
<th>Density [g/cm³]</th>
<th>Quantity</th>
<th>Phase MAC [cm²/g]</th>
<th>Phase LAC [cm²/cm³]</th>
</tr>
</thead>
<tbody>
<tr>
<td>betaCaPyrophosphate</td>
<td>CA16 O56 P16</td>
<td>3.1270</td>
<td>0.0458</td>
<td>77.10324</td>
<td>241.10133</td>
</tr>
<tr>
<td>betaTCP</td>
<td>CA63 O168 P42</td>
<td>3.0680</td>
<td>0.7657</td>
<td>85.72296</td>
<td>262.99805</td>
</tr>
<tr>
<td>Hydroxyapatite</td>
<td>CA10 H2 O26 P6</td>
<td>3.1360</td>
<td>0.1885</td>
<td>86.54988</td>
<td>271.42041</td>
</tr>
</tbody>
</table>

Tools → Calculate Absorption Coefficients...
New Tool: Mathematical operations on Scans

1. Enter mathematical expression

2. Generate scan

3. New scan will be appended to the project
New Tool: Integrate peak intensities

1. Use <<Shift>> + left mouse button to define integration ranges

2. Integrated intensity will be calculated

Window → Peak Integrals
Copy scan data to clipboard

1. Right mouse button in Plot Options list

2. Paste data to other application
Copy scan pixel image to clipboard

1. **<<Ctrl + C>>** on graph display

2. **<<Ctrl + V>>** in other application
New syntax for quantification GOALs (optional)

New syntax

Customize in preferences dialog (select old or new syntax)
+ many bugfixes