Using Kim with Stored Calibration

Since Kim version 5.12 it is now possible to process quantitative samples against a calibration curve, that was created on a different plate. Until 5.12 it was necessary to have standards and patient samples always on the same plate.

Terminology

To differentiate between the two calibration modes we introduce concepts of Calculated Calibration and Stored Calibration. The calculated calibration describes what we used until now. The stored calibration deals with the new feature introduced in version 5.12.

Stored Calibration

A plate definition contains a full description of a calibration without any link to standards on current plate. Actually, a plate with stored calibration must not contain standards!
(If we allowed such a situation then the user would be confused by a graph that does not match current standards.)

Stored calibration cannot be changed – in defining dialogs, fields for calibration model and concentrations are disabled and the system shows “Stored calibration” message.

In the calibration graph window, the title contains (MEMO) text after a name of calibration model. User cannot exclude calibration points neither he change calibration range.

Creating a Stored Calibration

First, it is necessary to have a valid calibration. One could prepare a plate with standards, measure such a plate and calculate a calibration. For training purposes it is possible to simulate a plate with standards, enter absorbances manually and let the system calculate a calibration curve.

From now on we assume that a plate **C** contains a valid calibration and that calibration is shown on Kim desktop.

- Open a new (empty) plate **N**.
- Choose **Definition/Calibration** menu command.
- In the **Calibration** dialog, click **Load calibration** button.

System shows a **Select Calibration** dialog with a list of currently opened plates with valid calibrations. Plate **C** should be seen in the list. Select a plate with calibration and confirm it by **OK** button. System copies calibration from plate **C** into plate **N**. Plate **N** will now contain a stored calibration.

Note: If there is no plate with calibration curve present on Kim desktop, then the system shows usual file open dialog to choose a calibration from a file.

We continue working with plate **N**. Go to layout mode to distribute samples (do not enter standards!). Go to **Definition/Calculations** (or **Definition/Advanced calculations**) to complete the definition.

Plate **N** is now complete and can be used to do a measurement and to evaluate samples against a stored calibration curve. You can also save plate **N** definition (**File/Save as method**) to create a new method in the list of methods. The stored calibration becomes a part of a plate definition. Is ready to be used in subsequent plates created with that method.

A responsible person should take care, that a calibration is actualized when a new set of chemicals is about to be used.

Hint: Version 5.12 introduces a new menu command: **Definition/Info**. With that, you can easily access method name and comment to an active plate (until now it was only possible to manipulate those information when saving a plate in the list of methods). The description can be used to make remarks concerning the calibration (when and how it was created). The system does not keep any link to the original calibration curve. It is the user’s responsibility to keep track of his calibrations.