WITec Suite 5.3

- Suite
 - New Splash
 - $\circ~$ WITec Control Help integrated in this Help
- True Match
 - $\circ\;$ Automatically created search sets for each database
 - New Search Option "Optimize HQI" to improve HQI calculation of noisy spectra
 - New Search Option "Subtract 2nd Spectrum" to improve multi component search HQI calculation of mixed spectra (e.g. subtract big portion of substrate to see small portion of "interesting" material - HQI is otherwise dominated by substrate)
 - $\circ~$ Jump to next/previous material buttons if columns are sorted by material
 - $\circ~$ CSV Export can now be sorted by original list instead of using the display sort
 - Save/Load Spectral Masks
- Particle Scout
 - $\circ~$ New Reporting Features (Exportable as bitmap into the clipboard)
 - Map with Legend (Image with Particle Mask)
 - Bar Chart with Legend
 - Pie Chart with Legend
 - Particle Thumbnails with Spectrum
 - Table with styling possibilities
 - New Specturm Measurement Options
 - Signal optimization using automatic signal to noise ratio detector
 - Auto focus and signal optimization masks can now be edited in the particle scout GUI (using some installed default spectra selectable from a list)
 - New "Watershed" Mask Algorithm to find particles
 - $\circ~$ Add particles to the current project
 - Possibility to find and add particles from the same image to the current particle project (e.g. dark particles, then bright particles)
 - Possibility to load multiple images and find and add particles to the current project
 - Possibility to export multiple bitmaps from WITec Project into particle scout
 - The first image is always the master image. Only the master image will be displayed and saved in the project.
 - Possibility to define a material name for each exported bitmap
 - $\circ~\ensuremath{\mathsf{Possibility}}$ to import a custom particle mask from file
 - $\circ~$ Improved performance and higher resolution of image and mask previews
 - $\circ~$ Improved performance for loading and saving
 - Attach results from True Match new features
 - For each search spectrum, the first flagged result is now used, if any is flagged
 - Multi Component Search: User can select which component should be used
 - Possibility to set minimum weight limit if a sub component is selected
 - $\circ\;$ Jump to next/previous material buttons if particle list is sorted by material
 - $\circ~$ Now supports big images
 - Material can now be attached to a particle without having a spectrum
 - Unified CSV Export brackets for units
 - Save/Load Spectral Masks
- Video Window
 - New Particle Scout Stitching Tab: Supports High-Resolution Images Possibility to define stitching mask (circle, pie, cross)
 - Video Image Vignetting Correction with automatic calibration
 - Support for new automated Output-Multi-Coupler and automatic laser output adjustment using adjustment plates
 - TSM3 User Interface now integrated in Video Window (shares place with AFM user interface)
 - Speed Limit for Sample Positioner now available in options next to joystick
 - $\circ~$ Illumination / Brightness now also controllable via gamepad in auxiliary device modes
- WITec Project

- New Look / Icons in Main Window
- Graph Viewer: Shortcut Control-C now only copies bitmap. Control-Shift-C copies ASCII Data
- $\circ\;$ True Component Analysis: User can now select which component spectra should be shown in the graph viewer
- o Filter Viewer now shows new filters automatically
- WITec Control
 - New Icons for Start Sequencer Buttons
 - o Spectral Auto Focus: now a mask can be defined instead of a single range
 - KPFM now logs more values in text object
 - $\circ~$ Improvement of multiple styles and parameter names
 - Automatic Software Z mode after successful signal stabilization

WITec Suite 5.2

- New Software: WITec ParticleScout
 - Find particles on (stitching-) video image
 - Manage and filter particles
 - o ASCII / CSV Export of particles and spectra
 - Measure Raman spectrum on all particles
 - Calculate and attach spectrum properties to particle (Raman signal, Fluorescence signal, Oversaturation)
 - Search in WITec TrueMatch spectral database and attach found material name + HQI to particle
 - o Simple statistical analysis (group by material and desired particle property, e.g. area)
 - Start via
 - Video Image Stitching Dialog button
 - Project Manager: Context menu of bitmap
- Microscope Control Application (Video Window)
 - Support for new automated optics
 - Field Stop and Aperture Stop
 - Polarizer and Analyzer (Polarizer and Analyzer)
 - Possibility for auto-link desired angle between polarizer and analyzer
- WITec Control
 - o New data object names for new measurement data objects
 - Spectrometer Calibration File is automatically selected
- WITec Project
 - True Component Analysis
 - Can now show and extract "only positive values" / positive weighting factors
 - Can now extract Pearson correlation coefficient as an image (Plus version)
 - Spectrum Normalization now available in Graph Background Subtraction dialog
 - o Graph Viewer: Order of graph objects can be changed (e.g. for cascade display mode)
 - Binary export of spectral data objects (raw 32 bit float format, much faster than ASCII)
 - Graph and Image Viewer with all their settings can now be duplicated
- True Match
 - Spectral mask is now a real mask (set and clear multiple ranges allowed)
 - Search algorithm now corrects x-axis / wave-number shift (± 10 1/cm)
 - $\circ~$ The following sorting and grouping of result columns now available:
 - No Sort
 - Sort by Best HQI
 - Sort and group by Best Material Name
 - Sort by Best HQI and group by Material Name
 - o Improved web search of sample properties
 - HQI and PDF-Report available when comparing a search spectrum with a database spectrum in the database tab

WITec Project 5.1

- Image Viewer Features
 - 3D Lighting effects (use shortcut "L")
 - o Animation Editor. Enables 3D Video Animations with full customizeable animation steps
 - o Better mouse handling (no cursor in 3D mode, 3D rotate / tilt with left mouse button)
 - 3D panning via "Shift" + Middle Mouse Drag and "Shift" + Mouse Wheel. (Can also be used for animation "flight")
 - o Automatic Color Scale of last changed line now has separate button in status bar
 - Background color can now be defined by user (also default options)
 - $\circ~$ Color Scale Export: precision of numbers now can be changed
 - $\circ~$ Separate buttons for exporting bitmap in original resolution
 - New Button for Automatic 3D Scale with correct aspect ratio for topography images (Shortcut Ctrl-A)
- Multi Bitmap Export
 - o Available Formats: Multiple Bitmap Files, Multi Frame TIFF, AVI Video
 - o Support for automatically opening a program after export
 - o Used in Image Stack Export, Image Overlay Morph, Image Viewer Animation
- Image Stack Export Dialog
 - Now with previews for X/Y, X/Z, Y/Z planes
 - o Automatic pixel interpolation in all directions
 - Support for intensity correction in z direction
 - Support for cutting planes, e.g. "opening" a cube for volume view now possible
- Image Overlay Morph now exportable as AVI video
- Shape Background Subtraction: improved performance, noise threshold parameter was removed
- Image Combination Changes
 - o Supports automatic masks, thus avoiding over saturation
 - Supports extracting all images with their color table, also with color scale bar (extract using viewer export settings)
- True Component Analysis
 - Supports Undo/Reset in Average tab
 - Now calculates better initial residual image
 - o Multiple Auto Find now adds components without clearing existing components
 - Demix parameters now stay untouched when adding / removing components
- Graph Viewer Auto Zoom Enlarge Only (Status bar button)
- Drop Action Intensity Correction now available for removing Filter or Etaloning artifacts
- Main Menu removed "Add" menu. "Add Text" now available via project manager context menu
- Graph Viewer Peak Labelling now supports ignoring the Rayleigh area, configurable default options for line length, number of digits and better mouse handling
- Data Stitching now allows stitching of bitmap objects (works in combination with new Image Combination export option)
- Average Spectrum now supports dropping multiple single spectra objects
- Drop Action "Weighted Spectrum Subtraction" now integrated in Graph Background Subtraction Constant Tab, using a check box that enables the weighting factor mask
- "Reset Viewer Positions" now sets Project Dialog positions to screen center
- Improved performance when loading a WIP file with many data objects
- Improved performance when calculating image spectra datasets with memory extension / memory mapped file
- Progress Dialog now shows number of calculating cores instead of lots of sub-progress bars
- Project manager now always present (last one can not be closed)
- Load/Append Project now cleans unused objects in project

WITec Project 5.0

- Now supports using up to 4Gb of memory without memory extension (on 64bit Windows Operating Systems)
- New Analysis Dialog: True Component Analysis
 - Replaces Basis Analysis Dialog
 - Basis Spectra can be dropped, Dialog can be used like normal basis analysis
 - Plus Version Features:

- Add basis spectra (manually, automatically)
- Average spectra (using manual mask, threshold mask, automatic mask)
- Demix spectra (manually using wheel controls or edits)
- New Dialog "Wizards" (Next Step buttons) and Raman Start Analysis button
- Software News / Did you know upon first program start
- Graph Viewer Features
 - $\circ~$ Mouse wheel can zoom all spectra in cascade mode
 - o Scale Edit Boxes for X-Axis also displayed in Graph List
 - $\circ~\ensuremath{\mathsf{Possibility}}$ to create and manipulate masks without any dialog
 - Configurable visibility of coordinate axes and ticks
 - Rayleigh area is automatically removed from masks (range configurable in Graph Viewer Options)
- Image Viewer Features
 - Equalize color scale (non linear assignment of colors for displaying the maximal contrast for all dynamics)
 - \circ Controls for Contrast and Brightness (changes top and bottom color value automatically)
 - Contrast and Brightness can now be adjusted in color bitmaps
 - $\circ~$ Draw Field / Mask: Erode and Dilate, "Minimum Structure Size" for threshold auto mask
 - $\circ~$ Smoother display of pixels if only few pixels are displayed
 - Configurable visibility of coordinate axes and ticks
 - Improved bitmap export (wysiwyg in 3D mode)
- New colors in graph viewer and image combination dialog (now colors should fit to each other)
- Sum images from Filter Viewer or RamanTV now have spectral range in meta data. Press "G" in image viewer to show spectral range.
- Graph Background Subtraction: possibility to show the background subtracted spectrum as preview
- Average Spectra: possibility to do an average of multiple single spectra
- Peak Find: Edit peaks with mouse, show if peak finds are displayed (even if dialog is closed, e.g. after load project)
- Time for show geometry is now configurable
- Image Combination: Auto scale button
- Cluster Analysis Dialog: New Extract buttons, simpler user interface
- Possibility to display "um" instead of "μm" (for asian operating systems that can't display "μ", see Display Options)
- Image Calculator: works with images from different measurements
- Table export: header can be exported

WITec Project 4.1

- Graph Viewer: Zoom out Rayleigh Peak (Shortcut "R", e.g. for calibration purposes)
- Show Scan Position / Geometry
 - Press "G" in Graph or Image Viewer to show the Geometry/Scan Position of the displayed measurement
- Larger Font Size in most windows of WITec Project and WITec Control
- Create Stack Slice / Depth Image from many stack images (drop onto Cross Section Dialog !)
- Graph Viewer fast zoom-in:
 - With control-key hold down "draw" region
 - Press space to zoom into peak at mouse position
 - o Zoom out x also zooms out y-axis, if auto y axis zoom is turned on
- Project Manager Multiple Rename Tool: Possibility to replace only those objects that contain a search string
- Graph Viewer can create Mask without any Drop Action Dialog (Circle Menu "Misc Visuals" -> Create Mask or Control-M)
- Advanced Fitting Tool: New result table for single spectra batch processing
- Shape Background Subtraction: Mask can now be used to do a simple line interpolation
- Graph Viewer Peak Labels
 - Now all graphs in viewer are labelled
 - Peaks can be added/removed manually (note: change graph / space position does not work if peaks were manually added/removed !)
 - All Peaks and Display Settings are now saved for each graph viewer in the WIP File
- Graph Viewer: "Export view as bitmap to project" now available in Export Menu
- Show Scan Position / Geometry

- Press "G" in Graph or Image Viewer to show the Geometry/Scan Position of the displayed measurement
- ASCII Data Export: File Suffix can be changed

WITec Project 4.0

- Look and Feel
 - New Splash/About Window
 - New Application Shortcut Icons on Desktop and Start Menu, new WIP File Icons
 - New Shortcut Viewer: Shows all the Shortcuts of the Software, see Menu Help -> Show Shortcuts
 - New Drop Action Icons
 - User is now notified if an action needs too much memory (some Drop Actions creating
 - large graph objects, Copy/Paste of data objects in project manager)
 - $\circ~$ Main Window:
 - New Tool Button for "Close All Viewers and Managers" next to "Reset Viewer Positions" Button
 - Recent WIP Files directly accessable in File Menu (no sub menu), better Structure of Menus
 - New Icon for Mask Image Objects (Extracted Draw Field Image or extracted calculator image with boolean unit name)
 - Automatic load of correct window settings (works for 1 monitor)
- New Program Options Window (Menu Options -> Program Options)
 - Replaces Viewer Positioning options, Export options and adds some additional, new options
 - OpenGL Graphic Acceleration can be turned on or off in this new Program Options (has effect on WITec Project AND WITec Control of the same version)
- Memory Extension
 - New Memory Option "Memory Mapped File" that allows the program to work with more than 2GB of data objects (e.g. for large Raman images or stacks; see Menu Options -> Memory Options)
 - 64-Bit Operating System with >=16GB of Memory as well as a Fast SSD Hard Drive as Memory Mapped File Location is recommended
- Cursor Manager:
 - The Cursor Manager is no longer a Viewer, but a Tool Window whose visibility can be toggled
 - The Cursor Manager Window is not visible by default due to new status information in viewers (see below)
 - The Cursor Manager Window can temporarily be shown via the Shortcut "P" in all Viewers
- Drop Action Window:
 - The Drop Action Plus Window is no longer present. All Plus Drop Actions are shown in the standard Drop Action Window (if Plus is activated)
 - The Drop Action Window will automatically show up near the mouse position upon starting a drag Action in the Project Manager
 - Inclusion Area Button is no longer present. Each Dialog supporting a Mask now shows an Image Viewer. A mask can be drawn there or a previously defined mask can be assigned (dropped)
- Viewers General
 - Automatic Mouse Mode
 - Graph Viewers with Masks automatically have the mark region mouse mode
 - If Listen is turned on, Graph and Image Viewers automatically select the correct mouse mode and switch back to move mode when listen is turned off.
 - Viewer Positioning Changes
 - If the last viewer of a viewer kind (e.g. Image Viewers) is closed, the positioning for this viewer kind will be reset
 - All Viewers are automatically repositioned after loading a project. There is an option to turn this feature on/off in the Viewer Positioning Options
 - Automatic Array: if there is not enough space for a new graph or image viewer, the size is automatically adjusted
 - o New Status Bar in Graph/Image/Video Control Windows
 - The Status Bar now also shows a second line with more information (Graph Viewer: X Cursor Position, Image Viewer and Video Control: Space Cursor

- Distance)
- If cursor is listening, the label in the status bar is shown red. A click on the red label will turn off listen mode for this cursor
- Some frequently used features can be found in the new status bar (e.g. Image Automatic Color Scale, Graph Zoom Functions)
- Cross Hair has now red color when someone listens to one of the axes of a viewer
- Extraction of currently shown data now works in all Graph/Image Viewers and it works always (also in Drop Action Previews and e.g. Hardware Spectrum Viewer). Shortcut "Control + E"
- Text Viewer: Text objects can be toggled in the same viewer (via arrow buttons or shortcuts F5/F6)
- New Filter Viewer (will replace old Filter Manager, also in WITec Control)
 - o Filters are no longer project data objects
 - o Filters are stored with the Viewer
 - Possibility to store a set of filters into a file for quick access (selectable for the current user or for all users)
 - Filter Range is defined by Position and Width
 - Filter Position/Width can be listened: Move Mouse Mode will change the Position, Mark Region Mouse Mode will change Position and Width
 - Preview Graph Window
 - Shows local average graph (like Spectrum to Images) and highlighted filter positions
 - Highlighted filter positions can be moved directly with the mouse move mode
 - Mark Region Tool opens popup that can create or change new filters at marked range
 - o Single Graphs have single-value-preview in status bar
 - Also works with Line Graphs and Graphs that have a spatial X-Transformation (Cross Section)
 - o Input Graph can be changed (only if it has the same size and X-Transformation Unit kind)
 - Drop another Graph onto Title Bar
 - Use the Previous/Next Buttons in the Status Bar
 - Press Page Up / Page Down in an Filter Result Image Preview Window
 - Filter Preview can be toggled by selecting a filter. Checkboxes in Filter List allow to show more than 1 filter simultaneously. If no preview is opened, a double-click on filter will open a preview.
 - Batch Calculation via Drag & Drop onto Extract Buttons (Dropping onto "All" Button will calculate and extract all filters in the list)
 - New Data Objects are only created upon pressing one of the Extract Actions
- Graph Viewer
 - $\circ~$ New Zoom Modes
 - Automatic Y-Axis Zoom, Cascade and Synchronized Zoom is turned on by default (you can change the defaults in the Graph Viewer Program Options)
 - Improved Cascade function with new cascade distance parameter
 - Synchronized Zoom for zooming all graph objects without using the same Y-Axis
 - New Feature: Peak Labels can be shown (using peak find algorithm). Shortcut "F"
 - Graph Mask Data Object can now be dropped directly on a Mask in a Graph Viewer to set the Mask
 - Graph Mask can be hidden. Shortcut "H"
 - New Follow Data Mode: The Cursor will follow the exact supporting points of the currently shown graph
 - New Histogram Drawing avoids gaps and aliasing drawing problems (only if the X-Transformation has equidistant points); supports cascade now
 - New Shortcut: Page Up / Page Down toggles through the Graph Objects in the project, if only 1 Graph is displayed
 - Graph Drawing Options can now be synchronized (e.g. set width for all graph objects in the same viewer)
- Default Graph Drawing Width can be defined in the new Graph Viewer Program Options
 Image Viewer
 - o Image Viewer also shows Bitmaps. Bitmap Viewer is no longer needed
 - o Image Viewer can show Bitmaps and Images that don't have a Space Transformation
 - New Feature: Synchronized Zoom. Will zoom all image viewers to the same spatial bounding box. Zoom Out in Synchronize Mode will zoom out all viewers. Shortcut "S"
 - Revised New Display Modes:
 - 3 Slots for Input Images: Color Image, 3D-Z Image, Brightness Image; all

assignable via drag drop

- 3D Mode (toggle, Shortcut "3"), Brightness Mode (toggle)
- 3D Image Mode now automatically uses perspective projection and side view
- Free Camera Mode (toggle, automatically used in 3D Mode): Image can be tilted and rotated by moving the mouse while holding down the middle mouse button (wheel), Free Camera Distance can be defined using the Mousewheel
- Crosshair can be hidden (e.g. for nice presentations)
- $\circ~$ Draw Field / Mask can be hidden. Shortcut "H"
- Draw Field: Pen Width for Draw Point mode can be changed
- $\circ~$ Image can be animated (change the animation speed in Image Viewer Program Options)
- Contour Lines can be drawn (Misc Visuals Circle Menu)
- $\circ~$ Nice Mesh Borders will close the borders in 3D Mode (Visuals Circle Menu)
- Line Correction can be changed in the right bottom corner in the new statusbar
- Automatic Color Scale (and toggle with rightclick) can be found in the right bottom corner in the new statusbar
- Color Scale:
 - Bottom/Top Color Scale can now be swapped
 - Bottom/Top Color scale can now be changed synchronously
 - In the new Image Viewer Program Options the behavior of the automatic color scale algorithm can be adjusted
- Scalebar now has transparent background
- Dropping multiple objects on the viewer for showing the positions in one step is now possible
- Image and Graph Tools
 - o Tool Windows are no longer present
 - New Circle Menus in Image and Graph Viewer:
 - Hold right mouse button down to see circle menu and then select one of the circle menus by moving the mouse in the right direction
 - All features can be found in the new circle menus, also those who previously only could be found in the normal context menu
 - o Start Drop Action Dialogs directly from an image/graph viewer circle menu
- Project Manager
 - New Circle Menu for toggling visibility and sort of objects and for starting drop action data analysis
 - o Only Graph, Image/Bitmap, Text Objects are shown (Advanced Mode shows all objects)
 - New Multiple Rename Tool with rename mask and search and replace functionality integrated
 - Project Managers now highlight all data objects that are used by another viewer when this viewer is activated/selected. There is an option to turn this feature on/off in the Viewer Positioning Options
 - Project Managers are not loaded when appending a project. There is an option to turn this feature on/off in the Viewer Positioning Options
- Drop Action Dialogs:
 - New Dialog "Image Histogram and Statistics": Image Histogram Dialog now also shows Image Statistics and Roughness parameters
 - New Dialog "Image Transform and Overlay" (Plus Feature): allows to change the spatial transformation of images and creates overlay bitmaps, supporting advanced transformations
 - New Dialog "Graph Repair" (Plus Feature): allows to interpolate manually selected spectral pixels or ranges for certain or all spectra in any kind of graph data object
 - New Dialog "Graph and Image Data Stitching" (Plus Feature): allows to stitch/merge a stack of images or graph images into one new bigger data object
 - New Dialog "Image Correlation" (Plus Feature): shows correlation points according to changeable mask in image viewer
 - New Cluster Analysis User Interface: only one window, simplified handling
 - Revised Background Subtraction Dialog
 - New Subtraction Mode "Minimum". Subtracts the minimum of all spectral pixels (using the mask)
 - New Subtraction Mode "Constant". A constant value or a constant spectrum can be subtracted
 - New Subtraction Mode "Shape" (Plus Feature). A rounded shape is fitted on the spectrum, leading to a excellent background subtraction, even for fluorescence offsets
 - Now supports cross section graph objects

- Image Cross Section Dialog: Simplified Dialog, Start/Stop Coordinates can now be swapped
- Image Color Combination:
 - Redesign with Simple/Advanced Mode
 - New mode "Allow Color Mixing"
 - Listenable Edits, Color-Scale-Synchronization with Image Viewer, wheels for changing the color scale
 - Improved transparency smooth parameter
- Spectrum to Images: Improved Listen mode
- $\circ~$ Graph Basis Analysis: Simplified Dialog
- Advanced Fitting Tool: Simplified Dialog
- Image Filter Dialogs no longer show error images, but have a new checkbox for showing the original image temporarily (Image Filter, Image FFT 2D, Image Background Subtraction)
- Data Binning Dialog is now called Data Cropping and Reduction. Simplified Dialog; now allows to crop bitmaps too
 - New in Version 4.0.12.9: Batch mode via Drag & Drop
- Graph Demixer now allows to use the current mix as new source graphs; allows graphs with different x transformations objects that are equal
- Only one Calculator Dialog for Images and/or Graph Objects
- o Image Filter Dialog: new image smoothing algorithm: "Anisotropic Smoothing"
- Similar Drop Actions are now merged into one Dialog
 - Image Statistics/Roughness Drop Actions are merged into the new "Histogram and Statistics" Dialog (Image Histogram, Image Statistics, Image Roughness)
 - Graph Filter Dialogs are merged into one dialog (Graph Average, Graph Median, Graph Savitzky Golay, Graph CRR)
 - Image Filter Dialogs are merged into one dialog (Image Median, Image Average, Plus Version Image Filters like Sobel, ...)
 - Image Background Subtraction Dialogs are merged into one dialog (N-Order Line Subtraction, N-Order Surface Subtraction)
 - Image Stack Dialogs are merged into one Dialog (Image Auto Focus, Image Extended Focus)
 - Image FFT Filters are merged into one Dialog (Image FFT Amplitude, Image Filter FFT Line, Image FFT 2D)
 - Image Line Interpolation and Image Remove Bad Data Dialoges are merged into one dialog
- Import/Export
 - New Bitmap Import: Bitmaps can be imported via Menu File -> Import -> Bitmap or use Paste in Project Manager (Strg-V) if Bitmap is in clipboard
 - o Tescan TIF Import (for SEM images, needs special license)
 - Export to Matlab
 - o Batch Export for Text Objects (ASCII and RTF)

WITec Project 2.10

- New Drop Action: Inverse Basis Analysis (the right button next to the Basis Analysis Button):
 - Uses an image graph together with Images (which should be background subtracted) that belong to the image graph
 - Calculates offset and de-mixed component spectra for each image
- Image and Bitmap Viewer: Drag and Drop of Graph and Image Objects onto the Viewers now open a Popup Menu for selecting several actions:
 - Show Position (Transformation) -> It's no longer necessary to search for the transformation of an image graph or image or bitmap to show it in a viewer
 - Use as Main Image/Bitmap
 - Use as second Brightness/Color Image (Image or Bitmap on Image Viewer only)
 - Use Bitmap as Texture (Bitmap on Image Viewer Only)
 - Use as Draw field (Image on Image Viewer Only)
- Drop Action Advanced Fitting Tool:
 - Batch calculation now available through Drag Drop onto the "Extract All" Button
 - Now some additional information for the current fit is shown (coefficient of determination, reduced chi square, average error)
 - o Replica of multi peak functions can now be shown and extracted (Gauss, Lorentz)

- o Fit curves of all pixels can now be calculated and extracted
- o Text Result (single fit extraction) now shows more information
- Works now with Cross Section Graph Objects (3 Dimensional X-Transformations)
- Spectrum To Image:
 - Drop Action as well as Online Algorithm now support different Filters for calculating image values: Sum, Variance, Average Binomial, Average Box, Average minus Minimum
 - Drop Action now works with 1-Dimensional Graph Objects (Time Series, Cross Section Graph, ...)
- Auto Scale on Data Change Function in Graph- and Image Viewers
 - It's now possible to right-click on the image tool window button "Automatic Color Scale" (or on the graph tool window buttons for zooming out) in order to turn on/off the automatic scaling if the data changes
 - o Additional Option in Graph Viewer Popup Menu: "Auto Cascade"
- Drop Action Image Cross Section: It's now possible to define a horizontal or vertical line that uses the exact pixel supporting points as cross section values
- Graph Viewer Data Export (e.g. to ACDLABS / UV/IR-Manager): the user can now define the program path in "Menu -> Options -> Export -> Graph ASCII to External Program" instead of editing a text file
- New Bitmap Export: It's now possible to export a couple of bitmap data objects at once into jpg, png, and bmp files. (Project Manager "Popup Menu -> Export")
- ASCII Export of Graph/Image/Bitmap Data is now available through Project Manager "Popup Menu -> Export" and offers some export options
- New in Version 2.10.3: SPC Export now also works with Image Spectrum Data (2D)