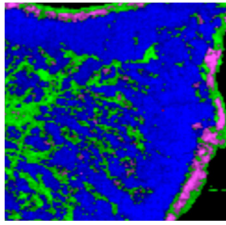
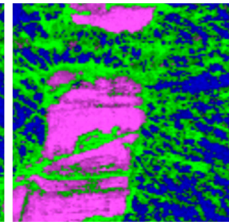
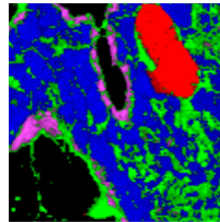




chiSTain™: Instant Raman Analysis



Get Automated Expert Analysis



Chemometrics
Tools for Enhanced
Raman Images

chiSTain™ is HORIBA's innovative and intelligent tool for fully automated processing and analysis of Raman 2D images. It builds on HORIBA's multidecade expertise in the analysis of spectral images through our global network of partners.

Feed your 2D Raman raw data set to the chiSTain™ App and get impressive results about your sample. You are just one click away from obtaining the most relevant Raman image!

Fast and easy-to-use application, chiSTain™ processes the hyperspectral data and classifies compounds within a sample using intelligent chemometrics tools.

From first-time user to expert, discover the instant benefits from chiSTain™ LabSpec 6!

The screenshot displays the chiSTain software interface. On the left, three Raman spectra are shown for PET, PP, and Yellow pigment. The main window shows a 2D Raman image with a legend identifying PET (red), PP (green), Yellow pigment (purple), Background (black), and Cellulose (yellow). The right sidebar contains 'Loadings' (Number of loadings: 5), 'Image options' (Smoothing, Brightness, Contrast, Show axes, Show legend, Show scale bar), and 'Export' (Export image, Export loadings, Export analysis logs) sections. Callout boxes highlight: 'Evaluation of the number of compounds' (pointing to the loadings section), 'Display of the Instant Raman Image' (pointing to the main image), 'Image display options' (pointing to the image options section), 'Data export options' (pointing to the export section), and 'Display of the Raman spectra of compounds' (pointing to the left sidebar).

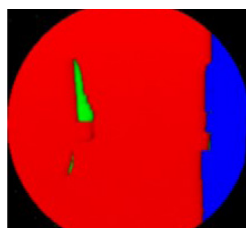
Raman analysis of a wipe sample in only 80 seconds

χ STaiN™ Highlights Your Applications

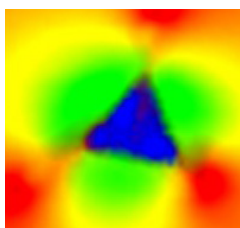
Raman Imaging is a technique that follows a well-established protocol:

- The first step is the acquisition of a Raman hyperspectral data set. The workflow should be optimized depending on the details of the sample and its structure.
- The second step is the processing and analysis of this data. χ STaiN™ will straightforwardly manage the Processing and Analysis more simply and faster than conventional solutions.

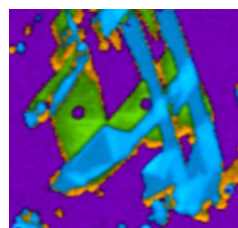
With χ STaiN™
access a wealth of
applications
much faster and
more reliable



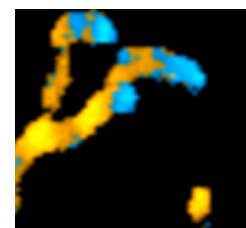
Silicon Carbide



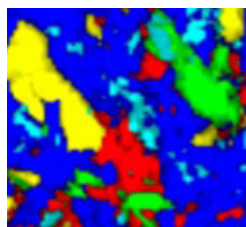
Nano-indented Silicon



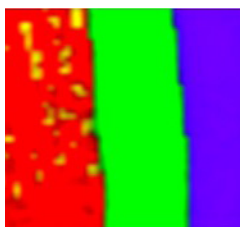
Graphene



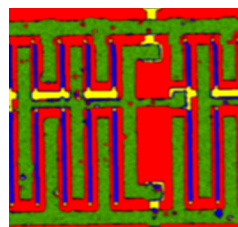
Carbon Nanotubes



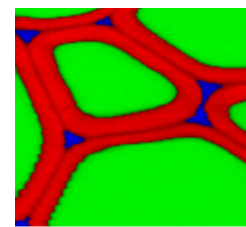
Geological Section



Pharmaceutical Beads



Poly-Silicon Chip



Wood cells

χ STaiN™ App Main Features

- Ultra-fast reliable one click operation
 - Optimized Processing operations: baseline subtraction, filtering/smoothing and normalization
 - Advanced chemometrics procedures based on Principal Components Analysis and Multivariate Curve Resolution
 - Automated loadings/chemical compounds evaluation including a confidence indicator
- Customizable Image display of spatial distribution of the most contributive chemical compounds

LabSpec 6 Raman software offers complete and versatile functionality with new EasyNav technology, acquisition, processing, analysis, and display of data, in addition to flexible automation solutions. The entry level functionality is complemented by a number of optional add-on applications in the LabStore: ViewSharp, Particle-Finder, MultiPoints, MultiWell, EasyImage, SmartSampling, MVAPus, KnowItAll, DLC, Si Stress, PhotoCurrent.

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