

This guide introduces a new user to the iC PVM graphical user interface (GUI) and describes several choices for getting started. Create and record an experiment to save images that best represent a particle system and its process dynamics. Each experiment can easily generate a report, image slideshow, or video.

Start Page

A start page appears when you first open iC PVM. At a glance you can see instrument status and begin an experiment, open a recent experiment file, or import an image sequence file (*.seq).

The screenshot shows the iC PVM 7.0 Start Page interface. On the left is a navigation sidebar with sections for 'Recent', 'Links', and 'Customer Community Site'. The main area is divided into 'New' (with 'Quick Start', 'Clone Experiment', and 'From Template' options) and 'Video Learning' (with 'Introduction to iC PVM', 'Ensuring High Quality Images', and 'Sharing with iC FBRM' options). A central window displays a simulation of a particle system. Callouts provide instructions and tips for each section.

Click/tap **Quick Start to quickly create a new iC PVM experiment**

Open recent experiments

- Browse to other experiment files
- Import a sequence file

Open links to:

- Activate software licenses
- View instrument configuration
- Check options including templates and iC Data Center
- Access iC PVM information and user assistance
- Go to AutoChem customer website

Glance at instrument connection status

Images appear when instrument is connected, powered, and inserted in a particle/droplet system. NOTE: A **clean probe window appears black when it is not inserted in a particle system.**

Links to product video tutorials

Alternatives for starting a new experiment:

- Cloning an existing experiment (tweak settings)
- From a template (including a system template that starts with Back lighting as the default)

Next—Name experiment file and set timing options...

Name Experiment File and Set Basic Options

After you click/tap **Quick Start** on the Start Page, click **Create** to accept the default filename and location of the experiment file that will have either the default or specified save interval and duration settings.

Edit or accept experiment file name and location.
If using iC Data Center, name the experiment according to your Standard Operating Procedure.

You can change these interval and duration settings now or during the experiment.

The screenshot shows a window titled "Quick Start" with a sun icon and a document icon. The main heading is "Create an experiment with default settings". Below this are two sections: "File Specifications" and "Experiment Duration".

File Specifications	
Experiment Name:	Exp 2015-01-07 10-01
Folder:	C:\iC PVM image files <input data-bbox="1360 657 1402 690" type="button" value="..."/>

Experiment Duration	
Save Interval:	10 seconds <input data-bbox="1186 787 1207 803" type="button" value="v"/>
Experiment Duration:	8 hours <input data-bbox="1186 852 1207 868" type="button" value="v"/>

At the bottom of the dialog is a large blue button with a sun icon and the text "Create".

Amount of time between each image saved.

Experiment file holds up to 6,000 images.

Click/tap **Create** to make the experiment.

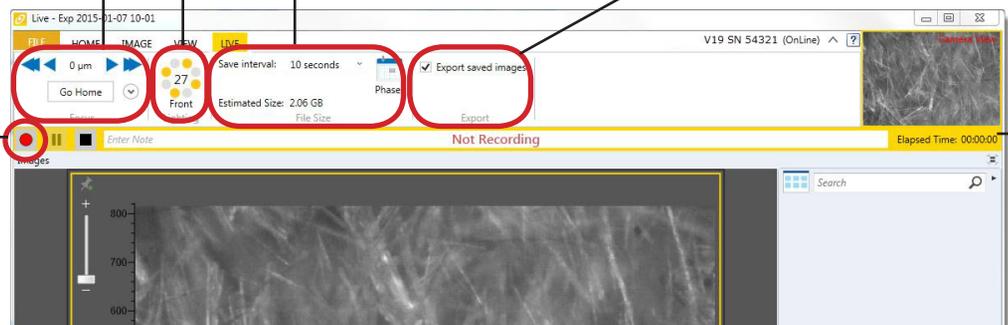
Next—Begin
Recording images to
the experiment file...



Record Images

After you click/tap **Create** to make the experiment, the main ic PVM workspace appears with the LIVE ribbon. NOTE: Live images on display are unsaved until you click/tap the record button (●). When recording starts, the LIVE experiment toolbar changes to green.

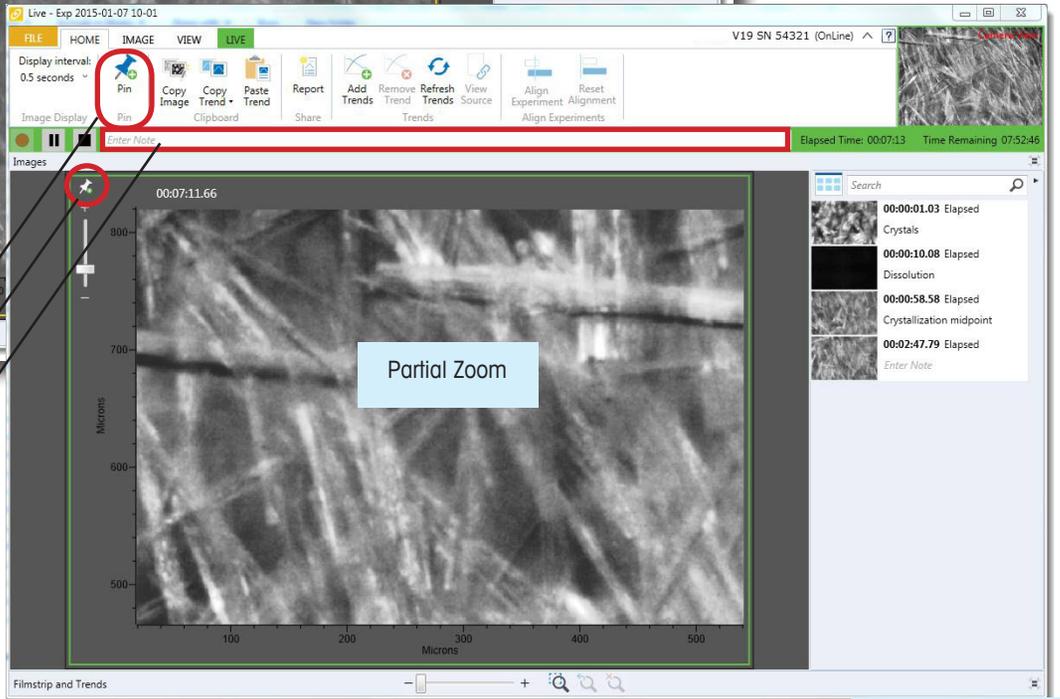
Adjust, as needed: Focus (V19 only), Lighting, Save interval (and experiment phases), or real-time image export



Multiple **ribbon tabs** show options and tools for the ic PVM workspace. (LIVE ribbon for ParticleView V19 shown)

Click/tap (●) to start recording images.

LIVE experiment toolbar



HOME ribbon shown

- Begin 'pinning' selected images by:
- Clicking/tapping the Pin button (from either location), or
 - Entering a process note

Next—The main workspace shows images only, by default. But a split view layout includes Images and Trends...

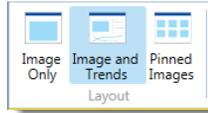


Observe Images and Trends

iC PVM includes a trends viewer and filmstrip of the saved images in sequence. The sample below shows a split layout of the two main sections in the iC PVM workspace—**Images** at the top and **Filmstrip and Trends** on the bottom.

To change the layout:

- Click/tap the split icon (). Notice the icon changes to the full version () on the Images bar.
- Or, select **Image and Trends** layout from the VIEW ribbon.



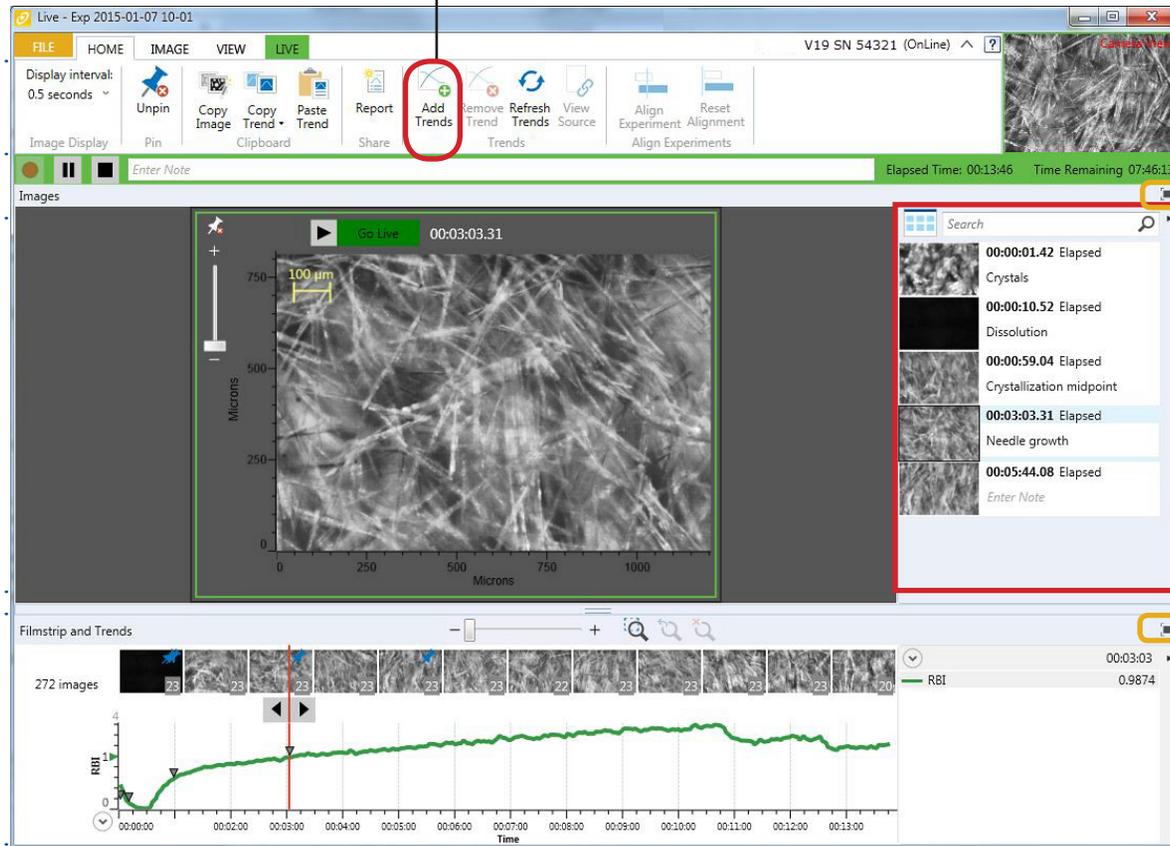
Import an iControl or iC FBRM trend.

HOME ribbon shown

This is the **Image and Trends** layout where the workspace layout is split into two main sections:

1. **Images** collected

2. **Filmstrip** of saved images, and **Trends** chart of image trends such as Relative Backscatter Index (**RBI**) when in Front lighting or Relative Transmission Index (**RTI**) when in Back lighting. Can include trends imported from iC FBRM or iControl.



Notes panel

- When you pin an image, it appears here.
- If panel is collapsed, click/tap Notes bar to expand it.

Enter note on pinned images.

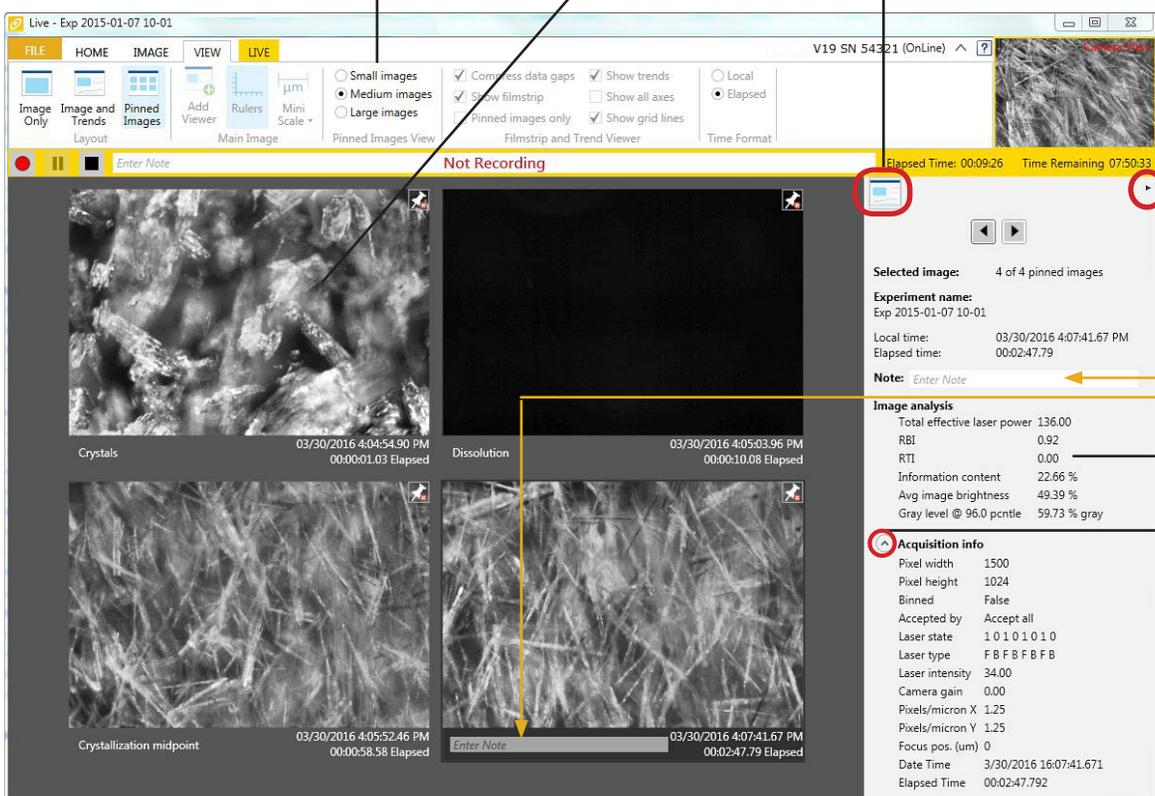
Double-click/tap in an image thumbnail to move back and forth between the main workspace and the **Pinned images** view, described next...

Next—Review all the images pinned from the experiment...



View Pinned Images

When you click/tap the **Pinned** button () in the Notes panel or from the VIEW ribbon, the iC PVM workspace displays a gallery of all pinned images in this experiment.



Select preferred image size

VIEW ribbon shown

To return to main workspace:

- Double-click/tap on an image, or
- Click/tap the view button, or
- Click/tap one of the first two layout buttons in the VIEW ribbon.

Expand/collapse image properties including notes, image analysis, trend data, and acquisition information for a selected image.

Enter/edit notes (in either place).

Review image analysis data.

Expand/collapse technical details about image acquisition.

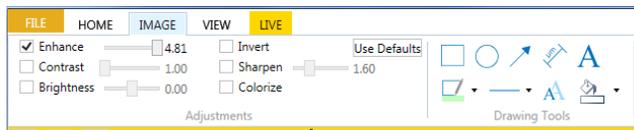


IMAGE ribbon: Apply common image adjustments to enhance an image, and mark up images using drawing/measuring tools.

ANALYZE ribbon: In completed experiments, you can set image acceptance properties as an aid in filtering saved images.



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