

Micro Writer 3

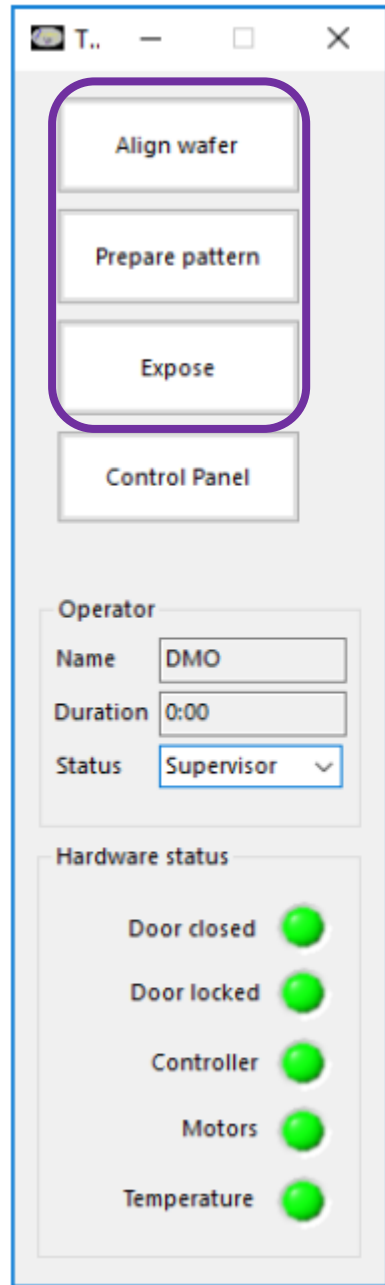
basics



<http://www.youtube.com/watch?v=IY2JMaVQv7A>

New tool advantages:

- High expose speed due to in-line resolution-switch option
- High resolution up to 0.6 μm
- Wide field viewer
- Multi-sample expose
- Visual alignment option
- Alignment assistant
- High sample thickness compatibility
- Back side alignment

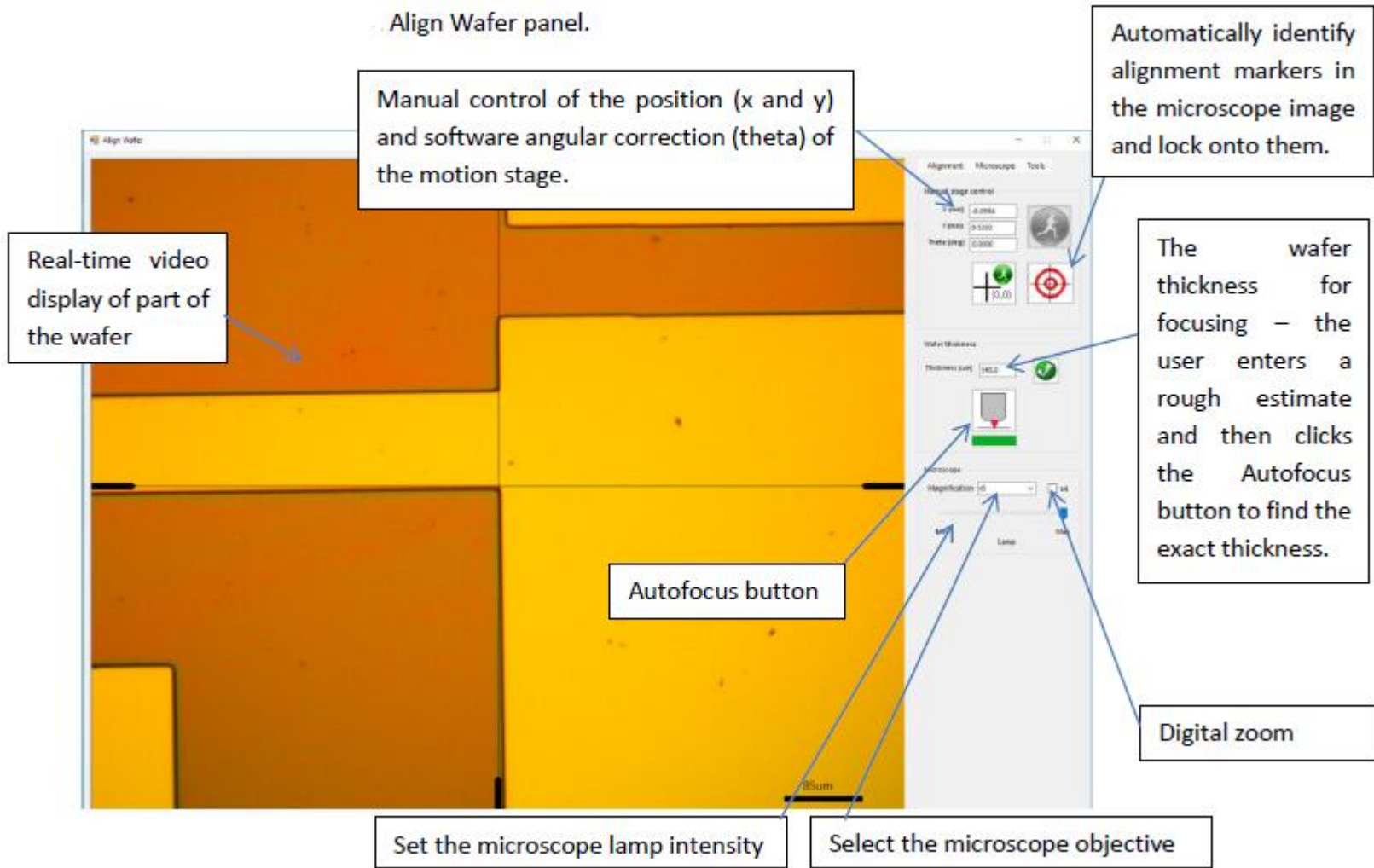


Call up any of the four main panels here.

The name of the currently logged-on user, how long (in hours and minutes) they've been logged on for and their privilege level (user, supervisor or service).

Hardware status. Green indicates OK; red indicates a problem.

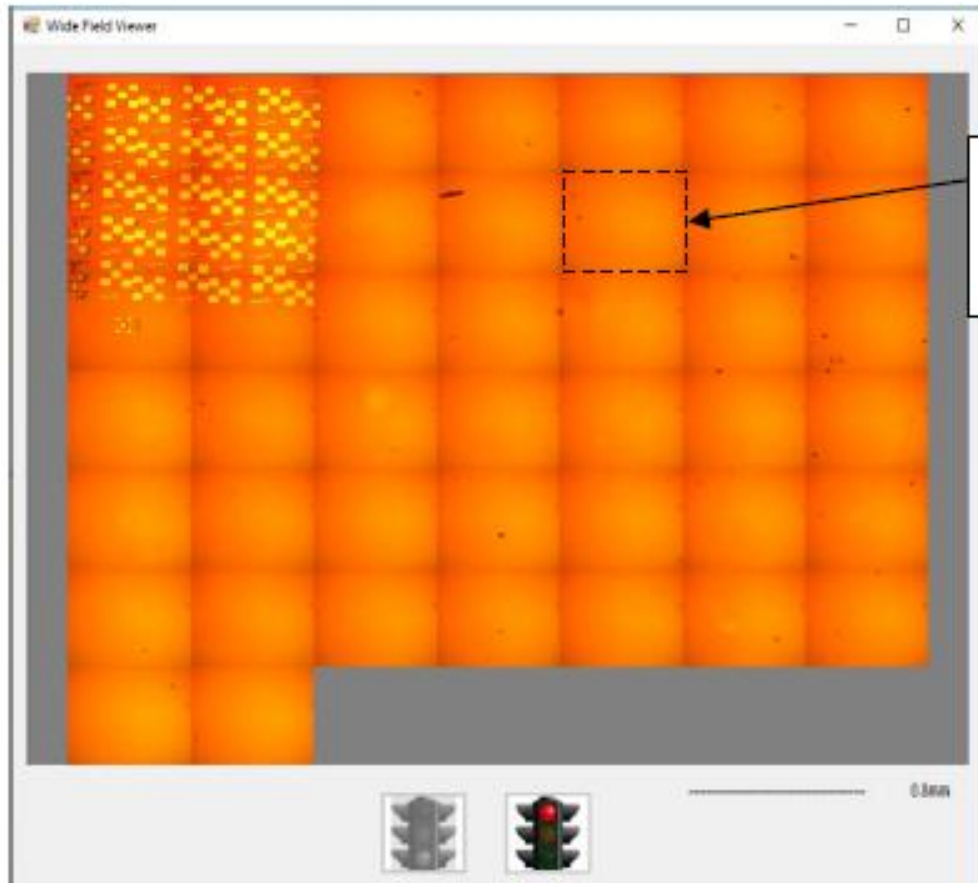
The Toolbar



Align Wafer panel

Lens' magnification	Exposure resolution, um
x3	5
x5	2
x10	1
x20	0.6

Wide field viewer



One single field of view
of the real time video
microscope

PreparePattern panel

The screenshot shows the 'Prepare Pattern' software interface. It features a 'Job list' on the left, a central wafer view, and a detailed job view on the right. Below these are configuration panels for 'File', 'Scale', and 'Exposure'. Callout boxes provide the following descriptions:

- The list of jobs to be exposed**: Points to the 'Job list' panel on the left.
- The entire wafer with each job shown in outline**: Points to the central wafer view showing a red square job.
- A detailed view of the selected job**: Points to the right-hand view showing a blue patterned job.
- The quality of exposure of the selected job**: Points to the 'Quality' dropdown menu in the 'Scale' panel.
- The size of the selected job**: Points to the 'Image size' and 'Exposure size' fields in the 'Scale' panel.
- Correction from the normal to the dose and focus for the selected job**: Points to the 'Dose correction' and 'Focus correction (um)' fields in the 'Exposure' panel.
- The resolution and wavelength to use for the selected job**: Points to the 'Resolution' and 'Wavelength' dropdown menus in the 'Exposure' panel.
- The position on the wafer of the selected job**: Points to the 'X (mm)' and 'Y (mm)' input fields in the 'Position on wafer' section.
- The layer to be used from a multi-layer .CIF or .GDS file for the selected job**: Points to the 'Layer' dropdown menu.
- The file path of the graphical or .CIF file defining the selected job**: Points to the 'Directory' and 'File name' fields in the 'File' section.

Expose panel

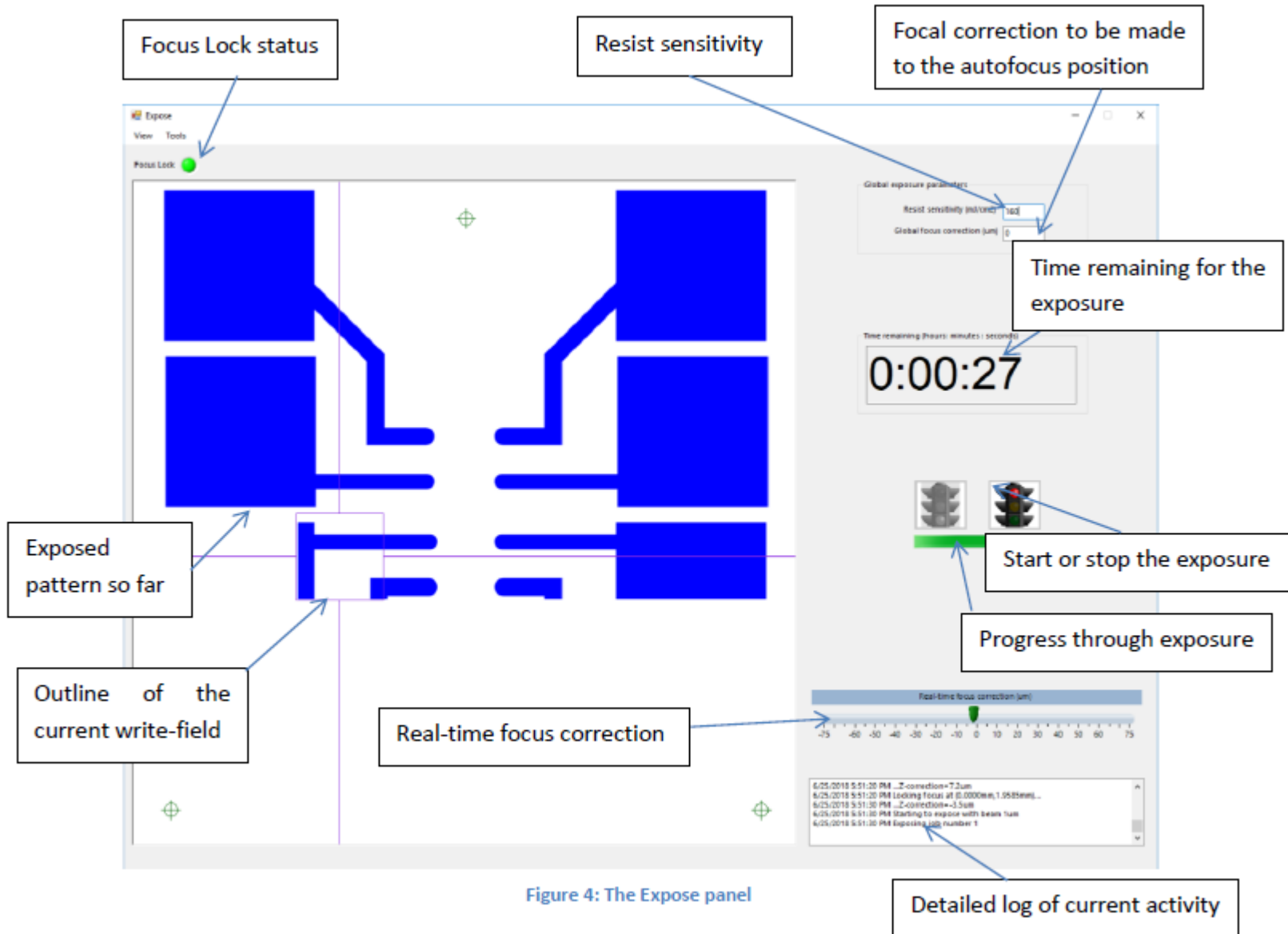
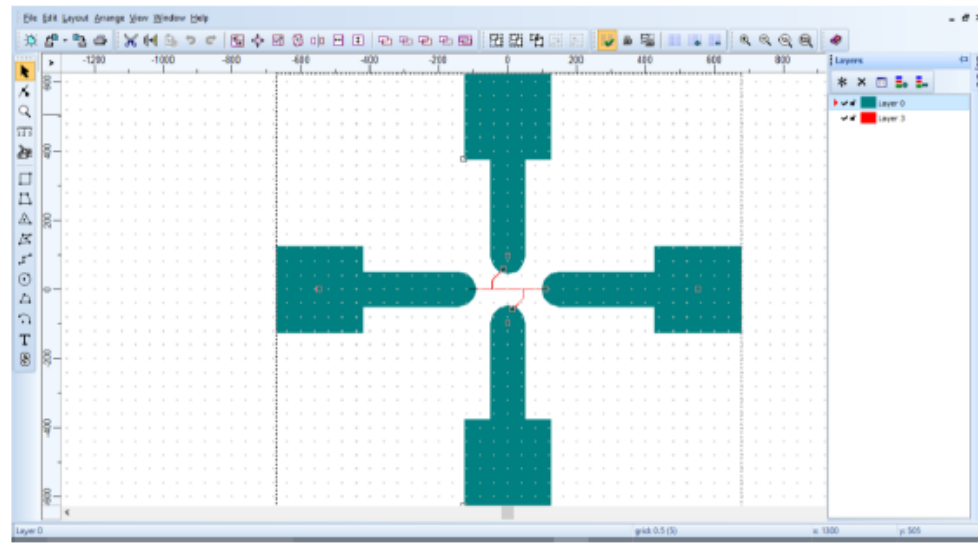
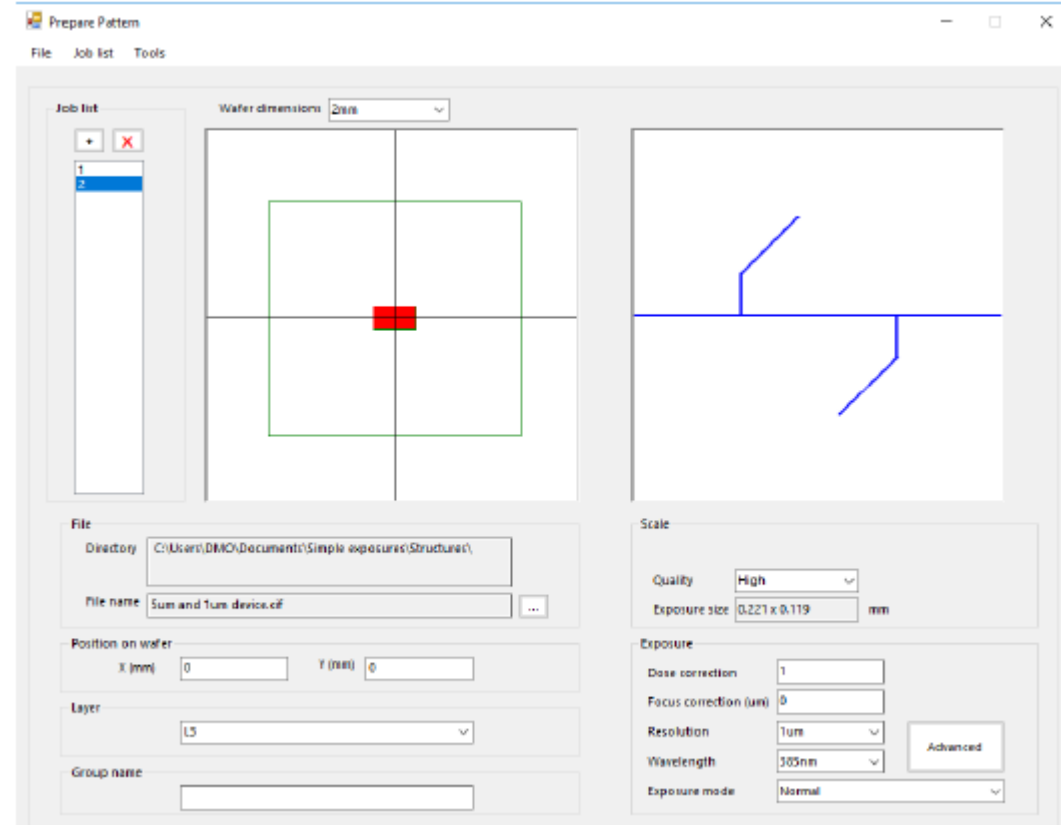
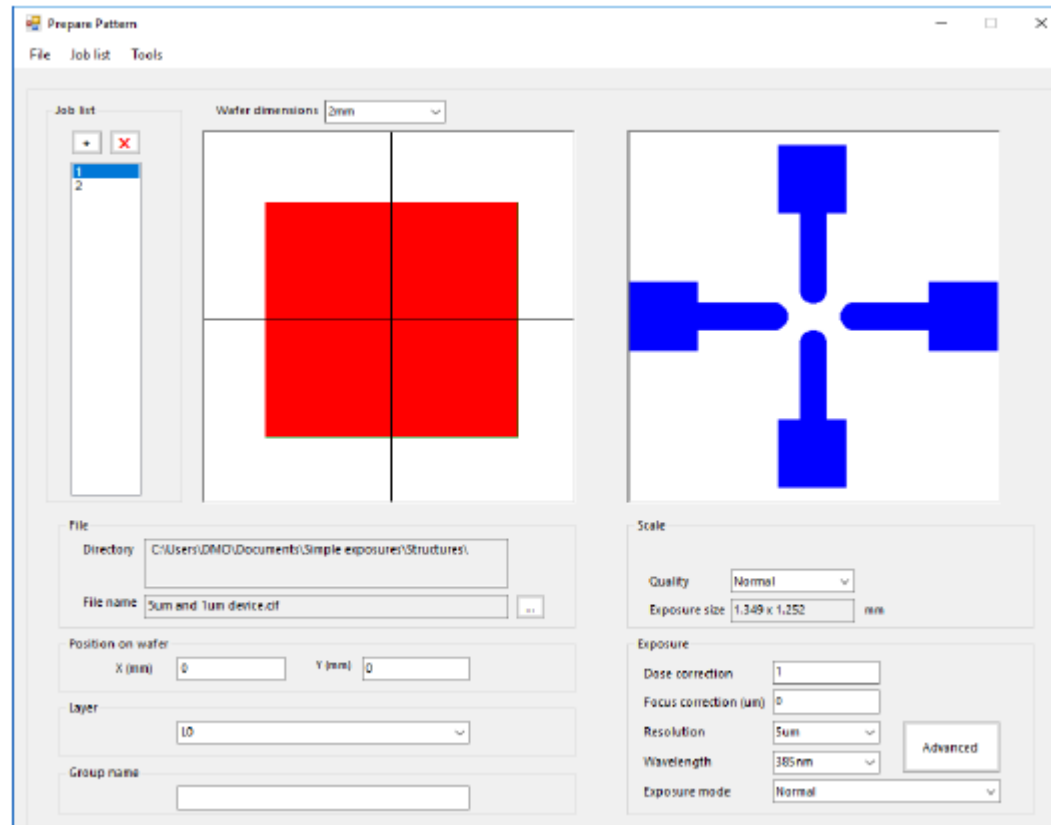
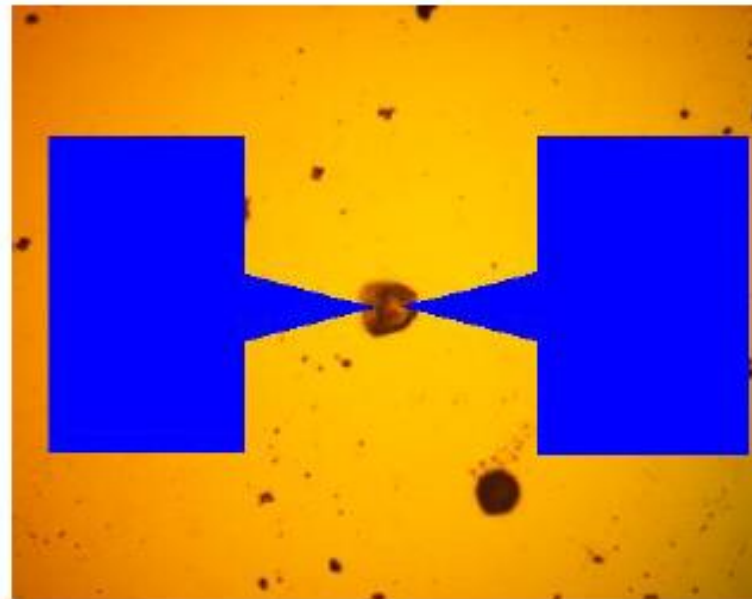
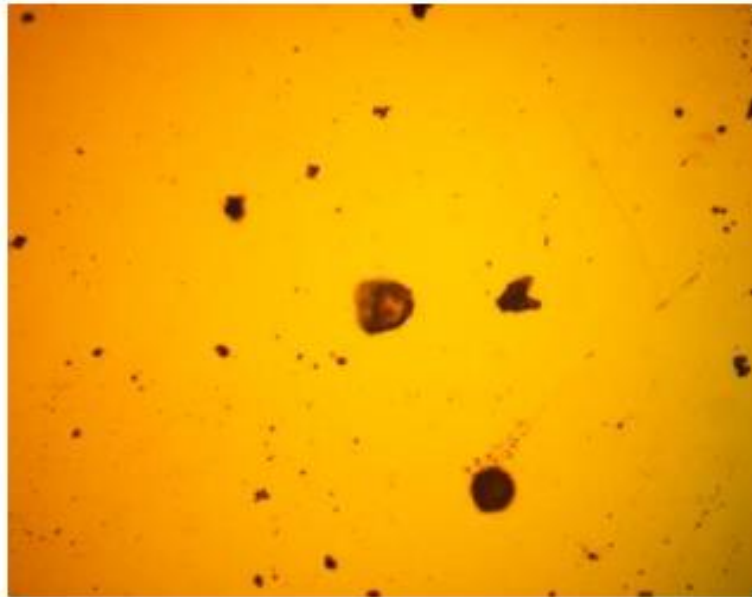


Figure 4: The Expose panel



Prepare Pattern
using
2 different jobs





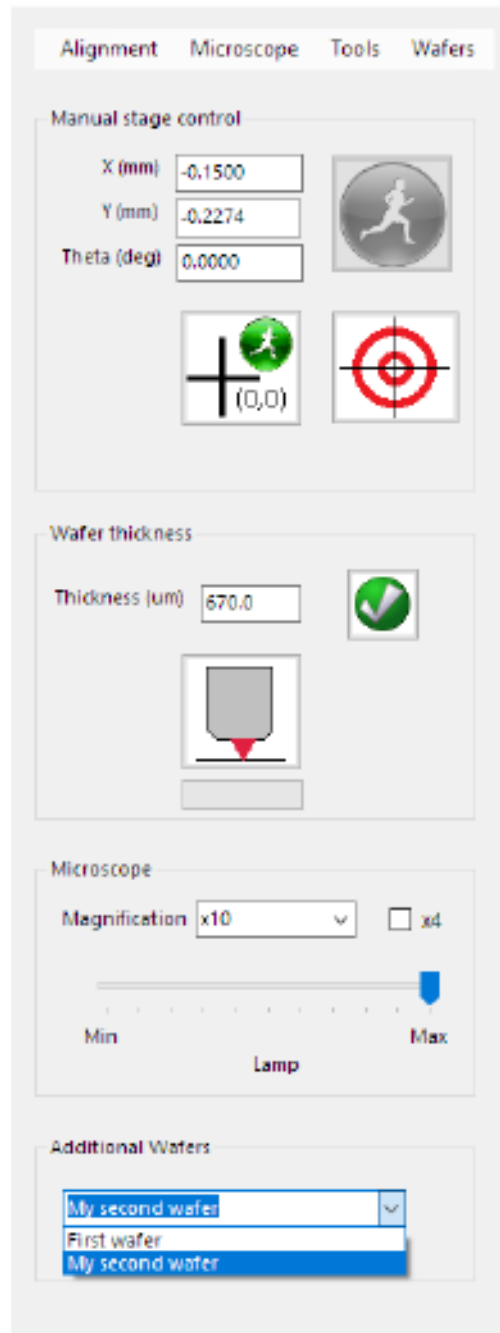
Visual alignment
option

Wafer location / Second design alignment

Markers window

The screenshot shows the 'Global markers' window with the following sections and callouts:

- Marker actual positions:** A list of markers (Marker 1, Marker 2, Marker 3, Marker 4) with icons for moving, deleting, and adding markers. A callout box points to this section: "For centring square and rectangular chips".
- Marker expected positions:** A grid of input fields for X1, Y1, X2, Y2, X3, Y3, X4, Y4 (in mm) and icons for moving and deleting markers. A callout box points to this section: "For centring circular wafers".
- Favourites:** A dropdown menu and buttons for adding and removing favourites. A callout box points to this section: "A memory list of commonly used alignment points".
- Correct for:** Checkboxes for Offset, Slope, Rotation, and Stretch and shear.
- Correction parameters:** Input fields for X(mm), Y(mm), Theta (deg), X stretch (%), Y stretch (%), Shear (%), X slope (deg), and Y slope (deg).
- Buttons:** "Reset all" and "OK" buttons.



Multi-sample expose