

QUICK REFERENCE GUIDE ---- Venture

- The BIS program and APEXIII programs must be running
- In APEXIII Log in

- Point to Instrument → Connect → localhost

- Point to Sample → New

- Enter your project name etc.

- Wait for Panels (if not visible) to appear on the left

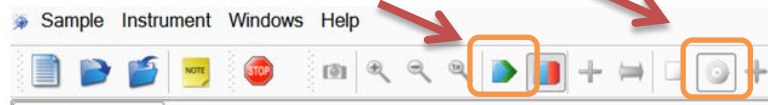
- Point to **Setup**

- Point to **Describe**

- Fill in the formula, crystal color/shape

- Point to **Center Crystal**

- Point to Grab Video (top) and Cursor



- Close Instrument Doors (Ins. will not move with open door)

- On the right bottom point to the “center” button

- Center Crystal

- Point to Spin Phi 90

- Center Crystal

- Point to Spin Phi 180

- Check centering adjust if needed

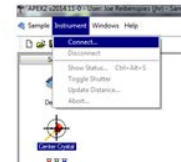
- On Panels point to **Evaluate**

- Point to **Determine Unit Cell**

- In the Automatic Panel (on the right) point to Run

- Allow unit cell determination (~14mins)

- If no unit cell is found find another crystal and repeat



(over)

Data Collection.

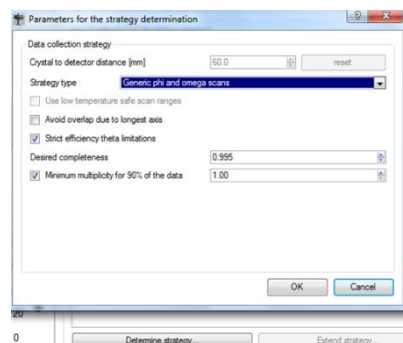
On the Panels (left) Point to **Collect**



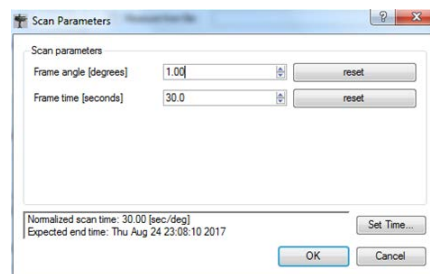
Calculate Strategy

Point to **Calculate Strategy** (Queen)

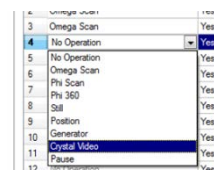
- Step 1. Check Cell and Resolution (on the right)
 - Change if necessary (resolution < 0.88)
- Step 2. Point to Determine Strategy (bottom left)
 - Point to OK
 - Wait for program to finish (~1-3mins)
 - Check Completeness and Multiplicity
 - > 90 complete and > 4 Multiplicity (monoclinic and above and >2 triclinic)
 - If not point to extend strategy button



- Step 3. Point to Select Scan Parameters (bottom)
 - Change step scan width to 1.0
 - Change step scan time (then click outside of step scan time box)
 - The data collection end time/date will be displayed.
 - If exceeds 9:30am (the next day) then reset scan time



- Data Collection : Point to **Run Experiment**
 - Point to Append Strategy (Lower left)
 - After the last run line, point to the first No Operation tab
 - Right Click Tab and pull down to Crystal Video
 - On the next No Operation tab
 - Right Click Tab and pull down to Position
 - Point to Validate
 - If validation OK then point to Execute



| Operation | Active | Distance [mm] |
|-----------------|--------|---------------|
| 1 Omega Scan | Yes | 60.000 |
| 2 Omega Scan | Yes | 60.000 |
| 3 Omega Scan | Yes | 60.000 |
| 4 Crystal Video | Yes | |
| 5 Position | Yes | 60.000 |
| 6 No Operation | Yes | |
| 7 No Operation | Yes | |

(over)