QUICK REFERENCE GUIDE ----  APEX21

• The BIS program/Video and APEXII programs must be running
• In APEXII Log in
  o Point to Instrument → Connect → localhost
  • Point to Sample → New
    o Enter your project name etc.
• Wait for Panels (if not visible) to appear on the left
• Point to Setup
  o Point to Describe
    o Fill in the formula, crystal color/shape
  • Point to Center Crystal
    o On the right bottom point to the “right” button
      ▪ Center Crystal
    o Point to Spin Phi 90
      ▪ Center Crystal
    o Point to Spin Phi 180
      ▪ Check centering adjust if needed
    o Point to Left
      ▪ Check centering adjust if needed
• On Panels point to Evaluate
  o Point to Determine Unit Cell
    o In the Automatic Panel (on the right) point to Run
      ▪ Allow unit cell determination (~14mins)
    o If no unit cell is found find another crystal and repeat

(over)
Data Collection.

On the Panels (left) Point to Collect

Point to Data Collection Strategy (Queen)

- Step 1. Check Cell and Resolution (on the right)
  - Change if necessary (resolution < 0.70)
- 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

(over)