

Bruker EPR Operating Procedure

To start the instrument:

- 1) Open Valves for chilled water lines
- 2) Turn ON:
 - (a) Haskrisk Water Chiller
 - (b) Power Supply (breaker in rear and switch in front)
 - (c) Spectrometer Console (round button on front).

To start Xenon software and connect to the instrument:

- 1) Log into the computer
 - (a) User: Xepr User
 - (b) Pswrd: user@xepr
- 2) Use the "Xe" icon to start Xenon XEPR
- 3) Navigate to "Acquisition" -> "Connect to Spectrometer"
- 4) Click "OK" for the server "local host"

To run a sample:

- 1) Open the microwave bridge control panel
- 2) Click the "tune" box/icon in the lower left of the window
- 3) Insert sample into the EPR sample holder as follows
 - (a) First push sample ~1/2 way into the sample top hat
 - (b) Clean the lower half of the sample with a chemwipe
 - (c) Place sample and top hat into the cavity
 - (d) Gently lower sample into the cavity/holder until it has seated
 - (e) Gently tighten the top hat.

NEVER FORCE A SAMPLE INTO THE CAVITY. ASK FOR HELP WHEN IN DOUBT!
- 4) Click "Autotune" in the right panel
- 5) The program will automatically switch to "operate mode"
 - (a) If all three boxes are not green and AFC and Diode gauges are not in the center, click "fine tune" and adjust the tuning as specified in the manual.
- 6) Click the "run" icon, then the "start" icon.