

# PEAK SUPPRESSION USING PRESATURATION

## BRUKER 400/401/600

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1. Type **new** to create a new experiment and select the "1H-dcif" parameter set.
  2. Insert your sample but leave the spin off (**ro off**). Lock, shim, and tune (only tune the 400 or 600, never the 401) as you normally would.
  3. Set number of scans to 1 (**ns 1**).
  4. Type **ii**, then acquire data with **rga** followed by **zg**.
  5. After Fourier transforming and phasing the spectrum (**ft apk**), find the exact chemical shift of the peak to be suppressed by holding your cursor over the peak.
  6. Create a new experiment number with the **ixpno** command. Use the same parameter set.
  7. Go to the acqparms tab and change the following parameters:
    - a. Set pulprog (pulse program) to zgpr
    - b. Set NS (number of scans) to at least 8
    - c. In the "Nucleus 1" section, set o1p (transmitter frequency offset, in ppm) to the chemical shift of the peak to be suppressed (also in ppm)
    - d. In the "Durations" section, edit the parameter "D" (delays) and set d1 to 2 seconds
    - e. In the "Power" section, edit the parameter "PL" (power level) and set PI19 to 55 dB
- Remember- changing o1p to the frequency of the peak to be suppressed will also center the spectrum on that peak. If you have peaks that are on the edge of the spectrum you will need to increase the width of the spectral window by changing the "sw" parameter.
8. Type **ii**, then acquire data with **rga** followed by **zg**.

