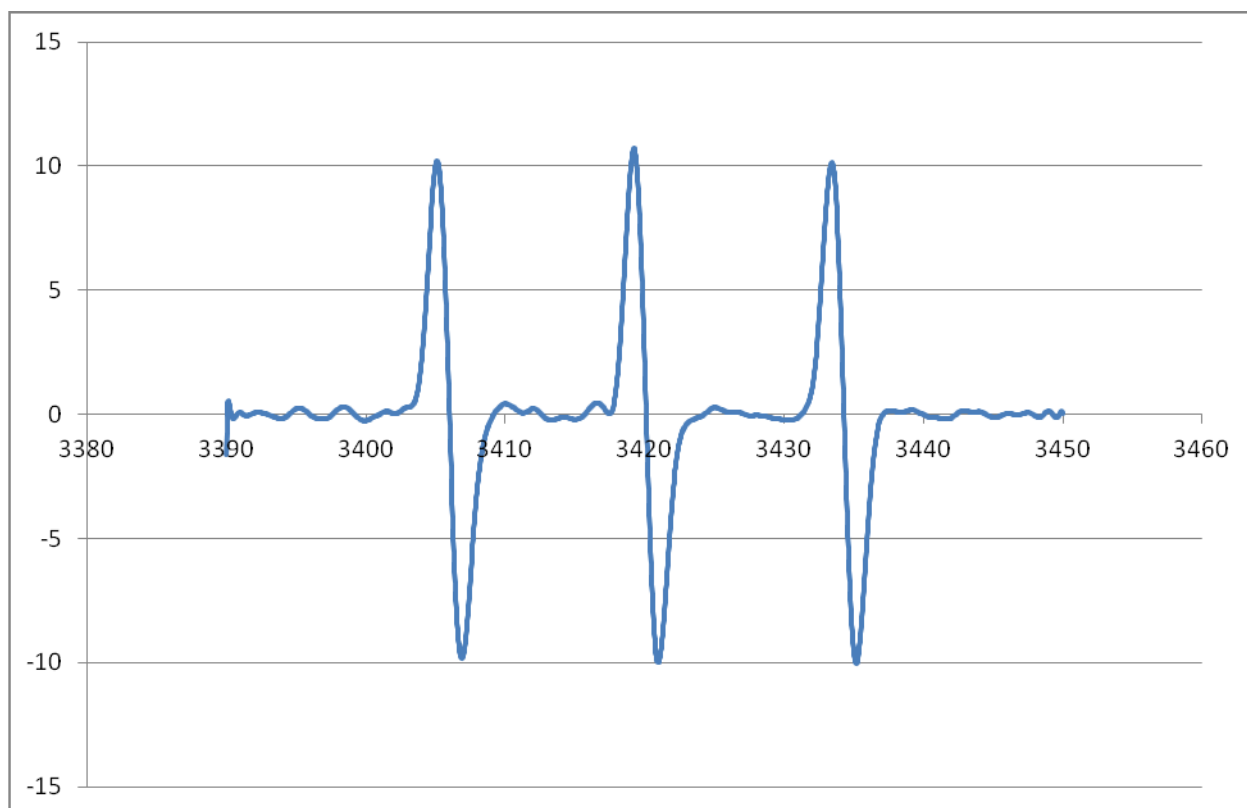


## Sensitivity Demonstration: Micro-ESR Spectrometer

**S/N 21.6 with 1 $\mu$ M TEMPOL in water**

Spectrometer Settings	Sample
Microwave power: 25 mW Sweep Width: 60 Gauss Sweep Duration: 3 minutes Modulation field: 1 Gauss	Sample Cell: Glass flat cell (5mm x 0.5mm) Sample Volume: 44 $\mu$ L Analyte: 1 micro-molar TEMPOL in deionized water.

### Results



**Figure 1: 3-minute scan of 1 micro-molar TEMPOL in aqueous solution**

### Signal-to-Noise Calculation

Parameter	Value
Signal Amplitude	21.17 mV
Noise Amplitude	0.98 mV
S/N (Amplitude)	21.60
S/N (Power)	466.6