

## ELECTRONIC SUPPLEMENTARY INFORMATION

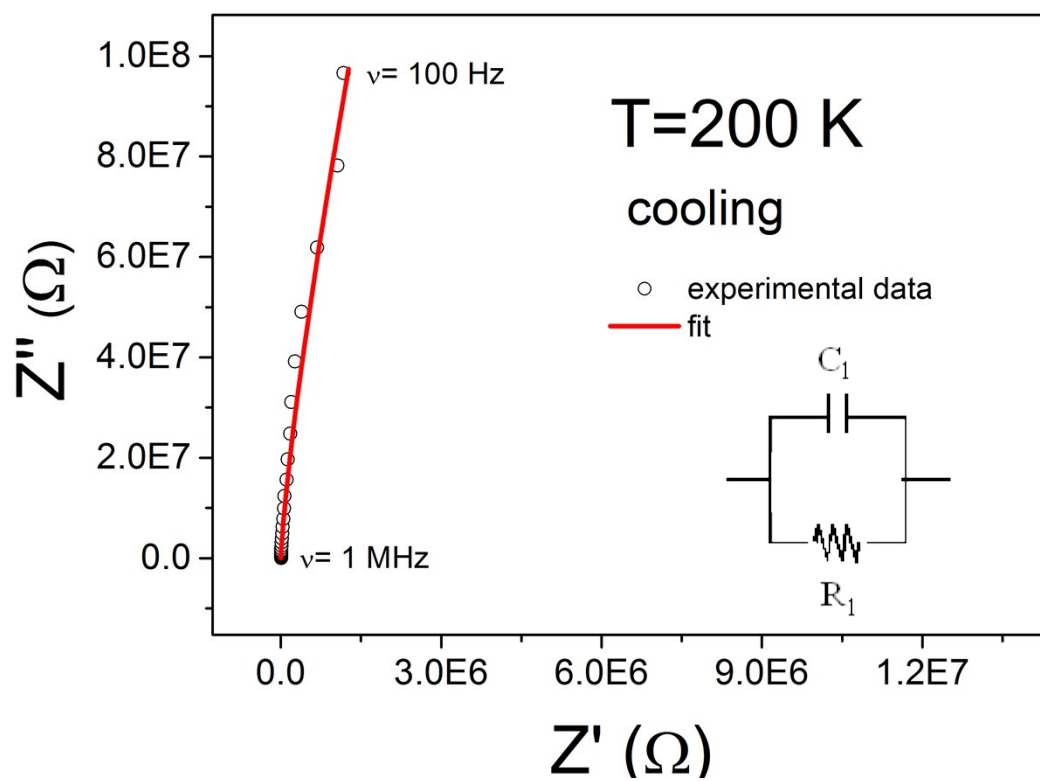
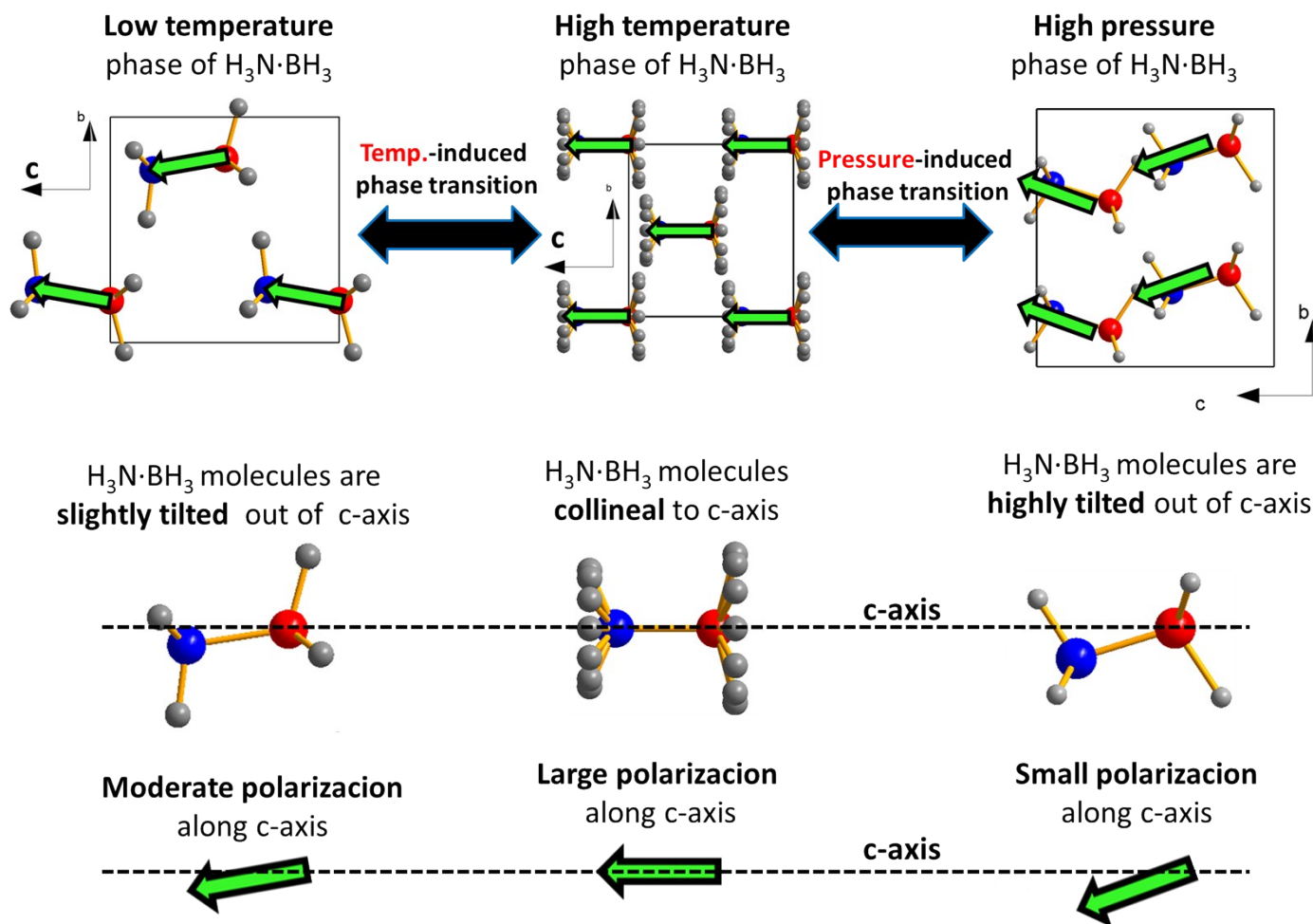


Figura S1.- Typical impedance complex plane of ferrocene and its corresponding fit representative of the temperatures around the transition and below.



**Figure S2.** Scheme of phase transitions induced by temperature and pressure on ammonia-borane crystals. Also, we show the arrangement of ammonia-borane molecules and associated dipole moments along the c-axis.