Exercise #8 : DSC Mixture Interpretations

Chem 6614 Chemical Instrumentation

For the DSC-ograms shown below, pick the most likely matieral or combination of materials present that could have created them:

1) **pure, stable $CaCl_2$ *$2H_2O$ crystal (CaCl2 melts at 773 °C)**
2) **pure silica glass (melts at ~1720 °C)**
3) **pure cristobalite quartz (silica crystal) (may undergo c-c change to tridymite at high temp) melts at ~1720**
4) **pure PVC amorphous plastic (T_g < 100 C, mp ~ 160 C)**
5) **pure PVC crystalline plastic (mp ~160 C)**
6) **Pyrex (T_g~ 550 C, mp ~1200 C)**
7) **NaCl (stable, pure cubic crystal, mp ~ 820 C)**
8) **KCl (stable, pure, cubic crystal, mp ~ 740 C)**
9) **soda-lime glass (T_g ~ 500 C, mp ~1000 C)**