

The procedure during a run involved first raising the pressure to the desired level and then raising the temperature. The sample was held at temperature up to 60 minutes in the NaCl cell and for about 1 to 5 minutes for very high temperature runs in the Al₂O₃ cell. The samples were rapidly quenched (about 400°C/sec) by turning off the power to the cell with the pressure still applied. The pressure was then released and the sample removed for examination.

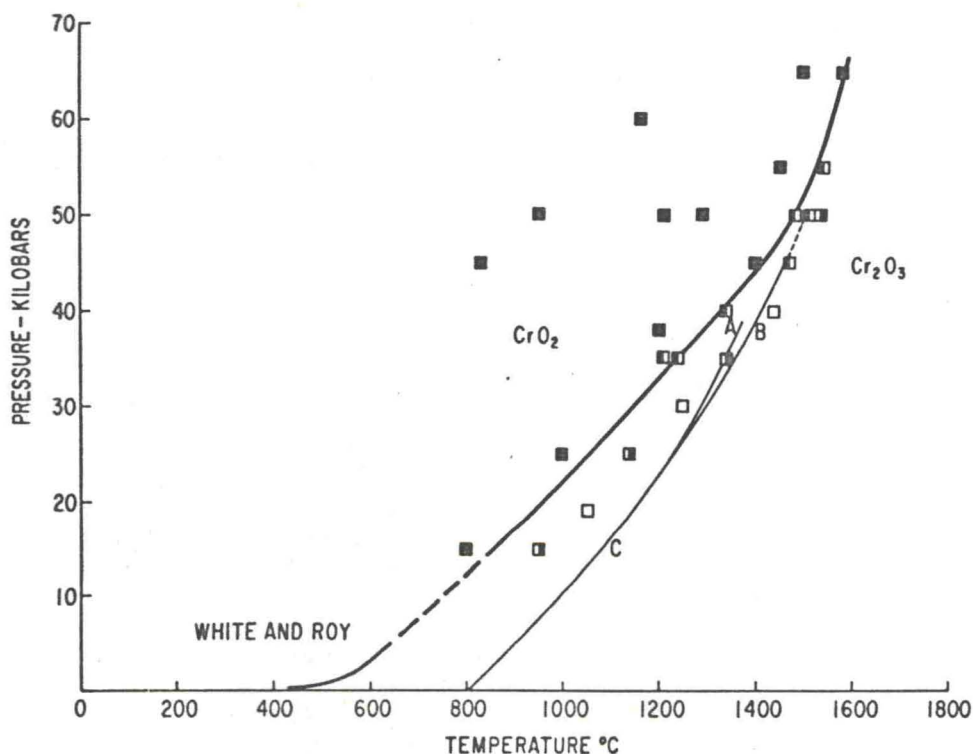


FIG. 1

P-T curve (heavy line) for the decomposition of CrO₂ to Cr₂O₃ in the "belt" apparatus. Filled square, CrO₂; open square, Cr₂O₃; partially filled square, mixture of the two phases; all data for NaCl-lined cells; lower pressure data from White and Roy. (9-11) Melting curve for NaCl (light line): (A) from Pistorius, (15) (B) from Strong, (16) and (C) from Clark. (18)