

Fig. 1. Schematic diagram of apparatus used for reactions of coal with sulfur vapor.

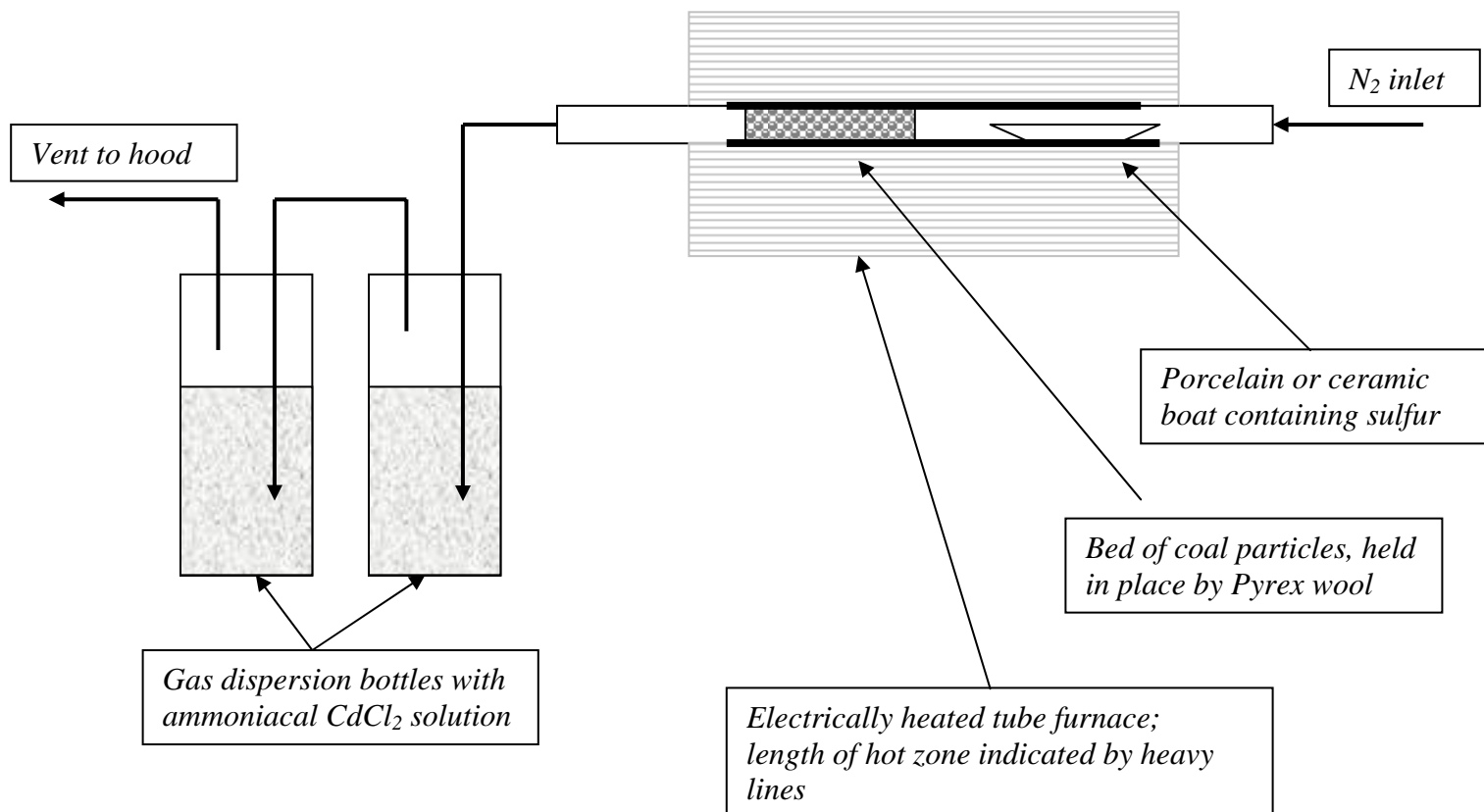


Fig. 2. H<sub>2</sub>S-to-coal ratio as a function of reciprocal sulfur weight. Dotted line represents extrapolation to reciprocal sulfur weight of zero.

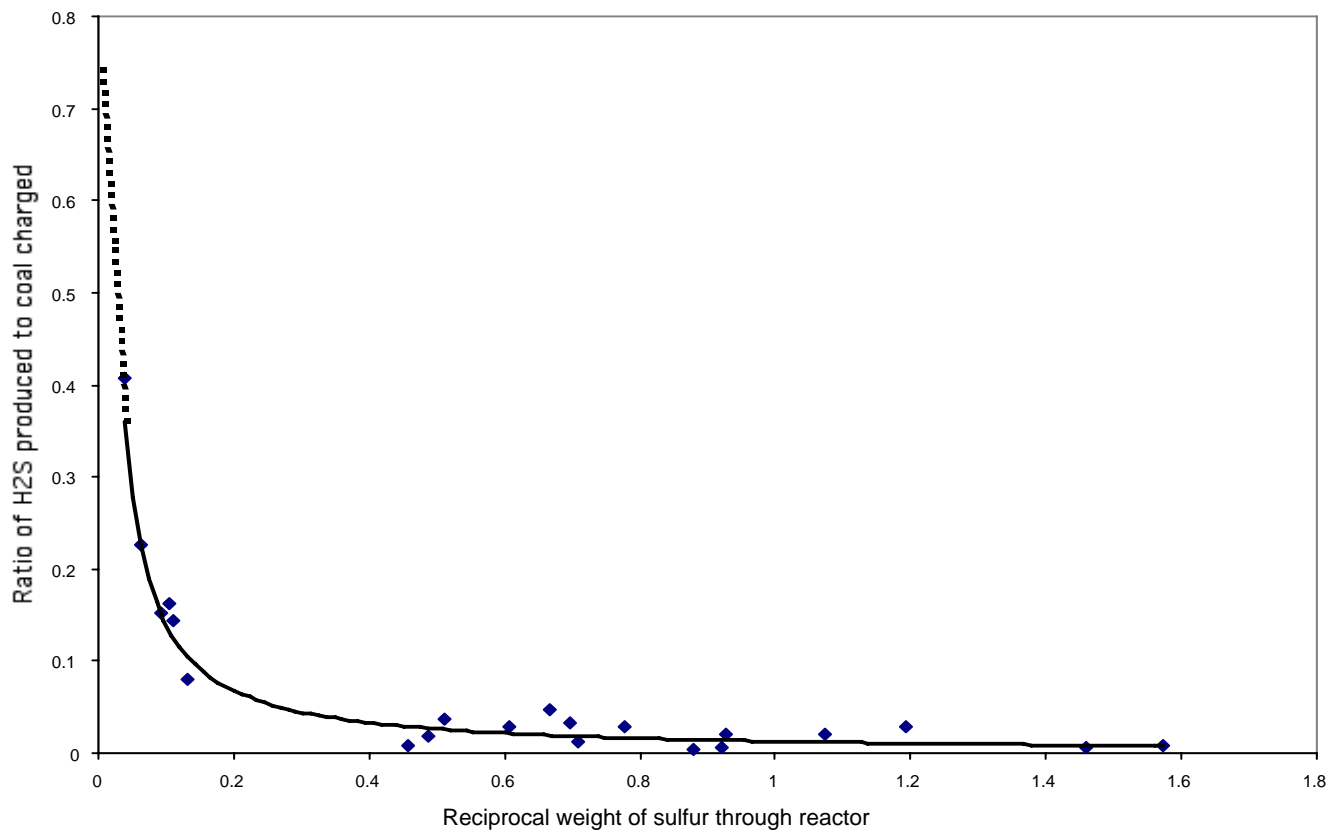


Fig. 3. Conceptual block-flow diagram of hydrogen-from-coal process. Commercially proven Fischer system is shown for conversion of  $H_2S$  to  $H_2$ , but other methods, such as pyrolysis or electric discharge, could be used instead.

