

B. M. A. College Bahari

DARBHANGA.

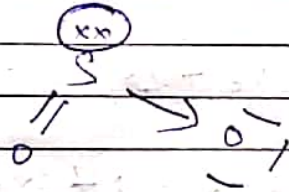
C. CHAUDHARY. CHEMISTRY

Mobile No.: 9006605185

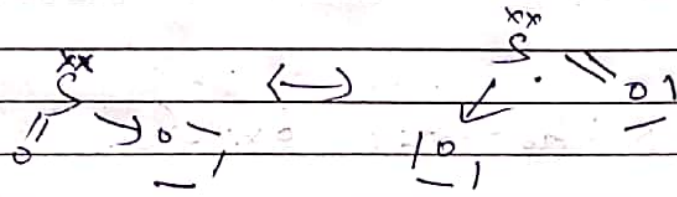
Topic: SO_2 Sulphur dioxide.

Electron dot structure of SO_2

is represented as



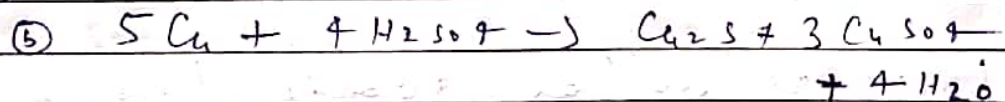
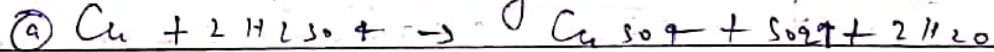
SO_2 shows resonating structure as follows.



SO_2 gas is prepared as follows.

(a) Heating Copper turnings with

Conc H_2SO_4 , SO_2 gas is obtained



Due to formation of Cu_2S colour of

residue becomes black.

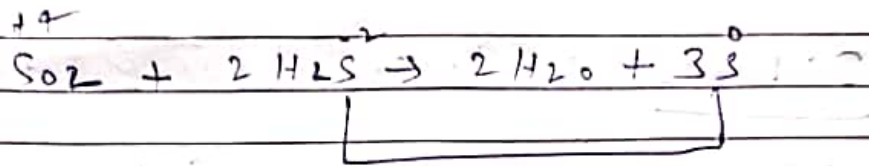
(b) Heating "S" with O_2 , SO_2 gas

is obtained



SO_2 act as a oxidising agent.

(i) It oxidises H_2S into S & H_2O .

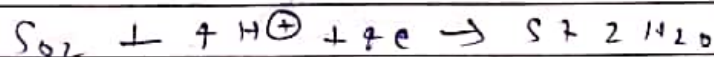
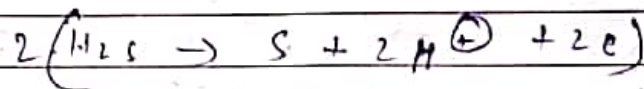


since oxidation no. of "S" in H_2S is

(-2) which changes to "0" means

oxidation no. is increased. In other words, hydrogen is removed from H_2S

therefore it is oxidised

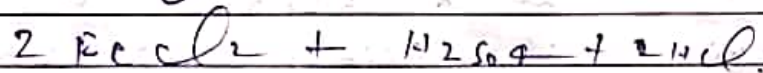
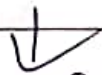
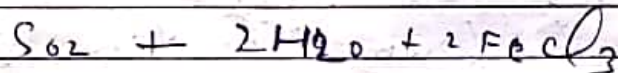


In SO_2 +4 oxidation no. changes to zero means it is accepting electrons and

acts as an oxidising agent.

SO₂ IS REDUCING AGENT

(b) SO_2 reduces FeCl_3 into FeCl_2



since oxidation no. of Fe in FeCl_3

is +3 which is changes to +2 therefore it acts as reducing agent.