

BOMBAY, DATED, 24th Nov. 41.

My dear Prof. Krishnan,

One of our students is engaged on the determination of the complete structure ^{of} ~~for~~ the crystal of hydrobenzene. In your paper in Phil. Trans. Part I., 1933, page 235., you have given the data for the absolute susceptibilities of the crystal of hydrobenzene along a, b and c axes. Later on, Dr. Banerjee published an abstract in the proceedings of the Indian Science Congress, 1937, which gives the results of the X-ray and magnetic data ^{on} ~~of~~ the above crystal. He finds that the space-group is Q_h^5 that is (D_{2h}^5) ~~according to you~~ and contains 4 molecules. From the magnetic data, he concludes that the benzene rings are equally inclined to N-N line by 16° ; ~~the~~ N-N line lies along the c-axis; and the molecular plane is inclined to ~~the~~ ^{the} face by 49° .

Subsequently we examined the crystal by X-ray method and found that the crystal belongs to the space-group Q_h^2 and the unit cell contains 4 molecules. J

An account of this result is published in the Current Science, 1936-37, Volume 5, page 387. I do not know whether Dr. Banerjee had in mind the same cell as described in our paper, because no data for this crystal seems to have been published.

May I request you to let me know whether the axes chosen in your magnetic work were the same as found by

DR. MATA PRASAD,
D. Sc., F. I. C.

CHEMICAL LABORATORIES,
ROYAL INSTITUTE OF SCIENCE,

BOMBAY, DATED,

us. If so, may I request you to let me know ^{whether} the orienta-
tion of the molecule determined from the magnetic data by
Dr. Banerjee ⁱ in conformity with your results.

An early reply is requested.

With best regards,

Yours sincerely,

Prasad