

5

SIR PRAFULLA CHANDRA RAY Seventieth Birthday
Commemoration Volume. Journal of the Indian
Chemical Society. Calcutta. 1933.

The volume published in commemoration of Professor Ray's seventieth birthday contains nearly forty articles dealing largely with chemical subjects. It is impossible to comment on all of these in the space allotted to this review. Those having the most general scientific interest have been chosen.

Donnan with his customary originality, outlines the thermodynamic functions of a universe of light. "Since radiation possesses a determinable mass i.e. that given by the well known Einstein equation, it offers us a 'material' system whose thermodynamic properties and relations are very simple and well worthy of ranking with those of the ideal gas, in the mind of the student of chemistry."

Dhar and Rao in an experimental study of the nitrification of soil by the atmosphere, point out that the amount of available nitrogen in the soil is not only due to the activity of bacteria, but also to photochemical processes taking place at the surface of various soil ingredients.

Guha reviews the latest available information on the chemistry of vitamins B₁ and B₂ (or G). B₁ seems to be a fairly strong base. B₂ is probably neither a base, acid or peptide but a neutral substance.

Saha's contribution deals with spectroscopy in the service of chemistry. The author describes the calculation of several chemical constants from spectroscopic data. He also points out the

flood of new information which has been thrown upon the nature of chemical forces by the study of absorption spectra.

In conclusion we may wish Professor Ray many years of fruitful work. This commemorative Volume bears undeniable witness to Professor Ray's eminence as a scientist and scholar.

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