COSMIC RAY METER.

This meter has continued to function well, and a five-day interval analysis of the resulting ionization is in progress. In diurnal variation this will yield a 73 point harmonic dial per twelve months. The work is being undertaken by Mr. J. W. Beagley, who also undertakes the major portion of the attention to this important equipment. It is notable that so far in this apparatus, the average number of "bursts" of ionization recorded at Christchurch is three per diem, and the magnitude of those which occur most frequently is about 22×10^6 ions. A preliminary evaluation of the barometric coefficient has been made—viz., —3.9 per cent. in ionization per +1 in. of mercury pressure. These figures refer to results obtained prior to November, 1936, with a pressure of thirty-one atmospheres of argon. In November the pressure was raised by addition of argon to the normal 750 lb./square inch.

Approximate Cost of Paper.—Preparation, not given; printing (960 copies, including maps and graphs), £220.