

## PROF. P. S. MACMAHON

BY a strange perversity of fate the two important national organisations, the Indian National Congress and the Indian Science Congress, owe their origin to the far-sighted vision of a few disinterested Englishmen. A. O. Hume, Lord Dufferin, Sir William Wedderburn and Sir Henry Cotton are credited to have laid the foundation for the first, while Profs. MacMahon and Simonsen were entirely responsible for the second. The Science Congress had attained its independence almost from its birth even though it had to be nursed by official patronage through its childhood. In its adolescence and manhood it has attained such a stature, and everything concerning it is taken so much for granted that its parenthood is almost forgotten. This is perhaps due to the extremely unassuming personality of the real parent, Prof. MacMahon, who, once he was satisfied that this child of his creation was growing fast and did not need his support any longer, kept himself completely in the background, so that many of his old friends and colleagues of the Science Congress have to be reminded that he is still in India. MacMahon always avoided the lime light. On April 30, 1948, he retired from service as Professor of Chemistry, Lucknow University, and as Public Analyst to Government of the United Provinces.

MacMahon had a brilliant academic career in Manchester University, after which he proceeded to Oxford where he carried out his classical work on the photochemical reactions between hydrogen and chlorine with Chapman. In 1910 he came to India as Professor of Chemistry in the Canning College, Lucknow, which was then an affiliated college of the Allahabad University. At about the same time J. L. Simonsen was Professor of Chemistry in the Presidency College, Madras. Both felt the absence of a scientific atmosphere and wished to start an association in India on the same lines as the British Association for the Advancement of Science. All the spadework was done by MacMahon, and it took him nearly three years

to arrange for the first session of the Indian Science Congress, which was held in 1914 at Calcutta under the presidentship of Sir Ashutosh Mukerji. The Congress started with six sections, viz., Chemistry, Physics, Geology, Zoology, Botany and Ethnography, while the total number of papers read were 35. In 1938, at the Jubilee Session, there were 13 sections and more than 800 papers besides general lectures and joint meetings.

Another important institution for which MacMahon is entirely responsible for its initiation and development is the Department of the Public Analyst in the United Provinces. This is a Government Department of which Professor MacMahon continued to be the Head on a part-time basis until his retirement.

When the Canning College was taken over by the newly created Lucknow University in 1921, MacMahon was appointed Head of the Chemistry Department. He was then able to persuade the authorities to reorganise chemistry teaching for which a beautiful new laboratory was built in 1929 to cater to the needs of students up to M.Sc. standard. He was unable to obtain enough funds for its proper equipment for research. The systematic financial starvation of the Universities by the Government is entirely responsible for this state of affairs. MacMahon had visited all important laboratories in England and the Continent, and knew what was needed; but it was his regret that he was unable to translate his ideas into practice with regard to the equipment of the Lucknow University laboratories for research work.

He has travelled widely, and is an extremely genial person and a perfect gentleman. He is a bachelor. He is leaving India after 38 years of meritorious service. He will be very much missed by his numerous friends, colleagues and students at Lucknow. We wish him many years of happy and peaceful life in his retirement.

M. R. N.

## GEOMAGNETIC STORMS

Some details of the geomagnetic storms as recorded at the Alibag Magnetic Observatory are given in the following table in which  $t_0$ ,  $t$  represent the time (I.S.T.) of commencement of the disturbance and its intense phase respectively, and  $T$  the duration of the intense phase expressed in hours. The ranges in the three different elements ( $D$ ,  $H$  and  $V$ ) of the earth's magnetic field have also been given,  $D$ , in minutes of arc,  $H$  and  $V$  in  $\gamma$  where  $1\gamma = 10^{-5}$  gauss. The maximum  $k$ -indices ( $K_m$ ) recorded during the disturbances have also been given.

Date	$t_0$	$t$	$T$	Range			$K_m$	Nature of commencement
				$D$	$H$	$V$		
1948—	h. m	h. m	hrs	Min				
Jan. 3	11 30	16 —	8½	2.4	185	27	5	Gradual
Jan 17	14 —	17 30	3	3.2	183	30	7	Gradual
Feb. 3-4	07 36	12 —	7	4.7	197	34	5	Sudden
March 12-15	03 08	..	5	4.1	180	40	5	Sudden
March 15	09 04	09 04	17	3.5	213	54	6	Sudden