established on a sound basis there would be a number of pressing problems peculiar to Indian conditions, such as a thorough investigation of the question of proper utilization of indigenous raw materials, etc., requiring immediate attention; and in this respect also, India badly needs an organization of the type of E.R.A. which will be of the greatest assistance to the Electrical Manufacturing Industry.

The phenomenal expansion of the electrical and allied industries in the past twenty-five years in England is due to a large extent to the work of the E.R.A. Manufacturers have also found the Association indispensable for the preparation of standard specifications. Mention must be made of the exceptionally valuable work done by the E. R. A. in the field of insulation alone. Their investigations cover a very wide field and include materials such as fabrics, tapes, varnished cloths, varnishes, enamels, filling compounds, paper, mica, asbestos press-boards, vulcanized fibre, ebonite and composite insulating materials based on synthetic resin, etc. The results of their investigations have not only effected definite improvements both in the properties of the insulating materials and in the technique of their selection and utilization, but also have led to considerable expansion of the industries themselves.

Towards its establishment and maintenance the E.R.A. receives generous financial support from the Government through the Department of Scientific and Industrial Research (D.S.I.R.), the Central Electricity Board, the B.B.C. and the G.P.O., the British Electrical and Allied Manufacturers' Association (B.E.A.M.A.), the Institution of Electrical Engineers (I.E.E.), the Cable Manufacturers' Association (C.M.A.) and many electric supply undertakings. The expenditure of the Association is now over £100,000 per annum and would have been much higher had it not been for the diversion of energy and personnel caused by the war effort.

Unfortunately in India there are as yet no organizations corresponding to the I.E.E., B.E.A.M.A., C.M.A., etc., which would supplement Government assistance in the setting up of a Research Association on the lines of the E.R.A. Hence the inception and direction of its activities in the early stages at least will have to rest mainly with the Government through the Central Technical Power Board. Research takes time, yet the results must be available in time for their utilization, hence the problem of providing facilities and building up staff to undertake the researches needed for post-war development is most urgent. A moderate beginning could be made by utilizing the existing facilities for experimental investigations in the laboratories of the Indian Institute of Science, Bangalore, and providing the Institute with some additional equipment of which the most important are those connected with High Voltage Testing, comprising :

(1) One million volt power-frequency testing equipment.
(2) Two million volt impulse-testing equipment.
(3) 200-KV high voltage D.C. testing equipment.
(4) A 125-KV H.F. testing equipment.

The approximate cost of the above equipment based on pre-war prices would amount to about Rs. 4 lakhs. A suitable building to house the above would, in addition, cost another lakh of rupees.

In due course the organization could have its own laboratory and staff.

H. N. RAMACHANDRA RAO.

OBITUARY

THE LATE DR. S. L. GHOSE

THE news of the premature death of Dr. S. L. Ghose, Professor of Botany, Government College, Lahore, has been received with profound sorrow by his numerous friends, colleagues and pupils. His departure from this world at an early age of fifty-two has created a gap in the ranks of Indian workers in Botany which is hard to fill.

S. L. Ghose was the youngest son of Mr. N. C. Ghose, who served as headmaster in many high schools in the Punjab and N.W.F.P. Born on 13th December 1893, he received education in many schools and ultimately passed his Matriculation from the Government High School, Ludhiana. He joined the Forman Christian College, Lahore, in 1908, and developed interest in biological sciences in his early years and in 1910 shifted to Government College, Lahore, where he had a brilliant academic career. In 1921 he proceeded to the University of Cambridge and worked under the guidance of Dr. A. C. Seward and Doctor Borraidale. For his researches on Myxophycæ, he was awarded Doctorate in Philosophy in 1923. He joined the University of Rangoon the same year and was responsible for establishing the Biology Department. In 1928, he returned to Government College, Lahore, as Assistant Professor of Botany, and on the death of Dr. S. R. Kashyap, he was appointed Professor of Botany, which post he held with distinction till his death on March 24, 1945.

He was elected Vice-President of the Indian Botanical Society for 1922-23, and was President of the Botany Section of the Patna Session of the All-India Science Congress in 1933.

His contributions to the study of Myxophycæ of Northern India and Burma are of an outstanding nature and by his pioneer work he showed the way to others into a realm hitherto practically untouched and unexplored. He was the author of twenty original papers of outstanding merit. By his genial temperament and sympathetic approach he had endeared himself to all his pupils. Besides being an inspiring teacher he was a sympathetic guide in the field of research. Indian Algology has suffered an irreparable loss by the demise of this veteran and the Panjab University an inspiring professor of Botany.

M. S. RANDHAWA.