Research Dept.,
Metropolitan Vickers
Electrical Co. Ltd.
Trafford Park.
Manchester.

12.4.47.

Dear Professor,

I happened to meet Dr. Lokanathan at London, on his way to Geneva, during Easter when he informed me that my application for a Research assistants' post in the National Physical laboratory is under consideration for selection. He also told me that you will be taking ~~over~~ over Charge as Director of the Laboratory shortly. I take this opportunity to inform you of my short experience at Metropolitan Vickers. I was working in their Semi-Conductors Laboratory for one year under Dr. R.W. Sillars. I recollect Dr. Sillars telling me that he had contacted you at the Faraday Society Conference at Bristol last year when he also listened to your contribution on the asymmetry ~~in~~ of the Conduction of Graphite. During my stay under him I worked

on "the development of Negative Temp. Coefficient materials" and on "The Johnsen and Rahbek Effect" which deals with the force of attraction between a metal and semiconductor in contact, and when there is a Voltage drop across the junction.

Since the beginning of this year I am working in their High Voltage Laboratory with the Betatron under Dr. J. D. Craggs. I am here getting acquainted with the investigation of the radial distribution of the magnetic flux in Betatron model magnets with a view to improve their designs to and hence improve the focussing of the electron beams in Betatrons. I am also getting acquainted with the design and construction of injector circuits in Betatrons. Soon I hope to have an opportunity to investigate the Spectrum of X-rays from the Betatron by making measurements on the Energy and angular distribution of the Protons ejected from Deuterium bombarded by the X-ray photons.

I hope I shall have the opportunity to work under you at the National Physical Laboratory.

With kind regards,

Yours sincerely

K. Balakrishnan

Prof. K.S. Krishnan F.R.S.
The University
Allahabad.