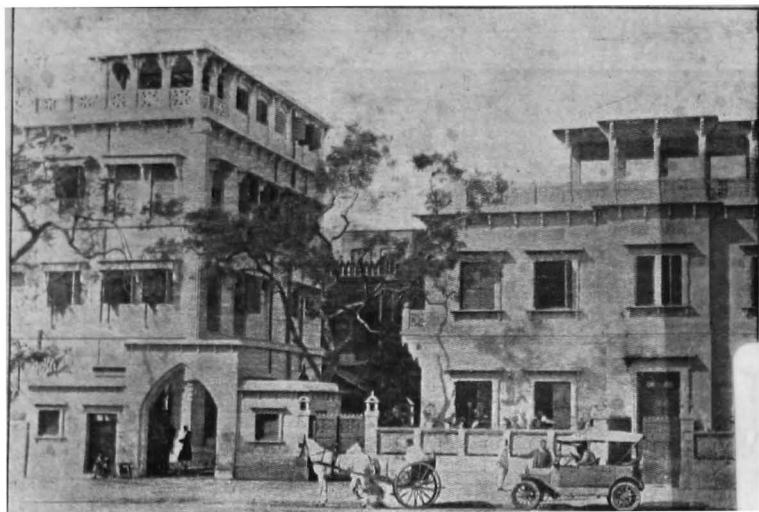


**JAGADISH CHUNDER BOSE**

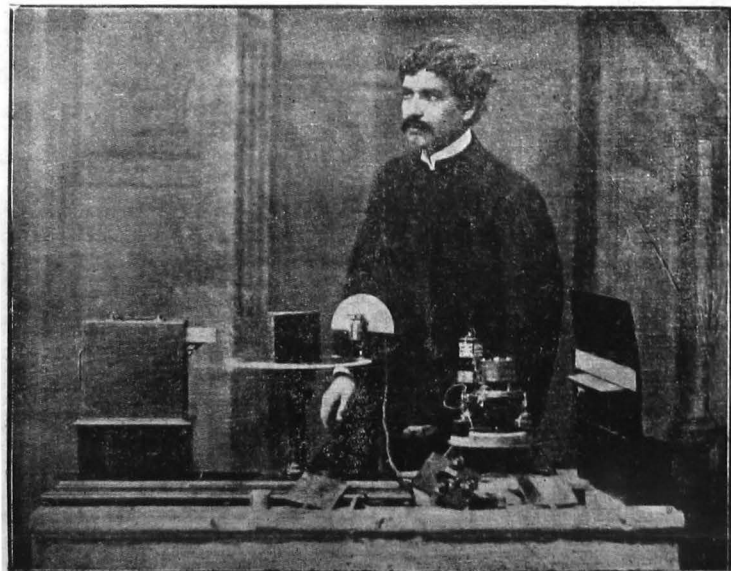
**HIS DISCOVERIES AND WRITINGS**

**WITH A BIOGRAPHICAL  
SKETCH & A PORTRAIT**

**PRICE RS. THREE  
G. A. NATESAN & CO.,  
MADRAS.**



**BOSE RESEARCH INSTITUTE.**



**Professor J. C. Bose lecturing on his discoveries at the Royal Institution rendered famous by the works of Davy and Faraday.**

# SIR JAGADISH CHANDER BOSE

HIS LIFE, DISCOVERIES AND WRITINGS.

*"It is no easy life that lies before a scientific investigator. He has to steel his body and nerve to the utmost. There is to be for him no life of ease. It is to be one of unending struggle. Even after all this there is no assurance whatever of success to reward him for his ceaseless toil. He has to cast his life as an offering, regarding gain or loss, success or failure as one. The lure that draws heroic souls is not the success which can easily be achieved but defeat and tribulation in the pursuit of the unattainable."—Jagadish Bose.*

FIRST EDITION

G. A. NATESAN & CO., MADRAS

PRICE RS. THREE

### PUBLISHERS' NOTE.

*This volume opens with a brief but succinct account of Sir Jagadish Chander Bose's life and his works. It describes his early struggles, his controversies with leading European scientists and his final victory, his tours in Europe and America and the establishment of what Prof. Geddes aptly calls the "Temple of Science" in Calcutta. The sketch recounts his various experiments and discoveries and summarises his achievements in the realm of science. The life sketch is followed by an almost exhaustive collection of his writings and speeches. It begins with Sir Jagadish's educational addresses including his famous Hindu University speech and his evidence before the Calcutta University Commission. Then follow speeches on general subjects. His purely scientific lectures occupy the bulk of the book. Dr. Bose's views on other important subjects, besides those mainly scientific, will be found of absorbing interest. An interesting feature of the book is the inclusion of his addresses to students. The collection also includes a list of his Researches and Discoveries and a description of the Bose Research Institute by Prof. Geddes, his enthusiastic biographer.*

## CONTENTS.

---

<b>Sir Jagadish Chander Bose</b>	
A Sketch	... i
<b>Educational</b>	
Teaching or Research	... 1
The Public Services Commission	... 6
Education in the West and East	... 21
Address to the Hindu University	... 25
Address to Students	... 41
The Calcutta University Commission	... 53
Message to the Scholars of the Bose Institute.	58
<b>General</b>	
Literature and Science	... 60
History of a Failure that was Great	... 81
Inauguration of the Bose Institute	... 90
Reply to Calcutta Citizens' Address	... 111
<b>Science</b>	
Response in the Living and Non-Living	... 121
Automatism in Plant and Animal	... 124
Death Spasm in Plants	... 139
The Praying Palm Tree	... 143
The Magnetic Crescograph	... 148
The Unity of Life	... 158
The Automatic Writing of the Plant	... 165
Control of Nervous Impulse	... 169
Response of Plants to Wireless Stimulation	172

Waking and Sleeping Plants	...	178
Wounded Plants	...	182
Reply to Criticisms	...	187
Visual Impressions	...	192
Two Types of Memory	...	193
The Surge of Life	...	195
Science and Research	...	199
Sense Organ of Plants	...	205
The Power of Will	...	209
Address at the Rotary Club	...	212
<b>Researches and Discoveries</b>	...	<b>211</b>
<b>The Bose Research Institute</b>	...	<b>241</b>
<b>Bose Institute Research Station</b>	...	<b>246</b>

---