

CONTENTS:

	<u>Pages.</u>
1. Chapter - I	1 - 62
Review Of The Previous Works	1 - 50
Scope And Object Of The Present Work	51 - 56
References	57 - 62
2. Chapter - II	63 - 86
Experimental Technique	
3. Chapter - III	87 - 97
Azimuthal Radiofrequency Conductivity Measurement In An Arc Plasma By Study- ing The Eddy Current Effect	
4. Chapter - IV	98 - 119
Radial Distribution Function For The Azimuthal Conductivity Of An Arc Plasma	
5. Chapter - V	120 - 146
Analysis Of The Previous Coil Probe Experiment	
6. Chapter - VI	147 - 177
Heat Flow Processes In The Positive Column Of A Low Pressure Mercury Arc	

...contd.

7. Chapter - VII

178 - 207

Determination Of Electron-Atom Collision  
Frequency Of A Mercury Arc Plasma Using  
Radiofrequency Coil Probe In Conjunction  
With A Steady Longitudinal Magnetic Field

Summary Of The Present Series of Studies

208 - 213