

CONTENTS

Preface	vii
Acknowledgment	x
Part I- Scientific Aspects	3
Chapter I. Nature and History of Bioga	5
II. Biochemistry and Microbiology	11
III. Laboratory and Pilot Plant Experiments	21
IV. Raw materials for Bioga Production	39
V. The Sludge	47
Part II-Biogas Technology	61
Chapter VI. Fundamentals of Bioga Plant Design	63
VII. Bioga Plant Designs Around the World	73
VIII. Sludge-Works Designs	87
IX. Bioga Works Designs	101
X. Planning and Establishing the Bioga Works	115
XI. Operating Bioga Works	131
Part III-Utilization and Economics	143
Chapter XII. Bioga as Fuel	145
XIII. Sludge as Fertilizer	153
XIV. sludge for Feed and Other Uses	159
XV. Bioga Works for Pollution Control	165
XVI. The Economics of Bioga Works	171
Part IV-Waste Recycling Through the Bioga Works	181
Chapter XVII. Recycling System of Farming	185
XVIII. Rural Development through Waste Recycling	193
XIX. Bioga Works in Practice	201
XX. Socio-Economic Impact of Bioga Works	213
Glossary of Terms	218
Bibliography	223
Index	227