١

CONTENTS

| | Рлев |
|---------------------------------------|---------------|
| PREFACE TO THE SECOND EDITION | . v |
| PREFACE TO THE FIRST EDITION | . vii |
| CHAPTER I | |
| INTRODUCTION | . 1 |
| CHAPTER II | |
| Foundations. | . 13 |
| CHAPTER III | |
| DRAINAGE | . 27 |
| CHAPTER IV | |
| Piping Installation | . 37 |
| CHAPTER V | |
| Pumps and Pumping | . 67 |
| CHAPTER VI | |
| THE BUILDING | . 94 |
| CHAPTER VII | |
| Power and Power Transmission | . 141 |
| CHAPTER VIII | |
| DEVELOPMENT OF THE DESIGN PROJECT | . 16 2 |
| CULADTED IV | |
| Flow Diagrams | . 188 |
| CHAPTER X | |
| SELECTION OF PROCESS EQUIPMENT. | . 214 |
| · · · · · · · · · · · · · · · · · · · | |
| CHAPTER XI | |
| PLANT LAYOUT AND ELEVATION | . 289 |

CONTENTS

| CHAPTER XII | PAGE |
|--------------------------------------|-------------|
| PRECONSTRUCTION COST ACCOUNTING | 306 |
| CHAPTER XIII | |
| LOCATING THE CHEMICAL PLANT. | 3 66 |
| APPENDICES | |
| A. GENERAL TABLES. | 387 |
| B. ELEMENTARY PROBLEMS | 409 |
| C. Complete Projects. | 417 |
| D. PROJECT PRECONSTRUCTION COST DATA | 417 |
| Index | 435 |

.'