

CONTENTS

1. Differential Heat of Sorption of Vapor on Active Charcoal	
1. Apparatus and Method of Measurement	
..... By Seturo Tamaru and Kazuo Sato.....	1
2. Result of Measurement	By Kazuo Sato..... 6
2. Studies on Organosols, II	
Silver Organosols obtained by a Chemical Method.....	By Ituro Yamakita..... 14
3. Studies on Organic Peroxides, II	
The Decomposition of Ethyl Hydroperoxide catalysed by Platinum Sol	
..... By Sigeo Hasegawa.....	21
4. The Surface-Chemical Study of the Solid to Water	
..... By Syozi Tutihasi.....	31
5. Studies of Colloidal Catalysts by Thermal Analysis of Reaction Velocity, VII	
On the Permanent Poisoning of Catalysts	By Eiji Suito..... 35
6. On the Effects of Surfaces upon the Spontaneous Ignition of the Liquid Fuels	
..... By Sôzaburo Ono.....	42
7. Macropolymerization of Ethylene, I	
..... By Sinziro Kodama, Hideiti Tahara and Isozi Taniguti.....	50
8. On the Viscosity of Pure Liquid	By Mikio Tamura..... 58
9. The Induced Photo-Dichroism by Infra-Red Rays	
..... By Jitaro Shidei, Daijiro Yamamoto and Yuriko Kubo.....	64
10. Some Experiments about the Oxygen and Hydrogen Reaction,	
KCl Effect on the Surface of Steel	By Teizo Watanabe..... 68
11. Ultra Pressure, VIII	
Material Flow of Attachments of High Pressure Apparatus	
..... By Ryo Kijuma.....	73
12. On the Photochemical Explosive Reactions, I	By Jiro Osugi..... 76
13. Inflammation of Aluminum Powder	
..... By Rempei Goto and Eiji Suito.....	82
14. On the Structural Change of Mechanically Pulverized Iron Powder due to the	
Procedures of Annealing	
..... By Hideki Hirata, Hidekiyo Fujihira and Eiichi Fujii.....	86
15. Studies on High Pressure Gaskets	
..... By Shun-ichi Uchida and Yoshitada Suezawa.....	91
16. Polymerisation of Ethylene under High Pressure	By Taizo Kume..... 98

17. The Photo-Effect on Serum Albumin
 Chiefly on its Viscosity and Solubility *By Nagao Hayami*..... 108
18. A Comparison of Catalytic Activities of Some Solid Salts in the Recombination
 of Hydrogen Free Atoms and Hydroxyl Free Radicals
 *By Mikio Tamura and Shoji Shida*..... 115
19. A Study of the Recombination Reactions of Free Atoms by the Thermal Analysis
 of Budde Effect, II *By Shoji Shida*..... 121
20. Study on the Selenium Colloidal Solution *By Kiyoshi Juna*..... 132
21. Studies on the Explosive Reaction between Hydrogen and Oxygen
 *By Ken-ichi Moriya*..... 136
22. Thermal Decomposition of Diethyl Peroxide *By Ken-ichi Moriya*..... 143
23. Methylol Condensation of Acetaldehyde *By Seiichi Fujii*..... 153