C O N T E N T S

Introduction 1

1. Babak V. G., Theory of adhesion of fluid particles 5
2. Bialopiotrowicz T., Jańczuk B., The surface free energy components of liquids and low energetic solids and the contact angle 11
3. Bialopiotrowicz T., Jańczuk B., Components of the surface free energy of some clay minerals 17
4. Biliński B., Wójcik W., Adsorption of n-alkane and n-alcohol on the graphite surface precoated with hexadecane 23
5. Biniak S., Dzieleńdziak B., Siedlewski J., Voltammetric and spectral studies of the carbonaceous films from degradated polyvinylidene chloride 29
6. Biniak S., Pakula M., Świątkowski A., Voltammetric studies of the active carbon oxidized by various methods 35
7. Bracke M., De Voeght F., Joos P., The dynamic contact angle in the wetting process 41
8. Busscher H. J., Holysz L., Kip G. A. M., van Silfhout A., Chibowski E., Surface free energy components of glass from ellipsometry and zeta potential measurements 47
9. Clarke S. M., Thomas R. K., A comparison of the monolayer structures of MeI and MeBr adsorbed on graphite 50
10. Dabrowski A., Nowak J., Garbacz J., Current state and perspectives of researches in adsorption from solutions of nonelectrolytes on solid surfaces 54
11. Derylo-Marczewska A., Nonideality effects in dilute solute adsorption 60
12. Douillard J. M., Tronel-Peyroz E., Bennes R., Privat M., Critical point wetting: water - 2,5 lutidine and water - 2 butoxyethanol 66
13. Dvořák O., Samec Z., Mareček V., Structure of the liquid-liquid interfaces and the polymer gel-liquid interfaces 71

14. Dvoretskov G. A., Kuznetsova E. N., Ogloblina M. O., Frolov Yu. G., Adsorption properties of the microporous crystalline aluminium phosphate $AlPO_4$-5 77
15. Dynarowicz P., Paluch M., The study of the interaction between some physiologically active compounds at the water/air interface 83
16. Fedoseev A. S., Avrutskaya S. G., Frolov Yu. G., Acid-base and catalytic properties of carbon surface 88
17. Fedoseev A. S., Gavrilkin M. A., Computer-aided analysis of thermal desorption from carbon surface 91
18. Garbacz J. K., Kopkowska E., Mioduska M., Świątkowski A., Dabrowski A., Description of adsorption isotherms from aqueous benzene solutions on active carbons 95
19. Gaydos J., Li D., Neumann A. W., Implications of the phase rule for systems containing surfaces and three-phase lines for the existence of interfacial equations of state 101
20. Gilányi T., Horváth-Szabó G., A new interpretation of the Donnan equilibrium of colloid electrolytes 107
21. Grodsky A., Formation of the particles coagulation contacts at the sedimentation process 113
22. Holysz L., Chibowski E., Adsorption - desorption, free energy changes and floatability of a mineral 118
23. Hrubeš M., Compressed air filtration 124
24. Khachaturyan A. A., Lunina M. A., Heterocoagulation of disperse metals on the solid surfaces 131
25. Kiss E., Gölander C.-G., Eriksson J. C., Stenius P., Wettability of PEO layer formed on functionalized mica and glass substrates 135
26. Kloubek J., Orientation of the aliphatic hydrocarbons on the surface 141
27. van Leeuwen H. P., Nelson A., Voltammetric study of the permeability of adsorbed lipid layers to different metal species 146

28. Liptáková E., Kúdela J., Relations between adhesion and cohesion of basic components in the system wood-film-forming material 150
29. Lunkenheimer K., Burczyk B., Piasecki A., Hirte R., Novel aspects of adsorption properties of surface-chemically pure surfactants: cis and trans 2-n-alkyl-5-hydroxy-1,3-dioxanes 156
30. Malysa K., On mechanism of foam formation and stability under dynamic conditions 160
31. Malyshev A. A., Zharinova T. A., Electrophoretic deposition mechanisms in hydrocarbon medium 166
32. Medrzycka K, B., The effect of alkyl chain length on surfactant adsorption at the hydrocarbon water interfaces 172
33. Mehandjiev D., Nickolov R., On the mechanism of water vapour preadsorption on activated carbon studied by low-temperature nitrogen adsorption 178
34. Milichovský M., Practical utilization of the theory of structure change in hydration layers 184
35. Molski A., Brownian motion in a nonuniform rarefied gas 190
36. Nowak P., Pomianowski A., Semiconducting properties of lead sulphide and their influence on the sorption of flotation collectors 196
37. Nowicka G., Nowicki W., Effect of medium composition on stability of AgI-sol in the presence of very-high-molecular weight polyacrylamide 202
38. Nowicky W., Nowicka G., Effect of pH on phase separation temperature of aqueous solutions of hydrolyzed polyacrylamide 208
39. Poberezhny V. Ya., Statistical unlocalized adsorption theory of ionogenous and nonionogenous surfactants at liquid-gas interface 212
40. Pomianowski A., Rodakiewicz-Nowak J., Xanthates - surfactants comicellization 218
41. Pospíšil L., Heyrovský M., Novotný L., Adsorption and phase transition in an electrochemical interface 224

42. Pouchlý J., Sorption of mixed solvent in polymer coils 230
43. Rabinovich Ya. I., Movchan T. G., Churaev N. V., Phase separation of binary mixture of polar liquids near to the solid surfaces 235
44. Sjolema J., Busscher H. J., Deposition of polystyrene latex particles in a parallel plate flow cell 237
45. Skalický Č., The interactions of hydroxyl groups in the cellulose dewatering process 243
46. Starov V., Sobolev V., Churaev N., Reverse osmosis as a problem of surface chemistry 247
47. Tertykh V. A., Chuiko A. A., Some regularities of chemical reactions with active centers of silica surface 252
48. Tikhonov A. P., Okorenkov V. Yu., Obtaining stable system with high electrolyte concentration 258
49. Tretinnik V. Yu., Parhomenko V. V., Loktionova L. N., Research of structure-formation processes in the polymer-containing disperse systems 262
50. Vespalec R., Liquid chromatography and electrokinetics at phase boundary 268
51. Vollhardt D., Retter U., Nucleation processes in monolayers 275
52. Warszyński P., Transfer of colloidal particles in random force fields 277
53. Wilk K. A., Burczyk B., Influence of hexadecyltrimethylammonium salts on the reaction of hydroxide ion with 2-phenylethyl derivatives 282
54. Zakharchenko V. N., Khachaturyan M. A., Foam properties of systems containing blood plasma 288
55. Tronel-Peyroz E., Douillard J. M., Bennes R., Privat M., Thermodynamic properties and structrue of the liquid vapor interface 294
56. Wanka G., Hoffmann H., Ulbricht W., The aggregation behaviour of poly-(oxyethylene)-poly-(oxypropylene)-block-copolymers 299

Ústřední ústav geologický
Základní knihovna
ČSAV Praha