USTIYEV, Ye.K., doktor geol.-mineral.nauk

Session of the Hungarian Geological Society. Vest. AN SSSR 35 no.10:114 O '65. (MIRA 18:10)

L 08039-67 EWT(1) GW

ACC NR: AP7001649 SOURCE CODE: UR/0030/66/000/005/0045/0049

AUTHOR: Ustiyev, Ye. K. (Doctor of geomineralogical science) 22 B

ORG: none

TITLE: Great program of scientific and practical work

SOURCE: AN SSSR. Vestnik, no. 5, 1966, 45-49

TOPIC TAGS: geology conference, earth crust, tectonics

ABSTRACT: The article cited below in many respects duplicating many reports which have been published on the meeting of the Earth Sciences Department of the Academy of Sciences USSR held at Khabarovsk, Magadan, Vladivostok and Yuzhno-Sakhalinsk. The program was devoted to the structure of the earth's crust in the transition zone from the Asian continent to the Pacific Ocean, characteristics of structure and history of tectonic development, principal characteristics and history of development of magmatism and metallogeny, mineral-raw material resources and their exploitation; and geographical aspects of the use of natural resources and transformation of nature. Like other reviews of this meeting, the article describes the principal emphasis at the different places of meeting and lists the speakers and the titles or subject matter of their papers. There is only fragmentary information on the actual

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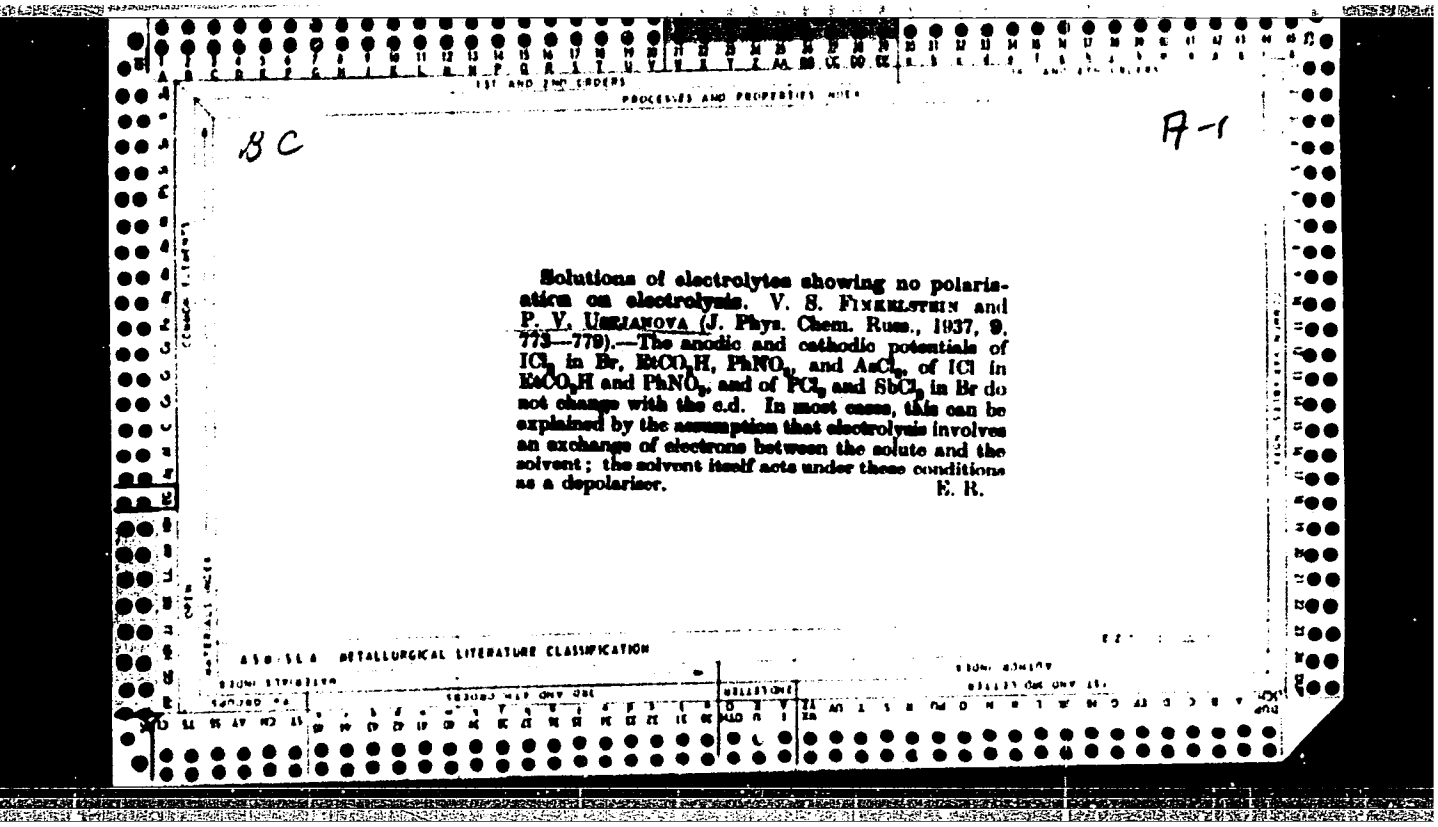
L 08039-67
ACC NR: AP7001649

content of their presentations. The author is concerned at what he feels is a major shortcoming in most of the work being done. He sees a tendency which threatens to disrupt the harmonious development of the earth sciences. Improvements in the fields of structural geology and geophysics of recent years have led, in his opinion, to an underevaluation of the role of matter (particularly rocks) in the character and direction of geological processes. The reports at the meetings dealt almost exclusively with geostructural problems and related endogenetic processes, with little heed of the medium in which these processes occur. He feels that only by restoring equilibrium in the development of the earth sciences, and especially encouraging all kinds of petrographic research, will it be possible to return geological knowledge to the material base from which it has temporarily departed. [JPRS: 38,230]

SUB CODE: 08 / SUBM DATE: none

Card 2/2 mc



BC

A-1

Solutions of electrolytes showing no polarisation on electrolysis. V. S. FINKELSTEIN and P. V. USELIANOVA (J. Phys. Chem. Russ., 1937, **9**, 773—779).—The anodic and cathodic potentials of ICl_3 in Br, $EtCO_2H$, $PhNO_2$, and $AsCl_3$, of ICl in $EtCO_2H$ and $PhNO_2$, and of PCl_5 and $SbCl_5$ in Br do not change with the c.d. In most cases, this can be explained by the assumption that electrolysis involves an exchange of electrons between the solute and the solvent; the solvent itself acts under these conditions as a depolariser. E. R.

A50-SL4 METALLURGICAL LITERATURE CLASSIFICATION

L 30271-65 EWT(m)/EPF(c)/EWT(j) Pc-4/Pr-4 RM

ACCESSION NR: AP5008174 S/0286/65/000/005/0069/0070

AUTHORS: Faydel', I. Ya.; Sokolov, [illegible]; Timofeyev, A. V.; Yakobson, B. V.; Ostkachkintsev, A. N.; [illegible]

TITLE: A method for obtaining phenolic aldehyde pressing powders. Class 39, No. 168873

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 5, 1965, 69-70

TOPIC TAGS: phenolic aldehyde, pressing powder, filler, coal, ash

ABSTRACT: This Author Certificate presents a method for obtaining phenolic aldehyde [illegible] coal is used as the filler.

ASSOCIATION: none

SUBMITTED: [illegible]

NR REF SOV: [illegible]

Card 1/1

UST-KACHKINTSEY, B. F.

3

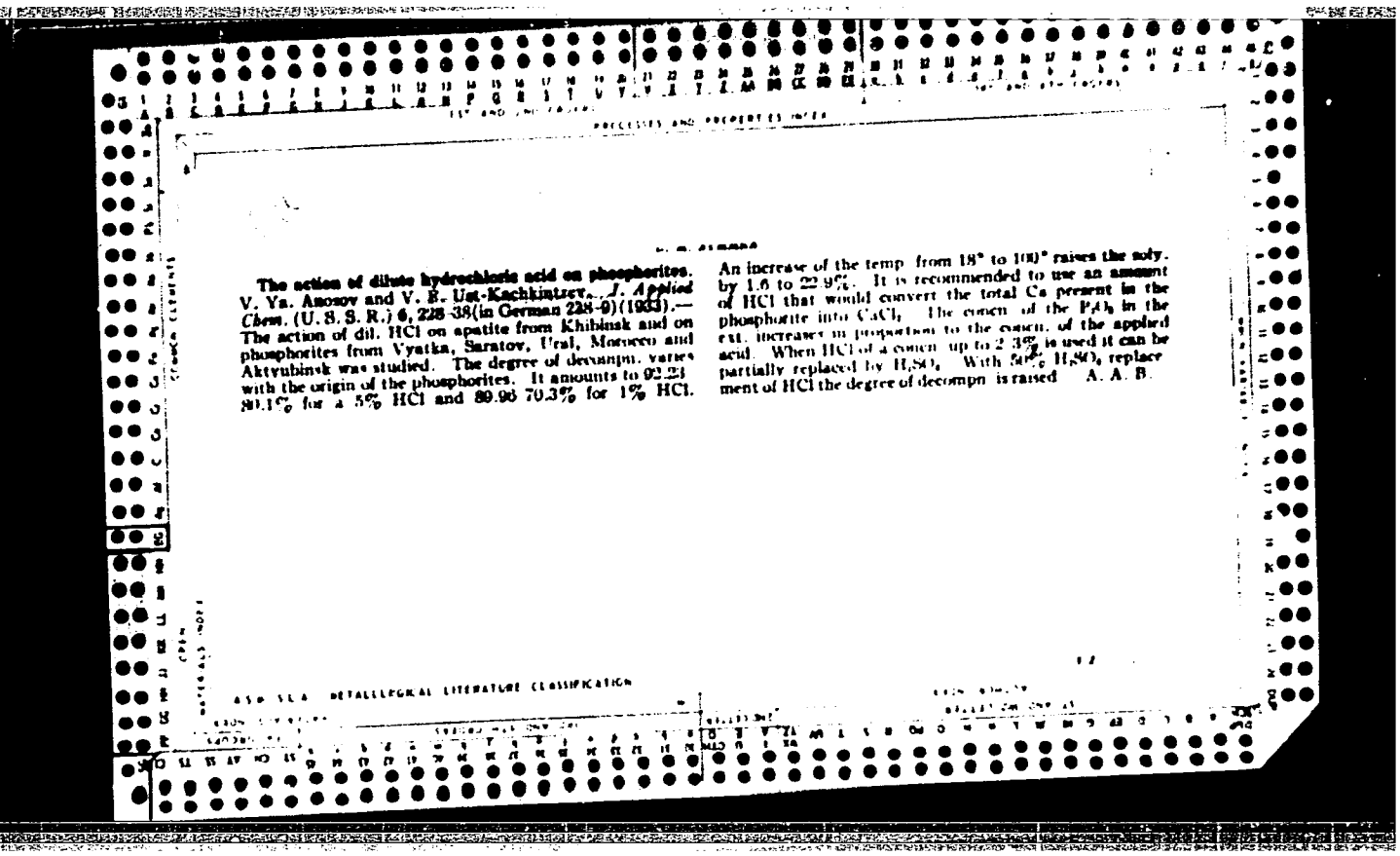
B. T. R.
Vol. 3 No. 4
Apr. 1954
Chemistry-Physical

4671* Coagulation of Colloidal Solutions by Mixtures Containing a Potential Determining Electrolyte. (Russian.)

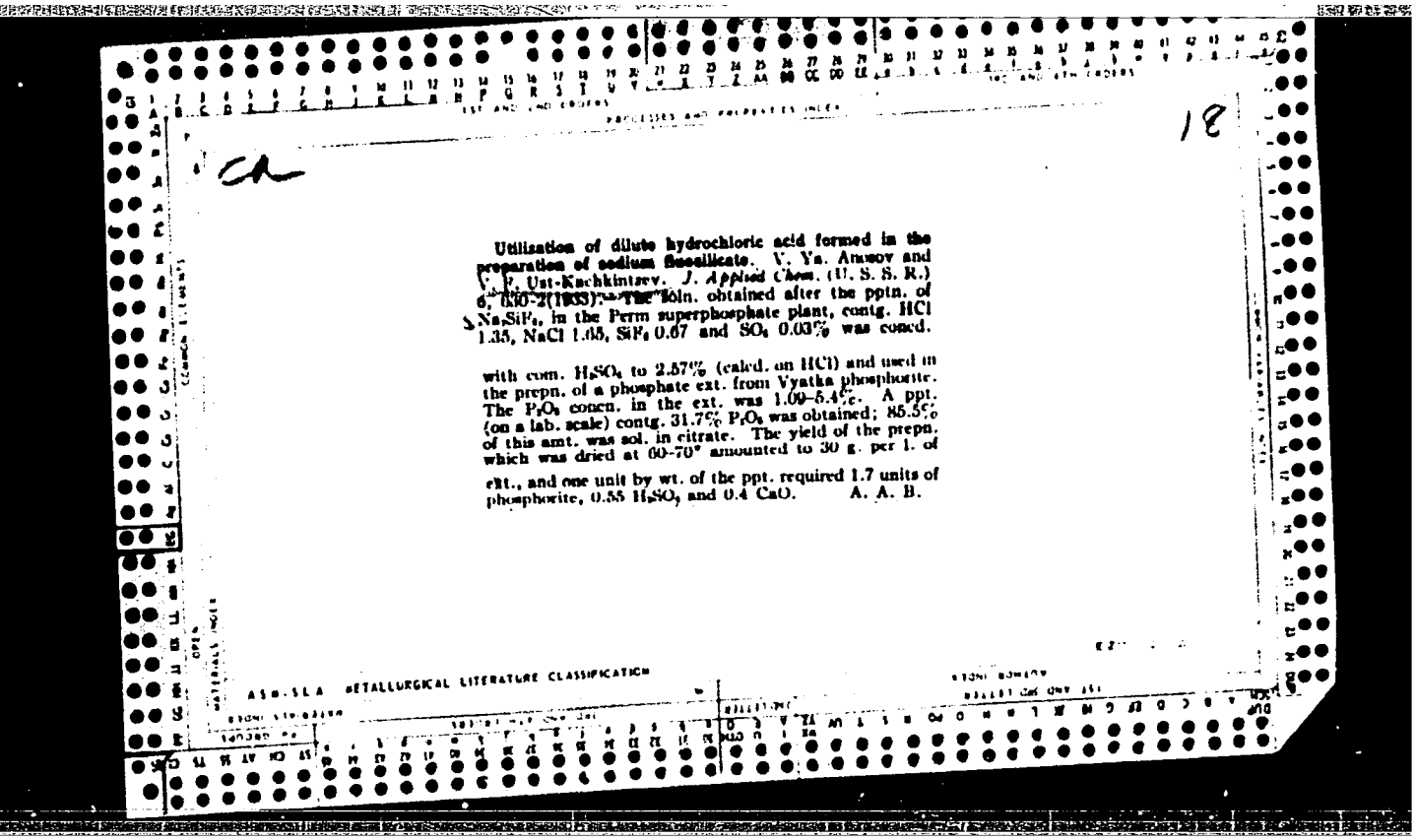
V. F. Ust-Kachkintsev. *Kolloidnyi Zhurnal*, v. 15, no 5, Sept.-Oct. 1953, p. 304-400.

Includes graphs, table. 13 ref.

MF 7-28-54



The action of dilute hydrochloric acid on phosphorites. V. Ya. Anosov and V. E. Ust-Kachkintsev. *J. Applied Chem.* (U. S. S. R.) 6, 228-38(in German 228-9)(1933).—The action of dil. HCl on apatite from Khibinsk and on phosphorites from Vyatka, Saratov, Ural, Moscow and Aktyubinsk was studied. The degree of decompn. varies with the origin of the phosphorites. It amounts to 92.23-80.1% for a 5% HCl and 89.96-70.3% for 1% HCl. An increase of the temp. from 18° to 100° raises the soly. by 1.6 to 22.9%. It is recommended to use an amount of HCl that would convert the total Ca present in the phosphorite into $CaCl_2$. The concn. of the P_2O_5 in the ext. increases in proportion to the concn. of the applied acid. When HCl of a concn. up to 2.3% is used it can be partially replaced by H_2SO_4. With 50% H_2SO_4 replacement of HCl the degree of decompn. is raised. A. A. B.



18

Utilization of dilute hydrochloric acid formed in the preparation of sodium fluosilicate. V. Ya. Anosov and P. Ust-Kachkintsev. *J. Applied Chem. (U. S. S. R.)* 6, 630-2(1933). The soln. obtained after the pptn. of Na_2SiF_6, in the Perm superphosphate plant, contg. HCl 1.35, NaCl 1.65, SiF_4 0.67 and SO_4 0.03% was concd. with conc. H_2SO_4 to 2.57% (calcd. on HCl) and used in the prepn. of a phosphate ext. from Vyatka phosphorite. The P_2O_5 concn. in the ext. was 1.09–5.4%. A ppt. (on a lab. scale) contg. 31.7% P_2O_5 was obtained; 85.5% of this amt. was sol. in citrate. The yield of the prepn. which was dried at 60–70° amounted to 30 g. per l. of filt., and one unit by wt. of the ppt. required 1.7 units of phosphorite, 0.55 H_2SO_4 and 0.4 CaO. A. A. B.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

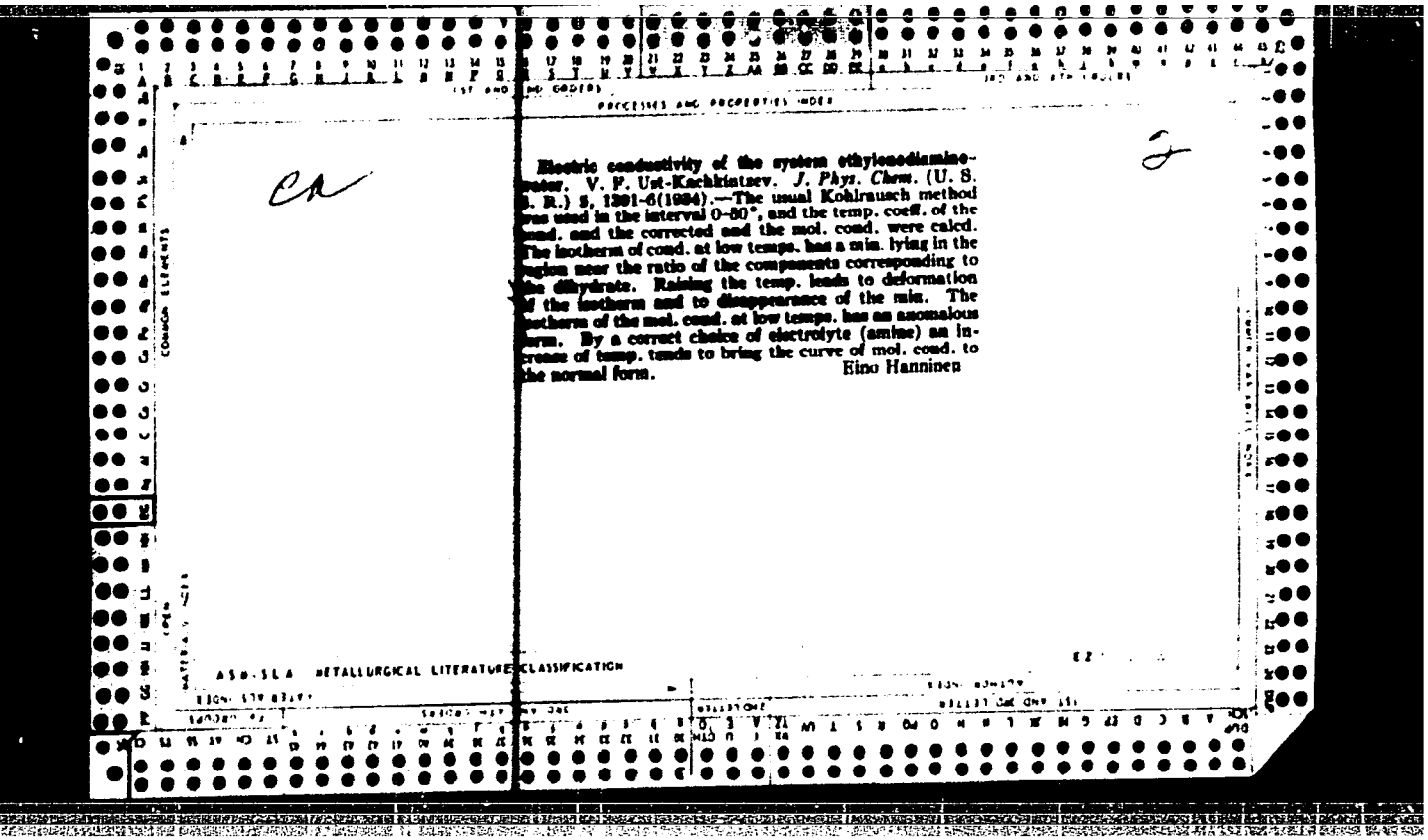
CA

2

PROCESSES AND PROPERTIES INDEX

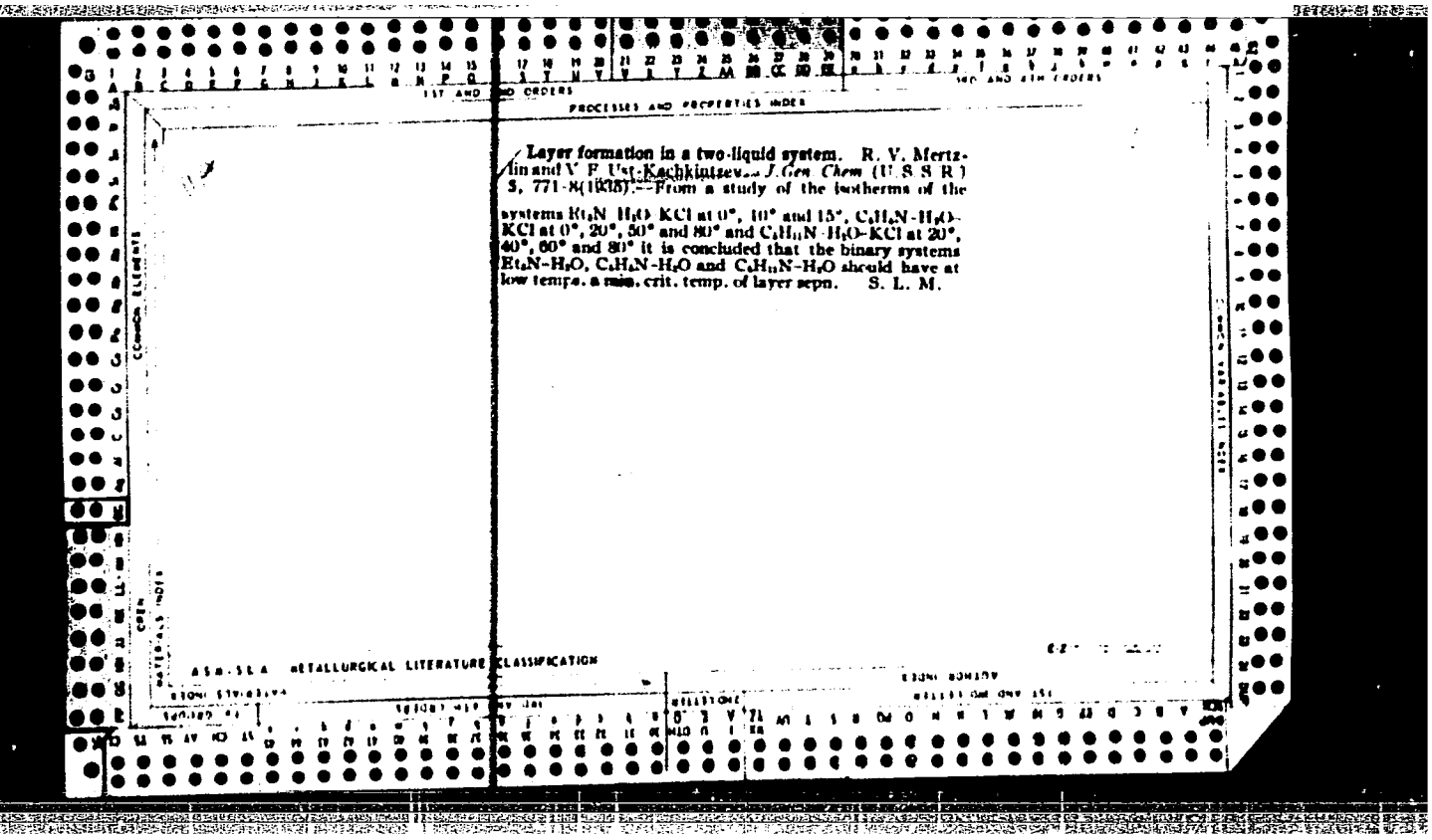
Electric conductivity of the system acetic anhydride–
ater. N. A. Trifonov and V. F. Ust-Kachkintsev. J.
hys. Chem. (U. S. S. R.) 5, 1215-21(1934). Measure-
ents were performed at 0°, 50° and 72.5°. In each case
max. appear at 3.5-4.5 and at 90, and a single min. at
0 moles % of Ac_2O. The temp. coeff. of cond. has one
ax. at 80 moles %. The results indicate the formation of
HOAc in the system. F. H. Rathmann

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



Electric conductivity of the system ethylenediamine-water. V. P. Ust-Kachkintsev. *J. Phys. Chem.* (U. S. S. R.) 8, 1201-6(1936).—The usual Kohlrausch method was used in the interval 0-80°, and the temp. coeff. of the cond. and the corrected and the mol. cond. were calcd. The isotherm of cond. at low temps. has a min. lying in the region near the ratio of the components corresponding to the dihydrate. Raising the temp. leads to deformation of the isotherm and to disappearance of the min. The isotherm of the mol. cond. at low temps. has an anomalous form. By a correct choice of electrolyte (amine) an increase of temp. tends to bring the curve of mol. cond. to the normal form.

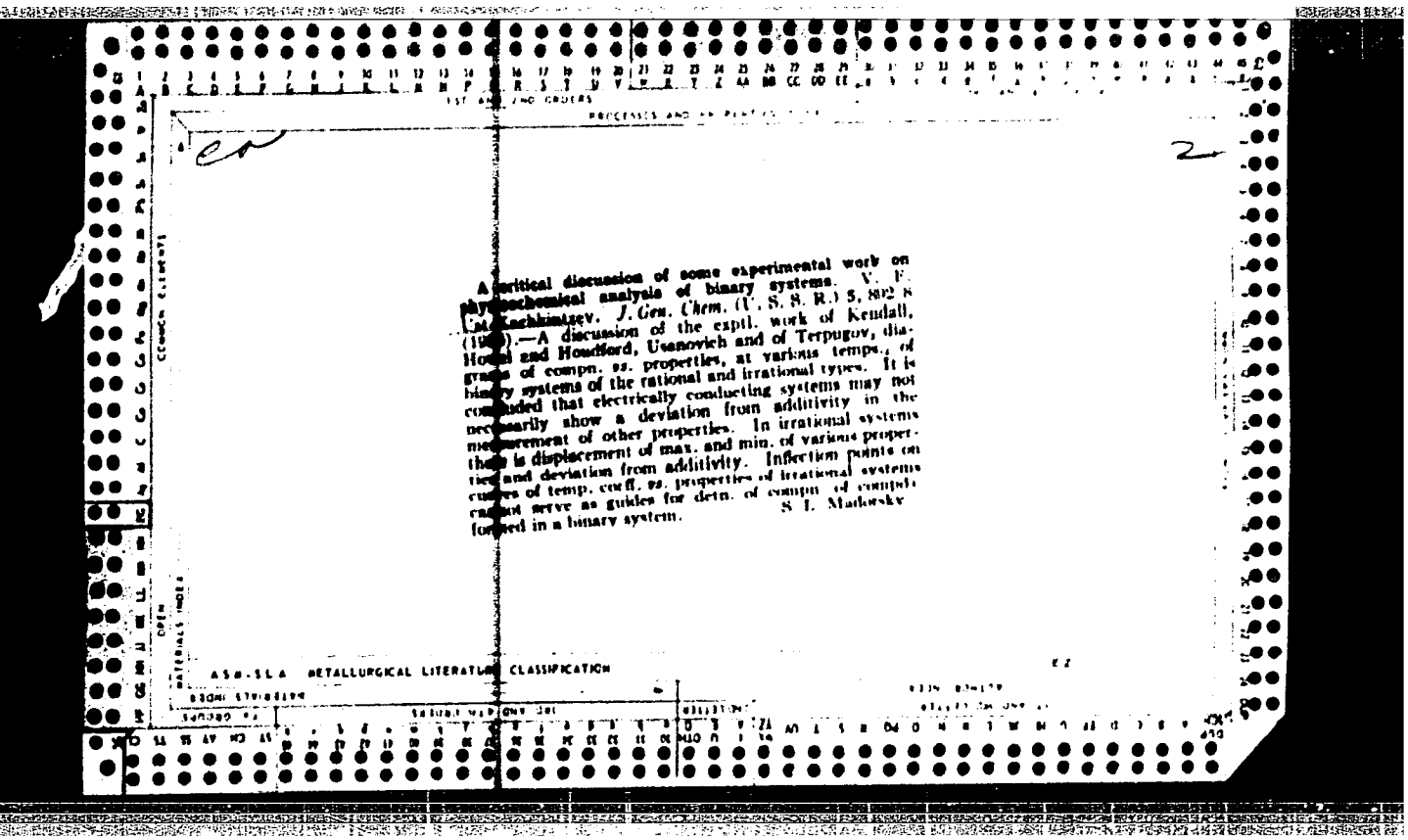
Eino Hanninen



PROCESSES AND PROPERTIES INDEX

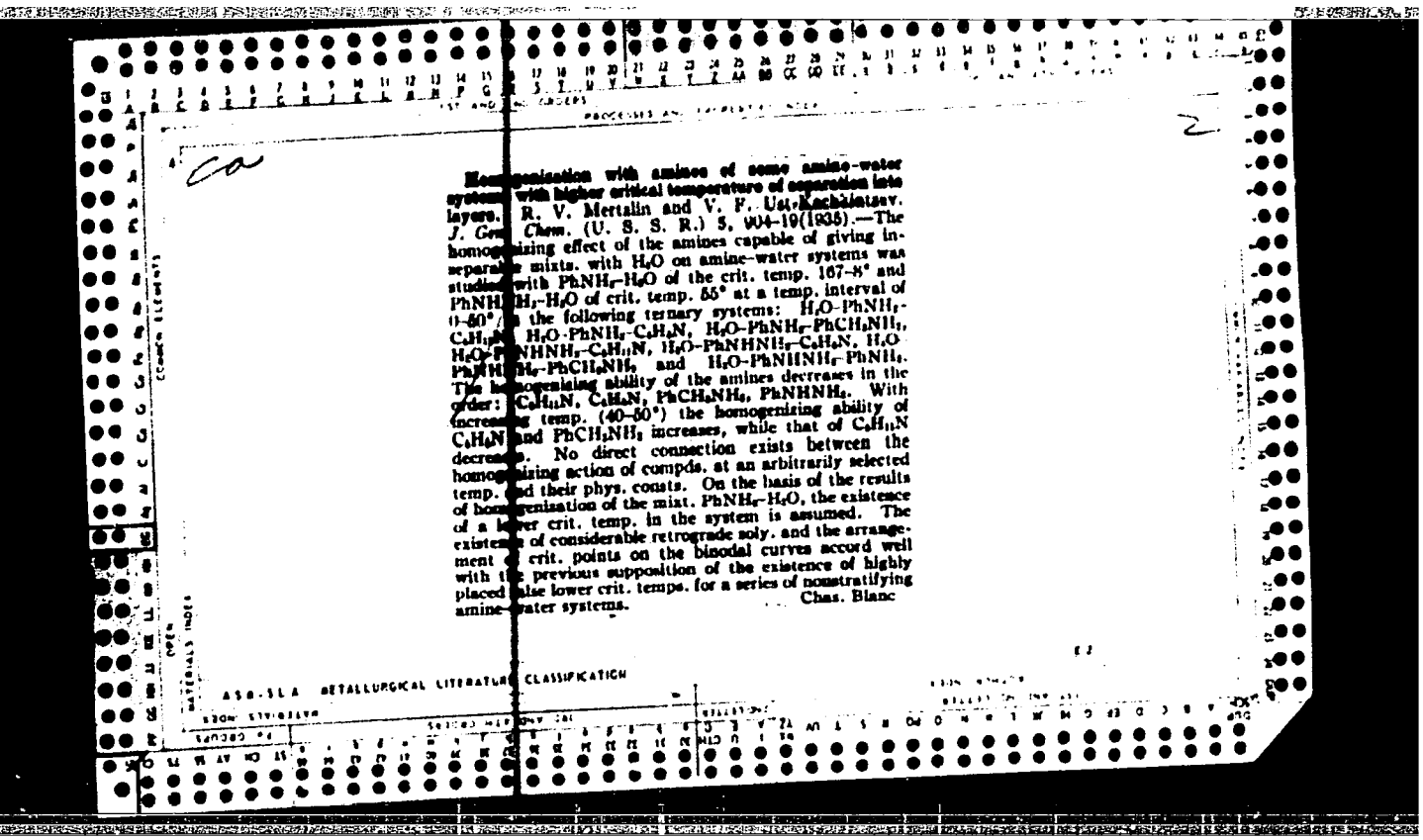
Layer formation in a two-liquid system. R. V. Mertzlin and V. F. Ust-Kachkintsev. *J. Gen. Chem.* (U.S.S.R.) 8, 771-8(1938).—From a study of the isotherms of the systems Et_3N-H_2O-KCl at 0°, 10° and 15°, C_5H_5N-H_2O-KCl at 0°, 20°, 50° and 80° and $C_5H_{11}N$-H_2O-KCl at 20°, 40°, 60° and 80° it is concluded that the binary systems Et_3N-H_2O, C_5H_5N-H_2O and $C_5H_{11}N$-H_2O should have at low temps. a min. crit. temp. of layer sepn. S. L. M.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



A critical discussion of some experimental work on physicochemical analysis of binary systems. V. F. Lachinskiĭ. *J. Gen. Chem.* (U. S. S. R.) 5, 802-8 (1935).—A discussion of the exptl. work of Kendall, Hougen and Houdford, Usanovich and of Terpugov, dia-grams of compn. vs. properties, at various temps., of binary systems of the rational and irrational types. It is concluded that electrically conducting systems may not necessarily show a deviation from additivity in the measurement of other properties. In irrational systems there is displacement of max. and min. of various proper-ties and deviation from additivity. Inflection points on curves of temp. coeff. vs. properties of irrational systems cannot serve as guides for detn. of compn. of compds. formed in a binary system.

S. L. Madorsky



Homogenization with amines of some amine–water systems with higher critical temperature of separation into layers. R. V. Mertalin and V. F. Ust.-Kachkintsev. *J. Gen. Chem.* (U. S. S. R.) 5, 904–19(1935).—The homogenizing effect of the amines capable of giving inseparable mixts. with H_2O on amine–water systems was studied with $PhNH_2$–H_2O of crit. temp. 167–8° and $PhNHNH_2$–H_2O of crit. temp. 55° at a temp. interval of 40–80°, in the following ternary systems: H_2O–$PhNH_2$–$C_5H_{11}N$, H_2O–$PhNH_2$–C_5H_5N, H_2O–$PhNH_2$–$PhCH_2NH_2$, H_2O–$PhNHNH_2$–$C_5H_{11}N$, H_2O–$PhNHNH_2$–C_5H_5N, H_2O–$PhNH_2$–$PhCH_2NH_2$ and H_2O–$PhNHNH_2$–$PhNH_2$. The homogenizing ability of the amines decreases in the order: $C_5H_{11}N$, C_5H_5N, $PhCH_2NH_2$, $PhNHNH_2$. With increasing temp. (40–80°) the homogenizing ability of C_5H_5N and $PhCH_2NH_2$ increases, while that of $C_5H_{11}N$ decreases. No direct connection exists between the homogenizing action of compds. at an arbitrarily selected temp. and their phys. consts. On the basis of the results of homogenization of the mixt. $PhNH_2$–H_2O, the existence of a lower crit. temp. in the system is assumed. The existence of considerable retrograde soly. and the arrangement of crit. points on the binodal curves accord well with the previous supposition of the existence of highly displaced false lower crit. temps. for a series of nonstratifying amine–water systems.

Chas. Blanc

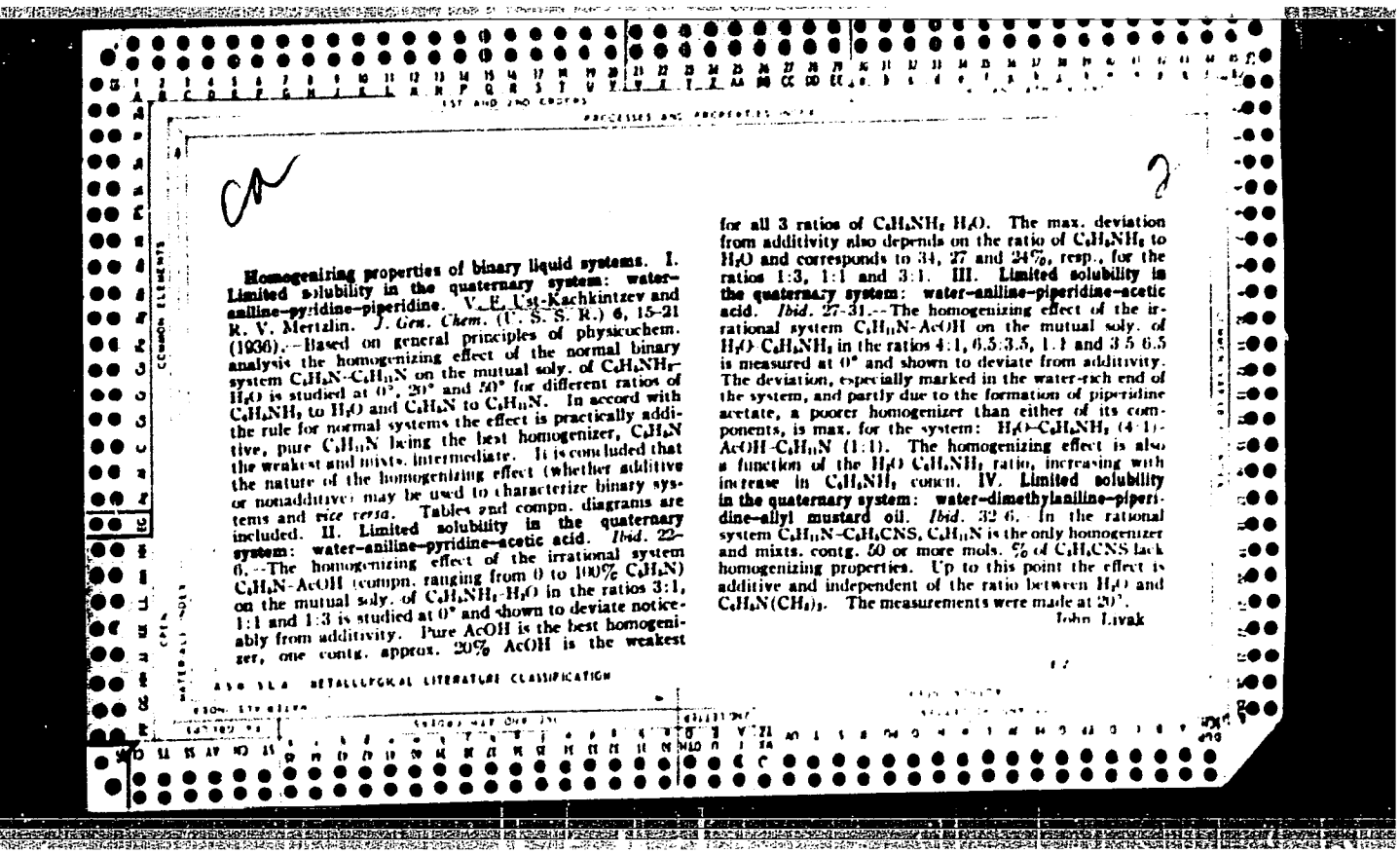
1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

2

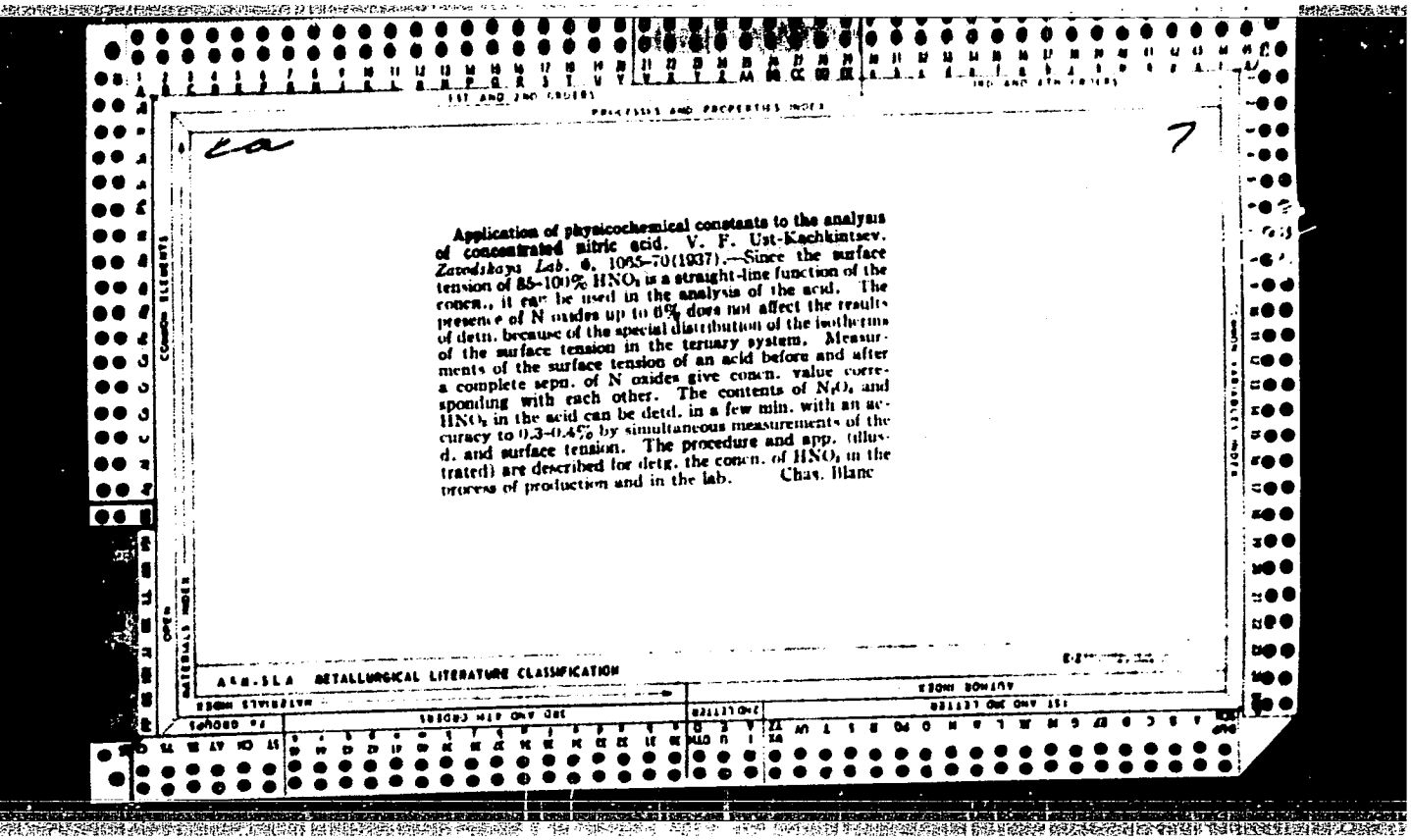
Surface tension and refraction of the system ethylenediamine–water in relation to its other properties. V. F. Ust-Kachkintsev. *J. Phys. Chem.* (U. S. S. R.) 6, 67-72(1935).—The surface tension σ of ethylenediamine from 0° to 80° is given by the equation $\sigma = 44.8 - 0.138t$. For solns. of $C_2H_8N_2$ in H_2O the function $\gamma = d\sigma/dt$ shows a max. at 75% H_2O and a min. at 25% H_2O. The max. at 26 mole. % amine is taken to indicate the dihydrate. The n, as a function of the concn., also indicates only a dihydrate. Conclusion: The existence of a monohydrate of ethylenediamine can be shown only by thermal analysis and by viscosity, as a study of other properties indicates only the dihydrate. F. H. Rathman

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

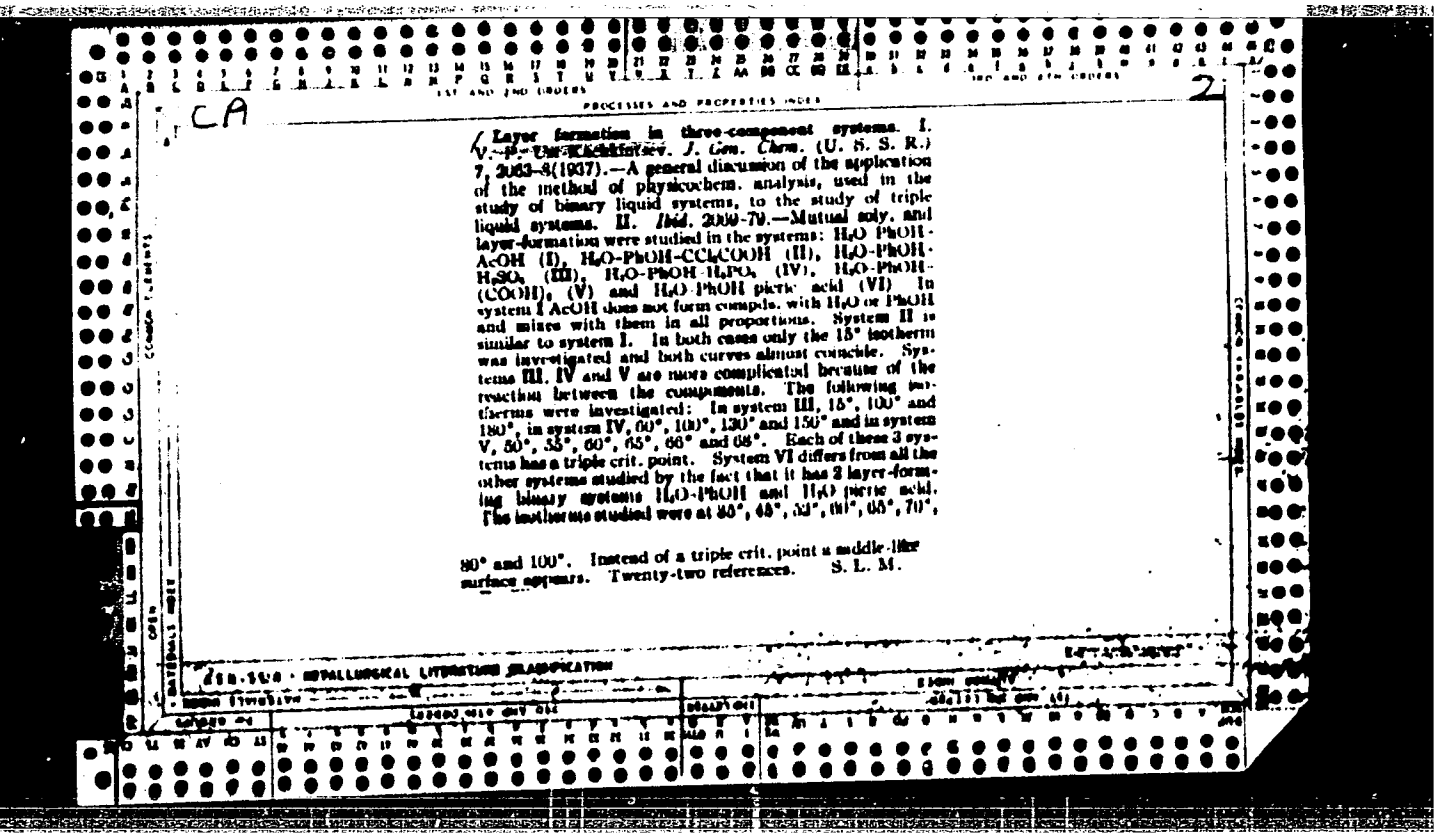


Homogenizing properties of binary liquid systems. I. Limited solubility in the quaternary system: water–aniline–pyridine–piperidine. V. E. Ust-Kachkintzev and R. V. Mertzlin. *J. Gen. Chem.* (U. S. S. R.) 6, 15–21 (1936).—Based on general principles of physicochem. analysis the homogenizing effect of the normal binary system C_5H_5N–$C_5H_{11}N$ on the mutual soly. of $C_6H_5NH_2$–H_2O is studied at 0°, 20° and 50° for different ratios of $C_6H_5NH_2$ to H_2O and C_5H_5N to $C_5H_{11}N$. In accord with the rule for normal systems the effect is practically additive, pure $C_5H_{11}N$ being the best homogenizer, C_5H_5N the weakest and mixts. intermediate. It is concluded that the nature of the homogenizing effect (whether additive or nonadditive) may be used to characterize binary systems and *vice versa*. Tables and compn. diagrams are included. **II. Limited solubility in the quaternary system: water–aniline–pyridine–acetic acid.** *Ibid.* 22–6.—The homogenizing effect of the irrational system C_5H_5N–AcOH (compn. ranging from 0 to 100% C_5H_5N) on the mutual soly. of $C_6H_5NH_2$–H_2O in the ratios 3:1, 1:1 and 1:3 is studied at 0° and shown to deviate noticeably from additivity. Pure AcOH is the best homogenizer, one contg. approx. 20% AcOH is the weakest for all 3 ratios of $C_6H_5NH_2$–H_2O. The max. deviation from additivity also depends on the ratio of $C_6H_5NH_2$ to H_2O and corresponds to 34, 27 and 24%, resp., for the ratios 1:3, 1:1 and 3:1. **III. Limited solubility in the quaternary system: water–aniline–piperidine–acetic acid.** *Ibid.* 27–31.—The homogenizing effect of the irrational system $C_5H_{11}N$–AcOH on the mutual soly. of H_2O–$C_6H_5NH_2$ in the ratios 4:1, 6.5:3.5, 1:1 and 3.5:6.5 is measured at 0° and shown to deviate from additivity. The deviation, especially marked in the water-rich end of the system, and partly due to the formation of piperidine acetate, a poorer homogenizer than either of its components, is max. for the system: H_2O–$C_6H_5NH_2$ (4:1)–AcOH–$C_5H_{11}N$ (1:1). The homogenizing effect is also a function of the H_2O–$C_6H_5NH_2$ ratio, increasing with increase in $C_6H_5NH_2$ concn. **IV. Limited solubility in the quaternary system: water–dimethylaniline–piperidine–allyl mustard oil.** *Ibid.* 32–6.—In the rational system $C_5H_{11}N$–C_3H_5CNS, $C_5H_{11}N$ is the only homogenizer and mixts. contg. 50 or more mols. % of C_3H_5CNS lack homogenizing properties. Up to this point the effect is additive and independent of the ratio between H_2O and $C_6H_5N(CH_3)_2$. The measurements were made at 20°.

John Livak



Application of physicochemical constants to the analysis of concentrated nitric acid. V. F. Ust-Kachkintsev. *Zavodskaya Lab.* 6, 1065–70(1937).—Since the surface tension of 85–101% HNO_3 is a straight-line function of the concn., it can be used in the analysis of the acid. The presence of N oxides up to 0% does not affect the results of detn. because of the special distribution of the isotherms of the surface tension in the ternary system. Measurements of the surface tension of an acid before and after a complete sepn. of N oxides give concn. value corresponding with each other. The contents of N_2O_4 and HNO_3 in the acid can be detd. in a few min. with an accuracy to 0.3–0.4% by simultaneous measurements of the d. and surface tension. The procedure and app. (illustrated) are described for detg. the concn. of HNO_3 in the process of production and in the lab. Chas. Blanc

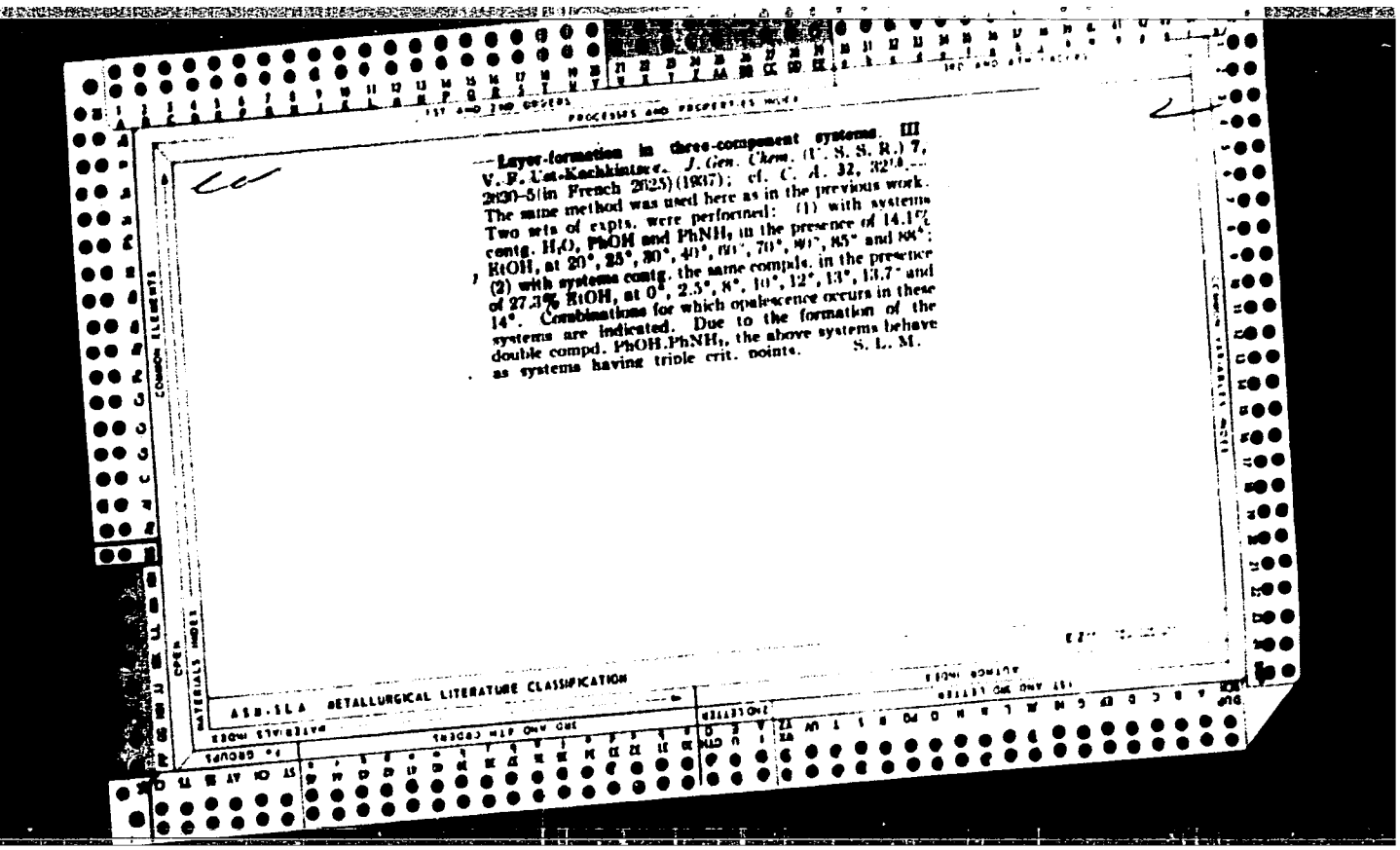


CA

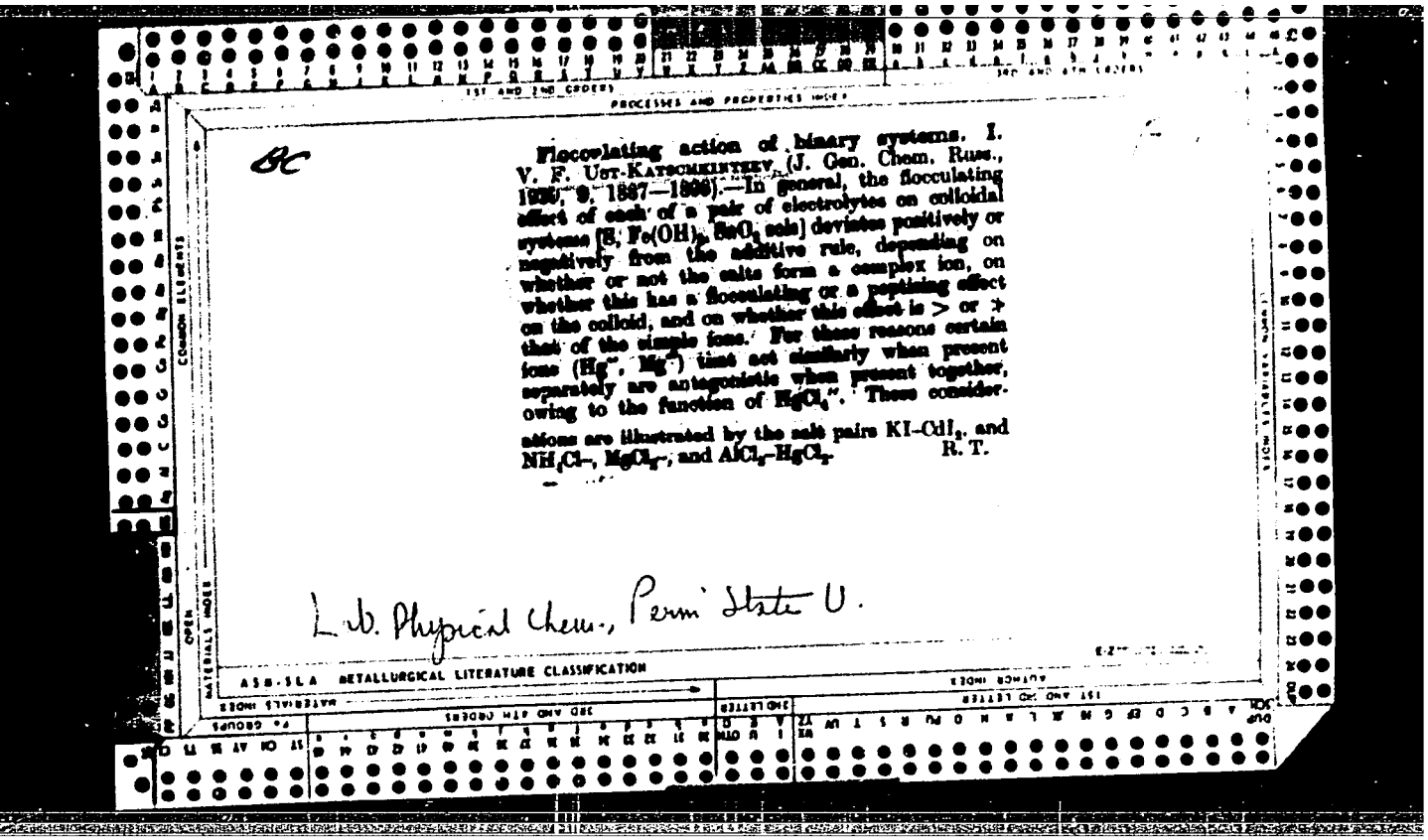
2

PROCESSES AND PROPERTIES INDEX

Layer formation in three-component systems. I. V. P. Vasilkiftsev. *J. Gen. Chem.* (U. S. S. R.) 7, 2063–8(1937).—A general discussion of the application of the method of physicochem. analysis, used in the study of binary liquid systems, to the study of triple liquid systems. II. *Ibid.* 2069-79.—Mutual soly. and layer-formation were studied in the systems: H_2O PhOH-AcOH (I), H_2O-PhOH-CCl_3COOH (II), H_2O-PhOH-H_2SO_4 (III), H_2O-PhOH-H_3PO_4 (IV), H_2O-PhOH-(COOH)$_2$ (V) and H_2O-PhOH picric acid (VI). In system I AcOH does not form compds. with H_2O or PhOH and mixes with them in all proportions. System II is similar to system I. In both cases only the 15° isotherm was investigated and both curves almost coincide. Systems III, IV and V are more complicated because of the reaction between the components. The following isotherms were investigated: In system III, 15°, 100° and 180°, in system IV, 60°, 100°, 130° and 150° and in system V, 50°, 55°, 60°, 65°, 66° and 68°. Each of these 3 systems has a triple crit. point. System VI differs from all the other systems studied by the fact that it has 2 layer-forming binary systems H_2O-PhOH and H_2O picric acid. The isotherms studied were at 35°, 45°, 55°, 60°, 65°, 70°, 80° and 100°. Instead of a triple crit. point a saddle-like surface appears. Twenty-two references. S. L. M.



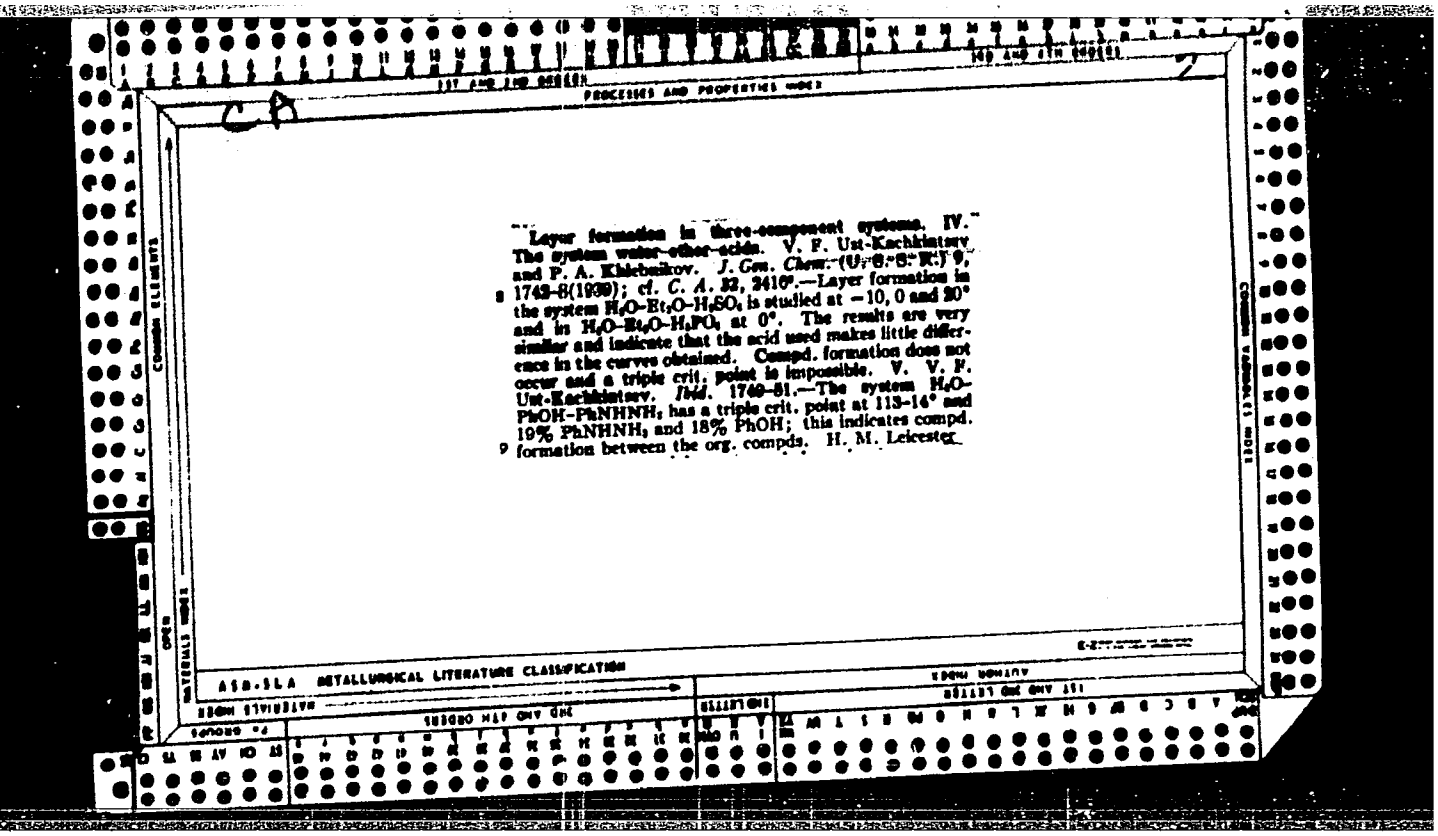
—Layer-formation in three-component systems. III V. F. Ust.-Kachkinstsev. *J. Gen. Chem.* (U. S. S. R.) 7, 2030–5(in French 2025)(1937); cf. C. A. 32, 3210.— The same method was used here as in the previous work. Two sets of expts. were performed: (1) with systems contg. H_2O, PhOH and $PhNH_2$ in the presence of 14.1% EtOH, at 20°, 25°, 30°, 40°, 60°, 70°, 80°, 85° and 90°; (2) with systems contg. the same compds. in the presence of 27.3% EtOH, at 0°, 2.5°, 8°, 10°, 12°, 13°, 13.7° and 14°. Combinations for which opalescence occurs in these systems are indicated. Due to the formation of the double compd. $PhOH.PhNH_2$, the above systems behave as systems having triple crit. points. S. L. M.



8C

Flocculating action of binary systems. I. V. F. Ust-Katschkintsev. (J. Gen. Chem. Russ., 1939, 9, 1887—1898).—In general, the flocculating effect of each of a pair of electrolytes on colloidal systems [S, $Fe(OH)_3$, SnO_2 sols] deviates positively or negatively from the additive rule, depending on whether or not the salts form a complex ion, on whether this has a flocculating or a peptising effect on the colloid, and on whether this effect is > or < that of the simple ions. For these reasons certain ions ($Hg^{"}$, $Mg^{"}$) that act similarly when present separately are antagonistic when present together, owing to the function of $HgCl_4^{"}$. These considerations are illustrated by the salt pairs KI–CdI_2, and NH_4Cl–$MgCl_2$, and $AlCl_3$–$HgCl_2$. R. T.

L. b. Physical Chem., Penn State U.



"Layer formation in three-component systems. IV." The system water–ether–acids. V. F. Ust-Kachkintsev and P. A. Khlebnikov. *J. Gen. Chem.* (U.S.S.R.) 9, 1749–8(1939); *cf. C. A.* 32, 2410⁹.—Layer formation in the system H_2O–Et_2O–H_2SO_4 is studied at −10, 0 and 20° and in H_2O–Et_2O–H_3PO_4 at 0°. The results are very similar and indicate that the acid used makes little difference in the curves obtained. Compd. formation does not occur and a triple crit. point is impossible. V. V. F. Ust-Kachkintsev. *Ibid.* 1749–81.—The system H_2O–PhOH–$PhNHNH_2$ has a triple crit. point at 113–14° and 19% $PhNHNH_2$ and 18% PhOH; this indicates compd. formation between the org. compds. H. M. Leicester

UST3KACHKINTSEV4V8F8

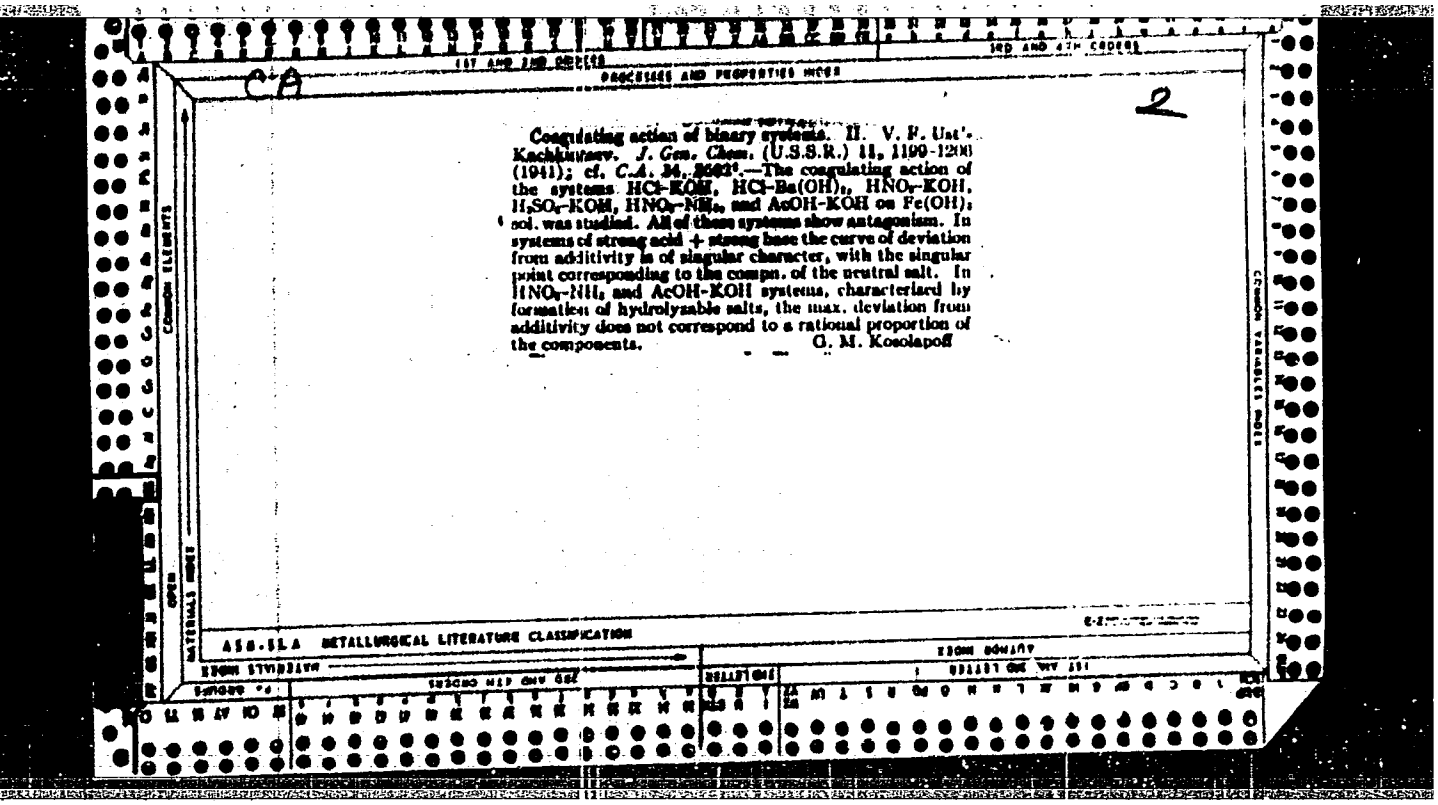
600

1. UST'-KACHKINSTEV, V. F.

2. USSR (600)

"Stratification in Ternary Systems --- V.", Zhur. Obshch. Khim., 9, No. 19, 1939. Laboratory of Physical Chemistry. Perm' State University. Received 14 April 1939.

9. [redacted] Report U-1626, 11 Jan 1952.

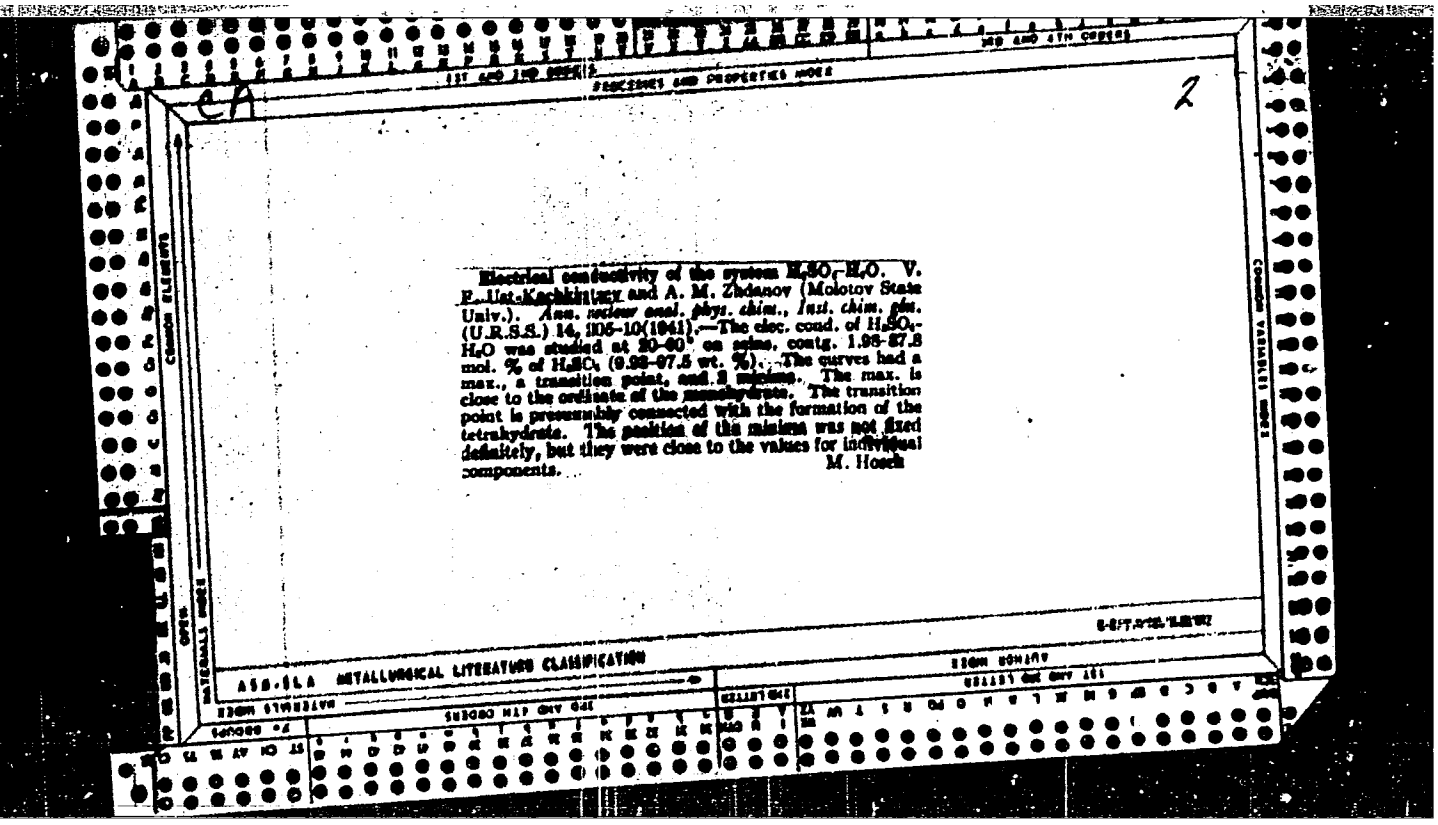


CA

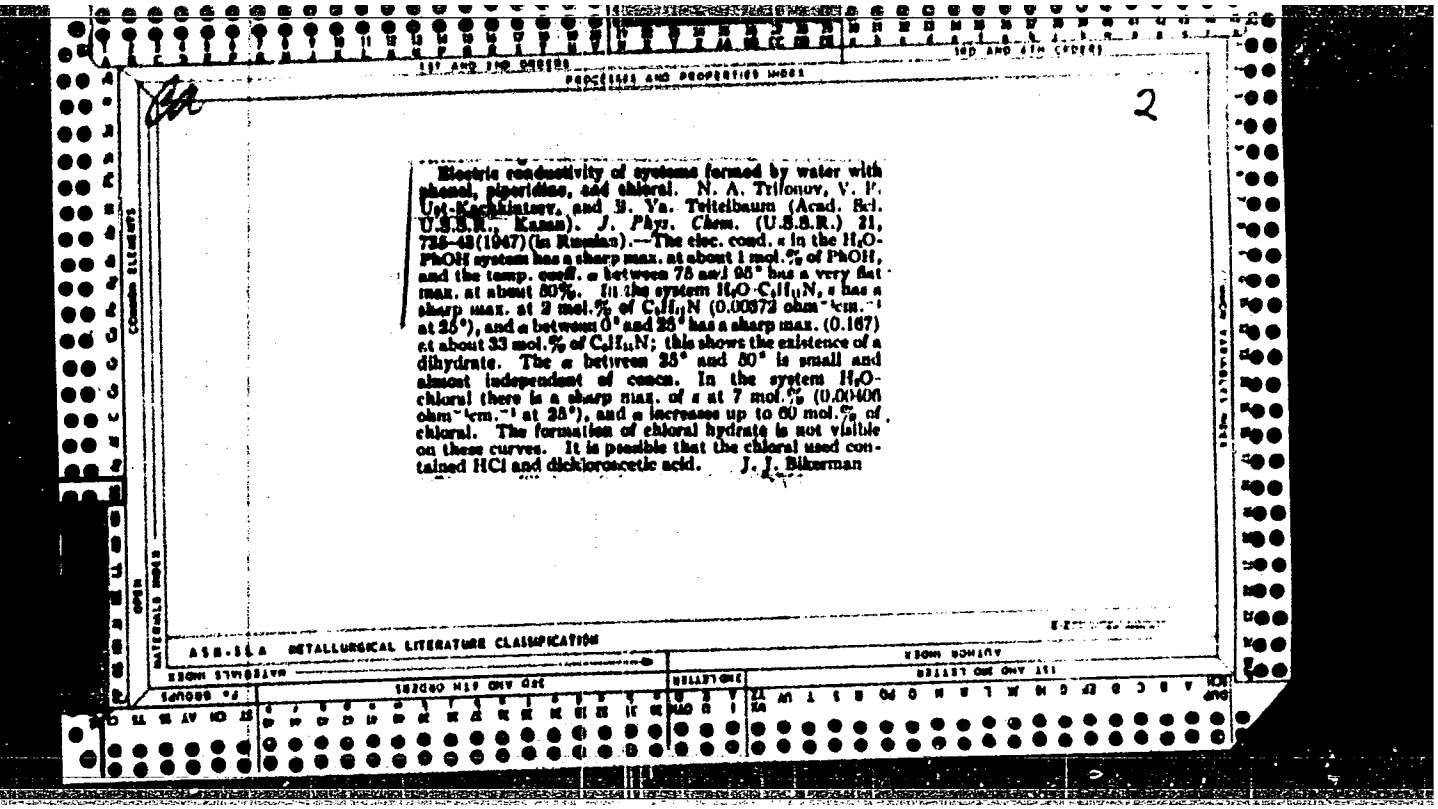
2

Coagulating action of binary systems. II. V. P. Ust'-Kachkintsev. *J. Gen. Chem.* (U.S.S.R.) 11, 1199-1200 (1941); cf. *C.A.* 34, 2621⁹.—The coagulating action of the systems HCl-KOH, HCl-Ba(OH)$_2$, HNO_3-KOH, H_2SO_4-KOH, HNO_3-NH_4, and AcOH-KOH on Fe(OH)$_3$ sol. was studied. All of these systems show antagonism. In systems of strong acid + strong base the curve of deviation from additivity is of singular character, with the singular point corresponding to the compn. of the neutral salt. In HNO_3-NH_4 and AcOH-KOH systems, characterized by formation of hydrolysable salts, the max. deviation from additivity does not correspond to a rational proportion of the components.

G. M. Kosolapoff

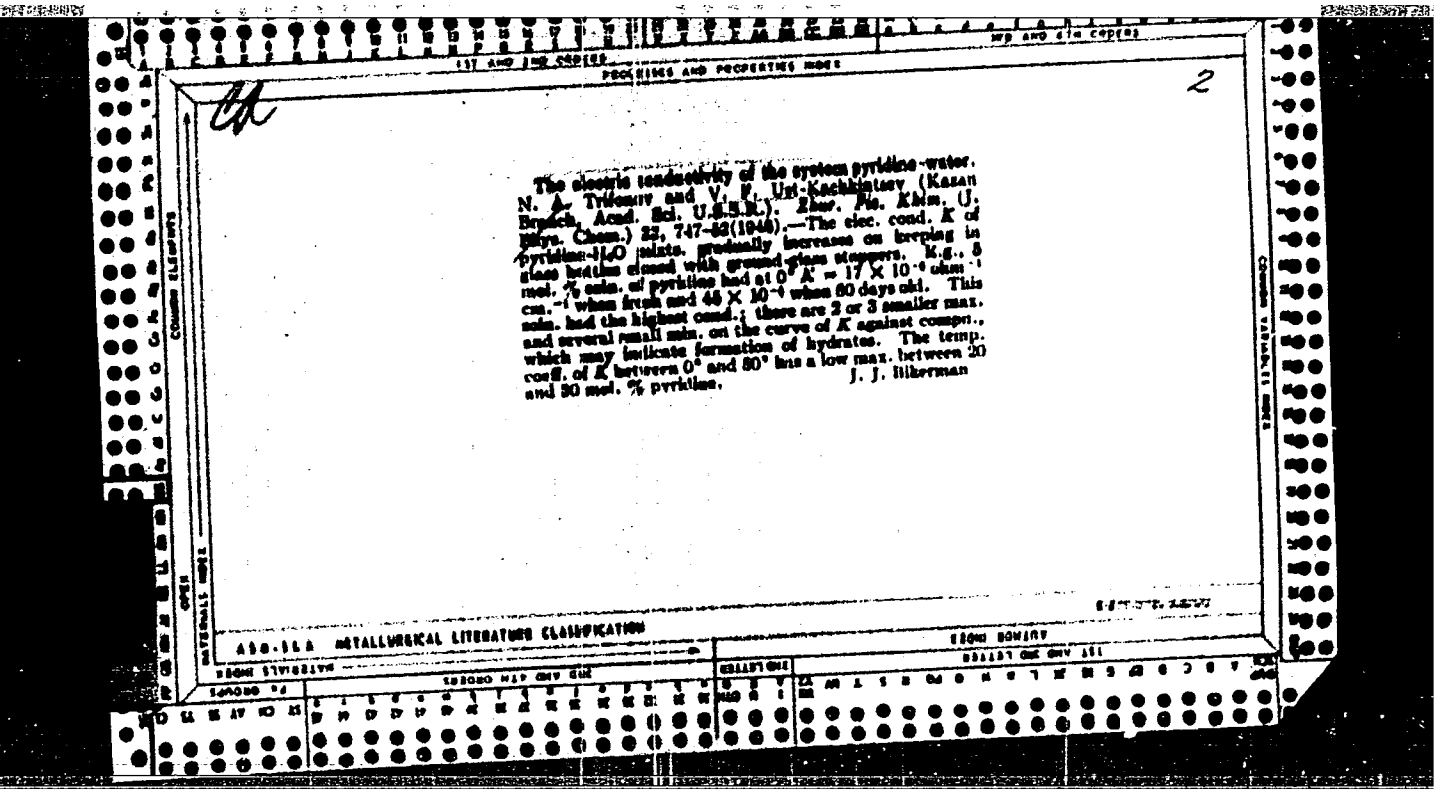


Electrical conductivity of the system H_2SO_4–H_2O. V. P. Ust-Kachkintsev and A. M. Zhdanov (Molotov State Univ.). *Ann. secteur anal. phys. chim., Inst. chim. gén.* (U.R.S.S.) 14, 105–10(1941).—The elec. cond. of H_2SO_4–H_2O was studied at 20–60° on solns. contg. 1.98–87.8 mol. % of H_2SO_4 (9.98–97.5 wt. %). The curves had a max., a transition point, and 2 minima. The max. is close to the ordinate of the monohydrate. The transition point is presumably connected with the formation of the tetrahydrate. The position of the minima was not fixed definitely, but they were close to the values for individual components. M. Hosch



2

Electric conductivity of systems formed by water with phenol, piperidine, and chloral. N. A. Trifonov, V. P. Ust-Kachkintsev, and B. Ya. Teitelbaum (Acad. Sci. U.S.S.R., Kazan). *J. Phys. Chem.* (U.S.S.R.) 21, 735–48 (1947) (in Russian).—The elec. cond. κ in the H_2O-PhOH system has a sharp max. at about 1 mol.% of PhOH, and the temp. coeff. α between 75 and 95° has a very flat max. at about 80%. In the system H_2O-$C_5H_{11}N$, κ has a sharp max. at 2 mol.% of $C_5H_{11}N$ (0.00372 ohm^{-1}cm.$^{-1}$ at 25°), and α between 0° and 25° has a sharp max. (0.167) at about 33 mol.% of $C_5H_{11}N$; this shows the existence of a dihydrate. The α between 25° and 50° is small and almost independent of concn. In the system H_2O-chloral there is a sharp max. of κ at 7 mol.% (0.00400 ohm^{-1}cm.$^{-1}$ at 25°), and α increases up to 60 mol.% of chloral. The formation of chloral hydrate is not visible on these curves. It is possible that the chloral used contained HCl and dichloroacetic acid. J. J. Bikerman



The electric conductivity of the system pyridine-water. N. A. Tvidnov and V. F. Ust-Kachkintsev (Kazan Branch, Acad. Sci. U.S.S.R.). Zhur. Fiz. Khim. U. Physs. Chem.) 22, 747-52(1948).—The elec. cond. K of pyridine-H2O mixts. gradually increases on keeping in glass bottles closed with ground-glass stoppers. E.g., 5 mol. % satn. of pyridine had at 0° K = 17 × 10⁻⁶ ohm⁻¹ cm.⁻¹ when fresh and 45 × 10⁻⁶ when 80 days old. This satn. had the highest cond.; there are 2 or 3 smaller max. and several small min. on the curve of K against compn., which may indicate formation of hydrates. The temp. coeff. of K between 0° and 80° has a low max. between 20 and 30 mol. % pyridine.

J. J. Bikerman

UST-KACHKINTSEV, V.F.

USSR.

Coagulation of colloidal solutions with mixtures of electrolytes of various ions. II. V. F. Ust-Kachkintsev. *Uchenye Zapiski Mololov. Univ.* No. 1, 135-9(1953); *Referat. Zhur., Khim.* 1954, No. 39338; cf. *C.A.* 48, 12519c.—The study concerned coagulation of SnO_2 sol by mixts. of KCl-NaCl, KCl-NaOH, KCl-KOH, NaCl-NaOH, NaOH-KOH, and NaCl-KCl, the components of these mixts. reacting metathetically. The sol was prepd. by hydrolysis of $SnCl_4$ and peptized with NH_3. The concn. of SnO_2 in the sol was 0.6 g./l. The coagulating mixt. KCl-NaCl acted additively, i.e., there was a linear relation between the coagulation no. (*loc. cit.*) and the molar ratio KCl:NaCl. In the system NaCl-NaOH the OH^- ions had a strong stabilizing effect on SnO_2. At a molar concn. ratio NaCl:NaOH = 99:1 the coagulation no. rose 15 times as compared to a NaCl soln. Further increase in NaOH had a less significant effect and above 2% NaOH the coagulation no. remained const. The relation was expressed by a curve resembling the adsorption curve. In the KOH-KCl mixt., the stabilizing effect of KOH was appreciably higher than that of NaOH. At a KCl:KOH ratio of 95:5, the coagulation threshold was diffuse, and further increase in the KOH content did not cause coagulation. This is explained by the interaction of KOH and SnO_2 to form stannate. In the system NaOH-KOH, the coagulation no. increased with the KOH content. The effect of OH^- ions in the systems Na hydroxide-KOH and KCl-NaOH was analogous but the coagulation curves were different. M. Hosek

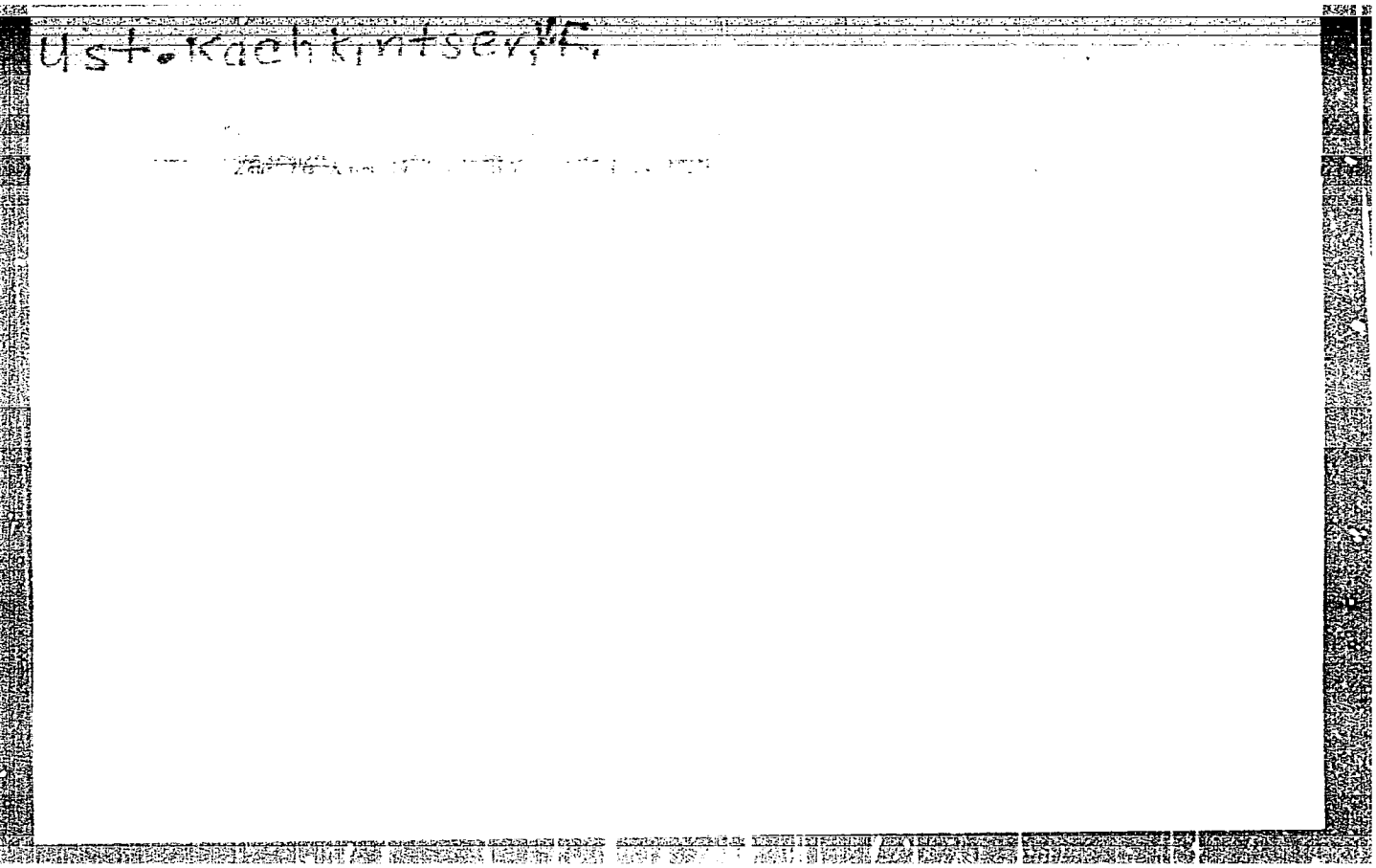
UST'-KACHKINTSEV, V.F.

Coagulation of colloidal solutions by mixtures, containing a potential-determining electrolyte. Koll.zhur. 15 no.5:394-400 '53. (MLRA 6:9)

1. Molotovskiy universitet, Kafedra fizicheskoy i kolloidnoy khimii.
(Colloids) (Electrolytes)

Ust-Rachkintsev, V. F.

Coagulation of colloidal solutions by mixtures containing potential determining electrolyte



5.3610

77394
SOV/79-30-1-55/78

AUTHORS: Konovalova, L. L. Ust'-Kachkintsev, V. F.

TITLE: Concerning the Reaction Between Thiocyanate Esters and Amines

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 1, pp 246-250 (USSR)

ABSTRACT: Reaction between ethyl thiocyanate and aniline, piperidine, and dimethylaniline was studied by measuring the densities, viscosities, and electrical conductivities of the mixtures of ethyl thiocyanate with amines. The results of the measurements are given in Figs. 1, 2, 3, 4, 5, and 6.

Card 1/5

Concerning the Reaction Between Thiocyanate Esters and Amines

77394
SOV/79-30-1-55/78

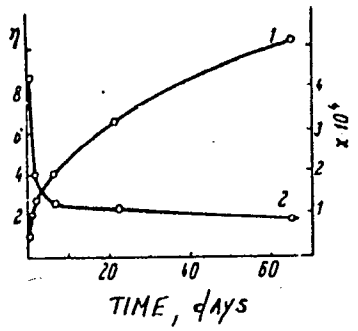


Fig. 1. Change in viscosity (1) and electrical conductivity (2) of a 50% mixture of ethyl thiocyanate with piperidine with time, at 25°.

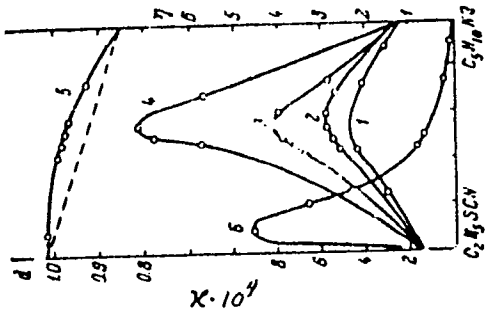


Fig. 2. System ethyl thiocyanate--piperidine, at 25°. (1-4) Viscosity after 1, 2, 7, 20 days; (5) density after 1 day; (6) electrical conductivity after 1 day.

Card 2/5

Concerning the Reaction Between Thiocyanate Esters and Amines

77394
SOV/79-30-1-55/78

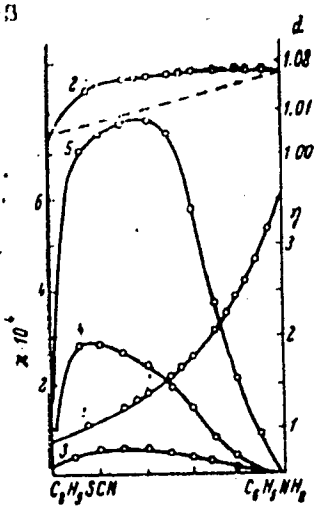


Fig. 3. System ethyl thiocyanate--aniline, at 25°. (1) Viscosity after 1 day; (2) density after 1 day; (3-5) electrical conductivity after 1, 15, 140 days.

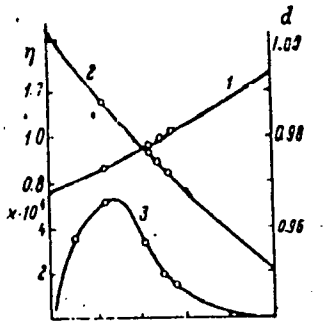


Fig. 4. System ethyl thiocyanate--dimethylaniline, at 25°. (1) Viscosity; (2) density; (3) electrical conductivity after 8 months.

Card 3/5

Concerning the Reaction Between Thiocyanate Esters and Amines

77394
SOV/79-30-1-55/78

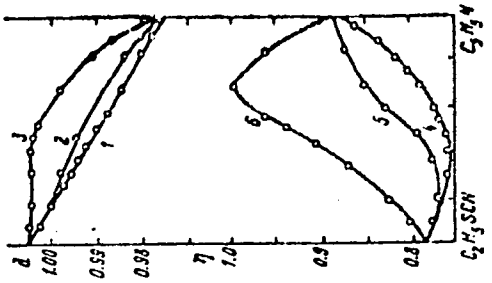


Fig. 5. System ethyl thiocyanate--pyridine, at 25°. (1-3) Densities after 1 day, 2 months, 1.5 years; (4-6) viscosity after 1 day, 2 months, 1.5 years.

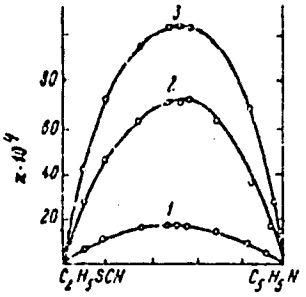


Fig. 6. Electrical conductivity of the mixture: ethyl thiocyanate--pyridine. (1,2) After 2 months and 1.5 years, at 25°; after 1.5 years at 50°.

Card 4/5

Concerning the Reaction Between Thiocyanate Esters and Amines

77394
SOV/79-30-1-55/78

Changes of the properties of the above mixtures indicate that chemical reactions between the components of the mixtures take place. There are 6 figures; and 6 references, 1 German, 5 Soviet.

ASSOCIATION: Perm' State University (Permskiy gosudarstvennyy universitet)

SUBMITTED: August 23, 1958

Card 5/5

УСТ-КАЧКИНЦЕВ, В.Ф.

USSR/Physical Chemistry, Thermodynamics, Thermochemistry, Equilibriums, Phys-Chem. Anal. Phase-Transitions. B-8

Abs Jour : Ref Zhur - Khimiya, No 7, 1957, 22342.

Author : V. F. Ust-Kachkintsev, A. V. Lyubimova.
Inst : Not given
Title : Binary systems light-absorption.

Orig Pub : Uch zap Molotovsk, un-ta. 1955, 9, No 4, 101-112.

Abstract : A dependence of optical density on concentration is established and basic types of light absorption diagrams for a normal binary system were developed. Obtained deductions were confirmed experimentally in nitrobenzene (I) - cymene, I - xylene, I - benzene systems. Basic rules in general aspect which must distinguish light absorption diagrams of binary systems with a chemical interaction are studied. Experimental results of the light-absorption study in o-nitrophenol-piperidine (II) and m-nitrophenol -- II systems are given.

Card 1/1 -113-

44858

S/081/62/000/024/013/073
B117/B186

AUTHORS: Verzhbitskiy, F. R., Ust'-Kachkintsev, V. F.

TITLE: Use of high-frequency methods in physicochemical analysis

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 24, 1962, 91, abstract 24B640 (Uch. zap. Permsk. un-t, v. 19, no. 1, 1961, 55-58)

TEXT: The high-frequency conductivity was measured in the solid-state systems $AgNO_3$ - $NaNO_3$, $AgNO_3$ - NH_4NO_3 and $NaNO_3$ - KNO_3 at 20°C. The transition from one phase into another as demonstrated in the high-frequency conductivity diagrams of the systems studied is accompanied by a discontinuity. The increase in conductivity in the region of eutectic compositions is attributed to the structure of the alloy and its degree of dispersion. [Abstracter's note: Complete translation.]

Card 1/1

L 28002-66

ACC NR: AR6011869 SOURCE CODE: UR/0081/65/000/016/B073/B073

AUTHOR: Verzhbitskiy, F. R.; Ust'-Kachkintsev, V. F.

41
B

TITLE: Investigation of polymorphism by the high-frequency method

SOURCE: Ref. zh. Khimiya, Abs. 16B505
REF SOURCE: Uch. zap. Permsk. un-t, no. 111, 1964, 24-28
TOPIC TAGS: electric conductance, polymorphism, HF, electric capacitance, temperature measurement
ABSTRACT: The possibility has been investigated of using of the high-frequency method for recording of polymorphic transformations using a device, which permits automatic recording of four curves, namely temperatures, temperature differences, electric conductance, and electric capacitance. It was shown on NH_4NO_3 and KNO_3 samples that polymorphic transformation clearly reveal themselves on the conductance and capacitance curves. The capacitance and conductance of the KNO_3-$K_2Cr_2O_7$ system in the solid state at various temperatures were measured. The capacitance and conductance isotherms were found to have extreme points, the position of which corresponds to the composition of a eutectic mixture. [Author's summary.] [NT]

SUB CODE: 07/ SUBM DATE: none/

Card 1/1

5.3300

77852
SOV/79-30-2-3/7[illegible]

AUTHORS: Levina, R. Ya., Kostin, V. N., [illegible], T. K.

TITLE: Reaction of Cyclopropanes With Mercuric Salts. XI. Cleavage of the Three-Membered Ring in (0, 1, N)-Bicycloalkanes (N = 2,3, and 4)

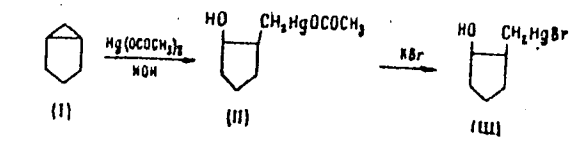
PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 2, pp 359-363 (USSR)

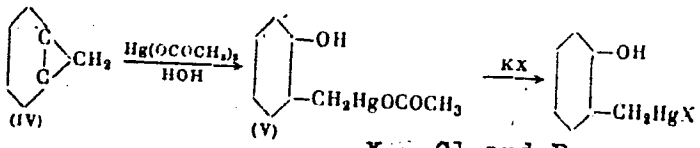
ABSTRACT: The action of mercuric acetate on (0,1,3)-bicyclohexane (I, northujane), (0,1,4)-bicycloheptane (IV, norcarane), and (0,1,2)-bicyclopentane (VI), as well as other (0,1,N)-bicycloalkanes, can be used to identify these substances by the final reaction products--mercurated alcohols and their derivatives. The reactions for compounds I, IV, and VI are represented below:

Card 1/5

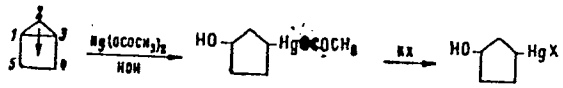
Reaction of Cyclopropanes With Mercuric Salts. XI

77852
SOV/79-30-2-3/78





X = Cl and Br



Card 2/5

Reaction of Cyclopropanes With Mercuric Salts. XI

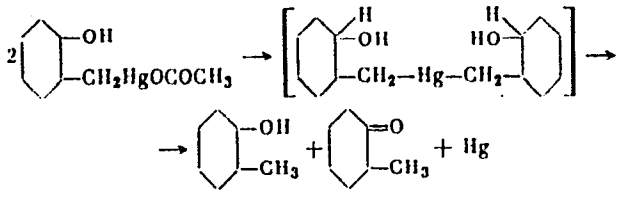
77852
SOV/79-30-2-3/78

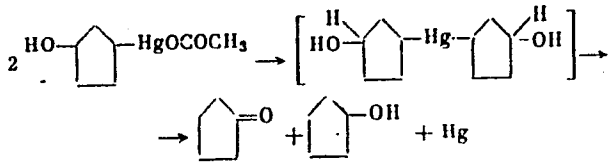
The reactions were performed by mixing the respective hydrocarbon with mercuric acetate (at room temperature for compounds I and IV and at 0° for VI) and by subsequent addition of potassium bromide to the product (the mercurated alcohols II, V, and VII) to obtain the halomercuri-derivatives. The cleavage of the three-membered ring in (0,1,2)-bicyclopentane takes place at the carbon-carbon "bridge" bond, while in the case of (0,1,3)-bicyclohexane and (0,1,4)-bicyclo-heptane the bond between the least and the most substituted carbon atoms is broken, leading to the formation of mercurated alcohols of the cycloheptane and cyclohexane series, respectively. The site of the ring cleavage was determined by results of thermal decomposition of mercurated alcohols. The reactions and final products for the pyrolysis of V and VII are shown below:

Card 3/5

Reaction of Cyclopropanes With Mercuric Salts. XI

77852
SOV/79-30-2-3/78





Card 4/5

The following derivatives of the mercurated alcohols were isolated and analyzed: 2-hydroxy-1-bromo-

mercurimethylcyclopentane (III), 151-152°; 2-hydroxy-1-acetoxymercurimethylcyclohexane (V), mp 129-130°; 3-hydroxy-1-chloromercuricyclopentane, mp 97-98°; 3-hydroxy-1-bromomercuricyclopentane, mp 129-130°; 3-hydroxy-1-thiocyanomercuricyclopentane, mp 110-111°; 2-hydroxy-1-chloromercurimethylcyclohexane; mp 122-123°; 2-hydroxy-1-bromomercurimethylcyclohexane, mp 114-115°. There are 13 references, 4 Soviet, 5 German, 1 Belgian, 1 Swiss, 2 U.S. The U.S. references are: W. E. Doering, A. K. Hoffman, J. Am. Chem. Soc., 76, 6162 (1954); C. R. Noller, R. Adams, J. Am. Chem. Soc., 48, 1084 (1926).

ASSOCIATION: Moscow State University (Moskovskiy gosudarstvennyy universitet)

SUBMITTED: March 2, 1959

L 00311-66 EWT(m)/EWP(w)/EPF(c)/T/EWP(t)/EWP(b) BW/JD/DJ/GS

ACCESSION NR: AT5020431 UR/0000/65/000/000/0005/0007

AUTHORS: Akhmatov, A. S.; Ustok, Kh. Z.

TITLE: Pressure dependence of surface friction forces

SOURCE: AN SSSR. Nauchnyy sovet po treniyu i smazkam. Teoriya smazochnogo deystviya i novyye materialy (Theory of lubricating action and new materials). Moscow, Izd-vo Nauka, 1965, 5-7

TOPIC TAGS: lubricant, lubricant property, surface friction / GOST 982 53 transformer oil, MZP 6 watch oil

ABSTRACT: To determine the accuracy of the Amont-Kulon surface friction law (W. B. Hardy. Collected Scientific Papers. Cambridge, 1936, p. 609) over a wide range of pressures, the friction forces of steel, Cr, Al, Cu, and Ni couples lubricated by pure stearic acid and technical oils (vaseline oil, transformer oil GOST 982-53, and watch oil MZP-6) were investigated as a function of contact pressure. Three specimens were lubricated as per A. S. Akhmatov (Molekulyarnaya fizika granichnogo treniya. M., Fizmatgiz, 1963), loaded by a hydraulic press, and the center specimen was then pushed by a screw jack, recording the force required to initiate motion. Only the data for steel on steel are presented (see

Card 1/4

L 00311-66

ACCESSION NR: AT5020431 2

Figs. 1 and 2 on the Enclosure). As can be seen, the results were not linear, indicating that the Amont-Kulon law is a linear approximation which can be used only over a limited contact pressure range. A short discussion of the friction phenomenon concludes that the exponential nature of the curve is determined by the fundamental relation of atomic interaction forces on atomic spacing. Orig. art. has: 4 figures.

ASSOCIATION: Nauchnyy sovet po treniyu i smazkam, AN SSSR (Scientific Committee on Friction and Lubrication, AN SSSR) 44

SUBMITTED: 22May65 ENCL: 02 SUB CODE: FP

NO REF SOV: 003 OTHER: 004

Card 2/4

L 00311-66

ACCESSION NR: AT5020431

ENCLOSURE: 01

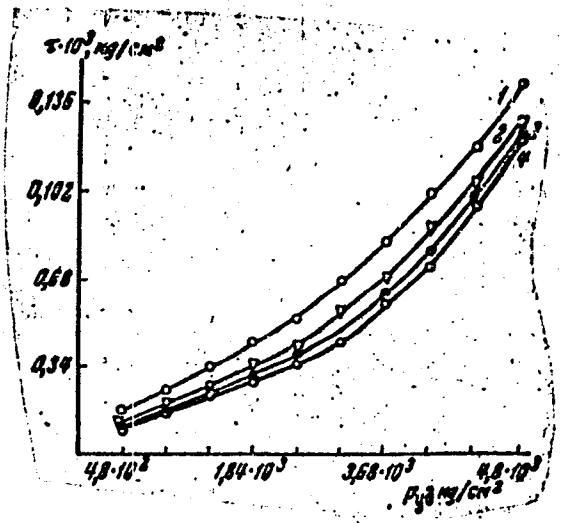


Fig. 1. Static friction vs contact pressure for various thickness of stearic acid: 1- 0.01, 2- 0.02, 3- 0.03, 4- 0.04 micron

Card 3/4

L 00311-66

ACCESSION NR: AT5020431

ENCLOSURE: 02

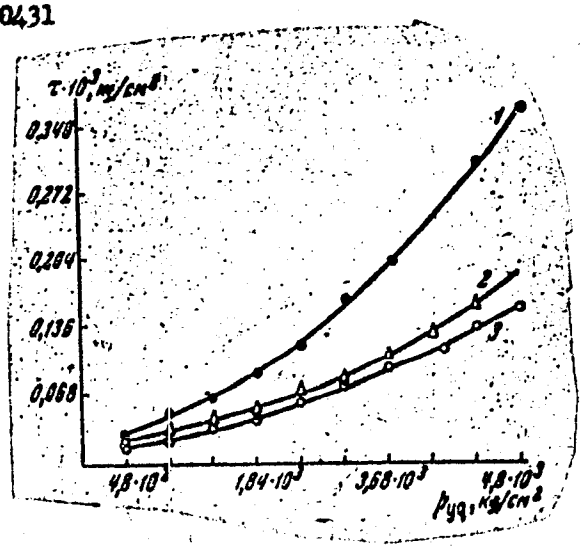


Fig. 2.
1- vaseline oil; 2- transformer oil; 3- watch oil

Card 4/4

USTRASHKIN, P. Ye.

FD-830

USSR/Chemistry - Soda industry effluents

Card 1/1 Pub.50 - 13/24

Author : Trebukov, P. D., Ustrashkin, P. Ye.

Title : The utilization of effluents of soda plants

Periodical : Khim. prom., No 6, 369 (49), Sep 1954

Abstract : Describes the use of soda industry effluents (consisting mainly of calcium carbonate, calcium hydroxide, and calcium chloride) as an effective additive to Portland cement and other building materials.

Institution : Central Scientific Research Laboratory of Building Materials ("Tsnil-khimstroy") and Main Administration of Chemical Industry Construction ("Glavkhimpromstroy").

Submitted :

FD-1563

USSR/Chemistry - Construction USTRASHKIN, P Ye

Card 1/1 : Pub. 50-20/25

Author : Ustrashkin, P. Ye.

Title : Twentieth anniversary of the 6th Installation Trust, Main Administration of Chemical Industry Construction [News Section].

Periodical : Khim. prom., No 8, p 500 (52), Dec 1954

Abstract : Reviews briefly the activities of 6th Installation Trust (originally the Organic Chemistry Installation Trust) during the 20 years of its existence. Says that it has developed methods for the welding of various grades of steel (including two-ply steel) used in the construction of chemical equipment and also for the welding by heat of pipelines and equipment made of viniplast. Describes the equipment used by the trust in installing chemical equipment and says that it uses X-ray and gamma-ray equipment in testing.

Institution : Main Administration of Chemical Industry Construction, Ministry of Chemical Industry USSR

Submitted :

USTRASHKIN, P.Ye., red.; TREPENENKOV, R.I., kand. tekhn. nauk, nauchn. red.

[Design and planning of the shops of chemical plants] Proektirovanie tsekhov khimicheskikh zavodov. Moskva, Stroiizdat, 1964. 97 p. (MIRA 18:2)

BROUNSHTEYN, B.I.; BYKOVA, L.G.; POKORSKIY, V.N.; USTRAYKH, M.A.; YABLOCHKINA, M.N.

Experimental check of the method of calculating the height of countercurrent packed and plate columns in processes involving the solution of a one-component disperse phase (the system toluene - diethylene glycol). Zhur.prikl.khim. 34 no.3:548-557 Mr '61. (MIRA 14:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut neftekhimicheskikh protsessov.

(Plate towers) (Packed towers)

SILINA, N.P.; POKORSKIY, V.N.; SHIRYAYEVA, Ye.I.; USTRAYKH, M.A.

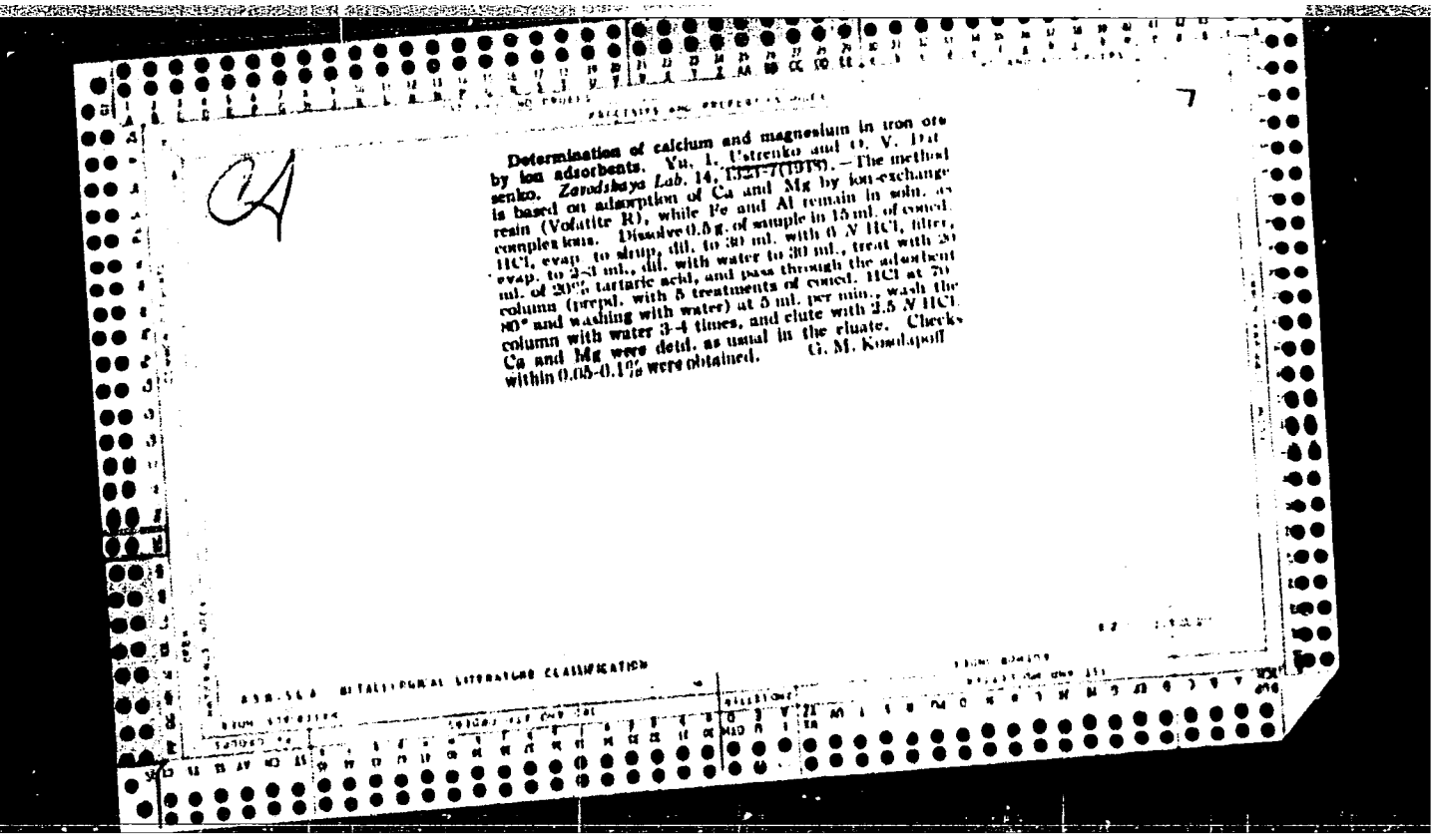
Vapor - liquid equilibrium in the systems toluene - diethylene glycol and o-xylene - diethylene glycol. Trudy VNIIneftekhim no.5:124-132 '62. (MIRA 15:7)

(Toluene) (Xylene)
(Diethylene glycol)

USTRAYKH, M.A.; BROUNSHTEYN, B.I.; PCKORSKIY, V.N.

Selective solution by diethylene glycol of toulene-n.heptane in countercurrent packed columns. Zhur.prikl.khim. 35 no.11:2454-2460 N '62. (MIRA 15:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut neftekhimicheskikh protesessov. (Toulene) (Heptane) (Extraction (Chemistry))



Determination of calcium and magnesium in iron ore by ion adsorbents. Yu. I. Ustrenko and O. V. Dal'senko. *Zavodskaya Lab.* 14, 1321-7(1948). — The method is based on adsorption of Ca and Mg by ion-exchange resin (Volatite R), while Fe and Al remain in soln. as complex ions. Dissolve 0.5 g. of sample in 15 ml. of concd. HCl, evap. to dryness, dil. to 30 ml. with 0.5 *N* HCl, filter, evap. to 2-3 ml., dil. with water to 30 ml., treat with 20 ml. of 20% tartaric acid, and pass through the adsorbent column (prepd. with 5 treatments of concd. HCl at 70-80° and washing with water) at 5 ml. per min., wash the column with water 3-4 times, and elute with 2.5 *N* HCl. Ca and Mg were detd. as usual in the eluate. Checks within 0.05-0.1% were obtained. G. M. Kondrat'eff

USTRITSKIY, V.I.

Brachiopod finds from Permian deposits in eastern Taimyr. Dokl. AN SSSR 105 no.4:805-807 D '55. (MLRA 9:3)

1. Nauchno-issledovatel'skiy institut geologii Arktiki, Leningrad. Predstavleno akademikom D.V. Nalivkinym.
(Taimyr National Area--Brachiopoda, Fossil)

USTRITSKIY, V.I.

On the northward extension of the Urals. Dokl. AN SSSR 110 no.3:437-439 S '56. (MLRA 9:12)

1. Institut geologii Arktiki, Leningrad. Predstavleno akademikom D.V. Nalivkinym.
(Ural Mountains--Geology)
(Arctic regions--Geology)

USTRITSKIY, V.I.

ATLASOV, I.P.; DEMOKIDOV, K.K.; DIBNER, V.D.; EGIAZAROV, B.Kh.; IVANOVA, A.M.; LOBANOV, M.F.; MARKOV, F.G.; RABKIN, M.I.; RAVICH, M.G.; SAKS, V.N.; SOKOLOV, V.N.; TKACHENKO, B.V.; USTRITSKIY, V.I.; NALIVKIN, D.V., nauchnyy red.; VASIL'YEV, R.P., red.; SOLOV'YEV, L.D., red.; NEKHOROSHEV, A.P., red.; DOLGONOS, L.G., tekhn. red.

[Geological map of the Soviet Arctic] Geologicheskaia karta Sovetskoi Arktiki. Sost. I.P.Atlasov [i dr.] Glav. red. F.G. Markov. ....Nauchn. red. D.V. Nalivkin. [Moskva] 1957. ..Col. map 89 x 131 cm. no. 4 sheets 51 x 72 cm. .. Scale 1:2,500,000. ..Inset: [Geological map of Wrangel Island] Geologicheskaia karta Ostrova Vrangelia, 1:1,500,000. (MIRA 11:8)
(Arctic regions--Geology--Maps)
(Wrangel Island--Geology--Maps)

IVANOV, A.M.; USTRITSKIY, V.I.; MOLDAVANTSEV, Yu.Ye.

Geology of the Arctic Urals and of the Pay-Khoy Range. Trudy Nauch.-issl. geol. Arkt. 81:58-96 '57. (MIRA 11:5)
(Ural Mountain region--Geology)

USTRITSKIY, V.I.

New data on the stratigraphy of the upper Paleozoic in the central sector of the Soviet Arctic. Trudy NIIGA 92:20-35 '58. (MIRA 13:4)

(Russia, Northern--Geology, Stratigraphic)

USTRITSKIY, V.I.

Contact of the Permian and Carboniferous in the Pay-Khoy.
Trudy NIIGA 80:3-14 '58. (MIRA 14:11)
(Pay-Khoy Range--Geology, Stratigraphic)

USTRITSKIY, V.I.

Stratigraphy of Permian deposits on the northwestern slope of the Pay-Khoy Range (in the region west of the Kara Bay). Sbor.st.po paleont.i biostrat. no.16:44-61 '59. (MIRA 13:3)
(Pay-Khoy Range--Geology, Stratigraphic)

USTRITSKIY, V.I.

Basic results of specific field work in the central and eastern Taymyr Peninsula. Inform. biul. HIIGA no.17: 42-45 '59. (MIRA 13:11)

(Taymyr Peninsula--Prospecting)

USTRITSKIY, V.I.

Comparative characteristics of Carboniferous and Permian brachiopods of China and the U.S.S.R. Paleont.zhur. no.3: 15-20 '60. (MIRA 13:10)

1. Nauchno-issledovatel'skiy institut geologii Arktiki.
(China--Brachiopods, Fossil)

USTRITSKIY, V.I.

Permain brochiopods of the Pay-Khoy (Inarticulata Strophomenidae, and Chonetidae). Trudy NIIGA 111:93-130 '60. (MIRA 14:7)
(Pay-Khoy Range—Brachiopoda, Fossil)

USTRITSKIY, V.I.

Lower and upper Permian border line in the Pechora Basin and Arctic. Trudy NIIGA 114:39-49 '60. (MIRA 13:11)
(Pechora Basin--Paleontology) (Arctic Regions--Paleontology)

USTRITSKIY, V.I.

Distribution of brachiopods in the Upper Paleozoic of the Arctic zoogeographical area. Paleont.zhur. no.3:3-13 '61. (MIRA 15:2)

1. Nauchno-issledovatel'skiy institut geologii Arktiki.
(Arctic regions—Brachiopoda, Fossil)

USTRITSKIY, V.I.

Basic stages in the development of ocean basins and brachiopods during the Permian in Asia. Sov. geol. 4 no.1:49-64 Ja '61. (MIRA 14:1)

1. Nauchno-issledovatel'skiy institut geologii Arktiki. (Submarine geology) (Brachiopoda, Fossil)

SHVEDOV, N.A.; USTRITSKIY, V.I.; CHERNYAK, G.Ye.; GERKE, A.A.; SOSIPATROVA, G.P.

New stratigraphic scheme of upper Paleozoic sediments in the Taymyr Peninsula. Sbor.st.po paleont. i biostrat. no.24:12-15 '61. (MIRA 15:2)

(Taymyr Peninsula—Geology, Stratigraphic)

USTRITSKIY, V.I.

Zonal facies of middle-Paleozoic sediments in the Pay-Khoi and northern Polar Urals. Trudy NIIGA 123:41-60 '61. (MIRA 14:10)

(Ural Mountain region--Geology, Stratigraphic)

USTRITSKIY, V.I.

Tectonics of the Pay-Khoy Range and the northern extremity of the Polar Urals. Trudy NIIGA no.125:75-101 '61. (MIRA 16:7)
(Ural Mountains--Geology, Structural)

USTRITSKIY, V.I.

Origin of the family Horridoniidae Muir-Wood et Cooper. Paleont. zhur. no.3:57-60 '62. (MIRA 15:9)

1. Nauchno-issledovatel'skiy institut geologii Arktiki.
(Taymyr Peninsula--Brachiopoda, Fossil)

USTRITSKIY, V.I.

New data on Permian Brachiopoda of Spitsbergen. Sbor.st.p paleont. i bistrat. ne.28:74-89 '62. (MIRA 16:9)
(Spitsbergen--Brachiopoda, Fossil)

USTRITSKIY, V.I.

Basis for the correlation of Middle and Upper Carboniferous sediments in the Taymyr Peninsula and the northern part of the Verkhoyansk Range. Sbor.st.po paleont.i biostrat. no.30:5-16 '62. (MIRA 16:12)

USTRITSKIY, Vitaliy Ivanovich; CHERNYAK, Georgiy Yevseyevich; POPOV, Yu.N., doktor geol.-mineral.nauk, red.; BESHALYT, M.S., vedushchiy red.

[Biostratigraphy and brachiopods of the Upper Paleozoic of the Taymyr Peninsula.] Biostratigrafiia i brakhiopody verkhnego paleozoia Taimyra. Leningrad, Gostoptekhizdat, 1963. 138 p. (Leningrad. Nauchno-issledovatel'skii institut geologii arktiki. Trudy, vol. 134) (MIRA 17:6)

USTRIALOV, N.

Hic Rohdus, hic Salta! Kharbin, 1929. 14 p.

SOV/138-58-10-7/10

AUTHORS: Kirpichev, A. I; Ustrugov, L. L. Mistryukova, G. V; Nikol'skaya, V. N.

TITLE: Preparation of Rubber Mixes on Continuous Production Lines (O potochnykh liniyakh po izgotovleniyu rezinovykh smesey)

PERIODICAL: Kauchuk i Rezina, 1958, Nr 10, pp 29 - 32 (USSR)

ABSTRACT: An account is given of 2½-years experience since the introduction of continuous-line working in the rubber mixing, milling, extrusion calendering and other sections of the factory. Wasteful cooling and re-heating of the rubber mix between stages of preparation has been eliminated by careful integration of the capacities of the various units of the plant which feed directly from one unit to the next. The rubber mix is transported on conveyor belts from the mixers to the initial leafing mills, through to the mills feeding the calenders and other plant, as a ribbon about 20 cm wide. The necessary organization between the various shops to co-ordinate rate of consumption of the mix is discussed. The introduction of "express-control" methods, enabling the mixes to be tested for correct vulcanizing properties, within about 3 minutes of preparation, is essential to success-

Card 1/2

Prpearation of Rubber Mixes on Continuous Production Lines

ful continuous-line working. Considerable savings are quoted (actually in thousands of roubles, but not related to output) with respect to power requirements for the rubber mills, reduction in amount of cooling water and compressed air used, and in particular through elimination of wastage of material as a result of rapid inspection possible with "express-control". Further economies result from the small labour force required which gives approx. 10% greater output per man-shift, and through freeing of space formerly required for intermediate storage of material in course of preparation. There are 2 Figures and 1 Table.

ASSOCIATION: Kirovskiy shinnyy zavod (Kirov Tire Factory)

SOV/138-59-3-11/16

AUTHOR: Ustrugov, L.L.

TITLE: The Two-Stage Preparation of Mixtures During Continuous Production of Semi-Finished Articles (Dvukhstadiynoye izgotovleniye smesey pri potochnom vypuske polufabrikatov)

PERIODICAL: Kauchuk i rezina, 1959, vol. 18 Nr 3, pp 48 - 49 (USSR)

ABSTRACT: In the Kirov Tyre Factory a two-stage process of mixing is used for mixtures containing 50% and 100% natural rubber. Originally, Altax and Captax were used as plasticisation accelerators (1954). The quality of rubber mixtures with/without the addition of carbon black plasticisers is compared in Table 1. During 1955 a two-stage method of mixing was introduced which made it possible to avoid scorching of the mixtures; further modifications of the process were introduced during 1956. Kosin and "Rubrax" were added to the tyre rubber mixture - the latter containing NK, SKB and regenerated rubber - during the first stage of mixing. This made it possible

Card 1/4

The Two-Stage Preparation of Mixtures During Continuous Production of Semi-Finished Articles

to lower the mixing temperature to 130 - 140°C and to separate the unmixed SKB and regenerated rubber during the second stage. The temperature of mixing during the second stage reached 85°C, and it was therefore possible to introduce the sulphur into the mixer after 1 to 2 minutes. Special laboratory tests were carried out to establish the sensitivity of the method when changing the composition of the mixtures. The following optimum temperatures of vulcanisation were established: 168±2°C for "breaker" mixtures and 178±2°C for tyre mixtures. It was suggested that a so-called "plasticisible plastic mass" should be used, i.e. that larger quantities of plasticiser should be introduced during the first stage. This can be achieved by 1) considerably increasing the plasticity of natural rubber so that it can be mixed with the rubber SKB, which has a plasticity of 0.50 to 0.55 (according to Karrer); 2) by introducing dispersing agents (during the first stage) to achieve their even distribution in the rubber, and facilitate mixing with activated carbon black at low temperatures; 3) by adding semi-active

The Two-Stage Preparation of Mixtures During Continuous Production of Semi- Finished Articles

fillers during the first stage and activated fillers during the second stage, so that only small quantities of active fillers should be contained in the mixture during the second stage. The quantity of scorched material was considerably reduced by using the above described method of preparation of SKB and NK tyre mixtures. The physical and mechanical characteristics of the vulcanisates remained unchanged, with the exception of the relative elongation which was reduced on an average from 680 to 620%. Data obtained during the preparation of rubber mixtures when using the four different methods (one-stage process - without the addition of an accelerator; one-stage process when using Renatsit-IV or Pentone-22; two-stage process and the modified two-stage process) are compared in Table 2, but it was found that

The Two-Stage Preparation of Mixtures During Continuous Production of Semi-Finished Articles

even this mixing process is not entirely satisfactory, further investigations should be carried out to improve the quality of manufactured articles.
There are 2 tables.

ASSOCIATION: Kirovskiy shinnyy zavod (Kirov Tyre Factory)

KOREN'KOV, V.Ye., kandidat tekhnicheskikh nauk, redaktor; USTRUGOVA, N.L., redaktor

[Residential construction (2-5 stories) from standard plans; collection of articles] Zhilishchnoe stroitel'stvo po tipovym proektam (2-5 etazhei); sbornik statei. Moskva, Gos. izd-vo lit-ry po stroitel'stvu i arkhitekture, 1954. 77 p. (MLRA 7:9)
(Apartment houses)

CHARNYY, Semen Semenovich, kandidat tekhnicheskikh nauk; BRIK, Frida Germanovna, inzhener; FILIPPOV, A.V., redaktor; USTRUGOVA, M.L., redaktor.

[Facing brick] Litsevoi kirpich. Pod obshchei red. A.V.Filippova. Moskva, Gos.izd-vo lit-ry po stroitel'stvu i arkhitekture, 1955. 133 p. (MLRA 9:5)

1.Akademiya arkhitektury SSSR, Moscow. Institut stroitel'noy tekhniki. 2.Chlen-korrespondent Akademii arkhitektury SSSR.(for Filippov) (Bricks)

USTRUGOVA, N.L.

STRAMENTOV, Andrey Yevger'yevich, doktor tekhnicheskikh nauk, professor; BAKUTIS, V.E., kandidat tekhnicheskikh nauk, dotsent, redaktor; KUZNETSOV, A.I., arkhitektor, redaktor; FRIDBERG, G.V., inzhener, redaktor; USTRUGOVA, N.L., arkhitektor, redaktor; PERSON, M.N., tekhnicheskiy redaktor

[Engineering problems in city planning] Inzhenernye voprosy planirovki gordov. Moskva, Gos. izd-vo lit-ry po stroit. i arkhit., 1955. 361 p. (MLRA 8:6)
(Municipal engineering) (City planning)

KNYAZHITSKIY, Iosif Il'ich; UST'-SHOMUSHSKIY, Georgiy Veniaminovich; RUBIN, M., red.

[Machine tools of the future] Stanki budushchego. Odessa, Odesskoe knizhnoe izd-vo, 1960. 79 p. (MIRA 15:4)
(Machine tools—Numerical control)

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

BC

A-4

Experimental transplantation of ovaries. Z. Urcu. (Zbl. Gynäk., 1938, 108, 259—268).—Immature ovaries were grafted into the muscles of the back of adult rabbits; mature ovaries were transplanted into the back muscles of the same animal; immature ovaries were grafted into adult ovariectomised rabbits. The grafts degenerated, notably in the central parts of the ovaries, in all cases.

A. S.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

DOBROVOL'SKIY, I.P.; USTUPNYY, V.A.; AKULOV, P.V.; PRAVDIN, V.N.

Modification of the spraying system for coke quenching. Koks i khim. no.12:25-27 '63. (MIRA 17:1)

1. Chelyabinskiy metallurgicheskiy zavod.

USTUROY, D.

Employees in commerce. Vsem. prof. dvizh. no.1:45-46 Ja '61.
(MIRA 14:1)

1. Sekretar' Mazhdunarodnogo ob'yedineniya profsoyuzov rabotnikov torgovli.
(Retail trade) (Hours of labor)

USTVOL'SKAYA, T.I., Cand Tech Sci -- (diss) "Problems of the accuracy of the graphic intergration of functions." Len, 1958, 16 pp (Min of Higher Education USSR. Len Order of Labor Red Banner Tech Inst im Lensovet. Chair of Descriptive Geometry and Graphics) 120 copies (KL, 29-58, 133)

USTVOL'SKAYA, T.I., inzh.

Use of graphic integration in computing volumes of bodies limited by topographical surfaces. Sbor. LIIZHT no.158:409-421 '58. (MIRA 11:6)

(Geodesy)

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C111/C222

16.6500

AUTHOR: Ustvol'skaya, T.I.

TITLE: Comparing estimates of the exactness of methods of the graphical integration of functions

PERIODICAL: Referativnyy zhurnal. Matematika, no.7, 1960, 227. Abstract no.8318. Tr.Leningr.tekhnol.in-ta im.Lensoveta, 1959, vyp.50, 57-62

TEXT: By the experimental examination of several graphical methods of integration according to the method of D.I.Kargin ,O tochosti **grafiches**-kikh raschetov (On the exactness of graphical calculations), Sb. LIIPS, 1929, no.101) the author gives some final conclusions in a very categorical form, most of them, however, are not sufficiently convincing.

[Abstracter's note: The above text is a full translation of the original Soviet abstract.]

Card 1/1

USTVOL'SKAYA, T. I., Candidate Tech Sci (diss) -- "Problems of the precision of graphic integration of functions". Leningrad, 1959. 13 pp (Min Higher Educ USSR, Leningrad Order of Labor Red Banner Tech Inst im Leningrad Soviet, Chair of Descriptive Geometry and Graphics), 150 copies (KL, No 23, 1959, 168)

UST'YAN, A.

Close contact with collective farm. Prof.-tekh.obr. 17 no.3: 18-19 Mr '60. (MIRA 13:6)

1. Direktor zolotonoshskogo uchilishcha mekhanizatsii sel'skogo khozyaystva No.10 Cherkasskoy oblasti.
(Zolotonosha--Farm mechanization--Study and teaching)

UST'YAN, A.K.

Testing chemicals in controlling the pine sawfly (Lophyrus sertifer Geoffr.) [in Armenian with summary in Russian] Izv.AN Arm. SSR. Biol. i sel'khoz. nauki 2 no.2:189-193 '49. (MLRA 9:8)
(ARMENIA--SAWFLIES) (INSECTICIDES)

Name: UST'YAN, A. K.

Dissertation: The effect of hexachlorane and DDT on the entomofauna of alfalfa under the conditions in the Ararat Plain

Degree: Cand Agr Sci

Defended at
~~Affiliation~~: Acad Sci Armenian SSR, Department of Biological Sciences

Publication
~~Defense~~ Date, Place: 1956, Yerevan

Source: Knizhnaya Letopis', No 45, 1956

STYAN, A. K.

USSR / General and Specialized Zoology. Insects. Harmful Insects and Acarids. Pests of the Technical, Oil, Medicinal and Essential-Oil Cultures.

Abs Jour : Ref Zhur - Biol., No 18, 1958, No. 82975

Author : Mardzhanyan, G. M.; Chilingaryan, V. A.; Ustyan, A. K.

Inst : Armenian Scientific Institute of the Agriculture Institute

Title : The Application of Merceptophos in the Struggle Against Suctorial Cotton Pests

Orig Pub : Byul. nauchno-tuchn. inform. Arm. n.-i. in-t zemled., 1957, No 2, 22-25

Abstract : The results of plot and industrial experiments, in the background of a four- to five-fold DDT dusting per 40 kg/hectare (against the mallow moth), without the addition of the sulphur of the brand 100 f., indicate that merceptophos (M) is highly effective against the

Card 1/2 ...ly replac... sulphur
...cino; ... inhibits the
...ld or the end of
...t the initial appearance
...ginning of the cotton plant
...re expeditious to apply the first
... end of June (0.5-0.8 kg/hectare), por
... the end of July (1-1½ kg/hectare) por
...n the regions, which are favorable for
...elopment, it is necessary to increase the
...o of M. The action of M, by fractional applica-
tions, is more lasting than by a single spraying. --
A. P. Adrianov

Card 2/2

COUNTRY :
CATEGORY : GENERAL&SPEC.ZOOLOGY.INSECTS

ABS. JOUR.: Ref Zhur -Biologiya, No. 4, 1959, No. 16293

Author :
INST. :
TITLE :

ORIG. PUB.:

ABSTRACT : to II in its effectiveness for Bryobia redikorzovi and the leafroller. [illegible] phytocidal properties of I and II were substantially manifested on leaves of the fruit plants in a concentration of 0.2%, but 0.25 - 0.5% concentration of I and 0.3% concentration of II resulted in the shedding of the leaves of the apple and apricot trees. Of the three chemical poisons tested II was considered to be outstanding. For young orchards and nurseries which

CARD : 2 /3

CATEGORY : GENERAL ASPECTS OF BIOLOGY. BIOLOGISTS

ABS. JOUR : Ref Zhur -Biologiya, No. 4, 1959, No. 16253

AUTHOR :
INST. :
TITLE :

ORIG. PUB.:

ABSTRACT :

CARD: 3 / 3

Abs Jour : Ref Zhur - Biol., No 5, 1958, 21061

Author : Ust'yan
Inst : -
Title : New Data on Parasitic Insects-Pests Attacking the Seeds of Lucerne.

Orig Pub : Izv. AN ArmSSR. Biol.i S.-kh.n., 1957, 10, No 2, 91-97

Abstract : The chief pests of lucerne on the Ararat plain were the Phytonomus variabilis which destroyed the first crop of lucerne almost completely (in the absence of control measures) and the seed-eater Brachophagus gibbus, when infected 60-80% of lucerne seeds. Five parasitic species developed on the phytonomus: one ichneumonic Canidia exigua, two braconides-Dinocampus terminatus and D. (Perilitus) secalis and two chalcides-Necremnus leucarthrops and Tetrastichus incertus. Canidia exigua was the most important parasite, its infection of the larvae of the

Card 1/3

USSR/General and Special Zoology - Insects.

Abs Jour : Ref Zhur - Biol., No 5, 1958, 21061

P-6

phytonomus (primarily in the third hatching) fluctuated greatly: from 5.5% to 84.2%. Two species of superparasites Mesochorus sp. and Habrocytus sp. were found in the case of Canidia. Tetrastichus infected the larvae of the last hatching; from seven to thirty-two specimens of the parasite developed on one infected speciemn of the host; the infection fluctuated between 1.5% and 70%. Necremnus infected the phytonomus in the pupa phase (the infection was about 7%). Dinocampus infected the adult beetles of the phytonomus; the infection was between 1.4% and 60%. Only two species of chalcides were discovered on the seed eater; Liodontomerus perplexus and Geniocerus bruchphagii; the development and flight of the parasites synchronized with those of the host; the number of hatchings was also the same. Liodontomerus infected from 2.4% to 47.8% of specimens of the host; Geniocerus infected from 22.6% to & 72.3%;

Card 2/3

USSR/General and Special Zoology - Insects.

P-6

Abs Jour : Ref Zhur - Biol., No 5, 1958, 21061

A regular decrease in the numbers of both species of the pest was observed in connection with the activity of the parasites.

Card 3/3