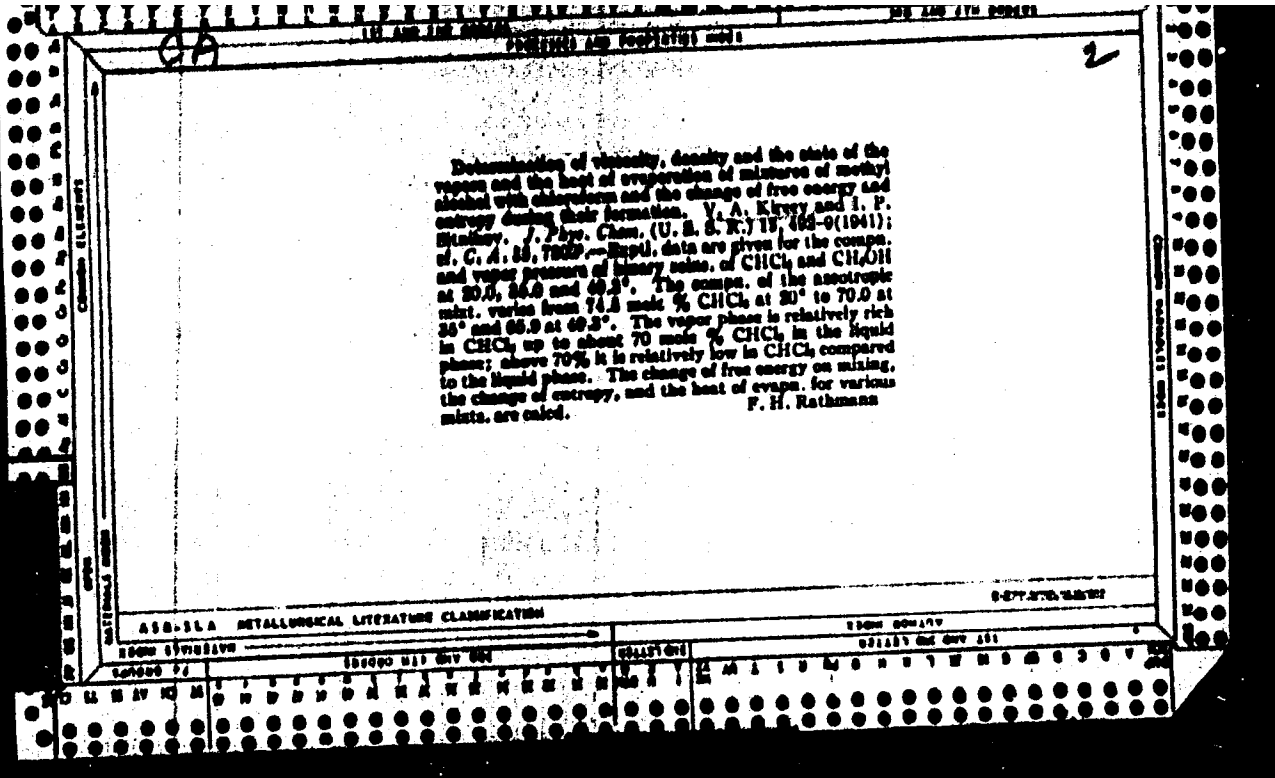


Handwritten: 3. 16. *Handwritten:* total vapor pressure

Theory of azeotropic mixtures. V. A. Kreyg (*J. Phys. Chem. Russ.*, 1941, 15, 481-491). - The composition of azeotropic mixtures depends on the ratio of the v.p. of the pure components and on the degree of deviation of the v.p. of the mixture from Raoult's law. The temp. coeff. of the composition depends on the difference between the heats of vaporization of the pure components and the free energy of mixing. J. J. 11



KIREYEV, V. A.

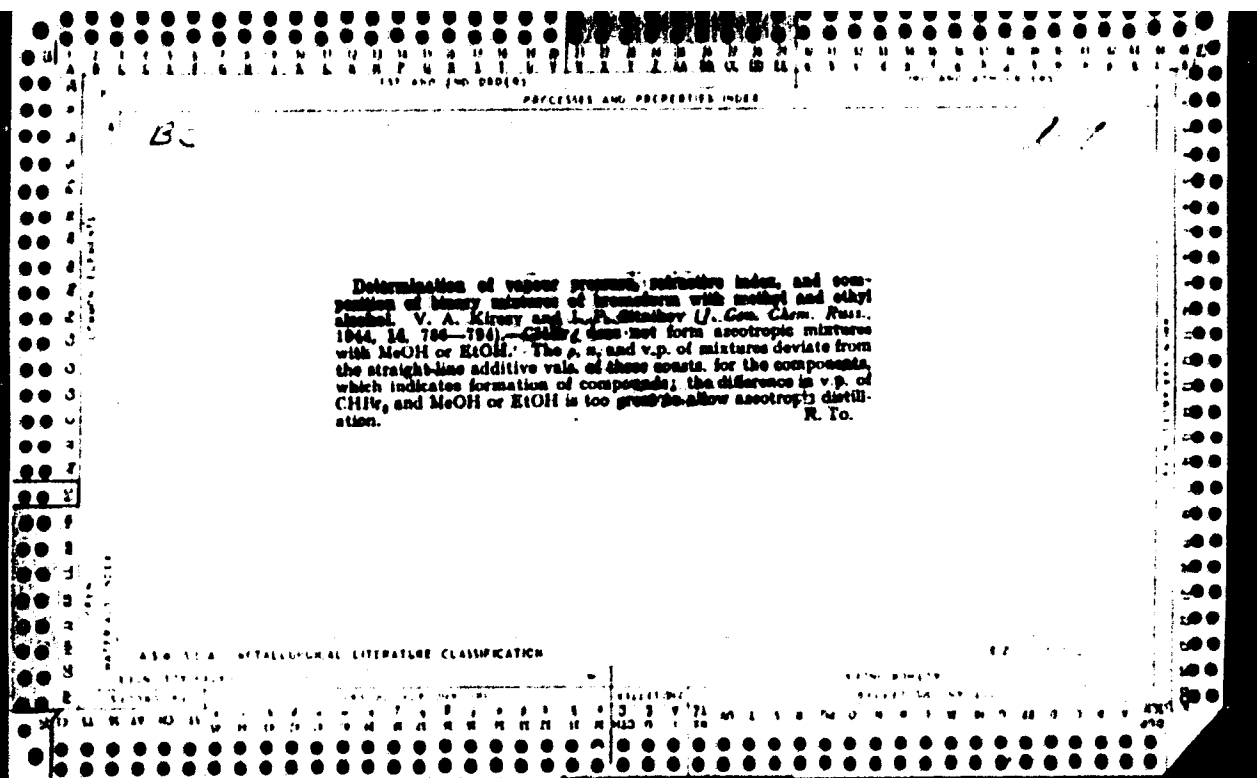
"On the Reciprocal Solubility of Liquids", Zhur. Fiz. Khim. 10, Nos. 3-4, 1942.
Moscow, All-Union Scientific - Research Chemico-pharmaceutical Institute, Physico-Chemical
Laboratory. Received 24 May 1941.

Report U-1523, 24 Oct. 1951.

KIREYEV, V. A.

"On Full and Surplus Exchanges of Free Energy in the Formation of Liquid Mixtures and Solutions", Zhur. Fiz. Khim., 16, Nos. 3-4, 1942. Moscow, All-Union Scientific-Research Chemico-Pharmaceutical Institute, Physico-Chemical Laboratory. Received 24 May 1941.

Report U-1523, 24 Oct. 1951.



PROCESSES AND PROPERTIES INDEX

2

CA

A method for the comparative calculation of the entropy, heat, and free energy of formation of chemical compounds. II. The calculation of the free energy of formation of similar compounds and variation of entropy and free energy of similar reactions. V. Kisev (Moscow Inst. for Hdg. Engrs.). *Acta Physicochim. U.R.S.S.* 1946, 120-70; cf. *C.A.*, 40, 3077. —The free energy of formation can be calcd. with good precision from the heat of formation and from mean values of the at. entropy of formation for similar compds. The concept of similar reactions (e.g., disocn. of bicarbonates of bivalent metals) is introduced. Since ΔS , and hence the difference $(\Delta H - \Delta F)$ for these reactions, depends very little upon the nature of the reactants, ΔF can be calcd. when ΔH is known by taking the mean value of $(\Delta H - \Delta F)$ or conversely. For 2 similar reactions the difference $(\Delta F_1 - \Delta F_2)$ and the equal difference $(\Delta H_1 - \Delta H_2)$ remain numerically const. at various temps.; this makes it possible to calc. the variations of ΔF and ΔH with temp. by the comparative method. Changes in sp. heat in all similar reactions, at the same temp., must be equal and vary equally with temp. All these conclusions may be extended to changes in internal energy. For org. reactions the method may, in some cases, be extended to calcns. for analogous reactions of homologs. The method is illustrated by the calcn. of values of ΔF_f for 18 halides of univalent, and sulfates of bivalent metals. Calcns. of the free energy of disocn. of Mg and Be sulfates were also made.

John K. Taylor

A.S.T.M. METALLURGICAL LITERATURE CLASSIFICATION

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1900M 000100

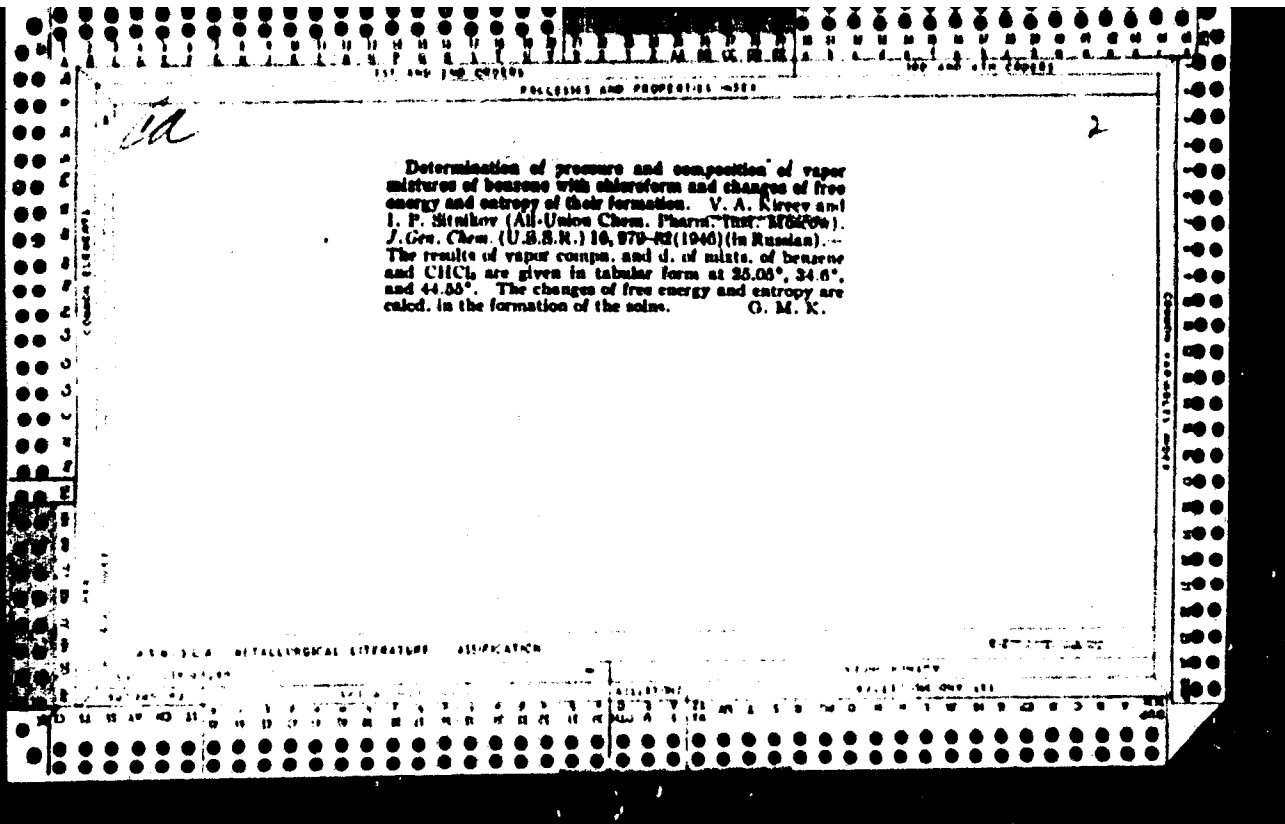
1900M 000100

KIREYEV, V. A.

Chair of Chemistry, Ordzhonikidz Inst. Engineering-economy, Moscow, (-194(-).

"The Entropy of Chemical Elements and the Periodical law."

Zhur. Fiz. Khim., No. 3, 1946.



137 AND 138 (1968) 137 AND 138 (1968) 137 AND 138 (1968)

CPA 2

PROCESSES AND PROPERTIES INDEX

Standard entropy of metasilicates of strontium, barium, zinc, cadmium, lead, and iron. Y. A. Kiryev (Kiryev) *Izv. Akad. Nauk SSSR Ser. Khim. Nauk* 1961-2 (1946) (in Russian). The calcn. was made on the basis of Kelley's data (C.A. 35, 6179) for S_{298}° of $MgCO_3$, $ZnCO_3$, $PbCO_3$, $MnCO_3$, $FeCO_3$, $CaCO_3$ (calcite and aragonite), $SiCO_3$ (strontianite), and $BaCO_3$ (witherrite), assuming for the entropy of formation, ΔS_f° , from monatomic ideal-gaseous elements: $FeSiO_3$, 1.6 times that of $FeCO_3$, in analogy with $MnSiO_3$ and $MnCO_3$ (error not over ± 0.5); for $SrSiO_3$, $BaSiO_3$, $ZnSiO_3$, $CdSiO_3$, ΔS_f° , 1.0 times that of the carbonates (from $MgSiO_3$ and $MgCO_3$); for $PbSiO_3$, 1.7 times. This gives for ΔS_f° : $MgSiO_3$, -174.9, $CaSiO_3$, -171.1, $SrSiO_3$, -171.2, $BaSiO_3$, -169.0, $ZnSiO_3$, -173.8, $CdSiO_3$, -170.0, $PbSiO_3$, -163.5, $MnSiO_3$, -175.8, $FeSiO_3$, -175.7 cal./mole/degree. Hence, S_{298}° and ΔS_f° from the elements in the standard state, are: $FeSiO_3$, 23.0 \pm 0.5, -61.5; $SrSiO_3$, 23.9 \pm 2.0, -67.1; $BaSiO_3$, 27.2 \pm 2.0, -67.0; $ZnSiO_3$, 29.2 \pm 2.0, -67.8; $CdSiO_3$, 25.6 \pm 2.0, -64.7; $PbSiO_3$, 32.0 \pm 2.0, -61.6 cal./mole/degree, assuming for $Sr(s)$ and $Ba(s)$, S_{298}° = 12.5 and 16.2, resp. With the 18° values of the heats of formation, the approx. standard free energies of formation of $ZnSiO_3$ and $FeSiO_3$ are ΔF_f° = -202.4 and -255.2 kcal./mole, resp. N. Thon

ASB-31A METALLURGICAL LITERATURE CLASSIFICATION

137 AND 138 (1968)

KIREEV, V. A.

"Entropy of the Beryllium, Magnesium, Strontium, Barium and Tin Sulphides and Calcium Telluride." by V. A. Kireev (p. 1569)

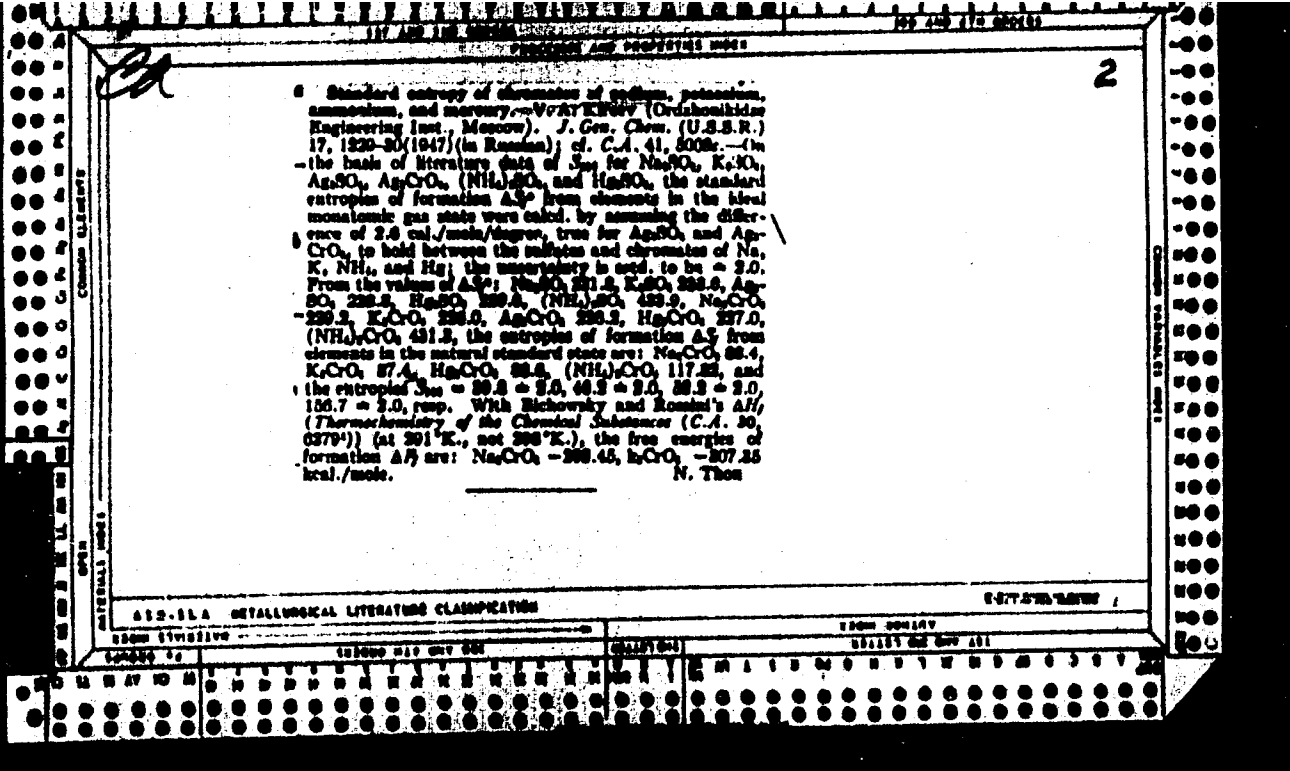
SC: Journal of General Chemistry (Zhurnal Obshchei Khimii) 1946, Volume 16, No. 10

2

The entropy of chemical elements and the periodic law.
 V. A. Kiselev (Ordnance Institute, Leningrad and Moscow
 Univ., Moscow). *J. Phys. Chem. (U.S.S.R.)* 20, 230-43
 (1946). — By interpolation or extrapolation the entropies
 of element, perfect gases of Os, Ra, and element 87 at 25°
 should be 45.3 = 0.8, 42.15 = 0.01, and 43.40 =
 0.01. For element 87, Os, Ra, and Sr at 25° should
 be 45.3 = 0.8, 42.15 = 0.01, 43.40 = 1.0,
 45.3 = 1.0, and 42.15 = 1.0. *J. Phys. Chem. (U.S.S.R.)* 21, 58

ADR-31A METALLURGICAL LITERATURE CLASSIFICATION

Label	Number	Character	Number	Character
1	2	3	4	5
6	7	8	9	0
1	2	3	4	5
6	7	8	9	0

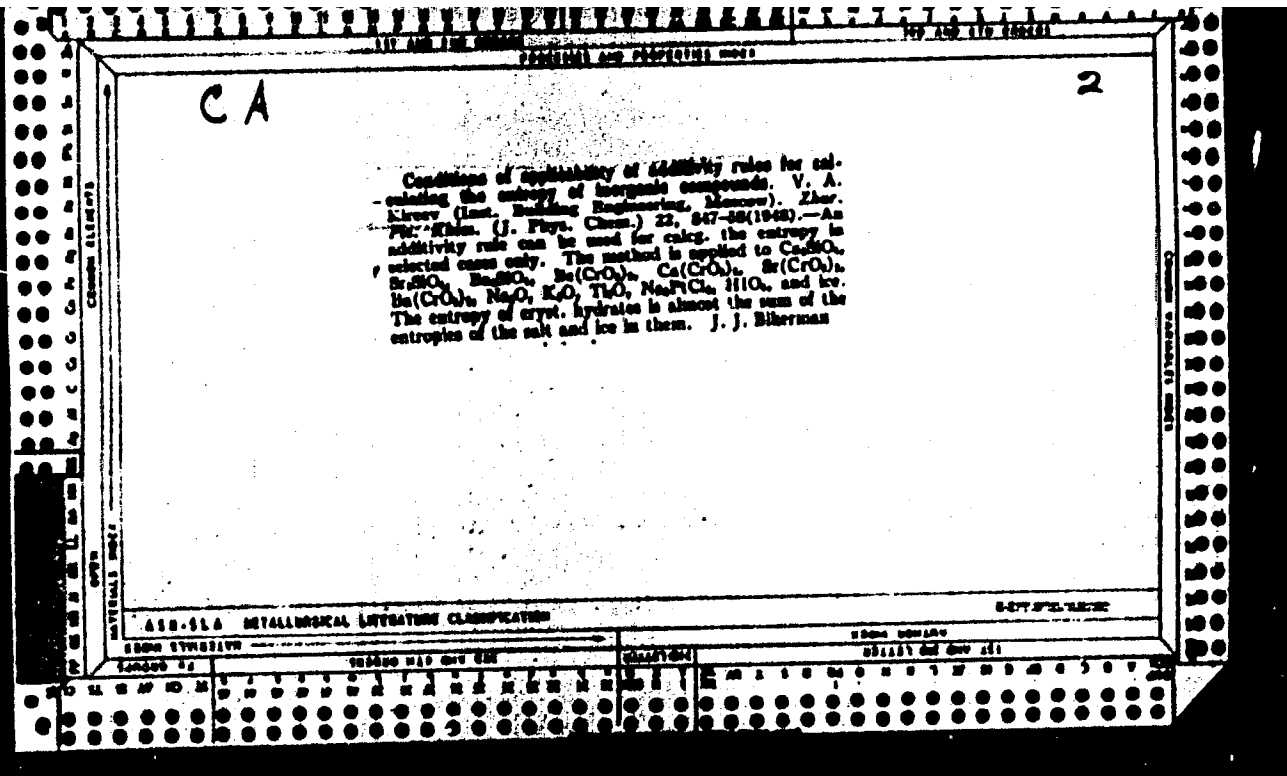


KIRSEV, V. A.

25387. KIRSEV, V. A.

Ob usloviyakh primenosti additivnykh skhem dlya rascheta entropii neorganicheskikh soedineniy. Zhurnal Fiz. Khimii, 1948, Vyp. 7, c. 57-58. -- Bibliogr: 14 Nazv.

SO: Letopis' Zhurnal Statey, No. 30, Moscow, 1948



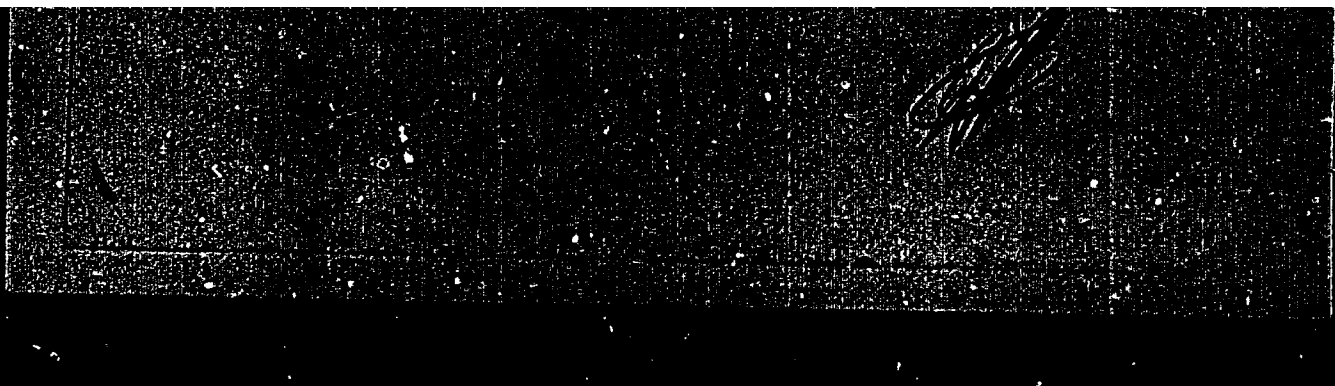
KIREYEV, V. A.

"Chemical Thermodynamics" (Khimicheskaya Termodinamika), M. Kh. Karapet'yants, edited by N. N. Kobozev and V. A. Kireyev, Goskhimizdat, Moscow/Leningrad 1949, 528 pages, 23 rubles 20 kopeks.

SO: Uspekhi Khimii, Vol 18, #6, 1949; Vol 19, #1, 1950 (W-10083)

"APPROVED FOR RELEASE: 09/17/2001

CIA-RDP86-00513R000722620001-1



APPROVED FOR RELEASE: 09/17/2001

CIA-RDP86-00513R000722620001-1"

KIREYEV, Valentin Aleksandrovich; MISHCHENKO, K.P., prof., rezensent;
TSVETKOVA, N.F., red.; ZAZUL'SKAYA, V.F., tekhn.red.; POGUDKIN,
P.V., tekhn.red.

[Short course in physical chemistry] Kratkii kurs fizicheskoi
khimii. Moskva, Gos.nauchno-tekhn.isd-vo khim.lit-ry, 1950.
599 p. (MIRA 12:4)
(Chemistry, Physical and theoretical)

KIREYEV, V. A.

Science

Course in physical chemistry; Dopuscheno v kachestve uchebnika dlia nekhimicheskikh vuzov. Moskva, Gos. nauchno-tekhn. izd-vokhim. Litry, 1951.

Monthly List of Russian Accessions, Library of Congress, May 1952. UNCLASSIFIED.

KIREYEV, V. A.

Chem

3
①

Chem Abs v 48
1-25-54
General & Physical
Chemistry

Work of D. I. Mendeleev on the equation of state of an ideal gas. V. A. Kireyev. *Uspekhi Khim.* 20, 132-4 (1951), d
-In 1874 M. derived a form of an ideal-gas equation, formulated as $M/p = 6200s(273 + t)$, where s is the wt. of 1 ml. of gas at t° and pressure p in mm. of Hg. and M = mol. wt. The equation permits the simultaneous use of the simpler individual gas laws. The Clapeyron equation derived in 1834 made use of Boyle's and Gay-Lussac's laws only.
G. M. Kolosoff

8-31-54
JPP

~~FEDULOV, I. F.~~
KIREYEV, V. A.

PHASE I TREASURE ISLAND BIBLIOGRAPHICAL REPORT AID 741 - I

BOOK

Authors: FEDULOV, I. F., KIREEV, V. A. Call No.: AF476498
Full Title: TEXTBOOK OF PHYSICAL CHEMISTRY 3rd ed., rev. and suppl.
Transliterated Title: Uchebnik fizicheskoy khimii, 3-ye izd.,
pererab. 1 dop.

PUBLISHING DATA

Originating Agency: None
Publishing House: State Scientific and Technical Publishing House
of Chemical Literature ("Goskhimizdat")
Date: 1952 No. pp.: 440 No. of copies: 25,000
Editorial Staff: None

PURPOSE: A textbook for technical schools of the Ministry of Chemical
Industry which also may serve as a manual of physical chemistry
for students of technical schools not specializing in chemistry.

TEXT DATA

Coverage: This textbook discusses briefly the following topics:
the most important properties of substances in gaseous, liquid
and crystallized state; the structure of atoms and molecules;
the laws of thermodynamics and their application to chemical
processes (thermochemistry, equilibrium in homogeneous and
heterogeneous systems); the phase-law; the properties of solu-
tions; electrochemistry; the study of the rate of chemical
reactions; catalysis; and the properties of substances in the

1/2

CR

Liquid-vapor phase equilibrium in some binary systems.
 V. A. Kisev, Yu. N. Shelaker, and E. M. Pervolent (S. Ordzhonikidze Chem. Pharm. Inst., Moscow). *Zhur. Fiz. Khim.* 28, 253-7 (1952).—The phase equil. between liquid and vapor, at 760 mm. Hg, was investigated in a new type of app. resembling that of Gillespie (C.A. 60, 2661'). The systems investigated were toluene-cyclohexanone (I), toluene-*iso*-BuOH (II) and toluene-*iso*-PrOH (III). The figures in each bracket give, resp., the b.p. of the mixt., the compo. of the vapor in mol. % of toluene, and the compo. of the liquid (same units). For I: (110.4, 100.0, 100.0) (116.0, 84.3, 80.2) (127.3, 38.4, 66.0) (128.7, 78.6, 47.8) (131.2, 63.1, 35.6) (135.0, 87.1, 27.7) (140.3, 48.3, 20.9) (144.4, 25.1, 13.6) (149.5, 14.9, 8.2) (154.8, 0.0, 0.0). For II: (110.4, 100.0, 100.0) (107.2, 87.0, 88.6) (104.7, 77.3, 80.7) (103.8, 73.6, 87.0) (103.3, 71.2, 84.4) (102.5, 67.4, 81.3) (101.9, 64.1, 76.2) (101.4, 59.2, 68.2) (100.9, 67.0, 63.8) (100.6, 64.4, 56.8) (100.5, 63.6, 55.0) (100.5, 48.0, 44.1) (101.1, 44.3, 34.8) (101.3, 43.1, 33.3) (101.7, 38.3, 28.3) (101.6, 33.4, 21.1) (102.8, 26.7, 18.0) (103.6, 21.8, 11.4) (104.3, 13.1, 6.8) (105.0, 0.0, 0.0). For III: (110.4, 100.0, 100.0) (104.6, 82.1, 87.0) (98.6, 63.3, 82.3) (94.4, 26.6, 89.7) (91.0, 49.3, 85.1) (88.5, 43.8, 79.7) (86.6, 40.3, 74.4) (85.4, 37.8, 68.8) (84.0, 33.7, 60.3) (83.2, 31.0, 55.1) (82.3, 27.9, 42.8) (81.8, 24.8, 32.4) (81.5, 23.8, 29.6) (81.3, 21.9, 25.8) (81.4, 19.3, 22.0) (81.3, 17.6, 18.8) (81.3, 14.6, 14.2) (81.6, 8.2, 6.7) (82.3, 0.0, 0.0). Thus, systems II and III are azeotropic. Michel Boudart

FEDULOV, I.F.; KIRNYEV, V.A. [authors]; BALEZIN, S.A., professor [reviewer].

For thorough study of the theoretical bases of chemistry. ("Textbook of physical chemistry for technical schools." I.F.Fedulov, V.A.Kireev. Reviewed by S.A.Balesin). Khim.v shkole no.5:75-76 S-0 '53. (MLRA 6:9) (Chemistry, Physical and theoretical) (Fedulov, I.F.) (Kireev, V.A.)

TATEVSKIY, V.M.; KARAPET'YANTS, M.Kh. [authors]; TILICHEEV, M.D. [redaktor];
KIRYIN, V.A. [reviewer].

"Physicochemical properties of individual hydrocarbons." Edited by M.D.
Tilicheev. Reviewed by V.A.Kireev. Zhur.fiz.khim. 27 no.6:939-940 Je
'53. (MLBA 6:7)
(Hydrocarbons)

KIREYEV, V. A.

Subject : USSR/Chemistry AID P - 1308
Card 1/1 Pub. 119 - 2/5
Author : Kireyev, V. A. (Moscow)
Title : Chemical reactivity and thermodynamic properties of some hydrocarbons. Reactions of isomerization and of thermal decomposition
Periodical : Usp. khim., 23, no. 8, 921-942, 1954
Abstract : Entropy and its components are reviewed. Calculation of chemical equilibria and determination of reactivity are discussed. 14 tables, 11 diagrams, 20 references (19 Russian: 1945-1954).
Institution : None
Submitted : No date

KIREYEV, V.A.
USSR/ Chemistry - Reaction processes
Card 1/1 Pub. 147 - 27/27
Authors : Kireyev, V.A.
Title : The method of monotypical (analogous) reactions and its application in organic chemistry
Periodical : Zhur. fiz. khim. 28/2, 372-376, Feb 1954
Abstract : Experimental data are presented showing that the monotypical reaction method is well applicable to reactions the process of which is accompanied by a practically uniform change in entropy. This takes place when the following two conditions are satisfactory: 1) when the changes in the number of moles in the gaseous products in both contrasting reactions are identical, and 2) when the effect of structural characteristics on the change in entropy is practically analogous. The method of monotypical (analogous) reactions can also be useful for the estimation of thermal effects. Four references: 2-USSR and 2-USA (1945-1951). Tables.
Institution : The V.V. Kuybyshev Structural Engineering Institute, Moscow
Submitted : October 14, 1953

KIRYEV, V. A.
USSR/Chemistry

Card 1/1

Authors : Kiryev, V. A.

Title : Thermal dependence of equilibrium constants of analogous (monotypical) reactions

Periodical : Zhur. Fiz. Khim. 28, Ed. 3, 568-575, March 1954

Abstract : Described is a method for the calculation of the thermal dependence of equilibrium constants of analogous (monotypical) reactions. In expressing the equilibrium constants through the activity the equilibrium given in equation (4) is a perfectly strict thermodynamic ratio which does not depend upon any partial assumptions and is applicable to any pair of reactions (not only monotypical), and to various conditions of their behavior (at uniform temperature). A comparison of this new method with the previously described by the author shows that the latter has a broader application but requires more basic data in its application. Ten references. Tables, graphs.

Institution : The V. V. Kuybyshev Engineering Structural Institute, Moscow, USSR

Submitted : Nov. 19, 1953

USSR/Physics - Physical chemistry

Card 1/1

: Pub. 1/7 - 25/21

Authors

: Kireyev, V. A.

Title

: Entropy and its application in chemical thermodynamics

Periodical

: Zhur. fis. khim. 28/12, 2262-2264, Dec 1954

Abstract

: The applicability of entropy in chemical thermodynamics is explained. Entropy is considered as a thermodynamic function which reflects the total effect of the movement of particles constituting a certain system. Entropy as well as internal energy of a substance depend upon all structural characteristics of the substances and the conditions of its existence. The second thermodynamic law makes it possible to express the effect of all these properties on the equilibrium position in a given chemical process. The concept of the second thermodynamic law is elucidated. Table.

Institution

: The V. V. Kuybyshev Structural Engineering Institute, Moscow

Submitted

: June 30, 1954

KIREYEV, V. A.

~~KIREYEV, V. A. (Kireyev, Vladimir) (Ukrainian) (Cyrillic)
Transcribed from original source. (Center for Strategic
Studies, Institute for University Community Support,
Moscow, 1988) (SIS) (Through) (Cody's Bookshop,
London, UK)~~

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PHASE I BOOK EXPLOITATION

SOV/2140

Kireyev, Valentin Aleksandrovich

Kratkiy kurs fizicheskoy khimii (A Short Course in Physical Chemistry) Moscow, Goskhimizdat, 1959. 599 p. Errata slip inserted. 25,000 copies printed.

Ed.: N.F. Tsvetkova; Tech. Eds.: V.F. Zazul'skaya, and P.V. Pogudkin

PURPOSE: The book is intended to serve as a textbook for vtuz students not specializing in chemistry. It can also serve as a reference book for scientists, engineers and technicians as well as for teachers of physical chemistry and related subjects.

COVERAGE: The book is based on the material used in the text, Kurs fizicheskoy khimii (Course in Physical Chemistry) by V.A. Kireyev, (1956) which was intended as a textbook for students of chemical vuzes. The text was abbreviated and revised. The following chapters have been included in the book: "Colloidal state" discussing lyophobic colloids chiefly; "The Tagged Atom Method and Chemical

Card 1/18

Effect of Radiations" and "High Polymers and Plastic Materials". The latter chapter discusses the inner structure and the properties of high polymers (plastics) essential to their uses. The author thanks Professor K.P. Mishchenko for reviewing the manuscript, Professor S.N. Nikiforov, Professor G.L. Slonimskiy, and Docent S.L. Sosin for their comments on the chapter discussing high polymers and plastic materials. There are 153 references: 117 Soviet, 26 English, and 10 German.

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722620001-1

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Card 2/18

5.4200

S/076/60/034/05/01/038
B010/B002AUTHOR: Kireyev, V. A.TITLE: Thermodynamics of Chemical Equilibria in Similar Reactions

PERIODICAL: Zhurnal fizicheskoy khimii, 1960, Vol. 34, No. 5, pp. 945-956

TEXT: The author discusses the methods of determining chemical equilibrium, which are based on the analogy of the chemical properties of similar substances, and which use the data of the equilibrium of a known reaction for calculating the data of an analogous but unknown reaction. Of the various methods used to compare and determine the chemical equilibria of similar reactions, the author discusses three thermodynamic methods with different prerequisites. In the first two methods two reactions are compared at the same temperature, whereas in the third method equilibrium constants of equal values are compared. The first method is based on an equation (1) developed by the author in a previous paper (Ref. 1). In this equation, the equilibrium constants K_X and K_Y of two reactions X and Y at equal temperatures are related to each other as well as the changes in enthalpy ΔH_X° and ΔH_Y° and in entropy ΔS_X° and ΔS_Y° under standard conditions. The periodic system forms the basis of a comparison between inorganic compounds, whereas homologous series are used for organic compounds. As shown by the

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Thermodynamics of Chemical Equilibria in
Similar Reactions

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B010/B002

author. in Ref. 1, equation (1) for constant temperatures is transformed into equation (2), which describes the linear dependence between $\log K_x$ and $\log K_y$. The accuracy of the results obtained depends on the degree of similarity of the reactions compared, as well as on the accuracy of the initial data. Equation (2) yields, however, exact results also for slightly dissimilar reactions. To illustrate the applicability of equation (2), the following results are given: Table 1 contains calculated data concerning the equilibrium of hydrogenation of ethyl benzene to ethyl cyclohexane according to the properties of these substances at 25° and the equilibrium of the analogous hydrogenation of toluene to methyl cyclohexane. Table 2 gives a comparison between calculations of the equilibrium of dissociation of gaseous SrO, BaO, and MgO according to data on the analogous dissociation of CaO and the thermodynamic properties of these substances (cf. the paper by I. V. Veyts, L. V. Gurvich, and N. P. Rtishcheva (Ref. 9)). Table 3 gives the results of calculations of the equilibrium constants of thermal dissociation of DBr and TBr according to the analogous dissociation of HBr. Table 4 lists data on the equilibrium of hydrogenation of some alkyl benzenes to the corresponding alkyl cyclohexanes according to the analogous hydrogenation of benzene. Table 5 shows the separation of ethylene from normal alkanes. Table 6 contains the results of calculations of the formation of some crystalline dioxides from simple substances at 1,000°K. The Card 2/4

Thermodynamics of Chemical Equilibria in
Similar Reactions

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B010/B002

second method described is based on the equation

$\ln K_Y = \ln K_X + \frac{\Delta H_X^{\circ} - \Delta H_Y^{\circ}}{RT} - \frac{\Delta S_X^{\circ} - \Delta S_Y^{\circ}}{R}$ (12). For practical purposes it is necessary that the difference $\Delta H_X^{\circ} - \Delta H_Y^{\circ}$ and $\Delta S_X^{\circ} - \Delta S_Y^{\circ}$ does not change with temperature. This equation is less accurate than equation (2). Under certain conditions it is possible to simplify (12). By means of the third method the temperature is determined which corresponds to equal values of the reaction rate constants. Here, $K_X = K_Y$ and $d \ln K_X = d \ln K_Y$ are assumed, and one obtains the equation

$$\frac{dT_Y}{T_Y^2} = \frac{H_X}{H_Y} \cdot \frac{dT_X}{T_X^2} \quad (14).$$

The latter can be integrated on three different assumptions. The use of this method is illustrated by Table 7 (enthalpy of dissociation of gaseous CaO, SrO, and BaO to free atoms at equal reaction rate constants), and Table 8 (temperatures corresponding to equal values of reaction rate constants in the dissociation of CaO, SrO, and BaO). The author concludes

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Thermodynamics of Chemical Equilibria in
Similar Reactions

S/076/60/034/05/01/038
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that the results furnished by the above-described methods are practically as accurate as direct experimental determinations. Approximate values are obtained both when only few initial data are available and in the case of rather dissimilar reactions. A. P. Kapustinskiy, K. B. Yatsimirskiy, and M. Kh. Karapet'yants are mentioned in the text. There are 2 figures, 8 tables, and 21 references: 13 Soviet, 5 American, 1 German, 1 French, and 1 Czech.

ASSOCIATION: Moskovskiy inzhenerno-stroitel'nyy institut im. V. V. Kuybysheva
(Moscow Institute of Civil Engineering imeni V. V. Kuybyshev)

SUBMITTED: December 29, 1959

Card 4/4

KARAPET'YANTS, Mikhail Khristoforovich; CHEN GUANG-YUE [Ch'êng Kuang-yüeh];
~~KIREYEV, V.A., prof., retsenzent; L'VOVA, L.A., vedushchiy red.;~~
MUKHINA, E.A., tekhn. red.

[Boiling point and pressure of hydrocarbon saturated vapors] Tem-
peratura kipenia i davlenie nasyschennogo para uglevodorodov.
Moskva, Gos.nauchno-tekhn. izd-vo neft. i gorno-toplivnoi lit-ry,
1961. 241 p. (MIRA 14:6)

(Hydrocarbons)

KIREYEV, V.A.

Thermodynamics of single-type chemical reactions and single-type compounds. Zhur. fiz. khim. 35 no.7:1393-1405 J1 '61.
(MIRA 14:7)

1. Moskov'skiy inzhenerno-stroitel'nyy institut im. V.V. Kuybyshevs.

(Chemical reaction—Conditions and laws)
(Thermochemistry)

KIREYEV, Valentin Aleksandrovich; TSVETKOVA, N.F., red.; ZAZUL'SKAYA, V.F., tekhn. red.

[Concise course in physical chemistry]Kratkii kurs fizicheskoi khimii. Izd.2., ispr. i dop. Moskva, Goskhimizdat, 1962. 647 p.
(MIRA 15:11)

(Chemistry, Physical and theoretical)

KIREYEV, V.A

Thermodynamics of chemical reactions of the same type chemical
reactions. Zhur. fiz. khim. 36 no.11:2547-2550 N'62.

(MIRA 17:5)

1. Moskovskiy inzhenerno-stroitel'nyy institut imeni
Kiybysheva.

KIREYEV, V.A.

Atomic entropy of the formation of inorganic substances at high temperatures. Izv.vys.ucheb.zav.,khim.i khim.tekh. 6 no.5:751-753 '63. (MIRA 16:12)

1. Moskovskiy inzhenerno-stroitel'nyy institut imeni V.V.Kuybysheva, kafedra obshchey khimii.

LIBERMAN, G.V.; KIREYEV, V.A.

Interaction of tricalcium aluminate with water in the presence of sodium and potassium sulfates at elevated temperatures. *Izv.vys. ucheb.zav.; khim. i khim. tekhn.* 6 no.6:896-900 '63. (MIRA 17:4)

1. Moskovskiy inzhenerno-stroitel'nyy institut imeni Kuybysheva, kafedra obshchey khimii.

SOROKOV, N.I.; FIDELIN, N.N.; ZEVYAKIN, I.V.; SIDOROV, I.S.

Vacuum slide-valves. Trib. i tekh. komp. i no. 6. 197-246
M-D '63. (REF: 17:6)

KIREYEV, V.A.

Effect of temperature on entropy change in chemical reactions.
Zhur.ob.khim: 33 no.3:724-728 Mr '63. (MIRA 16:3)

1. Moskovskiy inzhenerno-stroitel'nyy institut imeni
V.V. Kuybysheva.

(Chemical reactions)
(Entropy)

KIREYEV, V.A.

Influence of temperature on thermal effects of chemical
reactions. Zhur. ob. khim. 33 no.5:1391-1396 My '63.

(MIRA 16:6)

1. Moskovskiy inzhenerno-stroitel'nyy institut imeni Kuybysheva.
(Thermochemistry)

S/076/63/037/001/023/029
B101/B186AUTHOR: Kireyev, V. A.

TITLE: Effect of temperature on the atomic entropies of formation of inorganic substances

PERIODICAL: Zhurnal fizicheskoy khimii, v. 37, no. 1, 1963, 211 - 214

TEXT: The atomic entropy of formation, ΔS_{form}^a is defined as the change of entropy in the formation of one mole of a substance from free atoms in the normal state at constant temperature. $\Delta S_X^0 - \Delta S_Y^0 = c$ holds for monotypic substances, where c remains nearly unchanged over a wide temperature range, so that the known ΔS_X^0 for the one substance can be used to approximate ΔS_Y^0 for the other. The high-temperature component $S_T^0 - S_{298}^0$ of the entropy can be calculated from $\Delta S_{Y,T}^a - \Delta S_{Y,298}^a = \Delta S_{X,T}^a - \Delta S_{X,298}^a$ if the data of absolute entropy for the two monotypic substances are unknown. Based on thermodynamic data found by K. K. Kelley, A. D. Mah (Bureau of Mines Report

Card 1/2

Effect of temperature on the...

S/076/63/037/001/023/029
B101/B186

of Investig. 5490, Washington, 1959; Bureau of Mines Bull. 584, Washington, 1960) and D. R. Stull, G. S. Simke (Thermodynamic Properties of the Elements, Washington, 1956), ΔS_{form}^a was calculated for calcium, strontium, and barium metatitanates and metasilicates, and for FeTiO_3 and MnSiO_3 , and the deviations of c from the constant value were discussed. These deviations are explained by different degrees of monotypic characteristics or different crystal structures. The c of gaseous compounds therefore shows better constancy which is confirmed by ΔS_{form}^a of CO , N_2 , NO , OH , and H_2 . There are 2 tables. ✓

ASSOCIATION: Moskovskiy inzhenerno-stroitel'nyy institut im. V. V. Kuybysheva
(Moscow Construction Engineering Institute imeni V. V. Kuybyshev)

SUBMITTED: April 12, 1962

Card 2/2

KIREYEV, V.A.

Method of double comparison of reactions and compounds of the same type. Zhur.fiz.khim. 37 no.2:452-456 F '63. (MI.A 16:5)

1. Moskovskiy inzhenerno-straitel'nyy institut imeni V.V.Kuybysheva.
(Chemical compounds--Thermodynamic properties)
(Chemical reaction--Conditions and laws)

L 12870-63

EPT(a)/EPT(b)/EPT(c)/BDB AFYTC/ASD PF-4 WW/JD/39

ACCESSION NR: AF3002840

8/0076/63/037/006/1381/1384

63
60
16

AUTHOR: Kireyev, V. A.

TITLE: Thermodynamic parameters of chemical reactions and phase transformations under conditions corresponding to identical equilibrium constants

SOURCE: Zhurnal fizicheskoy khimii, v. 37, no. 6, 1963, 1381-1384

TOPIC TAGS: heat effect, entropy, phase transformation, gaseous MgO formation, CaO, SrO, BaO, hydrogenation, alkane, alkane, equilibrium constant, chemical reaction, thermodynamic parameter

ABSTRACT: A direct relationship, rather exact for a specific reaction range, was shown between the heat-effect and the entropy changes of two chemical reactions or phase transitions if the reactions or transitions are subjected to conditions producing identical equilibrium constants. Hence in the thermodynamic relationship $R \ln K_{sub a} = -\Delta H \text{ degrees}/T + \Delta S \text{ degrees}$, when dealing with monotypic reactions or transitions, it is possible to determine the parameters ΔH or ΔS of a given reaction from experimental data for a second reaction, or even to calculate the equilibrium constant $K_{sub a}$ for a given reaction from data for an analogous monotypic reaction. Data given for several

Card 1/2

L 12870-63

ACCESSION NR: AP3002940

groups of monotypic reactions (formation of gaseous MgO, CaO, SrO, and BaO from free element atoms; hydrogenation of normal C sub 2 - C sub 8 alkenes to alkanes; addition of ethylene to form C sub 2 - C sub 6 alkanes; obtaining O sub 2, H sub 2 and H sub 2 from free atoms) indicated Delta H degrees/T, and consequently Delta S, differed within a very small limit for a given value of the equilibrium constant. Corrections are given for data given in a previous article by V. A. Kireyev (Zh. fiz. khimii, vol. 34, 945, 1960). Orig. art. has: 2 tables and 7 equations.

ASSOCIATION: Moskovskiy Inzhenerno-stroitel'nyy institut im. V. V. Klyby'sheva
(Moscow Institute of Civil Engineering)

SUBMITTED: 05Jul62

DATE ACQ: 16Jul63

ENCL: 00

SUB CODE: 00

NO REF SOV: 003

OTHER: 002

Card 2/2

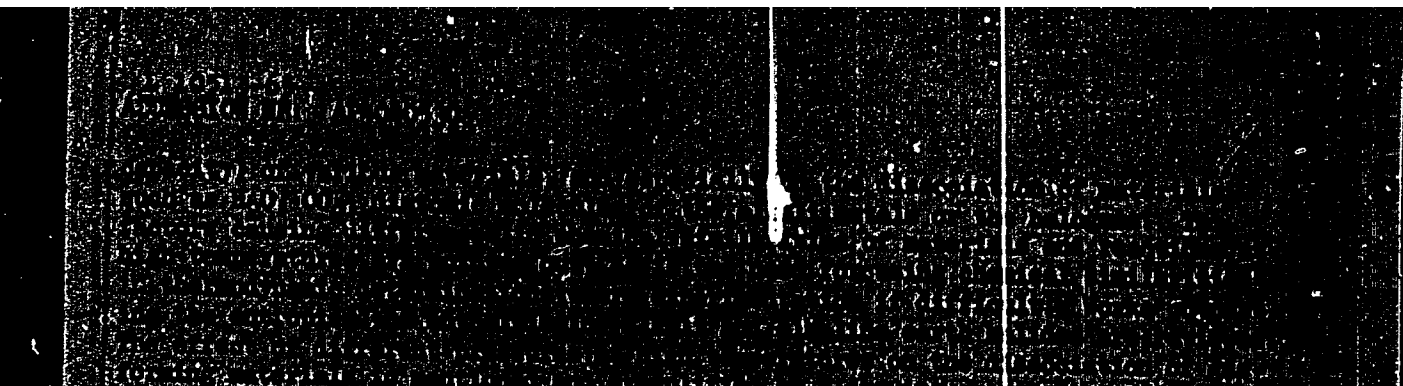
KIREYEV, V.A.; GORBUSHINA, V.B.

Relation between thermal effects of inorganic reactions taking place at the same temperatures. *Izv.vys.ucheb.zav.;khim. i khim. tekhn.* 7 no. 1:29-33 '64. (MIRA 17:5)

1. Moskovskiy inzhenerno-stroitel'nyy institut im. V.V. Kuybysheva, kafedra obshchey khimii.

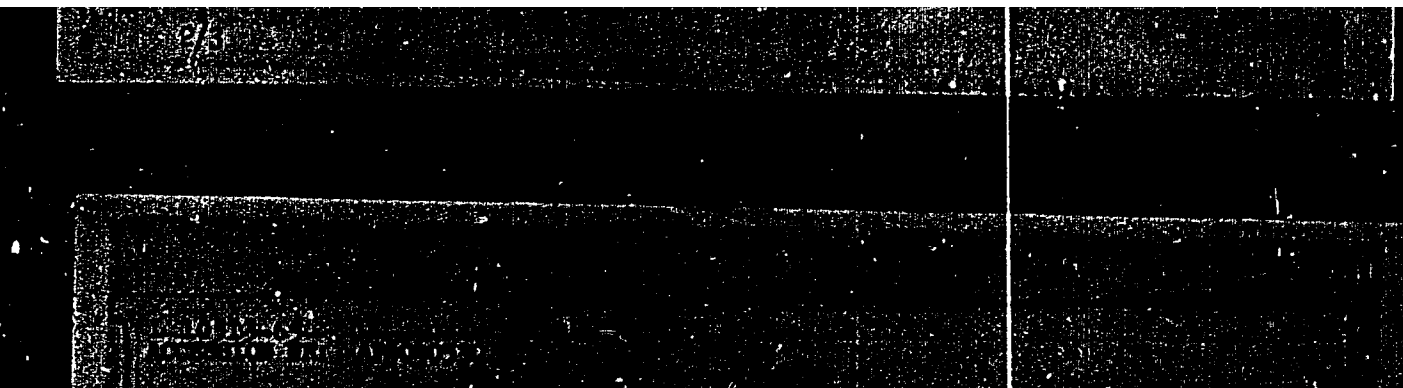
"APPROVED FOR RELEASE: 09/17/2001

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APPROVED FOR RELEASE: 09/17/2001

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LIBERMAN, G.V.; KIREYEV, V.A.

Interaction of tricalcium aluminate with water in the presence of the chlorides of calcium, sodium, and potassium at elevated temperatures.
Zhur.prikl.khim. 37 no.1:194-196 Ja '64. (MIRA 17:2)

LIBERMAN, G.V.; KIREYEV, V.A.

Interaction of tricalcium silicate with aqueous solutions of
some chlorides and sulfates at elevated temperatures. Zhur.
prikl. khim. 37 no.2:450-453 F '64. (MIRA 17:9)

1. Moskovskiy inzhenerno-stroitel'nyy institut imeni Kuybysheva.

KIRSEYEV, V.A.; GORDUSHINA, V.B.

Effect of temperature on the rate of formation of organic compounds. Zhur.prikl.khim. 37 no.7:1642-1644 11 '64.

(MIRA 18:4)

KIREYEV, V.A.

Acid-base properties of oxides. Zhur.izd.znan. 9: 1881-1891, 1964.
1964. (MIRA 18817)

I. Moskovskiy Inzhenerno-stroitel'nyy Institut imeni V.V.Kuybysheva.

KIREYEV, V.A.

Corresponding temperatures of chemical reactions. Zhur.
ob. khim. 35 no.3:409-414. Mr '65. (MIRA 18:4)

I. Moakovskiy inzhenerno-stroitel'nyy institut im. V.V.
Kuybysheva.

KIREYEV, V.A.

Effect of temperature on the heat effects of chemical reactions
and phase transitions. Zhur. fiz. khim. 39 no.2:463-466 F '65.
(MIRA 18:4)

1. Moskovskiy inzhenerno-stroitel'nyy institut imeni Kuybysheva.

CHERFAS, M.D., starshiy nauchnyy sotrudnik; KIREYEV, V.A.; KAPUSTIN, S.A.

Method of determining vertebral torsion in the initial forms of scoliosis. Ortop., travm. i protez. 26 no.4:30-33 Ap '65.

(MIRA 18:12)

1. Iz Saratovskogo instituta travmatologii i ortopedii (dir. - dotsent Ya.N.Rodin). Adres avtorov: Saratov, ul. Chernyshevskogo, dom 148, Institut travmatologii i ortopedii.

100 ... KIRMAN, ...

... the ... of ...

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KIREYEV, V.D.

Periodic aeration of rocks and its practical value. Izv. AN SSSR.
Ser.geofiz. no.1:152-155 Ja '63. (MIRA 16:2)
(Mine ventilation)

VERBITSKIY, V.M., inzh.; ZITSER, I.S., inzh.; KIRUYEV, V.D., inzh.; KOROLEV, I.
M., inzh.

Stand for testing the performance of mine supports. Shalht. stroi. 8
no.8:17 Ag '64. (MIRA 17:9)

1. Nauchno-issledovatel'skiy gornorudnyy institut, Krivoy Rog.

KIREYEV, V.F.

New developments in the techniques of carrot and tomato culture.
Kons.1 ov.prom. 17 no.10:23-24 0 '62. (MIRA 15:9)

1. Krasnodarskiy vitaminny kombinat.
(Carrots) (Tomatoes)

KIREYEV, V.F.

The TKU-0,9 universal trench digger. Trakt. i sel'khoz mash. 33 no.1:34-35
Ja '63. (MIRA 16:3)

1. Tsentral'no-Chernozemraya mashinospytatel'naya stantsiya.
(Trench digging machine)

KIREYEV, V. F.

KIREYEV, V. F.-- "Methods of Measuring the Curvature of Oil Wells."
Min Higher Education USSR. Azerbaydzhan Order of Labor 3rd
Banner Industrial Inst imeni M. Azizbekov. Baku, 1956.
(Dissertation for the Degree of Candidate in Technical Sciences)

No 1

SO: Knizhnaya Letopis', 1956, pp 102-122, 124

KIREYEV, V.F.

Effect of the lithology of the section and of formation factors
of layers on the direction and character of well deflection. Trudy
Azerb. ind. inst. no.16:49-54 '57. (MIRA 11:9)
(Oil well drilling)

KIREYEV, V.F.

Analyzing the theoretical possibilities of measuring well deflection.
Trudy Azerb. ind. inst. no.17:50-57 '57. (MIRA 11:9)
(Boring)

Kiriyev, V.F.

AGAMALIYEV, G.M.; KIRIYEV, V.F.

Using applied geophysical data to note the change in thickness
and lithological facies of the discontinuity in the pay formation
in the southern Karadag structure. Azerb.neft.khoz. 36 no.1:7-9
Ja '57. (MLRA 10:5)

(Karadag--Petroleum geology)

KIREYEV, V. F.

AGAMALIYEV, G.M.; KIREYEV, V.F.

Electric and radioactive properties of the series intersecting
the pay formation in the southern spur of the Karadag fold. Azerb.
neft.khoz. 36 no.3:10-13 Mr '57. (MLRA 10:5)
(Karadag--Oil well logging)

LITVINOV, S.Ya.; KIRBYEV, V.F.

Change in the thickness of the producing formation and lithofacies characteristics of Balakhan horizons in the Peschanyy offshore area. Izv.vys.nucheb.zav.; neft' i gaz
1 no.10:3-8 '58. (MIRA 12:4)

1. Azerbaydzhanskiy industrial'nyy institut imeni M.Azizbekova.
(Peschanyy Island--Petroleum geology)

MAMEDOV, M.K.; KIRBYEV, V.F.

Balakhan' series in the eastern wing of the Karadag fold and its
oil potential. Azerb. neft. khoz. 37 no.9:1-3 S '58.

(MIRA 11:12)

(Apshehon Peninsula—Petroleum geology)

MAMEDOV, M.K.; KIRBYEV, Y.F.

Geophysical data on the Supra-Kirmaki sand series in the Karadag field.
Azerb.neft.khoz. 37 no.12:1-4 D '58. (MIRA 12:3)

(Apsheron Peninsula--Petroleum geology)
(Apsheron Peninsula--Gas, Natural--Geology)
(Prospecting--Geophysical methods)

NAMEDOV, M.K.; KILEYEV, V.F.

Reasons for changes in the logging characteristics of sediments of
the Supra-Kirmaki arenaceous and Sub-Kirmaki series of the Peschanyy
Island field. Azerb. nef. khoz. 39 no.3(405):5-8 Mr '60.
(MIRA 1419)

(Peschanyy Island--Oil well logging)

KIREYEV, V.F.

Field and geophysical characteristics of the lower Apsheron
sediments of the Kalmas area in connection with their oil and
gas potentials. Izv.vys.ucheb.zav.; neft' i gaz. 4 no. 3-7
'61. (MIRA 14:10)

1. Azerbaydzhanskiy institut nefti i khimii im. M.Azizbekova.
(Azerbaijan--Petroleum geology) (Azerbaijan--Gas, Natural--Geology)

KIREYEV, V.F., inzh.

VTH-0,5 hemp loader. frakt. 1 sel'khoz mash. 31 no.11:33-34 N
'61. (MIRA 14:12)

1. Tsentral'no-Chernozemnaya mashinostpyatel'naya stantsiya.
(Hemp)
(Loading and unloading)

LI, P. N. (Candidate of Veterinary Sciences, Saratov NIVS), MASLOVA, Z. V. (Veterinary Surgeon of the Oblast' Veterinary Bacteriological Laboratory) and KIREYEV, V. P. (Veterinary Surgeons of the Saratov Government Station of Artificial Insemination of Animals)

"About the ulcerative posthitis in bulls and sire rams"
Veterinariya, vol. 39, no. 6, June 1962 pp. 51

YAKUBOV, A.A.; KIREYEV, V.F.

Nature of sediments and an oil- and gas-bearing cross section
of the Sub-Kirmaki series of the Zyrya field. Izv. vys. i cheb.
zav.; neft' i gaz 4 no.1:3-7 '61. (MIRA 15:5)

1. Azerbaydzhanskiy institut nefti i khimii imeni M. Azizbekova.
(Apsheron Peninsula--Petroleum geology)
(Apsheron Peninsula--Gas, Natural--Geology)

KIREYEV, V.F.; MAKHMUDOVA, V.M.

Electric logging characteristics of the Kala series in the
Zyrya field in connection with their oil and gas potentials.
Izv. vys. uch. zav.; neft' i gaz 5 no.9:17-22 '62.

(MIRA 1":5)

1. Azerbaydzhanskiy institut nefti i khimii im. M. Azizbekova.

KIREYEV, V.F.; LOGOVSKAYA, G.K.

Method for determining the actual thicknesses in the cross section
of the producing formation of the Kalmas field. Azerb. neft.
khoz. 42 no.1:9-11 Ja '63. (MIRA 16:10)

(Kura Lowland—Oil well logging, Electric)

L 24712-00 DWT(M)/DWP(J)/T MM

ACC NR: AP6007680	SOURCE CODE: UR/0413/66/000/003/0050/0050
AUTHOR: <u>Pakushin, G. N.; Bush, V. P.; Sandakov, Ye. A.; Gazizov, R. F.; Rashidov, N. P.; Todyshev, Yu. G.; Kireyev, V. G.</u>	
ORG: none	14 13 B
TITLE: Elastic container for storing and transporring liquids. Class 33, No. 178459	
SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 3, 1966, 50	
TOPIC TAGS: liquid container, portable container, elastic container	
ABSTRACT: An Author Certificate has been issued describing a port- able elastic container for storing and transporring liquids, which has a detachable fastener for the filling opening. To facilitate cleansing of the internal surface, the detachable fastener is a part of the filling opening which is equipped with clamping strips and a brass-type lock. To prevent the liquid from shifting in the con- tainer when it is partly full, there is a tightening belt attached to one of the clamp strips at the bottom of the container. (see Fig. 1).	
Card 1/2	UDC: 685.514.32
	[LD] 2

L 24512-66

ACC NR. AP6007680

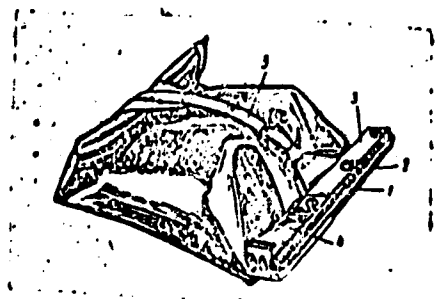


Fig. 1. Elastic containers for storing and transporting liquids. 1 - filling opening; 2 and 3 -- clamping strips; 4 - brass-type lock; 5 - tightening belt.

SUB CODE: 1/3

SUBM DATE: 20Nov64/

Card 2/2 BLO

KIREYEV, V. I., kand. med. nauk

Prolonged closed drainage of the extrahepatic bile ducts following their injury. Khirurgiia 37 no.7:127-128 J1 '61.

(MIRA 15:4)

1. Iz kafedry obshchey khirurgii (sav. - zaslushennyy deyatel' nauki UkrSSR prof. D. A. Vasilenko) Dnepropetrovskogo meditsinskogo instituta.

(BILE DUCTS—WOUNDS AND INJURIES)

KIREYEV, V. I., kand. med. nauk

Prolonged closed drainage of the extrahepatic bile ducts following their injury. Khirurgia 37 no.7:127-128 JI '61. (MIRA 15:4)

1. Iz kafedry obshchey khirurgii (sav. - zasluzhennyi deyatel' nauki UkrSSR prof. D. A. Vasilenko) Dnepropetrovskogo meditsinskogo instituta.

(BILE DUCTS—WOUNDS AND INJURIES)

KIREYEV, V.N., kandidat tekhnicheskikh nauk.
~~XXXXXXXXXXXX~~

Wear resistance of a chain working in an abrasive medium. Stroii
dor.mashinostr. 1 no.10:10-14 0 '56. (MLRA 9:8)
(Chains)

SOINTSEV, K.M., kand. sel'skokhozyaystvennykh nauk.; KIREYEV, V.N., kand.
sel'skokhozyaystvennykh nauk

Two-stage method of harvesting oil varieties of sunflower.
Zhivotnovodstvo 20 no. 7:27-30 J1 '58. (MIRA 11:8)

1. Balashovskaya gosudarstvennaya sel'skokhozyaystvennaya opyt'naya
stantsiya.

(Sunflowers--Harvesting)

DEMIN, Anatoliy Ivanovich [D'omin, A.I.]; PILIPENKO, Yuriy Petrovich [Pylypenko, IU.P.]; KIREYEV, Vasilii Petrovich [Kyrisiev, V.P.]; SUSHKO, I.S., red.; BERMAN, Z.G. [Berman, Z.H.], tekhn. red.

[Repair of tractors and automobiles; manual for secondary schools]
Remont traktoriv i avtomobiliv; pidruchnyk dlia seredn'oi shkoly.
Kyiv, Derzh. uchbovo-pedagog. vyd-vo "Radiants'ka shkola," 1960. 291 p.
(MIFA 14:11)

(Motor vehicles--Maintenance and repair)

LI, P.N., kand. veterin. nauk; MASLOVA, Z.V., veterinarnyy vrach; KIREYEV,
V.P., veterinarnyy vrach

Ulcerous posthitis in herd bulls and rams. Veterinariia 3, no. 6:
51-53 Je '62 (MIRA 18:1)

1. Saratovskaya nauchno-issledovatel'skaya veterinarnaya
stantsiya (for Li). 2. Saratovskaya oblastnaya veterinarno
bakteriologicheskaya laboratoriya (for Maslova). 3. Saratovskaya
gosudarstvennaya stantsiya iskusstvennogo osemneniya zhit'otnykh
(for Kireyev).

KIRBYEV, V.R.

Measurement of the voltampere characteristic of tunnel diodes.
Elektronvlaz' 19 no.9:75-77 S '65. (MIKA 18:9)

L 41107-66 EWT(1)

ACC NR: AR6014600

SOURCE CODE: UR/0274/65/000/012/2016/A016

AUTHOR: Kireyev, V. R.

TITLE: Stability of electric ^{LC} filters with negative resistances

SOURCE: Ref. zh. Radiotekhnika i elektrosvyaz', Abs. 12A122

REF SOURCE: Tr. Uchebn. in-tov svyazi, vyp. 25, 1965, 173-182

TOPIC TAGS: electric filter, filter circuit, circuit theory

ABSTRACT: It is shown that the search for the stability conditions for LC filters with negative resistances can be significantly simplified by using frequency transformation and the reversibility relation for electric filter circuits. The proofs for three theorems necessary to verify the indicated condition are presented. Theorem 1 states that, if one electric circuit is obtained from another by transformation of the complex frequency $p = \varphi(p')$, the new characteristic equation can be obtained from the old by transformation of the complex frequency of the same form. Theorem 2 states that, if an electric circuit is obtained from another by a transformation of the form $p = Ap'$ or $p = \frac{A}{p'}$, where $A > 0$, the original and derived circuits have the same stability conditions. Theorem 3 shows that the characteristic equations of two mutually reversible circuits differ by only a constant multiplier. 4 illustrations. L. S. [Translation of abstract]

Card 1/1

SUB CODE: 09 11b

UDC: 621.372.54

KIREYEV, V.S., kand. tekhn. nauk

English conveyors and cranes. Mekh. i avtom. proizvod. 17 no.12:
49-51 D'63. (MIRA 17:2)

KIREYEV, V. S., inzh.

Over-all mechanization of reloading operations. Mekh.1 avtom.
proizv. 14 no.8:36-39 Ag '60. (MIRA 13:8)
(Loading and unloading--Technological innovations)

KIREYEV, V. S.

Cand Tech Sci - (diss) "Problems of the theory and design of container self-sling ropes [avtostropy]." Khar'kov, 1961. 15 pp; (Ministry of Railways USSR, Khar'kov Inst of Railroad Transport Engineers imeni S. M. Kirov); 150 copies; price not given; (KL, 6-61 sup, 218)

KIREYEV, V.S., kand.tekhn.nauk

British exhibition of conveying and hoisting machinery.
Mekh.i avtom.proizv. 16 no.10:54-56 0 '62. (MIRA 15:11)
(Great Britain—Exhibitions)
(Conveying machinery) (Hoisting machinery)

KIREYEV, V.S., kand.tekhn.nauk

Equipment for installing contact network poles. Transp. stroi.
12 no.12:53-54 D '62. (MIRA 16:1)
(Great Britain--Railroads--Electrification)

AKSENOV, N.S., inzh.; KIREYEV, V.S., kand. tekhn. nauk

Means for the mechanization of handling high-capacity containers.
Mekh. i avtom. proizvod. 17 no.6:57-60 Je '65. (MIRA 16:7)

(Materials handling)

L 46675-66 EWP(m)/EWT(1) WW

ACC NR: AP6020722

SOURCE CODE: UR/0421/66/000/003/0031/0038

AUTHOR: Dem'yanov, Yu. A. (Moscow); Kireyev, V. T. (Moscow) 60/3

ORG: none

TITLE: Application of the equations of nonstationary mixing to certain aerodynamic problems

SOURCE: AN SSSR. Izvestiya. Mekhanika zhidkosti i gaza, no. 3, 1966, 31-38

TOPIC TAGS: shock wave reflection, shock wave interaction, aerodynamic boundary layer, boundary layer transition

ABSTRACT: In view of the simplifications that result in gas dynamics when tangential discontinuities are replaced by mixing (transition) regions, the authors analyze the self-similar solutions of the equations of nonstationary turbulent mixing in full analogy with an analysis by one of the authors (Dem'yanov, Nauchn. dokl. vysshey shkoly Fiziko-matem. nauki, 1958, no. 3) of the equations of laminar mixing, coinciding with the boundary-layer equations. It is shown that these self-similar solutions are valid also for the problem of formation of stationary jets and mixing regions in a bottom wake. As an example of the discussed procedure, the authors solve approximately the problem of interaction between a shock wave reflected from a semi-infinite wall and the boundary layer on a horizontal plate behind the incident shock wave. The results are used to analyze reflection in a shock tube. The calculation results are in good agreement with published experimental data. Orig. art. has: 3 figures and 31 formulas.

SUB CODE: 20/
Card 1/1 hs

SUBM DATE: 31Dec64/

ORIG REF: 008/

OTH REF: 005

L 43999-66 EWT(1)/EWP(m)

ACC NR: AP6030121

SOURCE CODE: UR/0421/66/000/004/0177/0180

AUTHOR: Kirayev, V. T. (Moscow) 37
B

ORG: none

TITLE: Establishing steady-state mixing in jets

SOURCE: AN SSSR. Izvestiya. Mekhanika zhidkosti i gaza, no. 4, 1966, 177-180

TOPIC TAGS: jet flow, turbulent mixing, jet mixing

ABSTRACT: The flow of plane and axisymmetric jets is analyzed. Using the method of integral relationships, an approximate calculation is presented of the time for establishing steady-state flow mixing at various cross sections of a jet. Orig. art. has: 24 formulas. [AS]

SUB CODE: ²⁰~~21~~ / SUBM DATE: 21Jul65/ ORIG REF: 004/ OTH REF: 001
ATD PRESS: 5071

Card 1/1 blg