middle Volga, and in the Ural, natural gas will become the most important source of raw material for the nitrogen industry. In the GIAP (State Institute for the Nitrogen Industry) a method for the oxidation of hydrocarbons of additional gases by oxygen at low temperature for the purpose of obtaining aldehydes and methanol and a subsequent transformation of the residue gases into a nitrogen-hydrogen mixture for the ammonia synthesis was developed. In the nitrogen industry schemes for a catalytical conversion of natural-, additional- and coke gases both under pressure and without pressure were developed. Gas conversion with and without pressure at high temperatures has already been introduced on a large scale. Gas washing with liquid nitrogen makes large cleaning- and purification plants superfluous and also the capital investments connected with them. The costs of producing hydrogen must be further reduced. Ammonia synthesis is carried out at pressures of 300 to 700 at. A short survey is given of the production of nitric acid,

CARD 3/3

ZAMARAYEV, I.K.; MEL'NIK, B.D.; KOSTANDOV, L.A.

Nikolai Mikhailovich Zhavoronkov; on his fifieth birthday. Khim. nauka i prom. 3 no.4:521 '58. (MIRA 11:10)
(Zhavoronkov, Nikolai Mikhailovich, 1908-)

KOSTAKOV, L.A.

PHASE I BOOK EXPLOITATION SOV/4579

Konferentsiya po razvitiyu proizvoditel'nykh sil Vostochnoy Sibiri, 1958. Khimicheskaya sektsiya

Khimicheskaya promyshlennost'; trudy konferentsii (Chemical Industry; Transactions of the Conference on the Development of Production Forces in Eastern Siberia) Moscow, Izd-vo AN SSSR, 1960. 202 p. (Series: Razvitiye proizvoditel'nykh sil Vostochnoy Sibiri) Errata slip inserted. 2,000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Sovet po izucheniyu proizvoditel'nykh sil. Sibirskoye otdeleniye.

Editorial Board: I.P. Bardin (Deceased) Chief Ed., Academician; M.A. Lavrent'yev, Academician; S.I. Vol'fkovich, Academician, V.I. Dikushin, Academician; V.S. Nemchinov, Academician; V.I. Veyts, Corresponding Member, Academy of Sciences USSR; O.D. Levitskiy, Corresponding Member, AS USSR; N.N. Nekrasov, Corresponding Member, AS USSR; L.V. Pustovalov, Corresponding Member, AS USSR; T.S. Khachaturov, Corresponding Member, AS USSR; N.F. Rostovtsev, Academician, VASKhNIL; A.N. Popov, Corresponding Member, Academy of Building and Architecture USSR; L. Ye. Grafov, Deputy Chairman, Gosplan RSFSR; A.D. Gashev, Member, Gosplan RSFSR; A. Ye. Probst, Professor; V.F. Vasyutin, Professor; V.A. Krotov, Professor;

~~Card 1/10~~

Chemical Industry (Cont.) SOV/4579

P.V. Vasil'yev, Doctor of Economic Sciences; G.I. Lyudogovskiy, Candidate of Technical Sciences; P.A. Letunov, Candidate of Geological and Mineralogical Sciences; and M.G. Shkol'nikov, Candidate of Economic Sciences; Editorial Board of this volume: S.I. Vol'fkovich (Resp. Ed.); G.V. Uvarov, Deputy Chairman, State Committee on Chemistry, Council of Ministers USSR; and V.P. Komarov, Docent; Ed. of Publishing House: A.L. Bankvitser; Tech. Ed.: V.V. Bruzgul'.

PURPOSE: This book is intended for chemical engineers and economic planners concerned with the industrial development of Eastern Siberia.

COVERAGE: This volume is one of a series of 13 containing the Transactions of the Conference on the Development of the Productive Forces in Eastern Siberia. The Conference took place in August 1958. The volume contains summaries of 20 reports presented at the meetings of the Chemical Section of the Conference, brief summaries of pertinent discussions, and the text of resolutions taken by the Chemical Section. The reports deal with the possibilities of developing chemical industries in Eastern Siberia capable of producing artificial fibers, acetylene, plastics, synthetic detergents, synthetic rubber, mineral fertilizers, sulfuric acid, nitrogen, soda, chlorine, etc. No personalities are mentioned. There are no references.

~~Card 2/10~~

KOSTANDOV, L.A.

Problems involved in the increase of the production of mineral fertilizers. Khim. prom. no. 2:75-77 F '61. (MIRA 14:4)
(Fertilizers and manures)

KOSTANDOV, L.A.; MEL'NIK, B.D.

Thirteenth Exhibition of ACHEMA of Chemical Apparatus. Khim. prom. no.10:68-77 O '61. (MIRA 15:2)
(Frankfort on the Main--Chemical apparatus--Exhibitions)

KOSTANDOV, L.A.

Automation in the chemical industry. Mekh.i avtom.proizv. 15 no.9:15-18 S '61. (MIRA 14:11)

1. Zamestitel' predsedatelya Gosudarstvennogo komiteta Soveta Ministrov SSSR po khimii.
(Chemical industries)
(Automation)

KOSTANDOV, L.A.

Raise the production of mineral fertilizers to a new high.
Zemledelie 24 no.4:58-62 Ap '62. (MIRA 15:4)

1. Zamestitel' predsedatelya Gosudarstvennogo komiteta Soveta Ministrov SSSR po khimii.
(Fertilizer industry)

KOSTANDOV, L.A., ministr SSSR

Development of the chemical machinery industry and objectives of the introduction of chemical processes into the national economy. Vest. mashinostr. 43 no.12:3-6 D '63. (MIRA 17:8)

1. Predsedatel' Gosudarstvennogo komiteta khimicheskogo i neftyanogo mashinostroyeniya pri Gosplane SSSR.

KOSTANDOV, L.A.

International exhibition of "Chemistry in industry, building, and agriculture" in Moscow. Khim. prom. 41 no.10:721-722 O '65. (MIRA 18:11)

KOSTANDYAN, B.A.

Kostandyan, B. A. On torsion of a shaft with an annular ~~groove of rectangular~~ form. Akad. Nauk Armyan. SSR. Izv. Fiz.-Mat. Estest. Tehn. Nauki 7, no. 4, 23–53 (1954). (Russian. Armenian summary)

A solution of the torsion problem for a solid cylindrical shaft consisting of three circular cylinders of different radii, twisted by axially symmetric tractions applied to the lateral surface of the shaft is given. The solution is obtained in the series of Bessel's functions, the coefficients in which can be determined from a completely regular system of linear algebraic equations. Explicit formulas for the determination of stresses are recorded.

I. S. Sokolnikoff (Los Angeles, Calif.)

1 - F/W

KOSTANDYAN, B.A.

Torsion of a tubular stepped shaft. Izv.AN Arm.SSR.Ser.FMET nauk 9 no.3:17-32 '56. (MLRA 9:9)

1.Yerevanskiy gosudarstvennyy universitet imeni V.M.Moletova.
(Strains and stresses) (Torsion)

AUTHOR: Kostandyan, B.A. SOV/22-11-3-4/5

TITLE: The Torsion of a Shaft With a Superimposed Disc (Krucheniye vala s nasazhennym diskom)

PERIODICAL: Izvestiya Akademii nauk Armyanskoy SSR, Seriya fiziko-matematicheskikh nauk, 1958, Vol 11, Nr 3, pp 63-77 (USSR) 1958

ABSTRACT: The author considers the torsion of a round cylindrical shaft of finite length, at the one end of which a disc of an other material is superimposed. The stress distributed over the whole free surface of the shaft and the disc is described by piecewise continuous functions of bounded variation, which can be developed in Fourier series and Fourier-Dini-series. By series hypotheses the problem is reduced to an infinite system of linear equations, the properties of which are considered in detail. A numerical example is given.
There are 2 figures, 1 table, and 8 references, 5 of which are Soviet, 1 German, and 2 American.

ASSOCIATION: Yerevanskiy gosudarstvenny universitet (Yerevan' State University)
SUBMITTED: February 6, 1958

Card 1/1 1. Shafts—Torque 2. Mathematics

88764
S/040/60/024/006/018/024
C 111/ C 333

24.5200 (1498, 1385, 1395)

AUTHOR: Kostandyan, B. A. (Moscow)

TITLE: On the Stability of the Solution of the Nonlinear Heat-Conduction Equation

PERIODICAL: Prikladnaya matematika i mekhanika, 1960, Vol. 24, No. 6, pp. 1112-1114

TEXT: Let G be a bounded domain of the $E^m(x_1, \ldots, x_m)$ with boundary Γ. In G the author considers the problem

(1) $\frac{\partial u}{\partial t} = \Delta u + f(x,t,u), \quad u|_\Gamma = 0 \quad u|_{t=0} = \varphi(x)$

for $0 < t < \infty$. Δ is the Laplace operator; $f(x,t,u) = o(u)$ for $u \to 0$.

Let $M = \{u(x,t)\}$ be the set of the continuous functions with continuous derivatives $\partial u/\partial t$ and $\partial^2 u/\partial x_i \partial x_j$. After introduction of the norm

(2) $\|u\| = \left(\int_G u^2(x,t)\,d\Omega\right)^{1/2}$

one obtains a space C_{L^2}. For $\varphi(x) \equiv 0$ the problem possesses the

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[illegible] the condition

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On the Stability of the Solution of the Nonlinear Heat-Conduction Equation

$$\lambda_{min} \geq \beta + \eta$$

Here η is chosen so that $\sqrt{2\varkappa(t_0)}e^{-\beta t_0}[V(t_0)]^{1/2} \leq \eta$, where $V(t)$ is a certain positive-definite function.

There are 4 references: 2 Soviet, 1 Polish and 1 American.

SUBMITTED: June 10, 1960

Card 3/3

KOSTANDYAN, B.A. (Moskva)

Stability of the rotary motions of a gyroscope having a cavity partially filled with a liquid. PMTF no.3:56-64 My-Je '61. (MIRA 14:7)

1. Institut mekhaniki AN SSSR.
(Gyroscope)

26127
S/040/61/025/004/006/021
D274/D306

13,9520

AUTHOR: Kostandyan, B.A. (Yerevan)

TITLE: Effect of oscillations of free liquid-surface on the stability of a spinning top containing the liquid

PERIODICAL: Prikladnaya matematika i mekhanika, v. 25, no. 4, 1961, 646-656

TEXT: The stability of rotation of a gyroscope with incompletely filled envelope (cavity) is analyzed. Oscillations of the free surface of a slowly rotating liquid in a cylindrical envelope are examined. The equations of motion in a moving coordinate-system are set up. The small oscillations of the liquid, due to gravity, are investigated. The height of the free surface (above the undisturbed level) is denoted by $\zeta^*(x,y)$. Cylindrical coordinates r, are introduced; the function $\zeta(r,\theta)$, with period θ, is expanded in a Fourier series in $e^{is\theta}$. For ζ_s one obtains

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S/040/61/025/004/006/021
D274/D306

Effect of oscillations...

$$\frac{d^2\zeta_s}{dr^2} + p(r)\frac{d\zeta_s}{dr} + q(r)\zeta_s = 0 \qquad (1.12)$$

where $p(r) = \frac{1}{r} + \frac{2r}{\lambda^2}\left(1 + \frac{r^2}{\lambda^2}\right)^{-1}$, $q(r) = \left(\frac{4\omega\sigma}{\lambda^2\sigma} + \frac{\sigma^2 - 4\omega^2}{gh_o}\right)\left(1 + \frac{r^2}{\lambda^2}\right)^{-1} - \frac{s^2}{r^2}$

$\lambda^2 = \frac{2gh_o}{\omega^2}$. The solution

$$\zeta_s = \left(\frac{r}{\lambda}\right)^s \left[1 + \sum_{k=1}^{\infty} a_{2k}\left(\frac{r}{\lambda}\right)^{2k}\right] \qquad (1.21)$$

converges for all r(0 r a); the obtained solution ought to satisfy the boundary condition u = 0 for r = a; this amounts to

$$f\left(\frac{\sigma}{\omega}\right) \equiv \frac{a}{\lambda}\zeta_s'\left(\frac{a}{\lambda}\right) + \frac{2\omega s}{\sigma}\zeta_s\left(\frac{a}{\lambda}\right) = 0 \qquad (1.23)$$

whence the frequencies of oscillation are determined. On oscillations of the free surface of a fast rotating liquid it is noted that for a cylindrical envelope of radius a and height 2c, the equation for the free-surface oscillations is

Card 2/4

Effect of oscillations...

frequency of oscillations of the free surface coincides with the frequency of nutation, a strong disturbance of the free surface takes place; this leads to non-symmetrical waves on the liquid surface, causing instability of the gyroscope. In order to verify gyroscope stability, (at a given amount of liquid), the values of σ/ω, calculated by a formula, are compared with the ratio ω_n/ω. If at least one value of the first ratio coincides with (or is very near to) the second ratio, the gyroscope becomes instable. Such an approach is confirmed by Word's experiment, (Ref. 11: K. Stewartson, On the stability of a spinning top containing liquid. J. Fluid Mechan., 1959, v. 5, part 4). There are 6 figures and 15 references: 12 Soviet-bloc and 3 non-Soviet-bloc. The reference to the English-language publication reads as follows: K. Stewartson, On the stability of a spinning top containing liquid. J. Fluid Mechan., 1959, v. 5, part 4.

ASSOCIATION: Institut matematiki i mekhaniki AN ArmSSR (Institute of Mathematics and Mechanics, AS ArmSSR)

SUBMITTED: April 21, 1961

Card 4/4

KOSTANDYAN, B.A.

Correction to the article "Stability of the spinning motions of a gyroscope containing a cavity incompletely filled with liquid." PMTF no.2:176 Mr-Ap '63. (MIRA 16:6)

(Gyroscope)

"Studying the corrosion of metals in a hydrogen-sulfide environment."
Gaz, Woda I Technika Sanitarna, Warsaw, Vol 28, No 5, May 1954, p. 145

SO: Eastern EuropeanAccessions List, Vol 3, No 10, Oct 1954, Lib. of Congress

KOSTEWICZ, Lech; PAWLOWSKI, Andrzej; KOSTANECKI, Wojciech

Effect of sweating on the excretion of ether-soluble substances. Przegl. derm. 52 no.4:397-401 Jl-Ag '65.

1. Z Kliniki Dermatologicznej AM w Warszawie (Kierownik: prof. dr. S. Jablonska).

PAWLOWSKI, Andrzej, KOSTANECKI, Wojciech

Effect of biotin on hair roots and sebum excretion in females with diffuse alopecia. Przegl. derm. 52 no.3:265-269 My-Je '65.

1. Z Kliniki Dermatologicznej AM w Warszawie (Kierownik: prof. dr. S. Jablonska).

KOSTANECKI, Wojciech; PETRYKIEWICZ, Roman [deceased]; PAWLOWSKI, Andrzej

Studies on alopecia in women. Przegl. derm. 50 no.6:541-545 N-D'63

1. Z Kliniki Dermatologicznej AM w Warszawie; kierownik: prof. dr. S.Jablonska.

KOSTANECKI, Wojciech

Theoretical and practical significance of studies on the hair cycle. Przegl. derm. 50 no.2:215-222 Mr-Je '63.

1. Z Kliniki Dermatologicznej AM w Warszawie; kierownik: prof.dr. S.Jablonska.

KOSTANECKI, Wcyciech

Pathogenesis and attempted therapy of alopecia of the male type. Przegl.derm.,Warsz.46 no.5:503-509 S-O '59.

1. Z Kliniki Dermatologicznej A.M. w Zabrzu. Kierownik: prof.dr. T. Chorazak.

(ALOPECIA)

KOSTANECKI, Wojciech

Effect of sex hormones on alopecia in rabbits produced by human sebum. Prezegl.derm., Warsz. 47 no.4:293-299 Jl-Ag '60.

1. Z Kliniki Dermatologicznej A.M. w Zabrzu Kierownik: prof. dr T.Chorazak

(SEBUM toxicol)
(ALOPECIA exper)
(ANDROGENS pharmacol)

KOSTANECKI, Wojciech

Attempted production of acne in rabbits. Przegl. derm. 48 no.8/10:435-441 '61.

1. Z Kliniki Dermatologicznej A.M. w Zabrzu Kierownik: Prof. dr T. Chorazak.

(ACNE exper)

KOSTANECKI, Wojciech

Views on dermatological education. The most frequent diagnostic errors in skin diseases committed by physicians not specialising in dermatology. Polski tygod. lek. 16 no.29:1129-1131 17 Jl '61.

(DERMATOLOGY diag)

KOSTANECKI, Wojciech

Certain problems of external dermatological therapy. Przegl. derm. 48 no.2:129-134 '61.

1. Z Kliniki Dermatologicznej AM w Zabrzu Kierownik: prof. dr T. Chorazak.

(DERMATOLOGY ther)

KOSTANJEVEC, Joze, inz.

Largest Yugoslav crane for export. Stroj vest 9 no.1/2:59-60 Ap '63.

1. Metalna, Maribor.

DEKANOVA, Emilia; KOSTANJEVEC, Stefan

Economic results of the E-153 (Belarus) universal dredger.
Inz stavby 12 no.1:Suppl.:Mechanizace no.1:9-12 '64.

1. Ustav ekonomiky a organizacie stavebnictva, Bratislava.

KOSTANJEVAC, S., inz.

A conference on the automation in ferrous metallurgy. Automatika 4 no.1:71-72 '63.

KOSTANJSEK, Drago

Some factors influencing the consumption of electric energy. Energija Hrv 10 no.11/12:409-410 '61

1. BUDNIKOV, A. S., Eng.; KOSTANOVICH, V. M., Eng.
2. USSR (600)
4. Mixing Machinery
7. Mobile plaster mixing unit. Biul. stroi. 15, No. 5, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

AGLINTSEV, K.K.; KARAVAYEV, F.M.; KOSTANTINOV, A.A.; OSTROMUKHOVA, G.P.; KHOL'NOVA, Ye.A.

Standardizing radioactive preparations. Atom.energ. no.2:55-62 '56. (MIRA 12:2)

(Radiation--Dosage)

KOSTANTINOV, B.

New method for fresco painting. p. 20, (MATSIONALIZATSIIA, Vol. 3 no. 10/11, Oct./Nov./ 1953. Sofiya, Bulgaria)

SO: Monthly list of east European Accessions, (EEAL, LC, VOL. 3 No. 12, Dec. 1954, Uncl.

RUBEN, R.; MIOVSKI, D.; KOSTANTINOV, D.

Malignant tumors of the skin in our clinical material. God. zborn. med. fak. Skopje 11:119-123 '64.

1. Klinika za kozni i venerični bolesti na medicinskiot fakultet, Skopje (direktor: prof. d-r. D. Miovski).

MERKOV, A.M., prof.; KOSTANTINOV, G.F., kand.med.nauk; GRAZHUL', V.S., kand.med.nauk

Practicality of standardizing Soviet and international nomenclature of diseases and causes of death. Gig. i san. 23 no.7: 47-56 Jl '58. (MIRA 12:1)

(NOMENCLATURE
dis. & causes of death, necessity for unification of Soviet & internat. terminol. (Rus))

1. KOSTANTINOV, N.

2. USSR (600)

4. Slavic Languages - Writing

7. History of the Russian alphabet. Znan. sila No. 1, 1953.

9. **Monthly List of Russian Accessions**, Library of Congress, May 1953. Unclassified.

KOSTANYAN, A.A.

Effect of keeping calves in stalls and pastures on the development of postvaccination immunity in paratyphoid fever in calves. Izv.AN Arm.SSR.Biol. i sel'khoz.nauki 9 no.11:81-89 N '56. (MLRA 10:1)

1. Kafedra zoogigiyeny s osnovami veterinarii Yerevanskogo zooveterinarnogo instituta.
(Calves--Diseases and pests) (Paratyphoid fever--Preventive inoculation) (Immunity)

Kostanyan, A.A.

USSR / Diseases of Farm Animals. Diseases Caused by Bacteria and Fungi. R

Abs Jour: Ref Zhur-Biol., No 8, 1958, 35824.

Author : Kostanyan, A.A.
Inst : Erevan' Institute of Zoology and Veterinary Medicine.
Title : Influence of Vitamin A on the Formation of Postvaccinal Immunity to Paratyphoid in Calves.

Orig Pub: Tr. Yerevansk. zoovet. in-ta, 1956, vyp. 20, 153-161.

Abstract: Experiments were conducted on 18 calves during the period when they were kept in the barn, with meagre and vitamin-poor forage. Total carotin content amounted to 4525 γ or 14.932 m. units in the animals' rations. During a period of 60 days, the calves of the experimental group received an additional 100 milligrams of vitamin .

Card 1/3 13

KOSTANYAN, A. A., Cand of Vet Sci -- (diss) "Influence of certain factors of environment on the formation of post-vaccination immunity to paratyphoid in calves." Yerevan, 1957, 25 pp (Yerevan Zooveterinary Institute) 100 copies (KL, 32-57, 95)

KOSTANYAN, A.A.

SAKANYAN, S.Sh.; KOSTANYAN, A.A.

Role of the cerebral cortex in the development of postvaccinal immunity. Izv. AN Arm. SSR. Biol. i sel'khoz. nauki 10 no.12:9-16 D '57. (MIRA 11:2)

1.Yerevanskiy zooveterinarnyy institut.
(CEREBRAL CORTEX) (AGGLUTININS)

KOSTANYAN, A. A.

USSR / General Problems of Pathology. Immunity. U

Abs Jour : Ref. Zhur. - Biologiya, No. 3, 1959 13432

Author : Kamalyan, G. V.; Mnatsakanyan, A. A.; Kostanyan, A. A.

Inst : Academy of Sciences Armenian SSR

Title : The Influence of Certain Biogenic Amines on the Displacements of Protein Fractions of Blood and the Stimulation of Agglutinins Formation. Report I. The Influence of Colamine and Acetylcholine on the Stimulation of Agglutinin Formation and Displacements of Protein Fractions of the Blood of Rabbits by Vaccination with Paratyphoid Vaccine.

Orig Pub : Dokl. AN ArmSSR, 1957, 25, No. 2, 69-73

Abstract : The immunization of rabbits was conducted with

Card 1/2

5

KOSTANYAN, A.A.

Effect of the air temperature on the development of postvaccinal immunity in the paratyphoid fever of calves and rabbits. Izv. AN Arm. SSR. Biol. i sel'khoz. nauki 11 no. 5:25-32 My '58.
(MIRA 11:7)

1. Kafedra zoogigiyeny s osnovami veterinarii Yerevanskogo zooveterinarnogo instituta.
(Temperature--Physiological effect)
(Paratyphoid fever--Preventive inoculation)

SAKANYAN, S.Sh.; KOSTANYAN, A.A.

Role of the cerebral cortex in the development of postvaccinal immunity. Report No.2. Izv. AN Arm.SSR. Biol. i sel'khoz.nauki 11 no.8:39-46 Ag '58. (MIRA 11:10)

1. Kafedra farmakologii Yerevanskogo zoovetinstituta.
(CEREBRAL CORTEX) (VACCINATION) (AGGLUTININS)

KOSTANYAN, A.A.

KAMALYAN, G.V.; MNATSAKANYAN, A.A.; KOSTANYAN, A.A.

Effect of some biogenic amines on shifts in the blood protein fractions and their stimulating influence on agglutinin formation. Izv.AN Arm.SSR.Biol. i sel'khoz.nauki 11 no.11: 47-54 N '58. (MIRA 11:12)

1. Yerevanskiy zooveterinarnyy institut.
(VACCINATION) (ETHANOL)

GAZARYAN, V.S.; KOSTANYAN, A.A.

Effect of ultraviolet rays on the development of postvaccinal immunity in rabbits inoculated with paratyphoid vaccine. Izv. AN Arm. SSR. Biol. nauki 13 no. 7:11-16 Jl '60. (MIRA 13:10)

1. Kafedra zoogigiyeny Yerevanskogo zooveterinarnogo instituta.
(ULTRAVIOLET RAYS—PHYSIOLOGICAL EFFECT)
(VACCINATION)

SAKANYAN, S.Sh.; KOSTANYAN, A.A.

Role of the cerebral cortex in the development of postvaccinal immunity. Izv. AN Arm. SSR. Biol. nauki 18 no.1:97-101 Ja '65. (MIRA 18:5)

1. Yerevanskiy zooveterinarnyy institut, kafedra farmakologii.

KOSTANYAN, A.O.

Effect of hearing on the rate of the motor reaction in man. Zhur. eksp. i klin. med. 3 no.1: 79-85'63. (MIRA 16:10)

1. Sportivnaya shkola vodnykh vidov Yerevanskogo gorodskogo otdela narodnogo obrazovaniya.
(HEARING) (TIME PERCEPTION)
(MOTION STUDY)

AGOSHKOV, M.I.; BUD'KO, A.V.; ARUTYUNOV, K.G.; BOGDANOV, G.I.; KRIVENKOV, N.A.; Prinimali uchastiye: ZAMESOV, N.A.; GAGULIN, M.V.; KRASAVIN, G.A.; VORONYUK, A.S.; KOSTAN'YAN, A.Ya., red.izd-va; ASRAF'YEVA, G.A., tekhn. red.; SIMKINA, G.S., tekhn. red.

[Analysis of the development systems of mines in the Krivoy Rog Basin] Analiz sistem razrabotki rudnikov Krivorozhskogo basseina. Moskva, Izd-vo AN SSSR, 1963. 184 p. (MIRA 17:3)

1. Chlen-korrespondent AN SSSR (for Agoshkov).

TRUMBACHEV, Vladimir Fedorovich; MOLODTSOVA, Lyudmila Semenovna; LIBERMAN, Yu.M., kand. tekhn. nauk, otv. red.; KOSTAN'YAN, A.Ya., red.; RYLINA, Yu.V., tekhn. red.

[Using the optical method to study the stress state of rocks around mine workings] Primenenie opticheskogo metoda dlia issledovaniia napriazhennogo sostoianiia porod vokrug gornykh vyrabotok. Moskva, Izd-vo Akad.nauk SSSR, 1963. 93 p. (MIRA 16:5)

(Rock pressure--Models) (Photoelasticity)

KOSTANYAN, B. A.

"Effect of Various Methods of Pollination on the Vitality and Inheritance Characteristics of Beets and Tomatoes." Cand Biol Sci, Department of Biological Sci, Acad of Sci, Armenian SSR, Yerevan, 1953. (RZhBiol, No 1, Sep 54)

SO: Sum 432, 29 Mar 55

KOSTANYAN, B.A.

Viability of pollen and stigma of the sugar beet [in Armenian with summary in Russian]. Izv.AN Arm.SSR.Biol.i sel'khoz.nauki 6 no.1: 77-82 '53. (MLRA 9:8)

(Sugar beet)

KOSTANYAN, B.A.

Effect of different methods of pollination on the productivity of tomato plants [in Armenian with summary in Russian]. Izv.AN Arm. SSR.Biol.i sel'khoz.nauk. 6 no.7:19-26 '53. (MLRA 9:8)
(Tomatoes)

MINASYAN, S.M.; KOSTANYAN, B.A.

Variation in the quantity of food reserves in tomato seeds produced by different methods of sexual reproduction. Izv.AN Arm.SSR.Biol.i sel'khoz.nauki 7 no.8:51-58 Ag '54. (MLRA 9:8)

1. Institut genetiki i selektsii rasteniy AN Arm. SSR.
(Tomatoes) (Seeds)

KOSTANYAN, B.A.

Selectivity of fertilization in tomatoes using different methos of sexual reproduction [in Armenian with summary in Russian]. Izv.AN Arm.SSR.Biol.i sel'khoz.nauki 8 no.2:53-62 F '55. (MLRA 9:8)
(Tomatoes) (Fertilization of plants)

were two varieties, the yielder and the sugary V-1612, and two table beets, the Bordeaux and Non-pareil. Each variety of sugar beet was crossed with one of the table varieties. The experiment

Card : 1/3

USSR/Cultivated Plants. Commercial. Oil-Bearing. Sugars.

Abs Jour: Ref Zhur-Biol., No 5, 1958, 20420.

was performed in 1949-1952 in the Institute for Plant Genetics and Selection of the Academy of Sciences Armenian SSR. The plant pollination and fertilization took place in artificial isolators. It was established that in free intervarietal pollination and with supplemental outside pollination, the sugar beet to a considerable degree selects the pollen of the table beet, although the table beet to a large extent selects its own pollen. First generation plants of both the maternal and intermediary types yield in the second generation plants of the intermediary and maternal types, confirming the presence of impregnation (at the first crossing) by outside pollen. A higher percentage of seed setting and greater viability was observed in the plants when cross pollination occurred with the

USSR/Cultivated Plants. Commercial. Oil-Bearing. Sugars.

Abs Jour: Ref Zhur-Biol., No 5, 1958, 20420.

participation of its own pollen. Therefore, to obtain plants with a greater viability, it is necessary to use the seeds of pollen from both crossed components.

Abstracter's remark. In Table No 1 which is presented in the article, column three contains the figures 65, 75, 65 and 187 which should in all probability be replaced by 100, 100, 100 and 100.

Card : 3/3

Card 1/2

73

USSR / Cultivated Plants. Potatoes, Vegetables, Melons. M-2

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 6280

Author : Kostanyan, B. A.
Inst : Agric. Institute, Arm SSR
Title : Culture of Tomatoes Issued from Hybrid Seeds

Orig Pub : Izv. AN ArmSSR, Biol. i s.-kh. n., 1958, 11, No 3, 67-70

Abstract : Mayak x Krasnodarets (108% increment of yield), Mayak x Krasnoznamennyy (84%), Krasnyy Dar x Mayak (38%), Margib x Krasnyy Dar, which had been grafted (258%) and others were found to be the best among 40 variants of intervariety hybrids and grafts, tested at the Agricultural Institute of Arm SSR. The best named of these hybrids was also characterized by the high quality of its fruits. In addition its fruits appear early.

Card 1/1

L 11176-67 EWT(d)/EWP(1) IJP(c) GG/WW/BB

ACC NR: AT6026470 SOURCE CODE: UR/3012/65/000/003/0069/0080 34 33

AUTHOR: Kostandyan, B. A.

ORG: none

TITLE: On a problem of nonlinear mechanics involved in designing a magnetic drum with a flying-head 16

SOURCE: Yerevan. Vychislitel'nyy tsentr. Trudy, no. 3, 1965. Matematicheskiye voprosy kibernetiki i vychislitel'noy tekhniki; modelirovaniye protsessov upravleniya (Mathematical problems in cybernetics and computer engineering; modelling control processes), 69-80

TOPIC TAGS: digital electronic computer, magnetic drum flying head, magnetic drum, hydrodynamic theory, mechanics, pressure lubrication / Razdan-2 digital electronic computer

ABSTRACT: The capacity of magnetic drum storage can be greatly augmented by increasing the density of data recording, i.e. chiefly, by reducing the clearance between the drum and the head. This, however, raises the problem of maintaining this clearance constant in order to avoid damage to the drum surface; this can best be accomplished by using a flying-head (an air-floating head). Essentially this means exploiting the force of repulsion which, given a

Card 1/2

L 11174-67
ACC NR: AT6026470

specific shape of the head, arises between the head and the drum (with a layer of viscous fluid) and which increases with decrease in the clearance, thus preventing the latter decrease. In this connection, it is shown that, depending on the dimensions of the head, for certain configurations the resultant of the pressure of the fluid on the head decreases with decrease in clearance. It is further shown that the problem of determining this pressure reduces to thy hydrodynamic problem of the theory of lubrication in finite sliding bearings, which is not amenable to an exact analytic solution but can be solved by the numerical method (numerical solution of a partial differential equation) with the aid of the most exact of the known equations characterizing the distribution of pressure in a layer of a viscous incompressible fluid between the journal and the bearing. Hence also the problem reduces the solution of the first boundary-value problem for an elliptic-type equation with variable coefficients, which had previously been solved by means of the Razdan-2 digital electronic computer. Thus, e.g. for a flying--head with the dimensions 22x20 mm constant clearance $h_m \approx 3\ \mu$ between the flying-head and the drum can be maintained if $x_m/B >> 0.96$, where x_m is the abscissa of the point of head nearest to the drum and B is the dimension of the head with respect to the x-axis (the axis running along the drum periphery in the direction of motion). Orig. art. has: 7 figures, 24 formulas.

SUB CODE: 09, 20 / SUBM DATE: none/ ORIG REF: 006/ OTH REF: 002

Card 2/2 mlc

DOVLATYAN, V.V.; KOSTANYAN, D.A.

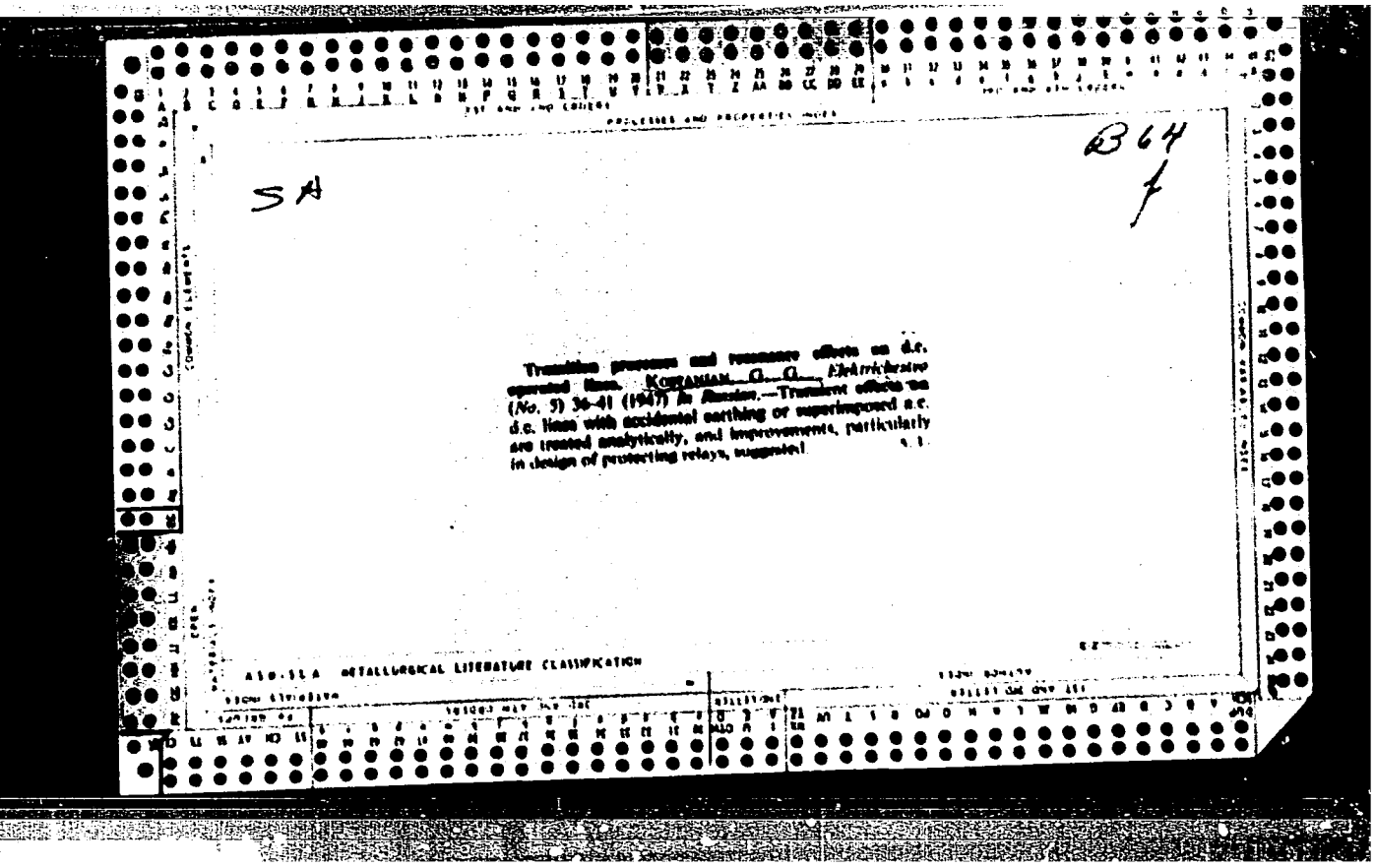
Polyvinyl esters of aryloxyacetic acids. Izv. AN Arm. SSR. Khim. nauki 18 no.3:325-327 '65. (MIRA 18:11)

1. Armyanskiy sel'skokhozyaystvennyy institut, kafedra obshchey khimii. Submitted February 23, 1965.

DOVLATYAN, V.V.; KOSTANYAN, D.A.

Chrolomethoxymethylation and conversions of products obtained. Report No.4: Action of a chloromethylating mixture on ethyl esters of α-arylacetoacetic acids. Izv. AN Arm. SSR. Khim. nauki 16 no.6:559-563 '63 (MIRA 17:8)

1. Armyanskiy sel'skokhozyaystvennyy institut, kafedra obshchey khimii.



SA

B64

f

Transition processes and resonance effects on d.c. operated lines. KOPELIANSKII, G. G. *Elektrichestvo* (No. 5) 36-41 (1947) In Russian.—Transient effects on d.c. lines with accidental earthing or superimposed a.c. are treated analytically, and improvements, particularly in design of protecting relays, suggested.

KOSTANYAN, G. G.
(reviewer)

"Review of G. I. Atabekov's book, 'Distantsionyy printsip zashchity dal'nikh elektroperedach'[Distance principle of protecting long-distance electrical transmissions], Academy of Sciences Armenian SSR Publishers, 1953," Avtomatika i Telemekhanika, Vol 15, NO. 3,4,5, 1954

Abs

W-31148, 7 Feb 55

KOSTANYAN, G.G.

Review of G.I.Atabekov's book "Distance principles in the protection of long-range electric transmission lines." G.G.Kostanian. Avtom. i telem. 15 no.4:364-366 Jl-Ag '54. (MLRA 7:11)
(Electric lines) (Electric relays)

KOSTANYAN, G. G.

AID P - 3515

Subject : USSR/Power Eng

Card 1/1 Pub. 26 - 9/30

Author : Kostanyan, G. G., Kand. Tech. Sci.

Title : On expanding the use of asynchronous automatic reclosure

Periodical : Elek. sta., 9, 34-35, S 1955

Abstract : The putting into operation of single and 3-phase asynchronous automatic reclosure devices is discussed. Their use is at present, relatively small, but reportedly could be considerably expanded, even to certain types of substations. Two diagrams.

Institution : None

Submitted : No date

KOSTANYAN, G.G., kand. tekhn. nauk.

Calculation of short circuits in systems with abnormal operating conditions. Elektrichestvo no.2:13-18 F '58. (MIRA 11:2)

1. Tbilisskiy nauchno-issledovatel'skiy institut sooruzheniy i gidroenergetiki.
(Electric power distribution) (Short circuits)

KOSTANYAN, G.G., kand.tekhn.nauk; TER-GAZARYAN, G.N., kand.tekhn. nauk.

Method for eliminating the inductive effect of two-circuit part-phase transmission on communication lines. Elek. sta. 29 no.6:75-76 Je '58. (MIRA 11:9)

(Electric power distribution) (Electric lines)

KOSTANYAN, G.G., kand.tekhn.nauk.

Measuring the current components under continuous part-phase conditions. Elek. sta. 29 no.7:48-51 Jl '58. (MIRA 11:10)
(Electric current, Alternating--Measurement)

KOSTANYAN, G.G.

Calculation of complex damage conditions using the calculation results of simpler conditions. Elektrichestvo no. 11:20-28 N '60. (MIRA 13:12)

1. Tbilisskiy nauchno-issledovatel'skiy institut sooruzheniy i gidroenergetiki.
(Electric networks)

KOSTANYAN, G.G., kand. tekhn. nauk

Representing complex unsymmetrical damages on a d.c. model.
Izv. vys. ucheb. zav. energ. 3 no.2:18-26 F '60.
(MIRA 13:2)

1.Tbilisskiy nauchno-issledovatel'skiy institut sooruzheniy i gidroenergetiki im. A.V. Vintera. Predstavlena uchenym sovetom laboratorii elektrostantsiy i elektrosetey.
(Electric currents)

KOSTANYAN, G.G.

Representation of a three-phase electric system in the form of a one-phase system in the theory of calculating compound asymmetrical damages. Soob. AN Gruz.SSR 25 no.2:151-158 Ag '60. (MIRA 13:11)

1. Tbilisskiy nauchno-issledovatel'skiy institut sooruzheniy i gidroenergetiki im. Vintera. Predstavleno akademikom K.S. Zavriyevym.
(Electric circuits)

KOSTANYAN, G.G., kand.tekhn.nauk

Complex networks of composite nonsymmetrical damages. Izv. vys. ucheb. zav.; energ. 5 no.7:9-15 Jl '62. (MIRA 15:7)

1. Laboratoriya elektrostantsiy i elektrosetey Tbilisskogo nauchno-issledovatel'skogo stroitel'nogo i gidroenergeticheskogo instituta. Predstavlena uchenym sovetom laboratorii elektricheskikh stantsiy i elektricheskikh setey.

(Electric power distribution)

KOSTANYAN, G.G., kand.tekhn.nauk

Presentation of networks with complex damages using a single-phase network analyzer. Izv.vys.ucheb.zav.; energ. 5 no.11:18-23 N '62. (MIRA 15:12)

1. Laboratoriya elektrostantsiy i elektrosetey Tbilisskogo nauchno-issledovatel'skogo instituta sooruzheniy i gidroenergetiki. Predstavlena Uchenym Sovetom laboratorii elektrostantsiy i elektricheskikh setey.

(Electric networks)

KOSTANYAN, G.G., kand.tekhn.nauk

A busbar protection system based on a principle which involves the comparison of current direction. Elek. sta. 34 no.1:55-60 Ja '63. (MIRA 16:2)

(Electric protection)
(Electric power distribution)

KOSTAN'YAN, I.

The main trend. Prom.koop. 14 no.4:19 Ap '60. (MIRA 13:6)

1. Tekhnoruk arteli "Kraspromkombinat," g. Krasnodar.
(Krasnodar--Technological innovations)

MANVELYAN, M.; MELIK-AKHNAZARYAN, A.; RUSTAMBEKYAN, S.; KOSTANYAN, K.; TATEVOSYAN, K.

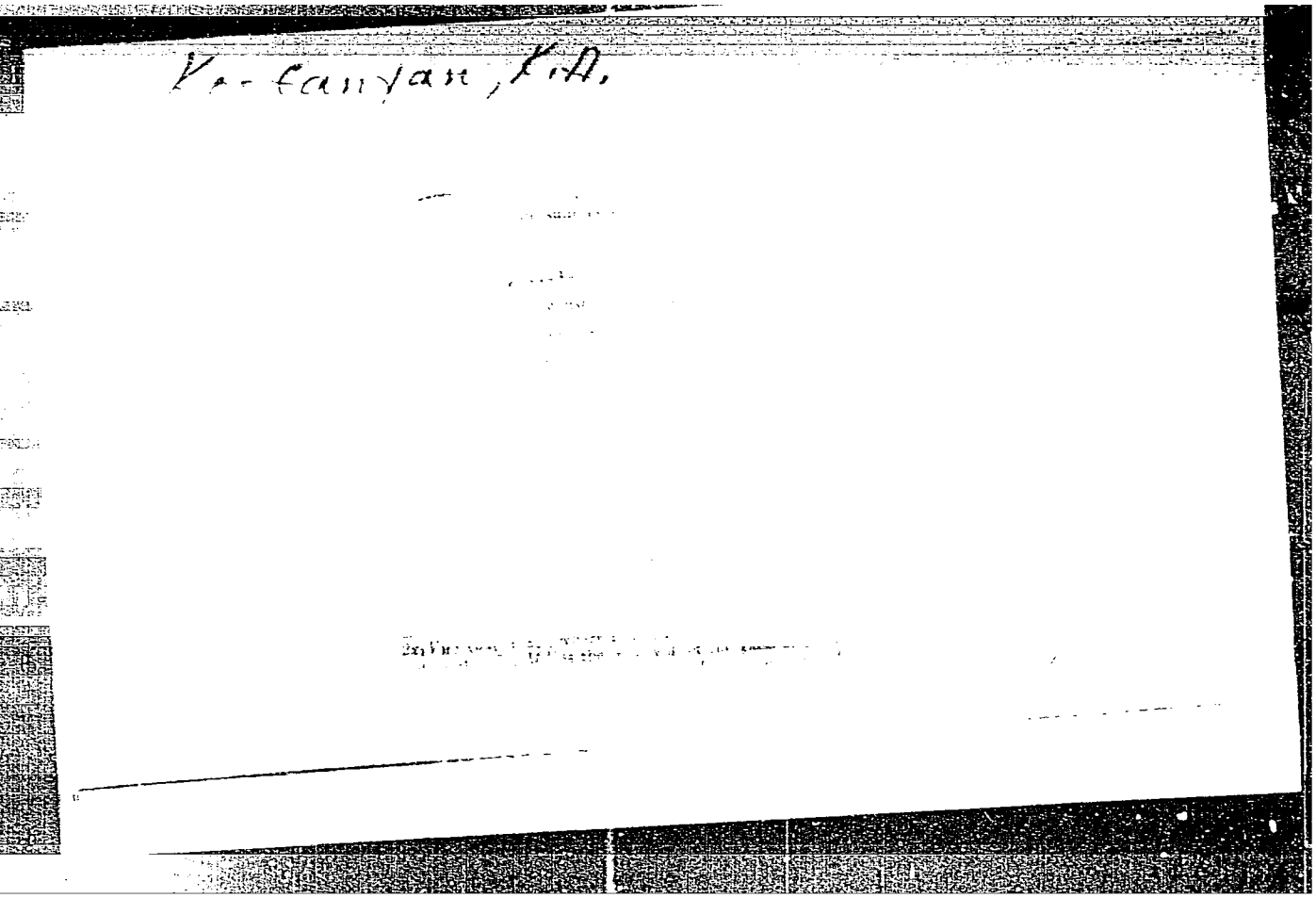
Studying the processes of bottle glass melting in electric glass furnaces with Lusavan perlites as base. Prom.Arm. 5 no.3:39-42 Mr '62. (MIRA 15:4)

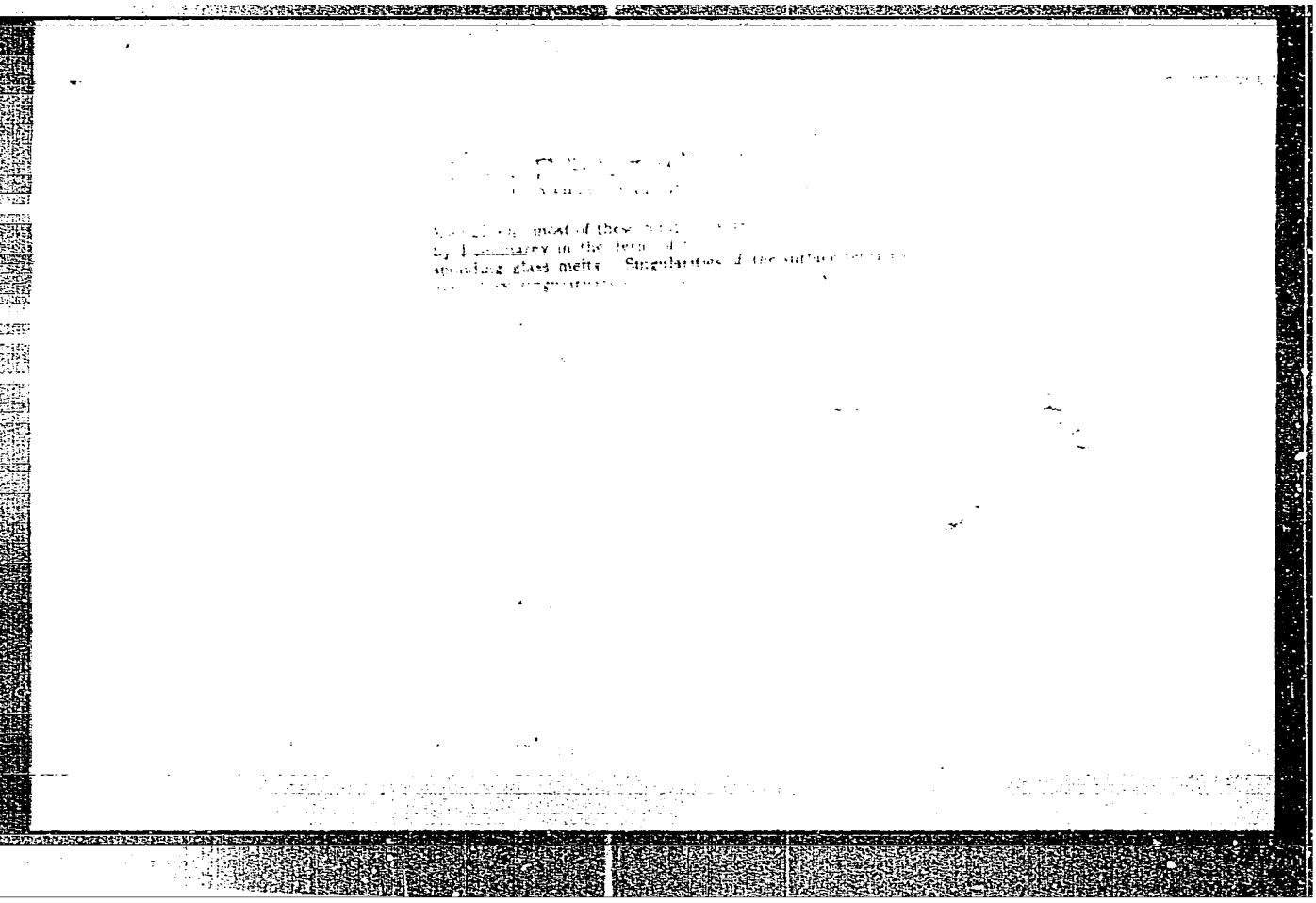
1. NIIKhimii Sovnarkhoza Armyanskoy SSR.
(Armenia—Perlite (Mineral)) (Glass manufacture)

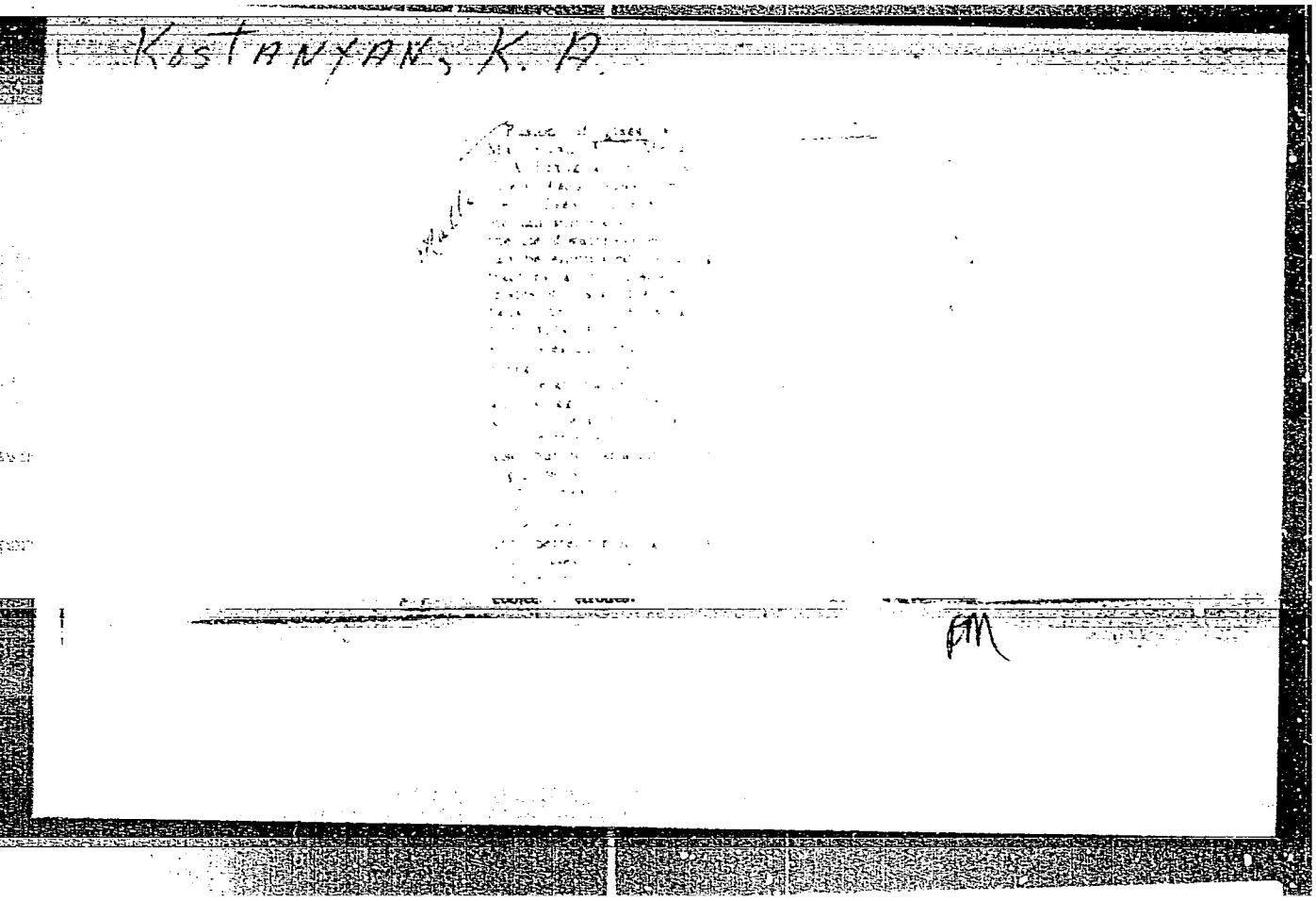
MANVELYAN, M.; KOSTANYAN, K.; YERZNKYAN, Ye.

Use of Dzhermuk quarzite as raw material for the manufacture of bottle glass. Prom.Arm. 5 no.10:52-54 O '62. (MIRA 15:11)

1. Institut khimii Soveta narodnogo khozyaystva ArmSSR.
(Dzhermuk region—Quarzite)
(Glass manufacture)



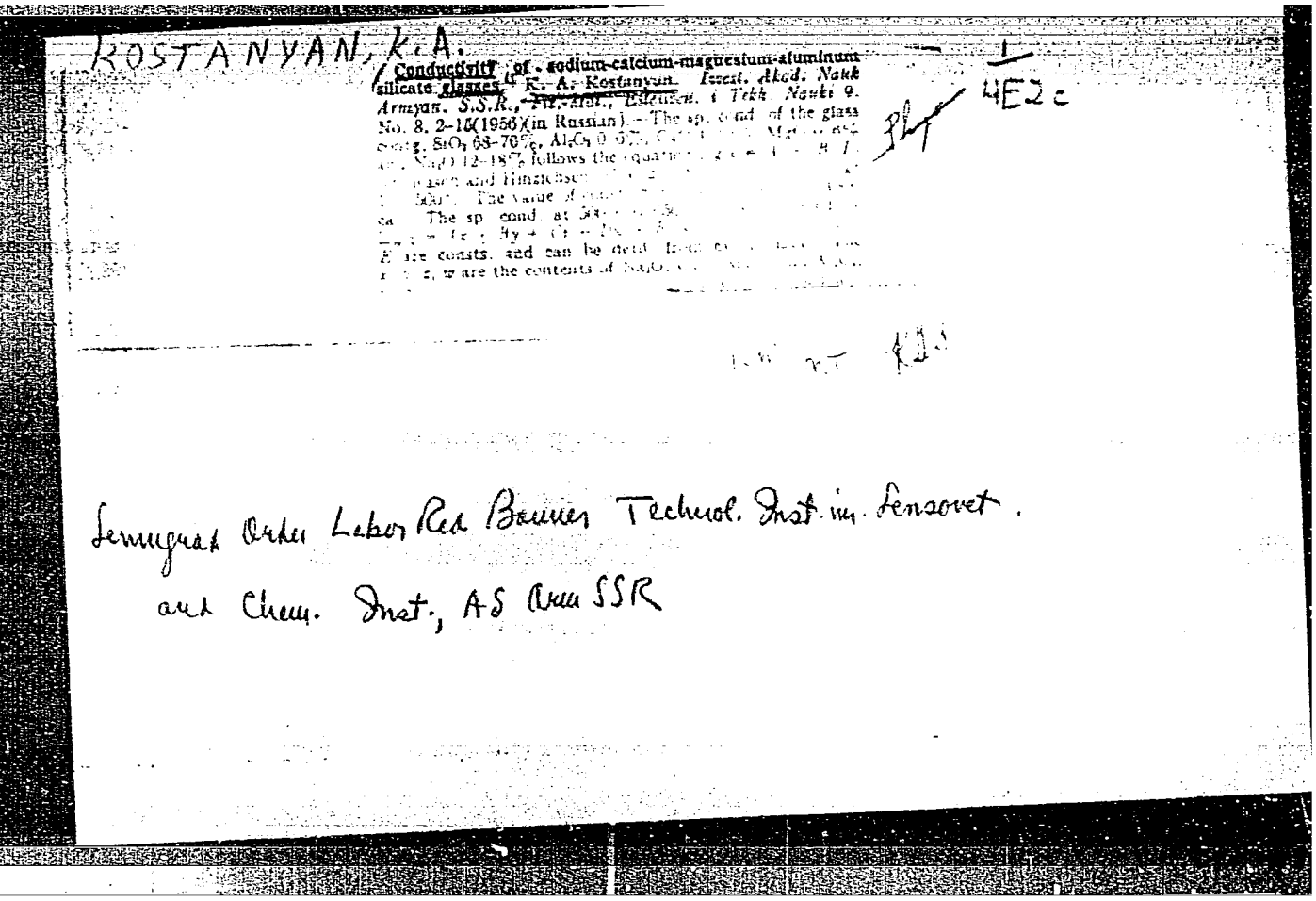




MANVELIAN, M.G.; MELIK-AKHNAZARYAN, A.F.; KOSTANYAN, K.A.; YERZNKYAN, Ye.A.; NALCHADZHYAN, S.O.; OGANESYAN, S.T.

Use of potassium chloride as a clarifying agent in the electric melting of glass. Izv. AN Arm.SSR Ser. FMET nauk 8 no.1:75-79 Ja-F '55. (MLRA 9:6)

1. Khimicheskiy institut AN Armyanskoy SSR.
(Glass manufacture)



ROSTANYAN, K. A.

Conductivity of sodium-calcium-magnesium-aluminum silicate glasses. K. A. Rostanyan. Izvest. Akad. Nauk Armyan. S.S.R., Fiz.-Mat., Estestven. i Tekh. Nauki 9, No. 8, 2-16(1956)(in Russian). – The sp. cond. of the glass [illegible] g. SiO_2 68-70%, Al_2O_3 0-9%, [illegible] 12-18% follows the [illegible] and Hinshelwood. [illegible] The value [illegible] The sp. cond. at [illegible] [illegible] Hy + [illegible] [illegible] ate consts. and can be used [illegible] x, w are the contents of [illegible]

4E2c

Leningrad Order Labor Red Banner Technol. Inst. im. Lensovet.

and Chem. Inst., AS Arm SSR

Crystallization of glass in the electric furnace [illegible] Kostenyan and E. G. Malkin; [illegible] *Trudy Inst. Stekla Akademii Nauk S.S.S.R., Fiz.-Mat., Estestven. i Tekh. Nauki* 9, No. 6, 67–9(1956)(in Russian). American summary: White stones and crust form on the surface of [illegible] corners, when the furnace is overloaded; the stone consists of grains of quartz in the center surrounded by fine crystal needles of tridymite. M. Charnandiana

NALCHADZHYAN, S.O.; KOSTANYAN, K.A.; MELIK-AKHNAZARYAN, A.F.

Measuring the specific resistance of melted glass in electric furnace. Stek. i ker. 13 no.3:7-9 Mr '56. (MLRA 9:6)
(Glass manufacture--Chemistry)

KOSTANYAN, K.A

MANVELYAN, M.G.; MELIK-ANKHAZARYAN, A.F.; KOSTANYAN, K.A.; NALCHADZHYAN, S.O.

Using graphite electrodes in electric glass kilns. Stek. i ker. 13 no.7:1-7 Jl '56. (MIRA 9:9)

1.Khimicheskiy institut Akademii nauk Armyanskoy SSR.
(Electrodes, Carbon) (Glass manufacture)

KOSTANYAN, K.A.

KOSTANYAN, K.A.

Electric conductivity of sodium calcium, magnesium, and aluminum silicate glasses within the range between 100 and 1200° C. Izv. AN Arm. SSR Ser. khim. nauk 10 no.3:161-172 '57. (MIRA 10:12)

1. Khimicheskiy institut AN ArmSSR i Leningradskiy tekhnologicheskiy institut im. Lensoveta.
(Glass--Electric properties)

MANVELYAN, M.O.; MELIK-AKHNAZARYAN, A.F.; KOSTANYAN, K.A.; NALCHADZHYAN, S.O.

Glass layers next to the electrodes in electric glass furnaces.
Izv.AN Arm.SSR. Ser.tekh.nauk 10 no.4:53-60 '57. (MIRA 10:10)

1. Khimicheskiy institut AN Armyanskoy SSR.
(Glass furnaces) (Electrodes)

KOSTANYAN, K.A.; MALCHADZHAN, S.O.

Measuring the specific electric conductivity of fused glass. Izv. AN Arm. SSR khim. nauk 11 no.1:3-11 '58. (MIRA 11:6)

1.Khimicheskiy institut AN ArmSSR.
(Glass--Electric properties)

KOSTANYAN, K.A.

Electric conductivity of fused alkali metal borates (Li_2O - B_2O_3, Na_2O - B_2O_3, and K_2O - B_2O_3 systems). Izv.AN Arm.SSR. Khim.nauki 11 no.2:65-73 '58. (MIRA 11:11)

1. Khimicheskiy institut AN ArmSSR.
(Alkali metal borates--Electric properties)

MANVELYAN, M.G.; MELIK-AKHNAZARYAN, A.F.; KOSTANYAN, K.A.; NALCHADZHYAN, S.O.; YERZNKYAN, Ye.A.; OGANESYAN, S.T.

Passage of grog materials inot glass batch during electric founding of bulb glass. Izv. AN Arm.SSR. Ser.tekhn.nauk 11 no.4:51-69 '58. (Glass mamufacture)

MANVELYAN, M.O.; MELIK-AKHNAZARYAN, A.F.; KOSTANYAN, K.A.; NALCHADZHYAN, S.O.; YERZNKYAN, Ye.A.

Deterioration of electrodes in electric glass furnaces. Izv. AN Arm.SSR. Ser.tekh.nauk 11 no.5:69-70 '58. (MIRA 11:11)

1. Khimicheskiy institut AN ArmSSR.
(Glass furnaces) (Electrodes)

KOSTANYAN, K.A.; NALCHADZHYAN, S.O.

Electric conductivity of fused glass. Izv.AN Arm.SSR.Khim. nauki 11 no.5:317-319 '58. (MIRA 12:1)

1. Nauchno-issledovatel'skiy institut khimii Sovnarkhoza ArmSSR.
(Glass) (Electric conductivity)

KOSTANYAN, K.A.

PHASE I BOOK EXPLOITATION SOV/5035

Vsesoyuznoye soveshchaniye po steklokhimii 3d, Leningrad, 1959.

Steklokhimiya silikatov; trudy Tretyego vsesoyuznogo soveshchaniya Leningrad, 16-20 noyabrya 1959 (Vitreous State; Transactions of the Third All-Union Conference on the Vitreous State, Held in Leningrad on November 16-20, 1959) Moscow, Izd-vo AN SSSR, 1960. 534 p. Errata slip inserted. 3,500 copies printed. (Series: Its: Trudy)

Sponsoring Agencies: Institut khimii silikatov Akademii nauk SSSR. Vsesoyuznoye khimicheskoye obshchestvo imeni D.I. Mendeleyeva and Gosudarstvennyy ordena Lenina opticheskiy institut imeni S.I. Vavilova.

Editorial Board: A.I. Avgustinik, V.P. Barzakovskiy, M.A. Bezborodov, O.K. Botvinkin, V.V.Vargin, A.G. Vlasov, K.S. Yevstropyev, A.A. Lebedev, M.A. Matveyev, V.S. Molchanov, N.L. Nyuller, Ye.A. Poray-Koshits, Chairman, N.A. Toropov, V.A. Florinskaya, A.K. Yakhkind; Ed. of Publishing House: I.V. Suvorov; Tech. Ed.: V.T. Bocharev.

PURPOSE: This book is intended for researchers in the science and technology of glasses.

COVERAGE: The book contains the reports and discussions of the Third All-Union Conference on the Vitreous State, held in Leningrad on November 16-19, 1959. They deal with the methods and results of studying the structure of glasses, the relation between the structure and properties of glasses, the nature of the chemical bond and glass structure, and the crystallochemistry of glass. Fused silica, mechanism of vitrification, optical properties and glass structure, and the electrical properties of glasses are also discussed. A number of the reports deal with the dependence of glass properties on composition, the tinting of glasses and radiation effects, and mechanical, technical, and chemical properties of glasses. Other papers treat glass semiconductors and soda borosilicate East German scientific organizations. Among the participants in the discussions were N.V. Solomin, Ye. V. Kuvshinskiy, Yu.A. Gaster, V.P. Pryanishnikov, Yu. Ye.. Gotlib, O.P. Mchedlov-Petrosyan, O.P. Mikhaylov, S.M. Petrov, A.M. Lazarev, D.I. Levin, A.V. Stanitsin, N.T. Ploshchinskiy, A.Ye. Kuznetsov, E.V. Deryagina, G.V. Byurganovskaya, A.A. Kalashnov, M.M. Shcherbakov, P.Ya. Kotin, K.K. Keller, Ya.A. Kunetsov, V.P. Poridze, R.S. Shevelevich, Z.G. Pinsker, and O.S. Molchanova. The final session of the Conference was addressed by Professor I.I. Kitaygorodskiy, Honored Scientist and Engineer, Doctor of Technical Sciences. The following institutes were cited for their contribution to the development of glass science and technology: Gosudarstvennyy opticheskiy institut (State Optical Institute), Institut khimii silikatov AN SSSR (Institute of Silicate Chemistry, AS USSR), Fizicheskiy institut AN SSSR (Physics Institute AS USSR), Fiziko-tekhnicheskiy institut AN SSSR (Physicotechnical Institute AS USSR), Institut fiziki AN BSSR, Minsk (Institute of Physics, Academy of Sciences, Belorusskaya SSR, Minsk), Laboratory of Physical Chemistry of Silicates of the Institut obshchey i neorganicheskoy khimii AN SSSR, Minsk (Institute of General and Inorganic Chemistry, Belorusskaya SSR, Minsk), Institut vysokomolekulyarnykh soyedineniy AS SSSR (Institute of High Molecular Compounds, AS USSR), Gosudarstvennyy institut steklyannykh stekla (State Institute for Glass Fibers), Gosudarstvennyy institut elektrotekhnicheskogo stekla (State Institute for Electrical Glass), Sibirskiy fiziko-tekhnicheskiy institut, Tomsk (Siberian Physicotechnical Institute, Tomsk), Leningradskiy gosudarstvennyy universitet (Leningrad State University), Moskovskiy khimiko-tekhnologicheskiy institut (Moscow Institute of Chemical Technology), Leningradskiy tekhnologicheskiy institut im. Lensoveta (Leningrad Technological Institut imeni Lensoveta), Belorusskiy politekhnicheskiy institut Minsk (Belorussian Polytechnic Institute, Minsk), Novocherkasskiy politekhnicheskiy institut (Novocherkassk Polytechnic Institute), and Sverdlovskiy politekhnicheskiy institut (Sverdlovsk Polytechnic Institute). The Conference was sponsored by the Institute of Silicate Chemistry AS USSR (Acting Director - A.S. Gotlib), the Vsesoyuznoye khimicheskoye obshchestvo im. D.I. Mendeleyeva (All-Union Chemical Society imeni D.I. Mendeleyev), and the Gosudarstvennyy ordena Lenina opticheskiy institut imeni S.I. Vavilova (State "Order of Lenin" Optical Institute imeni S.I. Vavilov). The 15 resolutions of the Conference include recommendations to organize a Center for the purpose of coordinating the research on glass, to publish a new periodical under the title "Fizika i khimiya stekla" (Physics and Chemistry of Glass), and to join the International Committee on Glass. The Conference thanks A.A. Lebedev, Academician, Professor, and Chairman of the Organization of Committees; Ye.A. Poray-Koshits, Doctor of Physics and Mathematics, Member of the Organizational Committee; and N.L. Nyuller, Doctor of Chemical Sciences, Member of the Organizational Committee. The editorial board thanks G.M. Barzakovskiy, M.V. Vol'kenshteyn, I.I. Denkina, D.P. Dobychin, S.K. Dubrovo, V.A. Ioffe, and B.T. Kolomiyets. References accompany individual reports.

Vitreous State (Cont.) SOV/5035

Card 12/22

Vitreous State (Cont.) SOV/5035

PHYSICOCHEMICAL PROPERTIES OF GLASSES

Dependence of Properties on Composition

Vitreous State (Cont.) SOV/5035

Card 14/22

S/072/60/000/008/003/007/XX
B021/B054

AUTHORS: Kostanyan, K. A., Saakyan, K. S.

TITLE: Electrical Conductivity of Some Industrial Glasses in Molten State

PERIODICAL: Steklo i keramika, 1960, No. 8, pp. 7 - 9

TEXT: The present paper gives data on the specific electrical conductivity of some electrovacuum glasses, which can be utilized in the electric melting of these glasses. Measurements were made in a platinum furnace by an a-c bridge and by the sounding method in the temperature range of 1100-1400°C. A figure shows the curves for the temperature dependence of the resistivity of glasses. Hence, it appears that the conductivity of the glasses investigated depends on their content of alkali ions and sodium oxide. The temperature dependence of electrical conductivity of molten glasses can be expressed by equation (1): $\log \chi = A - \frac{B}{T}$, where A and B are constants. It can also be expressed by equation (2): $\log \chi = a+bT+cT$, where a, b, and c are constants. An examination showed that equation (2)

Card 1/2

gives better agreement between calculated and experimental values than equation (1). Table 2 gives the values of coefficients a, b, and c from equation (2) for the glasses investigated. The difference between the values obtained from equation (2) by means of the coefficients of Table 2 and the experimental values does not exceed 5%. There are 1 figure, 2 tables, and 5 references: 3 Soviet, 1 US, and 1 British.

MANVELYAN, M.G.; MELIK-AKHNAZARYAN, A.P.; KOSTANYAN, K.A.; NALCHADZHYAN, S.O.; YERZNKYAN, Ye.A.; TATEVOSYAN, K.M.

Melting borosilicate glass in vertical electric furnaces.
Stek.i ker. 17 no.2:5-9 F '60. (MIRA 13:6)
(Glass manufacture)

MANVELYAN, M.; KOSTANYAN, K.; MKRTCHYAN, L.; BADALYAN, S.

Using lithoidal pumices of the Lusavan deposit as raw material for founding bottle glass. Prom.Arm. 4 no.5:42-45 My '61. (MIRA 14:8)

1. Nauchno-issledovatel'skiy institut khimii Sovnarkhoza Armyanskoy SSR.
(Armenia--Pumice)

15.2640

27385
S/171/61/014/003/002/004
E071/E435

AUTHOR: Kostanyan, K.A.

TITLE: An investigation of the effect of two alkalies on the electroconductivity of molten boric glasses

PERIODICAL: Akademiya nauk Armyanskoy SSR. Izvestiya. Khimicheskiye nauki. v.14, no.3, 1961, pp.217-229

TEXT: Results of an investigation of the electric conductivity of dicationic lithium-sodium, lithium-potassium and sodium-potassium boric glasses within the temperature range of 800 to 1000°C are reported. The glasses were made from pure salts in corundum crucibles at 900 to 1000°C. The composition of the glasses was so chosen that in each system there were three series of glasses: 1 - summary concentration of alkali oxides R_2O amounted to 12 mole%; 2 - 18 to 20 mole % and 3 - 25 to 28 mole %. The results obtained show that within the range of compositions and temperatures investigated, three factors play an important role: 1. Temperature - with increasing temperature the effect of two alkalies decreases. For sodium-potassium glasses at the temperatures 950 to 1000°C, the effect of the two alkalies is absent regardless of the total concentration.

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2. Difference in the ionic radii of the alkali ions. With increasing difference the effect increases, e.g. in lithium-potassium glasses the effect of the two alkalies is considerably higher and the maximum on the isotherms of the specific resistance is retained up to 1000°C.
3. Concentrations of alkali oxides. With increasing concentration the effect increases. At low concentrations (R_2O - 12 mole %), in lithium-sodium and sodium-potassium glasses, the maximum on the specific resistance isotherms was absent for the whole range of temperatures investigated. The dependence of the logarithm of specific conductivity on the reciprocal of absolute temperature for single cation glasses is represented by a straight line, for two-cation glasses this relationship shows a considerable deviation from the linear one. V.N.Boricheva, G.I.Skanavi, O.V.Mazurin, P.P.Kobeko and B.I.Markin are mentioned for their contributions in this field. There are 8 figures, 4 tables and 17 references: 12 Soviet and 5 non-Soviet. The references to English language publications read as follows: Ref.7: S.Urnes, Glass Ind. 5, 237 (1939); Ref.11: J.Stevels, Silikates ind. 22, 325 (1957); Philips, Techn. Rundschau 13, 350 (1952); Ref.16: L.Chartsis,