

ACCESSION NR: AP4037583

for the most important "genuinely inelastic" collisions, corresponding to the contribution of an isolated vacuum Regge pole, are used to determine the asymptotic amplitudes. It is assumed that all particles are identical and have no isospin. It is shown that for any inelastic process there is a definite particle momentum configuration making the most significant contribution to the amplitude. The distributions of these particles with respect to the logarithms of their momenta are determined and are found to depend on the behavior of the vertex functions. Unitarity in the s-channel for the zero-angle elastic-scattering amplitude is shown to be violated if these vertex functions do not decrease with decreasing squares of the reggeon momenta. The dependence of both halves of the s-channel unitarity condition for elastic scattering at nonzero angle on the momentum transfer is investigated, and it is shown that the right half of this condition does not represent the Regge asymptotic amplitude corresponding to the vacuum pole if the terms corresponding to the production of an arbitrary number of particles are taken into

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account. The momentum-transfer dependence can be duplicated only if all asymptotic contribution from all the branch-point singularities on the right of the vacuum point, condensing toward the point $j = 1$, are taken into account. Orig. art. has: 48 formulas.

ASSOCIATION: Institut teoreticheskoy i eksperimental'noy fiziki (Institute of Theoretical and Experimental Physics); Institut fiziki Akademii nauk Gruzinskoy SSR (Institute of Physics, Academy of Sciences, Georgian SSR); Institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta (Nuclear Physics Institute, Moscow State University)

SUBMITTED: 03Sep63 DATE ACQ: 09Jun64 ENCL: 00

SUB CODE: NP NR REF Sov: 004 OTHER: 003

Card 3/3

VERDIYEV, I.A.; KANCHELI, O.V.; MATINYAN, S.G.; POPOVA, A.M.; TER-MARTIROSYAN, K.A.

Complex asymptotic expressions for the amplitudes of inelastic processes, and some singularities in the plane of angular momentum. Zhur. eksp. i teor. fiz. 46 no.5:1700-1714 My '64.
(MIRA 17:6)

1. Institut teoreticheskoy i eksperimental'noy fiziki, Institut fiziki AN Gruzinskoy SSR i Institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta.

VAVILOV, B.T.; VERDIYEV, I.A.; GONCHAROVA, N.G.; GRIGOR'YEV, V.I.;
MELEDIN, G.V.

Quantum field examination of multiple processes. Vest.
Mosk. un. Ser. 3:Fiz., astron. 17 no.3:46-58 My-Je '62.
(MIRA 15:6)

1. Kafedra elektrodinamiki i kvantovoy teorii Moskovskogo
universiteta. (Quantum field theory)
(Mesons)

38880
S/188/62/000/003/005/012
B111/B112

24.6610

AUTHORS:

Vavilov, B. T., Verdiyev, I. A., Goncharova, N. G.,
Grigor'yev, V. I., Meledin, G. V.

TITLE:

Quantum field theoretical investigation of multiple processes

PERIODICAL:

Moscow. Universitet. Vestnik. Seriya III. Fizika,
astronomiya, no. 3, 1962, 46-59

TEXT: Multiple production of π -mesons in π -N, γ -N, N-N, and π - π collisions is studied and the corresponding graphic renormalization equations are given. The mathematical structure of the theory is similar to that of the Tamm-Dankov method. It differs only in that the infinite system of equations does not break off, but a solution is reached through a reduction of the propagation function and on other assumptions. Proceeding from the Tomonaga-Schwinger equation

$$i \frac{\partial}{\partial \sigma} U[\sigma, \sigma_0] = H(x) U[\sigma, \sigma_0]$$

$$U[\sigma, \sigma_0] = \sum_{ij, nm, kl} U^{(ij, nm, kl)}[\sigma, \sigma_0]$$

where

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Quantum field theoretical...

$U^{(ij,nm,kl)}$ is the transition matrix for a graph with i, n, k incoming, and j, m, l outgoing boson, fermion and antifermion lines, respectively.

For $U_{[\sigma, \sigma_0]}^{(ij,nm)}$ it is established that

$$U_{[\sigma, \sigma_0]}^{(ij,nm)} = \int d^4z \sum_{\text{graphs}} \prod_{i=1}^m \bar{u}(\vec{p}_i) \prod_{j=1}^n u(\vec{p}_j) \prod_{l=1}^l \varphi^{(+)}(\vec{p}_l) \prod_{k=1}^k \varphi^{(-)}(\vec{p}_k) \times \\ \times Q^{(ij,nm)} \exp \left[iz \left(\sum_{i=1}^m p_i + \sum_{l=1}^l p_l - \sum_{j=1}^n p_j - \sum_{k=1}^k p_k \right) \right]. \quad (4),$$

where $Q^{(ij,nm)}$ is a coefficient function, for the individual collisions, as determined from the graphs. This method offers the advantage that summation does not necessitate all graphs being written explicitly as in the perturbation theory. Since a closed solution is impossible, the procedure is simplified by disregarding the production of nucleon-antinucleon pairs in the intermediate and final states, disregarding spin effects, and assuming low energy in the mesons produced. In addition, scalar and pseudoscalar mesons with scalar interaction are

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Quantum field theoretical...

studied. Following the determination of $Q^{(ij,nn)}$ for the $\pi\text{-N}$, $\gamma\text{-N}$ collisions the probability "n"

$$W_n = n! (2\pi)^4 \int \frac{dp}{2E_p} \prod_{i=1}^n \frac{dk_i}{2k_{oi}} |Q^{(n,n)}|^2 \times \\ \times \delta(E_p + \sum_{i=1}^n k_{oi} - e_0) \delta^3(\vec{p} + \sum_{i=1}^n \vec{k}_i). \quad (8)$$

is obtained by insertion into (4) where p, k_i is a four-momentum of the final particles. The integral in (8) is the "generalized phase integral" which, for N-N and $\pi\text{-}\pi$ collisions has similar shape. Its calculation is illustrated for $\pi\text{-N}$ collisions. For N-N collisions, similar considerations as for $\pi\text{-N}$ collisions, give

$$W_n \sim (gm)^{2n} \left(\frac{\pi}{2u^2} \right)^{n/2} \frac{n! (z-1)^{2n-1}}{[(n+1)!]^2 (2n-1)!},$$

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where $z = \frac{E\bar{q}}{m}$. For $\pi-\pi$ collisions the interaction is brought about by a nucleon-antinucleon pair (a term γ^4 being added in the interaction Hamiltonian). If meson scattering only is considered, this influences the multiplicity only slightly. The angular distribution tends to higher isotropy in the presence of meson interaction. For the angular distribution of relativistic mesons in N-N collisions $\frac{dn(\theta)}{d\theta} \sim \frac{1}{\sin^3\theta}$, and for the energy distribution

$$\frac{dn(k)}{dk} \sim \frac{1}{\omega^2} + \frac{\kappa^2}{4k\omega^3} \cdot \ln \left(\frac{\omega+k}{\omega-k} \right)^2, \quad \omega^2 = k^2 + \kappa^2.$$

Summary of the results for multiplicity:

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Quantum field theoretical...

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$$\bar{n}_{N-N} \approx \frac{\pi'^2}{3} \left(g \frac{m}{\mu} \right)^{1/2} (z^{1/2} - 1)^2, \quad z = \frac{W_{\text{eff}}}{2m},$$

$$\bar{n}_{\pi-\bar{\pi}} = \bar{n}_{\bar{\pi}-\pi} = \frac{\pi'^2}{4^{1/2}} g^{1/2} \left(\frac{m}{\mu} \right)^{1/2} \left[\left(\frac{W_{\text{eff}}}{2m} \right)^{1/2} - 1 \right]^{1/2},$$

$$\bar{n}_{\pi-\pi} \sim \begin{cases} \left(\frac{E^c}{2\mu} - 1 \right)^{1/2} & (\text{I}) \\ \left(\frac{E^c}{2\mu} - 1 \right)^{1/3.5} \div \left(\frac{E^c}{2\mu} - 1 \right)^{1/2} & (\text{II}) \end{cases}$$

No qualitative agreement could be found between the formulas and the experiment. There are 5 figures and 1 table.

ASSOCIATION: Kafedra elektrodinamiki i kvantovoy teorii (Department of Electrodynamics and Quantum Theory)

SUBMITTED: July 18, 1961

Card 5/5

VERBLYEV, I.A.

Crography of the Kel'badzhar-Lachin physicogeographic region.
IZV. AN Azerb. SSR. Ser. geol.-geog. nauk i nefti no.2:91-102
(MIRA 17:19)
1963.

VERDIYEV, K.Z.

Effect of mineral fertilizers and manure on the dynamics of soil
nutrients and cotton yields. Izv. AN Azerb. SSR. Ser. biol. i med.
nauk no. 10:91-96 '61. (Mish 15:1)
(AZERBAIJAN...COTTON..FERTILIZERS AND MANURES)

VERDIYEV, K.Z.

Effect of different amounts of mineral fertilizers on cotton
yields and the dynamics of soil nutrients. Izv. AN Azerb.SSR.
Ser. biol.i sel'khoz.nauk no.4:93-98 '59. (MIRA 12:12)
(Kura Lowland--Cotton--Fertilizers and manures)

MUSABEKova, E.S.; VERDIYEV, K.Z.

Effect of the phosphorus and nitrogen ratio in the soil on the
cotton yield. Izv. AN Azerb. SSR. Ser. biol. i med. nauk no.3:
67-71 '63. (MIRA 16:6)
(Azerbaijan--Cotton--Fertilizers and manures)
(Plants, Effect of phosphorus on)
(Plants, Effect of nitrogen on)

Country : USSR
Category : Farm Animals.
 The Honeybee.
Abs. Jour : Ref Zaur-Biol., No 21, 1958, 96944
Author : Verdiyeva, M. G.
Institut. : Moscow Academy of Agriculture imeni K. A.*
Title : The Effect of Pollination by Bees on the
 Harvest of Cotton under the Conditions of Azer-
 baydzhan.
Orig Pub. : Dokl. Mosk. s.-kh. akad. im. K. A. Timiryazova
 1957, vyp. 30, ch. 2, 315-320
Abstract : No abstract.

Card:

1/1
*Timiryazev

72

L 6485-66 EWT(m)/EPF(c)/ENT(j)/T/EWP(t)/EWP(b) IJP(c) JD/RM
ACC NR: AFS/2804.

AUTHOR: Shikhiyev, I. A.; Aslanov, I. A., Mertselian, R. T., Verdilayeva, S.

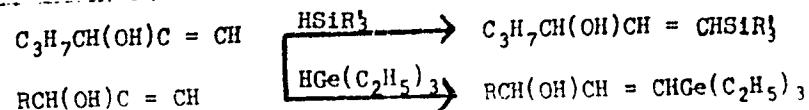
ORG: INKhP AN AzerSSR

TITLE: Synthesis and conversions of unsaturated germanium and silicon organic compounds

SOURCE: Azerbaydzhanskiy khimicheskiy zhurnal, no. 4, 1965, 42-43

TOPIC TAGS: organogermanium compound, organosilicon compound, secondary alcohol, ethylenic alcohol, silane, germane

ABSTRACT: Ten new compounds were synthesized by reacting propylethynylcarbinol and isopropylethynylcarbinol with trialkylsilanes and trialkylgermanes in the presence of chloroplatinic acid:



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L 6485-66

ACC NR: AP5028891

where R = iso-C₃H₇; C₃H₇

R₃¹ = CH₃(C₂H₅)₂; CH₃(C₃H₇)₂; CH₃(iso-C₃H₇)₂; C₂H₅(iso-C₃H₇)₂; C₂H₅(C₃H₇)₂.

The presence of the hydroxyl group in the synthesized compounds was determined by cyanoethylation. Properties of these compounds are tabulated in the original. Orig. [EW] art. has: 1 table.

SUB CODE: OC/ SUBM DATE: 07Dec64/ ORIG REF: 003/ OTH REF: 001/ ATD PRESS:

4139

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Card 2/2

L 23842-66 EWT(m)/EWP(j)/T IJP(c) W/JW/RM
 ACC NR: AP6007122 SOURCE CODE: UR/0079/66/036/002/0355/0357

AUTHOR: Shikhlyev, I. A.; Aslanov, I. A.; Verdiyeva, S. Sh.

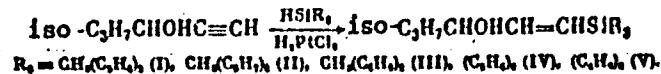
ORG: Institute of Petrochemical Processes, Academy of Sciences, Azerbaijan SSR
 (Institut neftekhimicheskikh protsessov Akademii nauk Azerbaydzhanskoy SSR)

TITLE: Studies in the synthesis and conversion of unsaturated organosilicon compounds. Part 28: Synthesis and conversion in certain monatomic organosilicon alcohols of the ethylene series

SOURCE: Zhurnal obshchey khimii, v. 36, no. 2, 1966, 355-357

TOPIC TAGS: organosilicon compound, alcohol, chemical reaction

ABSTRACT: In order to further develop the studies of organometallic derivatives of unsaturated alcohols, the reaction of isopropylethyneylcarbinol with various trialkylsilanes,



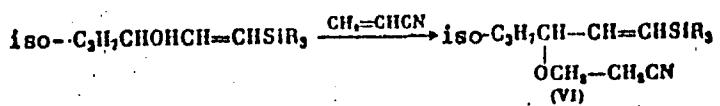
was investigated. Five representatives of secondary organosilicon alcohols of the ethylene series were obtained and described for the first time: 1-methyldiethylsilyl-

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ACC Nk: AP6007122

-4-methyl-1-penten-3-ol; 1-methyldipropylsilyl-4-methyl-1-penten-3-ol; 1-methyldi-butyl-silyl-4-methyl-1-penten-3-ol; 1-triethylsilyl-4-methyl-1-penten-3-ol, and 1-tri-butyl-silyl-4-methyl-1-penten-3-ol. The presence of hydroxyl groups in the composition of secondary ethylenic alcohols was demonstrated by cyanoethylation according to the reaction



The corresponding cyanoethoxy derivatives of secondary alcohols were obtained and described for the first time. Orig. art. has: 2 formulas, 1 table.

SUB CODE: 07/ SUBM DATE: 23Jan65/ ORIG REF: 003/ OTH REF: 000

Card 2/2

L 17726-66 EWT(1)/EWT(m)/ETC(f)/EWG(m)/T/EWP(t) IJP(c) RDW/GG/JD/GS
ACC NR: AT6001331 SOURCE CODE: UR/0000/65/000/000/0037/0041

AUTHOR: Talibi, M. A.; Verdiyeva, T. M.

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59

ORG: none

B1

TITLE: The effect of certain factors on the surface of Se,¹

SOURCE: AN AzerbSSR. Institut fiziki. Selen, tellur i ikh primeneniye (Selenium, tellurium and their utilization). Baku. Izd-vo AN AzerbSSR, 1965, 37-41

TOPIC TAGS: selenium, surface property, crystal growth, nucleation, illumination, etched crystal, metallographic examination, metal physics, pn transition

ABSTRACT: The effects of crystallization time, illumination and etching on the surfaces of selenium layers (50 to 70 μ thick) were studied in an effort to clarify the mechanism underlying the growth of Se crystals. The Se films were obtained by vapor deposition of technical grade Se containing 0.03% Br impurity on aluminum substrates. The substrates were maintained at a constant temperature of 130°C; crystallization time varied from 5 to 60 min under illumination from a red bulb and a neon lamp as well as under zero illumination. The data (presented in the form of micrographs (100x)) illustrate the effects of the above variables on the nature of

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L 17726-66

ACC NR: AT6001331

the crystallization. In darkness spherulites of Se crystals were observed after only 15 min, while at longer times the diameters of the spherulites increased according to the following empirical relation:

$$d = 0.35t + d_0,$$

where d = diameter (mm), t = time of crystallization (min) and $d_0 = 0.2 \cdot 10^{-2}$ (mm). The increase in diameter was due to the increased growth rate which at 10-20 min was estimated to be 246 μ/hr . After 30 min at 130°C, the density of spherulites was 250 mm⁻³. The results obtained for illumination and etching after 10 min of crystallization at 130°C (100x) were similar to the above; that is, the appearance and the dimensions of the spherulites did not change. The etch used was a 50/50 HNO₃/H₂SO₄. However, when the films were immersed in boiling water (after 10 min preliminary crystallization in the dark), changes in spherulite size and background were noted. These changes were caused by the reaction SeO₂ + H₂O = H₂SeO₃. The effects of the above surface changes were postulated to have an influence on the pn transition properties, however, further work in this area was planned. The authors express their gratitude to Professor G. B. Abdullayev for his interest in the work and for his discussion of the results. Orig. art. has: 2 figures, 2 formulas.

SUB CODE: 11, 20/ SUBM DATE: 10Mar65/ ORIG REF: 003/ OTH REF: 008

Card 2/2

L 06196-67 EWT(m)/EWP(t)/ETI LJP(c) JD/JH
ACC NR: AP6032616 SOURCE CODE: UR/0233/66/000/002/0101/0106

AUTHOR: Talibi, M. A.; Verdiyeva, T. M.; Krutenyuk, Ye. G.

ORG: none

TITLE: Effect of crystallization and surface condition of Se on forming of p-n junctions of Se-CdSe and Se-CdS

SOURCE: AN AzerbSSR. Izvestiya. Seriya fiziko-tehnicheskikh i matematicheskikh nauk, no. 2, 1966, 101-106

TOPIC TAGS: semiconductor device, photoelectric cell, semiconductor rectifier, selenium rectifier, PN JUNCTION, CADMIUM SELENIODE, SELENIUM, CRYSTALLIZATION

ABSTRACT: The article presents some results of an experimental investigation of the dependence of properties of selenium p-n junctions on the structure of the selenium surface. Rectifying cells made of Se-CdSe, Se-CdS, Se-CdSe photocells, and Se-layers were investigated. A bismuth coated aluminum base with a selenium layer (containing 0.03% Br) was used as a basic material for specimens. Specimens were crystallized under various conditions and then etched with nitric acid. Their surfaces were then studied on the basis of their reflection of monochromatic rays (420-780 m μ) using dial-beam microphotometer. Analysis of data indicates: 1) There are two stages of crystallization of selenium layers deposited on rough bismuth-coated aluminum bases: a) spherulitic crystallization b) crystallization caused by growth of intra- and inter-

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ACC NR: AP6032616

spherulitic crystalline grains. 2) During the first stage of crystallization the resistivity ρ and zero resistances of the corresponding rectifiers- R_0 decrease monotonically if the diameters of spherulitics and the diffuse-reflection factor increase. During an increase in diameters of spherulitics from 2×10^{-3} to 10^{-2} cm, the resistivity decreased from 10^6 to 4×10^5 ohm·cm, and R_0 decreased respectively from 4×10^9 to 5×10^3 ohm. 3) The etching of the selenium surface decreases the diffuse-reflection factor of monochromatic rays. The concentration of ionizing impurity centers increases two or three times in the region of the space charge, and a capacitive loop of the inverse current half wave leakage develops as a result. 4) Maximums of selenium photocell spectral sensitivity correspond to $\lambda = 5800 \text{ \AA} - 6000 \text{ \AA}$. They are caused by lattice absorption; their position depends only slightly on the degree of crystallization. The authors thank G. A. Efendihev and K. P. Mamedov for valuable comments. Orig. art. has: 6 figures and 1 table.

SUB CODE: 09/ SUBM DATE: none/ ORIG REF: 012/ OTH REF: 001

Card 2/2 afs

HUNGARY / Human and Animal Physiology (Normal and Pathological). T-4
Blood.

Abs Jour : Ref Zhur - Biologiya, No 13, 1958, No. 60195

Author : Verecke, I.

Inst : Not given

Title : A Transfusion Reaction with Temperature Rise, and Its
Relation to the General Nature of the Disease

Orig Pub : Orv. hetilap, 1957, 98, No 21, 556-561

Abstract : No abstract given

Card 1/1

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"APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001859420014-7

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CIA-RDP86-00513R001859420014-7

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CIA-RDP86-00513R001859420014-7"

VERDIYEV, M.Z. (Zhitomir)

Jar for transfusing blood and blood substitutes. Vrach.delo no.10:
1087 O '57. (MIRA 10:12)
(BLOOD--TRANSFUSION--EQUIPMENT AND SUPPLIES)

"APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001859420014-7

VERDIZADE, I.A.

Periodatometric determination of tin. Uch. zap. AGU. Ser. khim.
nauk no.4:23-26 '63. (MIREA 17:11)

APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001859420014-7"

VERDI-ZADE, A.A.

Periodate method of determining zinc. Trudy Azerb. gos. zaoch. ped.
inst. 6:155-158 '59. (MIRA 14:8)
(Zinc--Analysis)

VERDIZADE, A.A.

Determining the titer of sodium thiosulfate with potassium dichromate. Dokl. AN Azerb. SSR 20 no.8:23-26 '64.

(MIRA 17:12)

1. Azerbaydzhanskiy gosudarstvennyy pedagogicheskiy institut im. V.I. Lenina. Predstavлено akademikom AN AzerSSR M.A. Kashkayem.

VERDIZADE, A.A.; ALIZADE, T.D.

Determination of nickel by the periodate method. Dokl. AN
Azerb. SSR 19 no.3:35-39 '63. (MIRA 17:8)

VERDIZADE, A.A.; ALBENOV, A.A.

Determination of zirconium by the microperiodate method. Azerb.khim.
zhur. no.4:149-156 '63. (MIRA 17:2)

SHAKHTAKHTINSKIY, G.B.; VERDIZADE, A.A.

Characteristics of the microiodometric determination of iron
oxides using iodine solvents. Azerb.khim.zhur. no.6:89-97 59.
(MIRA 14:9)

(Iron---Analysis)

(Iron oxide)

"APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001859420014-7

APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001859420014-7"

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CIA-RDP86-00513R001859420014-7

APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001859420014-7"

LANTSBURG, Yakov Borisovich; VERDNIKOV, G.V., nauchnyy red.;
RYCHEK, T.I., red.; PERSON, M.N., tekhn. red.

[Handbook for the young excavator operator] Spravochnik
molodogo mashinista ekskavatora. Moskva, Proftekhizdat,
1962. 253 p. (MIRA 16:4)
(Excavating machinery)

VERDNIKOV, Grigoriy Vladimirovich; LEVCHENKO, Ya.V., inzh., red.;
FREGER, D.P., red. izd-vu; BELOGUROVA, I.A., tekhn. red.

[Improving the methods of repairing building machinery] So-
vershenstvovanie metodov remonta stroitel'nykh mashin; steno-
gramma lektsii. Leningrad, 1961. 26 p. (MIRA 15:5)
(Construction equipment--Maintenance and repair)

VERDNIKOV, V.G., instr.; PAVLICH, S.I., instr.

Reconditioning worn-out parts of construction machinery. Struk.
4 dne mash. 10 no.1:35-57 Ja '66 (MIRA 184)

NAKHTMAN, Fedor Vladimirovich; YERMIKOV, Ya.V., inzh., retsenzent;
GREGEL'SKIY, P.Kh., inzh., retsenzent; KOSTINSKIY, I.Ye.,
nauchn. red.; MISHKEVICH, G.I., red.

[Mechanization of minor operations in the fitting-out of ship
hulls] Malaya mekhanizatsiya korpusodostroechnykh rassut. Leningrad,
"Sudostroenie," 1964. 114 p. (MIRA 17:5)

ZILIST, Petr Sigizmundovich; KAZACHKOV, David L'vovich; DVORKIN,
A.L., inzh., retsenzent; UTKIN, K.V., inzh., retsenzent
VERDNIKOV, Ya.V., nauchn. red.; NIKITINA, M.I., red.

[Overall mechanization of planning and designing operations
in shipbuilding] Kompleksnaia mekhanizatsiia proektiro-
konstruktorskikh rabot v sudostroenii. Leningrad, Sud-
stroenie, 1965. 315 p. (MIRA 18:12)

VERDYSH, D.

Solving the important problems. Prof.-tekhn. obr. 21 no 9:1. 12
S '64. (MIRA 77:11)

1. Nachal'nik Glavnogo upravleniya professional'no-tehnicheskogo
otrazovaniya Soveta Ministrov Moldavskoy SSR.

VEREANU, I., dr.; ALINESCU, R., dr.; BELIGAN, Gr., dr.; LUNGEANU, M., dr.

Clinical aspects of staphylococcal septicemia and its therapy.
Med. intern., Bucur 13 no.4:603-610 Ap '61.

1. Lucrare efectuata in Clinica medicala I.M.F. "Dr. I. Cantacuzino"
(director: prof. I. Bruckner).

(STAPHYLOCOCCAL INFECTIONS case reports)
(SEPTICEMIA case reports)

MIKHAILESCU, V., dr.; VEREANU, I., dr.; ALINASCU, R.,dr.

Cardiac insufficiency in acromegaly. Med. inter., Bucur 13 no.6:
929-932 Je '61.

1. Institutul medico-farmaceutic Bucuresti, Clinica medicala
de la Spitalul "Cantacuzino", director: prof. I.Bruckner.
(HEART FAILURE, CONGESTIVE case reports)
(ACROMEGALY case reports)

BOT, G.; ANDRASSY, Katalin; FOLCSAINY, Ilona; VEREB, G.

The effects of feeding, fasting and adrenaline on the glucose-6-phosphatase activity of the liver. Acta physiol. acad. sci. Hung. 26 no.4:29. 304 '65

1. Institute of Medical Chemistry, University Medical School, Debrecen.

PETROCI, J.; VEREB, J.; TICHLER, V.; JACINA, J.

On the problem of reactivity of the organism in otitis media in infants.
Cesk. otolaryng. 12 no.1:12-19 F '63.

i. Katedra starostlivosti o dieta LF UPJS v Kosiciach, veduci prof.
dr. F. Demant.

(OTITIS MEDIA) (BLOOD PROTEINS) (BLOOD SEDIMENTATION)
(LEUKOCYTE COUNT) (INFANT NUTRITION DISORDERS)

VEREBELY, Andras

Axle counting installations. Vassut 12 no.3:14-15 Mr 162.

VERESS, Istvan; VEREBELY, Andras

Some problems relating to the technical development.
Vasut 12 no.10:3-4 25 0 '62.

1. MAV Vasutervezo UV.

VEREBELY, Judit

The materialization of the principle of prevention in
Hungarian medicine. Nepegeszsegugy 44 no.7:215-219 Jl '63.

(STATE MEDICINE) (PREVENTIVE MEDICINE)

VHERELY, L.

25th anniversary of the 50 Hz railroad electrification system. In French. p. 269.

ACTA TECHNICA. (Magyar Tudomanyos Akademia) Budapest, Hungary, Vol. 20, no. 3/4, 1958.

MONTHLY List of East European Accessions (EEAI) LC, Vol. 8, No. 11, November 1959,
Uncl.

"APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001859420014-7

APPROVED FOR RELEASE: 09/01/2001

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CIA-RDP86-00513R001859420014-7"

"APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001859420014-7

VENDIVN, N. I.

"Portable Apparatus for the Transfusion of Blood and Solutions Outside the Hospital;
Vrachebnoye Delo, No. 8, p. 745-46, 1951.

APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001859420014-7"

VERDIYEV, Ye.I.
LITVIN, S.I.

27200

Mekhanizatsiya Proizvodstva Na Kostanskim Zavodie Arzovlhoztresta. (3 Priluch. ked)
Vinodeliye 1 Vinograd-nitvo SSSR, 17/3, No. 2, S. 41-42

SO: LETCHIS NO 34

VERDIYEV, Z. K.

Mangel-Wurzel

Late fall sowing of fodder beets on irrigated land., Korm. baza, 3, no. 2, 1952.

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

VERDIYEV, Z.K.

Mangal-qurzel

New types of fodder beets, Sel. i sem., 19, No. 7, 1952.

Monthly List of Russian Accessions, Library of Congress, October, 1952, Unclassified.

"APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001859420014-7

USSR. ~~.....~~

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Periodical : Pirogovo, ~~.....~~

Submitted : ~~.....~~

APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001859420014-7"

VERDIYEVA, M. G. Cand Agr Sci -- (diss) "The ^{Effect} ^{influence} of Bee-Caused
Pollination on ^{up raising of} Improvement in the Harvesting Yield of Cotton
Under Conditions of the Azerbaydzhan SSR." Mos, 1957. 14 pp 20 cm.
(Mos Order of Lenin Agricultural Academy im K. A. Timiryazev),
110 copies (KL, 27-57, 108)

VERDIYEVA, M. G. Cand Agr Sci -- (diss) "Effect of bee~~be~~^{up to} pollination ~~on the varieties~~
~~of cotton~~
increase in yield capacity of cotton-crops under conditions of the Azerbaijhan SSR."
Mos, 1957. 15 pp 19 cm. (Mos Order of Lenin Agr Acad im K. A. Timiryazev), 110
copies. (KL, 15-57, 106)

VERDI-ZADE, A.A.

Gravimetric and volumetric method for determining cadmium. Dokl.
AN Azerb. SSR 15 no.10:911-914 '59. (MIHA 13:3)
(Cadmium--Analysis)

SOV/137-57-11-22742

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 11, p 302 (USSR)

AUTHOR: Verdi-zade, A. A.

TITLE: Determination of Microquantities of Nickel by the Vanadate Method
(Mikrovanadatometricheskoye opredeleniye nikelya)

PERIODICAL: Tr Azerb. gos. zaochn. ped. in ta, 1957, Vol 4, Nr 1,
pp 77-81

ABSTRACT: It is established that the Ni-ammonia complex, reacting with hexavanadic acid (I) forms the $[Ni(NH_3)_4]V_6O_{16}$ compound either pure or with an admixture of $[Ni(NH_3)_6]V_6O_{16}$. The compound is soluble in hot water and in acetic and mineral acids; it dissolves in alkalies with the formation of Ni hydroxides; it is not soluble in an excess of precipitating agent, in ether, or in alcohol. The detectable minimum is 6 γ per cc of solution. For the gravimetric determination to 1 cc of solution are added 0.3 cc of saturated solution of NH₄Cl, an amount of I solution equivalent to a concentration in the mixture of 0.03 - 0.035N, and 2 - 2.5 cc of 20% NH₄OH. After 3 - 4 min the mixture is filtered, the precipitate is washed 5 - 6 times with a 2:1 mixture of alcohol and water and

Card 1/2

SOV/137-57-11-22742

Determination of Microquantities of Nickel by the Vanadate Method

calcined at 500 - 580°C to the formation of $\text{NiO}_3\text{V}_2\text{O}_5$ (sic!). The error in the determination of Ni is from 0 to +0.18 mg when the Ni content is 0.58 - 5.83 mg. In the case of volumetric determination of Ni, the precipitate of the complex salt is dissolved in 20 - 25 cc of 1:6 H_2SO_4 . Three drops of phenylanthranilyc acid are added to the solution, and the liberated 6 atoms of V are titrated with Mohr's salt. The error in the determination of Ni is from 0 to 0.097 mg when the nickel content is 0.170 - 5.678 mg.

Z. G.

Card 2/2

BRAUN, D.A., dotsent, kand.tekhn.nauk; WAYNSON, A.A., kand.tekhn.nauk;
DZHUNKOVSKIY, N.N., dotsent; ZIMIN, P.A., kand.tekhn.nauk;
VERDNIKOV, G.V., nauchnyy red.; KRYUGER, Yu.V., red.izd-va;
KL'KINA, E.M., tekhn.red.

[Manual for building machinery operators] Spravochnik mekhanika
po ekspluatatsii stroitel'nykh mashin. Pod red. P.A.Zimina.
Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam,
1960. 567 p. (MIRA 13:10)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut organi-
zatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stva.
(Building machinery--Maintenance and repair)

VERDNIKOV, I. V.

Machine for polishing cylindrical glass goods. N. G. VERDNIKOV and
I. V. VERDNIKOV. Russ. 26,212, April 30, 1932.

"APPROVED FOR RELEASE: 09/01/2001

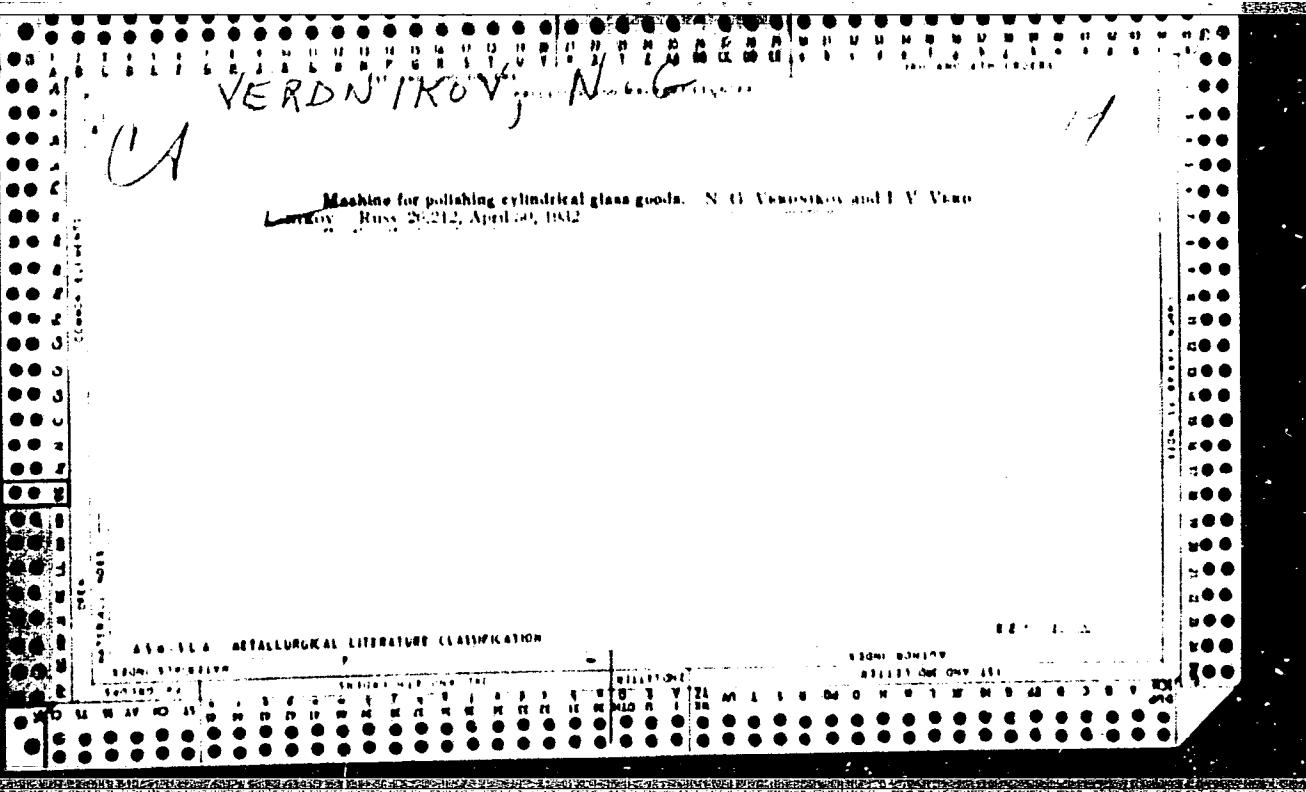
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CIA-RDP86-00513R001859420014-7



APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001859420014-7"

VERDNIKOV, Ya.V.

Structural engineering, and planning and accounting units in
shipbuilding and their purpose. Trudy NTO sud.prom. 8
no.2:69-86 '59. (MIRA 13:5)
(Shipbuilding) (Industrial organization)

YEGOROV, M.V., otvetstvennyy red.; VERDNIKOV, Ya.V., nauchnyy red.;
LEVOCHKINA, L.I., tekhn.red.

[Collection of materials of the International Conference on
Shipbuilding] Sbornik materialov Mezhdunarodnoi konferentsii po
sudostroeniu. Leningrad, Gos. soiuznoe izd-vo sudostroit.
promyschl., 1957. 262 p. (MIRA 11:6)

1. Mezhdunarodnaya konferentsiya po sudostroyeniyu, Leningrad, 1956.
(Shipbuilding--Congresses)

SHCHERBAKOV, D.I., akademik; BABAT, G.I., prof. doktor tekhn. nauk; ZHELTSOV,
V., inzh.; VYRD'YE, Zhan, zhurnalist (Frantsiya); RUBASHEV, B.;
GRIGOR'YEV, S., inzh.; SAUKOV, R.A.; VASIL'YEV, M., inzh.; POMAZOVICH,
N., prof.; GALINA, L.M., muzykoved-fol'klorist; KERSHNER, D., biolog;
BUDYKO, I., prof.; SEMENOV, S., zhurnalist.

Discoveries to be made. Znan. sila 32 no.11:27-32 N '57. (MLRA 10:11)

1. Ispolnyayushchiy obyazannosti uchenogo sekretarya Glavnoy astro-
nomicheskoy observatorii (for Rubashev). 2. Chlen-korrespondent AN
SSSR (for Saukov). 3. Direktor Glavnoy geofizicheskoy observatorii
im. A.I. Voeyskova (for Budyko).

(Science)

ЛІКУІ, 27/1

ZENKOVICH, V., prof. doktor geogr. nauk; LAGUNOVA, I.; PETROVSKIY, Yu.
zhurnalist; YERD'YE, Zhan; PETROV, S., inzh.; NAUMOV, S., nauchnyy
sotrudnik; IOFFE, V., inzh.; DROZDOV, V., inzh.

People of new specialties. Znan. sila 32 no.11:32-34 N '57.

(MLRA 10:11)

1. Direktor Instituta rentgenologii i radiologii Ministerstva zdravo-
okhraneniya (for Lagunova)

(Science)

VERDYSH, D.I.

A whole community on guard for public health. Zdravookhranenie
3 no.2:9-12 Mr-Apr '60. (MIRA 13:7)
(KOTOV DISTRICT (MOLDAVIA)--PUBLIC HEALTH)

2214 Verdvsh, S Ya

Plodouyy Pitomnik Kolkhoza Im. Kotovskogo, Kamyenskogo Rayona (Zapisala S. Ye Grinbyerg). Kishinev, Moldavgiz. 1954 16 s. s Ill. 16 sm. (Glav. Upr. s.-Kh. Propagandy I Nauki MSKH MSSR B-Chka Kolkhoznika) 3.000EXZ 10k.-
(54-55857)p 634.¹: 631.537(47.75)

MORYGANOV, A. N., VERDYSHEV, A. F.

Moryganov, A. N.

Book on the work practice of a leading collective farm ("Vpered" Collective Farm." A. N. Moryganov, A. F. Verdyshev. Reviewed by kh. Potapov). Kolkh. proiz. 12 no. 5, 1952.

9. Monthly List of Russian Accessions, Library of Congress, November 1952, Uncl.

TRUDOVYKH, A.P. and VERBITSKY, KH.

TRUDOVYKH, A.P.

Book on the work practice of collective agricultural farms in the collective farms. 10.
Ned. by. priav. reviewed by Rothov, M. 12 p. 5, 1952.

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

MORYGANOV, A. N., VERDYSHEV, A. P.

Yaroslavl' Province - Collective Farms

Book on the work practice of a leading collective farm ("Vpered" Collective Farm
Reviewed by Kh. Potapov). Kolkh. proiz. no. 5, 1952.

9. Monthly List of Russian Accessions, Library of Congress, November 1951, Uncl.
2

ANDREEV, ALEXEY, A.P., ARTHUR

COLLECTIVE FARM - KARAEVSKY PROVINCE

SOVIET UNION, REPUBLIC OF TATARSTAN, DISTRICT "KAZAN", VILLAGE "KALINOVKA",
SERIAL NO. 5. TOTAL 400, 1953, UNCL.

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

VK E.S.

FILE I BOOK EXHIBITION 507/LSS

Akademija nauk SSSR. Izdatel'stvo fiziko-tekhnicheskikh i obozrenii nauchno-tekhnicheskikh

prilozheniyakh radiofizika i radiohemika (Gos. otd. Vsesoyuz. nauch.-issled. inst. po radiofiz. i radiohem. 1960). 336 p. Printed slip inserted. 4,500 copies printed.

Spetsial'nyy agent Akademija nauk SSSR. Institut metallofiziki imeni A.I. Bayrova.

Izdatel'stvo fiziko-tekhnicheskikh obozrenii proizvodstva stali.

Bogov, M.I. A.M. Semenov. Corresponding Member, Academy of Sciences USSR; Ed. of

Prilozheniiem Nauken. G.M. Matrosov; Tech. Ed.: S.G. Matrosov.

Priroda. This exhibition of articles is intended for technical personal interest.
and is meant to stimulate and develop interest in vacuum technology practice and equipment.

CONTENTS. The book contains information on steel rolling in vacuum induction furnaces, and various dry furnaces, reduction processes in vacuum, and dressing of

steel and alloy. The functioning of operation and equipment, especially

vacuum furnaces and vacuum booster pumps is also analyzed. Explanations are

provided in connection with some of the articles and will appear in the table

of contents. Five articles have been translated from English. Some of the

articles [Hungarian People's Republic]. The Mechanism of Deformation of Metals.

257

Khromatova, S.P., I.D. Melnikov, and V.I. Solntsev. On the Problem of

264

Vacuum Rolling of Metals.

273

Kulik, D. Solubility of Nitrogen in Iron-Chromium-Nickel Metals

274

PART V. APPARATUS AND EQUIPMENT

Pogod'ko, A.A. Investigation Rolling of Metals in Vacuum or in the Hard-Gas

279

Transpiration

Nesterov, E.N. and F.E. Danziger. Investigation of Individual Subassemblies

280

of Vacuum Electric Furnaces

Mashinostroyeniye, A.P. Solntsevskiy and A.G. Poluboretskiy. Highly Productive

294

continuous vacuum furnaces

295

Perfil'chikov, A. A New Series of Highly Productive Vapor-Sieve Pumps

310

G.D. Krasnoshchekov and V.A. Konarov participated in the work.

316

Krasnoshchekov, V.I. Highly Productive Mechanical Booster Pumps

320

Borov, V.S. Determination of Gas Content in Steel and Petrolyers

326

Generalniy, Iu.B. Hot Rolling of Metals in Vacuum

328

APPENDIX. Library of Congress

VEREANU, D. (Bukurest)

Spinal anesthesia in pediatric surgery. Cas. lek. cesk. 101 no.40:
1206-1209 5 0 '62.

(ANESTHESIA SPINAL) (PEDIATRICS)

VEREANU, D.

*
- // -

1.	General Problems in Romania. Dr. ION CIOBANU, 27 February 62 (Bucharest), Chief of the "Technical Service" responsible for the direction of the Agency and head (Sectar General) of Central Committee for Political Work of the Ministry of Foreign Affairs, Bucharest. (Tele- vision Broadcasts at Press Conference).
2.	General. A meeting of the Ministry of Health, Bucharest, on the 27th, 1961, Dr. GHEORGHE MATEI, Minister of Health, Dr. NICHOLAE GRABIANU, Minister of Education, Dr. NICOLAE GHEORGHE, Minister of Finance, Dr. NICOLAE GHEORGHE, Minister of Internal Affairs, Dr. NICOLAE GRABIANU, Minister of Foreign Affairs, other members of the cabinet (and others). (See also DR. GHEORGHE MATEI).
3.	Information to the Soviet Union is classified. (See 2. RECENT INFORMATION).
4.	Information to the Soviets and the USSR, Dr. GHEORGHE MATEI.
5.	Proposed by Dr. GHEORGHE MATEI that Bucharest be included in the Soviet Union's classification system. (See 2. RECENT INFORMATION).
6.	Practice of the USSR in using "Soviet Diplomatic" Dr. ION CIOBANU (Bucharest, Bucharest). Poor performance on the class. A suggestion proposed (Sectar General of Central Committee for Political Work of the Ministry of Foreign Affairs, Bucharest). Dr. NICOLAE GHEORGHE, Minister of Finance, Dr. NICOLAE GHEORGHE, Minister of Internal Affairs, Dr. NICOLAE GRABIANU, Minister of Education, Dr. NICOLAE GHEORGHE, Minister of Finance, Dr. NICOLAE GHEORGHE, Minister of Internal Affairs (not on agenda).
7.	The treatment of some persons as citizens, Dr. ION CIOBANU, Dr. NICOLAE GHEORGHE (Citizen of Romania) and Dr. NICOLAE GHEORGHE (Citizen of Romania).
8.	Problems of Bucharest in participating in the 1960 FAWC. See DR. NICOLAE GHEORGHE (Citizen of Romania) (See 2. RECENT INFORMATION).

VEREANU, D.

particular clinical forms of intussusception in the child. Romanian
M. Rev. 3 no.1:52-54 Jan-Mar 59.
(INTUSSUSCEPTION, in inf. & child
tumoral & recur. painful forms)

VEREANU, G.

VEREANU, G. About the typification of vessels on the Danube. p. 212.

Vol. 3, no. 6, June 1956
REVISTA TRANSPORTURILOR
TECHNOLOGY
Bucuresti, Romania

So: East European Accession, Vol. 7, no. 3, March 1957

VEREBELY, LASZLO & PAL SZIROKAY

Elektromos vasutak. I. kötet (Electric Railroads. Vol. 1); a book review.
p. 359. KOZIEKEDEFTUDOMANYI SZEMLE. Budapest. Vol. 5, No. 9, Sept. 1955.

SOURCE: EAST EUROPEAN ACCESSION LIST (EEAL), LC, Vol. 5, No. 2, Feb. 1956

VEREBELY, L.

Ronkay Ferenc's Villamos szabadvezetek zuzmaraterhalesc (Rime Load on Overhead Lines); a book review. p. 259.
ELEKTROTECHNIKA, VOL. 48, No. 8, Aug. 1955
(Magyar Elektrotechnikai Egyesulet) Budapest.

SOURCE: East European Accessions List Vol. 5, No. 1 September, 1956

BUCH IV, L.

Kalman Hando; a biographic sketch. p. 31.
(S 210 17745. Vol. 21, no. 1/4, 1957, Budapest, Hungary)

Sp: Monthly List of West European Associations (var.) Vol. 6, no. 12, Dec. 1957.
Uncl.

~~Results of lightning research in Hungary. L. Vere-~~
~~bély. A Magyar Tudományos Akadémia Műszaki~~
~~Tudományok Osztályának Közleményei. Vol. 21, 1957.~~
No. 1-4, pp. 189-228, 11 figs., 12 tabs., 5 maps

g
T-j R

In order to protect the national transmission-line network against atmospheric surges disturbing its service three questions must be cleared up: (a) How large is the screening area of the grounded protective conductor mounted over the main conductors? (b) To what extent are the individual sections of the transmission lines endangered by lightning? (c) What power of lightning must be taken into account for choosing the groundings and lightning arresters? The paper furnishes statistical data according to which the average isokeraunic level in Hungary is 14 or 22 according to the method of interpretation. Test results for the lightning polarity and lightning current intensity obtained with lightning streamer crests are as follows: 91% of strokes of lightning into tall objects, 43% of strokes into transmission lines and 52.6% of strokes into lightning arresters were of negative polarity. The strongest lightning observed struck a high chimney, the current intensity was 60 kA. According to the data a min. of 45 kA should be calculated for grounding of transmission line poles and a min. of 10-12 kA surge current for lightning arresters. The national organization of lightning research, the measuring instruments and methods are dealt with in detail.

VARGA, L.

Results in the investigation of lightning in Hungary up to the year 1959.
(KOVÁCS, Vol. 21, no. 1/b, 1957, Budapest, Hungary)

See: Monthly List of East European Acquisitions (EML) 1957, vol. 6, no. 17, Dec. 1957,
Uncl.

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VEREBELY, LADISLAV

(Electric-power transmission. 1st ed. tr. from the Hungarian. bibl., diagrs., footnotes, index)

Monthly list of East European Accessions (EEAT), LC, Vol. 8, No. 6, Jun 59, Unclass

V E R E B E L Y , Tibor

KOVES, Istvan, dr.; VEREBELY, Tibor, dr.

A new surgical method for radical excision of sigmoid rectum carcinoma with preservation of the sphincter apparatus (Swenson's surgery). Magy.sebeszet 8 no.145-208:145-159 June 55.

1. Az Orszagos Reuma es Furdougyi Intezet Sebeszeti csztalyanak
kozlemenye Foorvoss: Verebelly Tibor dr.
(COLON, neoplasms,
surg., Swenson's method)

VEREBEYCHIK, N. M.

USSR/Physics - Dielectric Loss

Jan 52

"Dielectric Losses in Alkaline Alumosilicate Glasses," N. M. Verebeychik, A. E. Kamenchik, V. I. Odelevskiy

"Zhur Tekh Fiz" Vol XXII, No 1, pp 12-15

Investigates the dielec losses in high-silicic potassium-alumosilicate glasses corresponding to the general mol formula $K_2O \cdot xAl_2O_3 \cdot (17-2x)SiO_2$. Shows that the dielec losses are complex function of compn which passes through a min when the ratio of atoms or concns of oxygen and small cations, $a = (O/Si+Al)$, equals 2; it passes through a max when $b = 2 \pm 0.012$.
Submitted 28 Mar 51.

206T98

VEREBEYCHIK, N. M.,
and
ODELEVSKIY, V. I.

"Relaxation Dielectric Losses in Certain Silicate Glasses," pp 247-266,
ill, 8 ref

Abst: An attempt is made to develop a theory for high-temperature relaxation dielectric losses in silicate glasses. A number of glass compounds having high dielectric constants are brought to the attention of industrial technologists.

SOURCE: Izvestiya Tomskogo Politekhnika, In-ta Im. S. M. Kirova (News of the Tomsk Polytechnic Institute imeni S. M. Kirov), Volume 91, Works of the Conference on Solid Dielectrics, Tomsk, September 1955, Tomsk, Publishing House of the Polytechnical Institute, 1956

Sum 1854

Verebeychik, N.M.
USSR / Electricity

G

Abs Jour : Ref Zhur - Fizika, No 4, 1957, No 9630
Author : Verebeychik, N.M., Odelevskiy, V.I.
Inst : Not given
Title : Dielectric Losses in Glass. II. Investigation of Electric
and Physical Properties of Sodium Alumo-silicate Glass.
Orig Pub : Zh. tekhn. fiziki, 1956, 26, No 8, 1696-1703

Abstract : Measurements were made of the electric properties, density,
thermal expansion, and index of refraction of glass with com-
position $\text{Na}_2\text{O} \cdot x\text{Al}_2\text{O}_3(17-2x) \text{SiO}_2$, where x varies from 0.6
to 1.4 in the temperature range from 50 to 600°. The glass
is characterized at room temperature by high electric conduc-
tivity copper and by losses; if the Na_2O content is 0.6
mole % we get $\sim 10^{-10} \text{ ohm}^{-1} \text{ cm}^{-1}$ and $\tan \delta \sim 20\%$ at 1 kc.
The coefficient of expansion is approximately one order of
magnitude greater than that of silicate glass. The proper-

Card : 1/2

USSR / Electricity

C

Abs Jour : Ref Zhur - Fizika, No 4, 1957, No 9630

Abstract : ty vs composition curve of all the investigated quantities pass through a maximum at points corresponding to $x = 0.8$ and 1.2. The appearance of the maxima indicates that there exists two regions in which glass crumbles when the alumina content changes.

Card : 2/2

Verebeychik, N.M.

USSR/Electricity - Dielectrics

G-2

Abs Jour : Referat Zhur - Fizika, No 5, 1957, 12116

Author : Verebeychik, N.M., Odelevskiy, V.I.

Inst :

Title : Dielectric Losses in Glass. III. Relaxational "High Temperature" Dielectric Losses in Alkali Glass.

Orig Pub : Zh. tekhn. fiziki, 1956, 26, No 8, 1704-1713

Abstract : To explain the high dielectric losses of alumosilicate glass, the authors proposed a structural model with constant mobile dipoles. The structure of the alumosilicate glass is derived from the crystobalite lattice by replacing the Si ions in accordance with the scheme $\text{Si}^{n+} \rightarrow \text{Al}^{(n-1)+} + \text{R}^+$ with formation of pseudo-cavities between the oxygen triangles. The alkali ions are placed in the pseudo-cavities forming constant dipoles with the tetrahedron. On the basis of the crystal-chemical data, the author calculates the dipole moments of alkali ions.

Card 1/2

USSR/Electricity - Dielectrics

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Abs Jour : Ref Zhur - Fizika, No 5, 1957, 12116

A formula is proposed for determining the height of the potential barrier, corresponding to the transition of the ions from one cavity into the other, the formula being of the form:

$$\Delta U = \Delta U_{\text{COUL}} + \Delta U_{\text{rep}} + |4U_p| .$$

The calculated values of the activation energy of the dielectric losses is in agreement with experiment. Clear maximum in the region of approximately 100° are observed in the $\tan \delta$ vs. temperature curves (at audiofrequencies).

Card 2 /2

SOY/112-58-2-1862

Translation from: Referativnyj zhurnal, Elektrotehnika, 1958, № 2, p 10 (USSR)

AUTHOR: Odelevskiy, V. J., and Yerebeycik, N. M.

TITLE: Relaxation Dielectric Losses in Some Silicate Glasses
(Relaksatsionnyye dielektricheskiye poteri v nekotorykh silikatnykh steklakh)

PERIODICAL: Izv. Tomskogo politekhn. in-ta, 1956, Vol 91, pp 247-267

ABSTRACT: Inadequacy of the existent theories of "high-temperature" dielectric losses in alkali glasses is pointed out. A structural model is suggested of high-silica alkaline aluminosilicate glass with a moving dipole formed from four energy-equivalent states of the alkaline ion. To verify the theory of constant moving dipoles, dielectric losses in glass in the range of high $\tan \delta$ were investigated. Existence of sharp relaxation temperature maxima of $\tan \delta$ and high values of permittivity at temperatures about 100° - 150° C in sodium high-silica aluminosilicate glasses is shown, which agree with the theory. Dielectric losses depending on temperature were investigated for windowpane glass at various frequencies; existence of $\tan \delta$ relaxation maxima is demonstrated (with allowance

Card 1/2

SOV/112-58-2-1862

Relaxation Dielectric Losses in Some Silicate Glasses

. for conductance losses). A number of recipes for nonalkaline, nonboron glasses from readily available raw materials and with high electric properties have been developed on the basis of heterogeneous equilibrium diagrams. Effects of hardening and annealing on electrical properties of nonalkaline glasses have been studied. Existence of relaxation dielectric losses in some nonalkaline glasses has been proved. A change in properties of glass with time at room temperature has been discovered. Bibliography: 12 items. Also see Referativnyy Zhurnal, Elektrotekhnika, 1957, 3133.

M.D.M.

Card 2/2

5(2)

AUTHORS:

~~Verebeychik, N. M., Gindin, Ye. I., Odelevskiy, V. I.,~~
Prokhvatilov, V. G.

COV/78-4-3-2/34

TITLE:

New Modification of the Crystalline Magnesium Metasilicate
(Novaya modifikatsiya kristallicheskogo metasilikata magniya)

PERIODICAL:

Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 3,
pp 535-542 (USSR)

ABSTRACT:

The existence of the δ -modification of magnesium metasilicate has been discovered by the thermal decomposition of talc. Investigations of the X-ray structure have shown that the δ -phase distinguishes distinctly from protoenstatite. The existence of $\delta\text{-MgSiO}_3$ has been confirmed by comparative investigations of the refraction indices, the density and the mechanical stability of the various modifications. The thermodynamical stability of the δ -phase was investigated at 900°C. In the absence of mineralizers the δ -phase is stable up to 1400°C. The δ -modification of MgSiO_3 can be used for the production of non-aging steatite. There are 3 figures, 3 tables, and 16 references, 7 of which are Soviet.

Card 1/2

15.2120

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S/194/61/000/006/031/077
D201/D302

AUTHORS: Verebeychik, N.M. and Odelevskiy, V.I.

TITLE: A new alkali-free hard structure silicate glass containing zirconium

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 6, 1961, 8, abstract 6 G69 (V sb. Stekloobrazn. sostoyaniye, N. - L., AN SSSR, 1960, 282-286, Discuss, 303-304)

TEXT: The method of batches of saturated silicates has been used in manufacturing alkali-free hard structure silicate glass. Determination of the glass composition was performed starting with mineral components using the known diagrams of balance of double and triple systems. The free silicil acid from the mineral batch was excluded and saturated silicates were used (zirconium-boron and aluminum silicates). Mineral components (not less than four) having similar melting points and nearly identical values were used.

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A new alkali-free hard structure...

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The combination consisted of compounds having small and large ions -
modifiers. The method facilitates obtaining glass with a lower
re-crystallizing property, good electric properties at high temper-
ature and a low boiling point. Abstracter's note: Complete trans-
lation

X

Card 2/2

PONOMARENKO, F.T.; GAYLISH, Ye.A.; MARTYUSHOV, K.I.; ODELEVSKIY, V.I.;
VERBITSKAYA, T.N.; FRIDBERG, I.D.; MANOYLOV, V.Ye.; VEREBEYCHIK,
N.M.; ZHUKOVSKIY, V.I.; LISKEV, K.Ye.; MIKHAYLOV, M.M.; KNYAZEV, T.S.

Georgii Ivanovich Skanavi; obituary. Elektrichestvo no.4:94 Ap
'60. (MIRA 14:4)
(Skanavi, Georgii Ivanovich, d. 1959)