

BENEDIKTOV, I.A.---(continued) Card 3.

YEVREINOV, M.G., akademik, nauchnyy redaktor; SAZONOV, N.A., doktor tekhnicheskikh nauk, nauchnyy redaktor; NIKANDROY, B.I., inzhener, nauchnyy redaktor; KOSTYAKOV, A.N., akademik, nauchnyy redaktor; CHERKASOV, A.A., professor, doktor tekhnicheskikh nauk, nauchnyy redaktor; DAVITAYA, F.F., doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; IVANOV, N.N., professor, doktor tekhnicheskikh nauk, nauchnyy redaktor; ORLOV, P.M., professor, doktor tekhnicheskikh nauk, nauchnyy redaktor; LOZA, G.M., kandidat ekonomicheskikh nauk, nauchnyy redaktor; CHERNOV, A.V., kontrol'nyy redaktor; ZAVARSKIY, A.I., redaktor; ROS-SOSHANSKAYA, V.A., redaktor; FILATOVA, M.I., redaktor; YEMEL'YANOVA, N.I., redaktor; SILIN, V.S., redaktor BRANZBURG, A.Yu., redaktor; MAGNITSKIY, A.V., redaktor terminov; KUDRYAVTSEVA, A.G., redaktor terminov; AKSENOVA, A.P., mladshiy redaktor; MALYAVSKAYA, O.A., mladshiy redaktor; FEDOTOVA, A.F., tekhnicheskiy redaktor

(Continued on next card)

BENEDIKTOV, I.A.---(continued) Card 4.

[Agricultural encyclopedia] Sel'skokhoziaistvennaia entsikolopediia.
Izd. 3-e, perer. Moskva, Gos. izd-vo selkhoz. lit-ry. Vol. 5. [T-IA.]
1956. 663 p. (MLRA 9:9)
(Agriculture--Dictionaries and encyclopedias)

NIKANDROV, B.I.

CHAYKINA, Tat'yana Georgiyevna; ~~NIKANDROV, B.I.~~ inzhener-arkhitektor, red.;
SMELYANSKIY, V.A., red.; BALLOD, A.I., tekhn.red.

[Structures for cattle] Postroiki dlia krupnogo rogatogo skota.
Pod red. V.I.Nikandrova. Moskva, Gos. izd-vo sel'khoz. lit-ry,
1957. 215 p. (MIRA 11:4)
(Barns)

NIKANDROV, B.

Plans for renovation of houses for fattening swine. Sel'. stroi. 12
no.3:30 Nr '58. (MIRA 11:3)

1. Direktor instituta "Giprotsel'khoz" Ministerstva sel'skogo khozyay-
stva SSSR.

(Swine houses and equipment)

NIKANDROV, B.; VOLGIN, V.; KUZNETSOV, N.; RYABTSEVA, A.; VORONIN, A.;
SERGEYEV, Ye.; PECHATKIN, I.

Labor campaign in honor of the congress. Prom.koop. 12 no.12:4
D '58. (MIRA 12:2)

1. Predsedatel' pravleniya moskovskoy arteli "Tol'prom" (for Nikandrov).
 2. Sekretar' partorganizatsii moskovskoy arteli "Tol'prom" (for Volgin).
 3. Predsedatel' pravleniya arteli "Rembytshvey" (for Kuznetsov).
 4. Sekretar' partoorganizatsii arteli "Rembytshvey" (for Ryabtseva).
 5. Predsedatel' pravleniya oblpromsoveta Tul'skoy oblasti (for Voronin).
 6. Zamestitel' predsedatelya pravleniya oblpromsoveta Alma-Atinskoy oblasti (for Sergeyev).
 7. Sekretar' partorganizatsii krasnoslobodskoy arteli im. Kuybysheva Mordovskoy ASSR (for Pechatkin).
- (Cooperative societies)

NIKANDROV, B.

Structures for drying and storing corn. Sel'. stroi. 13 no.6:19-21
Je '58. (MIRA 11:6)

1. Direktor "Giprosel'khoza" Ministerstva sel'skogo khozyaystva
SSSR.
(Corn (Maize)--Drying) (Corn (Maize)--Storage)

NIKANDROV, Boris Ivanovich; DUBROVSKIY, V.A., red.; SOKOLOVA, N.M.,
tekh.n.red.; PEVZNER, V.I., tekh.n.red.

[Livestock buildings] Zhivotnovodcheskie postroiки. Moskva,
Gos.izd-vo sel'khoz.lit-ry, 1959. 270 p. (MIRA 12:9)
(Farm buildings)

NIKANDROV, B., inzh.-arkhitektor; LESOV, N., inzh.-stroitel'

Raise more animals on the same acreage. Nauka 1 pered. op. v
sel'khoz 9 no.10:16-19 0 '59 (MIRA 13:3)
(Stock and stockbreeding)

ARKHANGEL'SKIY, P.Ye.; BERNSTEYN, A.M.; BYKOV, M.A.; DLUGACH, M.L.;
IL'YASHEVSKIY, Ye.A.; KIRILLOV, A.A.; KOZLOVSKIY, A.S.; KRYLOV,
N.V.; LESOV, N.M.; MARTYNOV, P.T.; NIKANDROV, B.I.; PARUNIN,
V.Ye.; RUDANOV, M.L.; SINYAKOV, V.K.; PAL'KMER, O.G.; PETRYAKOV,
A.I., red.; BALLOD, A.I., tekhn.red.

[Manual on the construction of farm buildings] Spravochnik po
sel'skokhoziaistvennomu stroitel'stvu. Moskva, Gos.izd-vo
sel'khoz.lit-ry, 1960. 704 p.
(Farm buildings) (MIRA 13:12)

NIKANDROV, Boris Ivanovich; YELIZAVETSKAYA, G.V., red.; PEVZNER, V.I.,
tekhn. red.

[Farm buildings]Sel'skokhoziaistvennye postroiki. Moskva,
Sel'khozizdat, 1962. 271 p. (MIRA 15:9)
(Farm buildings)

TOPCHIIY, Dmitriy Nikitich; NIKANDROV, B.I., ~~inst.~~, retsenzent; KUZ'MIN, N.S., kand. arkhitektury, dots., retsenzent; ZUBKOVA, M.S., red. izd-va; GOL'BERG, T.M., tekhn. red.

[Agricultural buildings and structures] Sel'skokhoziaistvennye zdaniia i sooruzheniia. Izd.2., perer. i dop. Moskva, Gosstroizdat, 1962. 398 p. (MIRA 15:12)

1. Direktor Gosudarstvennogo instituta po proyektirovaniyu sel'skokhozyaystvennykh sooruzheniy (for Nikandrov). 2. Rukovoditel' kafedry promyshlennykh, grazhdanskikh i sel'skokhozyaystvennykh sooruzheniy Novosibirskogo inzhenerno-stroitel'nogo instituta (for Kuz'min).

(Farm buildings)

L 8329-56 EWI(m)/EWP(t)/EWP(b) IJP(c) JD

ACC NR: AP5025722

SOURCE CODE: UR/0286/65/000/018/0075/0075

INVENTOR: Anitov, I. S.; Nikonorov, M. A.; Zhvostyntsev, K. I.

ORG: none

TITLE: High-strength titanium-base alloy. Class 40, No. 174795 [announced by the Organization of the State Committee of Defense Engineering USSR (Organizatsiya gosudarstvennogo komiteta po oboronnoy tekhnike USSR)]

SOURCE: Byulleten' izobreneniy i tovarnykh znakov, no. 18, 1965, 75

TOPIC TAGS: titanium alloy, aluminum containing alloy, molybdenum containing alloy, vanadium containing alloy, chromium containing alloy

ABSTRACT: This Author Certificate introduces a high-strength titanium-base alloy containing aluminum, molybdenum, vanadium, and chromium. To improve ductility, the alloy composition is as follows: 2.5-3.5% aluminum, 3.2-4.5% molybdenum, 6.5-7.5% vanadium, 10-11.3% chromium, and the balance titanium. [JD]

SUB CODE: 11/ SUBM DATE: 01Jun64/ ATD PRESS: 4149

PC

Card 1/1

UDC: 669.295.5.018.2

152000

43140
S/181/62/004/011/046/049
B108/B186

AUTHOR: Nikandrov, V. S.

TITLE: The influence of aluminum oxide on the electrical conductivity of alkali-free magnesia-calcium glasses

PERIODICAL: Fizika tverdogo tela, v. 4, no. 11, 1962, 3342-3343

TEXT: It was found earlier that partially substituting SiO_4 by Al_2O_3 in alkali glasses increases the electrical conductivity of the latter. This paper is concerned with similar studies on alkali-free glasses (diopside type). Glass of the composition $\text{CaO} \cdot \text{MgO} \cdot 2\text{SiO}_2 \cdot x\text{Al}_2\text{O}_3$ showed a decreasing electrical conductivity when the aluminum oxide content was increased. The carrier activation energy increased from 0.8 to 1.3 eV as the content x in Al_2O_3 increased from 0.1 to 0.6. The decrease of conductivity is explained by the substitution of Si^{+4} ions by Al^{+3} ions. However, this is possible only when at the same time an equal amount of Mg^{+2} ions is replaced by Al^{+3} ions. This process reduces the number of ions in the eighth coordination and therefore reduces also the conductivity.

Card 1/2

The influence of aluminum oxide ...

S/181/62/004/011/046/049
B108/B186

Consequently, the higher number of ions in the sixth coordination gives the glass a simpler structure which manifests itself in the energy of the carriers. There is 1 figure.

ASSOCIATION: Leningradskiy Elektrotekhnicheskiy institut im. V. I. Ul'yanova
(Lenina) (Leningrad Electrotechnical Institute imeni V. I.
Ul'yanov (Lenin))

SUBMITTED: July 16, 1962

Card 2/2

L 44778-66 EWT(d)/EWT(m)/EWP(v)/EWP(t)/ETI/EWP(k)/EWP(h)/EWP(l) IJP(e) JD

ACC NR: AP6013263

SOURCE CODE: UR/0413/66/000/008/0053/0053

INVENTOR: Gorokhov, N. I. ; Nikandrov, I. L.

27
13

ORG: none

TITLE: Semiautomatic vacuum device for making selenium photocells. Class 21, No. 180715

27

14

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 8, 1966, 53

TOPIC TAGS: photocell, selenium photocell

ABSTRACT: This Author Certificate introduces a semiautomatic vacuum device for making selenium photocells featuring a turning arrangement for moving the blank photocell in to a position with respect to the vaporization source. To improve the efficiency of the device and the uniformity of the layer applied to the photocell blank, the turning device is made as a drum consisting of a set of prisms whose rotation axes

Card 1/2

UDC: 621.383.42.002.5

L 44778-66

ACC NR: AP6013263

are parallel to the surface of the vaporization surface. The external side of the prisms are designed with position retainers arranged for the photocell blanks (see Fig. 1).
Orig. art. has: 1 figure. [Translation] [LD]

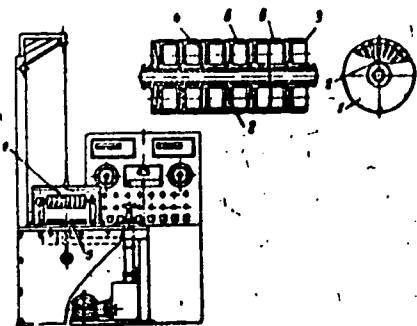


Fig. 1. Semiautomatic vacuum device for making selenium photocells. 1—Drum; 2—prism; 3—external side of prism; 4—position retainers; 5—vaporized surface; 6—photocell blank.

SUB CODE: 13, 20/ SUBM DATE: 11Oct63/

Card 2/2

I 44199-66 EWP(e)/EWT(m) WH

ACC NR: AP6013272 (A) SOURCE CODE: UR/0413/66/000/008/0070/0070

INVENTOR: Nikandrov, V. S.

ORG: none

TITLE: Glass for the second cover of a light guide. ¹⁶ Class 32, No. 180771 ¹⁵
[announced by the All-Union Scientific Research Institute of Glass Fibers (Vse-
soyuznyy nauchno-issledovatel'skiy institut steklyannogo volokna)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 8, 1966, 70

TOPIC TAGS: glass, image contrast, light guide

ABSTRACT: An Author Certificate has been issued for glass for the second cover
of a light guide. Its base is SiO₂, B₂O₃, Na₂O, Fe₂O₃, and CaO. ¹⁵ To ensure image
contrast, the components are taken in the following quantities (weight in %):

Card 1/2

UDC: 666.189 2:666.112.7

L 44189-66

ACC NR: AP6013272

SiO₂, 52.5—60; B₂O₃, 1.6—18.5; Na₂O, 9.5—10.5; Fe₂O₃, 19—21; CaO, not

more than 3. [Translation]

[NT]

SUB CODE: 11,20,17 SUBM DATE: 29Oct64/

Card 2/2 *alum*

S/139/62/000/006/005/032
E039/E435

AUTHOR: Nikandrov, V.S.

TITLE: The effect of sintering temperature on the stability of the bond between silver and dielectrics

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Fizika, no.6, 1962, 25-28

TEXT: The physico-chemical processes occurring when metals are bonded to dielectrics are complex. The stability of the bond depends on many factors such as the nature of the metal and the dielectric surface compositions etc. The silver is applied as a paste to the degreased dielectric surface, dried at 120°C and sintered in a muffle furnace, the temperature of which is controlled to 1 to 2°C. The applied layer of silver is then copper plated and tinned. Stability of the silver-dielectric bond is determined by soldering a brass rod to the tinned silver surface. This rod is supported in a special holder and the breaking strain for separating the silver from the dielectric can be measured directly. Layers of silver are applied and sintered at different temperatures. It is shown that the optimum sintering temperature

Card 1/2

The effect of sintering ...

S/139/62/000/006/005/032
E039/E435

is 650°C. The maximum breaking strain measured between silver and crystallized glass is 285 kg/cm² while the average of ten experiments is about 160 kg/cm². A comparable figure for silver to ceramic from the literature is 300 kg/cm². It is shown that the coupling is not mechanical and dendrites are not formed. It is suggested that the bond is due to metal ions in microdefects on the dielectric surface. There are 2 figures and 1 table.

ASSOCIATION: Leningradskiy elektrotekhnicheskiy institut imeni V.I.Ul'yanova (Lenina) (Leningrad Electrotechnical Institute imeni V.I.Ul'yanov (Lenin))

SUBMITTED: August 15, 1961

Card 2/2

NIKANDROV, V.S.

Investigating the catalytic crystallization of alkali-free glasses.
Stakloobr. sost. no.1:174-177 '63. (MIRA 17.10)

ACCESSION NR: AT4019315

S/0000/63/003/001/0174/0177

AUTHOR: Nikandrov, V. S.

TITLE: An investigation of the catalytic crystallization of alkali-free glasses

SOURCE: Simpozium po stekloobraznomu sostoyaniyu. Leningrad, 1962. Stekloobraznoye sostoyaniye, vyyp. 1: Katalizirovannaya kristallizatsiya stekla (Vitreous state, no. 1: Catalyzing crystallization of glass). Trudy* simpoziuma, v. 3, no. 1. Moscow, Izd-vo AN SSSR, 1963, 174-177, insert facing p. 178

TOPIC TAGS: glass, glass crystallization, alkali-free glass, diopside, apatite, catalyzed crystallization

ABSTRACT: Crystalline glasses having the chemical composition of diopside were investigated because, first of all, the clarification of the conditions and characteristics of the crystallization of this type of glass would make it possible to produce inexpensive, readily-fusible, glassy-crystalline materials and secondly, because the information obtained on this type of crystallization can also be used for other glass compositions. The chemical composition (% by weight) of the investigated diopside glasses was: CaO-24.4, MgO-17.5, SiO₂-52.5, and Al₂O₃-5.6. For initiation a mixture of Ag, Cu, Cr₂O₃, TiO₂ and apatite were added (0.01-5% by weight). The best effect was obtained with TiO₂ and fluoroapatite. Their

Card 1/2

ACCESSION NR: AT4019315

effect on the crystallization process is discussed in detail. The best effect from TiO_2 was obtained over a temperature range of 920-940C. The range of crystallization of glasses containing fluoroapatite, however, is much wider; the maximum rate of crystallization is at 960C and the minimum rate is at 820C. The crystals obtained from glasses with TiO_2 and apatite are compared. A study of the crystallization process with different additives showed that the physico-chemical properties of the additives exert a substantial effect on the growth of the crystals. This effect is greater the more the additive changes the surface tension crystal face of the growing crystal with respect to the medium. The degree of this effect is determined by the ratio of the lattice parameters of the additive and the growing crystal. The parameters tabulated for diopside and apatite show good agreement. Orig. art. has: 1 formula, 3 figures and 1 table.

ASSOCIATION: none

SUBMITTED: 17May63

DATE ACQ: 21Nov63

ENCL: 00

SUB CODE: MT

NO REF SOV: 004

OTHER: 002

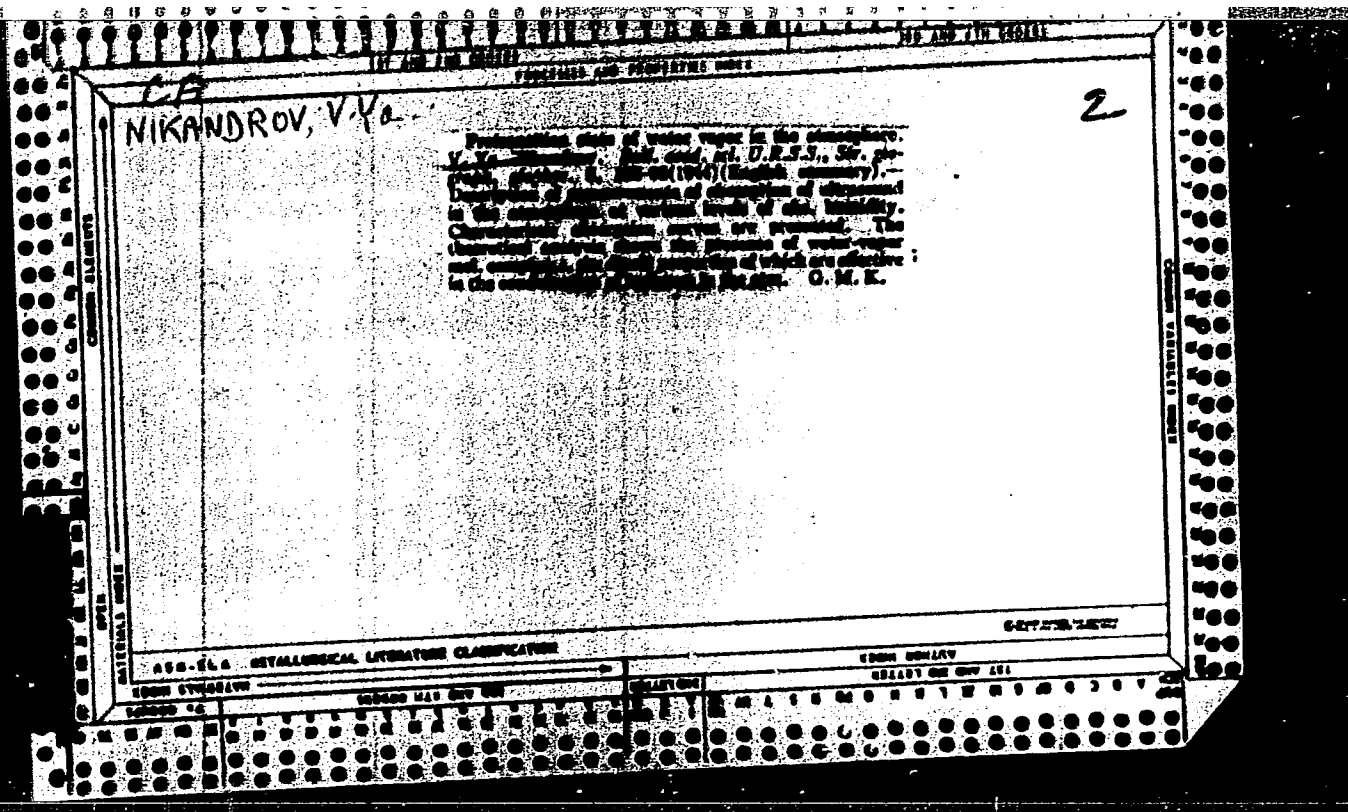
Card 2/2

NIKANDROV, V. Ya.

Central Geophysical Observatory, (-1943-)

" On the fore-transition state of water-steam in
the atmosphere,"

Iz. AK. Nauk SSSR, Ser. Geograf. i Geofiz., No.1-6, 1944



NIKANDROVA, V.IA.

Science

Problems of the physics of precipitation; collection of articles, Pod red V. IA.
Nikandrova, Leningrad, Gidrometeoizdat, 1951.

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

NIKANDROV, V.Ya.

Interaction of supercooled water drops and solid particles. Trudy
GGO no.57:3-18 '56. (MIRA 10:1)
(Precipitation (Meteorology))

NIKANDROV, V. Ye.

Charge of particles in clouds and fogs, Trudy GGO no. 57:36-39 '56.
(MIRA 10:1)

(Particles) (Atmospheric nucleation)

NIKANDROV, V. Ya., kand. fiz.-mat. nauk, red.; SHISHKIN, N.S., doktor fiz.-mat. nauk, red.; SHIFRIN, K.S., doktor fiz.-mat. nauk, red.; SOLOV'YEV, V.A., kand. fiz.-mat. nauk, red.; PISAREVSKAYA, V.I., red.; SOLOVEYCHIK, A.A., tekhn. red.

[Investigations of clouds, precipitation, and thunderstorm electricity] Issledovanie oblakov, osadkov i grozovogo elektrichestva; sbornik dokladov V Mezhdomstvennoi konferentsii po voprosam issledovaniia oblakov, osadkov i grozovogo elektrichestva. Leningrad, Gidrometeor. izd-vo, 1957. 214 p. (MIRA 11:6)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye gidrometeorologicheskoy sluzhby.
(Clouds) (Atmospheric electricity)
(Precipitation (Meteorology))

VOSKRESENSKIY, A.I.; MORACHEVSKIY, V.G.; NIKANDROV, V.Ya.

Use of dry ice for cloud dispersal in the Arctic. Probl. Arkt.
no.2:133-139 '57. (MIRA 11:12)
(Dry ice) (Arctic regions--Weather control)

NIKANDROV, V.Ya.

Standardization of the use of solid carbon dioxide as applied to
the seeding of clouds. Trudy GGO no. 67:131-143 '57. (MIRA 11:4)
(Rain making) (Dry ice)

NIKANDROV V. YA.
p 2

PHASE I BOOK EXPLOITATION

SOV/3904
SOV/2-M-73

Glavnaya geofizicheskaya observatoriya

Fizika atmosfery (Physics of the Atmosphere) Leningrad, Gidrometeoizdat, 1958.
130 p. Errata slip inserted. 1,300 copies printed. (Series: Its: Trudy,
vyp. 73)

Additional Sponsoring Agency: USSR. Glavnoye upravleniye gidrometeorologicheskoy
sluzhby.

Ed.: V.V. Bazilevich, Doctor of Physics and Mathematics; Ed.: M.M. Yasnogorodskaya;
Tech. Ed.: O.G. Vladimirov.

PURPOSE: This publication is intended for meteorologists and geophysicists.

COVERAGE: This issue of the Transactions of the Main Geophysical Observatory
of the USSR contains 11 articles on problems in atmospheric physics, par-
ticularly in the region of the ground layer. Individual articles discuss:
the meteorological conditions surrounding the formation of winter evapo-
rational fogs, the possibilities of using radio-controlled aircraft models for
Card 1/3

Physics of the Atmosphere

SOV/3904

aerological investigations, the effect of atmospheric turbulence on sound propagation, and the physical properties of fog droplets. References accompany each article.

TABLE OF CONTENTS:

Nikandrov, V.Ya. Nature of the Formation of Droplets and Icicles Under Conditions of Supersaturation	3
Krasikov, P.N., and G.M. Bashkirova. Meteorological Conditions During Angara Winter Fogs in the Area of the City of Irkutsk	12
Verontsov, P.A. Aerological Investigations of Evaporational Fogs of the Angara River	24
Bashkirova, G.M., and P.N. Krasikov. Some Microphysical Characteristics of Angara Winter Fogs in the Area of the City of Irkutsk	37
Bazilevich, V.V. Effect of Atmospheric Turbulence Upon the Audibility of Sounds in the Atmosphere	50
Tverskoy, N.P. Acoustic Characteristics of the Turbulent State of the Atmosphere	54
Card 2/3	

Physics of the Atmosphere

SOV/3904

- Vorontsov, P.A. Aerological Investigation of the Boundary Layer of the Atmosphere Over the Hillock Relief of Virgin Lands 61
- Vorontsov, P.A. The Breezes of Lake Ladoga 87
- Vorontsov, P.A., V.M. Michel', and A.A. Erler. Use of Radio-Controlled Aircraft Models for Aerological Investigation of the Lower Layers of the Atmosphere 107
- Makhotkin, L.G., and V.A. Solov'yev. The Role of Electric Charges in the Coagulation of Fog Droplets 116
- Tverskaya, N.P. Experimental Study of Collision and Fusion of Charged Droplets

AVAILABLE: Library of Congress

JA/dwm/gmp
8-1-60

Card 3/3

NIKANDROV, V Ya

3(7)

bx

PHASE I BOOK EXPLOITATION

SOV/1720

Leningrad. Glavnaya geofizicheskaya observatoriya.

Voprosy razrabotki meteorologicheskikh priborov (Problems in the Development of Meteorological Instruments) Leningrad, Gidrometeoizdat, 1958. 49 p. (Series: Its: Trudy, vyp. 83) 1350 copies printed.

Additional Sponsoring Agency: Glavnoye upravleniye gidrometeorologicheskoy sluzhby.

Ed. (Title page): M.S. Sternzat, Candidate of Physical-Mathematical Sciences; Ed. (Inside book): M.M. Yasnogorodskaya; Tech. Ed.: A.N. Sergeev.

PURPOSE: This issue is intended for scientific personnel engaged in the construction and use of meteorological instruments.

COVERAGE: In general, this booklet covers descriptions of new instruments and problems encountered in their development. It also describes methods used for selecting the optimum interval for averaging the velocity of the wind and for determining the aggregate composition of fogs. The instruments described in detail include a new
Card 1/2
2

Problems in the Development (Cont.)

SOV/1720

automatic condensation hygrometer, a simple device for determining the composition of fog, a field radiometer, a device for measuring temperature, apparatus for actinometric observations and a device for measuring winds of high velocity. No personalities are mentioned. Bibliographies follow each article.

TABLE OF CONTENTS:

Fateyev, N.P. New Automatic Condensation Hygrometer	3
Andreyev, I.D. Selection of the Optimum Interval for Averaging Wind Velocity	20
<u>Nikandrov, V.Ya.</u> A Method of Determining the Aggregate Composition of a Fog	25
Aleksandrov, N.N. A Field Radiometer for Measuring the Relative Concentration of Radioactive Particles in the Atmosphere	27
Skachkova, I.F. Apparatus for Actinometric Measurements	36

Card 2/2
2

PHASE I BOOK EXPLOITATION SOV/3936

Nikandrov, Vladislav Yakovlevich

Iskusstvennyye vozdeystviya na oblaka i tumany; mikrofizicheskiye osnovy (Artificial Modification of Clouds and Fog; Microphysical Principles) Leningrad, Gidrometeoizdat, 1959. 189 p. 3,000 copies printed.

Resp. Ed.: V.V. Bazilevich; Ed.: Yu.V. Vlasova; Tech. Ed.: N.V. Volkov.

PURPOSE: This book is intended for meteorologists, geophysicists, and students at hydrometeorological institutes and in the physics division of universities.

COVERAGE: This book contains an analysis of the physical processes generated by artificial modification of supercooled clouds and fogs. The theoretical-physical and experimental principles behind modern methods of cloud seeding are discussed. Problems of the physics of the formation and growth of water droplets and ice crystals

Card 1/4
2

Artificial Modification (Cont.)

SOV/3936

naturally in supersaturated conditions as well as around condensation and crystallization nuclei are studied. Comparative estimates of the consumption of solid CO₂, silver iodide, and lead iodide by various methods of nucleation are presented. The author thanks V.V. Bazilevich, P.N. Krasikov, I.I. Gayvoronskiy, A.P. Chuvayev, N.S. Shishkin, B.V. Kiryukhin, G.M. Bashkirova, and T.A. Pershina. There are 340 references: 230 Soviet, 76 English, 18 German, 4 French, 1 Bulgarian, and 1 Italian.

TABLE OF CONTENTS:

Introduction	5
Ch. I. Nature of the Natural Formation (Without Nucleation) of Water Droplets and Ice Crystals From Water Vapor	11
1. Energy of molecular forces	11
2. Interaction and combination of the molecules of water vapor	19
3. Growth of molecular association into condensation	32

Card 2/2

85904

6.1130 (also 1093)

S/169/60/000/011/013/016
A005/A001

Translation from: Referativnyy zhurnal, Geofizika, 1960, No. 11, PR. 171 - 172,
14499

AUTHORS: Morachevskiy, V.G., Nikandrov, V.Ya.

TITLE: The Effectiveness of CO₂-Particles and AgI-Fume for the Dispersion
of Supercooled Lower Clouds and Fogs

PERIODICAL: Tr. Arkt. i antarkt. n.-i. in-ta, 1959, Vol. 228, pp. 135-145

TEXT: The authors report briefly on the mechanism of the artificial crystal-
lization of a supercooled droplet cloud or fog by means of dry carbon dioxide ice
and AgI-fume. The appearance of crystals in the cloud causes the diffusion of the
water vapor from the droplets to the crystals and leads to rapid growth of the
latter, which causes the dispersion process of the cloud and fog. Twenty-five
research flights were carried out for clarifying some questions of the application
method of AgI and dry CO₂ during treatment the clouds and fogs with them; the
flights served to determining the optimum expenditure of the reagent. The tests
were performed in the Arctic region of Tadibe-Yakhi. The equipment and facilities

Card 1/3

85901

S/169/60/000/011/013/016
A005/A001

The Effectiveness of CO₂-Particles and AgI-Fume for the Dispersion of Supercooled Lower Clouds and Fogs

are described which were installed in the aircraft for producing the dry CO₂-granules, the AgI-fume, and for photographing the clouds treated. Uniform internal clouds with the vertical thickness up to 500 m were treated. The schemes are presented of sounding and flight during the action, and the course of maneuvering of the aircraft according to the scheme mentioned is described. A compilation table of the action results from 20 tests is added. On the basis of the data obtained, the authors conclude as follows: 1) the action of dry CO₂ upon clouds and fogs is ineffective at the temperature of the latter higher than -4°C; 2) the vertical maximum thickness of the cloud capable of being dispersed by spreading CO₂ from one level amounts to 600 m. It is pointed out that under arctic conditions an accelerated process of phase transformations in the clouds is observed in comparison with other regions; this is explained by the lower water content of the clouds. Data are presented which characterize the cloud transformation process until full destruction due to dry CO₂ treatment under various meteorological conditions. A graph is given of the dependence of the dry CO₂ expenditure per 1-km flight on the cloud thickness when treatment is performed from one level.

Card 2/3

85904

S/169/60/000/011/013/016
A005/A001

The Effectiveness of CO₂-Particles and AgI-Fume for the Dispersion of Supercooled Lower Clouds and Fogs

A table is presented of the specific CO₂ dosages applied by various investigators in dependence on the cloud thickness. The results of two tests are described in detail, which were performed in the Chelyuskin Cape region, and conclusions are drawn from the results of all other tests. One of the tests on the action of AgI upon layered clouds in the Tadibe-Yakhi region is described more in detail. Micro-photographs are presented of the ice crystal samples in a layered cloud after the treatment of a supercooled cloud with AgI-fume.

V.A. Sorochan

Translator's note: This is the full translation of the original Russian abstract.

Card 3/3

NIKANDROV, V.Ya.

Some data on the water content of fogs in the Arctic.
Trudy AANII 228:146-148 '59. (MIRA 13:2)
(Arctic regions--Fog)

L1172

S/169/62/000/009/091/120
D228/D307

3.5400

AUTHOR: Nikandrov, V. Ya.

TITLE: Simple phase transformation processes for water in the atmosphere when supercooled clouds and fog are actively influenced by means of solid CO₂

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 9, 1962, 72-73, abstract 9B447 (In collection: Issled. oblakov, osadkov i grozovogo elektrichestva, M., AN SSSR, 1961, 7-9)

TEXT: Regarding water vapor as a mixture of individual molecules and complexes, formed through dipole attraction, it is possible to estimate the number and sizes of separate complexes, consisting of a definite number of molecules. Under favorable conditions -- for example, when the temperature falls -- fixing of molecules occurs in complexes as a result of the transition to more stable hydrogen bonds. During this transition, which causes the tetrahedral arrangement of interacting water vapor molecules, to wit (H₂O)_{n>4}, in

Card 1/2

Simple phase transformation ...

S/169/62/000/009/091/120
D228/D307

amounts sufficient for the formation of simple water (ice) nuclei, the structure of molecular complexes approximates to that of water droplets (icicles). During their formation complexes with sizes larger than those of simple water (ice) nuclei acquire the property characteristic of solid and liquid water phases -- surface tension. Under its influence the pressure on particles is higher than that on a flat water or ice surface. In consequence of this it is only when sufficient supersaturation appears that complexes of molecules do not dissociate during the time of their possible existence in the gaseous phase. The supersaturation attained favors the development as the nuclei of a new phase of molecular complexes, previously formed in water vapor and playing the same role as condensation nuclei. In connection with ideas, developed in the work, it is indicated that the problem of artificially influencing super-cooled clouds and fog by means of solid carbon dioxide is to create conditions which favor the development of molecular complexes as the nuclei of a new phase and their subsequent growth to critical sizes, when they can leave the supplementary cooling zone and exist in the normal saturated media of liquid drops. (Abstracter's note:

Complete translation. /
Card 2/2

NIKANDROV, V.Ya.

Use of hygroscopic salts in hail-preventing rockets. Trudy GGO
no.126:8-9 '62. (MIRA 15:7)
(Weather control)

43062

S/531/62/000/126/003/004
1053/1242AUTHOR: Nikandrov, V.Ya.

TITLE: Dry torches as a means of introducing nuclei of crystallization in ground mists

SOURCE: Leningrad. Glavnaya geofizicheskaya observatoriya. Trudy. no. 126. 1962. Voprosy fiziki oblakov i aktivnykh vozdeystviy, 22-24

TEXT: When a dry mixture composed of a combustible combination (BaNO₃, Al powder, dextrine, metal chips) and AgI is applied on a metallic stem, a torch capable of burning for 7 min is obtained. The torch scatters small particles of smoke and sparks which participate as nuclei of crystallization in the transformation of a supercooled mist to ice. The number of particles in a unit of volume is calculated according to the formula $N^1 = \frac{M}{4Dfmc^2}$, where M = the mass of ice-forming substances, D = the coefficient of turbulent diffusion, f = the speed of the wind, m - the mean mass of a single particle of AgI, and t = the burning time of the torch. There is 1 table.

Card 1/1

BATTAN, L.J., NAQVI, S.N., NIKANDROV, V. YA., VITTORI-ANTISARI, O.

"Artificial increase of rainfall."

Report submitted to the Conf. on the Application of Science and Technology
for the Benefit of the Less Developed Areas.
Geneva, Switzerland 4-20 February 1963

ACCESSION NR: AT4002179

S/2922/63/005/000/0129/0137

AUTHOR: Krasikov, P. N. (Leningrad); Nikandrov, V. Ya. (Leningrad)

TITLE: Studies of means for artificially modifying, clouds and fog

SOURCE: Vses. nauchn. meteorologich. soveshch. Trudy*, v. 5. Sektsiya fiziki svobodnoy atmosfery*. Leningrad, 1963, 129-137

TOPIC TAGS: meteorology, weather modification, cloud seeding, antifog technique, cloud seeding reagent

ABSTRACT: The authors review Western and Soviet research on methods for the seeding of clouds and fogs to induce dissipation or precipitation. Dry ice and silver iodide are discussed at length. A method for seeding clouds with an aqueous solution of lead iodide from a plane is described briefly. This method does not require complex equipment or heating apparatus, and is effective for inducing precipitation in cumulus clouds 2 km high, having temperatures below -7°C . A table is presented showing the results of the use of 52 chemical reagents to produce ice-forming nuclei in supercooled fog. Silver iodide produced the best yield of ice particles (10^{14} crystals/g at -10°C) and is the most effective reagent in the upper temperature range (-3 to -4°C) for ice formation. Orig. art. has: 1

Card - 1/2

ALEKSEYEVA, O. S.; BOKIN, P. Ya.; GOVOROVA, R. A.; KORELOVA, A. I.; NIKANDROVA, G. A. 4

"Structural variations in lithium silicate and lithium aluminosilicate glasses in the process of crystallization and their effect on mechanical properties."

report submitted for 4th All-Union Conf on Structure of Glass, Leningrad, 16-21 Mar 64.

L 00477-66 EWP(e)/EWT(m)/EWP(l)/EWP(b) GS/WH

ACCESSION NR: AT5013394

UR/0000/65/000/000/0149/0157

AUTHOR: Bokin, P. Ya.; Korelova, A. I.; Govorova, R. A.; Alekseyeva, O. S.;
Nikandrova, G. A.

TITLE: Mechanical properties and microstructure of lithium silicate glasses at various stages of crystallization

SOURCE: AN SSSR. Institut khimii silikatov. Strukturnyye prevrashcheniya v steklah pri povyshennykh temperaturakh (Structural transformations in glass at high temperatures). Moscow, Izd-vo Nauka, 1965, 149-157

TOPIC TAGS: glass mechanical property, glass crystallization, lithium silicate glass, glass structure

ABSTRACT: Certain mechanical properties and their dependence on the microstructure of initial and crystallized lithium silicate glasses containing 23.4 and 34.4 mole % lithium oxide were investigated. The glasses were subjected to various thermal treatments, and their microstructure was studied. The change in the size and quantity of spherulites and in the density, microhardness, elastic constants, and surface strength of the glasses was studied as a function of the conditions of thermal treatment. This combined study of the microstructure and mechanical properties of lithium silicate glasses reveals that changes in

Card 1/2

L 00477-66

ACCESSION NR: AT5013394

such properties taking place during the crystallization of glasses under various conditions are closely related to changes in their microstructure, which in turn depends on the composition and properties of the separating crystals.
Orig. art. has: 7 figures and 2 tables.

ASSOCIATION: none

SUBMITTED: 21Dec64

ENCL: 00

SUB CODE: MT

NO REF SOV: 006

OTHER: 000

mlc
Card

2/2

L 00476-66 EWP(a)/EWI(m)/EWP(i) CS/WH

ACCESSION NR: AT5013395

UR/0000/65/000/000/0158/0176

AUTHOR: Bokin, P. Ya.⁴⁴; Korelova, A. I.⁴⁴; Govorova, R. A.⁴⁴; Alekseyeva, O. S.⁴⁴; Nikandrova, G. A.⁴⁴

TITLE: Relationship between certain mechanical properties and the micro-structure of crystallized lithium aluminosilicate glasses 1544

SOURCE: AN SSSR. Institut khimii silikatov. Strukturnyye prevrashcheniya v steklah pri povyshennykh temperaturakh (Structural transformations in glass at high temperatures). Moscow, Izd-vo Nauka, 1965, 158-176

TOPIC TAGS: glass crystallization, glass mechanical property, lithium metasilicate, lithium aluminosilicate

ABSTRACT: A series of mechanical properties (density, hardness, elastic constants, and surface strength) were studied as a function of the microstructure of lithium aluminosilicate glass subjected to crystallization under various conditions of thermal treatment. The microstructure was investigated by optical and electron microscopy; x-ray phase analysis was also employed. In samples subjected to thermal treatment at 530-700C, the increase in density is due to the crystallization of lithium metasilicate, which is also responsible for the

Card 1/2

L 00476-66

ACCESSION NR: AT5013395

increase in microhardness, Young's modulus, and surface strength. A still greater increase in density at 740C and above, associated with a decline in mechanical properties, is caused by the formation of a β -eucryptite solid solution, which is much more brittle than glass. It is concluded that the methods selected for studying the mechanical properties are sufficiently sensitive and adequately reflect changes in the process of crystallization and in the nature of the crystallizing phases caused by different conditions of thermal treatment. The results showed that the appearance of any crystalline phase in the glass is associated with the formation of a microstructure characteristic of this phase, and this in turn is manifested by changes in the curves representing the mechanical properties versus the temperature of the thermal treatment. Orig. art. has: 13 figures and 2 tables.

ASSOCIATION: none

SUBMITTED: 21Dec64

ENCL: 00

SUB CODE: MT

NO REF SOV: 013

OTHER: 011

Card

mlh
2/2

L 11850-66 EWT(m)/EWP(s)/EWP(b) WH/GS

ACC NR: AT6000510

SOURCE CODE: UR/0000/65/000/000/0382/0386

AUTHOR: Aleksyeva, O. S.; Bokin, P. Ya.; Govorova, R. A.; Korslova, A. I.; Nikandrova, G. A.

ORG: None

TITLE: Structural changes in lithia-silica and lithia-alumino silica glasses during crystallization and their effect on mechanical properties

SOURCE: Vsesoyuznoye soveshchaniya po stekloobraznomu sostoyaniyu, 4th, Leningrad, 1964. Stekloobraznoye sostoyaniye (Vitreous state); trudy soveshchaniya, Leningrad, Izd-vo Nauka, 1965, 382-386

TOPIC TAGS: lithium glass, silicate glass, aluminum silicate, glass property, catalyzed crystallization, *crystallization, electron microscopy, x ray analysis, solid mechanical property*

ABSTRACT: Two lithia-silica glasses (34.4 and 23.4 mol % of Li₂O) and one lithia-aluminosilica glass containing a small admixture of potassium oxide and silver and cerium dioxide catalyzers have been investigated. Polished glass samples (20 x 25 x 3 mm) were crystallized under single or repeated heating to 400-900C over periods of 4 to 24 hrs. The structure was investigated by standard (2375 X) and electron (8000 X) microscope, while the composition was checked Card 1/2

L 11850-66

ACC NR: AT6000510

by x-ray phase analysis. Experimentally obtained data cover the crystalline phases, density, microhardness, surface strength, and Young's modulus. Comparative analysis of the results shows that the mechanical properties of the glasses are sensitive to the phase transitions within the glass samples. The electron microscope work was performed by A. D. Fishkova. Orig. art. has: 2 figures and 1 table. *74.55*

SUB CODE: 11, 20 / SUBM DATE: 22May65 / ORIG REF: 005 / OTH REF: 002

jw
Card 2/2

BUSHMAKIN, I.N.; MOLODENKO, P.Ya.; NIKANDROVA, G.I.

Determination of liquid - vapor equilibria with the aid of a
rectification column. Zhur.prikl.khim. 35 no.6:1260-1265 Je
'62. (MIRA 15:7)

1. Leningradskiy gosudarstvennyy universitet.
(Phase rule and equilibrium)
(Distillation, Fractional)

NIKANDROVA, G.T.; CHUVAYEV, A.P.

Role of intercepting layers in solving problems of precipitation.
Meteor. i gidrol. no. 4:12-18 Ap '56. (MLBA 9:8)
(Precipitation (Meteorology))

~~NIKANDROVA, G.T.~~ SMIRNOV, S.A.

Interdepartmental conference on study of clouds, precipitation, and
thunderstorm electricity. Meteor. i gidrol. no.5:64-66 My '56.
(MLRA 9:8)

(Meteorology)

NIKANDROVA, G.T.; CHUVAYEV, A.P.

Investigation of the change-over of cloud microstructure following
solid carbon dioxide treatment. Trudy GGO no. 67:104-113 '57.
(Clouds) (Dry ice) (Rain making) (MIRA 11:4)

NIKANDROVA, G.T.

36-72-11/13

AUTHOR: Chuvayev, A.P., Tarasov, A.V., Nikandrova, G.T.

TITLE: Experiment in Controlling the Development of Powerful Convective Clouds over Large Areas (Opyt regulirovaniya razvitiya oblakov moshchnoy konveksii nad znachitel'noy ploshchad'yu)

PERIODICAL: Trudy Glavnoy geofizicheskoy observatorii, 1957, Nr 72, pp. 127-133 (USSR)

ABSTRACT: In July 1956 a laboratory of the Main Geophysical Observatory (CGO), in cooperation with the Third Division of the State Scientific Research Institute of the Civil Air Fleet, conducted a field experiment in the dispersion of storm centers in powerful cumulus clouds with super-cooled tops. Dry ice particles, 0.5-2.0 cm in diameter were seeded along the edge of a field of clouds, whose individual summits rose over 5,000 m. Seeding, which lasted 20 min., was executed in three straight lines, running 6 km apart and 40 km long, covering an area of 40 x 15 km and using 65 kg of dry ice. Activation resulted in an almost complete disappearance of clouds in the entire zone of operation, without precipitation forming and reaching the ground, with only a few insignificant traces of clouds remaining. At the same time nearby masses of powerful cumulus clouds

Card 1/2

Experiment in Controlling the Development of Powerful Convective Clouds
Over Large Areas (Cont.)

36-72-11/13

and groups of frontal clouds continued to develop during and after seeding. There are 7 figures, consisting of a synoptic map, a weather chart, and photographs of clouds taken at various points during the experiment.

AVAILABLE: Library of Congress

Card 2/2

NIKANDROV N S I

PHASE I BOOK EXPLOITATION

SOV/4173

SOV/2-S-102

Leningrad. Glavnaya geofizicheskaya observatoriya

Voprosy fiziki oblakov (Problems in the Physics of Clouds) Leningrad, Gidrometeoizdat, 1960. 102 p. (Series: Its: Trudy, vyp. 102). Errata slip inserted. 1,150 copies printed.

Additional Sponsoring Agency: USSR. Glavnoye upravleniya gidrometeorologicheskoy sluzhby. Ed. (Title page): N. S. Shishkin, Doctor of Physics and Mathematics; Ed. (Inside book): V. S. Protopopov; Tech. Ed.: M. I. Braynina.

PURPOSE: The publication is intended for the scientific workers in meteorology and aerology, as well as for graduate students in these fields.

COVERAGE: This is a collection of 6 articles published as No. 102 of the Transactions of the Main Geophysical Observatory imeni A. I. Voyeykov and dealing with the physics of clouds. Individual articles are concerned with convective clouds and their radar characteristics, the microstructure of supercooled clouds, radar characteristics of thunderstorms, and the problem of the optimum radio wave for detection of cloud systems and precipitation. References accompany each article.

Card 1/2

Problems in the Physics of Clouds

SOV/4173

TABLE OF CONTENTS:

Selezneva, Ye. S., and M. P. Churinova. Some Characteristics of the Condition of the Atmosphere During the Formation of Cumulus and Cumulonimbus Clouds	3
Shishkin, N. S. Investigations of the Breakup of Convective Clouds During Unstable Stratification of the Atmosphere	21
Nikandrova, G. T., and M. A. Khimch. Characteristics of the Microstructure of Supercooled Clouds	50
Nikandrova, G. T., and Yu. S. Fridman. On the Problem of Method in Determining the Characteristics of the Distribution of Droplet Sizes in Clouds	58
Kotov, N. F. Radar Characteristics of Cloudbursts and Thunderstorms	63
Sal'man, Ye. M. Problem of the Optimum Length of Radio Wave for the Detection of Cloud Systems and Precipitation	94

AVAILABLE: Library of Congress
Card 2/2

JA/edw/fal
9-9-60

43061

S/531/62/000/126/002/004
I053/I 253

2.57.13
AUTHORS: Gromova, T.N., Krasikov, P.N., Lenshin, V.T., Mikandrova,
G.T., Khimach, M.A., Shishkin, N.S.

TITLE: Experiments on the application of PbI_2 in water solution
to supercooled clouds

SOURCE: Leningrad. Glavnaya geofizicheskaya observatoriya. Trudy.
no. 120, 1962. Voprosy fiziki oblakov i aktivnykh
vozdystviy, 10-21

TEXT: Clouds or mists are treated with a combustible water solution
of PbI_2 sprayed out of an air-plane at a pressure of 3-4 atmosphere
through sprayers comprising 32 nozzles 1.2 mm in diameter. The
effect has been observed from an altitude of 0.5-1.0 km over the
upper cloud limit. In cumulus clouds with a vertical capacity of
2 km and over, precipitations have been obtained below $-7^{\circ}C$. Com-
pact strato-cumulus clouds with a capacity of 200-460 m were dis-
sipated below $-15^{\circ}C$. At $\sim -20^{\circ}C$, both the PbI_2 solution and the
water itself produce cloud dissipation. There is 1 table.

Card 1/1

43063

S/531/62/000/126/004/004
I053/I253

3.5/10

AUTHOR: Nikandrova, G.T.

TITLE: The change in the microstructure of the various types of clouds with altitude

SOURCE: Leningrad, Glavnaya geofizicheskaya observatoriya. Trudy. no. 126. 1962. Voprosy fiziki oblakov i aktivnykh vozdeystviy, 70-78

TEXT: The radius according to the water content, r_{ow} , and the radius of specific-surface equivalence of a drop, r_s , have been calculated by representing the gamma distribution of cloud particles by the function

$$f(r) = \frac{b^{m+1}}{\Gamma(m+1)} r^m e^{-br}$$
, where $\Gamma(m+1)$ = the gamma function, r = the radius of drop, and m , b are parameters of distribution. These quantities serve to characterize the change with the altitude of the drop spectrum in clouds of Cu cong., Cu simpl., and Sc type. The decrease of parameters m and b with the altitude was determined.

Card 1/2

S/531/62/000/126/004/004
1053/1253

The change in the microstructure...

The limiting radius of a drop in a cloudy or condensation spectrum is 30μ . The cloudy or condensation spectrum of the drops is distinguished from the spectrum of drops forming by a coagulation mechanism. It was established on the basis of the value of radiolative reflectivity ($Z = \sum nr^6$) of all clouds of Cu cong. and Sc type, with drop diameter up to 60μ , that the distribution of drops of all dimensions has its maximal value in the middle region of cloud, where the reflectivity reaches $10^{-2} \text{ mm}^6/\text{m}^3$. The value of the reflectivity must characterize the maximal probable dimension of the drops. There are 4 figures and 1 table.

"

Card 1/2

MEMORANDUM FOR THE DIRECTOR, CIA

MEMORANDUM FOR THE DIRECTOR, CIA
SUBJECT: [Illegible]

NIKANDROVA, G.T.

Stochastic errors in determining the parameters of the distribution
function for droplets in fogs, clouds, and precipitation. Trudy GGO
no.156:46-59 '64. (MIRA 17:10)

KULIKOVA, G.I.; NIKANDROVA, G.T.; PETRUSHEVSKIY, V.A.

Accuracy of measuring the boundaries of clouds by radar. Trudy
GSO no.173:9-18 '65. (MIRA 18:3)

NIKANDROVA, K.A.

Clinical evaluation of the determination of sensitivity to antibiotics
in microbial flora of sputum of pneumonia patients. Trudy LSGHI
48:481-486 '59. (MIRA 14:2)
(PNEUMONIA) (ANTIBIOTICS) (SPUTUM)

NIKANDROVA, L. I.; GERASIMOVA, N. I.; IVANOVA, L. V.; KONDRATOVICH, G. A.;
KRUGLOVA, Ye. G., red.; ERLIKH, Ye. Ya., tekhn. red.

[Analysis of electrolytes and solutions for electroplates and
chemical coatings] Analiz elektrolitov i rastvorov; dlia gal'-
vanicheskikh i khimicheskikh pokrytii. Leningrad, Goskhimizdat,
1963. 310 p. (MIRA 16:3)
(Electrolytes--Analysis) (Electroplating)

NIKANDROVA, N.V.

Determination of the profile of a correction plate. Geod. 1 kart.
no.5:44-48 My '62. (MIRA 15:7)
(Optical instruments)

NIKANDROVA, V. N.

Effect of heat and [mechanical] stirring on the color of wine. P. N. Unguryan and V. N. Nikandrova. *Sadovodstvo, Vinogradarstvo i Vinodolno Kholodil'nik* 11, No. 2, 42-5 (1966). —To facilitate the passing of the coloring substances from the grape peels into the wine the following processes have been studied: fermenting the grape must over the grape pulp (control); heating the pulp to 85-90°; keeping the must over the heated pulp for 0, 3, 6, 12, and 24 hrs.; sepg. the pulp; and fermenting the sepd. grape must; fermenting the must over the heated pulp; heating of the whole grape bunches in another grape must to 90°; grinding of the grapes; and keeping the pulp obtained at this temp. for varying periods of time before the alc. fermentation; and a mech. stirring of the fermenting pulp followed by sepg. the pulp and finishing the fermentation of the pre-fermented must. The best-quality red table wines were obtained when the musts were kept over the 85-90° heated pulps for 6 hrs., with the pulps sepd. before the fermentation: alc. 18.3 (exptl. wine) and 12.1% (control); pH 3.40 and 3.43; total ext. 3.65 and 2.83 g./100 ml.; titratable acidity 9.2 and 6.8; volatile acids 0.60 and 0.55, and 1.39 g./l.; ampelopsidin 997.9 and 825.4, total ampelopsidin 597 and 677, and free ampelopsidin 4.2 and 3.8 mg./l., resp. Mech. stirring increased the amts. of volatile acids and tannins in the wines, the effect being increased with the time of stirring; this was also true for the amts. of enin (378.6, 443.4, and 312.0) and total enidin (270, 315, and 225 mg./l. for 6 and 12 hrs. and no stirring, resp.) while free enidin remained nearly unaffected (7.1-8.4 mg./l.). The best dessert red wines were obtained when the alc. raw product was continuously stirred with the pulp for 24 hrs.; the recommended temp. was 55-60°.

B. Wierbicki

NIKANDROVA, V.N.; SAFATINOVA, V.A.

Moldavian vermouth. Trudy MNIIP 4128-37 '64.

(MIRA 18:1)

L 64548-65 EWT(m)/EPF(c)/EWP(j)/F . HM

ACCESSION NR: AP5023222

UR/0190/01/006/011/2023/2029

AUTHOR: Dontsov, A. A.⁵⁵; Nikanorenkova, A. V.⁵⁵; Dogadkin, B. A.⁵⁶ 26

TITLE: Investigation of the reaction of polyethylene with sulfur in the presence of mercaptobenzothiazole and zinc oxide 29

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 6, no. 11, 1964, 2023-2029

TOPIC TAGS: polyethylene plastic, sulfur, chemical reaction, polymer, organic sulfur compound, zinc oxide

ABSTRACT: The article represents the sixth communication from the series "Interaction of Polyethylene with Sulfur." The kinetics of the reaction of polyethylene with sulfur was investigated in the presence of zinc oxide without additives, in conjunction with stearic acid, mercaptobenzothiazole, or its zinc salt (zinc benzothiazylmercaptide). Without additives, in polyethylene medium at 230°, zinc oxide does not react either with sulfur or with hydrogen sulfide. In the presence of stearic acid, zinc oxide is converted to zinc stearate, which reacts with sulfur, forming zinc sulfide at the initial stages of the reaction. The surplus elemental sulfur reacts with polyethylene in the usual way. In a mixture of polyethylene, sulfur, mercaptobenzothiazole,

Card 1/2

L 64548-65

ACCESSION NR: AP5023222

and zinc oxide at 220°, the reaction proceeds differently, depending on the ratio of zinc oxide to mercaptobenzothiazole. When the zinc oxide content does not exceed that needed for converting the added mercaptobenzothiazole to the zinc mercaptide, it exerts no appreciable effect on the reactions that occur in the system. In the presence of excess zinc oxide, both the efficiency and the rates of the reactions and structuration process increase. Zinc benzothiazylmercaptide exerts the same effect on the reaction of polyethylene with sulfur as a combination of mercaptobenzothiazole and zinc oxide. In a mixture of polyethylene, sulfur, mercaptobenzothiazole, and zinc oxide, the most rapid reaction is that of zinc oxide with the accelerator, sulfur then reacting with the zinc mercaptide, forming zinc sulfide, and apparently radicals of the mercaptobenzothiazole accelerator, which, in contrast to mercaptobenzothiazole, are capable not only of cleaving the cyclic sulfur molecules into radicals, but also of dehydrogenating the polymer molecules. Orig. art. has: 5 graphs, 3 tables, 3 formulas. 55

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M. V. Lomonosova (Moscow Institute of Fine Chemical Technology) 55

SUBMITTED: 22 Jan 64

ENCL: 00

SUB CODE: 00, 00

NR REF SOV: 006

OTHER: 005

JPRS

Card 2/2 *mb*

NIKANORKIN, Anatoliy Ignat'yevich; TARAN, G., red.; ISUPOVA, N.,
tekh. red.

[People of great deeds; Sunny town, Doctor without medicines,
Scalpel versus sword] Liudi podviga; Solnechnyi gorodok,
Doktor bez lekarstv, Skal'pel' protiv mecha. Simferopol',
Krymizdat, 1962. 178 p. (MIRA 15:11)

(PHYSICIANS)

MEDVEDEV, V.M., kandidat tekhnicheskikh nauk; NIKANDROV, A.A., inzhener.

On the problem of joints between shell-slabs. Gidr. stroi. 25
no.7:16-18 Ag '56. (MLBA 9:10)

(Concrete slabs)

DEMIDOV, G.K.; NIKANOROV, A.A.; Primalni uchastiye: ROZINA, G.D.;
ZHIVTSOVA, V.V.

New design of the extruder head. Kauch.i rez. 20 no.7:43-46 J1
'61. (MIRA 14:6)

1. Yaroslavskiy shinnyy zavod.
(Rubber machinery)

ACC NR: AR6035374

SOURCE CODE: UR/0271/66/000/009/B040/B041

AUTHOR: Ivanov, M. N.; Kadashevich, V. I.; Kondurov, I. A.; Nekhay, A. P.; Nikolayev, S. N.; Nikanorov, A. G.; Petrova, V. I.

TITLE: Central system for gathering and processing information (SOPI)

SOURCE: Ref. zh. Avtomatika, telemekhanika i vychislitel'naya tekhnika, Abs. 9B320

REF SOURCE: Tr. 6-y nauchno-tekhn. konferentsii po yadern. radioelektron. T. 3. Ch. I. M., Atomizdat, 1965, 110-136

TOPIC TAGS: *computer design, information processing, information storage and retrieval, electronic computer, computer input unit, computer output unit/* Minsk-1 computer
computer storage device,

ABSTRACT: The article describes a system developed at the Physicotechnical Institute im. A. F. Ioffe AN SSSR for time analysis in 500 - 1000 channels in the investigation of neutron spectra, for two-dimensional amplitude-time and amplitude-amplitude analysis, and for pulse-height analysis with 100 - 200 channels. The main units of the system are: the input units (amplitude and time analyzers) which transform the information received by them into a digital code that determines the address of the memory cell; the memory unit (magnetic operative memory of the "Minsk-1") for storage of the codes; the control unit, which scans the input units in sequence and extracts the numbers from the memory; output unit for the readout of the numbers from the memory to the printer unit, perforator, or cathode ray tube screen; movable control desk for remote control of the input blocks. The input blocks of the system can oper-

Card 1/2

UDC: 681.142.4

ACC NR: AR6035374

ate independently in the following modes: operation, observation, verification, and erasure. The technical characteristics of the system are as follows: number of channels 2048; channel capacity 2^{10} ; number of input units 8; inquiry period 5 μ sec; and maximum registration frequency 12 000 pulses/sec. 10 illustrations. Bibliography, 11 titles. V. Zh. (Translation of abstract)

SUB CODE: 09

Card 2/2

VOROPAYEV, M. M.; SARKISOV, D. S.; NIKANOROV, A. I.

Morphological pulmonary changes and the surgical technic for
[cases of] foreign bodies of several years duration. Khirurgiia
38 no.5:28-33 My '62. (MIRA 15:6)

1. Iz 2-go khirurgicheskogo otdeleniya (zav. - kandidat medi-
tsinskikh nauk M. M. Voropayev) i otdela patologicheskoy anatomii
(zav. - doktor meditsinskikh nauk D. S. Sarkisov) Instituta
khirurgii imeni A. V. Vishnevskogo (dir. - deystvitel'nyy chlen
AMN SSSR prof. A. A. Vishnevskiy) AMN SSSR.

(LUNGS--FOREIGN BODIES)

SHITIKOV, L.I.; NIKANOROV, A.M.

Concerning the possibility of using high-pressure gas for
displacing oil in the Khayan-Kort field. Neft. khoz. 40
no.4:35-41 Ap '62. (MIRA 15:5)
(Caucasus, Northern--Oil fields--Production methods)

NIKANCROV, A.M.

Underground waters of the Khvalynian and Khazar sediments of
eastern Ciscaucasia. Izv.vys. ucheb. zav.; nef't' i gaz. 6
no.5:9-14 '63 (MIRA 17:7)

1. Grcznenakiy nef'tyanoy Institut.

TARANUKHA, Yu.K.; NIKANOROV, A.M.

Principals of paleogeothermal investigations. Izv. vys.
ucheb. zav.; neft' i gaz 6 no.7:3-4 '63. (MIRA 17:8)

1. Groznerskiy neftyanoy institut.

NIKANOROV, A.M.; TARANUKHA, Yu.K.

Hydrochemical types and factors influencing the formation of the chemical composition of the waters of the Khvalynian sediments in eastern Ciscaucasia. Izv. vys. ucheb. zav.; neft' i gaz 6 no.10: 3-5 '63. (MIRA 17:3)

1. Groznenskiy neftyanoy institut.

NIKANDROV, A.M.; KOSACHEV, A.N.

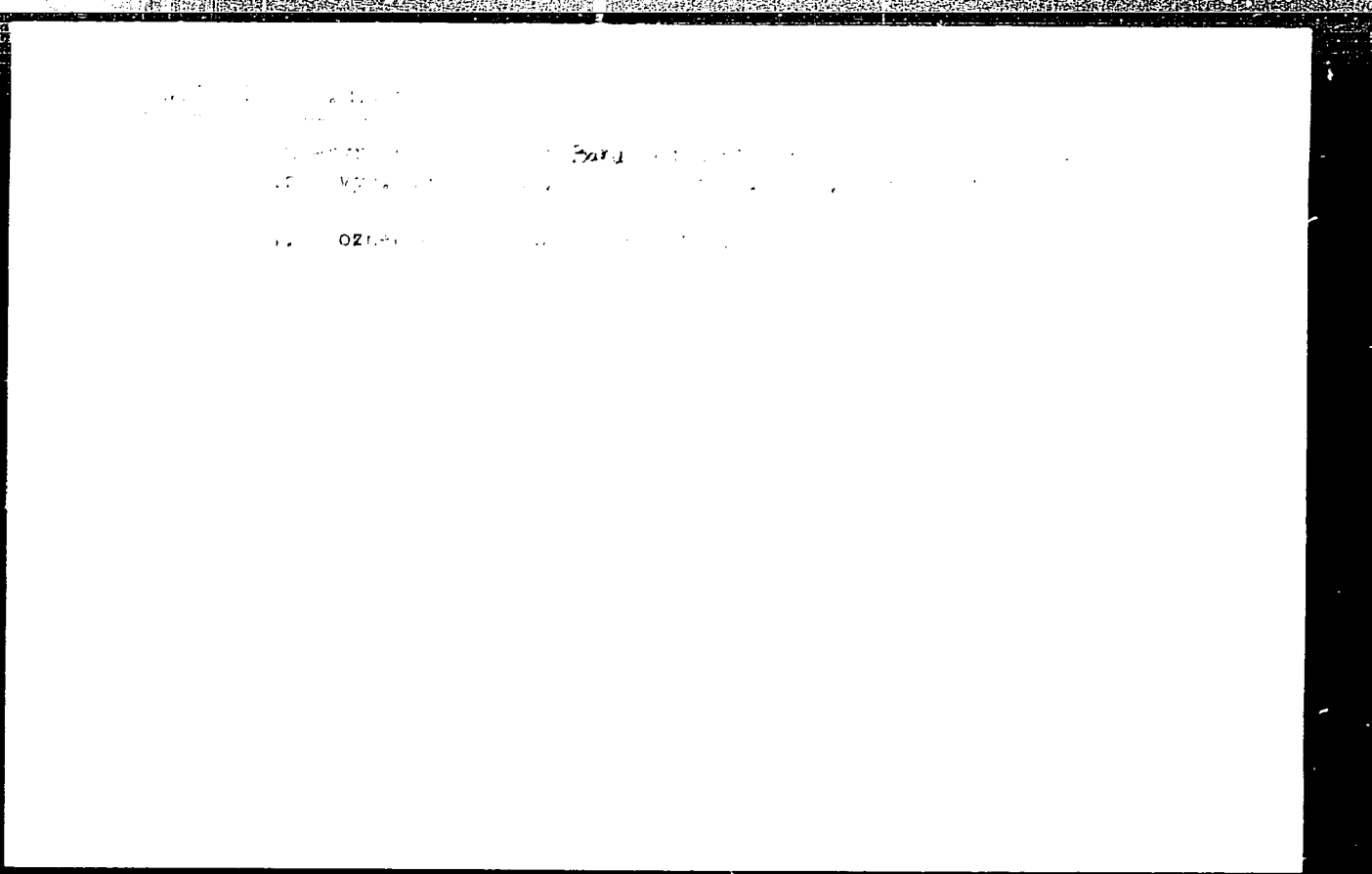
Three cases of fibroma of the maxillary sinus. Stomatologia 42
no.2:103-104 Mr-Ap'63 (MIRA 17:3)

1. Iz kafedry khirurgicheskoy stomatologii (zaveduyushchiy
A.M.Nikandrov) Omskogo meditsinskogo institutaimeni M.I.
Kalinina.

NIKANOROV, A.M.

Certain new data on the discharge of waters of the Mesozoic
sediments in the region of the Buzginskiy uplift of the buried
Kavkaz Range. Izv. vys. ucheb. zav.; neft' i gaz 7 no.3:
42-48 '64. (MIRA 17:6)

1. Groznenskiy neftyanoy institut.



TARANUKHA, Yu.K.; NIKANOROV, A.M.

Some problems concerning the hydrochemistry of the underground waters of the Mesozoic sediments of eastern Ciscaucasia.

Izv. vys. ucheb. zav.; nef't' i gaz 7 no.8:30, 38 '64.

(MIRA 17:10)

1. Groznenskiy nef'tyanoy Institut.

NIKANOROV, A.M.; VLASOVA, S.P.

Geothermal features of the Pliocene sediments of eastern
Ciscaucasia. Izv. vys. ucheb. zav., nefte' i gaz. 1964, No. 1,
23-26 '64. VOSTOK 17:13;

1. Groznenskiy neftyanoy institut.

ALEXANDROV, M.P.

See data on the composition and age of Pleistocene sediments
in eastern Kazakhstan. XI. M. 1969 no. 192-94 N 154,
IMBA 17-12,
S. G. Gerasimovskiy Institute. Izvestiya akademika
N. M. Zhukovskiy.

NIKANOROV, A.M.

Underground waters of the Akchagyl' stage in eastern Ciscaucasia.
Izv. vys. ucheb. zav.; neft' i gaz. 8 no.5:17-20 '65. (MIRA 18:7)

1. Groznenskiy neftyanoy institut.

NIKANOROV, A.N., tekhnik

Portable device for checking relay protection apparatus. Prom. energ.
17 no.8:8-10 Ag '62. (ML: A 16'4)

(Electric relays--Testing)

NIKANGROV, A.N., tekhnik

Device for measuring and regulating temperature in transformer
drying operations. Energetik 11 no.6:21-23 Je '63.

(MIRA 16:7)

(Electric transformers—Drying)

NIKANOROV, A.S.

Generations and types of industrial muscovite. Inform. sbor. VSEGEI
no.9:67-76 '59. (MIRA 13:12)

(Muscovite)

NIKANOROV, A.S.

Relationship between biotites and muscovites in mica-bearing
pegmatites. Inform. sbor. VSEGEI no.9:77-83 '59. (MIRA 13:12)
(Biotite) (Muscovite) (Pegmatites)

NIKANOROV, A.S.

Different age of mica-bearing pegmatites in Mama-Chuya District.
Inform. sbor. VSEGEI no. 20:29-34 '59. (MIRA 14:1)
(Mama-chuya District—Pegmatites)

NIKANOROV, A.S.

Mica-bearing pegmatites in the zone of abundant injections in
Chuya District. Mat. VSEGEI. Ob. ser. no.29:83-99 '60.

(MIRA 14:7)

(Chuya District--Mica)

(Chuya District--Pegmatites,

NIKANOROV, A.S.

Some defects of muscovite crystals. Zap.Vses.min.ob-va 90 no.4:
391-399 '61. (MIRA 14:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskii institut
(VSEGEI), Leningrad.
(Muscovite crystals--Defects)