BOGDANOVA, L.S.

Tasks of state orchards in ensuring a supply of fruits for the canning industry. Kons. i ov. prom. 14 no.6:24-26 Je '59.
(MIRA 12:8)

1.Tsentral'nyy nauchno-issledovatel'skiy institut konservnoy i ovoshchesushil'noy promyshlennosti.
(Fruit culture)

BOGDANOVA, L.S.

Annotation of articles on problems of preserving and drying published in Soviet journals in 1958. Kons. i ov. prom. 14 no.7: 44-45 Jl '59. (MIRA 12:9)
(Bibliography--Canning and preserving)

BOGDANOVA, L.S.

Scientific and technical conference of representatives of the Soviet canning industry. Kons. i ov. prom. 14 no.7:46-47 Jl '59. (MIRA 12:9)

(Canning industry--Congresses)

BOGDANOVA, L.S.

Annotations of articles on canning and drying published in Soviet journals in 1958. Kons. i ov. prom. 14 no.8:45-47 Ag '59. (MIRA 12:9)

(Bibliography--Canning and preserving)

BOGDANOVA, L.

Let's preserve the fruit crop without losses. Sov. torg. 33 no.11:21-33 N '59. (MIRA 13:2)
(Fruit trade)

BOGDANOVA, L.S.

Conference of readers of our journal. Kons.i ov. prom. 16 no.2: 45-46 F '61. (MIRA 14:4)
(Canning industry—Periodicals)

BOGDANOVA, L.S.; YASTREBOV, S.M.

Experience of Daghestan canning and preserving enterprises in the mechanization and automation of production. Kons. i ov. prom. 16 no.6:37-38 Je '61. (MIRA 14:8)
(Daghestan--Canning industry--Equipment and supplies)
(Automation)

BELOGOLOVAYA, L.A.; BOGDANOVA, L.S.

Hydrobiological characteristics of the tail water of the Narva River in connection with the regulation of its stream flow. Uch. zap.LGU no.311:126-152 '62. (MIRA 15:8)
(Narva River--Freshwater biology)

L 54962-65 EWT(m)/EPF(c)/EPR/ENP(j)/T Pc-4/Pr-4/Ps-4 RPL WW/RM
ACCESSION NR: AP5014167 UR/0080/65/038/005/1176/1178
66.092+541.64

AUTHOR: Shibalovich, V. S.; Okhrimenko, I. S.; Bogdanova, L. V.

TITLE: Irreversible hardening of the product of destruction of SKS-30 divinylstyrene copolymer

SOURCE: Zhurnal prikladnoy khimii, v. 38, no. 5, 1965, 1176-1178

TOPIC TAGS: divinylstyrene copolymer, copolymer, polymer destruction, thermal destruction

ABSTRACT: Formation and hardening of cross-linked polymers was studied with the objective of obtaining corrosion- and chemically resistant protective coatings. The products of thermal-oxidative decomposition of SKS-30 divinylstyrene copolymer were used as raw material. These have the following characteristics: average molecular weight 300 to 400, percentage of active oxygen (in form of stable peroxides) from 0.8 to 1.0, acid number within 10 to 15 milligrams of KOH per gram of polymer, iodine number 270 to 273 grams of I_2 per 100 grams of polymer, and ether number of 42 milligrams of KOH per gram of polymer. Coatings 20-30 μ thick were

Card 1/2

L 54962-65
ACCESSION NR: AP5014167

prepared from the products of decomposition of SKS-30 copolymer. These coatings were hardened in the temperature range from 125° to 170° and the hardening durations were 15, 30, 45, 60, 75, and 90 minutes. The resulting polymer coatings exhibit characteristic features of the cross-linked (three-dimensional) polymers: they are nonfusing and insoluble. The process of hardening is irreversible and its rate is fast (at 150°C it is completed within 1 to 1.5 hours). Infrared spectra indicated that the process of hardening is due to polymerization and polycondensation reactions involving double bonds and various oxygen-containing groups. The activation energy of the hardening process is 10/kcal/mol. Orig. art. has: 1 table and 2 figures.

ASSOCIATION: Leningradskiy tekhnologicheskiy institut imeni Lensoveta (Leningrad Institute of Technology)

SUBMITTED: 01Nov63 ENCL: 00 SUB CODE: OC, GC

NO REF SOV: 005 OTHER: 001

Card 2/2

10.1100

31597
S/169/61/000/010/043/053
D228/D304

AUTHORS: Bogdanova, M. D., Yerofeyev, N. M., and Klimova, Z. N.

TITLE: Ionosphere characteristics over Ashkhabad in January 1960

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 10, 1961, 28, abstract 10G168 (Izv. AN TurkmSSR, Ser. fiz.-tekhn., khim. i geol. n., no. 1, 1961, 74-76)

TEXT: The results of the processing of observations at the Ashkhabad ionospheric station for January 1960 and their comparison with the forecasts and observations in January 1959 are examined. The observed f_0F2 were lower than the forecasted values by an amount of up to 33%; the greatest deviations were observed in the nocturnal hours. In 1960, f_0F2 were considerably (26% by night, 6% by day) lower than in January 1959, which is explained by the lessened solar activity. In comparison with

Card 1/2

31597
S/169/61/000/010/043/053
D228/D304

Ionosphere characteristics...

January 1959, the number of E_s appearances grew from 35 to 42%--largely at the expense of the increase in the number of E_s with low limiting frequencies. The degree of ionospheric disturbance in January 1960 was somewhat higher than in January 1959. The dates of disturbances, corresponding to f_0F2 deviations of $\geq \pm 20\%$, and the number of positively and negatively disturbed hours in January 1959 and January 1960 are given. The quietest days (January 30 and 31) in respect of the magnetic-ionospheric activity are distinguished. Nh-profiles are calculated for January 31 by the Kelso method with an account of the magnetic field.
[Abstracter's note: Complete translation.]

Card 2/2

BOGDANOVA, M.D.; YEROFEYEV, N.M.; STEPANOVA, M.B.

Characteristics of the ionosphere over Ashkhabad in May 1960. Izv. AN Turk. SSR. Ser. fiz.-tekh., khim. i geol.nauk no.5:114-117 '61. (MIRA 14:11)

1. Fiziko-tekhnicheskiy institut AN Turkmenskoy SSR.
(Ionosphere)

9.9100

27116
S/165/61/000/001/005/007
A104/A127

AUTHORS: Bogdanova, M.D., Yerofeyev, N.M., Klimova, Z.N.

TITLE: Characteristics of the ionosphere at Ashkhabad in January 1960

PERIODICAL: Akademiya nauk Turkmenskoy SSR. Izvestiya. Seriya fiziko-tekhnicheskikh, khimicheskikh i geologicheskikh nauk, no. 1, 1961, 74 - 76

TEXT: The article discusses the vertical sounding of the ionosphere coupled with the registration of altitudinal frequency characteristics carried out in the automatic, panoramic ionosphere station АИС (AIS) at Ashkhabad in January 1960. [Abstracter's note: АИС (AIS) not defined.] Some results of these observations are shown in Table 1, others were published by the IZMIR AN SSSR (Institute of Space Sound Recording of the Academy of Sciences USSR), in "Kosmicheskiye dannyy", February 1960, no. 2 (48), 23. It is interesting to compare the observed meridian values of the critical frequencies of layer F_2 with forecasts and 1959 observations. The deviations of $f_o F_2$ values from forecasts were chiefly decreasing, sometimes 33%; as shown in column $\pm \Delta f_o F_2$ of Table 1. A comparison of observation data in January 1960 to that in January 1959 reveals lower critical frequencies of the F_2 layer in 1960 (column: $\pm$ $f_o F_2$ 1959).

Card 1/5

Characteristics of the ionosphere ...

The considerable decrease of solar activity was reflected also in the conduct of other ionosphere layers. Layers E and F_2 showed identical daytime decrease (6 - 7%) of f o Es. The occurrence of sporadic layer E increased to 42% in January 1960 as compared to 35% in January 1959. (Column: $\pm \Delta$ RE% 1959). The ionospheric perturbance in January 1960 had increased in comparison to January 1959. The resulting number of perturbed hours $\pm \Delta f$ o $F_2 \geq 20\%$ in 1960 was 98, i.e. 62 negative and 36 positive; in 1959 there were only 81 perturbed hours, i.e. 46 negative and 35 positive. In January 1959 a positive perturbance with 35% maximum deviation value at a total maximum deviation of 37% was recorded. In addition to the compiling of data on monthly perturbance characteristics, efforts were made to establish the dates of calmest days, i.e. free ionospheric and/or magnetic perturbances. In Ashkhabad such days were January 30 and 31, 1960. Nh-profiles calculated according to Kel'so's method by taking into account the influence of the magnetic field are shown in Figure 1. It should be noted that this influence effects only negligible corrections in Ashkhabad latitudes. The above calculations are based on a number of assumptions: the electronic concentration of the ionosphere increases steadily with altitude; altitudes of frequencies below the lower limit of instruments within a range of 0 - 0.6 Mc had a value of 100 km per 24 hours and from 0.6 Mc to $f$min. Mc were subject

Card 2/5

Characteristics of the ionosphere ...

to linear increase law. The obtained Nh-profile leads to the conclusion that the main energy used for the ionization of the ionosphere was concentrated at atmospheric altitudes of 200 - 300 km. Highest altitudes were observed before midnight. Daily altitude variations of the Nh-profile are inadequately expressed. There were three minimums, two of which occur at F_2 2 - 3 hours after sunrise or sunset, the third is oriented symmetrically towards either of these before sunrise. There is 1 table, 1 figure and 4 Soviet-bloc references.

ASSOCIATION: Fiziko-tekhnicheskiy institut AN Turkmenskoy SSR (Physical Technical Institute of the Academy of Sciences Turkmenskaya SSR)

SUBMITTED: July 7, 1960

Card 3/5

BOGDANOVA, M. G.

E-2

USSR / Virology. Human and Animal Viruses

Abs Jour: Ref Zhur - Biol., No 6, 1958, 24024

Author : Krichevskiy, A. M., Mikhaylova, P. V., Bogdanova, M. G., Ratina, S. M.

Inst : Not given

Title : Further Studies of Virus Etiology in Psoriasis, Pemphigus, Diuring Dermatitis, and Red Lupus Vulgaris. Communication 2.

Orig Pub: V sb. Sovrem. vopr. dermatol., Kiev, Gosmedizdat USSR, 1957, 121-135

Abstract: Elementary corpuscles are found in a large percentage of cases in smear-imprints from psorious elements, pemphigus blisters, and blisters in Diuring dermatitis. Similar corpuscles are found in internal organs of rabbits infected by blood of psoriasis patients, as well as by the contents of blisters in

Card 1/3

USSR / Virology. Human and Animal Viruses E-2

Abs Jour: Ref Zhur - Biol., No 6, 1958, 24024

Abstract: During dermatitis and vesiculitis. In the serum of patients with the above-mentioned diseases and red lupus vulgaris an antigen is found in RSK (blood serum reaction) specific for this group of diseases, and its antibodies. In individual cases the specific antigen is found also in the patient's urine. Examination of sera in externally healthy members of families ill with psoriasis as to presence of specific antigens and antibodies yielded positive results in a large number of cases. Antigens were found in the rabbits' organs and serum, while antibodies were found in the serum. Rabbits infected by vesiculitis developed cachexia and in individual cases vesicles showing the presence of elementary corpuscles. Experiments of infecting chick embryos by psoriasis and pemphigus viruses

Card 2/3

USSR / Virology. Human and Animal Viruses E-2

Abs Jour: Ref Zhur - Biol., No 6, 1958, 24024

Abstract: yielded negative results. The authors consider the viral nature of diseases mentioned to be proven (Communication 1, J. Venerology and Dermatology, 1951, No 4).

Card 3/3

USCOMM-DC-55,213

USSR / Virology--Viruses of Man and Animals; Newly-Discovered and Little-Studied Viruses E

Abs Jour: Ref Zhur-Biologiya, No 21, 1958, 94917

Author : Krichevskiy, A. M., Mikhaylova, P. V., Bogdanova, M. G., Ratina, S. M., Shakhova, F. B.

Inst : Khar'kov Scientific Medical Society

Title : Further Results of the Study of the Virus Etiology of Psoriasis, Pemphigus, Dühring's Dermatitis (Herpetiformis) and Lupus Erythematosus

Orig Pub: Tr. Khar'kovsk. nauchn. med. o-vo, 1957, vyp.9, 83-88

Abstract: Chicken embryos (CE) (7 days old) were infected in the allantois cavity with serum of patients with psoriasis, with serum or liquid of the bladder

Card 1/3

USSR / Virology--Viruses of Man and Animals; Newly-Discovered and Little-Studied Viruses E

Abs Jour: Ref Zhur-Biologiya, No 21, 1958, 94917

from patients with pemphigus and Dühring's dermatits, and then incubated at 26 to 28 degrees. There was observed an accumulation of antigens in the allantois liquid of the infected CE on the fourth day; in CE infected with psoriasis, a weak accumulation was noted, in addition, of elementary bodies. During passing (4 passages), the antigenic properties of allantois liquid decreased. Direct and crossed experiments of CFR (complement fixation reaction) with antigens and serums of patients permitted the establishment of a group proximity of antigens of the group of diseases studied. In serums of healthy-appearing members of families in which psoriasis was observed, specific complement fixation antibodies were found and an antigen,

Card 2/3

USSR / Virology--Viruses of Man and Animals; Newly-Dis- E
covered and Little-Studied Viruses

Abs Jour. Ref Zhur-Biologiya, No 21, 1958, 94917

confirms the presence of a virus carrier and of hidden forms of psoriasis. -- I. A. Shumeykina

Card 3/3

23

KISLYAKOVA, L.N.; ZHDANOV, V.M.; TSERAIDIS, G.S.; BOGDANOVA, M.G.

Data on the study of the etiology of chronic pemphigus in a tissue culture. Vest.derm.i ven. no.8:25-29 '62.

(MIRA 15:9)

1. Iz Ukrainskogo nauchno-issledovatel'skogo kozhno-venerologicheskogo instituta (dir. - dotsent A.I. Pyatikom).

(PEMPHIGUS) (TISSUE CULTURE)

KISLYAKOVA, L.N.; TSERAIDIS, G.S.; ZHDANOV, V.M.; BOGDANOVA, M.G.; LIMARENKO, M.I.

Study of the viral etiology of chronic pemphigus. Vop. virus. 9 no.3:320-324 My-Je '64. (MIRA 18:1)

1. Ukrainskiy nauchno-issledovatel'skiy kozhno-venerologicheskiy institut, Khar'kov.

BAZYKA, A.P.; MESHCHANINOVA, Ye.A.; BOGDANOVA, M.G.

Sensitization to pyrogenal in patients with foot mycoses. Vest. derm. i ven. 37 no.12:3-8 D '63 (MIRA 18:1)

1. Otdel dermatologii (zav. A.P. Bazyka) Ukrainskogo nauchno-issledovatel'skogo kozhno-venerologicheskogo instituta (direktor dotsent A.I.Fyatkop).

BRAND, A.I.; GOLOTINA, Z.S.; BOGDANOVA, M.G.; MINOSHNIK, G.F.; ROZENGAUZ, D.Ye.

Role of focal infection in the pathogenesis of lupus erythematosus. Vest. derm. i ven. 38 no.7:12-16 Jl '64.

(MIRA 18:4)

1. Otdel dermatologii (zav. A.P.Razyka) Ukrainskogo nauchno-issledovatel'skogo kozhno-venerologicheskogo instituta (dir. dotsent A.I.Pyatikop), Khar'kov.

SHABALIN, Georgiy Ivanovich; ANDREYEV, Georgiy Yefimovich; BOGDANOVA, Mariya Konstantinovna; IASHKOV, Aleksandr Nikolayevich; YERSHKOV, O.P., kand. tekhn. nauk, retsenzent; SERGEYEVA, A.I., inzh., red.; VOROB'YEVA, L.V., tekhn. red.

[The track on high-speed train sections; work practice of the railroad workers of the October Railroad]Put' na uchastkakh skorostnogo dvizheniia poezdov; opyt raboty putseitsev Oktiabr'skoi dorogi. Moskva, Transzheldorizdat, 1962. 71 p. (MIRA 15:10)

(Railroads—Track)

BOGDANOVA, M.Kh.

Variation of osmotic pressure in the ontogenesis of different corn varieties. Uzb.biol.zhur. no.4:50-56 '59.
(MIRA 13:1)

1. Institut genetiki i fiziologii rasteniy AN UzSSR.
(Uzbekistan--Corn (Maize)--Water requirements)

BOGDANOVA, M.Kh.

Assimilation force as an indication of the irrigation [illegible] of corn. Dokl.AN Uz.SSR no.3:43-46 '59. (MIRA 13:11)

1. Institut genetiki i fiziologii rasteniy AN UzSSR. Predstavleno akademikom AN UzSSR S.S.Kamashom.
(Corn(Maize)) (Irrigation farming)

BOGDANOVA, M.Kh.

Some indications of the drought resistance of two varieties of corn. Dokl. AN Uz. SSR no.9:45-48 '59. (MIRA 13:1)

1. Institut vodnykh problem i gidrotekhniki AN UzSSR. Predstavleno chelenom-korrespondentom AN UzSSR R.A. Alimovym.
(Corn (Maize)--Varieties))(Plants, Effect of aridity on)

BOGDAŃOVA, M. Kh.

Cand Biol Sci - (diss) "Comparative-physiological study of indicators of water adequacy /vodoobespechennost'/ of different varieties of corn." Tashkent, 1961. 19 pp; (Academy of Sciences Uzbek SSR, Inst of Genetics and Plant Physiology); 170 copies; price not given; (KL, 6-61 sup, 206)

BOGDANOVA, M.P.

Generalization of the method of variation of arbitrary constants. Dokl. AN BSSR 6 no.5:285-287 My '62. (MIRA 15:6)

1. Belorusskiy politekhnicheskiy institut. Predstavleno akademikom AN BSSR N.P. Yeruginym.
(Differential equations)

L 22522-65 EWT(1)/EWA(b) JK
ACCESSION NR: AR4039966 S/0299/64/000/009/B025/B025

SOURCE: Ref. zh. Biol. Sv. t., Abs. 9B189

AUTHOR: Markovich, A. V.; Konev, Yu. Ye.; Petrova, L. Ya.; Bogdanova, M. P.

TITLE: Certain products of actinomycetes 1435/4 life activity

CITED SOURCE: Sb. Materialy* 3-y Nauchn. sessii Leningr. in-ta antibiotikov, 1963. L., 1963, 68

TOPIC TAGS: actinomycetes, act. aureoverticillatus Krass, yeast, antibiosis, gram-positive bacteria

TRANSLATION: Orange actinomycetes 1435/4 identified as a variety of Act. aureoverticillatus Krass displays antagonistic activity against gram-positive bacteria and yeasts. Antibacterial substances and pigments were found in mycelium extracts. On the basis of its spectral and chemical properties, the hydrochloride of the highly mobile red pigment is close to the prodigiosin-like pigments of actinomycetes origin. From a resume.

Cord 1/1 SUB CODE: LS ENCL: 00

ALEKSEYEVA, Yelizaveta Ivanovna; BOGDANOVA, Mariya Semenovna; LILENKO, S.I., redaktor; KULEVA, M.S., tekhnicheskiy redaktor.

[Work therapy in hospitals; knitting] Trudoterapiia v lechebnykh uchrezhdeniiakh ; viazanie na spitsakh. [Leningrad] Gos.izd-vo med.lit-ry, Leningr.otd-nie, 1956. 44 p. (MLRA 10:6)
(Knitting)

BOGDANOVA, M.T.

Effect of technological factors on shell strength in precision casting. Lit. proizv. no.9:18-20 S '58. (MIRA 11:10)
(Precision casting) (Foundry machinery and supplies)

BOGDANOVA, M.V.

BOLOTOV, B.A.; BARANOVA, N.A.; BOGDANOVA, M.V.

Catalytic decomposition of ethylbutyrate and butylacetate, metameric esters. Zhur. prikl. khim. v. 31 no.5:778-784 My '58. (MIRA 11:6)

(Butyric acid) (Acetic acid)

VOLKOV, V.N; VOLKOVA, I.B.; BOGDANOVA, M.V.

Characteristics of lower Mesozoic coal-bearing sediments in the southern Magnitogorsk synclinorium. Trudy Lab.geol.ugl. no.12:131-169 '61. (MIRA 14:8)
(Ural Mountains—Coal geology)

BOGDANOVA M. Yu.

SHATOV, V.A., dots.; BOGDANOVA, M.Yu.; RATINA, S.M.

Diagnostic value of the gonoantigen reaction with secretions from the urethra & cervix uteri [with summary in English]. Vest.derm. i ven. 32 no.2:67-71 Mr-Ap '58. (MIRA 11:4)

1. Iz Ukrainskogo nauchno-issledovatel'skogo kozhno-venerologicheskogo instituta (dir. A.M.Krichevskiy [deceased])

(GONORRHEA, diag.
gono-antigen test in women, inadequate specificity & diag. limitations (Rus))

SOKOLOVSKIY, Aleksandr Fedorovich; YEVSTIGNEYEV, Viktor Pavlovich; LEONT'YEV, L.A., red.; BOGDANOVA, N., red.; MYASOYEDOV, B., red.; SHLYK, M., tekhn.red.

[Everyone must work without defective production] Kazhdyi dolzhen rabotat' bez braka. Pod obshchei red. L.A.Leont'eva. Moskva, Mosk.rabochii, 1960. 35 p. (MIRA 13:9)

1. Chlen-korrespondent Akademii nauk SSSR (for Leont'yev).
(Waste (Economics)) (Efficiency, Industrial)

DMITRENKO, Vladimir Petrovich; LEL'CHUK, Vitaliy Semenovich; OSTAPENKO, Ivan Prokof'yevich; ROGACHEVSKAYA, Lyudmila Solomonovna; BOGDANOVA, N., red.; SHLYK, M., tekhn. red.

[The flower and pride of the working class; the structure of the collectives of communist labor]TSvet i gordost' rabochego klasa; o sostave kollektivov kommunisticheskogo truda. Moskva, Mosk. rabochii, 1962. 85 p. (MIRA 16:1)

1. Nauchnyye rabotniki Instituta istorii Akademii nauk SSSR (for Dmitrenko, Lel'chuk, Ostapenko, Rogachevskaya)
(Moscow--Socialist competition)

DAVYDOV, Vladislav Fedorovich; ROGACHEV, Sergey Vladimirovich; BOGDANOVA, N., red.; KUZNETSOVA, A., tekhn. red.

[There where the orchards bloom] Tam gde tsvetut sady. Moskva, Mosk. rabochii, 1961. 45 p. (MIRA 14:8)
(Rural conditions)

GORBUNOV, Valeriy Arkad'yevich; BOGDANOVA, N., red.; YAKOVLEVA, Ye., tekhn. red.

[Patriotic initiative of Moscowites; struggle for the improvement of the quality and durability of industrial products] Patrioticheskii pochin moskvichei; borot'sia za povyshenie kachestva i nadezhnosti promyshlennoi produktsii. Moskva, Mosk. rabochii, 1961. 66 p. (MIRA 15:1)

(Moscow--Socialist competition)
(Moscow--Quality control)

DANILYUK, M.G., inzh.; GORSHKOVA, Z.A., inzh.; BOGDANOVA, N.A., inzh.

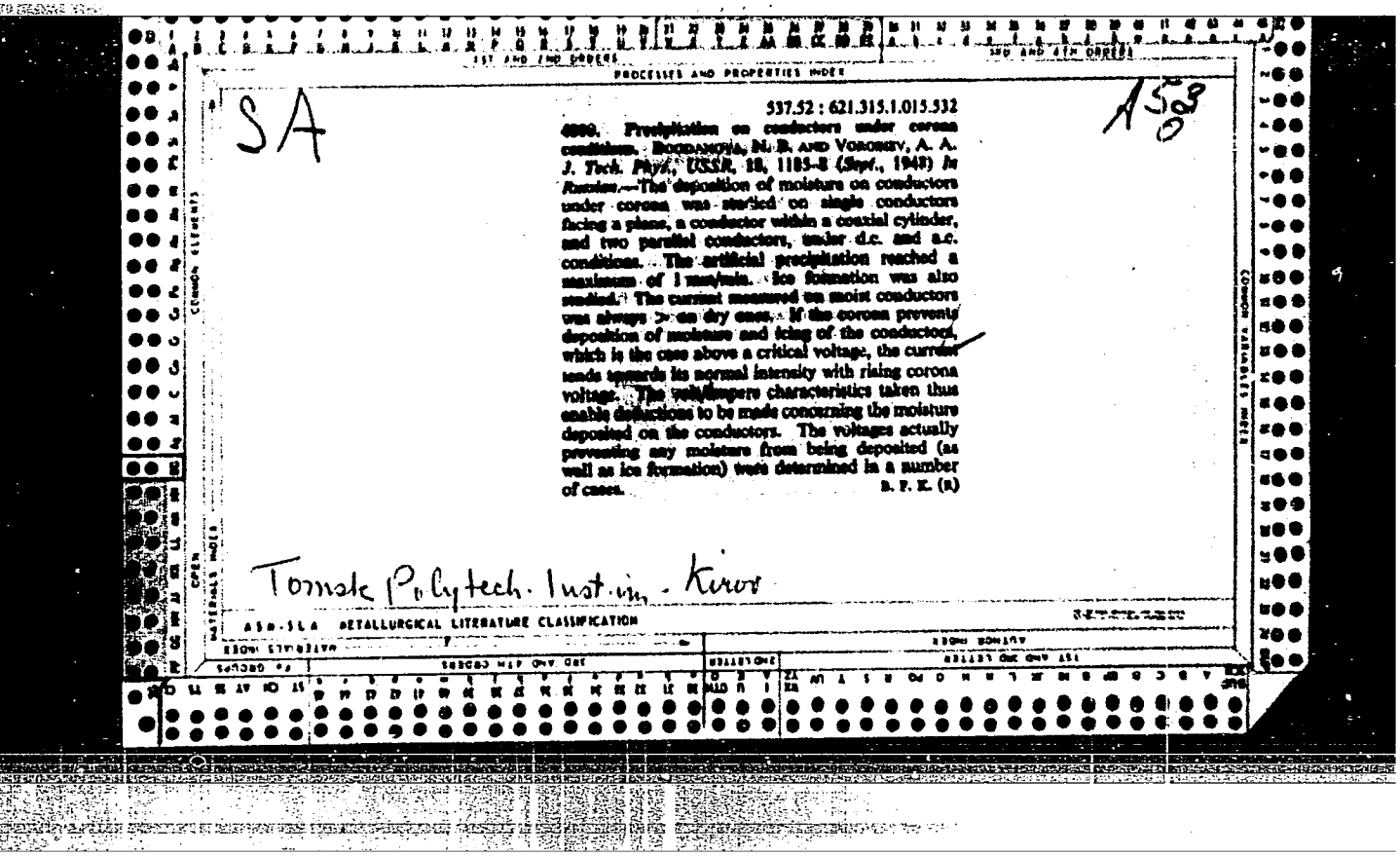
Tin plating in an electrolyte with the addition of the OP-10 surface-active substance. Mashinostroenie no.1:84-85 Ja-F '65. (MIRA 18:4)

2605

The Electrical Strength of Solid Solutions and their Melting Temperature. N. Bogdanova [illegible] *Zhur. Tekh. Fiz.*, 1944, Vol 14, Nos 1-2, pp [illegible] (Russian)

A report of an experimental investigation. Data obtained by von Hippel (1180 of 1938) were used to plot the curves in Fig 1 (system KCl - RbCl). System KCl - KBr also behaves in a similar manner) and Fig 2 (system NaCl - AgCl). In the first case the maximum electrical strength is obtained with a melting temperature of the order of 750 C. In the second case there is a linear decrease in electrical strength with increase in melting temperature. Systems KI - NaI and KI - KBr were also investigated and the results are plotted in Figs 3 and 4 respectively. It appears that the electrical strength of these solutions increases with the melting temperature. The effect of the composition of solid dielectric solutions was also investigated, but no sharp strengthening of the dielectric with the introduction of admixtures was observed.

Chief Physics, Ind. Inst. im. Kirov, Tomsk



PROCESSES AND PROPERTIES INDEX

SA

A59

537.52 : 621.315.1.015.532

4889. **Precipitation on conductors under corona conditions.** BOCHARNIKOVA, N. B. AND VORONOV, A. A. *J. Tech. Phys., USSR*, 18, 1185-8 (*Sept.*, 1948) *In Russian.*—The deposition of moisture on conductors under corona was studied on single conductors facing a plane, a conductor within a coaxial cylinder, and two parallel conductors, under d.c. and a.c. conditions. The artificial precipitation reached a maximum of 1 mm/min. Ice formation was also studied. The current measured on moist conductors was always > on dry ones. If the corona prevents deposition of moisture and icing of the conductors, which is the case above a critical voltage, the current tends towards its normal intensity with rising corona voltage. The volt/ampere characteristics taken thus enable deductions to be made concerning the moisture deposited on the conductors. The voltages actually preventing any moisture from being deposited (as well as ice formation) were determined in a number of cases. B. P. K. (R)

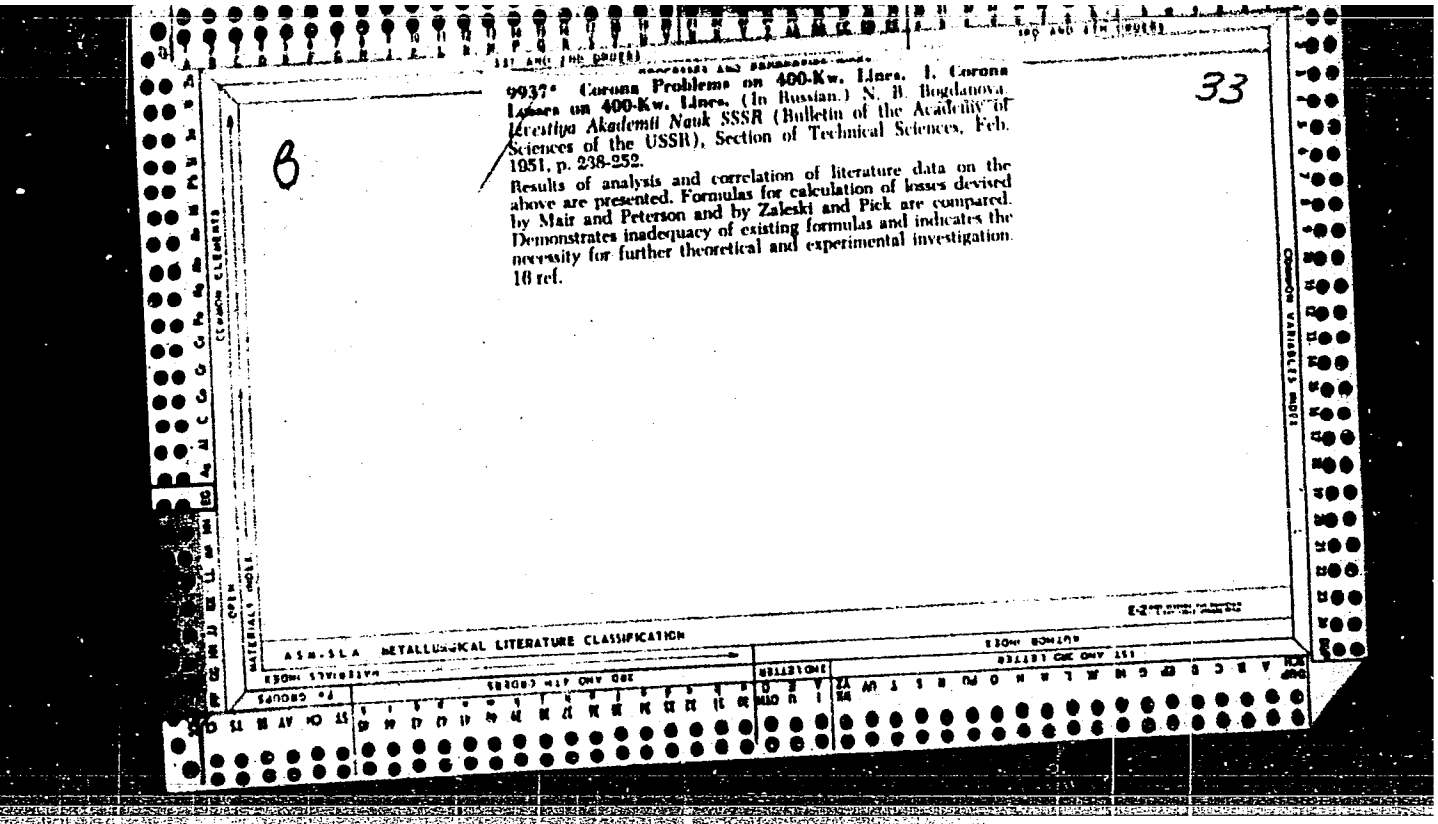
Tomsk Polytech. Inst. im. Kirov

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

BOGDANOVA, N. E.

Bogdanova, N. E. "The volt-ampere characteristics and the critical voltage of the corona on power lines in the rain," Izvestiya Tomskogo politekhn. in-ta im. Kirova, Vol. IXVI, Issue 1, 1948, p. 5-10, - Bibliog: 11 items

SO: U-4631, 16 Sept. 53, (Letopis 'Zhurnal 'nykh Statey, No. 24, 1949).



6

33

9937* **Corona Problems on 400-Kw. Lines.** I. Corona Losses on 400-Kw. Lines. (In Russian.) N. B. Bogdanova. *Izvestiya Akademii Nauk SSSR* (Bulletin of the Academy of Sciences of the USSR), Section of Technical Sciences, Feb. 1951, p. 238-252.

Results of analysis and correlation of literature data on the above are presented. Formulas for calculation of losses devised by Mair and Peterson and by Zaleski and Pick are compared. Demonstrates inadequacy of existing formulas and indicates the necessity for further theoretical and experimental investigation. 16 ref.

Bogdanova, N.B.

PA 190T46

USSR/Electricity - Transmission Lines, Mar 51
High-Voltage
Corona

"The Problem of Determining the Parameters of a System Representing a Line Subject to Corona," N. B. Bogdanova, V. I. Popkov, Power Eng Inst imeni G. M. Krzhizhanovskiy, Acad Sci USSR

"Iz Ak Nauk, Otdel Tekh Nauk No 3, pp 381-389

Shows that corona effect in system representing line subject to corona can be represented by variable distributed corona conductance and variable distributed capacitance connected between the line and ground. Submitted by Acad A. V. Vinter 18 Sep 50.

190T46 ✓

BOGDANOVA, N.R.

USSR/Electricity - Transmission Lines, Apr 51
High-Voltage
Corona

"Problems of Corona on 400-KV Lines. II. Radio Interference in Corona of Conductors)," N. B. Bogdanova, A. M. Lifshits, Power Eng Inst imeni G. M. Krzhizhanovskiy, Acad Sci USSR

"Iz Ak Nauk, Otdel Tekh Nauk" No 4, pp 497-506

PA 190T47

Previous article dealt with corona loss. Present article gives basic analytical data obtained from measuring intensity of radio interference fld near conductors of exptl lines and some operational

190T47

USSR/Electricity - Transmission Lines, Apr 51
High-Voltage (Contd)

220-kv lines. Data are fragmentary and incomplete, but permit some conclusions on variation of interference fld for different geometric and elec parameters of the line and under various atm conditions. Sub by Acad A. V. Vinter 18 Sep 50.

190T47

BOGDANOVA, N. B., YEMEL'YANOV, N. P., HERTSIK, A. K., LEVITOV, V. I., POPKOV, V. I. and VOSKRESENSKIY, N. A.

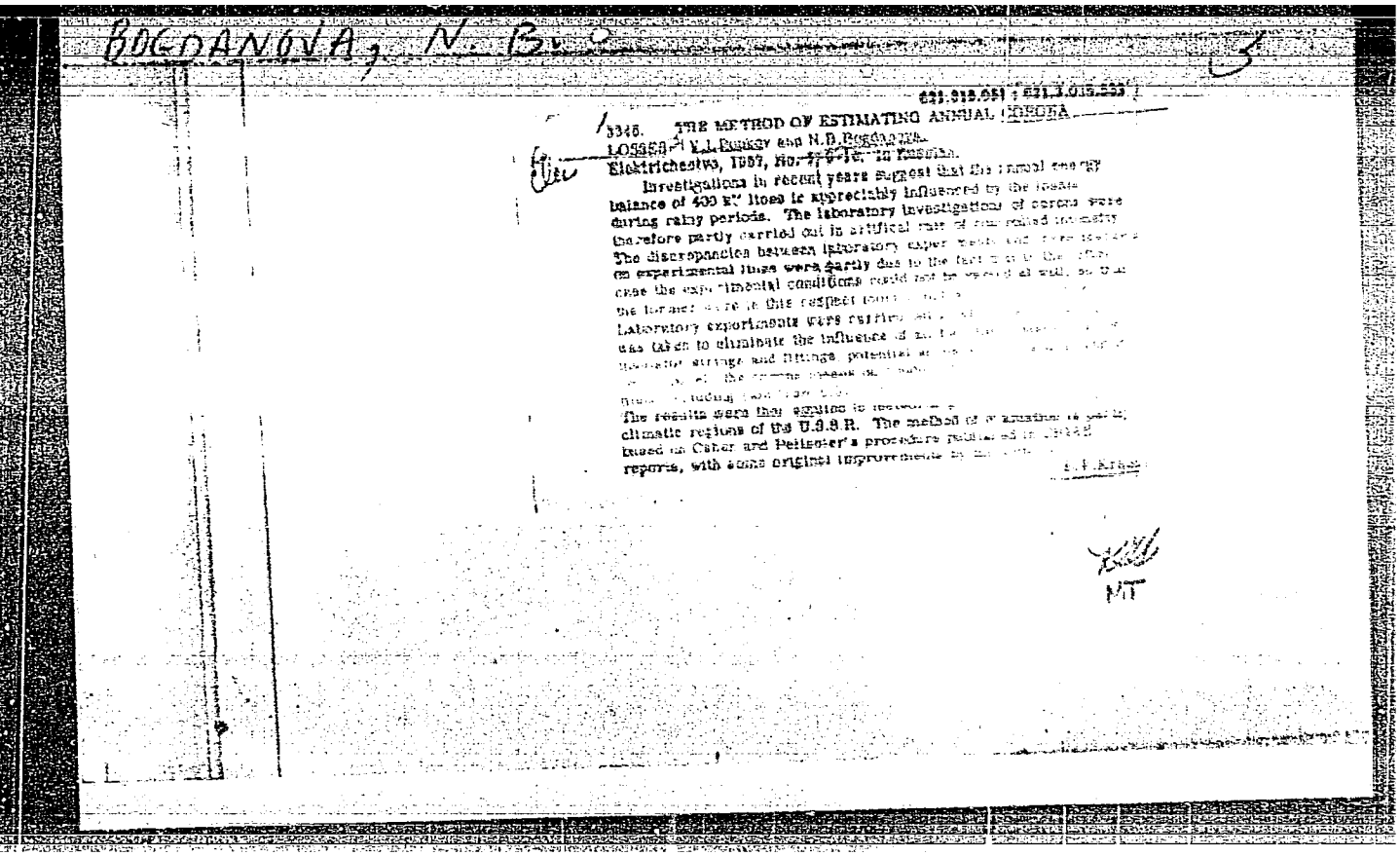
"Investigating A.C. Corona in the Soviet Union," a paper presented at the International Conference on CIGRE, 16th Biennial Session and General Assembly Paris, 30 May-9 June 1956

Translation E-5047 in Branch 5

POPKOV, V.I.; BOGDANOVA, N.B., kandidat tekhnicheskikh nauk.

Estimation of annual power loss due to corona. Elektrichestvo no.1:9-16 Ja '57. (MLRA 10:2)

1. Chlen-korrespondent Akademii nauk SSSR (for Popkov). 2. Energeticheskiy institut im. Krzhizhanovskogo AN SSSR.
(Corona (Electricity)) (Electric lines)



BOGDANOVA, N. B.

621.313.051 : 621.3.015.532

3348. THE METHOD OF ESTIMATING ANNUAL LOSSES

V.I. Bunkov and N.B. Bogdanova.

Elektrichestvo, 1957, No. 7, 9-16. In Russian.

Investigations in recent years suggest that the annual energy balance of 400 kV lines is appreciably influenced by the losses during rainy periods. The laboratory investigation of corona were therefore partly carried out in artifical rain of [illegible] The discrepancies between laboratory experiments and [illegible] on experimental lines were partly due to the fact that in the latter case the experimental conditions could not be varied at will, so that the [illegible] were in this respect [illegible]

Laboratory experiments were carried [illegible] was taken to eliminate the influence of [illegible] insulator strings and fittings potential [illegible]

[illegible] including [illegible]

The results were then applied to [illegible] climatic regions of the U.S.S.R. The method of [illegible] based on Cahen and Peltsner's procedure [illegible] reports, with some original improvements [illegible]

[illegible]

MT

Bogdanova, N. B.

BOGDANOVA, N.B., GERTSYK, A. K., YEMELYANOV, N. P., KOLPAKOVA, A. I., MARKOVICH, I. M., POPKOV, V. I. SOVALOV, S. A., and SLAVIN, G. A.

Results of some researches, carried out in the USSR on 600 kV long-distance power Transmissions.

paper submitted for presentation at the Intl. Conf. on Large Electric Systems (CIGRE) 17th Biennial Session, Paris, France, 4-14 June 1958.

Electra, No. 30, Nov 57, periodical news letter issued by the CIGRE, Paris, France.

AUTHOR: Bogdanova, N. B. (Moscow) SOV/24-58-11-19/42

TITLE: Spectral Composition of the Corona Current on Conductors (Spektral'nyy sostav toka korony na provodakh)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Tekhnicheskikh Nauk, 1958, Nr 11, pp 86-88 (USSR)

ABSTRACT: The results, which are briefly described in the paper, lead to the following conclusions:
1. For the over-voltage range U/U_0 between 1 and 2 the content of the basic wave C_1 and its phase angle ψ_1 increase with increasing value of the ratio U/U_0; the contents of other harmonics (3,5,7) and their phase angles decrease. At over-voltages $U/U_0 > 2$ these values are practically constant $C_1 \approx 80\text{-}90\%$ and $\psi_1 \approx 30^\circ$, i.e. for rough calculations the corona currents can be assumed sinusoidal and leading the voltage by 30° at such over-voltages.
2. The harmonic compositions of the corona current on a thin 1.2 mm conductor and a steel-aluminium conductor of 30.2 mm dia. do not differ greatly from each other (Figs. 3 and 4); these data are in good agreement with the

Cardl/2

SOV/24-58-11-19/42

Spectral Composition of the Corona Current on Conductors

results obtained by AEG on a German experimental line with a conductor diameter of 42 mm. The harmonic composition of the corona current on split conductors is also similar to the values obtained for single conductors.

3. The relative agreement of the data obtained for conductors of 1.2, 30.2, 42 mm dia. on the one hand and various split conductors on the other, seems to justify the assumption that the relations obtained in this paper for C_k and ψ_k for single and for split conductors are also applicable to conductors of other types and dimensions.

The results obtained in this paper enable calculating the internal over-voltages, taking into consideration not only the fundamental wave of the corona current but also the influence of higher harmonics. The subject matter of this work was proposed to the author by Corresponding Member of the Ac.Sc. USSR V. I. Popkov. There are 4 figures and 3 Soviet references.

SUBMITTED: January 2, 1957

Card2/2

POPKOV, V.I.,otv.red.; VINTER, A.V., akademik, red. [deceased]; VEYTS, V.I., red.; PREDVODITELEV, A.S., red.; STYRIKOVICH, M.A., red.; CHUKHANOV, E.F., red.; BOGDANOVA, N.B., kand.tekhn.nauk, red.; KOZLOV, B.K., kand.tekhn.nauk, red.; LEBEDEV, M.M., kand.tekhn. nauk, red.; SUNDUKOV, I.N., kand.tekhn.nauk, red.; ANTRUSHIN, B.D., red.izd-va; DUBKOV, P.V., red.izd-va; ZUBKOV, P.I., red. izd-va; MOYZHES, S.M., red.izd-va; PRUSAKOVA, T.A., tekhn.red.

[Problems of power engineering; symposium dedicated to Academician G.M.Krzhizhanovskii] Problemy energetiki; sbornik posviashchaetsia akademiku G.M.Krzhizhanovskomu. Moskva, 1959. 851 p.
(MIRA 12:12)

1. Akademiya nauk SSSR. Energeticheskiy institut. 2. Chleny-korrespondenty AN SSSR (for Popkov, Veyts, Predvoditelev, Styrikovich, Chukhanov).
(Power engineering)

84668

S/020/60/134/006/011/031
B019/B067

9.9419

AUTHORS: Bogdanova, N. B. and Popkov, V. I., Corresponding Member of the AS USSR

TITLE: Some Characteristics of High-frequency Radiation of a Corona Discharge

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 134, No. 6, pp. 1331 - 1333

TEXT: As is known from experiments there is a certain relationship between the radiation level and the shape of a corona discharge. The present paper deals with the explanation of this relationship for a-c voltage and for radiation levels with both types of polarity, as well as with the possibility of suppressing the radiation level by changing artificially the electric field near the conductor surface and the shape of the corona discharge. The experimental arrangement consisted of a power source (50 cps), a corona conductor, and a copper antenna. The measuring arrangement made it possible to take stroboscopic photographs of the corona and to measure the radiation intensity simultaneously. The existence of a

Card 1/3

homogeneous "cover" of the positive corona at $U/U_0 \approx 1.1$ to 1.3, which hitherto has been known only for such thin conductors, was observed also in conductors of large diameters. This cover is so thin that it can be only seen from the contours of the conductor. As is the case with thin conductors, also here the corona current does not fluctuate. In the case of negative polarity, the corona has the shape of local discharges, the current fluctuates, and weak radiation occurs. At $U/U_0 \geqslant 1.3$, the current of the positive corona has a high-frequency component and radiation is considerable. In the case of negative polarity, the radiation intensity changes little with increasing voltage. As may be seen from Fig. 2, the radiation during the positive half-period is considerably stronger than that during the negative half-period. In conclusion, it is noted that radiation of conductors of usual dimensions occurs mainly during the positive voltage half-period and, especially, when the positive corona has the shape of local streamers. By suppressing this type of corona it is possible to prevent radiation. This possibility has been experimentally proved by applying one or two additional conductors near the test conductor, so that their ignition potential was below that of the test

84668

Some Characteristics of High-frequency Radiation of a Corona Discharge

S/020/60/134/006/011/031
B019/B067

conductor. Thus, a corona discharge took place only at the thin conductors which, as was mentioned at the beginning, have no strong radiation. Further experiments are being carried out. There are 3 figures and 1 Soviet reference.

ASSOCIATION: Energeticheskiy institut im. G. M. Krzhizhanovskogo Akademii nauk SSSR (Institute of Power Engineering imeni G. M. Krzhizhanovskiy of the Academy of Sciences USSR)

SUBMITTED: July 21, 1960

Card 3/3

BOGDANOVA, N.B.; RYABAYA, S.I.

Generalization of the experimental data on radio interference caused by corona generating wires obtained from measurements of operational and experimental lines. Elektroenergetika no.4:90-114 '61. (MIRA 14:8)
(Radio--Interference) (Corona (Electricity))
(Electric lines--Overhead)

L 22270-66 EWT(1)

ACC NR: AR6005184 SOURCE CODE: UR/0058/65/000/009/G017/G017

AUTHOR: Bogdanova, N. B., 43

B

TITLE: Concerning the influence of pre-discharge phenomena on the breakdown voltages of discharge gaps

21

SOURCE: Ref. zh. Fizika, Abs. 9G139

REF. SOURCE: Sb. Proboy dielektrikov i poluprovodnikov. M.-L., Energiya, 1964, 49-54

TOPIC TAGS: electric discharge, dielectric breakdown, corona discharge

TRANSLATION: A positive corona can have two forms -- streamer, at which the glow has the form of intermittent branchlike channels, and continuous -- with glow in the form of a uniform sheet covering the electrode. If the breakdown in the corona-producing gaps is preceded by the first form of the corona, then the breakdown occurs at a lower voltage than in the case when the breakdown is preceded

Card 1/2

L 22270-66

ACC NR: AR6005184

by a continuous corona. Results are described of experiments aimed at finding different ways of acting on the form of the positive corona and on the magnitude of the breakdown voltage.

SUB CODE: 20

Card 2/2 nst

BOGDANOVA, N. G. (and P. L. Gruzin, G. I Yermolayev, I. D. Nikulinskiy)

"APPLICATION OF RADIOACTIVE ISOTOPES FOR THE INVESTIGATION OF METALLURGICAL PROCESSES".

By N. G. Bogdanova, P. L. Gruzin, G. I. Yermolayev, and I. D. Nikulinskiy.

Report presented at 2nd UN Atoms-for-Peace Conference, Geneva, 9-13 Sept. 1958.

BOGDANOVA, N.G.

(4) PHASE I BOOK EXPLOITATION SOV/2713

International Conference on the Peaceful Uses of Atomic Energy. 2nd, Geneva, 1958

Doklady sovetskikh uchenykh; polucheniye i primeneniye izotopov (Reports of Soviet Scientists; Production and Application of Isotopes) Moscow, Atomizdat, 1959. 388 p. (Series: Its: Trudy, vol. 6) 8,000 copies printed.

Eds. (Title page): G.V. Kurdyumov, Academician, and I.I. Novikov, Corresponding Member, USSR Academy of Sciences; Ed. (Inside book): Z.D. Andreyenko; Tech. Ed.: Z.D. Andreyenko.

PURPOSE: This book is intended for scientists, engineers, physicians, and biologists engaged in the production and application of atomic energy to peaceful uses; for professors and graduate and nongraduate students of higher technical schools where nuclear science is taught; and for the general public interested in atomic science and technology.

COVERAGE: This is volume 6 of a 6-volume set of reports delivered by Soviet scientists at the Second International Conference on the Peaceful Uses of Atomic Energy held in Geneva from September 1 to 13, 1958. Volume 6 contains 32 reports on: 1) modern methods for the production of stable radioactive isotopes and their labeled compounds, 2) research results obtained with the aid of isotopes in the field of chemistry, metallurgy, machine building, and agriculture, and 3) dosimetry of ionizing radiation. Volume 6 was edited by: S.V. Levinskiy, Candidate of Medical Sciences; V.I. Frusakov, Candidate of Chemical Sciences; and V.V. Gedov, Candidate of Medical Sciences. See Sov/2081 for titles of volumes of the set. References appear at the end of the articles.

BOGDANOVA, N.G.

24(8) PHASE I BOOK EXPLOITATION SOV/2117

Soveshchaniye po eksperimental'noy tekhnike i metodam vysokotemperaturnykh issledovaniy, 1956

Eksperimental'naya tekhnika i metody issledovaniy pri vysokikh temperaturakh; trudy soveshchaniya (Experimental Techniques and Methods of Investigation at High Temperatures; Transactions of the Conference on Experimental Techniques and Methods of Investigation at High Temperatures) Moscow, Izd-vo AN SSSR, 1959. 789 p. (Series: Akademiya nauk SSSR. Institut metallurgii. Komissiya po fiziko-khimicheskim osnovam proizvodstva stali) 2,200 copies printed.

Resp. Ed.: A.M. Samarin, Corresponding Member, USSR Academy of Sciences; Ed. of Publishing House: A.F. Bankvitser.

PURPOSE: This book is intended for metallurgists and metallurgical engineers.

COVERAGE: This collection of scientific papers is divided into six parts: 1) thermodynamic activity and kinetics of high-temperature processes 2) constitution diagram studies 3) physical properties of liquid metals and slags 4) new analytical methods and production of pure metals 5) pyrometry, and 6) general questions. For more specific coverage, see Table of Contents.

Mikaylets, N.S. Discussion of the Papers of L.M. Krachentseva and N.G. Bogdanova 751

Bogdanova, N.G. Concluding Remarks 753

Marmer, E.N. Behavior of Nichromes and Chromels [sic] in Vacuum 780
The possibility of vaporization should be taken into account when using heat-resistant alloys in vacuum furnaces. Double nichrome is recommended for use at temperatures of up to 1200° C in any vacuum. EI-626 alloy [a "chromel" composition not given] is recommended for use when the temperature reaches 1300° C and the pressure is 10-2 mm or higher. At higher vacuums, where the temperature remains at 1300°, this alloy cannot be used because of its rapid vaporization.

AVAILABLE: Library of Congress

Card 32/32

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BOGDANOVA N. G.

24(8) PHASE I BOOK EXPLOITATION SOV/2117

Soveshchaniye po eksperimental'noy tekhnike i metodam vysokotemperaturnykh issledovaniy, 1956

Eksperimental'naya tekhnika i metody issledovaniy pri vysokikh temperaturakh; trudy soveshchaniya (Experimental Techniques and Methods of Investigation at High Temperatures; Transactions of the Conference on Experimental Techniques and Methods of Investigation at High Temperatures) Moscow, AN SSSR, 1959. 789 p. (Series: Akademiya nauk SSSR. Institut metallurgii. Komissiya po fiziko-khimicheskim osnovam proizvodstva stali) 2,700 copies printed.

Resp. Ed.: A.M. Samarin, Corresponding Member, USSR Academy of Sciences; Ed. of Publishing House: A.L. Bankvitser.

PURPOSE: This book is intended for metallurgists and metallurgical engineers.

COVERAGE: This collection of scientific papers is divided into six parts: 1) thermodynamic activity and kinetics of high-temperature processes 2) constitution diagram studies 3) physical properties of liquid metals and slags 4) new analytical methods and production of pure metals 5) pyrometry, and 6) general questions. For more specific coverage, see Table of Contents.

VI. GENERAL QUESTIONS

Card 27/32

6

CHELYSHEV, N.A.; KOBYZEV, V.K.; PLEKHANOV, P.S.; BOGDANOVA, N.G.; YAMPOL'SKIY, A.M.

Investigating metal deformation during the rolling process on the 750 mill by means of radioactive isotopes. Izv. vys. ucheb. zav.; chern. met. no.8:48-58 '60. (MIRA 13:9)

1. Sibirskiy metallurgicheskiy institut.
(Rolling (Metalwork))
(Radioisotopes--Industrial applications)

S/[illegible]/000/003/011/191
[illegible] 1

AUTHORS: Bogdanova N. G., Borodu[illegible]n, A [illegible].

TITLE: The use [illegible]ctive isotope [illegible] the [illegible] [illegible] urgical Combin

PERIODICAL: Referati[illegible]y zhurnal, Metallurgiya, no. 3, 1962, 7, abstract 3V45 (V sb. "[illegible]. Izotopy i yadern. izlucheniya v nar. kh-ve SSSR", v. 3 [illegible], Gostoptekhizdat, 1961, 126-129)

TEXT: At [illegible] Kuznetsk Metallurgical Combine radioactive isotopes have been used from 1951 in blast-furnace, steelmelting, rolling, and coke practice for the manufacture of refractories and sinters and for chemical analysis of steel. To operate with radioactive isotopes, the following three groups were organized: radioactive investigation methods; radioelectronics and gamma flaw detection; then the operational plan is set up. In the case of a full metallurgical cycle with mining and sintering-concentration shops at the KMK, radioactive isotopes can be widely used as marked atoms to investigate metallurgical processes and as radiation sources for the control and automation of production processes, and also for the purpose of flaw detection. The technical and economical effect

Card 1/2

The use of radioactiv[illegible] isotopes ... [illegible]/[illegible] '62/[illegible]/003/011/191
A06[illegible]/101

of operation with radioactive isotopes appears in an improved production technology and quality of the products; reduced waste; higher efficiency of various metallurgical units; the development of new more effective, accurate and cheaper methods of steel analysis; production and equipment control, and automation of production processes. The results of the operation with isotopes, carried out at the Combine, have been introduced into practice, or are being assimilated at the present. The planned work may yield high technical and economical results. The control and automation of production processes is particularly promising. For instance, the automatic dosing of refractory charges and elimination of dosage rejects, developed in 1960, may yield one million rubles yearly savings in merely one refractory shop department.

K. Ursova

[Abstracter's note: Complete translation]

Card 2/2

BOGDANOVA, N.G., inzh.; MASLOVA, V.N., inzh.

Studying chemical heterogeneity in ingots of killed steel.
Stal' 22 no.10:907-909 O'62. (MIRA 15:10)
(Steel ingots—Testing) (Steel—Analysis)

CHESNOKOV, N.D.; ZVEREV, V.A.; Prinimali uchastiye: BOGDANOVA, N.G.; BELIKOV, P.Ye.; FOMINSKIY, M.K.; BAZHENOV, M.M.

Making roll cast iron in an acid open-hearth furnace. Lit. proizv. no.2:4-7 F '63. (MIRA 16:3)

(Cast iron--Metallurgy)

BOGDANOVA, N.G.; MASLOVA, V.N.

Structural heterogeneity of killed steel ingots. Stal' 23 no.8:742-746 Ag '63. (MIRA 16:9)
(Steel—Metallography) (Steel ingots)

CHELYSHEV, N.A.; KOBYZEV, V.K.; BOGDANOVA, N.G.; DUBROVIN, A.K.; KACHURIN, D.S.

Radioactive isotope study of metal deformation in blooming mill rolling. Izv. vys. ucheb. zav.; chern. met. 7 no.12:65-72 '64 (MIRA 18:1)

1. Sibirskiy metallurgicheskiy institut i Kuznetskiy metallurgicheskiy kombinat.

BOGDANOVA, N.G.; MASLOVA, V.N.

Distribution of nonmetallic inclusions in a killed steel ingot. Stal' 24 no.8:703-704 Ag '64. (MIRA 17:9)

ACC NR: AT7004212 (A) SOURCE CODE: UR/0000/66/000/000/0164/0169

AUTHORS: Bogdanova, N. G.; Maslova, V. N.

ORG: none

TITLE: Study of structural inhomogeneity in steel ingots of carbon and alloy steels by means of radioactive isotopes

SOURCE: AN SSSR. Institut metallurgii. Eksperimental'naya tekhnika i metody vysokotemperaturnykh izmereniy (Experimental techniques and methods of high temperature measurement). Moscow, Izd-vo Nauka, 1966, 164-169

TOPIC TAGS: carbon steel, alloy steel, steel, metallographic analysis, radioactivity, isotope / 20 steel, 20Kh steel, 18KhGT steel, 65G steel, 3 steel, 30KhGT steel

ABSTRACT: The effect of the chemical composition and of casting technique on the structural inhomogeneity of carbon and alloy steels, 20, 20Kh, 18KhGT, 65G, 3, 30KhGT, and others, was studied. The structural inhomogeneities were determined for various alloys by the radioactive isotopes technique, P^{32} and S^{35} content, deep etching, sulfur imprints, ultrasonic method, chemical and microchemical composition, and metallographic analysis, respectively. The experimental results of the radioactive isotope experiments are shown graphically. It was found that the radioactive isotope method for determining structural inhomogeneities in steel is capable of

Card 1/2

ACC NR: AT7004212

yielding precise data on the internal structure of steel ingots. The study also showed that specimens cast into molds insulated with luncerite exhibited a more pronounced structural inhomogeneity than specimens cast into molds insulated with chamotte. Orig. art. has: 3 graphs.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 006/ OTH REF: 001

Card 2/2

BOGDANOV, I.N.; NOSOV, A.V.; BOGDANOVA, N.G.

Activities of the Kiev Province Scientific Society of Roentgenologists and Radiologists. Vest. rentg. i rad. 39 no.6:84-85 N-D '64.
(MIRA 18:6)

CHELYSHEV, N.A.; KOBYZEV, V.K.; BOGDANOVA, N.G.; DUBROVIN, A.K.; KACHURIN, D.S.

Investigating metal deformation on a blooming mill with the help of radioactive isotopes. Izv.vys.ucheb.zav.; chern. met. 8 no.4: 96-101 '65. (MIRA 18:4)

1. Sibirskiy metallurgicheskiy institut i Kuznetskiy metallurgicheskiy kombinat.

BOGDANOVA, N.G.

Initial corona potentials on electric lines. Elektroenergetika no.7:3-15 '63. (MIRA 16:9)

Chemical Abst.
Vol. 48
Apr. 10, 1954
Organic Chemistry

Alkylation of aromatic compounds with alcohols [illegible]
Condensation of 1,4-pentane[illegible] with [illegible]
[illegible]
Alma Al[illegible]
C.A. 48, [illegible]
[illegible]
[illegible]
added over 1 hr.; after 9 hrs. [illegible]
and treatment with water [illegible]
[illegible] (II) [illegible]
[illegible] III [illegible]
with 27 g. Al[illegible]
and [illegible] III [illegible]
$AlCl_3$ after 4 hrs. at [illegible] gave [illegible]
combined products after redn. [illegible]
d_{20} 0.9339 (oxidized with HNO_3 [illegible]
with S it gave [illegible]
8°, n_D^{20} 1.5170, d_{20} 0.9515 [illegible] passed over Cu at [illegible]
gave crude *aldehyde*, isolated through the $NaHSO_3$ [illegible]
the *2,4-dinitrophenylhydrazone* m. [illegible] M. [illegible]

~~24(5)~~ 24.7700

66247

AUTHORS: Ariya, S. M., Bogdanova, N. I. SOV/181-1-7-3/21

TITLE: Electrical Conductivity of Some Titanium and Vanadium Oxides

PERIODICAL: Fizika tverdogo tela, 1959, Vol 1, Nr 7, pp 1022-1026 (USSR)

ABSTRACT: Some time ago, it was supposed that some inconstant compounds, especially a series of oxides possess a submicroscopic inhomogeneous structure, e.g. that atoms of the trivalent titanium form accumulations, so-called "islets" in the lattice of titanium protoxide (TiO_{1+x}). It was the intention of the author to explain whether the dependence of the electrical conductivity with regard to the composition in the system $TiO_{1.00}$-$TiO_{1.50}$ matches the above assumption. Conductivity measurements in vanadium oxides within the limits of $VO_{1.50}$-$VO_{2.00}$ were performed, because within this zone numerous discrete intermediate compounds occur. The conductivity was investigated till 600°C by means of a potentiometer sonde. The results are reproducible in a satisfactory way taking account of the poly-crystalline sintered nature of the samples. The dependence of conductivity in vanadium oxides

Card 1/3

4

Electrical Conductivity of Some Titanium and Vanadium Oxides

on their composition (Fig 1) shows, that the conductivity of discrete intermediate compounds, in which the vanadium occurs in 3- and 4-valent formation, is different from the conductivity of a V_2O_3 and VO_2 mixture. The electrical conductivity of titanium oxide within the limits of $TiO_{1.00}$-$TiO_{1.50}$ equals almost the conductivity of a $TiO_{1.00}$ and $TiO_{1.50}$ mixture (Fig 2). The shape of the curve of the dependence of conductivity on the composition of that part within the homogeneous range of titanium protoxide ($TiO_{1.00}$-$TiO_{1.20}$), that is rich in oxygen, is very similar to the shape of the curve within the range of $VO_{1.00}$-$VO_{1.67}$. The latter corresponds to the heterogeneous range of the system V-O according to the radiographical data by Anderson and according to results of thermodynamical and magnetic investigations made by the authors(the thermodynamical investigations were shared by Yu. T. Popov). Consequently, the results of conductivity measurements are not contrary to the assumption of a submicroscopical inhomogeneous structure of the lattice

Card 2/3

Electrical Conductivity of Some Titanium and Vanadium Oxides

within the range of $Ti_{1.00}$ - $Ti_{1.20}$. It must be noted that the similarity of the electrical conductivity of oxides within the homogeneous range to the conductivity of the corresponding mixture with stoichiometrical composition is not evident generally. On the approach to the ionic state by the lattice with stoichiometrical composition, a deviation from the stoichiometrical composition, which refers to the presence of a certain quota of statistically irregular distributed atoms in the lattice possessing different valence with respect to their main mass, may cause significant changes in conductivity. There are 2 figures, 1 table, and 8 references, 5 of which are Soviet.

ASSOCIATION: Leningradskiy gosudarstvennyy universitet (Leningrad State University)

SUBMITTED: July 22, 1958

Card 3/3

5.4100

77340
SOV/79-30-1-1/78

AUTHORS: Bogdanova, N. I., Ariya, S. M.

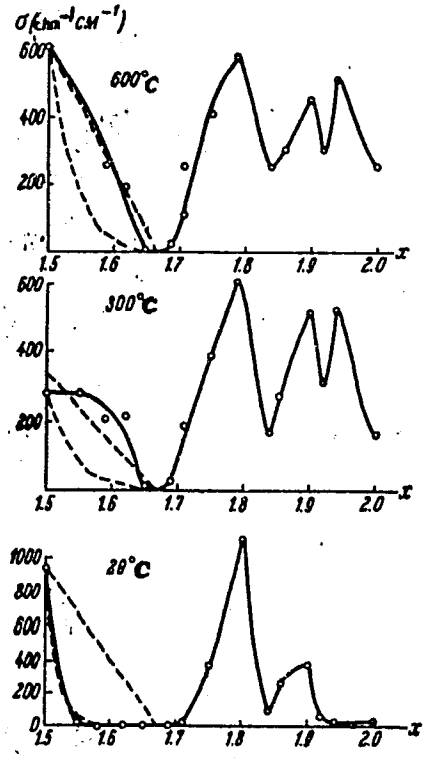
TITLE: Composition of Higher Oxides of Vanadium According to Their Electric Conductivity Data

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 1, pp 3-7 (USSR)

ABSTRACT: The binary compounds whose structures apparently contain atoms of a metal in different valence states and whose compositions, consequently, cannot be expressed by using whole valence numbers, are termed "mixed" compounds. Vanadium oxides have been known to be among them since G. Anderson's X-ray investigations (Acta Chem. Scan., 8, 1599, 1954). He and other investigators found discrete "mixed" compound of VO_n composition with fractional n values such as 1.67, 1.75, 1.80, 1.84, 1.86, 1.87, 2.17; α-phase with n = 1.71- 2.0; α'-phase with n = 2-2.23; β-phase with n = 1.67-1.79; γ-phase with

Card 1/6

n up to 1.5. The authors examined the electric conductivity of the compounds, whose n varied from 1.5 to 2.0. The samples were prepared by a 4-stage treatment: (1) reduction of very pure V_2O_5 to V_2O_3 with thoroughly purified electrolytic H_2 at temperatures gradually raised up to 900° C; (2) annealing of $V_2O_3 + V_2O_5$ mixture under vacuum at 700° C for 10 hr, then at 900° C for 20 hr; (3) compression of the annealed and powdered mixture into tablets under 10,000 kg/cm^2 pressure; (4) sintering at 1,600° C in a high-vacuum high-frequency furnace. The composition of the sintered tablets was determined according to the weight increase (oxygen consumption) on oxidation to V_2O_5. The electric conductivities, measured with a potentiometer under vacuum at 20° C to 600° C, are shown in Fig. 1 and 2. The first 3 of the maxima and minima in Fig. 1 correspond to the known discrete compounds with n = 1.67, 1.80, 1.84,



77340 SOV/79-30-1-1/78

Fig. 1. Specific conductance σ of vanadium oxides as function of their composition (dotted lines limit area within which values of σ of $VO_{1.5} + VO_{1.67}$ mixtures can be found).

Card 3/6

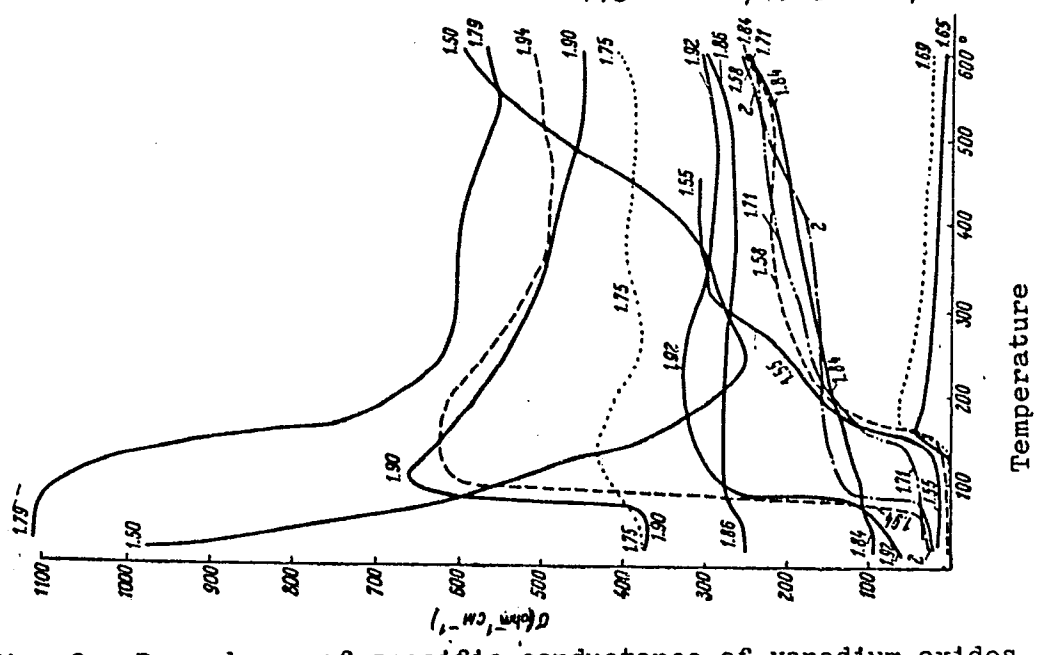


Fig. 2. Dependence of specific conductance of vanadium oxides on temperature.

Card 4/6

while the origin of peaks at n = 1.90 and n = 1.94, and of dip at n = 1.92 is still unknown; perhaps they also indicate discrete compounds, the possibility of whose existence was mentioned by Anderson. The n values from 1.50 to 1.67 seem to correspond to 2 phase systems. No solid solution with n = 1.75 is indicated in the σ vs. composition curve, but absence of an abrupt change in the conductivity of $VO_{1.75}$ at 160° C and essentially differing n = 1.75 and n = 1.79 curves in Fig. 2 point to existence of a discrete compound with n = 1.75. Also, no compounds with n = 1.86 and n = 1.87 appear in the σ vs. composition curves. However, inspection of Fig. 2 permits one to assume a discrete compound or even 2 compounds at the interval from n = 1.84 to n = 1.88. There are 2 figures; 1 table; and 8 references, 3 German, 2 Soviet, 1 Danish, 1 Swiss, 1 Italian.

Composition of Higher Oxides of Vanadium According to Their Electric Conductivity Data

77340
SOV/79-30-1-1/78

ASSOCIATION: Leningrad State University (Leningradskiy gosudarstvennyy universitet)

SUBMITTED: January 12, 1959

Card 6/6

BOGDANOVA, N.I.; ARIYA, S.M.

Electric conductivity of lower vanadium oxides. Vest.LGU 16 no.16:143-147 '61. (MIRA 14:8)
(Vanadium oxide—Electric properties)

S/181/62/004/001/037/052
B104/B112

AUTHORS: Bogdanova, N. I., and Loginov, G. N.

TITLE: Magnetic susceptibility of the lower vanadium oxide at 80 - 370°K

PERIODICAL: Fizika tverdogo tela, v. 4, no. 1, 1962, 236 - 238

TEXT: The magnetic susceptibility of the lower vanadium oxide was determined by the Faraday method on 14 samples with x ranging from 0.50 to 1.51. VO_x holds for x. The oxides were prepared from the hydride of vanadium iodide and from $VO_{1.51}$, obtained by reduction of V_2O_5, with hydrogen at 900°C. Mixtures of these substances were pressed to tablets, and sintered in vacuo for 3 hrs at ~1750°C. The vanadium oxides under examination contained only small amounts of ferromagnetic impurities: When the magnetic field strength was changed by 1 oe, the magnetic susceptibility varied by 10^{-4}%. The effective magnetic susceptibility

Magnetic susceptibility of the lower...

μ_{eff} is a linear function of x between $VO_{0.86}$ and $VO_{1.00}$. $\mu_{eff} = \mu_{eff}(x)$ describes a parabola between $VO_{1.00}$ and $VO_{1.27}$. This is consistent with the dependence of other properties on VO. The molar susceptibility as a function of x at different temperatures indicates the existence of the compound $VO_{1.33}$. The temperature dependence of the magnetic susceptibility for different VO_k suggests that the homogeneous region of the compound reaches its upper limit at $VO_{1.51}$. S. M. Ariya is thanked for having posed the problem and for assistance. There are 3 figures, 1 table, and 7 references: 3 Soviet and 4 non-Soviet. The four references to English-language publications read as follows: F. I. Morin. Bell System Techn. J., 37, 1047, 1958; J. B. Goodenough. Phys. Rev., 117, 1442, 1960; I. Breadley. J. Scient. Instr., 30, 86, 1956; L. C. Jackson. Phil. Trans. Roy. Soc. London., A 224, 1, 1923.

ASSOCIATION: Leningradskiy gosudarstvennyy universitet (Leningrad State University)

SUBMITTED: June 27, 1961 (initially), August 15, 1961 (after revision)

Table. Magnetic susceptibility of vanadium oxides of different compositions.
Legend: (1) composition of the oxide, x; (2) susceptibility $\chi_M \cdot 10^6$; (3) constants of the relation $\chi = a + C/T$; (4) effective magnetic susceptibility.

(1) Состав окисла, x	(2) $\chi_M \cdot 10^6$ 90°K	293°K	(3) $a \cdot 10^6$	$C \cdot 10^1$	(4) $\mu_{эфф}$.
0.50	190	190	190	0	0
0.61	199	199	199	0	0
0.94	297	227	197	86	0.26
0.96	323	233	193	117	0.31
0.99	397	264	206	171	0.37
1.06	517	318	227	265	0.46
1.15	760	426	271	455	0.605
1.17	861	453	266	535	0.66
1.26	1251	616	313	872	0.84
1.30	1370	679	—	—	—
1.31	1467	694	—	—	—
1.39	996	814	—	—	—
1.45	727	934	—	—	—
1.51	563	967	—	—	—

Card 3/3

S/078/63/008/004/001/013
A059/A126

AUTHORS: Bogdanova, N.I., Pirogovskaya, G.P., Ariya, S.M.

TITLE: Higher oxides of titanium

PERIODICAL: Zhurnal neorganicheskoy khimii, v. 8, no. 4, 1963, 785 - 787

TEXT: In order to establish the phase ratios in the system $TiO_{2.00}$ - $TiO_{1.5}$, the electric conductivities of the oxides of titanium were measured at 20 and 300°C, and the equilibria of the higher oxides of titanium examined in mixtures with H_2/H_2O at 1,030°C. The electric conductivities were measured in the same way as has been described by the authors before [Zh. obshch, khimii, v. 30, 3 (1960)]. The dependence of the electric conductivity of the oxides of titanium on their compositions was found to agree with the assumption of Andersson and his collaborators [Acta Chem. Scand., v. 11, 1,641 (1957)] on the existence of the compounds $TiO_{1.67}$, $TiO_{1.75}$, $TiO_{1.833}$, $TiO_{1.875}$ - $TiO_{1.889}$, and $TiO_{1.90}$. In order to obtain accurate data on the phase ratios in the system $TiO_{2.0}$ - - $TiO_{1.75}$ at high temperatures, the dependence of the composition of solid tita-

Card 1/2

Higher oxides of titanium

nium oxide on the ratio of hydrogen and water vapor in the gas phase coexisting with the titanium oxide was investigated at 1,030°C. The composition of the solid phase was determined by measuring the elongation of a quartz spring with a microcathetometer. Six phases were shown to exist in the range $TiO_{1.75}$ - $TiO_{1.90}$ which contact with each other, namely: $TiO_{1.90}$ - $TiO_{1.875}$; $TiO_{1.875}$ - $TiO_{1.862}$; $TiO_{1.862}$ - $TiO_{1.839}$; $TiO_{1.839}$ - $TiO_{1.818}$; $TiO_{1.818}$ - $TiO_{1.778}$; $TiO_{1.778}$ - $TiO_{1.751}$, without any intermediates. There are 2 figures.

ASSOCIATION: Leningradskiy gosudarstvennyy universitet (Leningrad State University)

SUBMITTED: August 15, 1962

Card 2/2

BOGDANOVA, O. K

4

SCHGLOVA, A.P.

SCHEGLOVA, A.P., BOGDANOVA, O.K., BALANDIN, A.A., T'YUR'YAYEV, I.P., VINNIK, I.F.,

Kinetics of dehydrogenation.

Report presented at the 12th Conference on high molecular weight compounds devoted to monomers, Baku, 3-7 April 62

BOGDANOVA, N. L.

Bogdanova, N. L.: "On the use of local predatory bugs in the fight against pulvinaria in tea plantations", Byulleten' Vsesoyuz. nauch. -issled. in-ta chaya i subtrop, kul'tur, 1948, No. 3, p. 148-52.

SO:-3042, 11 March 53, (Letopis 'nykh Statey, No. 10, 1949).

BOGDANOVA, N.L.

Hyperaspis campestris Herbst (Coleoptera, Coccinellidae), predator of the elongated scale insect Chloropulvinaria floccifera Westw. (Homoptera, Coccoidea). Ent.obos. 35 no.2: 311-323 '56. (MLRA 9:10)

1. Yushnaya stantsiya zashchity rasteniy, Adler. (Scale insects) (Ladybirds)

BOGDANOVA, N.L., kand.sel'skokhoz.nauk

"Biological methods for controlling harmful insects" by V. A. Shchepetil'nikova. Reviewed by N.L.Bogdanova. Zashch. rast. ot vred. i bol. 8 no.1:63 Ja '63. (MIRA 16:5)
(Insects, Injurious and beneficial—Biological control)
(Shchepetil'nikova, V.A.)