S/126/62/013/006/002/018
E202/E492

Optical properties of ...

Vanadium: $\varepsilon_1 = 2.9 + 8.05\lambda^2 - 0.034\lambda^4$;

$\varepsilon_2 = -3683\lambda^{-5} + 2167\lambda^{-3} - 392\lambda^{-1} + 33.4\lambda + 0.139\lambda^3$; (7)

Gold: $\varepsilon_1 = -16.5 + 37.2\lambda^2 - 0.12\lambda^4$;

$\varepsilon_2 = 1.55\lambda^3 - 0.0024\lambda^2$. (8)

Detailed contributions of various groups of electrons participating in the above expressions were identified. The groups of optical electrons found were related to the s- and d-bands. Current carriers in small d-bands contributed relatively little to conductivity. Additional data on Hall coefficient confirmed two types of carriers with the conductivity in the d-band being of the hole type. In the case of gold, similar results were obtained by means of the simple method of equalization, which proved the reliability of the method of approximating polynomials. There are 6 figures and 2 tables.

4

Card 3/4

S/126/62/013/006/002/018
Optical properties of ... E202/E492

ASSOCIATION: Institut fiziki metallov AN SSSR
(Institute of Physics of Metals AS USSR)

4

SUBMITTED: January 17, 1962

Card 4/4

LEVKOV, A.N.; NOSKOV, M.M.; PONOMAREVA, V.I.

Faraday effect in copper oxide and selenium near the main absorption band. Izv. vys. ucheb. zav; fiz. no.1:171-175 '63. (MIRA 16:5)

1. Ural'skiy gosudarstvennyy universitet imeni A.M.Gor'kogo.
(Faraday effect) (Copper oxide) (Selenium)

AFANAS'YEVA, L.A.; BOLOTIN, G.A.; NOSKOV, M.M.

Magnetic rotation of the polarization plane with reflection from antimony and bismuth in the infrared region of the spectrum. Fiz. met. i metalloved. 19 no.6:944 Je '65. (MIRA 18:7)

1. Institut fiziki metallov AN SSSR.

ACC NR: AP7000662 SOURCE CODE: UR/0126/66/022/005/0787/0789

AUTHORS: Afanas'yeva, L. A.; Noskov, M. M.

ORG: Institute of the Physics of Metals, AN SSSR (Institut fiziki metallov AN SSSR)

TITLE: Spin orbit interaction and magnetooptical Kerr effect in ferromagnetic metals

SOURCE: Fizika metallov i metallovedeniye, v. 22, no. 5. 1966, 787-789

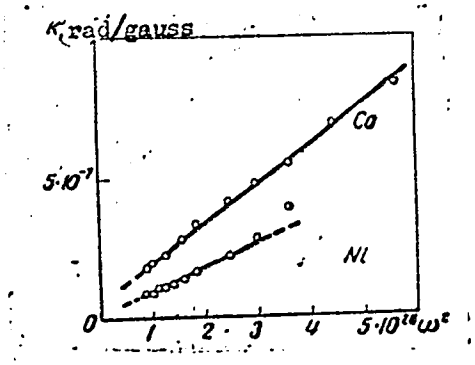
TOPIC TAGS: Kerr effect, cobalt, nickel, Faraday effect

ABSTRACT: The frequency dependence of the Kerr constant for cobalt and nickel in the spectral region of 5--20 microns was determined. The experimental results are shown graphically (see Fig. 1). It was found that these results support the phonon mechanism for electron scattering in ferromagnetics proposed by L. A. Afanas'yeva, A. N. Voloshinskiy, and M. M. Noskov (FMM, 1966, 21, 288) and are incompatible with the inhomogeneous spin scattering mechanism of A. N. Voloshinskiy (FMM, 1964, 18, 10). It is concluded that the square dependence of the Kerr constant on the frequency and the sign of the magnetooptical rotation in cobalt require further clarification.
The authors thank G. A. Bolotin, A. N. Voloshinskiy, and I. G. Fakidov for helpful discussions.

Card 1/2 UDC: 669.017:535

ACC NR: AP7000662

Fig. 1. Frequency dependence of the Kerr constant for cobalt and nickel in the interval of 8—20 microns.



Orig. art. has: 1 graph.

SUB CODE: 11, 20/ SUBM DATE: 06Apr66/ ORIG REF: 005

Card 2/2

VASILENKO, Aleksey Nikolayevich, kand. tekhn. nauk; DRYZHAKOV, Yevgeniy Vasil'yevich, dots.; ISAYEV, Sergey Ivanovich, kand. tekhn. nauk; KORNEYCHUK, Nikolay Karpovich, kand. tekhn. nauk, dots.; KOFANOV, Vyacheslav Ivanovich; assistent; KRUTOV, Vitaliy Ivanovich, doktor tekhn. nauk, prof.; MIRONOV, Boris Mikhaylovich, kand. tekhn. nauk; NIGMATULIN, Iskander Nigmatulevich, doktor tekhn. nauk, prof.; NOSOV, Mikhail Vasil'yevich, prof.; SAMOYLOV, Mikhail Sergeyevich, assistent; SPORYSH, Igor'Pavlovich, kand. tekhn. nauk, prof.; KHVOSTOV, Viktor Ivanovich, kand. tekhn. nauk; SHISHOV, Yevgeniy Viktorovich, kand. tekhn. nauk; YUDAYEV, Boris Nikolayevich, kand. tekhn. nauk, dots.; KUTYRIN, I.N., dots., kand. tekhn. nauk, retsenzent; SHVEDOV, A.M., dots., retsenzent; TUPITSYNA, L.A., red.; FUFAYEVA, G.I., red.

[Problems in technical thermodynamics and heat transfer] Sbornik zadach po tekhnicheskoi termodinamike i teploperedache. [By] A.N.Vasilenko i dr. Moskva, Vysshaia shkola, 1964. 369 p. (MIRA 17:4)

1. Prepodavatel'skiy kollektiv kafedry termodinamiki i teploperedachi Moskovskogo vysshego tekhnicheskogo uchilishcha (for all except Kutyrin, Shvedov, Tupitsyna, Fufayeva). 2. Moskovskiy aviatsionnyy institut (for Kutyrin, Shvedov).

NOSKOV, N.F.

Helminthological expedition of the Gorkiy Teachers' Institute to Gorkiy Reservoir. Uch. zap. GGPI 48:91-94 '64.

Role of gulls in supporting the focus of Ligula infestation in Gorkiy Reservoir. Ibid.:95-97 (MIRA 18:4)

MOSKOV, M.I.

Multi-dimensional physicochemical diagrams based on the principle of multi-dimensional axonometry. Dokl.AN SSSR 94 no.1:89-92 Ja '54. (MLRA 7:1)

(Chemistry, Physical and theoretical) (Axonometry)

MOSKOV, M.I.

Construction of graphic representation for multicomponent systems by means of multi-dimensional axonometry. Izv.Sekt.fiz.-khim.anal. 26:14-29 '55. (MLRA 8:9)
(Systems (Chemistry)--Graphic methods)
(Axonometry)

SOV/124-57-5-5239

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 5, p 19 (USSR)

AUTHOR: Noskov, N. I.

TITLE: The Dyadic Graphic Method for the Determination of the Position of a Normal Spatial Seven-bar Mechanism (Diadnyy sposob postroyeniya polozheniy normal'nogo prostranstvennogo semizvennika)

PERIODICAL: Tr. Seminara po teorii mashin i mekhanizmov In-ta mashinoved. AN SSSR, 1956, Vol 16, Nr 62, pp 5-10

ABSTRACT: The paper suggests a graphic method for the design of a normal seven-bar mechanism which for prescribed positions of the driving and the driven link is reduced to a problem of the design of a 14-angle polygon with prescribed positions of four of its sides. The solution of the problem requires only the construction of the orthogonal projections in which the suggested method differs favorably from the one by V. V. Dobrovol'skiy [Teoriya sfericheskikh mekhanizmov (Theory of Spherical Mechanisms). Mashgiz, 1947] which requires a construction of the spherical projections.

V. N. Geminov

Card 1/1

PHASE I BOOK EXPLOITATION SOV/3559

Akademiya nauk SSSR. Institut metallurgii. Nauchnyy sovet po probleme zharoprochnykh splavov

Issledovaniya po zharoprochnym splavam, t. 5 (Investigations of Heat-Resistant Alloys, Vol 5) Moscow, Izd-vo AN SSSR, 1959. 423 p. Errata slip inserted. 2,000 copies printed.

Ed. of Publishing House: V.A. Klimov; Tech. Ed.: I.F. Kuz'min; Editorial Board: I.P. Bardin, Academician, G.V. Kurdyumov, Academician, N.V. Ageyev, Corresponding Member, USSR Academy of Sciences (Resp. Ed.), I.A. Oding, I.M. Pavlov, and I.F. Rudin, Candidate of Technical Sciences.

PURPOSE: This book is intended for metallurgical engineers, research workers in metallurgy, and may also be of interest to students of advanced courses in metallurgy.

COVERAGE: This book, consisting of a number of papers, deals with the properties of heat-resisting metals and alloys. Each of the papers is devoted to the study of the factors which affect the properties and behavior of metals. The effects of various elements such as Cr, Mo, and W on the heat-resisting properties of various alloys are studied. Deformability and workability of certain metals as related to the thermal conditions are the object of another study described. The problems of hydrogen embrittlement, diffusion and the deposition of ceramic coatings on metal surfaces by means of electrophoresis are examined. One paper describes the apparatus and methods used for growing monocrystals of metals. Boron-base metals are critically examined and evaluated. Results are given of studies of interatomic bonds and the behavior of atoms in metal. Tests of turbine and compressor blades are described. No personalities are mentioned. References accompany most of the articles.

5(4)

AUTHOR: Noskov, N. I. SOV/78-4-3-22/34

TITLE: Representation of the Five-component System by the Method of the Monocentric Square (Izobrazheniye pyaternoy vzaimnoy sistemy po sposobu monotsentricheskogo kvadrata)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 3, pp 626-644 (USSR)

ABSTRACT: Comparative analyses and geometrical investigations of the aqueous four- and five-component system were carried out by the figure and vector method. The plotting of the figure diagram of the four-component system: K_2SO_4-Na_2SO_4-$MgSO_4$-H_2O was carried out according to the method devised by Jeneke and Buke and the plotting of the figure diagram of the five-component system K^+, Na^+, Mg^{2+} || Cl', SO_4''-H_2O according to the method developed by Skoute and Buke. A complete diagram of the four-component system was plotted at 25° according to the vector method for the crystallization range of glaserite ($3K_2SO_4.Na_2SO_4$) and all surrounding crystallization ranges

Card 1/3

as mirabilite ($Na_2SO_4 \cdot 10H_2O$), astrakanite ($Na_2SO_4 \cdot MgSO_4 \cdot 4H_2O$), epsomite ($MgSO_4 \cdot 7H_2O$), schoenite ($K_2SO_4 \cdot MgSO_4 \cdot 6H_2O$), and potassium sulfate (K_2SO_4). This diagram is shown in figure 12.

In the diagram the composition is illustrated by points, left and right, without an additional index. The diagram of the five-component system was plotted according to the monocentric square method. For a better survey several crystallization ranges of this system are given by detailed diagrams in figures 22-26. In the construction of the polycomponent systems by the method of the monocentric square spatial figures and projections become superfluous. The diagram gives the coordinates of all components, including water, on the same scale and in wt %. On the diagram according to the figure method the coordinates of salts are given on one single scale and in ion % and the coordinates of water in mole %. By this method it is possible to illustrate the simple geometrical structure of solid and liquid phases in complex systems. The vector diagram of the four-component system

Representation of the Five-component System by the Method of the Monocentric Square SOV/78-4-3-22/34

$NiCl_2 + K_2SO_4 \rightleftharpoons K_2Cl_2 + NiSO_4$ was experimentally drawn and given in figures 30-33. The vector method can be used for the plotting of diagrams according to the figure method as well as for the representation of multi-component systems. There are 35 figures, 3 tables, and 3 Soviet references.

SUBMITTED: April 5, 1957

Card 3/3

NOSKOV, N.I.

Mechanization of labor-consuming auxiliary operations. (MIRA 15:5)
Mashinostroitel' no.4:10-13 Ap '62.
(Industrial equipment--Technological innovations)

NOSKOV, N.I.

Diagram for systems having some components in small amounts.
Zhur. neorg. khim. 9 no.8:2007-2010 Ag '64.
(MIRA 17:11)

L 46285-66 EWT(m)/T/EWP(t)/ETI IJP(c) JD/HW/JG

ACC NR: AP5025329 SOURCE CODE: UR/0126/65/020/003/0428/0432

51
50

AUTHOR: Noskova, N. I.; Pavlov, V. A.

B

ORG: Institute of Physics of Metals, AN SSSR (Institut fiziki metallov AN SSSR)

TITLE: Stacking faults in face centered cubic crystal systems of metals and alloys

SOURCE: Fizika metallov i metallovedeniye, v. 20, no. 3, 1965, 428-432

TOPIC TAGS: metal crystal, crystal lattice structure, cubic crystal, crystal lattice defect

ABSTRACT: The hardening coefficient, corresponding to the third region of the elongation graph, was correlated with the probability of stacking faults formed in the lattice of pure metals and alloys. The hardening coefficient increased with the density of stacking faults. Au, Ag, Cu, Al, Ni, Pt, Pd, and homogeneous solid solutions of Au-Cu, Ni-Cu, and Ni-Co were submitted to strong plastic deformation prior to tensile tests. The density of stacking faults was determined by x-ray diffraction and the hardening coefficient was derived by relating cross section reduction to intrinsic stress. In metals with high density, failure occurred without marked local deformation and the destruction surface was located at 45° to the sample axis. At low fault densities, failure was characterized by formation of a sharply defined neck, i.e. under strong local deformation. Effects of stacking faults on the hardening

Card 1/2 UDC: 538.[illegible]546.4

L 46285-66

ACC NR. AP6028913

coefficient and on the mode of destruction were related to the change in the dislocation structure, due to the different mobility of split and of intact dislocations. Orig. art. has: 4 figures and 1 table.

SUB CODE: 11/ SUBM DATE: 03Aug64 / ORIG REF: 002/ OTH REF: 008

LS

Card 2/2

LUKISHOV, G.I.; RODIONOV, K.D.; NOSKOV, N.I.

Chain of glove boxes for handling radioactive substances. Atom. energ. 19 no.5:486-488 N '65. (MIRA 18:12)

NOSKOV, N[M] (Hd. of the Dept. of Epizootiology)
Chkalov Agricultural Inst.
"The course and treatment of necrobacillosis in grown cattle."
SO: Veterinariia 24(1), 1947, p. 19.

NOSKOV, N. M.

"The Cold Method of Rearing Calves," Veterinariya, No. 1, 1948.

Mbr., Chkalov Agricultural Inst., -c1948-.

[redacted], N. M.

Agriculture

(How to keep alive all the calves born) (Chkalov) Chkalovskoe izd-vo, 1950.

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

YCHKOV, N. V.

Agriculture

(How to free farms of brucellosis) (Chkalov) Chkalovskoe izd-vo, 1951.

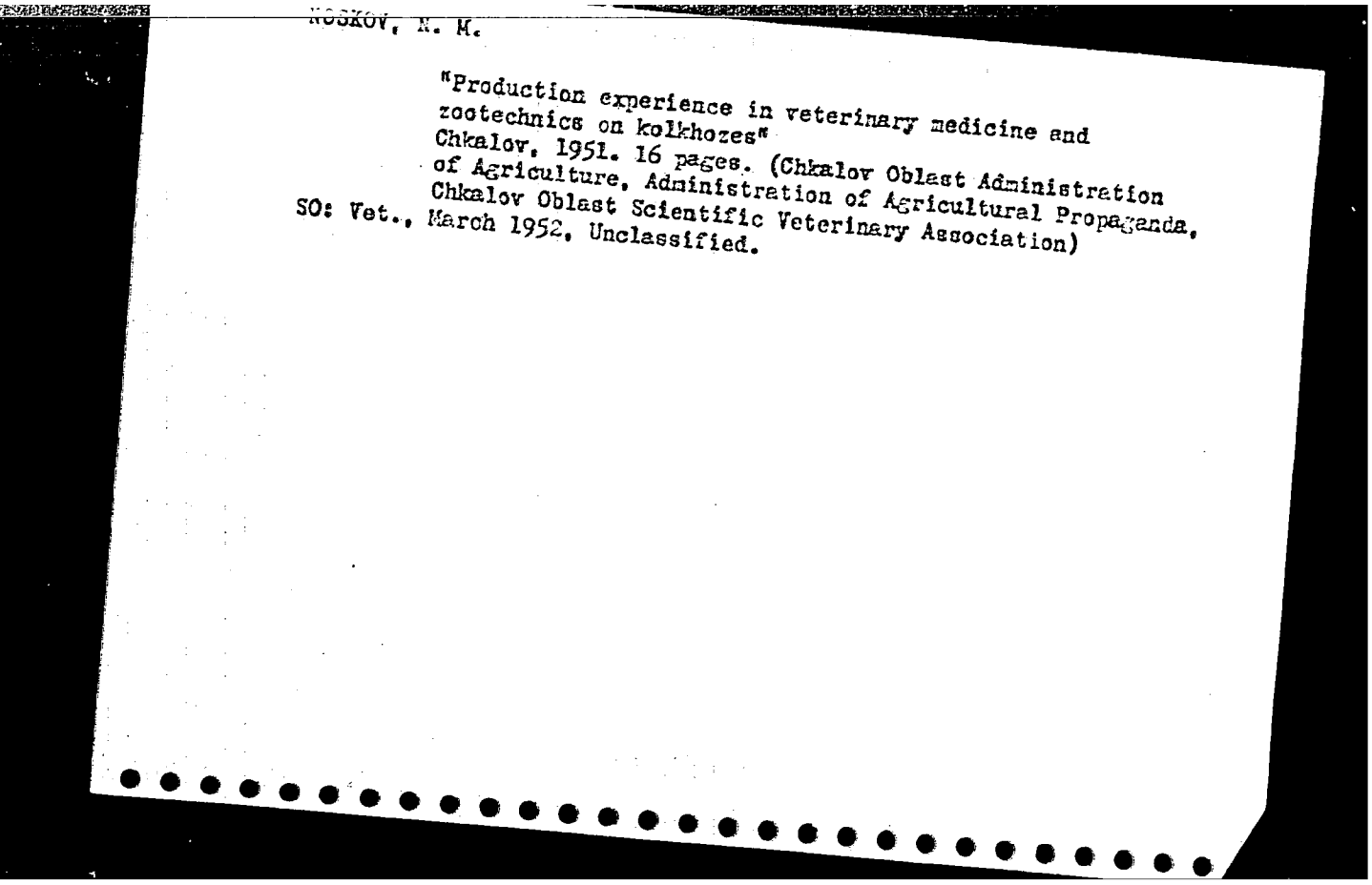
Monthly List of Russian Accessions, Library of Congress, July, 1952. UNCLASSIFIED.

NOSKOV, N.

N. NOSKOV, author of Kolibatsillez ("Colibacillosis") Chkalov, Chkal. izd., 1951. 4 pages (Chkal. obl. Administration of Agriculture. Administration of Agricultural propaganda. Chkal. obl. Scientific Veterinary Society) Unbound. 1,500 copies.

SO: Report U-4502; 28 August 1953.

(From: NEW BOOKS ON VETERINARY MEDICINE Veterinariya, No. 11, pp. 63,64, Nov. 1951, Moscow, Russian mo per:)



KOSKOV, N. M.

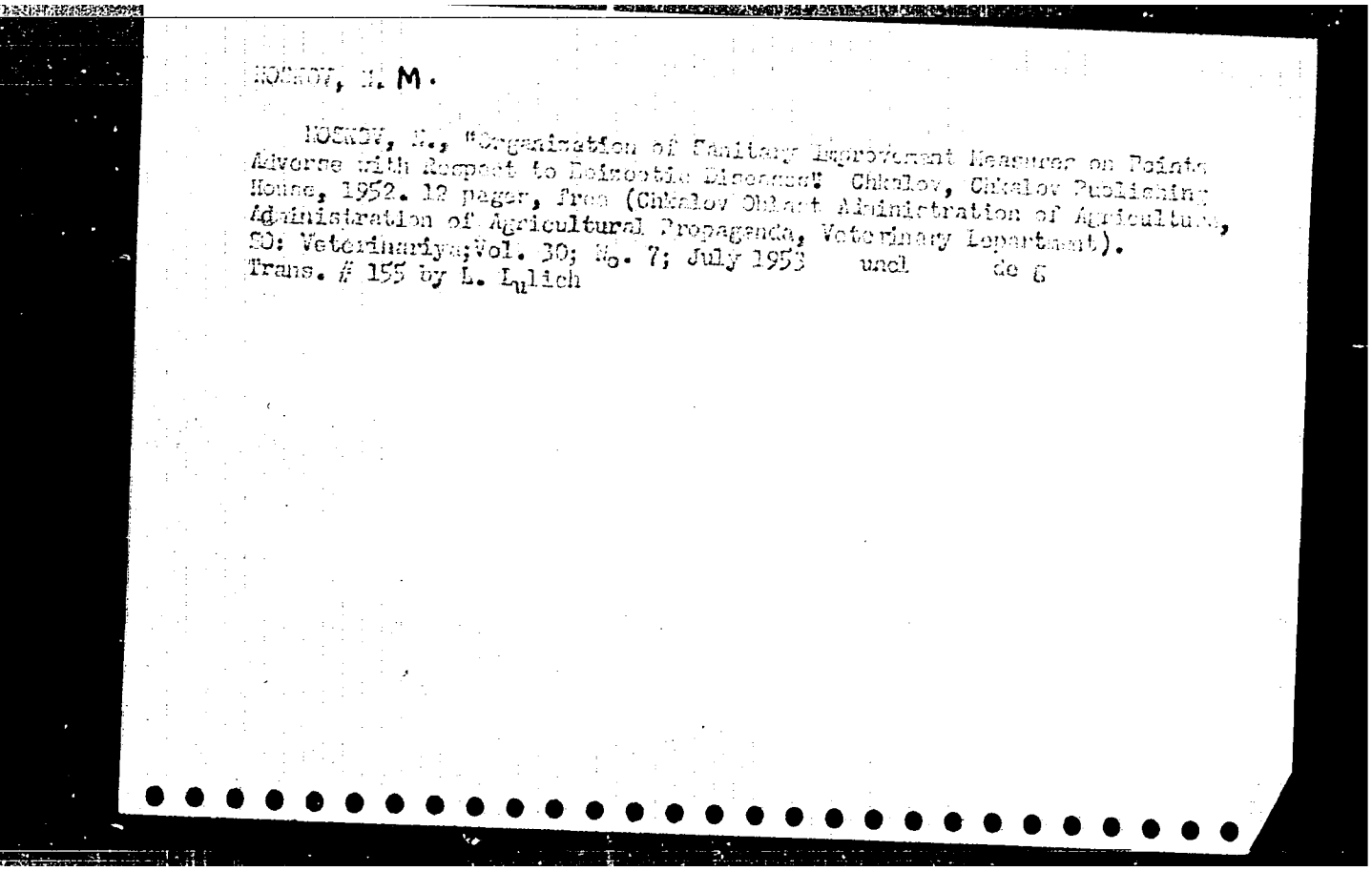
"Production experience in veterinary medicine and zootechnics on kolkhozes"
Chkalov, 1951. 16 pages. (Chkalov Oblast Administration of Agriculture, Administration of Agricultural Propaganda, Chkalov Oblast Scientific Veterinary Association)

SO: Vet., March 1952, Unclassified.

NOSKOV, N. M.

NOSKOV, N.: Swine erysipelas and the fight against it. Chkalov. Chkalov Publishing House. 1952. 8 pages. Free. 2,500 copies. (Chkalov Oblast Administration of Agriculture, Administration of Agricultural Propaganda, Veterinary Department).

SO: Veterinariya; 30; (1); January 1953; Uncl. TABCON



ROGOV, N. M.

ROGOV, N., "Organization of Sanitary Improvement Measures on Points Adverse with Respect to Enzootic Diseases" Chkalov, Chkalov Publishing House, 1952. 12 pages, Trans (Chkalov Oblast Administration of Agriculture, Administration of Agricultural Propaganda, Veterinary Department).
SO: Veterinariya; Vol. 30; No. 7; July 1953 uncl de G
Trans. # 155 by L. Ulich

MOSKOV, N. M., Cand. Vet. Sci. SURNACHEV, A. V., Sci. Coworker KANEVSKIY, V. N., Vet. Polyclinic, Chkalov Oblast

Contagion and Contagious Diseases in Animals

Study of the role of sheep in the epizootiology of malignant catarrhal fever in cattle. Veterinariia 29 no.3:34-37 Mr '52.

9. Monthly List of Russian Accessions, Library of Congress, July 1952. Unclassified.

2

NOSKOV, Nikolay Mikhaylovich, dotsent, kandidat veterinarnykh nauk;
BOBYLEV, P.G., redaktor; FEDOTOVA, A.F., tekhnicheskiy redaktor

[Fundamentals of raising calves] Osnovy vyrashchivaniia teliat. Moskva, Gos. izd-vo sel'khoz. lit-ry, 1956. 295 p. (MLRA 10:4)
(Calves)

Country :CZECHOSLOVAKIA
Catogory :Farm Animals. Q-2
Cattle.
Abs. Jour :Ref Zhur-Biol., No 16, 1958, 74009

Author :Noskov, N. M.
Institut. :
Title :The Basis for Planned Raising of Calves.

Orig Pub. :Nas chov, 1957, No 21, 586-588

Abstract :This study deals with the raising methods of highly productive cattle at the Karavayevo, Kostromskaya oblast' and imeni Komintern, Orenburgskaya oblast' breeding farms. -- G. A. Titov

Card: 1/1

MUSKOV, M.M., kand.veterinarnykh nauk

Effect of age and feeding on the quality and composition of the blood serum of calves. Agrobiologiia no.3:358-360 My-Je '59.
(MIRA 12:9)

1. Orenburgskiy sel'skokhozyaystvennyy institut.
(Blood--Analysis and chemistry)
(Calves--Feeding and feeds)

YERSHOV, V.S., prof., doktor veter.nauk; ZHURAVEL', A.A., prof., doktor veter.nauk; PREOBRAZHENSKIY, N.M., dotsent, kand.veter.nauk; YEL'TSOV, S.G., prof., doktor veter.nauk; ITKIN, B.Z., dotsent; NOSKOV, N.M., dotsent, kand.veter.nauk; YEMEL'YANOVA, N.I., red.; BALLOD, A.I., tekhn.red.

[Principles of veterinary medicine] Osnovy veterinarii. Izd.2., ispr. i dop. Moskva, Gos.izd-vo sel'khoz.lit-ry, 1960. 437 p. (MIRA 13:10)

1. Direktor Vsesoyuznogo instituta gel'mintologii im. K.I.Skryabina (for Yershov). 2. Zaveduyushchiy kafedroy fiziologii Leningradskogo veterinarnogo instituta (for Zhuravel'). 3. Moskovskaya veterinarnaya akademiya (for Preobrazhenskiy). 4. Zaveduyushchiy kafedroy operativnoy khirurgii Moskovskoy veterinarnoy akademii (for Yel'tsov). 5. Zaveduyushchiy kafedroy epizootologii Orenburgskogo sel'skokhozyaystvennogo instituta (for Noskov).

(Veterinary medicine)

NOSKOV, N.M.

Inflammatory reactions in calves in ontogenesis. Biul. eksp. i biol. med. 50 no. 8:80-83 Ag '60. (MIRA 13:10)

1. Iz kafedry veterinarno-sanitarnoy eksperitzy i epizootologii (zav. - prof. A.Ya. Lukin) Orenburgskogo sel'skokhozyaystvennogo instituta. Predstavlena deystv. chlenom AMN SSSR V.V. Parinym.
(INFLAMMATION)

NOSKOV, N. M. [redacted] Doc Vet Sci -- "Studies on the [redacted] immunobiology of [redacted] nursing-age calves." Mos-Kuzminki, 1961 (Mos Vet Acad of the Min of Agr RSFSR.)

(KL, 4-61, 205)

NOSKOV, Nikolay Mikhaylovich, kand. veter. nauk; BYRDINA, A.S., red.; PROKOF'YEVA, L.N., tekhn. red.

[Handbook for practical lessons in epizootiology] Rukovodstvo k prakticheskim zaniatiiam po epizootologii. Moskva, Gos. izd-vo sel'khoz. lit-ry, zhurnalov i plakatov, 1961. 343 p. (MIRA 14:8)

(Communicable diseases in animals)

KOROPOV, V. N. (Professor) and NOSKOV, N. M. (Docent, Moscow Veterinary Academy).

"Metabolism in calves during ontogenesis, in normalcy and in pathology..."
Veterinariya, vol. 39, no. 2, February 1962 pp. 45

NOSKOV, N.M., prof.

Give the green light to educational films. Veterinariia 41 no.10:103 O '64. (MIRA 18:11)

1. Gor'kovskiy sel'skokhozyaystvennyy institut.

NOSKOV, N.S., kand.tekhn.nauk; TSAPENKO, Ye.F., kand.tekhn.nauk;
ZVEZDKIN, A.S., inzh.; BRODSKIY, Z.I., inzh.

Control of liquid flow into a vessel using electrodes. Prom. energ.
17 no.12:26-31 D '62. (MIRA 17:4)

USSR/Soil Science. Tillage. Land Reclamation. Erosion. J-5

Abs Jour: Ref Zhur-Biol., No 6, 1958, 24817.

Author : Noskov, P.
Inst :
Title : The Advantage of the Mal'tsev System of Soil Tillage.

Orig Pub: S. kh. Sibirii, 1957, No 9, 19-23.

Abstract: No abstract.

Card : 1/1

BRAVYY, Z.A.; KIRILINA, V.Z., st. nauchn. sotr., red.; NOSKOV, R.F., red.; BRATISHKO, L.V., tekhn. red.

[Rapid method for determining the breaking length of cotton yarn] Ekspressnyi metod opredeleniia razryvnoi dliny khlopchato-bumazhnoi priazhi. Moskva, 1962. 63 p. (MIRA 17:3)

1. Moscow. TSentral'nyy institut nauchno-tekhnicheskoy informatsii legkoy promyshlennosti.

MOSKOV, S.A.

Use of hydrolysin L-103 and aminopeptide in surgery. Akt.vop.perel. krovi no.7:311-314 '59. (MIRA 13:1)

1. Kafedra obshchey khirurgii No.2 Voyenno-meditsinskoy akademii im. S.M. Kirova (nachal'nik kafedry - zasluzhennyy deyatel' nauki, prof. M.S. Lisitsyn).

(BLOOD PLASMA SUBSTITUTES)

MOSKOV, S. I.

27104. MOSKOV, S. I. - Stakhanov ski y plan povyshei ya proi z vodi tel'nosti truda na shakhte ("Chernaya Gora", Kuzbass). Rekhani z atsi ya trudoyemki kh i tyazhelykh robot, 1949 No (, c. 1-3

SO: Letopis' Zhurnal'.ykh Statey, Vol. 36, 1949

PROSKURIN, V.V., MOSKOV, S.I.

Some results of using levels of 150m.high in working wide pitching seams. Ugol' 31 no.12:13-16 D '56. (MLRA 10:2)

1. Tomskiy politekhnicheskiy institut imeni S.M.Kirova (for Proskurin). 2. Nachal'nik shakhty "Severnaya" tresta Kemerovugol' (for Moskov).

(Kuznetsk Basin--Coal mines and mining)

MOSKOV, S. K.

MOSKOV, S. K. -- "Flattening of Asphalt-Concrete by Jarring." Sub 28 Oct 52, Central Sci Res Inst of Industrial Structures. (TsNIPS). (Dissertation for the Degree of Candidate in Technical Sciences).

SO: Vechernaya Moskva, January-December 1952

KOZLOVSKIY, Arkadiy Stepanovich; NOSKOV, S.K., nauchn. red.;
MIKHAL'CHUK, Z.V., red.

[Roofing operations] Krovel'nye raboty. Izd.2., perer.
i dop. Moskva, Vysshaia shkola, 1965. 383 p.
(MIRA 18:2)

NOSKOV, S.K., kandidat tekhnicheskikh nauk, redaktor; AZRILYANT, Ya.M., redaktor; MEDVEDEV, L.Ya., tekhnicheskiy redaktor.

[Instruction for using roofing material and insulation under winter conditions] Instruktsiia po ustroistvu rulonnykh krovel' i gidroizoliatsii v zimnikh usloviiakh. Moskva, Gos. izd-vo lit-ry po stroitel'stvu i arkhitekture. 1954. 17 p. (MLRA 8:5)

1. Russia (1923- U.S.S.R.) Ministerstvo stroitel'stva. Tekhnicheskoye upravleniye.
(Roofing--Cold weather conditions)

NOSKOV, Sergey Kiseleevich, kandidat tekhnicheskikh nauk; ZHURAVLEV, B.A., inzhener, redaktor; NEPOMNYASHCHAYA, T.F., redaktor; PERSON, M.N., tekhnicheskiy redaktor.

[Laying rolled roofing material under winter conditions] Ustroistvo rulonnykh krovel' v zimnikh usloviiakh. Moskva, Gos.izd-vo lit-ry po stroitel'stvu i arkhitekture. 1954. 80 p. (MLRA 8:5)
(Roofing)

NOSKOV, S K.

KOZLOVSKIY, Arkadiy Stepanovich; [redacted], kandidat tekhnicheskikh nauk, nauchnyy redaktor; TYAPKIN, B.G., redaktor izdatel'stva; TOKER, A.M., tekhnicheskiy redaktor

[Roofing work in rural building] Krovel'nye raboty v sel'skom stroitel'stve. Moskva, Gos. izd-vo lit-ry po stroit. i arkhit. 1956. 98 p. (MLRA 10:4)
(Roofing)

MOSKOV, S.K., kandidat tekhnicheskikh nauk.

Roofwork under cold weather conditions. Mov.tekh.i pered.op.v stroi. 18 no.10:15-18 O '56. (MLRA 9:11)
(Roofing--Cold weather conditions)

NOSKOV, S. K., kand. tekhn. nauk; KOZLOVSKIY, A., inzh.

Efficient methods for covering roofs with rolled roofing materials. Stroitel' no.9:15 S '59. (MIRA 13:3)
(Roofing)

MOSKOV, S.K., kand.tekhn.nauk; ODINOKOV, S.D., kand.tekhn.nauk; SIROTKINA, O.V., starshiy tekhnik; KRETOVA, L.V., starshiy tekhnik. Prinimala uchastiye SHABALINA, V.I., mladshiy nauchnyy sotrudnik. SKVORTSOVA, I.P., red.izd-va; TEMKINA, Ye.L., tekhn.red.

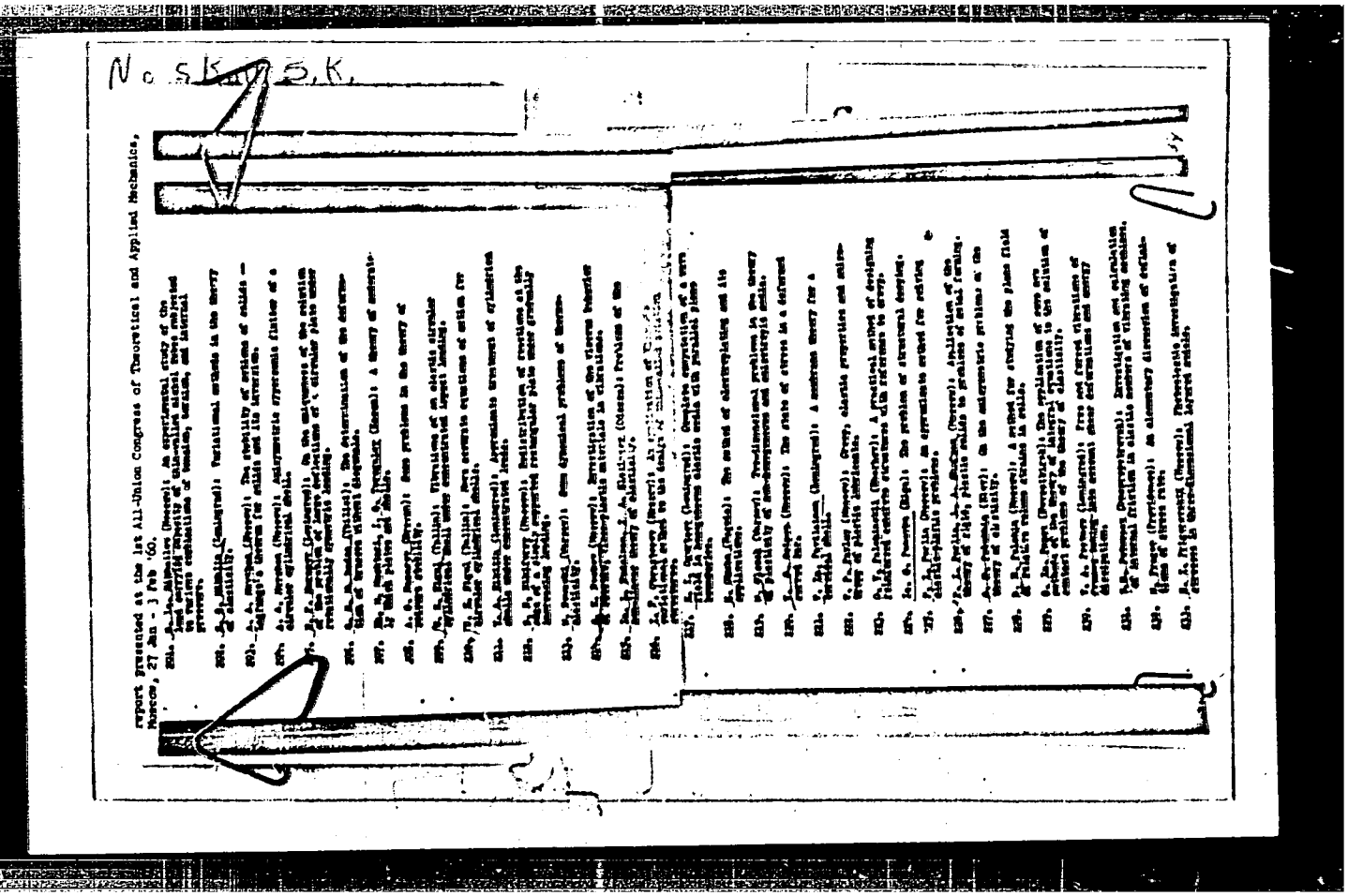
[Album of technological schemes and drawings of the equipment, instruments, and devices to be used in covering roofs with rolled materials] Al'bom tekhnologicheskikh skhem i chertezhei oborudovaniia, instrumentov i prisposobleniі dlia ustroistva krovel' iz rulonnykh materialov. Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam, 1960. 48 p. (MIRA 13:6)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu.
(Roofing--Equipment and supplies)

NOSKOV, S.K., kand.tekhn.nauk. Prinimali uchastiye: BELKIN, A.I., inzh.; TIKHOMIROV, N.M., ODINOKOV, S.D., kand.tekhn.nauk, nauchnyy red.; AZRILYANT, Ya.M., red.izd-va; NAUMOVA, G.D., tekhn.red.

[Using rolled roofing materials in constructing roofs] Ustroistvo pokrytii s rulonnoi krovlei. Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam, 1960. 180 p. (MIRA 13:6)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu. 2. Instruktory peredovykh metodov truda instituta Orgstroy (for Belkin, Tikhomirov).
(Roofing)



Report presented at the 1st All-Union Congress of Theoretical and Applied Mechanics, Moscow, 27 Jan - 3 Feb '60.

NOSKOV, S.K., kand.tekhn.nauk; RYAZANTSEVA, L.I., red.izd-va; KASIMOV, D.Ya., tekhn.red.

[Construction of roofs using roofing materials] Ustroistvo pokrytii s rulonnoi krovlei. Izd.2., ispr. i dop. Moskva, Gos. izd-vo lit-ry po stroit., arkyit. i stroit.materialam, 1962. 200 p. (MIRA 15:5)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu.
(Roofing)

NOSKOV, Sergey Kleonikovich, kand. tekhn. nauk; NIKIFOROV, I.A., kand. tekhn. nauk, nauchn. red.; PATENOVSKAYA, M.I., red.; BOROVNEV, N.K., tekhn. red.

[Waterproofing in industrial construction] Ustroistvo gidroizoliatsii v promyshlennom stroitel'stve. Moskva, Gosstroiizdat, 1963. 214 p. (MIRA 16:9)
(Waterproofing)

NOSKOV, S.K., kand. tekhn. nauk; SAMOKHINA, T.M., inzh.

Selecting the type and the composition of waterproofing elements.
Prom. stroi. 42 no.10:42-46 O '64. (MIRA 17:11)

NIKIFOROV, I.A., kand. tekhn. nauk; MOSKOV, S.K., kand. tekhn. nauk; SAMOKHINA, T.M., inzh.

Experience in using reinforced roofs. Prom. stroi. 43 no.9:11-13 '65. (MIRA 18:9)

NOSKOV, V.A.

TSAGE I BOOK EXPLOITATION SOV/5452

Donskoy, Ya. Ye., G.I. Kurbah, and I.P. Lyalyck, eds.

Mekhanizatsiya i avtomatizatsiya; sbornik statey ob opyte peredovykh mekhanizatsii i avtomatizatsii na khar'kovskikh mashinostroitel'nykh zavodakh (Mechanization and Automation; Collection of Articles on the Introduction of Mechanization and Automation in Khar'kov Machinery-Manufacturing Plants) (Khar'kov) Khar'kovskoye knizhnoye izd-vo, 1960. 373 p. 3,900 copies printed.

Editorial Board: S.A. Torobyev, Candidate of Technical Sciences; Chairman of the Editorial Board: P.I. Ivaga, Engineer; A.A. Makov, Engineer; V.I. Kunakov, Engineer; A. Ye. Leonov, Docent; A.F. Tupitsyn, Candidate of Technical Sciences, and S.M. Zimmer, Candidate of Technical Sciences; Ed.: Ya. Ye. Donskoy, G.I. Kurbah, and I.P. Lyalyck; Tech. Ed.: M.F. Limonova.

PURPOSE: This collection of articles is intended for technical and scientific personnel, outstanding workers, and shock workers of communist labor.

COVERAGE: The multifaceted experience of Khar'kov enterprises in the mechanization, automation, and improvement of manufacturing processes is generalized. The development of new machine, instruments, and promotion methods is considered and attention is given to newly established enterprises, and to the introduction of telemechanics in the Khar'kov gas-system management. By including concrete examples and facts, the authors of the various articles attempt to demonstrate the achievements of the Khar'kov industrial complex in fulfilling the resolutions of the June (1959) and July (1960) Plenums of the Central Committee of the Communist Party of the Soviet Union. No personalities are mentioned. There are no references.

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MOSKOV, V.A., inzh.

Three-legged suspended centrifuges. Khim.mash. no.5:42-43 S-O '60. (MIRA 13:9)
(Centrifuges)

MOSKOV, V.G.

Spruce as an indicator of river bed stability. Priroda 49 no.11: N '60. (MIRA 13:11)

1. Gosudarstvennyy gidrologicheskiy institut, Leningrad.
(Spruce) (Rivers)

NOSKOV, V.G.

Formation and development of islands in the channel of the Markha River. Trudy GGI no.81:77-90 '61. (MIRA 15:2)
(Markha River--Islands)

NOSKOV, V. G.

Formation and development of islands in the channel of the Markha River. Trudy GGI no.88:77-90 '61. (MIRA 15:2)
(Markha River--Islands)

TIMOFEYEV, A.A., kand. tekhn. nauk; KOVALENKO, P.P., kand. tekhn. nauk; PREOBRAZHENSKAYA, I.N., inzh.; NOSKOV, V.G., inzh.; BOLOTINA, A.V., red. izd-va; KHENOKH, F.M., tekhn. red.

[Album of designs of reinforced concrete slabs for precast pavements of city roads, sidewalks and streetcar tracks]Al'bom konstruktsii zhelezobetonnykh plit dlia sbornykh pokrytii gorodskikh dorog, trotuarov i putei tramvaia. Moskva, Izd-vo M-va kommun. khoz. RSFSR, 1962. 34 p. (MIRA 16:2)

1. Akademiya kommunal'nogo khozyaystva. Ural'skiy nauchno-issledovatel'skiy institut. 2. Ural'skiy nauchno-issledovatel'skiy institut Akademii kommunal'nogo khozyaystva (for Timofeyev, Kovalenko, Preobrazhenskaya, Noskov).
(Pavements, Concrete)

NOSKOV, V.G.

Results of the inspection of road surfacing in Sverdlovsk.
Nauch. trudy AKKH no.24:11-18 '64 (MIRA 18:3)

YEKHLAKOVA, N.G.; NOSKOV, V.G.

Use of stabilized soil in city road building. Nauch. trudy AKKH no.24:38-49 '64 (MIRA 18:2)

NOSKOV , V.G.

Formation of the Leningrad floods; laboratory studies. Trudy
OGI no.117:119-160 '64 (MIRA 18:1)

NOSKOV, V. I.

Pine

Significance of gathering pine seeds from different forests, Les. khoz., 5, No. 8, 1952

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

NOSKOV, V. I.

"The Ecology and Individual Variability of the Common Pine and Its Importance in Forest Seed Production." Cand Agr Sci, Voronezh Forestry Inst, Min Higher Education USSR, Voronezh, 1954. (KL, No 9 Feb 55)

SO: Sum. No. 631, 26 Aug 55- Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (14)

USSR/Plant Diseases. Diseases of Forest Species 0-2

Abs Jour : Ref Zhur - Biol., No 10, 1958, No 44451

Author : Noskov V.I., Negrutskiy S.F.
Inst : Voronezh Technical Forestry Institute
Title : Contribution to the Problem of the Origin of Witches' Broom on Pine

Orig Pub : Nauchn. zap. Voronezhsk. lesotekhn. in-ta, 1956, 15, 207-210

Abstract : The authors' experimentation on initial infection in the formation of witches' broom on pine led to a denial of any effect being caused by actinomyces and other microorganisms. The findings are presented of the cultivation of another generation of pine from seeds which were gathered with witches' broom. It was discovered that 45 pine saplings in cultures coming from the planting of one-year old shoots of these seeds had inherited the characteristics of witches' broom and by their fifth year were already quite distinct from normal saplings in both growth and morphological characteristics.

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Noskov, V.V

32-11-14/60

AUTHORS: Kerykalova, T.T., Noskov, V.V.

TITLE: Short Reports (3) (Korotkiye soobshcheniya)

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol. 23, Nr 11, pp. 1308-1308 (USSR)

ABSTRACT: It is suggested in this paper that the determination of the molybdenum content in chromium steel with a high content of chromium be carried out photocolorimetrically, by which iron in the presence of potassium bromide is regenerated by chlorine lead. Chlorine lead in connection with strong sulphuric acid results in a considerable stabilisation of the coloring of molybdenum thiocyanate and shortens the time of determination to about 10 minutes. For carrying out the analysis 0.2 g steel and 20 ml concentrated HCl and HNO_3 are dissolved; 10 ml of concentrated H_2SO_4 are added. For purposes of eliminating nitrogen the solution is heated up and then mixed with distilled water up to 500 ml. 15 ml each of the solution is put into 2 retorts, where each 10 ml of the 50% H_2SO_4, and each 5 ml of a 10% solution of HBr are added. Later, 15 ml of the 10% solution of NH_4CNS and 5 ml of the 10% solution of $SnCl_2$ + distilled water up to 100 ml are put into one of the retorts. Into the other retort only 5 ml of the 10% solution of $SnCl_2$ are added. After 3 to 4 min.

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colorimetrization with a blue light filter is carried out.

ASSOCIATION: Kuznetsk Metallurgical Combine (Kuznetskiy metallurgicheskiy kombinat)

AVAILABLE: Library of Congress

A003404.4.

KUSTANOVICH, I.M.; PAVLOVSKIY, Yu.V. [deceased]; KUCHINA, F.M.; MOSKOV, V.V.; GAMS, M.M.; FAYGEL'SON, A.Kh.; SEMIN'KO, V.A.; POPOV, P.G.; DROBYAZKO, T.G.

Brief reports. Zav. lab. 23 no.11:1393-1395 '57. (MIRA 11:1)

1. Magnitogorskiy industrial'nyy tekhnikum (for Kustanovich). 2. Irkutskiy zavod tyazhelogo mashinostroyeniya im. Kuybyshava (for Pavlovskiy). 3. Kuznetskiy metallurgicheskiy kombinat (for Kuchina, Moskov, Drobyazko). 4. Verkhne-Kolymskoye rayonnoye geologorazvedochnoye upravleniye Dal'stroya (for Faygel'son). 5. Khar'kovskiy farmatsevticheskiy institut (for Semin'ko). 6. Khar'kovskiy institut inzhenerov kommunal'nogo stroitel'stva (for Popov).
(Metallurgy) (Chemical apparatus)

BARSKIY, V.D.; MOSKOV, V.V.

Determining the optimum conditions for the colorimetric analysis of phenols. Zav.lab. 31 no.3:342-344 '65.
(MIRA 18:12)

MOSKOV, V.V.; GARBER, Yu.N.

Using the method of high-frequency titration for the analysis of the products of coke and coal chemicals plants. Koks i khim. no. 8:49-54 '62. (MIRA 17:2)

1. Kuznetskiy filial Vostochnogo uglekhimicheskogo instituta.

PANFILOV, I.A.; NOSKOV, V.V.

Determination of benzene in coke-oven gas. Zav. lab. 29 no.6:662-664 '63. (MIRA 16:6)

1. Kuznetskiy filial Vostochnogo nauchno-issledovatel'skogo uglekhimicheskogo instituta.
(Benzene) (Coke-oven gas)

SEMUKHINA, G.V.; BARSKIY, V.D.; MOSKOV, V.V.

Photometric determination of small amounts of pyridine bases in phenols. Zhur.anal.khim. 19 no.9:1155-1158 '64. (MIRA 17:10)

1. Kuznetskiy filial Vostochnogo nauchno-issledovatel'skogo instituta, Novokuznetsk.

KOSKOV, Yu.A.; MATALASOV, S.F.; CHERNYAYEV, V.I.

Equipment for the loosening-up of bulk loads frozen together.
Metallurg 9 no.6:12-13 Je '64. (MIRA 17:9)

CHERNYAYEV, V.I., inzhener; MOSKOV, Yu.A., inzhener.

Mechanized loosening of frozen ore. Metallurg 2 no.1:32-34 Ja '57. (MLRA 10:4)

1. Rukovoditel' sektora otdeleniya stroitel'nykh mashin Vsesoyuznogo nauchno-issledovatel'skogo instituta transportnogo stroitel'stva Mintransstroya (for Chernyayev). 2. Nauchnyy sotrudnik otdeleniya ekspluatatsii zheleznykh dorog TSentral'nogo nauchno-issledovatel'skogo instituta Ministerstva putey soobshcheniya (for Moskov).
(Materials handling)
(Tools--Vibration)

SADIKOV, P.P.; ANAN'YEVA, S.A.; LEBEDEVA, T.P.; SMIRNOV, Ye.K.; PRIGOROVSKIY, V.F., inzh., red.; TISHKOV, L.B.; KATOLICHENKO, V.A.; PANIN, A.V.; MOSKOV, Yu.A.; TRIFONOVA, M.G.; KLAVDIENOV, Ye.I.; BOBROVA, Ye.N., tekhn.red.

[Technical equipment for large general-purpose freight yards] Tekhnicheskoe osnashchenie krupnykh gruzovykh stantsii obshchego pol'zovaniia. Moskva, Gos.transp.zhel-dor izd-vo. 1958. 186 p. (Moscow. Moskovskii institut inzhenerov zheleznodorozhnogo transporta. Trudy, no.161) (MIRA 12:2)
(Railroads--Yards--Equipment and supplies)

SMIRNOV, Yevgeniy Konstantinovich, kand.tekhn.nauk; NOSKOV, Yuriy Aleksandrovich, inzh.; KANSHIN, M.D., red.; VERINA, G.P., tekhn.red.

[Foreign rail transportation of freight which freezes together] Perevozki smerzaiushchikhsia gruzov na zarubezhnykh zheleznykh dorogakh. Moskva, Gos.transp.zhel-dor.izd-vo. 1959. 111 p. (MIRA 12:9)

(Railroads--Cold weather conditions)

MOSKOV, Yu.A., inzh.

Apparatus for washing box cars. Vest.TsNII MPS 20 no.5:63 '61.
(MIRA 14:8)
(Railroads—Equipment and supplies)

GOL'DENTUL, B.A., inzh.; MOSKOV, Yu.A., inzh.

Centralized traffic control of public transportation in London.
Avtom., telem.i sviaz' 6 no.1:44-45 Ja '62. (MIRA 15:3)
(London--Railroads--Signaling)

GINDICH, M.G., inzh.; MOSKOV, Yu.A., inzh.; NOVIKOV, A.I., inzh.

Using a vibratory percussion unit for unloading frozen loose materials. Mekh. i avtom. proizv. 18 no.6:19-20 Je '64. (MIRA 17:9)

GINDICH, M.G.; MOSKOV, Yu.A.

Vibration-percussion unit for unloading frozen bulk freight. Biul-tekh.-ekon. inform. Gos. nauch.-issl. nauch. i tekh. inform. 17 no.9:74-76 S '64 (MIRA 18:1)

MATALASOV, S.F., kand. tekhn. nauk; MOSKOV, Yu.A., inzh.; Prinimali uchastiye: RAMODIN, V.N., inzh.; SUGAK, P.A., kand. tekhn. nauk; CHINAREV, S.S., inzh.; KURITSYN, V.I.; YAKUBOV, M.A.; VAVILOV, G.S., starshiy mekhanik; OVCHINNIKOV, Yu.P., starshiy mekhanik; DEVICHINSKIY, Yu.V., starshiy laborant; GOL'DENTUL, A.B., inzh.; VOROB'YEVA, Z.M., starshiy tekhnik

[Transportation of goods subject to freezing; problem in the theory of freezing and the mechanization of loosening operations.] Perevozki smerzaiushchiksia gruzov; voprosy teorii smerzaniia i mekhanizatsii rykhleniia. Moskva, Transport, 1964, 132 p. (Moscow. Vsesoiuznyi nauchno-issledovatel'skii institut zheleznodorozhnogo transporta. Trudy, no.273). (MIRA 17:9)

NOSKOV, Yu.A.; MATALASOV, S.F.; CHERNYAYEV, V.I.

Mechanization of the unloading of frozen freights. Khim. prom. 40 no.12:932-934 D '64. (MIRA 18:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zheleznodorozhnogo transporta Ministerstva putey soobshcheniya i Vsesoyuznyy nauchno-issledovatel'skiy institut transportnogo stroitel'stva Gosudarstvennogo proizvodstvennogo komiteta po transportnomu stroitel'stvu SSSR.

MATALASOV, S.F., kand. tekhn. nauk; NOSKOV, Yu.A., inzh.

Improving the transportation of freezable bulk freight. Zhel. dor. transp. 47 no.1:27-29 Ja '65. (MIRA 18:3)

GUMENYUK, G.N.; NALDZHAN, V.V.; NOSKOV, Yu.I.; ADEYANOV, V.A.

Determining the strength of rocks using irregularly shaped samples. Nauch. trudy KNIUI no.14:165-168 '64.

Properties of coal and enclosing rock of some Karaganda Basin seams. Ibid.:176-183 (MIRA 18:4)

20679

S/120/61/000/001/013/062
E032/E114

21.5300

AUTHORS: Savel'yev, V.Ya., and Noskov, Yu.O.

TITLE: On the Theory of Corona Discharge in Nuclear Radiation Counters

PERIODICAL: Pribory i tekhnika eksperimenta, 1961, No.1, pp.47-50

TEXT: The present authors have developed a theoretical relation between the corona discharge current and the voltage across the counter on the one hand, and the counter and circuit parameters on the other. The basic condition for the appearance of a positive corona in a counter is

$$\gamma K \geq 1 \qquad (2)$$

where K is the gas amplification coefficient and γ is the total secondary emission coefficient (including all the secondary processes). In a previous paper the first of the present authors and V.A. Kononenko (Ref.5) showed that the gas amplification coefficient K can be represented by the formula

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On the Theory of Corona Discharge in Nuclear Radiation Counters

$$K = \exp\left[\frac{V}{U_i \ln(A/a)} - \frac{a}{\lambda_0} p\right] \ln 2 \qquad (3)$$

where V is the true anode voltage, U_i is the ionization potential of the gas, P is the pressure in atm, and λ_0 is the mean free path of an electron in the gas at atmospheric pressure. Substituting Eq. (3) into the condition $\gamma K \geq 1$, one finds that

$$\frac{V}{U_i \ln(A/a)} - \frac{a}{\lambda_0} p \geq -\ln \gamma / \ln 2 \qquad (4)$$

When V reaches the value V_s, corresponding to the beginning of the discharge, the above inequality becomes an exact equality so that

$$V_s = U_i \ln \frac{A}{a}\left[\frac{a}{\lambda_0} p - \frac{\ln \gamma}{\ln 2}\right] \qquad (5)$$

This equation shows, in particular, that, other things being

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equal, the use of a cathode having a low work function and consequently a large γ, gives rise to a reduction in the discharge potential V_s. The reduction in this potential has been confirmed experimentally by replacing a nickel cathode by an aluminium one. Substituting for aP/λ_0 from Eq.(5) into Eq.(3), it is found that

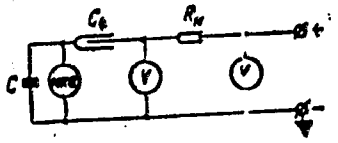
$$K = \frac{1}{\gamma} \exp \frac{V - V_s}{v_0} \qquad (6)$$

where

$$v_0 = U_i \ln (A/a)/\ln 2 \qquad (7)$$

In order to determine the instantaneous value of the anode potential in a counter connected as shown in Fig.1, the following calculation is made

Fig. 1



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On the Theory of Corona Discharge in Nuclear Radiation Counters

The charge due to electrons reaching the anode wire in a corona discharge in a time dt is given by

$$dq_1 = -\frac{eK}{T}\,dt \qquad (8)$$

where T is the time for the displacement of positive ions from the anode to the cathode. The charge reaching the wire from the capacitor C charged by the external source U_0 through the external resistance R is given by

$$dq_2 = \frac{U_0 - V}{R}\,dt \qquad (9)$$

It follows that the change in the potential of the wire is

$$dV = -\frac{1}{C}\left[\frac{V_0 - V}{R} - \frac{eK}{T}\right]dt \qquad (10)$$

It has been shown (Tolchenov, Ref.4) that, provided

$$\Delta V/V_s < 1/2 \ln (A/a), \qquad (11)$$

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On the Theory of Corona Discharge in Nuclear Radiation Counters

the time T is given by

$$T = \frac{A^2 \ln (A/a)}{2\mu + V} \sim \frac{A^2 \ln (A/a)}{2\mu + V_s} \qquad (12)$$

Substituting Eqs.(6) and (12) into Eq.(10) and using the notation

$$(V - V_s)/v_0 = \eta, \quad (U_0 - V_s)/v_0 = \eta_0, \qquad (13)$$

$$t/RC = \tau, \frac{\gamma A^2 \ln (A/a)\, v_0}{2e\mu + V_s} = r,$$

it is found that

$$\frac{d\eta}{d} = \eta_0 - \eta - \frac{R}{r} e^{\eta} \qquad (14)$$

This equation cannot be integrated exactly. However, it can be simplified on the basis of experimental data. Measurements carried out on real counters, working under the corona discharge conditions, have shown that the true voltage across the counter

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does not vary very much when the anode voltage is considerably changed. Since the magnitude of V_0 in real counters is 50 to 100 V, the overvoltage in the case of the CAT-7 (SAT-7) and CHM-9 (SNM-9) counters does not exceed 20-25 V, and η does not exceed 0 to 0.5, it follows that the last term in Eq.(14) can be expanded into a series and the first order terms only need be retained. The solution of Eq.(14) then reads

$$\eta = \frac{\eta_0 r - R}{r + R} \quad \frac{R(1 + \eta_0)}{r + R} \exp\left[-\left(1 + \frac{R}{r}\right)\tau \right] \qquad (15)$$

and the corona discharge current passing through the resistance R is given by

$$i_K = \frac{U_0 - V}{R} = \frac{V_0}{R}(\eta - \eta) \qquad (16)$$

Substituting Eq.(15) into Eq.(16), the final expression for the current is found to be given by

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On the Theory of Corona Discharge in Nuclear Radiation Counters

$$i_K = \frac{U_0 - V_s - v_0}{r + R} \left\{ 1 - \exp \left[- \frac{(r + R)\, t}{r\, Rc} \right] \right\} \qquad (17)$$

In steady-state this becomes

$$i_{K\infty} = (U_0 - V_s + v_0)/(R + r) \qquad (18)$$

Analysis of this equation shows that the corona discharge current is proportional to the magnitude of the overvoltage and inversely proportional to the sum of the load resistance R and the internal resistance of the counter r. It can be described by a series of straight lines passing through the point

$$x = V_s - v_0 \qquad (19)$$

Secondly, when the corona discharge is initiated, the initial current is not equal to zero but is given by

$$i_{K\ min} = v_0/(R + r) \qquad (20)$$

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On the Theory of Corona Discharge in Nuclear Radiation Counters

All these results are in full agreement with experiments and cannot be obtained from the classical formulation given by Werner (Ref.1). The experimental results which the present authors used to check the theory were obtained with the SAT-7 and SNM-9 counters using load resistances of 10, 1000 and 10000 MΩ. It is concluded that both the theoretical and the experimental results suggest that the optimum conditions obtain when the load resistance exceeds the internal resistance of the counters.
There are 5 figures and 5 references: 4 Soviet and 1 German.

SUBMITTED: February 13, 1960

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NOSKOV-DUKEL'SKIY, I. A.

PHASE I BOOK EXPLOITATION SOV/3380

Titarenko, Mikhail Vasil'yevich, and Igor' Alekseyevich Noskov-Dukel'skiy (Deceased)

Releynaya zashchita v elektricheskikh sistemakh (Relay Protection of Electrical Systems) [Lvov] Izd-vo L'vovskogo univ., 1959. 375 p. Errata slip inserted. 3,500 copies printed.

Ed.: V. V. Blikh; Tech. Ed.: A. V. Malyavko.

PURPOSE: This is a textbook approved by the Ministry of Higher Education of the USSR for use in power engineering and electrical engineering departments in schools of higher education. The book may also be of use to students of tekhnikums specializing in relay protection and to engineers and technicians engaged in the design, installation and operation of relay protection systems.

COVERAGE: The book discusses relay protection of the basic units of electrical systems: transmission lines, generators, transformers, motors, and bus bars. In writing the book the authors have complied with the requirements set forth in, "Rules for the Erection of Electric Installations" (1957). According to the authors, their book represents an attempt to compile a textbook corresponding to the program of the course, "Electric Power Stations, Networks and Systems," existing Soviet books on relay protection being inadequate for the program of this

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course. The authors thank Professors G. Z. Sokolnitskiy, I. I. Greben', and Engineers N. L. Solnovskiy, G. G. Glovatskiy and Ye. N. Zosim for their help. Chapters 1 to 8 were written by M. V. Titarenko, Chapters 9 to 12 by I. A. Noskov-Dukel'skiy. There are 61 references, all Soviet.

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