KOROLEV, Aleksandr Nikiforovich; POPOV, Aleksandr Ivanovich; SIZOV, K.P., inzh., retsenzent; YAKOVLEV, I.N., inzh., retsenzent; SARANTSEV, Yu.S., inzh., red.; VOROTNIKOVA, L.P., tekhn. red.

[Economics, organization, and planning of railroad car operation]Ekonomika, organizatsiia i planirovanie vagonnogo khoziaistva. Moskva, Transzheldorizdat, 1962. 290 p. (MIRA 15:12)

(Railroads—Rolling stock)

KOMANDIN, A.V.; SIZOV, L.I.; SHIMIT, B.D. (Moscow)

Dielectric constant and dielectric losses of o-hydroxybenzoic acid derivatives in the liquid state. Zhur. fiz. khim. 37 no.4:764-769 Ap '63. (MIRA 17:7)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.

L 9903-63 EPF(c)/EWT(l)/EWT(m)/BDS/ES(s)-2 /EWG(k)--AFFTC/ASD/SSD--
Pr-4/Pt-4/Pz-4--RM/WW/MAY/IJP(C)
ACCESSION NR: AP3000418 S/0076/63/037/005/1083/1088

76
75

AUTHOR: Komandin, A. V.; Sizov, L. I.; Shimit, B. D.

TITLE: Thermodynamics of dielectric relaxation processes in liquids.

SOURCE: AN SSSR. Zhurnal fizicheskoy khimii, v. 37, no. 5, 1963, 1083-1088

TOPIC TAGS: relaxation processes, phenyl O-hydroxybenzoate, phenyl o-acetoxybenzoate

ABSTRACT: A previous study (A. V. Komandin, L. I. Sizov and B. D. Shimit, Zh. Fiz. Khimii, 37, 764, 1963) was made on the dependence of temperature upon the penetration of phenyl o-hydroxybenzoate and phenyl o-acetoxybenzoate at various frequencies of external electric field in a liquid and a supercooled media. The present work is concerned with the investigation of the dispersion penetrations of these compounds at several temperatures. From the results obtained in both investigations, the main thermodynamic functions characterizing the dielectric relaxation processes in the liquids are calculated. The dispersion of the dielectric constant of phenyl o-hydroxybenzoate at 10, 15 and 20C, and

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L 9903-63
ACCESSION NR: AP3000418

of phenyl o-acetoxybenzoate at 55 and 42C in the supercooled state has been determined. A linear relationship between log Tau and 1/T has been established for both compounds and their corresponding derived equations. A detailed explanation and calculations are given in the discusssion of results. Orig. art. has: 7 equations, 7 tables and 3 graphs.

ASSOCIATION: Moskovskiy gosudarstvenny*y universitet (Moscow State University)

SUBMITTED: 07May62 DATE ACQ: 19Jun63 ENCL: 00

SUB CODE: 00 NR REF SOV: 005 OTHER: 002

Card 2/2

L 45117-66 EWT(m)/T DJ

ACC NR: AP6025686 (A) SOURCE CODE: UR/0413/66/000/013/0153/0153

INVENTOR: Privalov, A. I.; Il'ichev, V. V.; Kovalev, N. I.; Novikov, Ye. D.; Sizov, M. A.

24
E

ORG: none

TITLE: Device for checking the working substance in a closed hydraulic system. Class 72, No. 183626

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 13, 1966, 153

TOPIC TAGS: hydraulic device, hydraulic engineering, hydraulic equipment

ABSTRACT: An Author Certificate has been issued for a device for checking the working substance in a closed hydraulic system. It consists of a main pump, a booster tank, and pressure signaling devices mounted on the pressure and suction lines of the main pump and connected to the closed hydraulic system. To automatically compensate for working-substance losses in the hydraulic system tne signaling device mounted on the pressure line actuates a hydraulic pumping cylinder to replace losses, and the signaling device mounted on the suction line turns it off. The pumping cylinder is equipped with a terminal switch which signals the amount of liquid fed into the system. [SA]

SUB CODE: 13/ SUBM DATE: 19May64/

UDC: 623.451.8

Card 1/1 mjs

124-1957-1-441

Translation from: Referativnyy zhurnal, Mekhanika 1957, Nr 1, p 56 (USSR)

AUTHOR: Sizov, M.B.

TITLE: The Laws Governing the Outflow of a Liquid Through a Small Orifice From Containers Having the Shape of Bodies of Revolution (Zakony istecheniya zhidkosti cherez maloye otverstiye iz sosudov, imeyushchikh formu tel vrashcheniya)

PERIODICAL: V sb.: Mekhanika (MVTU, Vol 50). Moscow, Oborongiz, 1956 pp 237-244

ABSTRACT: The usual formula $v = \mu\sqrt{2gz}$, containing the variable height z and the constant orifice velocity coefficient μ, is employed to express the velocity of the outflow of a heavy liquid through a small orifice of arbitrary form, located near the bottom of a vessel, in the absence of any compensating inflow. Assuming incompressibility, the Author obtains the time t of complete discharge in the form of an integral, the evaluation of which is accomplished by means of a relationship containing μ between t, z, and the initial height of the liquid level for certain special cases. There are no numerical examples.

D.Ye.Dolidze

Card 1/1 1. Liquids--Flow--Velocity--Analysis

L 31355-65 EWT(1) IJP(c)

ACCESSION NR: AR5005462 S/0124/64/000/012/A015/A015

SOURCE: Ref. zh. Mekhanika, Abs. 12A79

AUTHORS: Sizov, M. B.

TITLE: Dynamics of constrained system of points in relative motion. Derivation of equations of motion

CITED SOURCE: Uch. zap. Mosk. obl. ped. in-ta, v. 131, 1963, 137-147

TOPIC TAGS: particle system dynamics, constrained system, friction force, equation of motion

TRANSLATION: The equations of motion are formulated for a system of material points coupled to some curves rotating around a vertical axis with variable angular velocity. The forces of the friction of the points against the curves are taken into account. The energy integral is formulated for stationary motions with ideal coupling. A. P. Duvakin.

SUB CODE: GP ENCL: 00

Card 1/1

L 13073-63 EWT(d)/FCC(w)/BDS AFFTC IJP(C)

ACCESSION NR: AP3000956 S/0140/63/000/003/0153/0157

AUTHOR: Sizov, M. B. (Moscow) 51

TITLE: Solution of the Poincare linear system in the case of a zero root of the characteristic equation

SOURCE: IVUZ. Matematika, no. 3, 1963, 153-157

TOPIC TAGS: periodicity, differential equation, quasi-linear system, characteristic equation, zero characteristic root, pure imaginary root, characteristic root

ABSTRACT: The author obtains an additional condition for periodicity. When this is satisfied, there exists a periodic solution of the pseudo-linear system (see Enclosure 1) in the presence of purely imaginary roots and one zero root of the characteristic equation of the system. This condition is simple to verify since it can be expressed in terms of the coefficients of the given system, and it is convenient for practical computations. Orig. art. has: 28 formulas.

ASSOCIATION: none

SUBMITTED: 17Oct60 DATE ACQ: 12Jun63 ENCL: 01

SUB CODE: 00 NO REF SOV: 003 OTHER: 000

Card 1/2

GIKOV, N. I.

"Variations of the Sensibility of the Visual Centers Under the Effect of Muscular Work", Arkhiv Biolog. Nauk, Vol. 41, 1st ed., 1936.

SIZOV, M.I.

Effect of temperature and storage time of meat on the physico-chemical properties of its salt-soluble protein. [with English summary in insert]. Biokhimiia 21 no.3:317-321 My-Je '56.
(MLRA 9:9)

1. Institut biologicheskoy fiziki Akademii nauk SSSR, Moskva
(MEAT,
eff. of temperature & time of preserv. on myosin (Rus))
(MUSCLE PROTEINS,
myosin, eff. of temperature & time of preserv. of meat on myosin (Rus))

SIZOV, N.

Lever-cable clamp. Stroitel' no.6:30 Je '58. (MIRA 11:7)
(Building--Tools and implements)

SIZOV, N.

Light gypsum mixer. Stroitel' no.11:21 N '59. (MIRA 13:3)

1. Starshiy instruktor Byuro tekhnicheskoy informatsii Minstroya Kirgizskoy SSR.
(Mixing machinery)

1. SIMOV, N.

2. USSR (600)

4. Education of Children

7. Assistance to laborers and white-collar workers in training children, Prof. soiuzy 8 no. 4, 1953.

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

BELOKHVOSTOV, V.A., mayor tekhnicheskoy sluzhby; SIZOV, N.I., inzhener-kapitan

Combat equipment of an antimissile missile (as revealed by foreign press data). Vest. protivovozd. obor. no.7:21-24 Jl '61. (MIRA 14:8)

(Antimissile missiles)

LEBEDEVA, L.P.; SIZOV, N.I.

Annealing products of iron base antifriction ceramic metals. Porosh. met. 5 no.6:79-82 Je '65. (MIRA 18:8)

SIZOV, N.T.

Equipment for the automatic welding of ring joints on metal drums. Svar.proizv. no.9:41-42 S '60. (MIRA 13:8)

1. Frunzenskiy mashinostroitel'nyy zavod.
(Electric welding--Equipment and supplies)

SANDLER, M.S.; CHIRKOV, A.I.; SIZOV, N.T.

Concerning A.B.Topolianskii's article "Problems of safety in electrical systems of the construction industry." Prom.energ. 19 no. 4:59-60 Ap '64. (MIRA 17:5)

1. Obukhovskiy domostroitel'nyy kombinat Glavnogo upravleniya po zhilishchnomu, grazhdanskomu i promyshlennomu stroitel'stvu Leningradskogo gorodskogo ispolnitel'nogo komiteta (for Sandler, Chirkov). 2. Noginskaya elektroset'Moskovskogo oblastnogo ekspluatatsionno-energeticheskogo upravleniya (for Sizov).

SIZOV, N.V.

Machine for making gypsum-sawdust mastics. Suggested by N.V. Sizov. Rats.i izobr.predl.v stroi. no.16:115-117 '60. (MIRA 13:9)

1. Po materialam Ministerstva stroitel'stva Kirgizskoy SSR, Frunze, ul.Krasnoarmeyskaya, d.99.
(Mixing machinery)

[redacted], P.S., [redacted].

Some problems in the organization of the production of the new types of fabrics. Tekst. prom. 24 no.4:73-79 Ap '64.
(MIRA 17:6)

SIZOV, P.P.

Making control points in afforested areas. Geod. i kart. no. 12:32-33 D '60. (MIRA 14:1)
(Surveying)

ALIYEV, B.M.; MISYUNAS, I.I.; KAVESHNIKOVA, S.V.; SIZOV, P.F.

Work of a group in charge of the dosage control in large focus gamma therapy. Med. rad. 10 no. 12:13-21 D '65 (MIRA 19:1)

1. Rentgeno-radiologicheskiy otdel (zav. - prof. I.I. Tager) Instituta eksperimental'noy i klinicheskoy onkologii AMN SSSR i 62-ya Gorodskaya klinicheskaya onkologicheskaya bol'nitsa, Moskva.

SIZOV, P. V.

SIZOV, P. V. Abortions in sheep due to colibacillosis.

So: Veterinariya; 22; (1): January 1945; Uncl.
TABCON

SIZOV, P. V.

SIZOV, P. V. A case of atypical antnrax.

So: Veterinariya 23; 7; July 1946; Uncl.
TABCON

YAMZIN, I.I.; SIZOV, R.A.

Double coordinate neutron diffractometer. Kristallografiia 9 no.6:946-948 N-D '64. (MIRA 18:2)

1. Institut kristallografii AN SSSR.

L 24377-66 EWT(m)/EWA(d)/T/EWP(t) IJP(c) JD
ACC NR: AP6010980 SOURCE CODE: UR/0056/66/050/003/0595/0604

AUTHORS: Yamzin, I. I.; Sizov, R. A.; Zheludev, I. S.; Perekalina, T. M.; Zalesskiy, A. V.

ORG: Institute of Crystallography, Academy of Sciences SSSR (Institut kristallografii Akademii nauk SSSR)

TITLE: Spin ordering and magnetocrystalline anisotropy in single crystals of $BaCo_xFe_{18-x}O_{27}$ ferrites

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 50, no. 3, 1966, 595-604

TOPIC TAGS: ferrite, single crystal, magnetic anisotropy, neutron diffraction, nuclear spin, Curie point, temperature dependence, spin wave theory

ABSTRACT: This is a continuation of earlier work by the authors (ZhETF v. 46, 1985, 1964). In this paper new data are presented on the magnetic anisotropy energy of the ferrite system under discussion. The crystals were grown by the Verneuil method and were the same as

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L 28677-66
ACC NR: AP6010980

used in the earlier investigation. In view of the fact that the ferrites investigated exhibit various types of magnetic anisotropy at low temperatures, the authors used a neutron diffraction method to investigate the influence of the cobalt ions on the positions of the spin ordering axis in these crystals in the temperature range from 77K to the Curie temperature. The temperature dependence of the magnetic anisotropy constants was investigated in the same range of temperatures and compared with the theory. The same samples were used to obtain neutron diffraction patterns as were used in the investigation of the magnetic anisotropy. The results show that the spin directions coincide with the directions of the total magnetization vectors of the crystals. The data also indicate that the experimental results can be fully reconciled with a theoretical formula deduced by Ye. A. Turov from the phenomenological theory of spin waves (Fizicheskiye svoystva magnitouporyadochennykh kristallov [Physical Properties of Mangetically Ordered Crystals], AN SSSR, 1963), without need to make allowance for any particular structure model. Orig. art. has: 7 figures, 3 formulas, and 3 tables.

SUB CODE: 20/ SUBM DATE: 25Oct65/ ORIG REF: 003/ OTH REF: 009

Card 2/2 UDC

L 58367-65 EWP(e)/EWT(m)/EPF(n)-2/EWP(t)/EWP(k)/EWP(z)/EWP(b)/EWA(h) Pf-4/Pu-4
JD
ACCESSION NR: AP5013724 UR/0070/65/010/003/0423/0424
548.7

AUTHOR: Sizov, R. A.; Yamzin, I. I.

TITLE: The effect of particle size on extinction in neutron diffraction.

SOURCE: Kristallografiya, v. 10, no. 3, 1965, 423-424

TOPIC TAGS: powder metallurgy, particle size, neutron diffraction

ABSTRACT: The effect of powder size on the magnitude of extinction was determined experimentally. The sample consisted of $BaCo_{1,0}Fe_{1,0}^{2+}Fe_{16}^{3+}O_{27}$ ferrite powder pressed into a thin-walled aluminum cylinder with a diameter of 15 mm and 30 mm high. The powder was obtained by the mechanical grinding of crystals and subsequent sieving with screens of different mesh. A total of six samples of different particle size were prepared. The two most intense reflections (1010 and 1120) were used. The first is basically of magnetic origin while the second is both magnetic and nuclear. The exposure was made at room temperature using a two-coordinate neutron diffractometer installed on the radial channel of the reactor. The variation in the intensity of reflections was due to extinction. The effect of other factors is estimated as less than 1%. The experimental data were used to plot curves which

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L 58367-65
ACCESSION NR: AP5013724

show that the extinction effect was small in sample No. 3 (approximately 1%) and was absent in sample No. 4.
Orig. art. has: 1 table, 2 figures

ASSOCIATION: Institut Kristallografii AN SSSR (Institute of Crystallography AN SSSR)

SUBMITTED: 22Oct64 ENCL: 00 SUB CODE: MM, NP

NO REF SOV: 001 OTHER: 001

Card 2/2

L 29785-66 EWT(m)/T/EWP(t)/ETI IJP(c) JD

ACC NR: AP6015089 SOURCE CODE: UR/0020/66/168/001/0090/0093

56

AUTHOR: Sizov, R. A.; Yamzin, I. I.

51
B

ORG: Institute of Crystallography, Academy of Sciences, SSSR (Institut kristallografii Akademii nauk SSSR)

TITLE: Neutron diffraction study of the magnetic structure of hexagonal ferrites of the Co_xW system

SOURCE: AN SSSR. Doklady, v. 168, no. 1, 1966, 90-93

TOPIC TAGS: neutron diffraction, ferrite, cobalt compound, barium compound, iron compound, magnetic ~~property~~ structure, crystal, polycrystal, nuclear spin

ABSTRACT: In order to determine the spin ordering in ferrites of the Co_xW system ($BaCo_x^{2+}Fe_{2-x}^{2+}Fe_{16}^{3+}O_{27}$), the authors carried out a neutron diffraction analysis on single and polycrystals with compositions x = 0, 0.5, 1.0, 1.5, and 1.75, in the range from 77 to 770°K. The correct values of the magnetic contributions to the diffraction pattern and absolute values of the saturation magnetization were obtained. The model of spin ordering in its general features and the angle between

Card 1/2 UDC: 539

L 29785-66

ACC NR: AP6015089

the spin axes and axis c were determined by analyzing the neutron diffraction patterns of polycrystalline specimens. Additional information was obtained from observations of the temperature dependence of the intensity of magnetic reflections from single crystal specimens. The paper was presented by Academician Belov, N. V., 20 Sep 65. Authors thank T. M. Perekalina and R. A. Vaskanyan for providing the specimens, Yu. Z. Nozik for constant interest in the work and useful suggestions, and Prof. J. Bacon for a helpful discussion of the results. Orig. art. has: 2 figures and 2 tables.

SUB CODE: 20/ SUBM DATE: 07Sep65/ ORIG REF: 003/ OTH REF: 007

Card 2/2

Sizov, S. N.

USSR/ Engineering - Casehardening

Card 1/1 Pub. 128 - 20/34

Authors : Tel'nov, G. M., and Sizov, S. N.

Title : The casehardening of large crankshaft journals with high-frequency current heating at low power

Periodical : Vest. mash. 12, 66-68, Dec 1954

Abstract : Methods for casehardening crankshaft journals made of the OKhM, OKhN1M, 40Kh and 45G2 steels are discussed, and the individual casehardening operations are described. Table; drawing.

Institution : .....

Submitted : .....

Sizov, S. N.

3000

9666* High-Frequency-Heat Treatment of Camshafts. Opyt termicheskoi obrabotki raspredelitel'nykh valov [skami vysokoi chastoty. (Russian.) S. N. Sizov, *Avtomobil'naia i Traktornaia Promyshlennost'*, 1956, no. 3, Mar. 1956, p. 32-35.

Recommended frequencies, heating time, cooling conditions, and the like in the induction heating and hardening of tractor cams and camshafts. Depth and structure (martensite, troostite-martensite, and troostite-sorbic zones) of case. Tables, diagrams, photograph. 3 ref.

VMP LFH

SIZOV, S.N., inzhener.

Control systems using high-frequency circuits in hardening equipment. Prom.energ. 11 no.7:5-6 Jl '56. (MLRA 9:10)

(Electric generators) (Furnaces, Heat-treating)

AUTHOR: Sizov, S.N. SOV-113-58-8-12/21

TITLE: Heating Camshafts for Tempering by Higher Frequency Currents (Nagrev pod zakalku raspredelitel'nykh valov tokami povyshennoy chastoty)

PERIODICAL: Avtomobil'naya promyshlennost', 1958, Nr 8, pp 37-38 (USSR)

ABSTRACT: For the induction heating of camshafts for tempering, frequencies of 8,000 - 10,000 c instead of the normal 2,000 - 3,600 c offer distinct advantages. The 2,000 c, 200 kw generator usually feeds two tempering machines with a total production of 36 shafts per/hour and a power consumption of 3.25 kw hrs a shaft. The 3,600 c, 200 kw generator has a capacity of up to 60 shafts p/hr and a power consumption per shaft of 1.9 kw/hr. An 8,000 c, 175 kw generator, however, has a capacity of up to 80 shafts p/hr and a power consumption of 1.6 kw hrs per shaft. The normal water-screened inductor can not be used with 8,000 c generators since uneven heating of the cams occurs. Instead, an inductor with electro-magnetic screening is used, produced by the Ural'skiy and Moskovskiy avtozavody (Ural and Moscow Motor Vehicle

Card 1/2

Heating Camshafts for Tempering by Higher Frequency Currents

Plants). Soviet industry does not produce 10,000 c high frequency generators, so the upper frequency limit at present is 8,000 c, at 100 kw power. The use of tube generators is not advisable since they cause uneven heating. There is 1 table and 3 Soviet references.

ASSOCIATION: Gor'kovskiy avtozavod (Gor'kiy Motor Vehicle Plant)

1. Camshafts--Induction heating 2. Generators--Applications

Card 2/2

POZDEHV, V.V.; SIZOV, S.Yu.; SVETLOV, Yu. A.

Work of the Central Factory Laboratory fulfilling the decisions of the 22d Congress of the CPSU. Zav.lab. 28 no.10:1265 '62. (MIRA 15:10)

(Chemical laboratories)

SIROV, V., prepodavatel'

To starting teachers. Prof. tekh. obr. 21 no.11:18-20 N '64
(MIRA 18:2)

1. Klevanskoye sel'skoye professional'no-tekhnicheskoye uchilishche No.14, Rovenskaya obl.

SIZOV, V

101. USE OF RADIOACTIVE ISOTOPES IN THE COAL INDUSTRY. Sizov, V. (Master Uglya (Master Coalwkr, Moscow), Feb. 1956, 21-23). Industrial tests of an experimental batch of gamma indicators intended for automation of various processes at collieries, preparation plants and opencast workings were carried out in the Cholyabinsk coalfield in the summer of 1955. The apparatus, which is described and illustrated, is used for the following purposes: automatic counting of full mine cars wound to the surface; automatic control of the level of filling of bunkers and skips; automatic stopping of electric locomotives at a red light. The tests proved successful and the introduction of gamma indicators on a large scale is under consideration. N.C.B.

LUK'YANENKO, I., inzhener; SIZOV, V., inzhener.

Contribution by efficiency workers of the Leninsk mine. Mast.ugl. 5 no.9:20-22 S '56. (MLRA 9:10)
(Kuznetsk Basin--Coal mining machinery)

SIZOV, V. (UB5QN) (g.Zaporozh'ye)

Propagation of radio waves during a full solar exlipse. Radio no.7:23 Jl '61. (MIRA 14:10)

(Radio, Shortwave)

SIZOV, V., kand.tekhn.nauk

Raise the quality of winter masonry work. Stroitel' 8 no.1: 14-15 Ja '62. (MIRA 16:2)
(Masonry--Cold weather conditions)

SIZOV, V. A.

Differential diagnosis of pathological states concomitant with elongation of the vertebral bodies. Vrach. delo no.3:13-16 Mr '62. (MIRA 15:7)

1. Kafedra rentgenologii (zav. - prof. A. Ye. Rubasheva) Kiyevskogo instituta usovershenstvovaniya vrachey.

(DIAGNOSIS, DIFFERENTIAL)
(VERTEBRAE--DISEASES)

SIZOV, V.A. (Kiyev, Delegatskiy per. d.12,kv.3)

Changes in the ribs in tuberculous spondylitis. Ortop., travm. i protez. 24 no.3:43-46 Mr '63. (MIRA 17:2)

1. Iz kafedry rentgenologii (zav. - prof. A.Ye. Rubasheva) Kiyevskogo instituta usovershenstvovaniya vrachey (rektor - dotsent M.N. Umovist) i III Kiyevskoy gorodskoy detskoy bol'nitsy kostnogo tuberkuleza.

SIZOV, V.A., inzhener.

Standardized matching parts for the mass production of furniture. Der.prom.5 no.7:3-5 Jl '56. (MLRA 9:9)

1.TsPKB Glavmebel'proma.
(Furniture industry)

SIZOV, V.A., inzhener.;POLIKASHEV, N.M., inzhener.

Furniture made by the method of bending and kerfing. Der prom. 6 no.2:3-4 F '57. (MLRA 10:4)

1. Tsentral'noye proyektno-konstruktorskoye byuro Glavmebel' proma. (Furniture industry) (Veneers and veneering)

SIZOV, V.A., inzh.

Lines of furniture made up from standard elements. Der. prom. 6 no.9: 3-5 S '57. (MIRA 10:11)

1. TSentral'noye proyektno-konstruktorskoye byuro Minbumdrevproma RSFSR.

(Furniture)

SIZOV, V.A., inzh.

New furniture designs. Der. prom. 7 no.4:6-7 Ap '58. (MIRA 11:5)

1.TSentral'noye proyektno-konstruktorskoye byuro Upravleniya mebel'noy promyshlennosti Mosgorsovnarkhoza.
(Furniture--Models)

SIZOV, V.A., inzh.; BLEKHMAN, A.B., inzh.

Standardization of units and parts used for making frame furniture.
Der. prom. 7 no.8:1-3 Ag '58. (MIRA 11:9)

1. TSentral'noye proyektnoye konstruktorskoye byuro Upravleniya mebel'noy promyshlennosti Mosgorsovnarkhoza.
(Furniture)

SIZOV, V.A., inzh.

Selection of sectional combination furniture. Der.prom. 9 no.1:3-5 Ja '60. (MIRA 13:4)

1. TSentral'noye proyektno-konstruktorskoye byuro Upravleniya mebel'noy promyshlennosti Mosgorsovnarkhoza.
(Moscow--Furniture)

SIZOV, V.A., inzh.

Standardization of subassemblies and specialization of production in the furniture industry. Der.prom. 9 no.7:2-4 Jl '60. (MIRA 13:7)

1. TSentral'noye proyektno-konstruktorskoye byuro Upravleniya mebel'noy promyshlennosti Mosgorsovnarkhoza.
(Moscow Province--Furniture industry)

SIZOV, V.A.

Strength of furniture construction and garanteed lifetime. Der.prom. 11 no.1[illegible] Ja '62. (MIRA 15:1)
(Furniture--Quality control)

SIZOV, V.A.; IVANOV, N.A.

Method of finishing particle boards with plastics. Der.prom. 11 no.10:1-3 O '62. (MIRA 15:9)
(Wood finishing) (Plastics)

SIZOV, V.A.; IVANOV, N.A.; LEHKY, Miroslav [translator]

Finishing particle boards and products by plastic materials. Drevo 17 no.7:209-211 Jl '62.

1. Tsentral'noye proyektno-konstruktorskoye byuro, Moskva (for Sizov and Ivanov).

PETROV, Boris Sergeyevich, pr[illegible] Aleksandrovich, inzh.; NIKIFOROV, A.[illegible] SPODARSKAYA, T.N., red. izd-va; SHIBKOVA, K.Ya., tekhn. red.

[Specialization and cooperation of furniture enterprises] Spetsializatsiia i kooperirovanie mebel'nykh predpriiatii. Moskva, Goslesbumizdat, 1963. 91 p. (MIRA 16:10)
(Furniture industry)

MISHCHENKO, G.L.; SIZOV, V.A.

Mechanizing the finishing of furniture. Der. prom. 12 no.5: 4-6 My '63. (MIRA 16:7)

1. TSentral'noye proyektno-konstruktorskoye byuro mebeli. (Furniture industry) (Wood finishing)

SIZOV, V.A.

Improve the introduction of new woodworking machinery.
Der. prom. 14 no.10:1-2 O '65. (MIRA 18:12)

SIZOV, V.D., inzh. (st.Petelino, Moskovskoy dorogi)

Assume greater responsibility for the given assignment. Put' i put.khoz. 6 no.11:2-3 '62. (MIRA 16:1)
(Railroads--Employees)

ACCESSION NR: AP4040295 S/0057/64/034/006/0961/0964

AUTHOR: Mitsuk, V.Ye.; Sizov, V.D.

TITLE: Application of a microwave method for measuring electron concentrations exceeding the critical concentration

SOURCE: Zhurnal Tekhnicheskoy fiziki, v.34, no.6, 1964, 961-964

TOPIC TAGS: plasma, plasma physics, microwave plasma, electron concentration, recombination phenomena, neon

ABSTRACT: The authors describe the microwave method for measuring electron concentrations exceeding the critical concentration $m\omega^2/4\pi e^2$ employed by L.Goldstein and T.Sekiguchi (Phys.Rev.109,625,1958), T.Sekiguchi and R.C.Herndon (Ibid.112,1,1958), and S.Takeda and M.Roux (J.Phys.Soc.Japan 16,No.7,1961), and discussed by S.J.Buchsbaum and S.C.Brown (Phys.Rev.106,196,1957). This consists in measuring the attenuation and phase shift of TE_{10} waves in a rectangular waveguide traversed in the direction of the electric field by a small tube containing the plasma. The application of this method is limited by the skin effect. This diagnostic technique was employed to investigate recomination in neon plasma. The plasma was contained in a 3 mm dia-

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ACCESSION NR: AP4040295

meter tube at a pressure of 3.3 mm Hg and was excited by 10 microsec current pulses of 3 or 4 amp. Microwaves of 3.2 cm wavelength were employed in 1 microsec pulses. The attentuation was measured by a substitution method, and the phase shift was obtained from the shift in the position of standing wave nodes. How the nodes were located during the 1 microsec pulses is not disclosed. The recombination was found to take place considerably more slowly than calculated by the theory of V.L.Granovskiy (ZhETH 13,123,1943). Similar results have been obtained by G.N.Zastenker and YeF.Gubochkina (Voprosy* radioelektroniki, GKRE, No.6,1961). The discrepancy is ascribed to rapid loss of electron energy by collisions of the first kind. The agreement with theory was improved by calculating the energy lost by the electrons to gas molecules from the experimental values of E/p and employing this in the theoretical calculations of electron densities and temperature. Orig.art.has: 7 formulas, 3 figures and 1 table.

ASSOCIATION: Moskovskiy gosudarstvenny*y universitet im.M.V.Lomonosova, Fizicheskiy fakul'tet (Physics Department, Moscow State University)

SUBMITTED: 03Jun63 DATE ACQ: 19Jun64 ENCL: 00

SUB CODE: ME NR REF SOV: 004 OTHER: 005

Card 2/2

SIZOV, V.G.

Calculating forces acting on a body in an unsteady periodic flow. Sudorem. i sudostr. no.2:66-71 '63. (MIRA 17:4)

1. Odesskoye vyssheye inzhenernoye morskoye uchilishche.

SIZOV, V.G. (Odessa)

Parametric resonance phenomena in rolling of ships. Inzh. sbor. 20: 21-24 '54. (MLRA 8:7)
(Stability of ships)

SIKOV, V.G.

On small unequal-volume inclinations of ships. Izv. AN SSSR. Otd. tekh.nauk no.8:60-66 Ag '55. (MLRA 9:1)
(Stability of ships)

SIZOV, V.G., kand. tekhn. nauk

Stability of ships carrying bulk cargoes. Sudostroenie 24 no. 6:7-11 Je '58. (MIRA 11:8)

(Stability of ships)
(Ships--Cargo)

SIZOV, V. G.

"The Theory of Ship Resistance under ordinary Swell Conditions."

report presented at the 11th Annual Scientific Technical Conference on Ship Theory, organized by the Central Administration of the Scientific-Technical Society of the Shipbuilding Industry, 13-15 December 1960.

SIZOV, V. G. and KREYN, M. G. (Odessa)

"On Ship Contours having minimum total drag values."
"The Method of a small parameter in the problem of wave resistance os ships" noco-aut. report presented at the First All-Union Congress on Theoretical and Applied Mechanics, Moscow, 27 Jan - 3 Feb 60

Society of the Scientific-Technical Society of the Shipbuilding Industry (Papers Presented at the Tenth Scientific-Technical Conference on Ship Theory)

Sudostroyeniye, No 4, 1960

O. A. Pirsov, Cand Tech Sci
I. I. Nikolayev, Dr Tech Sci

Papers presented:

K. K. Fedyayevskiy, Dr Tech Sci, "The Influence of Froude Number on the Radius of Gyration of a Ship in the Case of Large Drifts or Rudder Position."

A. G. Stepanov, Engineer, "Some Results of Statistical Study of Chargeless and the Rolling of the Expeditionary Ship 'Mikhail Lomonosov'".

E. E. Petryayevskiy, Dr Tech Sci and L. Kh. Blyumin, Cand Tech Sci, "Approximate Determination of Nonstationary Hydrodynamic Characteristics of Bodies of Small Elongation (Wings, Bodies of Rotation) at Large Angles of Attack."

I. Ya. Smorchev, Engineer, "Calculation of Ship Drift During Steady-State Gyration Taking into Account the Influence on Drift Moment Magnitude of the Form of the Underwater Part of the Hull and the Angle of Inclination."

E. A. Rubinshteyn, Cand Tech Sci, "Structure of Flow Around Oscillating Wings of Low Elongation."

Yu. V. Rozen, Cand Tech Sci, "Longitudinal Stability of a Ship on Hydrofoils."

T. O. Slisov, "General Theory of Wave Resistance of a Ship on Calm Water."

SIZOV, V.G. (Odessa)

Theory of the wave-making resistance of a ship in smooth water. Izv. AN SSSR. Otd. tekh.nauk.Mekh. i mashinostr. no. 1:75-85 Ja-F '61. (MIRA 14:2)
(Hydrodynamics) (Wave mechanics)

VIKHLOV, Ivan Kodionovich; MIZOV, Vladimir Maksimovich; MURLYCA, F.I., red.

[The "Donbass-2k" coal cutter-loader] Ugol'nyi kombain "Donbass-2k." Donetsk, Donetskoe knizhnoe izd-vo, 1963. 28 p. (MIRA 17:8)

SIZOV, V. N.

42240. SIZOV, V. N. Raschet rezhima vyderzhivaniya betona pri peremennoy temperature. Byulleten' stroit. Tekhniki, 1948, No. 22, c. 24-28.

So: Letopis' Zhurnal'nykh Statey, Vol. 47, 1948.

SIZOV, V. N.

Sizov, V. N. "Experience from winter work in construction trusts", Byulleten' stroit. tekhniki, 1948, No. 24, p. 1-7.

SO: U-2888, 12 Feb. 53, (Letopis' Zhurnal'nykh Statey, No. 2, 1949).

SIZOV, V. N.

SIZOV, V. N.

35260. Betonnye i zhelezobetonnye raboty v zimnikh usleviyakh. Trudy IV Vsesoyuz. Konf-Tsii Po Beton i Zhetezobeton. Konstruktsiyam. CH. I. M.-L., 1949, S. 271-79

SO: Letopis'Zhurnal'nykh Statey Vol. 34, 1949 Moskva

C.A.

The freezing of solutions having admixtures of sodium chloride. V. N. Sitov, *Stroitel. Prom.* **28**, No. 9, 6-9 (1950).—The freezing point of "structural solns." (for cement, etc.) is depressed by the addn. of NaCl and(or) $CaCl_2$. The stability of the concrete is not affected.
Paul W. Howerton

SIZOV, VASILIY NIKOLAYEVICH

Technology

Construction work under winter conditions. 2. izd., dop. i perer. Moskva, Gos izd-vo lit-ry po stroitel'stvu i arkhitekture, 1951. Red. Tarasevich, A. P.

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

SIZOV, V.N.

AID 144 - I

PHASE I

TREASURE ISLAND BIBLIOGRAPHIC REPORT

Call No.: TH153.S67

BOOK

Author: SIZOV, V. N., Laureate of Stalin Prize, Bach. Eng. Sci.

Full Title: ACCOMPLISHMENTS OF SOVIET ENGINEERING IN THE FIELD OF CONSTRUCTION UNDER WINTER CONDITIONS.

Transliterated Title: Dostizheniya sovetskoy tekhniki v oblasti stroitel'stva v zimnikh usloviyakh

Publishing Data

Originating Agency: All-Union Society for Dissemination of Political and Scientific Knowledge

Publishing House: "Znanie" ("Knowledge")

No. pp.: 31

No. of copies: 90,000

Date: 1952

Editorial Staff

Editor: Mironov, S. A., Prof.

Tech. Ed.: None

Editor-in-Chief: None

Appraiser: None

Text Data

Coverage: This lecture is a popular presentation of some of the material covered more extensively in the same author's 1951 book Construction Works under Winter Conditions.

Purpose: Popular dissemination of practical knowledge on winter construction.

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SIZOV, V. N.

Dostizheniya sovetskoy tekhniki v oblasti stroitel'stva v zimnikh usloviyakh

AID 144 - I

Facilities: TsNIPS -- Central Scientific Research Institute for Industrial Construction; VNIOMS -- All-Union Scientific Research Institute for the Organization and Mechanization of Construction; TsNILEPS--Central Scientific Research Laboratory for the Electrification of Industrial Construction.

No. of Russian and Slavic References: 2

Available: Library of Congress.

MIRONOV, S. A.; SIZOV, V. N.; BUZHEVICH, G. A.

Precast Concrete Construction

"Concentrated" system of steaming reinforced and slag concrete objects in the plant. Stroi. prom. 30, No. 7, 1952.

9. Monthly List of Russian Accessions, Library of Congress, October 1952. UNCLASSIFIED.

1. MIRONOV, S.; SIZOV, V.

2. USSR (600)

4. Plastering

7. Doing plaster work under freezing conditions. Sel'. stroi. 8, No. 1, 1953.

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

SIZOV, V. N.

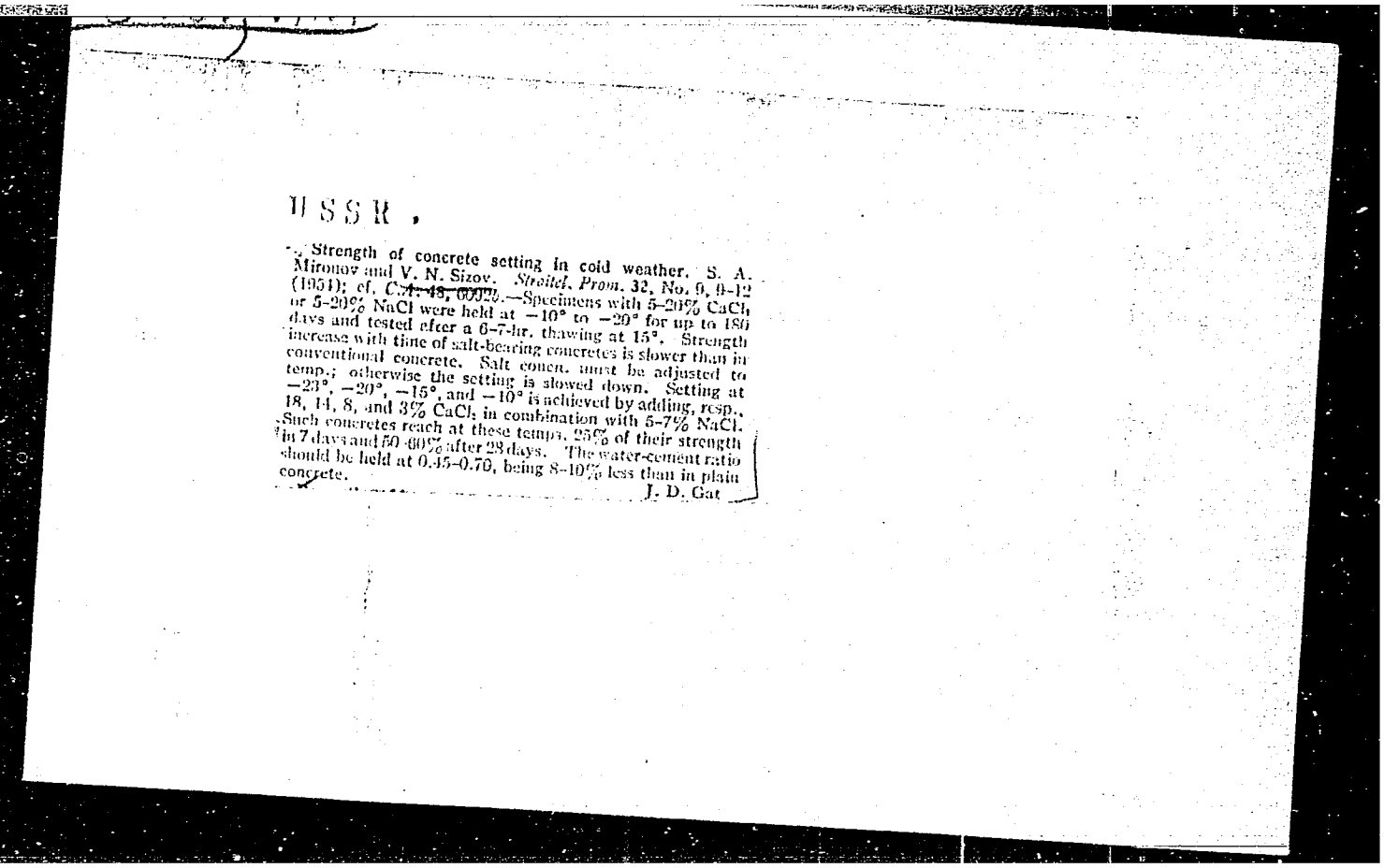
243 Primeneniye Khimicheskikh Dobavok Pri. Zimnikh Kamennykh, Betonnykh I Shtukaturnykh Raborkh, Pod Red. P. N. Grigor'yeva. M., Gos. Izd. Lit. Po Stroitel'stu I Arkhitekture, 1954. 80S Sill. 20 SM. (M-vo) Stroitel'stva Predpriyatiy Metallurgich. I Khim. Prom-sti. Sssr. Tekhn Upr. Tsentr. Nauch.-Issled. In-t Prom. Sogoruzheniy TSNIPS. Nauch. Soobshcheniye. Vyp. 16). 4.000 EKZ. 2r. 95 K-(54-14490 Zh) 691.5 t 693":24"

SO: Knizhnaya, Letopis, Vol. 1, 1955

SIZOV, V.N., laureat Stalinskoy premii.

Effect of early freezing on the durability of high-grade concretes. Stroi.prom.32 no.1:44-46 Ja '54. (MLRA 7:2)

1. TSentral'nyy nauchno-issledovatel'skiy institut mashinostroyeniya i metalloobrabotki. (Concrete construction--Cold weather conditions)



USSR

Strength of concrete setting in cold weather. S. A. Mironov and V. N. Sizov. *Stroitel. Prom.* 32, No. 9, 9–12 (1951); cf. C.A. 43, 6002i.—Specimens with 5–20% $CaCl_2$ or 5–20% NaCl were held at −10° to −20° for up to 180 days and tested after a 6–7-hr. thawing at 15°. Strength increase with time of salt-bearing concretes is slower than in conventional concrete. Salt concn. must be adjusted to temp.; otherwise the setting is slowed down. Setting at −23°, −20°, −15°, and −10° is achieved by adding, resp., 18, 14, 8, and 3% $CaCl_2$ in combination with 5–7% NaCl. Such concretes reach at these temps. 25% of their strength in 7 days and 50–60% after 28 days. The water-cement ratio should be held at 0.45–0.70, being 8–10% less than in plain concrete.

J. D. Gat

VASIL'YEV,A.P., kandidat tekhnicheskikh nauk; SIZOV,V.N., kandidat tekhnicheskikh nauk; AROBELIDZE,G.A., inzhener; GVOZDEV,A.A., professor, doktor tekhnicheskikh nauk; laureat Stalinsloy premii, redaktor; DESOV,A.Ye., professor, doktor tekhnicheskikh nauk, laureat Stalinskoy premii.

[Making precast concrete and reinforced concrete elements in construction yards.] Izgotovlenie sbornykh betonnykh i zhelezobetonnykh konstruktsii na poligonakh. Moskva, Gos. izd-vo litry po stroit. i arkhitekture, 1955. 90 p. (Moscow. TSentral'nyi nauchno-issledovatel'skii institut promyshlennykh sooruzhenii. Nauchnoe soobshchenie, no.17) (MLRA 8:9)
(Precast concrete) (Reinforced concrete)

SIZOV, V.N., laureat Stalinskoy premii

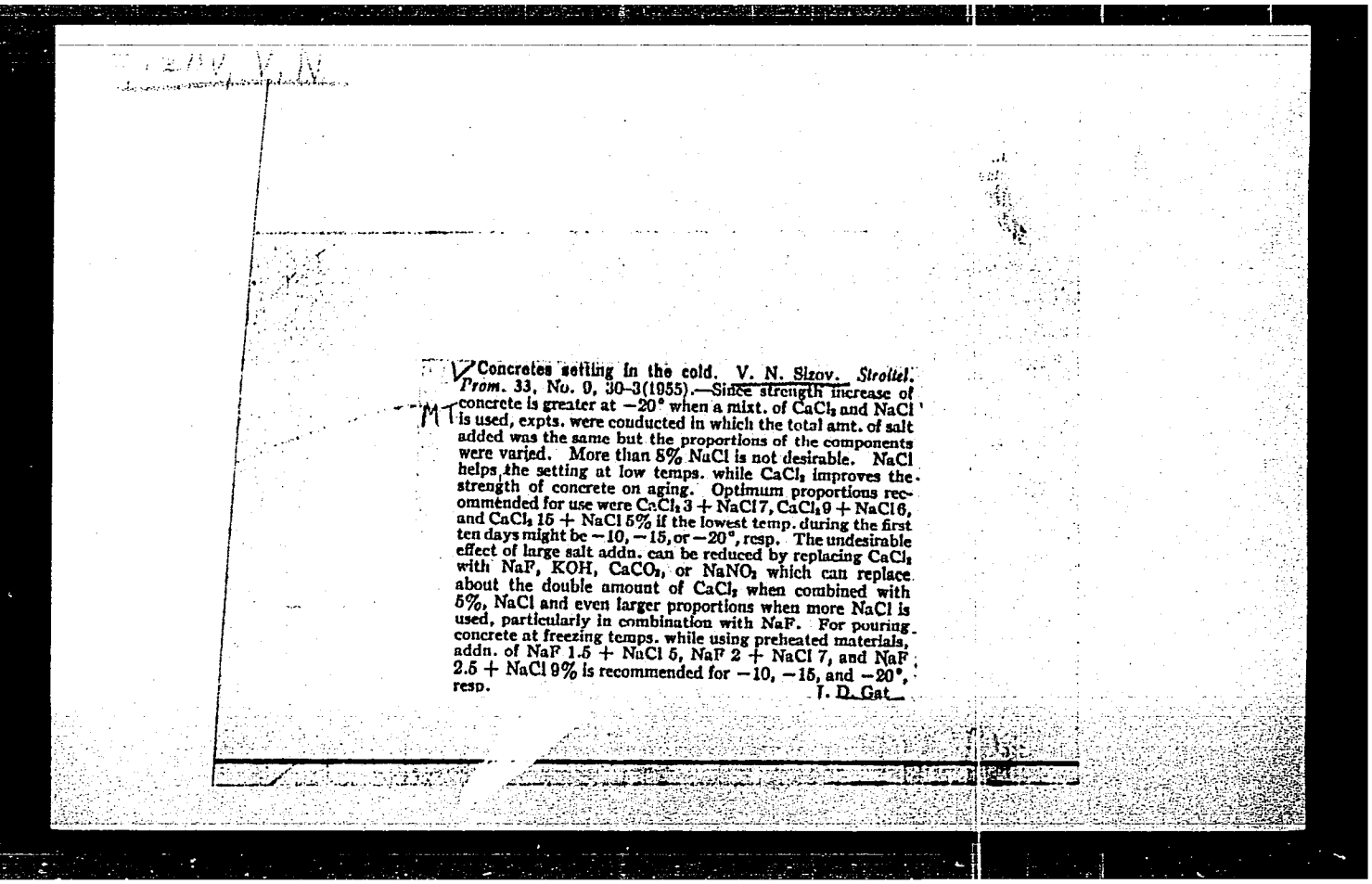
Effect of various antifreezing chemical additives. Biul.stroi. tekh. 12 no.10:3-5 O '55. (MIRA 12:1)

1. TSentral'nyy nauchno-issledovatel'skiy institut promyshlennykh sooruzheniy.
(Building--Cold weather conditions)

VASIL'YEV, A.P., kandidat tekhnicheskikh nauk; SIZOV, V.N., kandidat tekhnicheskikh nauk; AROBELIDZE, G.A., inzhener.

Building yards for the production of precast concrete construction elements. Stroi.prom. 33 no.1:22-26 Ja'55. (MLRA 8:3)

1. TSentral'nyy nauchno-issledovatel'skiy institut promyshlennykh sooruzheniy (for Arobelidze)
(Precast concrete construction)



Concretes setting in the cold. V. N. Sizov. *Stroitel. Prom.* 33, No. 9, 30–3(1955).—Since strength increase of concrete is greater at −20° when a mixt. of $CaCl_2$ and NaCl is used, expts. were conducted in which the total amt. of salt added was the same but the proportions of the components were varied. More than 8% NaCl is not desirable. NaCl helps the setting at low temps. while $CaCl_2$ improves the strength of concrete on aging. Optimum proportions recommended for use were $CaCl_2$ 3 + NaCl 7, $CaCl_2$ 9 + NaCl 6, and $CaCl_2$ 15 + NaCl 5% if the lowest temp. during the first ten days might be −10, −15, or −20°, resp. The undesirable effect of large salt addn. can be reduced by replacing $CaCl_2$ with NaF, KOH, $CaCO_3$, or $NaNO_2$ which can replace about the double amount of $CaCl_2$ when combined with 5% NaCl and even larger proportions when more NaCl is used, particularly in combination with NaF. For pouring concrete at freezing temps. while using preheated materials, addn. of NaF 1.5 + NaCl 5, NaF 2 + NaCl 7, and NaF 2.5 + NaCl 9% is recommended for −10, −15, and −20°, resp.

J. D. Gat

SIZOV, V.N.
Min Construction of Enterprises for the Metallurgical and Chemical Industries USSR. Technical Administration. Central Sci Res Inst of Industrial Structures (TsNIPS).

SIZOV, V.N.: "Investigation of concrete and solutions for winter work." Min Construction of Enterprises for the Metallurgical and Chemical Industries USSR. Technical Administration. Central Sci Res Inst of Industrial Structures (TsNIPS). Moscow, 1956.
(Dissertation for the Degree of Doctor in Technical Sciences)

SO: Knizhnaya Letopis', No. 20, 1956

MIRONOV, S.A., doktor tekhnicheskikh nauk, professor; ADOBELIDZE, G.A., kandidat tekhnicheskikh nauk; SIZOV, V.N., kandidat tekhnicheskikh nauk; PEVZNER, A.S., redaktor izdatel'stva; GUSEVA, S.S., tekhnicheskiy redaktor

[Instructions for steaming concrete and reinforced concrete elements in plants and yards (I 206-55/MSPMKhP)] Instruktsiia po propariva-niiu betonnykh i zhelezobetonnykh izdelii na zavodakh i poligonakh. (I 206-55/MSPMKhP) Moskva, Gos. izd-vo lit-ry po stroit. i arkhitekture, 1956. 17 p. (MLRA 10:1)

1. Russia (1923- U.S.S.R.) Ministerstvo stroitel'stva prdpriyatiy metallurgicheskoy i khimicheskoy promyshlennosti. Tekhnicheskoye upravleniye. 2. Laboratoriya betonov i vyazhushchikh TSentral'nogo nauchno-issledovatel'skogo instituta promyshlennykh sooruzheniy (for Mironov, Arobelidze, Sizov)
(Concrete)

SIZOV, V.N., kandidat tekhnicheskikh nauk; KOROTKOV, S.N.

Rapid-hardening concrete for monolithic elements produced in winter. Biul.stroi.tekh. 13 no.4:4-6 Ap '56. (MLRA 9:8)

1. TSentral'nyy nauchno-issledovatel'skiy institut promyshlennykh sooruzheniy.

(Concrete)

97-57-9-1/17

AUTHOR: Sizov, V. N. Doctor of Technical Sciences

TITLE: The Correct Way of Concreting in Winter. (Pravil'no proizvodit' zimneye betonirovaniye).

PERIODICAL: Beton i Zhelezobeton, 1957, Nr.9. pp.339-343 (USSR)

ABSTRACT: In the northern and eastern part of Soviet Russia concreting is carried out when the temperature is down to - 40°C and in conditions of permanent frost. The main technical publications dealing with this problem are: "Technical conditions for carrying out and taking over Building and Assembly Work" (TU 112-55), and "Instruction on Carrying out Concreting Work in Industrial and Residential Buildings During Winter", published 1954. It is necessary to protect concrete during initial hardening until the concrete reaches 50% of its final strength, i.e. 50 kg/cm² when the mark of concrete is lower than 100. The effect of frost before this stage not only lowers the concrete's strength, but also affects adversely the adhesion to reinforcement. Concrete so affected, could be loaded only to 60 or 70% of its calculated strength. The striking of formwork should take place only when the hardness of the concrete reaches 50% of the final hardness (28 days). When

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concrete articles are steam-cured no clinker or pozzolana cement should be used. Nor should these two types of cement be used when, during concreting, the temperatures of the soil is higher than that of the surrounding air. With steam-curing at a temperature not lower than 60°C, and especially at 85/90°C, these two types of cement can be more effectively used in reinforced concrete constructions than Portland cement. The mineralogical content (e.g. the content of tri-calcium silicate and of tri-calcium aluminate), activity, and speed of hardening of the cement, are of primary importance. Cements with a content of more than 45-55% of C_3S form the bulk of cement production today. Acceleration of the hardening of concrete can be achieved by the addition of calcium chloride, by the reduction of the water/cement ratio, by increasing the gypsum content, by re-grinding of the cement, and finally by heat-curing. Of great importance for the rationalisation of building during winter is the wide application of pre-fabricated reinforced units. Experience gained by Zaporozhstroy, Krivorozhstroy and other building organizations shows that pre-cast units can be manufactured quite conveniently on concrete yards during winter. Magnitostroy and Chelyabmetallurgstroy

The Correct Way of Concreting in Winter.

have manufactured a large amount of pre-cast foundations and other structural elements during the winter by the use of electrical heating. When using rapid-hardening cement and concrete the temperature of the heating may be lower and of shorter duration. A handbook covering the processes of steam-curing of pre-cast constructions is: "Instructions on Steam-Curing Concrete and Reinforced Concrete Products in Factories and Concrete Yards" (I 206-55 MSPMKhP). In comparison with the steam-curing of concrete without $CaCl_2$, steam-curing of reinforced concrete with 2% additive of calcium chloride somewhat increases corrosion of the reinforcement. This increased corrosion does not affect the load-bearing capacity of the reinforcement if the protective layer of concrete is at least 15 mm. Calcium chloride should not be used when the heat-cured concrete constructions are from clinker or slag, as the danger of corrosion arising from poorly burned clirker is considerably increased. The addition of calcium chloride to a concrete mix at a temperature not exceeding 20°C increases the plasticity of the mix, as $CaCl_2$ is a plastifying agent. The assembly of pre-cast units during winter conditions

Card 3/5

The Correct Way of Concreting in Winter. 97-57-9-1/17

depends on the way the joints are made. Grouting of joints by concrete mix or grout, and their heat-curing, is extremely complicated and difficult; therefore, the use of frost-resistant and anti-corrosive mixture appears to be the best solution of forming joints in heavy frost. A handbook describing grouting of joints is: "Instructions on Assembly of Reinforced Concrete Units", published 1957. It is advisable to form concrete foundations by using concrete of high relative strength and by pre-heating (electrically) for 8-10 hours up to a temperature of 40 - 50°C. Electrical heating or pre-heating is generally done by a current of 50-110 V, but 120 - 220 V (standard voltage) may also be used. The electrical heating should follow the instructions given in "Instructions on Electro-heating of Reinforced Concrete and Masonry" (I 94-54 MSPMKhP). Of considerable practical interest is the successful solution of the problem of concrete hardening at low temperatures by the use of anti-frost additives. These concretes are usually prepared by using pre-heated material (aggregate sand), and after concreting the heating is kept on for one or two days. The hardening takes place at a temperature

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The Correct Way of Concreting in Winter. 97-57-9-1/17

of up to -10°C without loss of final strength. Concrete made with increased additives of various salts (up to 20%) is prepared from cold materials (aggregate sand) and hardened at a temperature of up to -20°C. When using various additives of salts the instructions given in the following publication should be observed: "Temporary Instructions for the Preparation of Concrete with Salt Additives, and its Hardening During Frost" (I 207-55 MSPMKhP). The Academy of Building and Architecture of USSR, (Akademii stroitel'stva i arkhitektury SSSR), together with the Institute for Concrete and Reinforced Concrete (Institut betona i zhelezobetona), is carrying out research and tests on the behaviour of concrete during various climatic conditions.

AVAILABLE: Library of Congress.

1. Concrete-Construction factors-Applications 2. Construction analysis 3. Weather

Card 5/5

SOV/2923

Sizov, Vasiliy Nikolayevich, Doctor of Technical Sciences, Laureate of the Stalin Prize

Stroitel'nyye raboty v zimnikh usloviyakh (Construction Work Under Winter Conditions) 3d ed., rev. and enl. Moscow, Gosstroyizdat, 1958. 538 p. 10,000 copies printed.

Scientific Ed.: N. P. Edelev, Candidate of Technical Sciences; Ed. of Publishing House: I. P. Skvortsova; Tech. Eds.: E. M. El'kina, and M. V. Smolyakova.

PURPOSE: This book is intended for engineers and technicians of industrial and planning organizations as well as for personnel of scientific research institutes and laboratories.

COVERAGE: This book contains scientific data and practical information on building sites, building materials, and different types of construction work. It discusses in detail concreting and masonry work under cold weather conditions, giving specific

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SIZOV, V., doktor tekhn. nauk.

How to secure strength and durability of winter bricklaying in spring. Stroitel' no.3:7-8;14 Mr '58. (MIRA 11:2)
(Bricklaying)

SOV/97-58-11-11/11

AUTHOR: Besser, Ya. R. Cand. Tech. Sci.;
Sizov, V. N., Doctor of Tech. Sci., Professor.

TITLE: Book Review (Kritika i Bibliografiya)

PERIODICAL: Beton i Zhelezobeton, 1958, Nr.11, p.440 (USSR)

ABSTRACT: The following book is reviewed: A.G. Sarapin, "Production of Large-Scale Reinforced Concrete Constructions and Details Using "Stand" Method", published by Gosstroyizdat, 1958. It deals with Russian and Foreign problems of and research into the production of large precast reinforced concrete units. There is an interesting chapter compiled by the author in conjunction with operatives of the laboratory for reinforced concrete products of the Institute of Building Technique of the Academy of Architecture of USSR (Institut stroitel'noy tekhniki Akademii arkhitektury SSSR). Curing methods are criticised. In general the review is favourable.

Card 1/1

SIZOV, V.N., doktor tekhn. nauk.

Using chemical admixtures for mortars and concretes. Biul. stroi. tekh. 15 no.1:6-9 Ja '58. (MIRA 11:2)

1. Nauchno-issledovatel'skiy institut betona i zhelezobetona Akademii stroitel'stva i arkhitektury SSSR.
(Concrete) (Mortar)

SIZOV, V.N., doktor tekhn.nauk.

Increasing the strength and durability of brick structures laid under winter conditions. Nov.tekh. i pered. op. v stroi. 20 no.1:13-17 Ja '58. (MIRA 11:2)
(Bricklaying--Cold weather conditions)

MIRONOV, S.A., prof., doktor tekhn.nauk; SIZOV, V.N., prof., doktor tekhn. nauk; KHAVIN, B.N., red.izd-va; TEMKINA, Ye.L., tekhn.red.

[Instruction SN 42-59 for using concrete with chloride salt additives hardening at freezing temperatures] Instruktsiia po primeneniiu betona s dobavkami solei, tverdeiushchego na moroze SN 42-59. Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit. materialam, 1959. 34 p. (MIRA 13:1)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po delam stroitel'stva. 2. Laboratoriya yacheistykh, legkikh i uskorennogo tverdeniya betonov Nauchno-issledovatel'skogo instituta betona i zhelezobetona (NIIZhB) Akademii stroitel'stva i arkhitektury SSSR (for Mironov, Sizov).
(Concrete)

SOV/97-59-1-2/18

AUTHORS: Mironov, S.A., Corresponding Member, ASiA SSSR, Doctor of Technical Sciences, Professor; Sizov, V.N., Doctor of Technical Sciences, and Khvorostyanskiy, V.F., Engineer

TITLE: Methods of Obtaining High-Strength Vibrated Concretes Using Short Heat Curing (Sposoby polucheniya vysokoprochnykh betonov dlya vibroprokata pri kratkovremennoy teplovoy obrabotke)

PERIODICAL: Beton i Zhelezobeton, 1959, Nr 1, pp 4-10 (USSR)

ABSTRACT: N.Ya. Kozlov, together with collectives SKB, NIIMosstroy and the Kalibrovskiy experimental plant investigated and solved problems in the manufacture of panels using ordinary reinforcement. Complications arise in the manufacture of prestressed panels when vibration is used for consolidation. The Giprostroyindustriya, under the leadership of Engineer A.A. Susnikov, put forward to Gosstroy of USSR and the Institute for Concrete and Reinforced Concrete, ASiA SSSR (Instituta betona i zhelezobetona, ASiA SSSR), a programme to work out

Card 1/6 compositions of concrete and ways of heat curing for

Methods of Obtaining High-Strength Vibrated Concretes Using Short Heat Curing.

prestressed reinforced concrete panels using vibration for consolidation. For the manufacture of panels reinforced with ordinary reinforcement and consolidated by vibration, a cement-sand mix of 1 : 2 (by weight) should be used and panels cured for 2 hours on the conveyor belt or in forms at a temperature of 100°C. Special treatment is required in the case of prestressed reinforcement when the minimal strength of concrete must not be lower than 210 kg/cm^2 for the release of tensioned reinforcement. Portland cement used should be of high alumina content, ground to 3 500-5 000 cm^2/g (according to Tovarov). Classified or coarse pure sand should be used with the addition of granite aggregate up to 10 mm in size. Heat curing should be carried out at a temperature of 100°C for a period of 3 hours (including the period of raising and lowering of temperature). It is necessary during the curing to preserve the degree of humidity. Rapid hardening

Card 2/6 cements of a strength of 300 kg/cm^2 are being manufactured.