

BEGIN

REEL 370

MURASHVILIA. —

begin

MURASHEV, V.A., prof., doktor tekhn.nauk; MIRONOV, S.A., prof., doktor tekhn.nauk; ALEKSANDROVSKIY, S.V., kand.tekhn.nauk; TAL', K.Z., kand.tekhn.nauk; DMITRIYEV, S.A., kand.tekhn.nauk; MULIN, N.M., kand.tekhn.nauk; SIGALOV, E.Ye., kand.tekhn.nauk; NEMIROVSKIY, Ya.M., kand.tekhn.nauk; TABENKIN, N.L., inzh. [deceased]; KALATUROV, B.A., kand.tekhn.nauk; BRAUDE, Z.I., inzh.; KRYLOV, S.M., kand.tekhn.nauk; FOXIN, K.F., doktor tekhn.nauk; GUSEV, N.M., prof., doktor tekhn.nauk; YAKOVLEV, A.I., inzh.; KORENEV, B.G., prof., doktor tekhn.nauk; DERESHKEVICH, Yu.V., inzh.; MOSKVIN, V.M.; LUR'YE, L.L., inzh.; MAKARICHEV, V.V., kand.tekhn.nauk; SHEVCHENKO, V.A., inzh.; VASIL'YEV, B.F., inzh.; KOSTYUKOVSKIY, M.G., kand.tekhn.nauk; MAGARIK, I.L., inzh.; IL'YASHEVSKIY, Ya.A., inzh.; LARIKOV, A.F., inzh.; STULOV, T.T., inzh.; TRUSOV, L.P., inzh.; LYUDKOVSKIY, I.G., kand.tekhn.nauk; POPOV, A.N., kand.tekhn.nauk; VINOGRADOV, N.M., inzh.; USHAKOV, N.A., kand.tekhn.nauk; SVERDLOV, P.M., inzh.; TER-OVANESOV, G.S., inzh.; GLADKOV, B.N., kand.tekhn.nauk; KOSTOCHKINA, G.V., arkh.; KUREK, N.M.; OSTROVSKIY, M.V., kand.tekhn.nauk; PEREL'SHTEYN, Z.M., inzh.; BUKSHTEYN, D.I., inzh.;

(Continued on next card)

MURASHEV, V.A.--(continued) Card 2.

MIKHAYLOV, V.G., kand.tekhn.nauk; SIGALOV, E.Ye., kand.tekhn.nauk;
GVOZDEV, A.A., prof., retsenzent; MIKHAYLOV, V.V., prof., retsen-
zent; PASTERNAK, P.L., prof., retsenzent; SHUBIN, K.A., inzh.,
retsenzent; TEMKIN, L.Ye., inzh., nauchnyy red.; KOTIK, B.A., red.
izd-va; GORYACHEVA, T.V., red.izd-va; MEDVEDEV, L.Ya., tekhn.red.

[Handbook for designers] Spravochnik proektirovshchika. Pod ob-
shchei red. V.I.Murasheva. Moskva, Gos.izd-vo lit-ry o stroit.,
arkhit. i stroit.materialam. Vol.5. [Precast reinforced concrete
construction elements] Sbornye zhelezobetonnye konstruksii.
1959. 603 p.

(MIRA 12:12)

1. Akademiya stroitel'stva i arkhitektury SSSR. Nauchno-issledo-
vatel'skiy institut betona i zhelezobetona, Perovo. 2. Deystvitel'-
nyy chlen Akademii stroitel'stva i arkhitektury SSSR (for Murashev,
Gvozdev, Mikhaylov, V.V., Pasternak, Shubin). 3. Chlen-korresp. Aka-
demii stroitel'stva i arkhitektury SSSR (for Mironov, Gusev, Moskvina,
Kurek).

(Precast concrete construction)

SOV/97-59-1-5/18

AUTHORS: Moskvin, V.M., Member of ASIA SSSR, Doctor of Technical Sciences, Professor; Alekseyev, S.N., Candidate of Technical Sciences, and Batrakov, V.G., Engineer

TITLE: Silico-Organic Additive for Increasing Frost-Resistance of Concrete (Kremniyorganicheskaya dobavka dlya povysheniya morozostoykosti betona)

PERIODICAL: Beton i Zhelezobeton, 1959, Nr 1, pp.19-21 (USSR)

ABSTRACT: Frost-resistance of mortars and concretes can be considerably increased by the addition of a new hydrophobic compound GKZh-94. The optimal quantity of additive recommended to secure frost-resistance is 0.1% (by weight of binder). While this additive retards hardening in the initial stages, concrete and mortar have normal strengths after 28 days. Tests with GKZh-94 (discovered by Candidate of Technical Sciences M.N. Plungyanskaya) in the form of a 50% aqueous emulsion were carried out by the Laboratory for Protection of Concrete and Reinforcement from Corrosion, of the Institute of Concrete and Reinforced Concrete ASIA SSSR (Laboratoriya zashchity betona i armatury ot korrozii Instituta betona i zhelezobetona ASIA SSSR). GKZh-94 has the following properties: it does not

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SOV/97-69-1-5/18

Silico-Organic Additive for Increasing Frost-Resistance of Concrete

encourage corrosion; it does not form harmful gaseous products; it easily emulsifies in water, and emulsion is permanent. Tests were carried out on test cubes, 70 x 70 x 70 mm in size, 3, 7 and 28 days after application of the solution mixed in the proportion of 1/3. The water absorption was tested by submersion in water for 24 hours of test cubes 40 x 40 x 160 mm. Previously the cubes were dried out to a constant weight. Frost resistance tests were carried out, by an accelerated method, by means of freezing and defreezing of test cubes in a 5% solution of natrium sulphate. Results of these tests are given in Table 1. The addition of small quantities of GKZh-94 (0.01 - 0.1% by weight of cement) has no effect on the normal consistency of cement. When the addition reaches 0.5% or more the density increases. The time of setting of cement increases with increased quantity of the additive. The addition of 0.1 - 0.01% by weight of cement slightly increased the strength of samples. The addition of 0.12 - 0.2% retards the growth of strength, but after 28 days the strength of concrete is slightly higher than the standard

Card 2/4

SOV/97-59-1-5/18

Silico-Organic Additive for Increasing Frost-Resistance of Concrete

GKZh-94 and its effect on the strength of concrete after 3, 7, 28 and 90 days of hardening are given in Table 3. Test cubes were tested for breakage on apparatus IChMK-2. There are 1 figure and 5 tables.

Card 4/4

MOSEVIN, V.M., doktor tekhn.nauk, prof.; ALEKSEYEV, S.N., kand.teikh.
nauk

Protecting reinforcements in porous concretes from corrosion.
Trudy NIIZHB no.8:144-150 '59. (MIRA 13:4)

1. Nauchno-issledovatel'skiy institut betona i zhelezobetona
Akademii stroitel'stva i arkhitektury SSSR.
(Reinforced concrete--Corrosion)

MOSKVIN, V.M., doktor tekhn. nauk, prof.; ALEKSEYEV, S.N., kand. tekhn. nauk;
BATAKOV, V.G., inzh.

Effect of various cements on the strength of concretes and rein-
forcements. Trudy NIIZHB no.9:4-20 '59 (MIRA 13:3)
(Cement) (Reinforced concrete--Testing)

MOSEVIN, V.M., doktor tekhn. nauk. prof.; ALEKSEYEV, S.N., kand. tekhn. nauk.;
BATRAKOV, V.G., inzh.

Effect of some organic admixtures on the frost resistance of
concretes. Trudy NII ZHB no.9:70-82 '59 (MIRA 13:3)
(Frost resistant concrete)

MOSEVIN, V.M. doktor tekhn. nauk prof.; KURBATOVA, I.I., kand. khim. nauk

Obtaining radioactive compounds of hydrated calcium sulfoaluminates.

Trudy NII ZHE no.9:83-87 '59 (MIRA 13:3)

(Calcium compounds) (Aluminum compounds)

MOSKVIN, V.M., doktor tekhn. nauk. prof.; KURBATOVA, I.I., kand. khim. nauk

Using the S_{35} radioisotope in studying the effect of sulfate corrosion
in sodium sulfate solutions. Trudy NIIZHB no.9:88-95 '59 (MIRA 13:3)
(Radioisotopes--Industrial application)
(Concrete--Corrosion)

MOSEVIN, V.M., doktor tekhn. nauk; ROYAK, G.S., inzh.

Interaction of cement alkalies with aggregates in concretes. Trudy
NII ZHB no.9:96-111 '59 (MIRA 13:3)
(Concrete--Corrosion) (Alkalies)

MOSEVIN, V.M., doktor tekhn. nauk; FRANK, G.A., inzh.

Chemical resistance of clinker minerals and various types of cement
in alkali solutions. Trudy NIIZHB no.9:112-113 '59 (MIRA 13:3)
(Alkalies) (Cement clinkers--Corrosion) (Cement--Corrosion)

MOSEKVIN, V.M., doktor tekhn. nauk, prof.:PODVAL'NIY, A.M., inzh.

Effect of stresses on the corrosion resistance of concrete. Trudy
NIIZHB no.9:124-142 '59 (MIRA 13:3)
(Concrete--Corrosion) (Strains and stresses)

MOSKVIN, V.M., doktor tekhn.nauk; ALEKSEYEV, S.M., kand.tekhn.nauk;
KLIKOVA, G.D., red.izd-va; BOROVNEV, N.K., tekhn.red.

[Instructions for protecting reinforcements of reinforced
concrete construction elements from corrosion] Ukazaniia po
zashchite armatury zhelezobetonnykh konstrukttsii ot korrozii.
Moskva, Gos.izd-vo lit-ry po stroit., arkhitekt. i stroit.ma-
terialam, 1960. 24 p. (MIRA 13:6)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut betona
i zhelezobetona, Perovo. 2. Chlen-korrespondent Akademii stroi-
tel'stva i arkhitektury SSSR (for Moskvina).
(Reinforcing bars--Corrosion)

...moskvin, v. m

PHASE I BOOK EXPLOITATION

SOV/441

Akademiya stroitel'stva i arkhitektury SSSR. Institut betona i zhelezobetona

Korroziya zhelezobetona i metody zashchity (Corrosion of Reinforced Concrete and Methods of Protection Against It) Moscow, Gosstroyizdat, 1960. 131 p.
Errata slip inserted. (Series: Its: Trudy, vyp. 15) 5,000 copies printed.

Ed.: V.M. Moskvin, Corresponding Member, Academy of Building and Architecture USSR, Doctor of Technical Sciences, Professor; Ed. of Publishing House: M.N. Kuznetsova; Tech. Ed.: E.M. El'kina.

PURPOSE: This book is intended for scientific research workers and construction engineers specializing in reinforced-concrete structures.

COVERAGE: The collection of 9 articles deals with corrosion processes which occur in reinforced concrete and methods of combating them. Increasing the durability of reinforced concrete through the use of admixtures of organosilicon compounds or by using protective coatings with lacquers and enamels is analyzed. Ways of avoiding deformations in reinforced concrete caused by frost are discussed. No personalities are mentioned. References follow each article.

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Corrosion of Reinforced Concrete (Cont.)

SOV/4491

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Mokhvin, V.M. [Doctor of Technical Sciences, Professor], and A.M. Podval'nyy [Engineer]. Methods for Investigation of the Corrosion Processes in Concrete by Means of Specimens Under Tension	3
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Corrosion of Reinforced Concrete (Cont.)

SOV/4472

Kononenko, A.S. [Engineer]. Increasing the Stability of Silos

95

Plungyanskaya, M.N. [Candidate of Technical Sciences]. Protective Coatings on the Basis of Hydrofobic Materials, Perchlorovinyl and Epoxide Lacquers and Enamels

103

Moskvin, V.M., and A.M. Podval'nyy. Frost Resistance and the Durability of Reinforced-Concrete Structures

110

AVAILABLE: Library of Congress

Card 3/3

JA/dwm/mas
12-6-60

MOSKVIN, V.M., doktor tekhn.nauk prof.; PODVAL'NIY, A.M., inzh.

Frost resistance of stressed concrete. Bet. i zhel.-bet. no.2:
58-64 F '60. (MIRA 13:6)

1. Chlen-korrespondent Akademii stroitel'stva i arkhitektury
SSSR (for Moskvín).
(Frost resistant concrete)

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S/097/60/000/009/002/008/XX
A053/A029

AUTHORS: Moskvin, V.M., Doctor of Technical Sciences, Professor; Alekseyev, S.N.
Candidate of Technical Sciences; Batrakov, V.G., Engineer

TITLE: Effect of Certain Organic Admixtures on the Frost Resistance of Concrete

PERIODICAL: Beton i zhelezobeton, 1960, No. 9, pp. 389 - 393

TEXT: Kh.M. Leybovich and M.M. Kapkin, Candidates of Technical Sciences at NIItsement have demonstrated that by introducing the necessary quantity of silico-organic compounds a marked increase in frost resistance can be obtained (Ref. 1). This has been confirmed by the works of M.N. Plungyanskaya, Candidate of Technical Sciences, and V.M. Moskvin, Professor (Ref. 2). In previous works (Ref. 3) it had been established that the addition of ГКЖ-94 (GKZh-94) silicoorganic liquid a product of hydrolysis of the ethyl dichlorosilane amounting to 0.1% of the weight of cement increases the frost resistance of concrete 3 - 5 times. The article describes the results of investigations pertaining to the influence of other well-known admixtures, such as sodium abietate (vinsol), and distillation wash from sulfite alcohol. The experimental investigation took place in the Central Labora-

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S/097/60/000/009/002/008/XX
A053/A029

Effect of Certain Organic Admixtures on the Frost Resistance of Concrete

tory of Corrosion of the Institut betona i zhelezobetona (Institute of Concrete and Reinforced Concrete). The tests were made with concrete prisms 7 x 7 x 22 cm made from Portland cement of 400 brand and puzzuolanic cement of 400 brand. Sand and gravel (5 - 20 mm fractions) were employed as fillers. The article gives the chemical composition of the cements. The following admixtures were used: a 50% water emulsion of silicoorganic GKZh-94 liquid, nonsaponified abietic resin in powder form, sodium abeitute in powder form (CHB - SNV), sulfite-alcohol dregs as liquid concentrate. The admixtures were added to the concrete in the following quantities: GKZh-94 0.1% (based on 100% emulsion), abietic resin 0.02%, sulfite-alcohol dregs 0.2% (based on the dry substance). After the samples had been produced and permitted to dry during 28 days, they were submerged in baths with aggressive solutions in which they were kept for 48 hours, after which they were alternately frozen at -20°C and defrosted at +25 - 35°C during 8 hours. The degree of destruction of the samples was evaluated by measuring the frequency of the transversal oscillation of the bending of the sample on the ИЧМК-2 (ICHMK-2) device and by weighing the sample; this permitted to calculate the dynamic module of elasticity of the concrete. The durability of the concrete was judged by the

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A053/A029

Effect of Certain Organic Admixtures on the Frost Resistance of Concrete

number of cycles of freezing and defrosting a concrete sample could stand until suffering a decrease of 25% in the dynamic module of elasticity or a loss of 5% of the original weight. A number of graphs shows the influence which the above-cited organic admixtures have on concrete made from Portland cement and from puzzuolanic cement. Two comparative tables give the state of durability of the two kinds of concrete treated with different organic admixtures; the aspect of the respective samples having undergone the tests are shown on a photograph. The superiority of the silicoorganic compound GKZh-94 over the hitherto best-known admixtures is proved. The superior frost resistance obtained with GKZh-94 is mainly due to the development of fine-pore structure in the concrete, while the water-repellent effect is only temporary in the event of lasting contact of concrete with water. The utilization of GKZh-94 is recommended particularly for hydrotechnical installations. There are 3 tables, 2 sets of graphs, 1 photograph and 3 Soviet references.

A

Card 3/3

MOSHCHANSKIY, N.A., doktor tekhn. nauk. Primalni uchastiye: MOSKVIN, V.M., doktor tekhn. nauk, prof.; ALEKSEYEV, S.N., kand. tekhn. nauk; KAPKIN, M.M.; MEDVEDEV, V.M.; PODVAL'NIY, A.M., inzh.; STRASHNYKH, V.P., red.izd-va; MOCHALINA, Z.S., tekhn. red.

[Regulations on the use and protection of reinforced concrete in shops with corrosive media]Instruktsiia po primeneniui i zashchite zhelezobetona v tsekhakh s agressivnymi sredami. Moskva, Gosstroizdat, 1961. 29 p. (MIRA 15:8)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut betona i zhelezobetona, Perovo. 2. Chlen-korrespondent Akademii stroitel'stva i arkhitektury SSSR (for Moshchanskiy).
(Corrosion and anticorrosives)
(Reinforced concrete)

MOSKVIN, V.M., doktor tekhn.nauk, prof.; PODVAL'NIY, A.M., inzh.

Calculation of the functioning of reinforced concrete elements
under corrosive influences when establishing standards. Bet.1
zhel.-bet. no.6:246-249 Je '61. (MIRA 14:7)

1. Chlen-korrespondent Akademii stroitel'stva i arkhitektury
SSSR (for Moskvín). (Reinforced concrete)

MOSKVIN, V.M., doktor tekhn. nauk, prof.; MEDVEDEV, V.M., kand. tekhn. nauk; KAPKIN, M.M., kand. tekhn. nauk. Prinsipalni uchastiye: IVANOV, F.M., kand. tekhn. nauk; TSVETKOV, S.N., kand. tekhn. nauk; PAVLOV, V.N., inzh.; KLIMOVA, G.D., red. izd-va; BOROVNEV, N.K., tekhn. red.

[Instructions for increasing the durability of concrete in elements of marine hydraulic structures] Instruksiia po povysheniiu dolgovrechnosti betona v konstruktsiakh morskikh gidrotekhnicheskikh sooruzhenii. Moskva, Gos. izd-vo lit-ry po stroit., arkh. i stroit. materialam, 1962. 58 p. (MIRA 15:5)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut betona i zhelezobetona, Perovo. 2. Chlen-korrespondent Akademii stroitel'stva i arkhitektury SSSR (for Moskvina). 3. Tsentral'naya laboratoriya korrozii Nauchno-issledovatel'skogo instituta betona i zhelezobetona Akademii stroitel'stva i arkhitektury SSSR (for Medvedev, Kapkin). 4. Tsentral'nyy nauchno-issledovatel'skiy institut svyazi Ministerstva transportnogo stroitel'stva SSSR (for Ivanov).
(Hydraulic structures) (Concrete construction)

MOSKVIN, Vladimir Mikhaylovich, doktor tekhn. nauk; ROYAK, Genrikh Solomonovich, kand. tekhn. nauk; GLEZAROVA, I.L., red. izd-va; MIKHEYEVA, A.A., tekhn. red.

[Concrete corrosion caused by the action of cement alkalis on the silica in the aggregate]Korroziia betona pri deistvii shchelochi tsementa na kremnezem zapolnitelia. Moskva, Gosstroizdat, 1962. 162 p.

(MIRA 16:4)

(Concrete--Corrosion)

MOSKVIN, V.M.; PODVAL'NIY, A.M., kand.tekhn.nauk

Study of the processes of corrosion in stressed concrete. Izv.
ASIA 4 no.4:16-25 '62. (MIRA 16:1)

1. Chlen-korrespondent Akademii stroitel'stva i arkhitektury
SSSR (for Moskvina).

(Concrete--Corrosion)

MOSKVIN, V.M., doktor tekhn. nauk, prof.; LAZAREVICH, I.A., inzh.

Protecting concrete and reinforced concrete structures from
corrosion. Bet. 1 zhel.-bet. 9 no.10:478-480 0 '63.

(MIRA 16:12)

L 22907-65 EPF(c)/EWG(s)-2/EWP(j)/EWT(m) Pc-4/Pr-4/Pw-4 RM
ACCESSION NR: AP5001772 8/0097/64/000/002/0051/0056

AUTHORS: Moskvin, V. M. (Doctor of technical sciences, Professor); Batrakov,
V. G. (Candidate of technical sciences)

TITLE: Durability of concrete with additions of silica-bound links

SOURCE: Beton i zhelezobeton, no. 2, 1964, 51-56

TOPIC TAGS: additive, concrete, silica, silicon compound, bonding material

ABSTRACT: The effect of introducing small amounts of silica-bound links into concrete mixes upon the change of concrete properties was investigated. The silica interaction mechanism is characterized in Fig. 1 on the Enclosure, where Me is a metal (Ca, Mg, Al, etc.) and R is a methyl, ethyl, hydrogen, hydroxyl, or some other group. The linkage has a hydrophobic effect upon pore walls and capillaries such that the concrete's frost susceptibility is reduced. The results of tests conducted in NIIZhB to determine the use of the material in rigorous conditions are presented. Participants in the tests were I. A. Zubkov and K. P. Grinevich of the Institut gosudarstvennogo komiteta po khimii (State Institute Committee on Chemistry). Two basic linkages were tested: polyhydrosiloxane and sodium silicate. Frost stability was measured with the use in 0.1% concentrations

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I. 22907-65

ACCESSION NR: AP5001772

and were of the classifications GKZh-94, GKZh-94-M, and GKZh-10. Description of addition methods is as given in "Instruktsiyu po povyshaniyu dolgovechnosti betona v konstruktsiyakh morskikh gidrotekhnicheskikh sooruzheniy, M., 1962." Plotted results include measures of weight and dynamic modulus of elasticity change for concrete with silica-bound additives and, for comparison purposes, without additives, or with other types of additives. The measurements are made against increasing time of exposure to harsh elements (water, salt water). The authors demonstrated and concluded that the frost resistance is greatly increased (for 0 to 15 cm standard slump test consistencies) by the addition of either of the two additive types; the increased resistance is due to the additive's effect upon the hydrophobic properties of pore walls and capillaries. Salt infiltration stability is greatly increased through the presence of the additive linkage. GKZh-94 does not appreciably increase the mix cost. Orig. art. has: 7 figures.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 01

SUB CODE: MT

NO REF SOV: 006

OTHER: 001

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L-22907-65

ACCESSION NR: AP5001772

ENCLOSURE: 01

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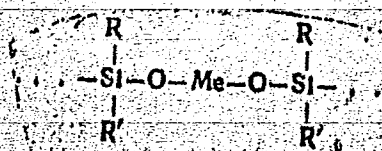


Fig. 1.

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I. 26775-66 EWT(m)

ACC NR: AP6017466

SOURCE CODE: UR/0097/65/000/007/0008/0010

AUTHOR: Moskvin, V. M. (Doctor of technical sciences; Professor); Alekseyev, S. N.
(Candidate of technical sciences); Novgorodskiy, V. I. (Engineer)

ORG: none

TITLE: Normalizing the width of fissures in prestressed reinforced concrete constructions

SOURCE: Beton i zhelezobeton, no. 7, 1965, 8-10

TOPIC TAGS: reinforced concrete, high strength steel, corrosion, electric conductivity

ABSTRACT: Fissures up to a certain width in prestressed concrete cause no reduction in the load-carrying capacity or service life, no reduction in the usefulness of the structures. Whereas earlier planning of stress-reinforced constructions did not permit fissures where loads were encountered recently, as a result of successes in the study of the influence of fissures on the stress-deformative state of constructions and longevity of rods, it has become possible to plan some constructions with allowance for the formation of fissures. This has been responsible, to a great degree, for the wide application of stressed-rod fittings. The high-strength steel used in such constructions has high carbon content, resulting in the danger of intercrystalline corrosion. Investigations have shown that the corrosion process in the reinforcement depends on the width of fissures, the aggressiveness of the

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UDC: 624.012.45.001.5

L 26775-66

ACC NR: AP6017466

surrounding medium, reinforcing-rod diameter, composition and stress state, concrete density and electrical conductivity. The authors therefore conclude that in non- or weakly aggressive media, prestressed concrete constructions with cracks (from 0.05 to 0.3 mm) may be used. The exact crack width permissible depends on the action of the external medium, type of construction and reinforcement. Orig. art. has: 1 table. [JPRS]

SUB CODE: 11, 20 / SUBM DATE: none / ORIG REF: 003

Card 2/2 *plw*

MOSKVIN, V.M.; ALEKSEYEV, S.N.; NOVGRODSKIY, V.I.

Passivation and the destruction of the passivity of steel reinforcements in concrete. Zashch. met. 1 no.5:559-564 S-0 '65. (MIRA 18:9)

1. Nauchno-issledovatel'skiy institut betona i zhelezobetona.

IVANOV, V.V.; MOSKVIN, Ya.G.

Nature of the distribution of the bitumoids in the Mesozoic
and Cenozoic sediments of the southwestern part and framerica
of the Anadyr Lowland. Neftsgaz. geol. i geofiz. no.10:30-34
'64 (MIRA 1831)

1. Moskovskiy gosudarstvennyy universitet im. Lomonosova.

MALITSKIY, I. I., AKSEL'ROD, L. S., MOSEVIN, YE. M.

Moscow - Streets

Rapid continuous method of road building in Moscow. Gor. khoz. Mosk. 26 no. 6, 19:2.

Monthly List of Russian Accessions, Library of Congress, September, p 52. UNCLASSIFIED.

MOSKVIN, Yu.V.; YAKUBOV, I.T.

Franck-Condon factors for the band systems of a lithium molecule.
Izv.vys.ucheb.zav.; fiz. no.4:173-175 '61. (MIRA 14:10)

1. Moskovskiy energeticheskiy institut.
(Molecules) (Lithium)

L 13633-65 EWT(l)/EWG(k)/EEG(t) Pz-6/Pb-4 IJP(c)/ASD(a)-5/AS(mp)-2/
ASD(p)-3/ESD(gs)/ESD(t) AT
ACCESSION NR: AP4047172 S/0051/64/017/004/0499/0503

AUTHOR: Moskvin, Yu. V.

TITLE: Analytic wave functions and photoionization cross sections
of negative ions with outer 2p electron shell

SOURCE: Optika i spektroskopiya, v. 17, no. 4, 1964, 499-503

TOPIC TAGS: electron shell, photoionization cross section, wave
function, negative ion, carbon, nitrogen, oxygen, fluorine

ABSTRACT: Analytic expressions for the radial atomic wave functions
of C^- , N^- , and O^- were obtained by the method initially proposed
by Slater and modified by P. O. Lowdin (Phys. Rev. v. 90, 120, 1953).
The required tabulated values of the reduced radial wave functions
for oxygen and nitrogen were taken directly from the paper by D. R.
Hartree (Calculation of Atomic Structures [Russ. Transl.] IL, M,
1950), while those for carbon had to be approximated. The analytic

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L 13633-65

ACCESSION NR: AP4047172

expressions are used to determine the photoionization cross sections of C^- , N^- , O^- , and F^- (an analytic expression for the radial wave function of F^- was published by Lowdin). The results for C^- and O^- are in good agreement with experiment. The discrepancy in the case of N^- may be due to the low affinity energy of the excess electron. "The author is grateful to F. A. Zhivopistsey for useful discussions and help." Orig. art. has: 4 figures, 4 formulas, and 2 tables.

ASSOCIATION: None

SUBMITTED: 29Oct63

ENCL: 00

SUB CODE: NP, EM

NR REF SOV: 001

OTHER: 014

Card 2/2

MOSKVIN, Yu.V. (Moskva); CHESNOKOVA, N.N. (Moskva)

Spectroscopic study of an argon flow as it leaves the nozzle
of a plasmatron. Teplofiz. vys. temp. 3 no.3:370-375 My-Je '65.
(MIRA 18:8)

L 4111-66 EWT(l)/ETC/EPF(n)-2/EMG(m)/EPA(w)-2 IJP(c) AT

ACCESSION NR: AP5025979

UR/0294/65/003/005/0669/0676

AUTHOR: Golubev, V. A. ^{44,55}(Moscow); Moskvin, Yu. V. ^{533.915}(Moscow); Khovrir, S. K. ^{44,55}(Moscow)

TITLE: Theoretical and experimental investigation of the radiation of a water plasma

SOURCE: Teplofizika vysokikh temperatur, v. 3, no. 5, 1965, 669-676

TOPIC TAGS: plasma radiation, plasma arc, water vapor

ABSTRACT: The article starts with an analysis of the contribution of different optical processes to the total radiation of a water plasma and a calculation of the magnitude of the light fluxes. The radiation of a gaseous layer of thickness l can be calculated by the formula for a hemispherical layer:

$$e = \int_0^{\infty} B_v [1 - \exp(-k_v l)] dv, \quad (1)$$

where k_v is the overall absorption coefficient with respect to all optical processes. The composition of water vapor plasmas was calculated theoretically from literature. Card 1/2

L 4111-66

ACCESSION NR: AP5025979

ture data and the results are shown in tabular form. The analysis shows that the radiation of a plasma is determined by atomic, ionic, and electronic components, while the molecular component can be neglected. The experimental investigations to determine the radiant heat fluxes were made on a direct current electric arc heater with a power of 150 kilowatts. The source of the plasma jet was an arc discharge between an end type anode and an annular cathode, with water stabilization. The anode and the cathode were made of graphite. The temperature in cross sections of the jet was determined spectrographically, using the H atomic hydrogen line. The radiant energy in the plasma jet was determined with a TERA-50 radiometer. Experimental results are shown to be in sufficiently good agreement with theory, in respect to the absolute magnitudes of the radiant fluxes as well as in respect to their overall change with temperature. Orig. art. has: 2 formulas and 5 figures

ASSOCIATION: None

SUBMITTED: 28Sep64

NR REF SOV: 011

ENCL: 00

SUR CODE: ME

OTHER: 019

Card 2/2

L 11940-66 EWT(1)/EWT(m)/T/EWP(t)/EWP(b)/EWA(m)-2 LJP(c) JD/JG/AT

ACC NR: AP6001904

UR/0294/65/003/006/0821/0826

AUTHOR: ^{44,55} Moskvin, Yu.V. (Moscow)

77
74
B

ORG: None

TITLE: The photoionization cross section of the negative ions of alkali metals and halogens

SOURCE: Teplofizika vysokikh temperatur, v.3, no.6, n965, 821-826

TOPIC TAGS: ionization cross section, negative ion, alkali metal, elemental halogen, sodium, potassium, fluorine, chlorine

ABSTRACT: The article uses the wave functions of a self-congruent field with exchange for the bound state and an approximation of a plane wave for a free electron to calculate the photoionization cross section of negative ions of the alkali metals ^{Li⁻}, Na⁻, K⁻, and the halogens, F⁻ and Cl⁻. The calculations are made by the methods of matrix mathematics. Results of the calculations (shown in the article in tabular form) for ions of the alkali metals are compared with the photoionization cross section of a negative hydrogen ion which has an analogous s² configuration of the inner electron shell. For F⁻ and Cl⁻ ions, the method of calculation shows satisfactory agreement with existing experimental data.

Card 1/2

UDC: 533.915,546.31

2

L 11940-66

ACC NR: AP6001904

"The author thanks ^{44,55} F.A. Zhivopistsev for valuable advice." Orig. art. has: 1 figure and 4 tables. 3

SUB CODE: 07/ SUBM DATE: 01Dec64/ ORIG REF: 013/ OTH REF: 025

beh

Card 2/2

L 8437-66 ENT(1)/ETC/EPF(n)-2/ENG(m) IJP(o) GG/AT

ACC NR: AP5021915 SOURCE CODE: UR/0207/65/000/004/0154/0156

AUTHOR: ^{44,55} Krayko, A. N. (Moscow); ^{44,55} Moskvina, Yu. V. (Moscow)

58
13

ORG: none

TITLE: On determination of two-temperature plasma composition

SOURCE: Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki, no. 4, 1965, 154-156

TOPIC TAGS: plasma temperature, ^{21,44,55} plasma diagnostics, ^{21,44,55} theoretic physics

ABSTRACT: The problem of the separate temperatures of the distinct components of a plasma is considered theoretically. The plasma consists of neutrals, ions and electrons and is quasineutral. Each specie forms a subsystem interacting with the two others. The slowest interaction process is the energy transfer to higher states of ionization (radiation processes are neglected) and the dominating effects are the elastic collisions. It is further assumed that electron gas and the energy levels of the heavy components are in equilibrium so that electron and ion temperatures are the same. An equation analogous to Saha's equation is derived, which with the usual constraint of statistical mechanics and the pressure-temperature relationship leads to a determination of the plasma state as a function of the two temperatures. The effect of departure from the stated assumptions is briefly considered. Orig. art. has: 6 formulas.

SUB CODE: 20/ SUBM DATE: 05Apr65/ ORIG REF: 000/ OTH REF: 005

BVK
Card 1/1

L 8919-66 - EWT(1)/EWT(m)/ETC/EPF(n)-2/EWG(m)/EWP(f)/EWP(h) IJP(c) JD/AT

ACC NR: AP5016692 SOURCE CODE: UR/0294/65/003/003/0370/0375

AUTHOR: ⁵²⁴ Moskv'in, Yu. V. (Moscow); ⁵²⁴ Chesnokova, N. N. (Moscow) 70
58
2

ORG: none

TITLE: Spectroscopic investigation of an argon stream at the orifice exit of a plasmatron 21

SOURCE: Teplofizika vysokikh temperatur, v. 3, no. 3, 1965, 370-375 21, 44, 55

TOPIC TAGS: argon, plasma jet, plasma temperature, plasma diagnostics

ABSTRACT: Argon temperature at the "plasmatron" exit orifice was studied for operating current and voltage range of 130-460 a and 120-360 v respectively. Weak temperature dependence on input power, temperature distribution in the plasma stream arc (determined by using Abel's inversion), and the existence of equilibrium are established. The measurements were taken 3-4 mm away from the exit, where static pressure is assumed to be atmospheric. The spectral intensity of eight neutral argon lines was used to determine the temperature where electron density ($\geq 10^{16} \text{ cm}^{-3}$) was obtained from $H\beta$ broadening. The discrepancy did not exceed 150° for all eight lines. The temperature measurements were also checked using the absolute intensity of recombination radiation, which at an operating temperature of about 10,000°K dominates continuum radiation from argon. The results show that if input power is increased by

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L 8919-66

ACC NR: AP5016692

44,55 12
a factor greater than 10, the temperature of argon plasma at the exit changes from 9,000°K to 11,000°K. The empirical radial temperature distribution formula is also given. In conclusion, the authors express gratitude to P. A. Dobashin and V. S. Romanychev for their helpful comments, and to L. I. Svirorov and Z. N. Rostovtsevaya for analyzing the experimental data. Orig. art. has: 5 figures, 5 formulas, 2 tables.

SUB CODE: 20/

SUBM DATE: 04Jun64/

ORIG REF: 006/

OTH REF: 005

44,55

44,55

44,55

OC

Card 2/2

MOSKVINA, A.A.; KUTNETSOVA, L.V.; LOBYCHIN, S.L.; ROSOVA, M.I.

Microelementary analysis using gas chromatography. Determination
of carbon, hydrogen, and nitrogen in organic compounds. Zhur.
anal. khim. 19 no.6:749-753 '64. (MIR) 18:3

1. Gosudarstvennyy institut prikladnoy khimii, Leningrad.

SOV/ 49-58-11-12/18

AUTHORS: Moskvina, A. G. and Shebalin, N. V.

TITLE: Seismograph Frequency Characteristics of Pulkovo (Chastotny-ye kharakteristiki seysmografov stantsii "Pulkovo")

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Geofizicheskaya, 1958, Nr 11, pp 1389-1393 (USSR)

ABSTRACT: The seismic station "Pulkovo" received in 1951 a new seismograph of the Kirnos-type to replace the old one of Galitzin-type. Both apparatus operated for several years simultaneously. It was observed that a constant interference with the periods of 0.2-1.0 sec occurred on both seismographs. Therefore, when a reconstruction of the building took place in 1956 a series of experiments was made in order to find the best position for frequency characteristics. The spectrum of interference was obtained from 0.1 to 10 sec by means of the oscillographs VEGIK (Ref. 1) and OSB-1 (Ref.2) with the galvanometers GB-III and GB-IV. The most frequent characteristics obtained are shown in Table 1. An example of the spectral curve of

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Seismograph Frequency Characteristics of Pulkovo

N-Z is represented in Fig.1. It can be seen that the minimum of the interference is found at the point of 1 sec, as represented in Fig.2, which is the spectrum of the horizontal components for 12 separate stations. A seismograph can be considered as true if the amplitude of disturbance is not greater than 0.2 mm for the periods less than 2 sec and 0.5 to 0.7 mm for those of 5 sec. A graph based on this assumption is shown in Fig.3, representing the curves of permissible magnification, V_m , and frequency characteristics of seismographs of Pulkovo. The analysis of the graph demonstrates that a broad band of characteristics cannot give good results in the range of periods 0.2-0.8 sec and 3-7 sec. These characteristics (magnified about 1500 times) fall far above the curve of permissible magnification. Therefore, to improve the value of recording the earthquakes selected characteristics should be used. These were found by means of 4 pendulums. Their parameters, related to the frequency characteristics (Fig.3) are shown in Table 2. As it can be seen from the table, the maximum magnification V_m of each characteristic does not differ much from the mean

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Seismograph Frequency Characteristics of Pulkovo

magnification which shows freedom from resonance. As a result, an improvement was obtained in registration of various seismic waves, with the better determination of the original phase.

(Fig.4), better distinction (Fig.5) and better registration of surface waves of weak earthquakes (Fig.6). It could be said that registration was greatly improved, there was more exact interpretation and a greater number of the earthquakes was recorded. There are 2 tables, 6 figures and 3 Soviet references.

ASSOCIATION: Akademiya nauk SSSR, Institut fiziki Zemli (Academy of Sciences, USSR, Institute of Physics of the Earth)

SUBMITTED: June 11, 1957.

Card 3/3

3,9300

87971

S/049/60/000/010/007/014

E133/E414

AUTHORS: Moskvina, A.G. and Shebalin, N.V.

TITLE: The Use of a Seismograph With Two Galvanometers for Tracing Earthquakes at Two Levels of Sensitivity

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geofizicheskaya, 1960, No.10, pp.1474-1478 + 1 plate

TEXT: Several seismic stations have seismographs which alter their sensitivity at a given amplitude so that oscillations do not go off-scale (Ref.1 to 4). There are two main drawbacks to this:

(1) mechanical failure is possible in the switching device;

(2) distortion of the trace always occurs during switching.

Since alterations in sensitivity usually take place several times in the course of a single trace, much wastage therefore occurs.

It is suggested that, instead, two channels should be used, one with a magnification ten times smaller than the other. The

present authors give a typical circuit including an additional galvanometer (Fig.3). They also give the phase and frequency

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S/049/60/000/010/007/014
E133/E414

The Use of a Seismograph With Two Galvanometers for Tracing Earthquakes at Two Levels of Sensitivity

characteristics of a seismograph with two galvanometers. A table is given of the calculated instrumental constants for the two channels. The circuit considered in this article actually has a second galvanometer which switches in automatically for seismograph amplitudes greater than five millimetres. Both the galvanometers record on the same strip. There are 4 figures, 1 table and 5 Soviet references.

ASSOCIATION: Akademiya nauk SSSR Institut fiziki Zemli (Academy of Sciences USSR Institute of Physics of the Earth)

SUBMITTED: February 25, 1960

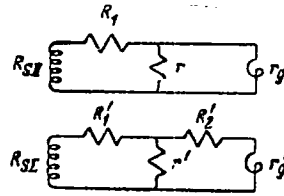


Fig. 3.

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25464

Z/023/61/000/003/002/005
D006/D102

39300

AUTHORS: Moskвина, A. G., and Shebalin, N. V.

TITLE: A study of seismic noise and calculation of the optimum seismograph constants

PERIODICAL: Studia geophysica et geodaetica, no. 3, 1961, 227-230

TEXT: The seismic-noise level in the period range from 0.1 to 5-7 sec was measured at more than 30 seismographic stations in the USSR to find a suitable method of determining the optimum seismograph constants. The measurements were made with portable pendulum seismographs consisting of a small pendulum (WEGIK system, reduced length $l_0 = 0.1$ m; inertial moment $K_1 = 10^{-2}$ kg·m²; period variable from 0.5 to 4 sec; damping variable up to critical) and a POB-14, or a modified OSB-1 oscillograph (the latter designed by Borisevich) with a GB-III galvanometer (period 0.05 or 0.2 sec, overdamped). The magnification of this system was about 10,000 - 20,000, stable for periods up to 2-3 sec. The seismic-noise curves obtained are characterized by one or two maxima in the period range of 0.1 - 0.6 sec, one sharp minimum

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D006/D102

A study of seismic noise ...

in the period range of 0.6 - 2.0 sec, and one or two high maxima in the period range of 2 - 8 sec. Two maxima in the latter range were mostly found at stations located near a continental water body. The measurements have shown that the magnification curve having a maximum in the period range of about 1 sec is the one most suitable for high-sensitivity seismographs. It is, however, recommended that the optimum magnification curve be calculated for each specific case. In calculating this curve, the most essential factors are the dependence of the seismic-noise amplitude on the period, and the requirement that the curve amplitude on the tape must not exceed a definite limit. Paying due attention to these factors, a magnification curve can be selected which meets the requirements of the seismograph theory and yields the largest magnification on the tape for a given noise level. From five characteristic points on this curve (one on the left leg, one on the right leg, and three near the top), all the basic seismograph constants can be calculated with sufficient accuracy. There are 4 figures and 4 Soviet-bloc references. (Technical Editor: V. Tobyáš.

Card 2/3

A study of seismic noise ...

Z/023/61/000/003/002/005
D006/D102

ASSOCIATION: Institute of the Physics of the Earth, Acad. Sci..
USSR, Moscow.

SUBMITTED: December 7, 1960

Card 3/3

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S/619/61/000/019/015/010
D039/D112

AUTHORS: Kirnos, D.P.; Moskvina, A.G.; Shebalin, N.V.

TITLE: On the selection of rational methods of determining the constants of electrodynamic seismographs

SOURCE: Akademiya nauk SSSR. Institut fiziki Zemli. Trudy, no. 19 (186).
Moscow, 1961, Seysmicheskiye pribory, 91-112

TEXT: Rational methods of determining the constants $T_1, T_2, D_1, D_2, \sigma^2$ and \bar{V} of the pendulum-galvanometer system of an electromagnetic seismograph are proposed. These constants entirely determine the form of the frequency and phase response and are accepted at Soviet seismic stations as the basic constants of seismographs. The period of free oscillations of the galvanometer T_2 can be determined by a seconds timer with an error of not more than 1%, when the oscillation periods of the frame of the galvanometer are short, it is recommended to determine T_2 by recording the free oscillations of the frame on photographic paper. The pendulum period T , was found for the **СВК** (SVK), **ВСК** (VSKh) and **ВЭГК** (VEGK) seismographs. The measurement of

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S/619/61/000/019/015/019
D039/D112

On the selection ...

T_1 should be done at $\sigma^2 \leq 0.1$ and at $\theta \leq 10^{-3}$. Since direct visual determination of T_1 at $\theta \leq 10^{-3}$ is difficult, the motion of the pendulum must be measured by a galvanometer connected through a sufficiently high resistance ensuring very slight damping of the pendulum. In order to find the damping of the pendulum D_1 , and that of the galvanometer D_2 , the corresponding mechanical dampings D_{10} and D_{20} and the electrodynamic coefficient α_2 for the galvanometer and α_{11} and α_{12} for the pendulums must be known. The value D_{20} is found by recording the free oscillations of the frame of the galvanometer by means of a formula. The coefficient α_2 is determined by a conventional method proposed by B.B. Golitsyn (Ref.6: (Lektsii po seysmometrii) Izbr. trudy, (Lectures on seismometry selected works] 2. Izd-vo AN SSSR, 1960). The value D_2 is determined from the recording of the damped oscillations of the galvanometer shunted across a known resistor R_{external} . The determination of α_{11} , α_{12} and D_{10} requires three equations, i.e. three recordings with different external resistances. To make this method more convenient, only two recordings for each coil of the pendulum were made. Circuit diagrams for both recordings are given. The value D_1 is calculated by imparting a pulse to the pendulum and recording

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D039/D112

On the selection ...

its damped oscillations. The coupling factor σ^2 is calculated for two cases: (1) when two additional resistors are switched between the pendulum and galvanometer; (2) when $R_1 = R_2 = 0$ and $r = \infty$. The formulae for both cases are given. The magnification \bar{V} is best determined by a calculation method requiring that the moment of inertia of the galvanometer K_2 , the moment of inertia of the pendulum K_1 and the given length of the pendulum l_1 be known. The value K_2 is determined by a method described by V.T. Arkhangel'skiy (Ref. 3: Rukovodstvo po proizvodstvu i obrabotke nablyudeniy na seismicheskikh stantsiyakh SSSR [Manual for Carrying out and Processing Observations at Seismic Stations of the USSR, Izd-vo AN SSSR, 1954]). For determining K_1 and l_1 with an error not above 1%, a method of swinging the pendulum on special knife bearings is proposed. Formulae are also given for calculating the magnification curve of a seismograph. The maximum magnification V_m and the corresponding value of the period of oscillations T_m can be determined from this curve. It is concluded that the values l_1 , K_1 , T_1 , T_2 , D_{20} and α_2 , the galvanometer current constant P_2 , the air damping of the pendulum D_{10} and its electrodynamic coefficients α_{11} and α_{12} can be

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found directly. The values l_1 and K_1 should be determined during manufacture of the pendulum and indicated on its rating plate. The values D_1 , D_2 , K_2 , σ^2 and \bar{V} are determined by means of calculations. The authors thank V.T. Arkhangel'skiy, Candidate of Physics and Mathematics, I.I. Popov, Director of the seymicheskaya stantsiya Simferopol' (Simferopol' Seismic Station) and its scientific workers Z.I. Aronovich and S.K. Novak who participated in the experiments and the discussion of results. There are 5 figures, 5 tables and 9 Soviet-bloc references. ✓

Card 4/4

S/619/61/000/019/016/019
D039/D112

AUTHOR: Moskvina, A.G.

TITLE: A calculation of the basic constants of a seismograph according to the form of the magnification curve

SOURCE: Akademiya nauk SSSR. Institut fiziki Zemli. Trudy, no.19 (186). Moscow, 1961, Seysmicheskiye pribory, 113-121

TEXT: The author proposes a direct method for calculating the basic parameters of the pendulum and galvanometer of a seismograph, according to the form of the seismograph's magnification curve. It is only applicable for calculating the parameters of seismographs with selective characteristics. The calculation is performed after the magnification curve has been plotted and for a "forward" circuit connection. The final formula is

$$\bar{V} = V_c : \frac{2D_2}{T_2} = \frac{2A}{l_1} \sqrt{\frac{K_1}{K_2}} \sqrt{\frac{D_1 T_2}{D_2 T_1}} \sigma^2, (20)$$

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D039/D112

A calculation ...

where A is the length of the optical arm; l_1 - the given length of the pendulum; K_1 and K_2 - moments of inertia of the pendulum and galvanometer. If the result of the calculation shows that $\frac{D_1 T_2}{D_2 T_1} > 1$, then formula

(20) will have the form

$$\bar{V} = \frac{2A}{l_1} \sqrt{\frac{K_1}{K_2}} \sqrt{\frac{D_2 T_1}{D_1 T_2}} \sigma$$

To check the correctness of the calculation method, the pendulum and galvanometer parameters were calculated according to the form of the magnification curve of a seismograph in operation at the Stantsiya Rakhov (Rakhov Station). It was found that in spite of a certain discrepancy between the parameters, the curve $V(T\omega)$ calculated according to the new method entirely coincided

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S/619/61/000/019/016/019
D039/D112

A calculation ...

with the initial curve. The author points out that the solution obtained is not the only one possible, and that other values of the rest of parameters satisfying one and the same magnification curve may be determined for different values of T_2 . Curves plotted according to such values will be similar to the partial curves calculated according to the method proposed by V.T. Arkhangel'skiy (pp 122-129 of the above source). The author thanks N.V. Shebalin, Candidate of Physics and Mathematics, for his advice and assistance in this work. There are 3 figures, 1 table and 4 Soviet-bloc references.

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Card 3/3

MOSKVINA, A.G.

Determining the principal constants of the seismograph from the
shape of the magnification curve. Trudy Inst. fiz. Zem. no.19:
113-121 '61. (MIRA 15:3)

(Seismometers)

PHASE I BOOK EXPLOITATION

SOV/6029

Arkhangel'skiy, V. T., D. P. Kirnos, A. G. Moskvina, V. N. Solov'yev,
N. Ye. Fedoseyenko, V. M. Fremd, and N. V. Shebalin

Apparatura i metodika nablyudeniya na seismicheskikh stantsiyakh SSSR
(Apparatus and Observation Methods at Seismic Stations in the USSR) Moscow,
Izd-vo AN SSSR, 1962. 166 p. Errata printed on inside back cover. 1500 copies
printed.

Sponsoring Agency: Akademiya nauk SSSR. Sovet po seismologii.

Resp. Ed.: D. P. Kirnos, Doctor of Physics and Mathematics; Ed. of Publishing
House: V. M. Fremd; Tech. Eds.: I. A. Makogonova and S. Golub'.

PURPOSE: This book is intended primarily for personnel of Soviet seismic sta-
tions.

COVERAGE: The book consists of three sections. Section I, written by V. T.
Arkhangel'skiy, deals with the elementary theory of seismographs. A descrip-
tion of the basic types of seismographs already in use in the Soviet Union is

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Apparatus and Observation Methods (Cont.)

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presented in Section II, which was compiled by D. P. Kirnos and A. G. Moskvina. Section III was written by A. G. Moskvina, V. M. Fremd, and N. V. Shebalin and deals with the methods and technique of seismic observation. In addition to the authors named above, the following persons, all members of the Institut fiziki Zemli im. O. Yu. Shmidta AN SSSR (Institute of Physics of the Earth, imeni O. Yu. Shmidt Academy of Sciences USSR), took part in the preparation and discussion of the manuscript: N. Ye. Fedoseyenko, V. N. Solov'yev, Z. I. Aronovich, I. L. Nersesov, I. I. Popov, and D. A. Kharin. There are 28 references, all Soviet.

TABLE OF CONTENTS:

Foreword	3
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IVAKIN, V.V.; MOSKVINA, E.T.

Method of investigating the runoff of small rivers of the Urals.
Trudy Otd.ekon.issl. UFAN SSSR no.3:19-42 '58.

(MIRA 13:6)

(Miass Valley--Runoff)

MOSKVINA, G.I.

MAN'KOVSKAYA, N.K., kandidat khimicheskikh nauk; AL'TERMAN, G.B. ;
MOSKVINA, G.I., inzhener

Producing synthetic fatty acids by the oxidation of soft
paraffin. Masl.-zhir. prom. 20 no.4:15-18 '55.
(MIRA 8:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov
(for Man'kovskaya). 2. Shebekinskiy kombinat SZhK i ZhS
(for Al'terman, Moskvina)
(Paraffins) (Acids, Fatty)

Moskvina, G. I.

USSR /Chemical Technology. Chemical Products
and Their Application

1-29

Fats and oils. Waxes. Soap.
Detergents. Flotation reagents.

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 32799

Author : Man'kovskaya M.K., Moskvina G.I.

Title : Oxidation of High-Molecular Paraffins

Orig Pub: Khimiya i tekhnol. topliva, 1956, No 7, 32-36

Abstract: A study was made of the effect of the extent of oxidation of high-melting paraffin (P) on the yield and quality of fatty acids suitable for soap manufacture. Subjected to oxidation was a high molecular P of the Novokuybyshev petroleum processing plant, purified and freed from oils, having the following characteristics: specific

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USSR /Chemical Technology. Chemical Products
and Their Application

I-29

Fats and oils. Waxes. Soap.
Detergents. Flotation reagents.

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 32799

gravity at 70° 0.7855, n_D^{70} 1.4339, solidifica-
tion point 60.9°, boiling range at normal pres-
sure 405-495°, molecular weight 446, average
number of C atoms 31.8, content (in %): oil
1.84, hydrocarbons forming a complex with urea
97.5, iso-hydrocarbons, as determined by nitra-
tion, 21.0. Subjected to oxidation was a mix-
ture of P and unsaponifiables, in the presence
of 0.2% potassium permanganate, with an air flow
of 100 liters/kg per hour. The initial tempera-
ture was maintained at 125° until an acid value
of 7-9 mg KOH was obtained for the material under-

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USSR /Chemical Technology. Chemical Products
and Their Application

Fats and oils. Waxes. Soap.
Detergents. Flotation reagents.

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 32799

going oxidation. Thereafter the temperature was lowered by 3° per hour until 107° was reached, and at this temperature the process was continued to the necessary extent. Oxidation in the presence of metal catalysts occurred, in all instances, at the same and constant rate up to the acid value of 100 mg KOH. The results thus obtained show that purified high-molecular P, freed from oil, derived from the eastern high-sulfur petroleum, undergoes oxidation at a constant rate in the presence of metal catalysts, up to the formation of 50% fatty acids insoluble in water. With increasing extent of the process of oxidation the

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USSR /Chemical Technology. Chemical Products
and Their Application

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Fats and oils. Waxes. Soap.
Detergents. Flotation reagents.

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 32799

sharpest increase takes place, in relation to the consumed P, in the yield of the soap producing fraction of the C₁₀-C₂₀ acids without deterioration of their quality. Increase in the yield of C₁₀-C₂₀ acids used in soap manufacture is twice that of the low molecular C₅-C₉ acids, and four times greater than the increase in yield of volatile, water-soluble acids. In the course thereof the relative proportion of the losses decreases.

Card 4/4

MAN'KOVSKAYA, N.K., kandidat khimicheskikh nauk; BARSEGYAN, I.V., inzhener;
MOSKVINA, G.I., inzhener.

Effect of the composition of paraffins on the yield and quality of
synthetic fatty acids obtained from them. Masl.-zhir.prem.22 no.6:
20-24 '56. (MLRA 9:10)

1.Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov (for Man'kov-
skaya and Barsegyan).2.Shebekinskiy kombinat sinteticheskikh zhirnykh
kisleot i Zhirovege syr'ya (for Moskvina).
(Paraffins) (Acids, Fatty)

MOSKVA G.I.

3

Maths 2

7
 Prolonged oxidation of high-molecular-weight paraffins.
 N. S. Man'kovskaya and G. I. Monkevina. *Acetobolus*.
 Zhurnal Prikl. Khim., No. 1, 223 (1967); *ibid.* C.A. 51, 16804.
 Oxidation of high-mol. (448) paraffins was carried out
 first at 125° to an acid degree of 7-0 mg. KOH, and then at
 107°, by lowering the temp. gradually at the rate of 3°/hr.,
 by using K_2MnO_4 (0.2%) as the catalyst. The rate of
 air passed was 100 l./kg./hr. The rate of oxidation as
 detd. by the acid degrees of 1 was found to be const. up to
 100 mg. of KOH. The iodine no. and the average mol. wt.
 of the fatty acids produced decreased with the passage of
 time, while carbonyl and ester nos. remained unaffected.
 The yield of C₁₈-C₂₄ fatty acids was significantly higher than
 that of C₁₂-C₁₆, and the color of finished products was definitely
 improved and the manuf. losses were reduced to the min.
 Vladimir N. Krasovskiy

EM MT

MAN'KOVSEAYA, N.K.; MOSEVINA, G.I.

The role of catalysts in the process of paraffin oxidation to fatty acids. Zhur. prikl. khim. 31 no.2:261-265 F '58. (MIRA 11:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov i Shebekinskiy kombinat sinteticheskikh zhirnykh kislot i zhirnykh spirtov "SzhK i ZhS." (Paraffin) (Oxidation)

Moskwind, G.I.

1959: 338 p. Krieva 119 inserted. 2,000 copies printed.

Mr. E. H. Bannett, Corresponding Member, Academy of Sciences USSR, of Publishing House E. H. Gornovoy, 1959: 241 p. 7, 248 etc.

purpose: this collection of articles is intended for chemists interested in hydrocarbon oxidation reactions, particularly for those specializing in paraffin oxidation.

contains: this collection of 35 articles represents the results of investigations carried out by several groups on problems of hydrocarbon oxidation. The authors present their own theoretical and experimental data and also draw from current literature. In particular, the following articles are included:

M. G. Kuznetsov, E. G. Kozlov, and V. A. Kuznetsov. [Investigation of the oxidation of hydrocarbons by the liquid phase]. Collection of articles, Moscow, 1959: 338 p. Krieva 119 inserted. 2,000 copies printed.

McLaurin, J.G., and A.J. D'Alagni. [Investigation of the oxidation of hydrocarbons by the liquid phase]. Collection of articles, Moscow, 1959: 338 p. Krieva 119 inserted. 2,000 copies printed.

where: G.H. (Grossman), and A.P. (Gorodkov). Preparation of Various Types of Acids from Glycerol Derivatives. The authors give data on the reaction of nitro acids from the oxidation of various oils to obtain carboxylic and hydroxy carboxylic acids.

Cherbury, D.B., and V.K. Gajjar. [Investigation of the oxidation of hydrocarbons by the liquid phase]. Collection of articles, Moscow, 1959: 338 p. Krieva 119 inserted. 2,000 copies printed.

L00903-66 EWT(m)/EWA(d)/EWP(j)/T RM

ACCESSION NR: AP5020205

UR/0332/65/000/008/0014/0017
665.3/35:661.185.1

AUTHORS: ⁴⁴Moskvina, G. I. (Engineer); Volkova, L. D. (Engineer)

TITLE: Powdery cleansing agents on the basis of alkylsulfates, obtained by direct sulfation of nonsaponifiables - II alcohols. Communication 3

SOURCE: Maslozhirovaya promyshlennost', no. 8, 1965, 14-17

TOPIC TAGS: detergent, alkylsulfate, sulfation, cleaning compound

ABSTRACT: In their previous paper (Maslozhirovaya promyshlennost', 1965, 6), the authors noted the dependence of properties of the nonsaponifiables-II alcohols on the boiling point. In this present work, the effect of inorganic salts on the cleansing ability and surface-active properties of alkylsulfates derived from the nonsaponifiable-II fraction of alcohols boiling at 350, 375, and 400C was determined. The composition of the cleansing agents studied is given in Table 1 on the Enclosure. The cleansing ability was tested on wool, silk, capron, and cotton fabrics, and was compared with the performance of detergents "Novost" and "Progress." It was found that cleansing ability increases with the boiling point of the nonsaponifiable-II alcohol fraction. Orig. art. has: 5 tables.

Card 1/3

70903-66

ACCESSION NR: AP5020205

ASSOCIATION: Volgodonskiy filial VNIISINZha (Volgodon Branch of VNIISINZh) 44 ²

SUBMITTED: 00

ENCL: 01

SUB CODE: 00

NO REF SCV: 005

OTHER: 000

Card 2/3

DD0903-66

ENCLOSURE: 01

ACCESSION NR: AP5020205

0

Table 1

A	B	C	D	E
Алкисульфаты неспиртовых неомыляемых-II, выкипающих до температуры, С	Содержание алкисульфатов, %	Содержание несulfированных соединений, %	K*	Содержание сульфата натрия, %
350	34,75	1,7	4,89	2,30
375	34,00	1,14	3,35	2,32
400	34,00	0,70	2,06	2,00

- A - Alkylsulfates from alcohols of the nonsaponifiable-II fraction boiling at the temperature, C.
- B - Alkylsulfate content, %.
- C - Nonsulfated compounds content, %.
- D - K* - ratio of the nonsulfated substances to the active substance, %.
- E - Sodium sulfate content, %.

Card 3/3 DP

YAKOBSON, Mikhail Osipovich; CHIKHACHEV, S.A., nauchnyy red.; MOSEVINA,
I.Ya., red.; GOROKHOV, Yu.N., tekhn.red.

[Modern methods in machining spur gears] Sovremennye metody
obrabotki tsilindricheskikh zubchatykh koles. Moskva, Vses.
ucheb.pedagog.izd-vo Trudrezervizdat, 1958. 91 p. (MIRA 12:9)
(Gear cutting)

USSR / Human and Animal Physiology. Blood Circulation. T

Abs Jour: Ref Zhur-Biol., No 9, 1958, 41309.

Author : Moskvina, L. I.

Inst : NOT Given.

Title : Experimental Cardiosclerosis in Rats with Renal Hypertension.

Orig Pub: V sb.: Ateroskleroz i Koronar. nedostatochnost'
(Arteriosclerosis and Coronary Insufficiency) M.
Medgiz, 1956, 83-89.

Abstract: The greatest changes were noted in the heart of 16 out of 32 rats with hypertension (H), produced by wrapping of one kidney with cellophane and removal of the other. The rats were killed or died

Card 1/2

MOSKVINA, L. V.

12 июня
(с 10 до 16 часов)

А. В. Голенин,
Л. А. Остроумов,
С. И. Фридкин

К теории узких электромагнитных пучков в ионизированной среде

В. В. Астахов

Новый метод измерения скорости распространения радиоволн в фазовых средах

В. А. Мамкин

К теории нелинейных связей в фазовых средах СВЧ

В. А. Мамкин,
А. В. Виноградов

Исследования нелинейных связей в фазовых средах СВЧ

12 июня
(с 16 до 22 часов)

А. М. Соловьев,
А. Я. Мельник

Резонансные фазовые среды

79

В. И. Костин

Резонансные свойства и взаимодействие сложной формы волнового канала с радиоволнами распространяющимися в магнетронной фазовой среде

В. И. Костин

Л. А. Мельник

Исследования нелинейных фазовых связей в волноводной среде с фазовыми средами

В. В. Виноградов

Экспериментальное исследование волноводов

report submitted for the Confidential Meeting of the Scientific Technological Society of
Radio Engineering and Electrical Communications in A. S. Popov (VSEVE), Moscow,
8-18 June, 1959

9.3100,9.1300,9.1400

77501
SOI/11-1-1-1-720

AUTHORS: Koblova, M. M., Moskvina, L. V.

TITLE: Investigation of Nonreciprocal Phase Shifts in a Coaxial Line With Ferrite

PERIODICAL: Radiotekhnika i elektronika, 1960, Vol 5, Nr 1, pp 162-166 (USSR)

ABSTRACT: Designs of coaxial systems utilizing unequal phase shifts for opposite directions of propagation are not known as yet. However, coaxial systems analogous to waveguide circulators can be built. (1) Calculation of nonreciprocal phase shift. Such a calculation was made by A. L. Mikaelyan (Use of Ferrites in Wave Guide Technology, Doctor's thesis, USSR, 1956) for a coaxial line represented in Fig. 1 as a strip waveguide with a ferrite-dielectric plate. In this case, the dimensions of the coaxial line do not enter into the equation and cannot be evaluated. Some authors suggested using

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Investigation of Nonreciprocal Phase Shifts in a Coaxial Line With Ferrite

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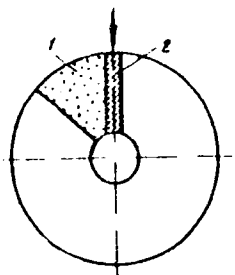
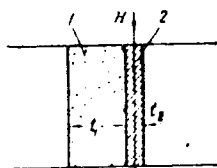


Fig. 1. Cross section of coaxial line containing a ferrite-dielectric plate: (1) dielectric; (2) ferrite.

Fig. 2. Plane-parallel analogue of coaxial line containing a ferrite-dielectric plate; (1) dielectric; (2) ferrite.

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Investigation of Nonreciprocal Phase
Shifts in a Coaxial Line With Ferrite

7722
SOV/109-5-1-14/20

a plane-parallel analogue in which the cross section of the coaxial line with a ferrite plate is considered as an infinite periodic structure consisting of strata (Fig. 3). Using the method of partial waves the expressions for the component field E_z and h_y in each layer can be written as:

$$\begin{aligned}
 E_{zI} &= (A_1 e^{-i\gamma_{1x}x} - B_1 e^{i\gamma_{1x}x}) e^{-i\gamma_{1y}y}, \\
 h_{yI} &= -\frac{\omega\epsilon_1}{\gamma_1^2} \gamma_{1x} (A_1 e^{-i\gamma_{1x}x} + B_1 e^{i\gamma_{1x}x}) e^{-i\gamma_{1y}y}, \\
 E_{zII} &= (A_2 e^{-i\gamma_{2x}x} - B_2 e^{i\gamma_{2x}x}) e^{-i\gamma_{2y}y}, \\
 h_{yII} &= \frac{\omega\epsilon_2}{\gamma_2^2} \left[-A_2 \left(\gamma_{2x} + i \frac{k}{\mu} \gamma_{2y} \right) e^{-i\gamma_{2x}x} + \right. \\
 &\quad \left. + B_2 \left(-\gamma_{2x} + i \frac{k}{\mu} \gamma_{2y} \right) e^{i\gamma_{2x}x} \right] e^{-i\gamma_{2y}y}, \\
 E_{zIII} &= (A_3 e^{-i\gamma_{3x}x} - B_3 e^{i\gamma_{3x}x}) e^{-i\gamma_{3y}y}, \\
 h_{yIII} &= -\frac{\omega\epsilon_3}{\gamma_3^2} \gamma_{3x} (A_3 e^{-i\gamma_{3x}x} + B_3 e^{i\gamma_{3x}x}) e^{-i\gamma_{3y}y}.
 \end{aligned} \tag{1}$$

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Investigation of Nonreciprocal Phase Shifts in a Coaxial Line With Ferrite

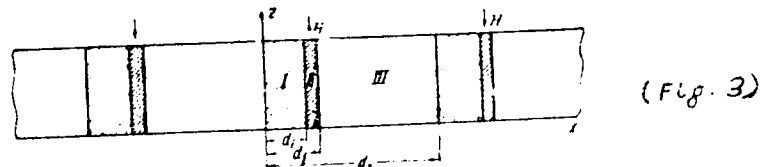
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SOV/109-5-1-14/2.

Boundary cases:

$$E_{I1}|_{x=0} = E_{I11}|_{x=d_1}, E_{I1}|_{x=d_1} = E_{I111}|_{x=d_1}, E_{I11}|_{x=d_1} = E_{I111}|_{x=d_1}, \quad (2)$$

$$h_{V1}|_{x=d_1} = h_{V111}|_{x=d_1}, h_{V1}|_{x=d_1} = h_{V11}|_{x=d_1}, h_{V11}|_{x=d_1} = h_{V111}|_{x=d_1}$$

result in six linear equations with six unknowns. In the case being considered, there are three layers: (I) dielectric; (II) ferrite; (III) air (see Fig. 3).



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Caption to Fig. 3 on Card 5/13

Investigation of Nonreciprocal Phase
Shifts in a Coaxial Line With Ferrite

Fig. 3
307/2000-1-1-1/2

Fig. 3. Infinite plane-parallel analogue of coaxial line, containing a ferrite-dielectric plate and filled with a periodic system: dielectric, ferrite, air.

Quantity d_2 is the average circumference of the cross section of the coaxial line. Thus, its dimensions are taken into consideration. d_1 and $(d_2 - d_1)$ are also the mean thicknesses of the dielectric and the ferrite, respectively. The solution of this system results in a transcendental equation for the propagation constant γ_y (Eq. 3). The presence of the term $(k/\mu \cdot \gamma_y)$ in first power stipulates the nonreciprocal properties of the system. The quantities ϵ_1 , μ_1 , k , γ_y used in the equation are complex. If calculations are made for that part of the magnetic field where the ferrite is saturated, but far off the magnetic resonance, the losses can be ignored.

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Investigation of Nonreciprocal Phase Shifts in a Coaxial Line With Ferrite

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307/100-1-1-1-1/

and ϵ , μ , k can be considered real values. Then γ_y is a real value, too, and determines the phase shift of the system. The calculation of nonreciprocal shifts for three coaxial cables containing CrMn-ferrite with a magnetization $4\pi M_s = 500$ gauss, $\Delta H = 250$ oersted, $\epsilon_{11} = 15\epsilon_0$ and dielectric with $\epsilon_d = 15\epsilon_0$ showed that the magnitude of a nonreciprocal shift of a 10 cm wave at an optimal selection of dielectric and ferrite thickness is rather high: $37^\circ/\text{cm}$. The calculations were made for two magnitudes of the magnetic field: $H_1 = 600$ oersted ($\mu = 0.48$; $k = 0.08$; $\mu_{\perp} = 0.08$) and $H_2 = 400$ ($\mu = 0.19$; $k = 0.21$; $\mu_{\perp} = 0.21$). Figs. 3, 4, and 5 show the curves of nonreciprocal phase shift vs. thickness of dielectric at different ferrite thicknesses.

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Investigation of Nonreciprocal Phase Shifts in a Coaxial Line With Ferrite

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$$\begin{aligned} & \left\{ \frac{\mu_1 \gamma_{1x}}{\mu_1 \gamma_{2x}} + \frac{\mu_1 \gamma_{2x}^2}{\mu_1 \gamma_{1x} \gamma_{2x}} \left[1 + \left(\frac{k \gamma_V}{\gamma_{2x}} \right)^2 \right] \right\} \sin a \sin b \cos c + \\ & + \left\{ \frac{\mu_1 \gamma_{2x}}{\mu_1 \gamma_{2x}} + \frac{\mu_1 \gamma_{2x}^2}{\mu_1 \gamma_{2x} \gamma_{2x}} \left[1 + \left(\frac{k \gamma_V}{\gamma_{2x}} \right)^2 \right] \right\} \cos a \sin b \sin c + \\ & + \left[\frac{\mu_1 \gamma_{1x}}{\mu_1 \gamma_{2x}} - \frac{\mu_1 \gamma_{2x}}{\mu_1 \gamma_{1x}} \right] \frac{k \gamma_V}{\gamma_{2x}} \sin a \sin b \sin c + \\ & + 2(1 - \cos a \cos b \cos c) + \left[\frac{\mu_1 \gamma_{1x}}{\mu_1 \gamma_{2x}} + \frac{\mu_1 \gamma_{2x}}{\mu_1 \gamma_{1x}} \right] \sin a \cos b \sin c = 0, \end{aligned} \tag{3}$$

where

$$a = \gamma_{1x} d_i; \quad b = \gamma_{2x} (d_2 - d_1); \quad c = \gamma_{2x} (d_2 - d_1); \quad |\mu| = \begin{vmatrix} \mu & -ik & 0 \\ ik & \mu & 0 \\ 0 & 0 & \mu_z \end{vmatrix};$$

$$\mu_{\perp} = \frac{k^2 - \mu^2}{\mu}; \quad \mu_1 = 1; \quad \mu_2 = 1; \quad \gamma_1^2 = \omega^2 \epsilon_1 \mu_1; \quad \gamma_{1x} = \sqrt{\gamma_1^2 - \gamma_V^2}.$$

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Investigation of Nonreciprocal Phase
Shifts in a Coaxial Line With Ferrite

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The characteristic impedance of the line was 50 ohms and dimensions were $D/d = 18 \text{ mm}/7.5 \text{ mm}$; $28 \text{ mm}/12.6 \text{ mm}$; $44 \text{ mm}/19.7 \text{ mm}$ ($H_1 = 600$ oersted). The influence of the thickness of ferrite is shown in Fig. 7 for a coaxial line with $D/d = 18 \text{ mm}/7.5 \text{ mm}$. Non-reciprocal shifts for a coaxial line with $d_3 = 64 \text{ mm}$ are shown in Fig. 8. The activity of the system drops in this case almost to one-half. Some experimental results: Tests were made with a 10 cm wave over a coaxial line, $d_3 = 64 \text{ mm}$ ($D = 28 \text{ mm}$, $d = 12.6 \text{ mm}$) and with ferrite-dielectric plates 100 mm long. The results of the tests expressing non-reciprocal shift (a) and losses (b) are shown in Fig. 9. The optimal thickness of the dielectric is found experimentally is 8 mm for a 3-mm-thick ferrite and coincides with the theoretical. In their conclusions the authors confirm that it is possible to achieve adequately high phase shifts to

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Investigation of Nonreciprocal Phase
Shifts in a Coaxial Line With Ferrite

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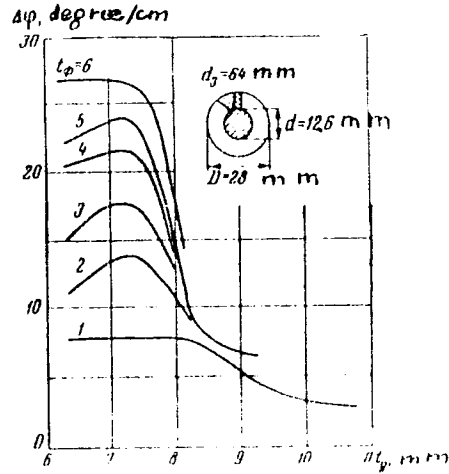
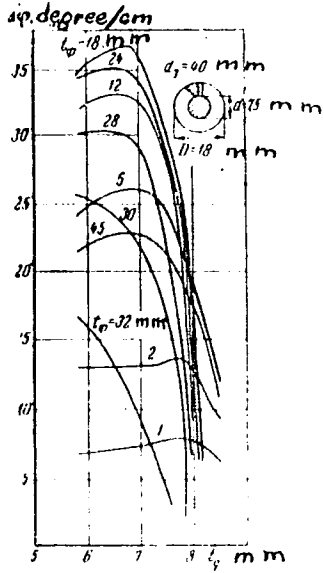
coaxial lines if sufficiently thick ferrites are used. The preparation of suitable ferrite with small losses will make possible designing of coaxial lines analogous to waveguide circulators. There are 9 figures; and 5 references, 3 Soviet, 2 U.S. The U.S. references are: B. J. Duncan, L. Swern, K. Tomiyas, G. Hannwacker, Proc. I. R. E., 1957, 45, 4, 483; M. Sucher, H. J. Carlin, Coaxial Line Non-reciprocal Phase Shifters, J. Appl. Phys., 1957, 28, 8, 921.

SUBMITTED: August 17, 1959

Card 9/13

Investigation of Nonreciprocal Phase Shifts in a Coaxial Line With Ferrite

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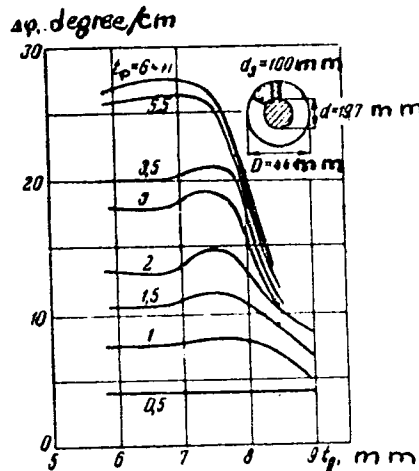
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Fig. 4

Fig.

Investigation of Nonreciprocal Phase Shifts in a Coaxial Line With Ferrite

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Figs. 4, 5, 6. Phase shift vs. thickness of dielectric plate and different ferrite thicknesses: Fig. 4, coaxial = 18/7.5; Fig. 5, 28/12.6; Fig. 6, 44/19.7.

Fig. 6

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77201 SOV/100-5-1-14/1

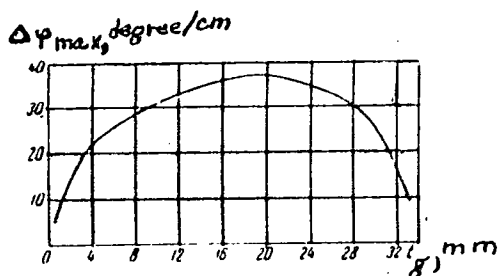


Fig. 7. Optimal phase shift vs. ferrite thickness.

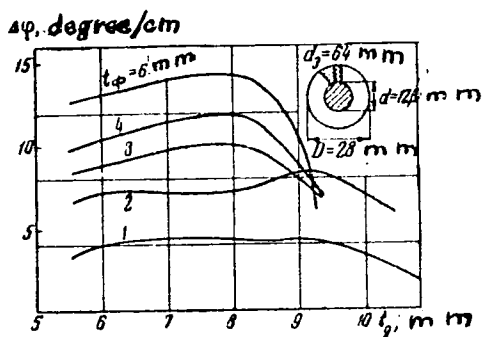


Fig. 8. Phase shift vs. thickness of dielectric plate for different ferrite plates (coaxial 28/12.6, $H = 400$ oersteds).

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Investigation of Nonreciprocal Phase Shifts in a Coaxial Line With Ferrite

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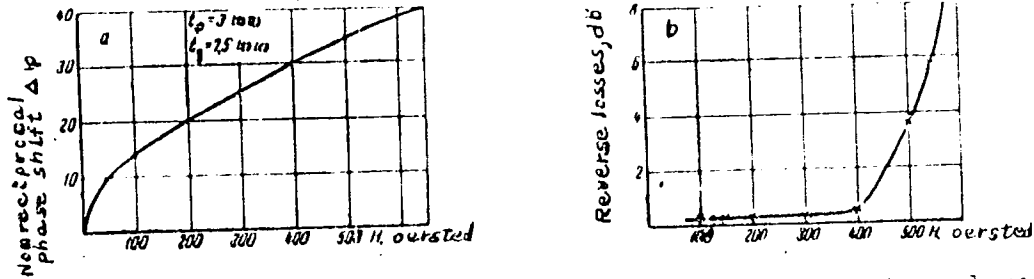


Fig. 9. Phase shift and losses vs. external magnetizing field.

Card 13/13

MOSKVINA, L. YE.

Botany - Study and Teaching

Aid of the Moscow municipal Young Naturalists' Club to teachers. Est. v shkole no. 2:80-82, Mr - Ap '52.

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

DYKHOVA, Z.I.; MATYUSHINA, N.A.; MOSKVIINA, M.M.; PROKOFIEVA, G.I.;
KHARLAMOV, V.T.; CHIRKOV, Ye.F.; FODOR, G.; FILIP, I.

[Radioactive isotopes and labeled compounds; a catalog;
Radioaktivnye isotopy i mechenye soedineniia; katalog.
Moskva, Atomizdat, 1964. 341 p. (MIRA 18:1)

1. Sovet ekonomicheskoy vzaimopomoshchi. Pustoyanaya komissiya po ispol'zovaniyu energii v mirovkh tebiyakh.

KOSKINA, N.I.

Scientific conference at the Ufa Aviation Institute. Izv. vys.
ucheb. zav.; av. tekhn. no.2:166-169 '58. (MIRA 11:6)

1. Ufinskiy aviatsionnyy institut.
(Mechanical engineering)

SHTUL'MAN, D. R.; MOSKVIN, O. A. (Moskva)

Chronic toxoplasmotic encephalitis with manifestations of
paroxysmal myoclonus and diencephalic crises. *Klin. med.* no.9:
126-129 '61. (MIRA 15:6)

1. Iz kliniki nervnykh bolezney (dir. - prof. V. V. Mikheyev)
I Moskovskogo ordena Lenina meditsinskogo instituta imeni I. M.
Sechenova.

(ENCEPHALITIS) (TOXOPLASMOSIS)