came into existence (see pattern). These derivatives are inclined to polymerize, i. e. to resinification; they represent an asymmetric substituted ethylene. Alkaline media favor the isomerization of citraconic acid to itaconic acid (Ref 3) . Such a medium can be created in a partial thermal decomposition in the dehydration of the alkylamide. In order to avoid this, the authors, apart from reducing the temperature of reaction, have conducted experiments aiming at the production of methylamide of citraconic acid by means of the effect of methylamine hydrochloride upon the citraconic anhydride. The reaction was carried out in one single stage without isolating the alkylamino acid (see pattern). The hydrogen ions released in the reaction favored dehydration and created an acid medium of the reaction mixture. By this isomerization was avoided. The yield of n-methylimide of citraconic acid fluctuated between 70 and 80 % of the amount of anhydride. In order to verify the assumption that the acid medium prevents isomerization it was attempted to produce n-methylimide by interaction between methylamine hydrochloride and itaconic anhydride. A yield of 40 % of the amount theoretically possible was obtained; the rest of the

reaction mixture was resinified. Therefore no n-methylimide of itaconic acid could be isolated. There are 1 table and 3 references, 1 of which is Soviet.

PRESENTED: May 16, 1958, by B. A. Kazanskiy, Academician

SUBMITTED: May 15, 1958

5(3)

AUTHORS: Sheremeteva, T. V., Zhenevskaya, M. G., Koton, M. M. SOV/62-59-3-22/37

TITLE: Synthesis and Polymerization of p-Butyl- and p-Butyrophenyl Methacrylic Esters (Sintez i polimerizatsiya p-butil- i p-butirofenilmetakrilovykh efirov). Communication 2 (Soobshcheniye 2)

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1959, Nr 3, pp 528-534 (USSR)

ABSTRACT: In the present paper various isomers of the p-butyl- and p-butyrophenyl methacrylic esters which have hitherto not been described were synthesized in order to investigate the effect of the branching of the alkyl substituents in the phenyl nucleus of the monomers on the properties of the polymers obtained from these esters. The synthesis was carried out in two stages: 1) Production of p-butyl- and p-butyrophenols, 2) production of p-butyl- and p-butyrophenyl methacrylates. In the course of the investigation of the properties of the polymers obtained from different isomeric butylphenyl methacrylates their different behaviour towards the solvents was observed. Products in which the butyl group is connected

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with the phenyl nucl[illegible] tertiary or tertiary carbon proved to be soluble. In those cases in which the linking by the secondary [illegible] was brought about by the carbonyl group, the polymers were only partly soluble. The insolubility of the polymers is due to the branching of the polymer chain with subsequent cross-linking which leads to the formation of three-dimensional structures. Since the soluble and the insoluble polymers are found due to the polymerization of the isomeric butylphenyl esters of the methacrylic acid of the chain which causes the branching of the cross-linking probably does not take place in the main chain but in the alkyl substituent and depends on its structure. The different structure of the substituents contained in the benzene nucleus of the synthesized esters causes the different vitrification temperatures of the polymers obtained from these esters. The strongest branching of the substituents causes a higher vitrification temperature. This temperature fluctuates in the case of various isomers between 47 and 144°. The substitution of the CH_2-group in the benzene residue by the CO-group i.e.

Card 2/3 the transition from one alkyl into an acyl substituent

increases the vitrification temperatures by 35° on the average. The degree of the conversion of a monomer into a polymer also depends on the character of the substituent i.e. esters with a branched structure attain a lower degree of conversion. There are 4 tables and 9 references, 6 of which are Soviet.

ASSOCIATION: Institut vysokomolekulyarnykh soyedineniy Akademii nauk SSSR (Institute of High-Molecular Compounds of the Academy of Sciences, USSR)

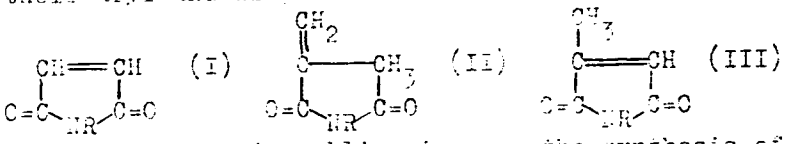
SUBMITTED: June 8, 1957

AUTHORS: Cheremeteva, T. V., Lavina, G. M. SOV/62-59-5-13/10

TITLE: Synthesis of Some Unsaturated Compounds Containing Nitrogen (Sintez nekotorykh nenredel'nykh azotsoderzhashchikh soyedineniy). Communication 1. (Soobshcheniye 1.)

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1959, Nr 5, pp 845-848 (USSR)

ABSTRACT: Unsaturated heterocyclic compounds containing nitrogen have recently gained practical importance as monomers of the sovcytium and as insecticides and fungicides. In connection with it, the authors synthesized the imides of maleic (I), itaconic (II), and citraconic (III) acid, investigated them and determined out their properties. Likewise, they investigated their acyl and alkyl derivatives.



Little is known in publications on the synthesis of unsubstituted imides of these acids. The data on the synthesis

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Synthesis of Some Unsaturated Compounds Containing Nitrogen. Communication 1.

SOV/[illegible]-59-5-13/40

mentioned which are known in publications are briefly characterized (Refs 1-12). The synthesis of the N-acyl-substituted imides (I) and (III) is such a way it can be carried out in two ways: 1) by the distillation of maleic acid aniline and 2) by dehydrogenation of monoacylmaleamide which was obtained from maleic anhydride and aniline. The synthesis of pure imides is rendered more difficult by the easy isomerization of this group of acids and their derivatives (maleic acid $\rightleftharpoons$ fumaric acid etc), by the good solubility of the substances in water and many organic compounds, by the tendency to polymerization at high temperatures, and by their volatility. In this work, therefore, the synthesis was carried out at temperatures as low as possible and in a neutral medium. The synthesis was carried out in both ways mentioned. Alkyl imides of citraconic acid and citraconic anhydrides were obtained; the yield ranged from 37 to 50 % of the yield theoretically possible. Moreover, N-methyl-, N-ethyl-, N-isopropyl-, N-butyl-, N-isobutyl-, N-octyl-, and N-cyclohexylmonoamide of citraconic acid and the

Card 1/4 corresponding imides (except N-isobutyl-) not yet described

Synthesis of Some Unsaturated Compounds Containing Nitrogen. Communication 1. SOV/62-59-5-13/40

In publications were synthesized. The characteristics of these compounds, the physical constants, mole refraction, molecular weight, and elementary composition are listed in tables 1 and 2. There are 1 table and 14 references.

ASSOCIATION: Institut vysokomolekulyarnykh soyedineniy Akademii nauk SSSR (Institute of High-molecular Compounds of the Academy of Sciences, USSR)

SUBMITTED: July 25, 1957

Card 3/3

SHERMETEVA, T.V.; STOLYAROVA, T.Yu.; LARINA, G.N.

Preparation and properties of carboxyalkylene derivatives of citraconimide. Izv. AN SSSR. Otd.khim.nauk no.9:1680-1685 S '61. (MIRA 14:9)

1. Institut vysokomolekulyarnykh soyedineniy AN SSSR.
(Maleimide)

SHEREMETEVA, T.V.; BORISOVA, Z.V.; KUDRYAVTSEV, V.V.

Synthesis of N-β-trifluoro derivatives of maleic and citraconic acids. Izv. AN SSSR Otd.khim.nauk no.12:2237-2239 D '61. (MIRA 14:11)

1. Institut vysokomolekulyarnykh soyedineniy AN SSSR.
(Maleic acid) (Citraconic acid)

29737
S/190/61/003/011/007/016
B124/B101

15.8000 2204

AUTHORS: Larina, G. N., Borisova, Z. V., Sheremeteva, T. V.

TITLE: Copolymerization of N-methylcitraconimide with some vinyl compounds

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 3, no. 11, 1961, 1664-1668

TEXT: The radical bulk copolymerization constants of four binary monomer couples consisting of N-methylcitraconimide (M_1), acrylonitrile, β vinyl-naphthalene, styrene, and methylmethacrylate were determined by copolymerization in the presence of 0.3 % by weight of benzoyl peroxide in sealed ampoules (Table 1). The N-methylcitraconimide - acrylonitrile system was heated to 60°C and the other systems to 70°C up to a conversion of 5-25 %. The polymers were solved in chloroform and reprecipitated with methyl alcohol, filtered, and dried to constant weight. The nitrogen content of the polymers was determined according to Dumas and the composition of the copolymers calculated from the results (Table 2). The copolymerization constants were calculated from the integral equation of F. R. Mayo and F. M. Lewis (Ref. 12: J. Amer. Chem. Soc., 66, 1594, 1944),

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Copolymerization of..

with the method suggested by S. N. Ushakov, S. P. Mitsengendler, and G. A. Shtraykhman (Ref. 13: Uspekhi khimii, 19, 265, 1950) being used for the experimental determination of the parameter p for the systems 1, and 3. The mean value of p was determined for all systems by the analytical method of G. A. Shtraykhman, A. A. Vansheydt, and G. A. Petrova (Ref. 14: Zh. fiz. khimii, 32, 5, 1958). M_1 forms azeotropic copolymers with all mentioned monomers except for methylmethacrylate; the composition of the azeotropic copolymers with acrylonitrile, β-vinylnaphthalene, and styrene is given in Table 2. The probable distribution of monomer units in the systems N-methylcitraconimide - β-vinylnaphthalene and N-methylcitraconimide - styrene calculated from equations developed by F. T. Wall (J. Amer. Chem. Soc., 66, 2050, 1944) and S. S. Medvedev (Ref. 10: Dokl. AN SSSR 56, 177, 1947) which show a tendency to alternation is given in Table 3. The reactivity of the radicals of the mentioned monomers to M_1 decreases in the order: styrene > β-vinylnaphthalene > acrylonitrile > methylmethacrylate. The specific activity Q and the factor e characterizing the polarity of double bonds for M_1 were calculated from the copolymerization constants of M_1 with styrene and methylmethacrylate by using the equations of T. Alfrey and C. C. Price (Ref. 15: J. Polymer Sci. 2, 101, 1947);

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Copolymerization of...

values of $Q = 0.8$ and $e = 1$ were obtained for M_1. There are 5 tables and 15 references: 6 Soviet and 9 non-Soviet. The three most recent references to English-language publications read as follows: L. E. Coleman, J. A. Conrady, J. Polymer Sci. 38, 241, 1959; J. Dawning, J. C. N. Drewitt, Brit. Pat. 712319, 1954; E. C. Chapin, G. E. Ham, C. L. Mills, J. Polymer Sci., 4, 597, 1949.

ASSOCIATION: Institut vysokomolekulyarnykh soyedineniy AN SSSR (Institute of High-molecular Compounds AS USSR)

SUBMITTED: December 23, 1960

Table 1. Copolymerization constants of N-methylcitraconimide with some vinyl compounds. Legend: (I) System no.; (II) monomer M_2; (III) acrylonitrile; (IV) 3-vinylnaphthalene; (V) styrene; (VI) methylmethacrylate.

Table 2. Composition of azeotropic copolymers. Legend: (I) System no.; (II) composition of the azeotropic copolymer, m_1/m_2; (III) found; (IV) calculated.

SHEREMETEVA, T.V.; GUSINSKAYA, V.A.; KUDRYAVTSEV, V.V.

Synthesis of N-substituted diamides of succinic and citraconic acids. Izv. AN SSSR Ser.khim. no.10:1821-1823 O '63. (MIRA 17:3)

1. Institut vysokomolekulyarnykh soyedineniy AN SSSR.

ACCESSION NR: AP4019008 S/0062/64/000/002/0331/0334

AUTHORS: Zhenevskaya, M.G.; Sheremeteva, T.V.; Koton, M.M.

TITLE: Synthesis and polymerization of p-butyl- and p-butyrophenyl methacrylates. Communication 3. Concerning ester structures and their tendency to polymerize

SOURCE: AN SSSR. Izv. Seriya khimicheskaya, no.2, 1964, 331-334

TOPIC TAGS: parabutyl methacrylate polymerization, polymerization, parabytyrophenyl methacrylate polymerization, ester structure, methacrylate phenylmethacrylic ester , substituted phenylmethacrylic ester

ABSTRACT: The purpose of this investigation is to find how the polymerization rate of the above esters is affected by the structure of the substituent. The determination of the polymerization rate of substituted phenylmethacrylic esters was made for the following monomers: p-normal, p-isoprimary, p-tertiarybutylphenylmethacrylates and p-normal, p-isoprimary butyrophenylmethacrylates. Polymerization was carried out at 80C in the presence of benzoyl peroxide (0.3%) and in a nitrogen atmosphere because oxygen inhibits polymerization. It was

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ACCESSION NR: AP4019008

found that esters with the least branched substituent are the slowest to polymerize, probably due to the transmission of the chain (as a result of a hydrogen torn off the alkyl substituent in the benzene nucleus). The readiness of the hydrogen atom to be torn off depends on the structure of the alkyl substituent. The substitution of an acrylic residue for the alkyl residue speeds up polymerization; this is explained by the presence of an electro-negative group C = O in the acyl residue causing a shift of the electron cloud from the double bond toward the substituent, and diminishing the activation energy of breaking the double bond. Orig. art. has 4 figures, 3 formulas, 1 table.

ASSOCIATION: Institut vy*sokolmolekulyarnykh soyedineniy AN SSSR (Institute of Highmolecular Compounds AN SSSR)

SUBMITTED: 20Sep62 DATE ACQ: 27Mar64 ENCL: 00

SUB CODE: CH NR REF SOV: 003 OTHER: 000

Card 2/2

SHEREMETEVA, T.V.; LARINA, G.N.

Polymerization of imides of unsaturated dicarboxylic acids. Dokl. AN SSSR 162 no.6:1323-1325 Je '65. (MIRA 18:7)

1. Institut vysokomolekulyarnykh soyedineniy AN SSSR. Submitted December 12, 1964.

L 32923-66 EWT(m)/EWP(j)/T RM/WW
ACC NR: AP6017599 (A) SOURCE CODE: UR/0183/66/000/001/0009/0010

AUTHOR: Kamalov, S. K.; Pyrkov, L. M.; Batrakova, T. V.; Sheremeteva, T. V. 33 32

ORG: IVS AN SSSR

TITLE: Effect which amidocitraconic acid and its N-alkyl derivatives have on the structural and mechanical properties of nitron fiber

SOURCE: Khimcheskiye volokna, no. 1, 1966, 9-10

TOPIC TAGS: aliphatic dicarboxylic acid, alkyl radical, synthetic fiber, polyacrylonitrile, plasticizer

ABSTRACT: The authors study the strength of fibers as a function of their previous history and various structural parameters, in particular the overall orientation evaluated by isotrometric heating. The fibers tested were pure polyacrylonitrile containing 4 mol.% N-ethylamide of citraconic acid. Temperature-stress curves are given for isothermal heating of fibers subjected of identical plastification stretching and of fibers with identical strength but different compositions and molecular weights. Curves are also given showing the modulus of elasticity of the fibers as a function of temperature. Overall fiber orientation (determined from the maximum on the isothermal heating curves) increases in polyacrylonitrile fibers of equal strength as the concen-

UDC: 677.742.2

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ACC NR: AP6017599

tration of the secondary component in the copolymer is increased from 0 to 19%. It is possible that the large monomeric units of the copolymer act as an internal plasticizer which aids in orientation of amorphous sections of the fibrils. Orig. art. has: 3 figures, 2 tables.

SUB CODE: 11, 07/ SUBM DATE: 100ct64/ ORIG REF: 003/ OTH REF: 000

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3(7) PHASE I BOOK EXPLOITATION SOV/2113

Tsentral'nyy institut prognozov

Voprosy morskikh gidrometeorologicheskikh prognozov (Problems of Marine Hydrometeorological Forecasting) Moscow, Gidrometeoizdat (otd-niye), 1958. 88 p. Errata slip inserted. (Series: Its: Trudy, vyp. 76) 1,000 copies printed.

Sponsoring Agency: USSR. Glavnoye upravleniye gidrometeorologicheskoy sluzhby.

Ed. (Title page): N.A. Belinskiy; Ed. (inside book): N.N. Goryunkin; Tech. Ed.: I.N. Zarin.

PURPOSE: This issue of the Institute's Transactions is intended for hydrometeorologists and advanced students in the field.

COVERAGE: This collection of articles deals with the problem of forecasting the onset of seasonal ice phenomena. Individual papers treat conditions in the Japanese, Bering, White, and Caspian Seas, the Dvina, Bug, and Dnepr Rivers. No personalities are mentioned. References accompany each article.

TABLE OF CONTENTS:

SHEREMETEVSKAYA, O.I.

PHASE I BOOK EXPLOITATION SOV/4582

Moscow. Tsentral'nyy institut prognozov

Voprosy morskikh gidrometeorologicheskikh prognozov (Problems of Oceanographic Hydrometeorologic Forecasting) Moscow, Gidrometeoizdat, Otd-niye, 1959. 69 p. (Series: Its: Trudy, vyp. 91) Errata slip inserted. 300 copies printed.

Sponsoring Agencies: Tsentral'nyy institut prognozov; Glavnoye upravleniye gidrometeorologicheskoy sluzhby pri Sovete Ministrov SSSR.

Ed. (Title page): A.I. Karakash; Ed. (Inside book): M.N. Goryushkin; Tech. Ed.: I.M. Zarkh.

PURPOSE: This issue of the Transactions of the Central Institute of Forecasting is intended for scientific and field workers of the Hydrometeorological Service. It will be of interest to all meteorologists, hydrologists, and oceanographers.

COVERAGE: The articles in this collection deal mainly with the forecasting of water temperature in the open sea and in coastal waters. Methods of long-range forecasting of spring ice behavior are also analyzed. The results of investigating the possibility of extrapolating the fields of cyclonic and anticyclonic activity, using Chebyshev's polynomials, are discussed. No personalities are mentioned.

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SHEREMETEVSKAYA, O.I.

Calculating water temperature variations during the warm period of the year. Trudy TSIP no.91:64-70 '59. (MIRA 12:8)
(Ocean temperature)

S/050/60/000/009/009/XX
B012/B067

3.5000
3.6000

AUTHOR: Sheremetevskaya, O I.

TITLE: Consideration of the Air Stratification in Calculating Evaporation and Heat Exchange

PERIODICAL: Meteorologiya i gidrologiya, 1960, No 9, pp. 16-22

TEXT: In the papers of M. I. Budyko (Ref. 4), D L Laykhtman (Ref. 7), A S Monin and A M Obukhov (Ref 13), M. P. Timofeyev (Ref 4), L. T. Matveyev (Ref 11), A. R. Konstantinov (Ref. 10), N A Belinskiy (Ref 2), V. S Samoylenko (Ref. 15), and V. V. Shuleykin (Ref. 17) methods were suggested for taking account of the effect of stratification on the turbulent exchange in the air layer above the ground by using the data of gradient measurements However, determinations of the gradients above the seas as well as the parameters necessary for the calculations are difficult and complicated The present paper gives a simplified method for calculating evaporation and heat exchange on the basis of the experimental data on the vertical distribution of the meteorological elements above the seas and on the basis of the theory of turbulent mixing (de-

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Consideration of the Air Stratification in Calculating Evaporation and Heat Exchange

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B012/B067

law for the change of the wind velocity with height is a first approximation for the layer which is 1 - 15 m above the sea surface. The ratio of the velocities in two levels does not remain constant. With the same wind velocity at the 15 m - level the vertical wind velocity gradients are higher in the case of stable stratification than in the case of indifferent stratification. For the same air and water temperature drop the intensification of wind velocity is connected with the vertical gradients of wind velocity. The difference in the profile is especially large in the case of stable stratification. In the course of the experiments an empirical formula was obtained for calculating the vertical distribution of wind velocities above the sea from data of ordinary ship observations. This formula, (1), reads as follows:

$v_z - v_1 = \lg(v_z + 1.0)\left[a(t_{a_z} - t_w) + b\right]$; $v_z - v_1$ is the wind velocity drop (in m/sec) at the levels 1 and z (in m); $t_{a_z} - t_w$ is the difference between the air temperature at the z-level and the temperature of the water surface; $a = 0.19 \lg z + 0.37$; $b = 0.81 \lg z + 0.24$. The formula takes ac-

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Consideration of the Air Stratification in Calculating Evaporation and Heat Exchange

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B012/B067

count of the rise of the vertical velocity gradient with increasing stability of the atmosphere and the intensification of wind. It reproduces the decrease of the influence of the thermal factor on the formation of the vertical wind profile with a rise in the wind velocity. Since the dependence of the vertical air temperature gradient in the 1-15 m - layer on the difference between the water and air temperature with a stable and an unstable stratification differs, two empirical formulas were obtained for this relation: for the stable stratification formula (2): $t_{a_z} - t_{a_1} = (0.45 \lg z + 0.42)(t_{a_z} - t_w)^{2/3}$ and for the unstable stratification formula (3): $t_{a_1} - t_{a_z} = (0.46 \lg z + 0.28)(t_w - t_{a_z})^{0.45}$. Here, t_{a_1} denotes the air temperature at the levels 1 and t_{a_z} the air temperature at the z-level, t_w the temperature of the sea surface and z the sea level at which the air temperature was measured. Besides, a relation was observed between the moisture deficiency Δ_z at the z-level and the moisture

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Consideration of the Air Stratification in Calculating Evaporation and Heat Exchange

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deficiency Δ_1 at the 1 m - level: formula (4): $\Delta_1 = (1.15 - 0.40 \lg z)\Delta_z - (0.15 \lg z + 0.01)(t_{a_z} - t_{a_1})$ With these four empirical formulas the vertical gradients of the meteorological elements can be calculated from the ordinary ship observations. When deriving the formulas of evaporation and heat exchange it was assumed that the coefficients of the momentum exchange, of the eddy diffusion and of the eddy thermometrical conductivity are equal. Proceeding from the equation for the eddy diffusion formula (12): $E = 7.6\, v_1 \Delta_1$ is derived for the evaporation, and proceeding from the equation for the eddy thermometrical conductivity formula (13): $p = 0.22\, v_1(t_{a_1} - t_w)$ is obtained. E denotes the rate of evaporation, v_1 the wind velocity at the 1 m - level, and Δ_1 the moisture deficiency at the 1 m - level. p is the rate of heat exchange. With these formulas (12) and (13) the evaporation and heat exchange can be calculated when measuring the meteorological elements on ships from any level of the

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Consideration of the Air Stratification in Calculating Evaporation and Heat Exchange

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B012/B067

1 - 15 m - layer Since in this case the data of ship observations are reduced to the 1 m - level, these two formulas allow an approximative consideration of the rules governing the vertical distribution of air temperature, air moisture, and wind velocity above the sea as depending on the stratification of the atmosphere The papers by B D Zaykov (Ref 9) and Ye G Arkhipova (Ref 1) are mentioned There are 1 figure and 22 references: 17 Soviet, 1 German, and 2 Japanese

Card 6/6

SHEREMETEVSKAYA, O.I.

Heat balance of the ocean surface in Antarctica. Okeanologiia 1 no.5:835-836 '61. (MIRA 15:3)

1. TSentral'nyy institut prognozov.
(Antarctic regions--Ocean temperature)

SHEREMETEVSKAYA, O.I.

Calculating the distribution of water temperature and determining the position of the ice edge in the Northern Caspian during the fall period. Trudy Okean.kom. 11:150-157 '61. (MIRA 14:7)
(Caspian Sea--Ocean temperature) (Caspian Sea--Sea ice)

SHEREMETEVSKAYA, O.I., kand. geograf. nauk

Forecasts of nonperiodic changes in the level of the Caspian Sea. Meteor. i gidrol. no.9:33-36 S '64. (MIRA 17:9)

1. TSentral'nyy institut prognozov.

ISAYEV, N.S.; BELOVA, Yo.I.; KUKARKINA, M.N.; OZHIGANOVA, Z.I.; SHEREMETEVSKAYA, T.A.; YURIN, B.A., red.; KOROBOVA, N.D., tekhn. red.

[Documents of proletarian solidarity; collected documents on the cooperation of Soviet Union workers with the workers of Asia, Africa and Latin America in 1918-1961]Dokumenty proletarskoi solidarnosti; sbornik dokumentov o sodruzhestve trudiashchikhsia Sovetskogo Soiuza s trudiashchimisia stran Azii, Afriki i Latinskoi Ameriki v 1918-1961 godakh. Moskva, Profizdat, 1962. 207 p. (MIRA 15:12)

(Trade unions)

SHEREMETEVSKAYA, V.V.

Work of the organizational and methodological office of the Leningrad Province Clinical Hospital. Vop.okh.mat. i det. 4 no.6:68-71 N-D '59. (MIRA 13:4)

1. Iz organizatsionno-metodicheskogo kabineta Leningradskoy oblastnoy klinicheskoy bol'nitsy.
(LENINGRAD PROVINCE--CHILDREN--INSTITUTIONAL CARE)

SHEREMETEVSKAYA, Valeriya Vladimirovna; TUR, Aleksandr Fedorovich, red.

[Educational work with the ill and convalescing child; guide for medical personnel in children's hospitals and sanatoriums] Vospitatel'naia rabota s bol'nym i vyzdoravlivaiushchim rebenkom; v pomoshch' meditsinskim rabotnikam detskikh bol'nits i sanatoriev. Leningrad, Medgiz, 1960. 67 p. (MIRA 13:9)
(CONVALESCENCE) (EDUCATION OF CHILDREN)

SHEREMETEVSKIY, Pavel Viktorovich [deceased]; SAVZDARG, V.E., redaktor; PAVLOVA, M.M., tekhnicheskiy redaktor

[Cucumbers] Ogurtsy. Izd. 2-oe, ispr. i dop. Moskva, Gos. izd-vo selkhoz. lit-ry, 1956. 79 p. (MLRA 9:9)
(Cucumbers)

SHEREMETOVSKAYA, V.V. (Leningrad)

"Physical therapy without apparatus and physical prophylaxis." Edited by D.A.Markov, E.F.Kalitovskii. Reviewed by V.V.Sheremetovskaia. Med. sestra 20 no.3:41-42 Mr '61. (MIRA 14:5)
(OPEN-AIR TREATMENT) (MARKOV, D.A.) (KALITOVSKII, E.F.)

BARDIN, I.; BELAN, R.; BEKHTIN, N.; BOYKO, V.; BORISOV, A.; BYCHKOV, V.; VASILENKO, S.; VINOGRADOV, V.; VISHNEVSKIY, A.; VODNEV, G.; DVORIN, S.; DZHAPARIDZE, Ye.; DIDENKO, V.; D'YAKONOV, N.; ZHURAVLEV, S.; ZAKHAROV, A.; IVANOV, I.; KIRSANOV, M.; KOLYADA, G.; KOROBOV, P.; LESKOV, A.; LUKICH, L.; LYUBIMOV, A.; MELESHKIN, S.; MYRTSYMOV, A.; PERTSEV, M.; PETRUSHA, F.; PITERSKIY, A.; POPOV, I.; RAYZER, D.; ROZHKOV, A.; SAPOZHNIKOV, L.; SEDOV, P.; SOKOLOV, P.; TEVOSYAN, I.; TIKHONOV, N.; TISHCHENKO, S.; FILIPPOV, B.; FOMENKO, N.; SHELKOV, A.; SHEREMET'YEV, A.

Fedor Aleksandrovich Merkulov. Koks i khim.no.7:62 '56. (MLRA 9:12)
(Merkulov, Fedor Aleksandrovich, 1900-1956)

SHERENBERG, A.

Panel heating. Na stroi. Ros. 6 no.2:21 F '65.
(MIRA 19:1)

1. Glavnyy tekhnolog tresta TSentrosantekhmontazh-2.

[redacted], A. . .

"Investigating the Effect of Heat and Mechanical Treatment on the Quality of Piston Rings." Cand Tech Sci, Ural Polytechnic Inst, Sverdlovsk, 1954. (RZhKhim, No 4, Feb 55)

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

SHEREMET'YEV, A.D.; ASTANIN, V.N.

Modernization of lathes for high-speed drilling of deep holes in heat-resistant steel valves. Stan.i instr. 33 no.3:37-38 Mr '62. (MIRA 15:2)

(Lathes—Technological innovations)

BALZHI, M.F.; BEREZKIN, P.N.; GOL'DSHTEYN, Ya.Ye.; GAL'PERIN, Ye.B.; YEDLICHKO, V.V.; KERAS, A.F.; LEKUS, I.D.; POTEKUSHIN, N.V.; POZDNYSHEV, V.M.; SUBBOTIN, N.A.; SAVINTSEV, R.I.; TAMAROVSKIY, V.M.; SHEREMET'YEV, A.D.; BAKSHI, O.A., kand. tekhn. nauk, retsenzent; BONDIN, Ye.A., inzh., retsenzent; BOYKO, F.I., inzh., retsenzent; VASIN, Yu.P., inzh., retsenzent; LAZAREV, A.A., inzh., retsenzent; SOROKIN, A.I., inzh., retsenzent; KON'KOV, Arkadiy Sergeyevich, dots., red.; DUGINA, N.A., tekhn. red.

[Economy of metals in the machinery industry]Ekonomiia metallov v mashinostroenii. [By]M.F.Balzhi i dr. Moskva, Mashgiz, 1962. 235 p. (MIRA 16:2)
(Machinery--Design and construction)
(Metals, Substitutes for)

SHEREMET'YEV, A. V.

A. V. Sheremet'yev and N. I. Astashkina, 24-kanal'naya sistema mnogokratnogo telefonirovaniya po simmetrichnym param magistral'-mykh kabeley (K-24) /The 24-Channel System of Multiplex Telephony by Symmetrical Pairs of Main Cables (K24-)/, Svyazizdat, 2 sheets, 8,000 copies

This brochure discusses the basic technical data and gives skeleton schematics, individual component assemblies, and the design of the apparatus of the 24-channel system of type K-24.

It is intended for engineering-technical personnel of the toll service.

SO: U-6472, 23 Nov 1954

SHEREMETEV, A.V.; ASTASHKINA, N.N.

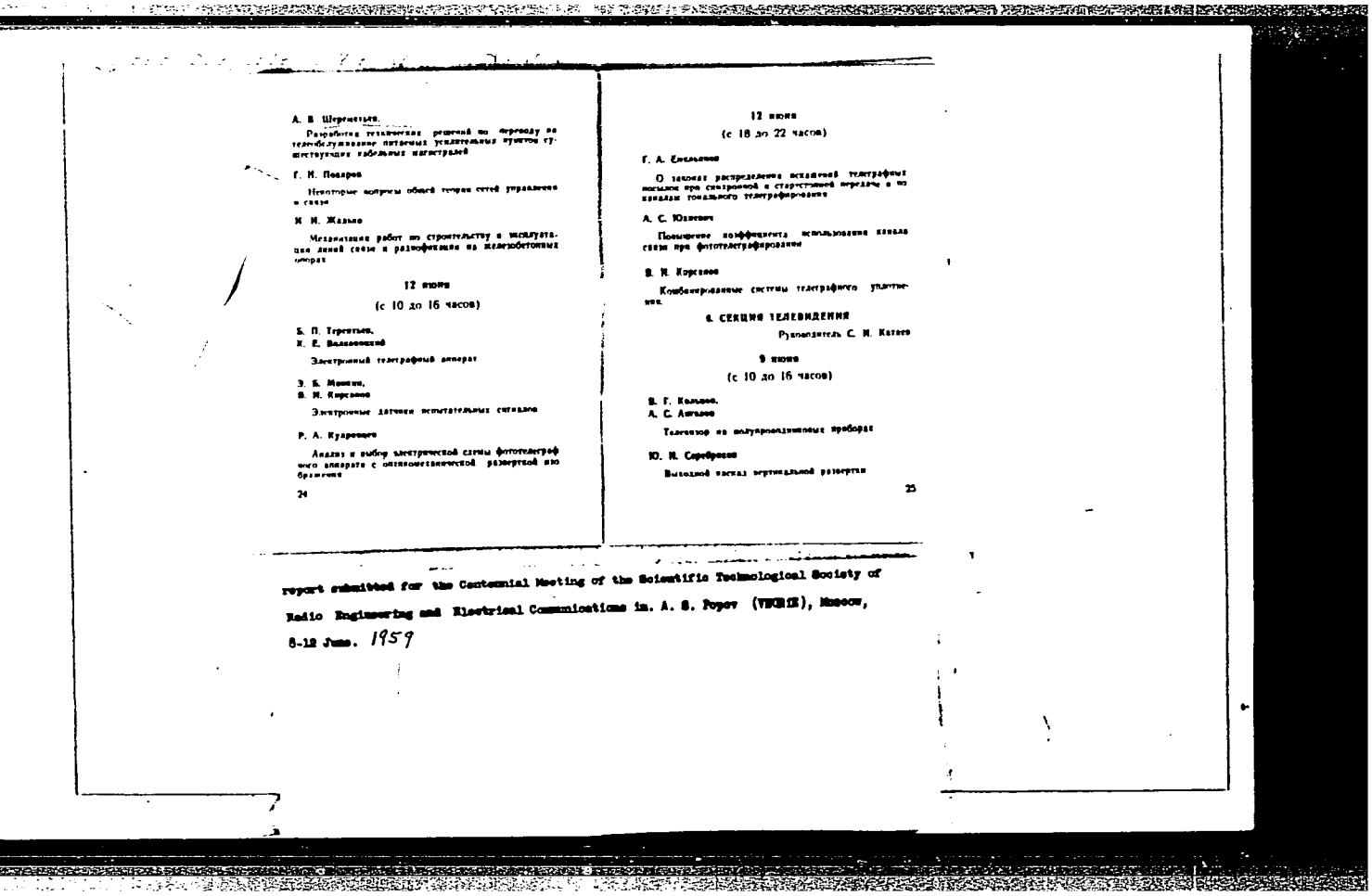
[24-channel multiple telephone system (K-24)] 24-kanal'naia sistema mnogokratnogo telefonirovaniia (K-24). Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1953. 26 p. (MLRA 7:1)
(Telephone--Apparatus and supplies)

SHEREMETYEV

SHEREMETYEV, A.V., kandidat tekhnicheskikh nauk, nauchnyy sotrudnik;
ARKHANGEL'SKIY, G.A., inzhener, nauchnyy sotrudnik.

Shortcomings in VUS-12 apparatus and methods of eliminating them. Vest. sviazi 16 no.12:9-11 D '56. (MLRA 10:2)

1. Kiyevskoye otdeleniye TSentral'nogo nauchno-issledovatel'skogo instituta svyazi.
(Amplifiers, Electron-tube)



А. В. Шереметьев.

Разработка технических решений по переводу на телеобслуживание питающих усилительных пунктов существующих кабельных магистралей

Г. И. Поздеев

Некоторые вопросы общей теории сетей управления и связи

И. И. Жалыо

Механизация работ по строительству и эксплуатации линий связи и радиофикации на железобетонных опорах

12 июня

(с 10 до 16 часов)

Б. П. Терентьев,
И. Е. Волковицкий

Электронный телеграфный аппарат

З. Б. Минкин,
В. И. Корсаков

Электронные датчики испытательных сигналов

Р. А. Кудревецкий

Анализ и выбор электрической схемы фототелеграфного аппарата с оптико-механической разверткой изображения

24

12 июня

(с 18 до 22 часов)

Г. А. Емельянов

О законах распределения искажений телеграфных посылок при синхронной и стартстопной передаче и на каналах тонального телеграфирования

А. С. Юдинцев

Повышение коэффициента использования канала связи при фототелеграфировании

В. И. Корсаков

Комбинированные системы телеграфного уплотнения.

4. СЕКЦИЯ ТЕЛЕВИДЕНИЯ

Руководитель С. И. Катаев

9 июня

(с 10 до 16 часов)

В. Г. Колпаков,
А. С. Антышев

Телевизор на полупроводниковых приборах

Ю. И. Серафимов

Выходной каскад вертикальной развертки

25

report submitted for the Centennial Meeting of the Scientific Technological Society of Radio Engineering and Electrical Communications im. A. S. Popov (VNIIRE), Moscow, 8-12 June. 1959

GRISHKO, N.A.; SHEREMET'YEV, A.V., kand.tekhn.nauk

Auxiliary VUS-12-2 amplifying station. Vest. sviazi 20 no.11:3-5 N '60. (MIRA 13:12)

1. Starshiy inzhener Kiyevskogo otdeleniya TSentral'nogo nauchno-issledovatel'skogo instituta svyazi (for Grishko). 2. Nachal'nik laboratorii Kiyevskogo otdeleniya TSentral'nogo nauchno-issledovatel'skogo instituta svyazi (for Sheremet'yev).
(Telephone)

SUDENKO, A.M.; SHEREMET'YEV, A.M., otv. red.; RYKOV, N.A., red. izd-va; KOROVENKOVA, Z.A., tekhn. red.

[Advanced methods of repairing equipment in coal preparation plants] Peredovye metody remonta oborudovaniia ugleobogatitel'nykh fabrik. Moskva, Ugletekhizdat, 1954. 66 p. (MIRA 16:7)

(Coal preparation plants--Equipment and supplies)

L 62086-65 EEC-4/EWT(d)/EEC(t)/FSS-2 Pn-4/Pp-4/Pac-4

ACCESSION NR: AP5016722 UR/0286/65/000/010/0041/0041

AUTHORS: Grishko, N. A.; Sheremet'yev, A. V.

28
B

TITLE: Device for shielding the channels of long distance telephone service. Class 21, No. 171022

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 10, 1965, 41

TOPIC TAGS: telephone equipment, telephone line, noise suppression

ABSTRACT: This Author Certificate presents a device for shielding the channels of long distance telephone service from noise currents and audible cross-talk by limiting them to the moments when a useful signal is absent. To combine the functions of signal level control and channel cutoff, two silicon stabilitrons interconnected antiparallel are connected in series between the double variable attenuators (see Fig. 1 on the Enclosure). Orig. art. has: 1 diagram.

ASSOCIATION: none

SUBMITTED: 07Oct61 ENCL: 01 SUB CODE: EC

NO REF SOV: 000 OTHER: 000

Card 1/2

L 62066-65

ACCESSION NR: AP5016722

ENCLOSURE: 01

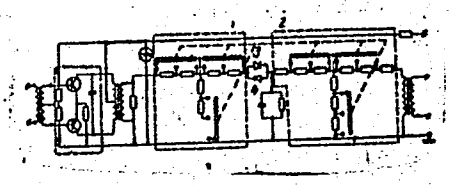


Fig. 1.
1 and 2- variable attenuators; 3 and 4- silicon stabilitrons

Card 2/2

MIZYUK, L.Ya.; SHAGEMET'YEV, E.V.; SHTAMBERGER, G.A.

Transistorized attachment to the EP-1 potentiometer. Avtom.kont.i elek.izm. no.1:93-100 '60. (MIRA 15:8)
(Electric prospecting--Electronic equipment)
(Potentiometer)

SHEREMET'YEV, E.V.

Semiconductive attachment to the EP-1 potentiometer. Razved. i okh. nedr 27 no.3:46 Mr '61. (MIRA 14:5)

1. Sibirskoye otdeleniye Instituta avtomatiki i elektrometrii.
(Potentiometer)

KOTYUK, A.F.; SHEREMET'YEV, E.V.

Susceptibility threshold in the induction method for the measurement of weak magnetic fields. Geol. i geofiz. no.6: 102-103 '63. (MIRA 19:1)

1. Institut avtomatiki i elektrometrii Sibirskogo otdeleniya AN SSSR, Novosibirsk. Submitted February 2, 1963.

ZAGORSKIY, Ya.T.; SHEREMET'YEV, E.V.; SHTAMBERGER, G.A.

Universal wide-band d.c.device. Priborostroenie no.10:12-14 O '63. (MIRA 16:11)

KOTYUK, A.F.; SHEGAL'YEV, E.V.

Universal bridge unit for measuring p–n junctions of semiconductor devices at sonic frequencies. Izm.tekh. no.11:33–36 N '63. (MIRA 16:12)

L 36661-65 EWT(l)/EEC(t) Peb IJP(c)

ACCESSION NR: AP5007400 S/0286/65/000/004/0051/0051

AUTHOR: Kotyuk, A. F.; Sheremet'yev, E. V.; Zagorskiy, Ya. T. 17

TITLE: Instrument for measuring magnetic fields by the induction method. 21 B
Class 21, No. 168386 10

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 4, 1965, 51

TOPIC TAGS: magnetic field measurement, magnetic induction measurement

ABSTRACT: The proposed instrument consists of a parametric amplifier, a frequency amplifier, a mixer, a pumping generator, a filter, and a meter. To improve accuracy and economize on the power consumption of the pumping generator, a coil with a toroidal core serves as an inductance modulator. In the magnetic circuit of the coil, a vibrating armature is fastened to a movable diaphragm. The diaphragm is coupled by an air gap to a second diaphragm, which is excited by the pumping generator. (See Fig. 1 of Enclosure.) Orig. art. has: 1 figure. [DW]

ASSOCIATION: Institut avtomatiki i elektrometrii Sibirskogo otdeleniya AN SSSR (Institute of Automation and Electrometry, Siberian Department, AN SSSR)

Card 1/2

L 56517-65
ACCESSION NR: AP5016746 UR/0286/65/000/010/0071/0071

10
B

AUTHORS: Kotyuk, A. F.; Sheremet'yev, E. V.

TITLE: Device for measuring a magnetic field by an inductive method. Class 42, No. 171123

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 10, 1965, 71

TOPIC TAGS: magnetic field measurement, tuning fork, oscillator

ABSTRACT: This Author Certificate presents a device for measuring a magnetic field by an inductive method with a two-channel amplifier. To separate the amplifier channels and the pumping oscillator, a tuning fork is used as the inductance modulator. One prong serves as the vibrating armature in the magnetic circuit of the modulated inductance. The other prong is coupled inductively by an energizing system to the pumping oscillator (see Fig. 1 on the Enclosure). Orig. art. has: 1 diagram.

ASSOCIATION: Institut avtomatiki i elektrometrii Sibirskogo otdeleniya AN SSSR (Institute of Automation and Electrometry, Siberian Branch AN SSSR)

SUBMITTED: 29Jan63 ENCL: 01 SUB CODE: EM

NO REF SOV: 000 OTHER: 000

Card 1/2

L 56517-65

ACCESSION NR: AP5016746 ENCLOSURE: 01

6

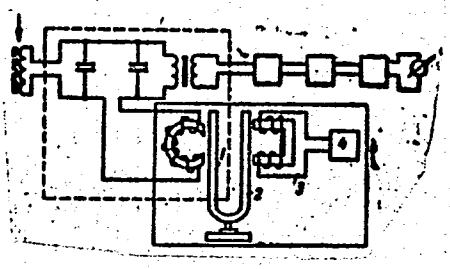
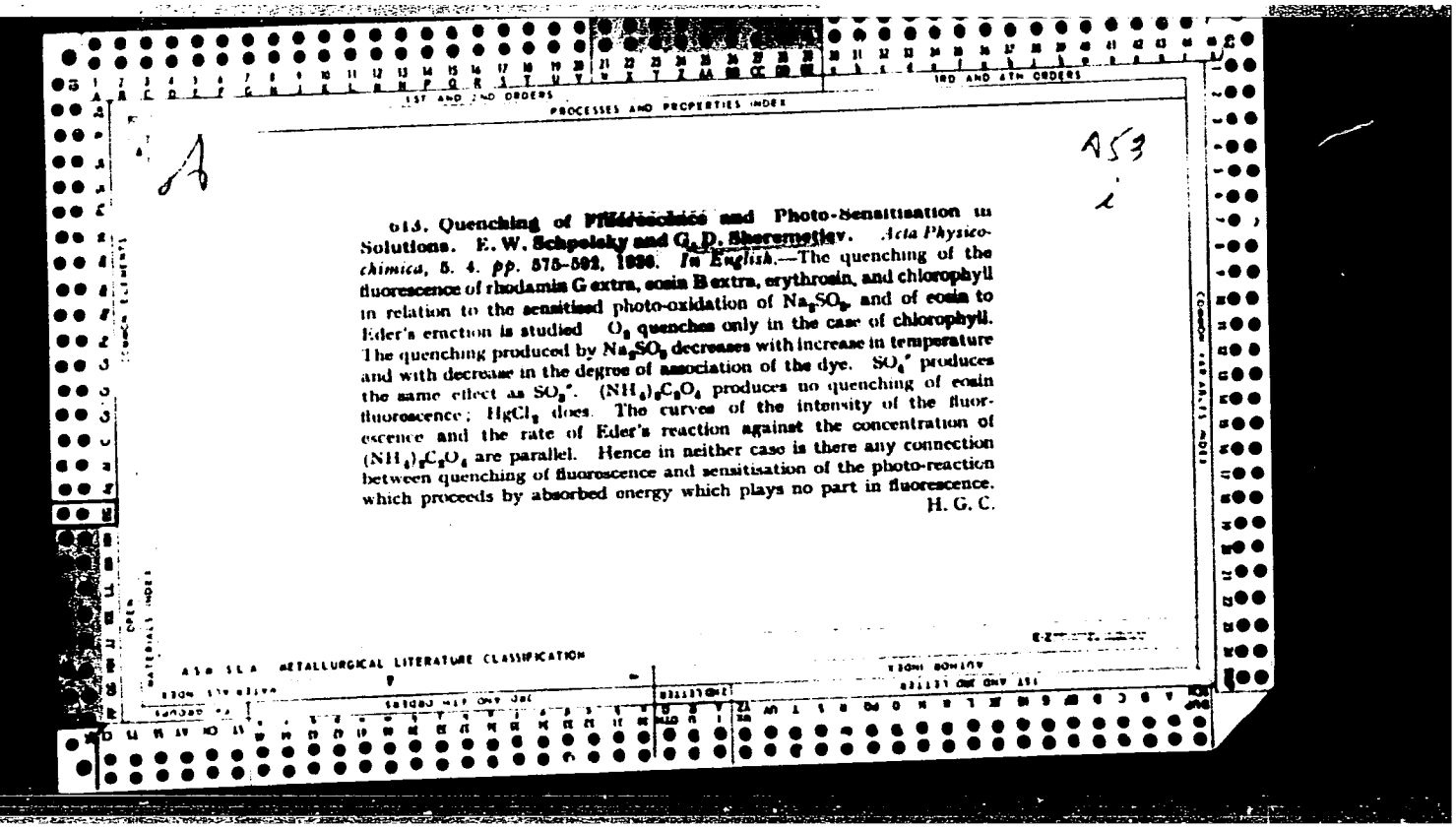


Fig. 1. 1 and 2- tuning fork prongs;
3- energizing system; 4- pumping oscillator

Card 2/2



1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

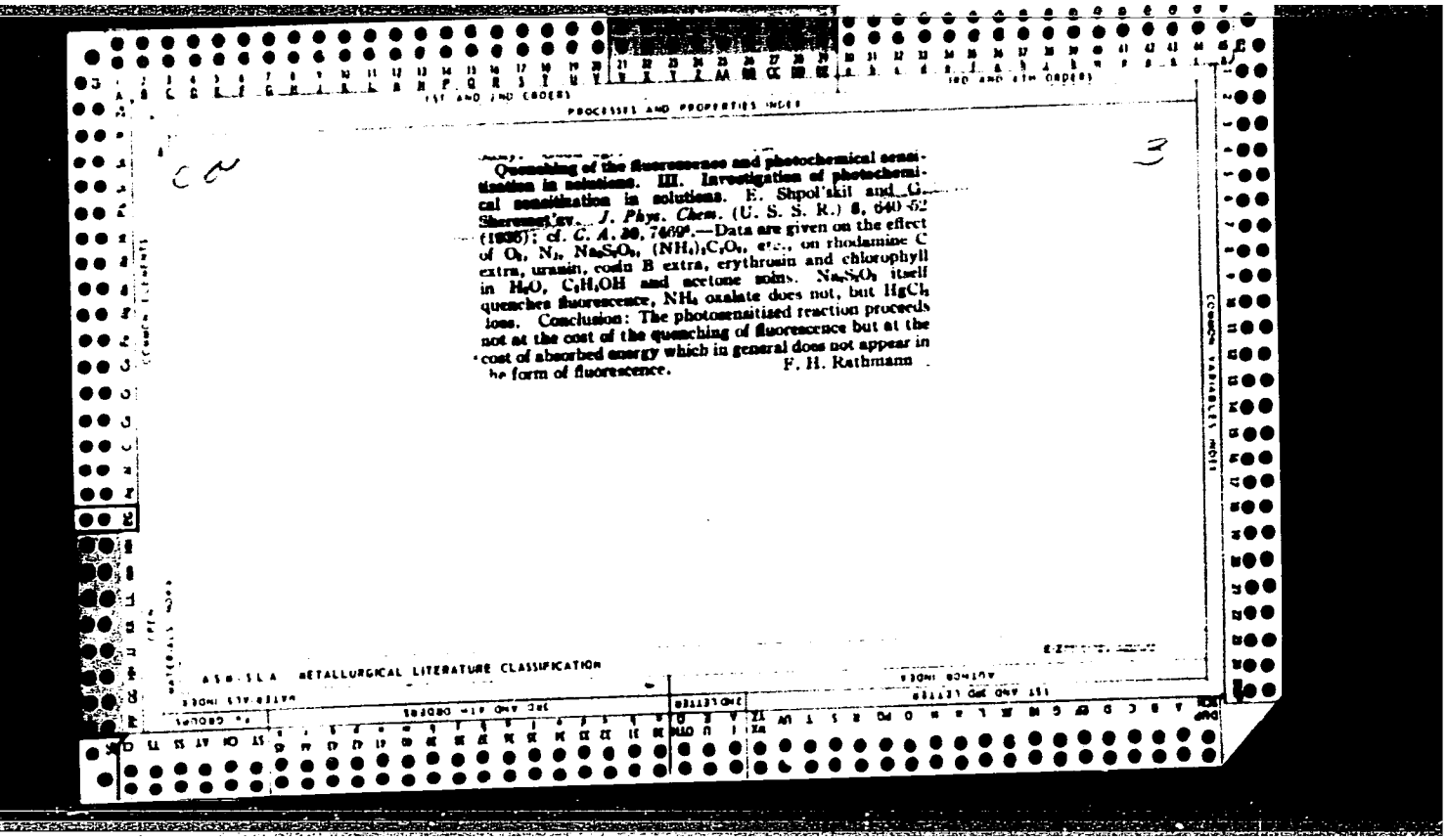
A53

2

613. **Quenching of Fluorescence and Photo-Sensitisation in Solutions.** E. W. Schpolsky and G. D. Sheremetjev. *Acta Physicochimica*, 5. 4. pp. 575–592, 1936. *In English.*—The quenching of the fluorescence of rhodamin G extra, eosin B extra, erythrosin, and chlorophyll in relation to the sensitised photo-oxidation of Na_2SO_3, and of eosin to Eder's erection is studied. O_2 quenches only in the case of chlorophyll. The quenching produced by Na_2SO_3 decreases with increase in temperature and with decrease in the degree of association of the dye. SO_4'' produces the same effect as SO_3''. $(NH_4)_2C_2O_4$ produces no quenching of eosin fluorescence; $HgCl_2$ does. The curves of the intensity of the fluorescence and the rate of Eder's reaction against the concentration of $(NH_4)_2C_2O_4$ are parallel. Hence in neither case is there any connection between quenching of fluorescence and sensitisation of the photo-reaction which proceeds by absorbed energy which plays no part in fluorescence.

H. G. C.

A53 METALLURGICAL LITERATURE CLASSIFICATION



PROCESSES AND PROPERTIES INDEX

Quenching of the fluorescence and photochemical sensitization in solutions. III. Investigation of photochemical sensitization in solutions. E. Shpol'skii and G. Sherenet'ev. *J. Phys. Chem.* (U. S. S. R.) **8**, 640-52 (1936); cf. *C. A.* **30**, 7469⁸.—Data are given on the effect of O_2, N_2, $Na_2S_2O_3$, $(NH_4)_2C_2O_4$, etc., on rhodamine C extra, uranin, eosin B extra, erythrosin and chlorophyll in H_2O, C_2H_5OH and acetone solns. $Na_2S_2O_3$ itself quenches fluorescence, NH_4 oxalate does not, but $HgCl_2$ does. Conclusion: The photosensitised reaction proceeds not at the cost of the quenching of fluorescence but at the cost of absorbed energy which in general does not appear in the form of fluorescence. F. H. Rathmann

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

SHEREMET'YEV, G. D.

Mar 47

USSR/Physics
Spectrographic Analysis
Chemistry - Uranyl Salts

"The Duration of Static Distribution in Excited Molecules of Uranyl Salts," V. L. Levshin, G. D. Sheremet'yev, 17 pp

"Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki" Vol XVII, No 3

The radiation spectrum of uranyl sulfate at different temperatures is studied. It is shown that a change in temperature causes a change in the distribution of energy both in the entire spectrum as a whole and within the separate bands of radiation. Is is shown experimentally that the dark interval between moments of absorption and the beginning of radiation is either absent or has a duration of less than 3×10^{-6} seconds ($< 0.01\ \tau$).

PA 34T100

SHEREMET'YEV, G. D.

PA 59/49T102

USSR/Physics Apr 49
Literature

"New Books on Physics From the Gostekhizdat Popular Scientific Library," G. D. Sheremet'yev, Cand Physicomath Sci, 3 pp

"Nauka i Zhizn'" No 4

Considers A. I. Kitaygorodskiy's "The Structure of Matter" very useful but certain changes should be made in future editions. E. I. Adirovich's "Electric Current" limits itself to an explanation of what comprises electric current, what causes it, and what phenomena arise when current flows. M. A. Valyus' "How the Eye Sees" is a well-written

59/49T102

USSR/Physics (Contd) Apr 49

description of the important role of scientists in the development of better eyesight. Several simple eye tests are explained (blind spots, spherical and chromatic aberration, etc.).

59/49T102

USSR/Optics - Spectroscopy. K-6

Abs Jour : Referat Zhur - Fizika, No 3, 1957, 7818

Author : Sheremet'yev, G.D.
Inst : Physics Institute, Academy of Sciences, USSR, and Chelyabinsk Pedagogical Institute, USSR.
Title : Optical Properties of UF_6. I. Absorption Spectra in the Visible and Near Ultraviolet Regions.

Orig Pub : Optika i spektroskopiya, 1956, 1, No 2, 181-189

Abstract : An investigation is made of the electron-oscillation sprectrum of vapor-like UF_6 at a vapor tension of 5 -- 94 mm mercury, and a comparison is made of this spectrum with spectra of solid UF_6 at various temperatures. A procedure is developed for purifying UF_6 of volatile impurities, making it possible to obtain transparent crystals. The maxima of the absorption bands were determined with an accuracy to 15 cm^{-1}. A wide absorption band, beginning at 3341A and continuing towards a

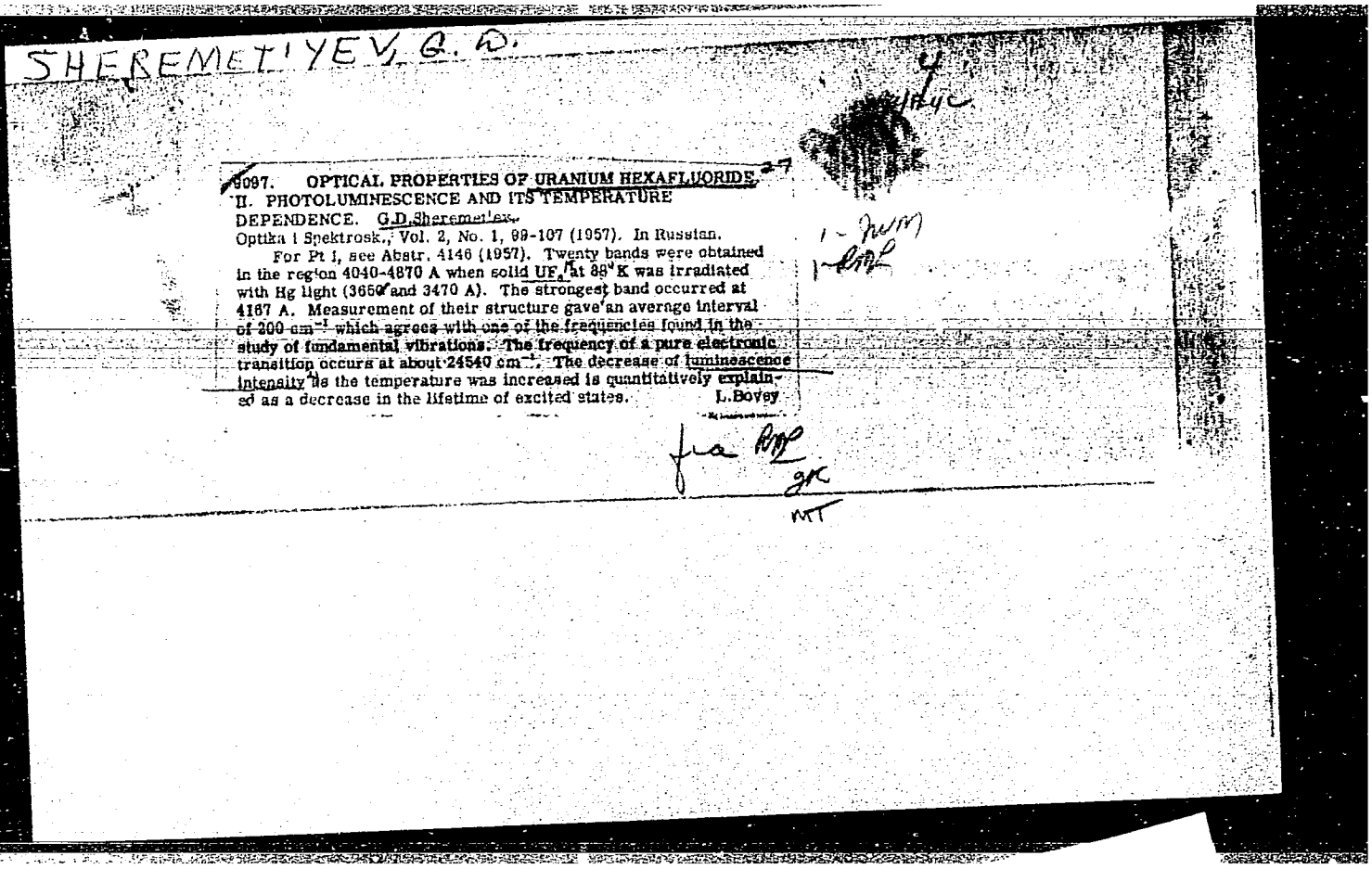
Card 1/3 - 76 -

shorter waves, and a band in the interval between 4070 to 3470A consisting of several wide and a large number of narrow bands, were observed. The maximum absorption was found near 27134 cm^{-1}, and a strong one at 26631, 26918, 27548, 27824, 28184, and 28409 cm^{-1}. Films of solid UF_6 also absorb, starting with 3341A and in the region 4070 -- 3470A. At 88° K one observes approximately 16 narrow bands. The strong absorption in this case takes place near 27134 cm^{-1}, and at room temperature near 26918 cm^{-1}. On the whole, the absorption spectrum of solid UF_6 is similar to the spectrum of the vapor, but is shifted towards the shorter waves by approximately 115 cm^{-1}. Molten UF_6 has a solid absorption spectrum with a sharp long-wave boundary near 4210A. It is concluded that the electron-oscillating energy levels of the UF_6 molecule have a washed-out character, which changes little as the temperature drops from room temperature to

Abs Jour : Referat Zhur - Fizika, No 3, 1957, 7818

88° K, and also that the UF_6 crystals are molecular crystals. It is proposed that the structure of UF_6 molecule does not correspond fully to the model of the regular octahedron.

Bibliography, 14 titles.



SHEREMET'YEV, G. D.

9097. OPTICAL PROPERTIES OF URANIUM HEXAFLUORIDE. II. PHOTOLUMINESCENCE AND ITS TEMPERATURE DEPENDENCE. G.D.Sheremet'ev. Optika i Spektrosk., Vol. 2, No. 1, 99-107 (1957). In Russian.

For Pt I, see Abstr. 4146 (1957). Twenty bands were obtained in the region 4040-4870 A when solid UF_6 at 89°K was irradiated with Hg light (3660 and 3470 A). The strongest band occurred at 4167 A. Measurement of their structure gave an average interval of 200 cm^{-1} which agrees with one of the frequencies found in the study of fundamental vibrations. The frequency of a pure electronic transition occurs at about 24540 cm^{-1}. The decrease of luminescence intensity as the temperature was increased is quantitatively explained as a decrease in the lifetime of excited states. L.Bovey

13503

S/051/62/013/006/024/027
E039/E120

AUTHORS: Gobov, G.V., Kulimbet, A.Z., Fedotov, A.P., and Sheremet'yev, G.D.

TITLE: Polarisation of the quasilinear luminescence spectra of perylene in the electric field at 77 °K

PERIODICAL: Optika i spektroskopiya, v.13, no.6, 1962, 879

TEXT: This work was undertaken in order to observe the optical effects associated with radiation from electrets and to study the kinetics of the electret condition. Perylene was chosen because of its extensive cloud of π-electrons, which under the action of an electric field might produce a noticeable effect on its luminescent spectrum. In the absence of an electric field the luminescence of perylene in n-heptane observed at right angles to direction of the exciting beam (366 mmk natural light) is 32% polarised. The degree of polarisation along the line of excitation is zero. When a solution of perylene in n-heptane is frozen in an electric field of 25 kV/cm the luminescence observed along the line of excitation is 26% polarised. An investigation of the

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temperature and 150 kV/cm gave a degree of polarisation of 0.1. By using the electret condition and Shpol'skiy's method the authors have obtained significant electric polarisation of luminescence at comparatively small fields. Investigations are being carried out on other aromatic hydrocarbons (pyrene, chrysene and others).

SUBMITTED: June 19, 1962

[Abstractor's note: Abridged translation.]

Card 2/2

L 34543-65 EPF(c)/EPR/EWP(j)/EWT(1)/EWT(m) Pc-4/Pr-4/Ps-4 IJP(c)/RPL
RM/WW
ACCESSION NR: AR5000788 S/0058/64/000/010/D052/D052

SOURCE: Ref. zh. Fizika, Abs. 10D404

27
B+1

AUTHORS: Val'dman, M. M.; Sheremt'yev, G. D.

TITLE: Luminescence spectra of frozen solutions of fluoranthen

CITED SOURCE: Tr. Chelyab. gos. ped. in-t. v. 2, 1964, 195-200

TOPIC TAGS: luminescence spectrum, fluorescence spectrum, phosphorescence spectrum, fluoranthen

TRANSLATION: It is shown that the luminescence of fluoranthen at 77K has a quasilinear structure. The luminescence spectrum consists of fluorescence and phosphorescence sections located in the visible region and separated from each other by an interval of $\sim 2,750\ cm^{-1}$. The relative stability of the phosphorescence spectrum, and the long duration of the afterglow, offer evidence of a weaker influence of the solven on the triplet

Card 1/2

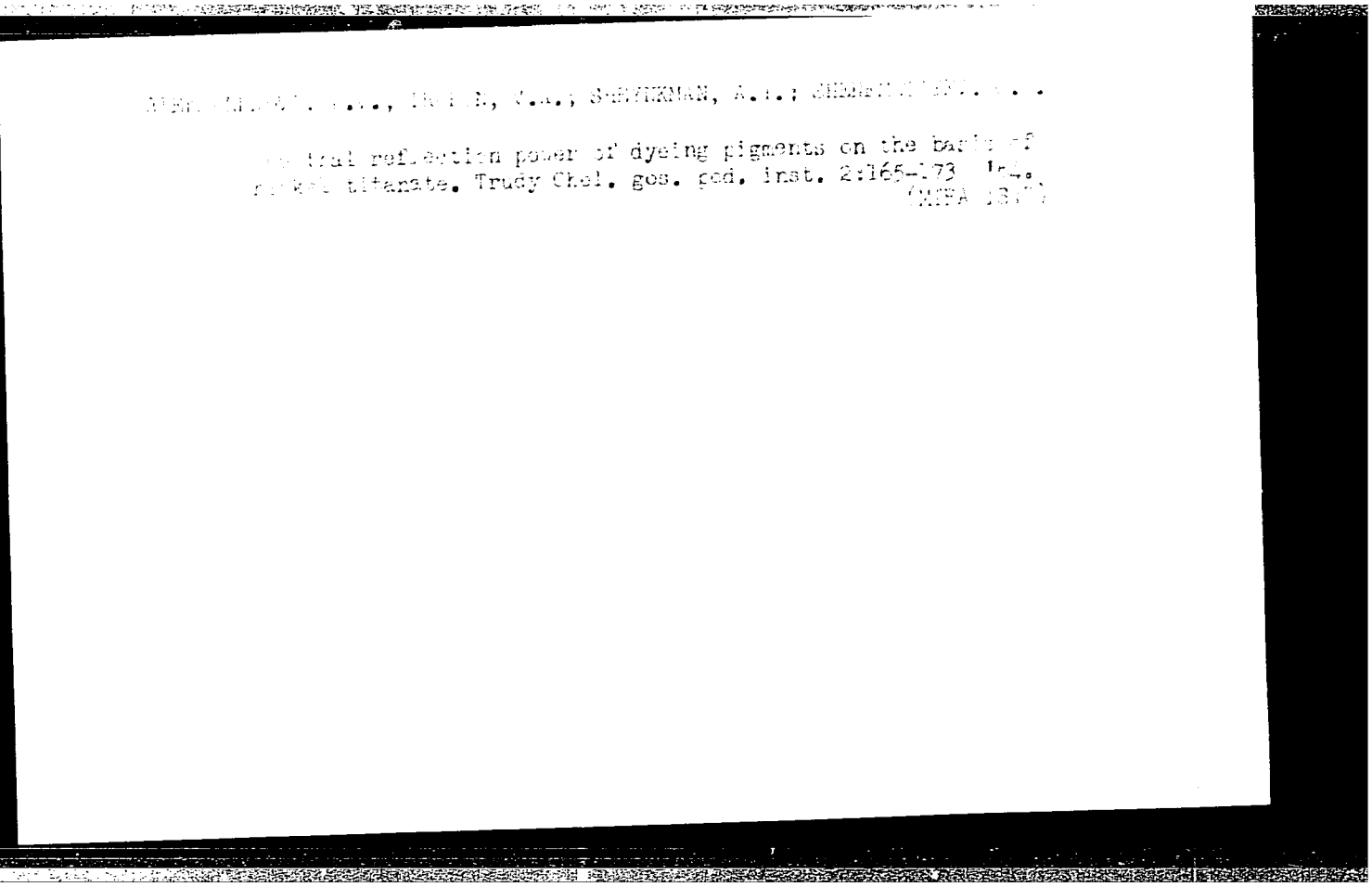
L 34543-65

ACCESSION NR: AR5000788 0

levels than on the excited levels of the ground state of the fluoranthen molecules. With decreasing concentration of the solution, an increase is observed in the number of split bands. Owing to the larger stability and finer structure, it is more convenient to use phosphorescence spectra for the identification of fluoranthen.

SUB CODE: IC, OP ENCL: 00

Card 2/2



VAL'DMAN, M.M.; [illegible], G.P.

Luminescence spectra of frozen solutions of fluoranthene.
Trudy Chel. gos. ped. inst. 3:195-200 '64. (MIRA 18:9)

L 46583-66 EWT(m)/EWP(t) RM

ACC NR: AR6017253 SOURCE CODE: UR/0058/65/000/012/D065/D065

AUTHOR: Val'dman, M. M.; Sheremet'yev, G. D.

TITLE: Spectroscopy of frozen solutions of rubicene

SOURCE: Ref. zh. Fizika, Abs. 12D547

REF SOURCE: Tr. Komis. po spektroskopii. AN SSSR, vyp. 1, 1964, 459-467

TOPIC TAGS: phosphorescence spectrum, fluorescence spectrum, organic solvent, low temperature research

ABSTRACT: The luminescence and absorption spectra of fluoranthen (I) and rubicene (II) in n-paraffins were investigated at 77K. The solutions of I disclosed phosphorescence and fluorescence spectra with characteristic quasi-line structure, situated in the visible region and separated from one another by an interval of 6100 cm^{-1}. In different solvents (hexane, heptane, octane, nonane) the phosphorescence spectrum of I possesses a strongly pronounced stability, this being attributed both to a long duration of afterglow and to the relatively weak influence of the medium on the triplet levels. The fluorescence spectrum of solutions of II can be regarded as a result of a superposition of two identical spectra, the displacement of which relative to each other depends on the nature of the solvent. In all investigated solvents, complete mirror symmetry of the absorption and luminescence spectra is observed. A vibrational analysis of the spectra has been carried out. [Translation of abstract]

SUB CODE: 20, 07/

Card 1/1 bs

GRECHEV, M.A., kand. ekon. nauk; KLESMET, O.G., kand.ekon. nauk; TARASOV, K.S., kand. ekon. nauk; DANILEVICH, M.V., doktor ekon. nauk; YURLOV, A.F., kand.ekon. nauk; ONUFRIYEV, Yu.G.; ROMANOVA, Z.I., kand. ekon. nauk; SHEREMET'YEV, I.K., kand. ekon. nauk; SHUL'GOVSKIY, A.F., kand. istor. nauk; KALININ, A.I., kand. iurid. nauk; AVARINA, V.Ya., doktor ekon. nauk, red.; BAYKOV, V.S.,red.; KOVALEV, A.P., red.izd-va; KASHINA, P.S., tekhn. red.

[Econonomic problems of Latin American countries] Ekonomicheskie problemy stran Latinskoi Ameriki. Moskva, Izd-vo AN SSSR, 1963. 511 p. (MIRA 17:1)

1. Akademiya nauk SSSR. Institut mirovoy ekonomiki i mezhdunarodnykh otnosheniy.

PUPKO, V.V.; LEONOV, V.I.; SHEREMET'YEV, K.G.

Experimental study of the start characteristics of devices using semiconductor resistances. Sbor. nauch. trud. ElNII 3:156-162 '63. (MIRA 17:4)

SHEREMET'EV, L. G.

Issledovanie sistem okhlazhdeniia vozdukha pri dvukhstupenchatom nadduve dvigatelei. Moskva, Oborongiz, 1946.

Title tr.: Investigation of air cooling systems with two-stage supercharging of engines.

KF

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955.

SHEREMET'YEV L.

Sheremet'yev, L.

[illegible] Moskva, Oborongiz, 1946.

Title tr.: [illegible] Aerodynamic principles of [illegible] evaporation in the suction zone of aircraft engines.

ACF

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955.

~~SHEHEALTIEG~~

[illegible], [illegible]

[illegible] aviatsionnykh [illegible]lei. Moskva, Oborong[illegible]z, 19[illegible]7.

Title tr.: [illegible] of the cooling of [illegible] engines.

NCF

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955.

DAVYDOV, Yu., kandidat tekhnicheskikh nauk; FOMIN, A., kandidat tekhnicheskikh nauk; SHEREMET'YEV, M., kandidat tekhnicheskikh nauk.

Testing air conditioning systems in passenger cars with centralized power supply. Khol.tekh. 31 no.3:11-15 Jl-S '54. (MLRA 7:9)
(Railroads--Cars--Heating and ventilation)

SHEREMET'YEV, M., kand.tekhn.nauk; DAVYDOV, Yu., kand.tekhn.nauk

New model of an electric resistance thermometer. Khol.tekh. 33 no.4:26-27 O-D '56. (MIRA 12:1)
(Thermometers) (Air conditioning)

KOMAROV, S.G.; KITOV, A.N., inzh.; DOROFEYEV, V.G.; SHEREMET'YEV, M.A.; FOMIN, A.A.; KOSAREV, A.A.; SARANTSEV, Yu.S., red.; VERINA, G.P., tekhn.red.

[Handbook for the repair of passenger cars] Spravochnik po remontu passazhirskikh vagonov. Moskva, Vses.izdatel'sko-poligr.ob"edinenie M-va putei soobshcheniia, 1960. 631 p. (MIRA 13:6)

(Railroads--Passenger cars--Maintenance and repair)

RUBINCHIK, I.M., kand. tekhn. nauk; SHEREMET'YEV, M.A., kand. tekhn. nauk; SAFRONOV, D.I., inzh.; KITAYEV, B.N., kand. tekhn. nauk, retsenzent; FILIPPOVA, L.S., red.; VOROB'YEVA, L.V., tekhn. red.

[Heating, ventilation and air-conditioning systems of the new passenger cars] Sistemy otopleniia, ventiliatsii i okhlazhdeniia vozdukha v novykh passazhirskikh vagonakh. Moskva, Transzheldorizdat, 1963. 29 p. (MIRA 17:1)

SHEREMET'YEV, M.P. (L'vov)

Effect of an elastic ring soldered into a curvilinear hole, upon the uniform stress of a plane field. Ukr.mat.zhur. [1] no.3:68-80 '49. (MLRA 7:10)

(Strains and stresses) (Elasticity)

SHEREMET'YEV, M. P.

DEFORMATIONS (MECHANICS)

Stretching of an infinite plate with a ring soldered into it, the survace of which, together with the surface of the plate, is depicted in a circle by means of rational functions. Nauk.zap. L'viv. 12 No. 3, 1949.

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

1. [redacted], M.P.

2. USSR (600)

4. Elastic Plates and Shells

7. Bending of thin plates with reinforced edges, Ukr.mat.zhur. 5 no. 1, 1952.

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

USSR/Physics - Elasticity Jul/Aug 52

"Elastic Equilibrium of an Infinite Plate With Enclosed Absolutely Stiff or Elastic Collar-Plate," M. P. Sheremet'yev, Moscow, Inst of Mech, Acad Sci USSR

"Prik Matemat i Mekh" Vol XVI, No 4, pp 437-448

Considers 2 cases of elastic equil of an infinite plate on the circular aperture of which is placed an absolutely stiff or elastic "washer" of the same diam as the aperture. The method expounded is easily generalized to the case where the aperture of the plate and the imposed "washer" are not circular.

225T88

Mathematical Reviews
Vol. 15 No. 2
Feb. 1954
Mechanics

Šeremet'ev, M. P. **Bending of thin plates with reinforced boundaries.** Ukrain. Mat. Žurnal 5, 58–79 (1953). (Russian)

The paper gives a formulation of the problem of small transverse deflections of a thin elastic plate reinforced along the edge by a ring whose thickness and rigidity differ from those of the plate. The middle surfaces of the plate and the ring, in the undeformed state, lie in the (x, y)-plane and the cylindrical edge of the plate is welded onto the ring. The plate so reinforced is then deformed by forces and moments distributed along its edge. The state of stress in the interior of the homogeneous and isotropic plate is thus determined by two analytic functions $\varphi_i(z)$ of the complex variable $z=x+iy$, which satisfy certain conditions along the contour of the weld depending on the nature of the reinforcing ring. If the ring is so thin that it behaves like an inextensible curved rod in the Kirchhoff-Clebsch theory of thin rods, it is possible to deduce the appropriate boundary conditions. The author calculates the functions $\varphi_i(z)$ for an infinite plate with a circular hole when the plate is deformed by the application of constant bending and twisting moments at a great distance from the hole and when the ring is free of external loads. *I. S. Sokolnikoff.*

SHEREMET'YEV, M.P.

Mathematical Reviews
Vol. 14 No. 11
December, 1953
Mechanics.

Šeremet'ev, M. P. Elastic equilibrium of an elliptic ring. Akad. Nauk SSSR. Prikl. Mat. Meh. 17, 107–113 (1953). (Russian)

The author investigates a ring bounded by two confocal ellipses, the loads being applied on the boundaries. A. Timpe [Math. Z. 17, 189–205 (1923)] solved the above problem, but Mushelišvili [Some fundamental problems of the mathematical theory of elasticity, Izdat. Akad. Nauk SSSR, Moscow-Leningrad, 1949, p. 231; these Rev. 11, 626] pointed out that Timpe's solution is incorrect. The author gives now a correct solution. He uses a conformal mapping method presented in an earlier work [Ukrain. Mat. Žurnal 1, no. 3, 68–80 (1949); these Rev. 15, 886]. A numerical example of a ring with given confocal ellipses as boundaries, and the outer boundary compressed by a constant distributed normal load illustrates the use of general formulas.

T. Leser (Lexington, Ky.).

SOV/124-58-4-4405

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 4, p 102 (USSR)

AUTHOR: Sheremet'yev, M. P.

TITLE: The Action of a Concentrated Force Upon the Reinforced Edge of a Circular Hole in an Infinite Plate (Deystviye sosredotochennoy sily na podkreplennyy kray kruglogo otverstiya beskonechnoy plastinki)

PERIODICAL: Inzhenernyy sb., 1956, Vol 24, pp 127-138

ABSTRACT: The author attempts to find the stresses in an infinite elastic isotropic plane, weakened by a circular hole the edge of which is reinforced by a narrow elastic ring (considered as an elastic line) with a given flexural and longitudinal rigidity, undergoing the effect of a concentrated force applied to the reinforcing ring at a certain angle to the normal of the axis of the ring. Distribution curves are presented of the stresses upon the circumference of the seam of a copper plate with the soldered-in copper ring resulting from a concentrated force normal to the axis of the ring.

Card 1/1 1 Copper 2 Rubber 3 Metal plates--Stresses 4 Mathematics

G N Savin

SHERMET'YEV, M.P. (L'viv); MARTINOVICH, T.L. (L'viv).

Bending of an infinite plate with an elliptic hole framed by a thin elastic ring [with summaries in Russian and English]. Pryk. mekh. 3 no.2:140-146 '57. (MLRA 10:9)

1. L'vivskiy derzhavniy universitet.
(Elastic plates and shells)

SOV/124-58-11-12993

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 11, p 161 (USSR)

AUTHORS: Sheremet'yev, M. P., Khlebnikov, D. G.

TITLE: Elastic Equilibrium of a Halfplane Supported Along the Edge (Uprugoye ravnovesiye poluploskosti s podkreplennym krayem)

PERIODICAL: Dopovidi ta povidomlennya. L'vivs'k. un-t, 1957, Nr 7, part 3, pp 286-292

ABSTRACT: The authors examine the problem of the elastic equilibrium of an isotropic halfplane $y \leq 0$, the boundary of which is soldered to an infinitely long, thin, elastic rod of constant stiffness; the halfplane is subjected to the action of distributed transverse and longitudinal loads, as well as bending moments of magnitudes $q(x)$, $n(x)$, and $m(x)$. One of the principal axes of inertia of every transverse cross section of the rod lies in the plane under consideration. Let $f(x)$ and $g(x)$ be the normal and the tangential stresses on the contour of the soldered joint. It is demonstrated that $f(x)$ and $g(x)$ satisfy the following system of integral-differential equations

Card 1/2

Elastic Equilibrium of a Halfplane Supported Along the Edge

$$G_1 \alpha f'(x) - g(x) + G_1 \frac{\beta}{\pi} \int_{-\infty}^{+\infty} \frac{g'(t)dt}{t-x} n(x)$$

$$G_2 \frac{\beta}{\pi} \int_{-\infty}^{+\infty} \frac{f'''(t)dt}{t-x} + f(x) - F_2 \alpha g'''(x) = \frac{dm}{dx} - q(x)$$

where α and β are certain elastic constants of the halfplane, and G_1 and G_2 are the stiffnesses of the rod with respect to tension and flexure. By expressing $q(x)$, $n(x)$, and $m(x)$ in the form of Fourier integrals, the authors obtain implicit formulae for the solution of this system. The Fourier integrals representing the solution are convergent only if $q(x)$, $n(x)$, and $m(x)$ are absolutely integratable and if, in addition, $n(x)$ and $m(x)$ possess an integratable derivative that is finite everywhere.

N. A. Rostovtsev

Card 2/2

SOV/124-58-7-7911

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 7, p 88 (USSR)

AUTHORS: Sheremet'yev, M.P., Tul'chinskiy, V.I. [Sheremetyev, M.P., Tul'chyy, V.I.]

TITLE: Some Aspects of the Flexure of Reinforced Plates. Part I: Boundary Conditions (Nekotoryye voprosy izgiba plastinok s podkrepleniyem. I. Granichnyye usloviya zadachi) [Deyaki pytannya zhynu plastynok z pidkriplennyam. I. Hranychni umovy zadachi]

PERIODICAL: Nauk. zap. L'vivsk. un-t, 1957, Vol 44, pp 29-39 (in Ukrainian)

ABSTRACT: An examination is made of the flexure of an infinite anisotropic plate weakened by a hole through it, the rim of the hole being reinforced by a thin elastic isotropic ring. It is assumed 1) that the middle plane of the anisotropic plate is the plane of elastic symmetry, 2) that the contour of the seam formed by the juncture of the plate with the reinforcing ring has a continuously varying tangent, and 3) that the reinforcing ring is so thin that its axis can be considered as the contour of the seam formed by the juncture of the plate with said ring. The solution to the problem in question reduces to finding the two functions

Some Aspects of the Flexure of Reinforced Plates. (cont.)

$\varphi_1(z_1)$ and $\psi_2(z_2)$ of the complex variables $z_1 = x + \mu_1 y$ and $z_2 = x + \mu_2 y$ [wherein μ_1 and μ_2 are the complex variables characterizing the anisotropy of the plate's material (should the material be isotropic, then $\mu_1 = \mu_2 = i$ and $z_1 = z_2 = z = x + iy$)] from the four relationships obtaining on the seam when values are given for the bending moments M_x and M_y the torque moments H_{xy} acting on the plate and for the bending moments m(s) and shearing forces p(s) acting on the ring. From the boundary conditions thus obtained for an anisotropic plate the earlier-found boundary conditions for an isotropic plate are arrived at as a particular case. It is demonstrated that the four relationships obtaining along the contour of the seam can be reduced to a single relationship linking the two desired functions $\varphi_1(z_1)$ and $\psi_2(z_2)$. For the case of a circular hole in the plate the solution of the problem is carried out to the end, i.e., the functions φ_1 and ψ_2 are arrived at. The article gives no numerical results.

G.N. Savin

1. Metal plates--Theory 2. Plates--Moments

Card 2/2

SHEREMET'YEV, M.P. [Sheremet'iev, M.P.]; GRILITSKIY, D.V. [Hrylyts'kyi, D.V.]

"Anisotropic plates" by S.G. Lekhnitskii. Reviewed by M.P. Sheremet'ev, D.V. Hrylyts'kyi. Prykl. mekh. 4 no.4:471-472 '58. (MIRA 11:12)
(Elastic plates and shells)

SHEREMET'YEV, M.P. (L'vov)

Bending of an infinite plate weakened by an elliptic hole having its edge reinforced by a thin ring. Inzh. sbor. 25: 51-63 '59. (MIRA 13:2)
(Elastic plates and shells)

SHEREMET'YEV, Mikhail Petrovich; BLIKH, V.V., red.; SARANYUK, T.V., tekhn. red.

[Plates with reinforced rim] Plastinki s podkreplennym kraem. L'vov, Izd-vo L'vovskogo univ., 1960. 257 p. (MIRA 14:7)
(Elastic plates and shells)

SHEREMET'YEV, M.P.; GRILITSKIY, D.V. [Hrylyts'kyi, D.V.]

Elastic equilibrium of a flat rectangular plate. Prykl.mekh. 6 no.1:109-113 '60. (MIRA 13:6)

1. L'vovskiy gosudarstvennyy universitet.
(Elastic plates and shells)

SHEREMET'YEV, M.P. [Sheremet'iev, M.P.] (L'vov); KHLEBNIKOV, D.G. [Khliebnikov, D.H.] (L'vov)

Bending of an infinite strip with a reinforced edge. Prykl.mekh. 7 no.2:212-126 '61. (MIRA 14:4)

1. L'vovskiy gosudarstvennyy universitet.
(Elastic plates and shells)

SHERSHNEV, M.I.; YAREMA, S.Ya.; KHLEBNIKOV, D.G.

Selecting the optimum shape for a circular metal-glass kinescope. Nauch.zap.IMA AN URSR. Ser.mashinoved. 7 no.7:96-109 '61. (MIRA 15:1)

(Television--Apparatus and supplies)

S/879/62/000/000/011/088
D234/D308

AUTHOR: Sheremt'yev, M. P. (L'vov)

TITLE: Problem of stress functions in the theory of shells

SOURCE: Teoriya plastin i obolochek; trudy II Vsesoyuznoy konferentsii, L'vov, 15-21 sentyabrya 1961 g. Kiev, Izdo-vo AN USSR, 1962, 109-110

TEXT: The author fomulates, without proof, the following theorem: A necessary and sufficient condition for the static conditions of equilibrium to be fulfilled, is the homogeneous condition of equilibrium and

$$\vec{R}_{(\beta)} \cos\lambda + \vec{R}_{(\alpha)} \sin\lambda = \vec{R}_t$$

$$\vec{Q}_{(\alpha)} \sin\lambda + \vec{Q}_{(\beta)} \cos\lambda = \vec{Q}_t \qquad (2)$$

Card 1/3

Problem of stress...

where λ is the angle formed by the vectors t and $\tau_{(\beta)}$. Then the problem of finding the stress function reduces to that of making the integrals

$$\int_{\gamma} \vec{R}_t ds_{\gamma} = \int_{\gamma^*} -(\vec{AR}_{(\beta)})d\alpha + (\vec{BR}_{(\alpha)})d\beta = 0 \qquad (3)$$

$$\int_{\gamma} \vec{Q}_t ds_{\gamma} + \int_{\gamma} \vec{r} \times \vec{R}_t ds_{\gamma} = \int_{\gamma^*} -(\vec{AQ}_{(\beta)} + \sqrt{\vec{r} \times \vec{AR}_{(\beta)}})d\alpha + \\ + (\vec{BQ}_{(\alpha)} + \vec{r} \times \vec{BR}_{(\alpha)})d\beta] = 0 \qquad (4)$$

equal to 0, and two functions P, K are introduced by

$$-\vec{AR}_{(\beta)} = \frac{\partial \vec{P}}{\partial \alpha} ; \quad \vec{BR}_{(\alpha)} = \frac{\partial \vec{P}}{\partial \beta} \qquad (5)$$

Card 2/3

Problem of stress ...

$$-\left[\vec{A}\vec{Q}_{(\beta)} + \vec{r} \times A\vec{R}_{(\beta)}\right] = \frac{\partial \vec{K}}{\partial \alpha},$$

$$\left[B\vec{Q}_{(\alpha)} + \vec{r} \times B\vec{R}_{(\alpha)}\right] = \frac{\partial \vec{K}}{\partial \beta} \qquad (7)$$

The first function coincides with that of Gol'denveyzer and Lur'ye, the second does not; consequently, the function introduced by them for the moments does not make the integral (4) equal to zero.

Card 3/3