Applying the method of initial ...

Dimensionless coordinates $\xi = x/a$, $\eta = y/a$ are taken from the initial line $x = 0$ and the equations are put in canonical form

$$w(\xi, \eta) = a(L_{ww}W_0 + L_{w\theta}\theta_0 + L_{wM}M_0 + L_{wV}V_0),$$

$$\theta_x(\xi, \eta) = L_{\theta_x w}W_0 + L_{\theta_x\theta}\theta_0 + L_{\theta_x M}M_0 + L_{\theta_x V}V_0,$$

$$\theta_y(\xi, \eta) = L_{\theta w}W_0 + L_{\theta\theta}\theta_0 + L_{\theta M}M_0 + L_{\theta V}V_0,$$

$$M_x(\xi, \eta) = -\frac{D}{a}(L_{M_x w}W_0 + L_{M_x\theta_0} + L_{M_x M}M_0 + L_{M_x V}V_0),$$

$$M_y(\xi, \eta) = -\frac{D}{a}(L_{Mw}W_0 + L_{M\theta}\theta_0 + L_{MM}M_0 + L_{MV}V_0), \qquad (3)$$

$$V_x(\xi, \eta) = -\frac{D}{a^2}(L_{Vw}W_0 + L_{V\theta}\theta_0 + L_{VM}M_0 + L_{VV}V_0),$$

$$V_y(\xi, \eta) = -\frac{D}{a^2}(L_{V_y w}W_0 + L_{V_y\theta}\theta_0 + L_{V_y M}M_0 + L_{V_y V}V_0),$$

Card 3/5

Applying the method of initial ...

$$R(\xi, \eta) = -2(1-\mu)\frac{D}{a}(L_{Rw}W_0 + L_{R\theta}\theta_0 + L_{RM}M_0 + L_{RV}V_0). \quad (3)$$

where

$$W_0 = W_0(\eta) = \frac{1}{a}w(0, \eta),\ \theta_0 = \theta_0(\eta) = \theta_y(0, \eta), \quad (4)$$

$$M_0 = M_0(\eta) = -\frac{a}{D}M_y(0, \eta),\ V_0 = V_0(\eta) = -\frac{a^2}{D}V_x(0, \eta)$$

Substitution in (1) gives a system of general differential equations for functional operators. Integration and the initial conditions

$$L_{sj}\Big|_{\xi=0} = \begin{cases} 1, & \text{if } s = j \\ 0, & \text{if } s \neq j \end{cases} \qquad s, j = w, \theta, M, V$$

and substitution gives a series of equations which, together with

Card 4/5

Applying the method of initial ...

(3) give the general solution of (1) with arbitrary conditions on the edge of the rectangular plate. The boundary conditions on the initial line give two relationships between $W_0$, $t_0$, $M_0$ and $V_0$, so that (3) are now dependent on two unknown initial functions. The boundary conditions on the edge of the plate parallel to the initial line gives a system of two homogeneous equations in these functions which give rise to one transcendental solvable equation, in terms of a function $\varphi(\eta)$. The method gives a sufficient number of arbitrary parameters for the exact or approximate satisfaction of the boundary conditions. The cases of symmetric, quasisymmetric and non-symmetric oscillations are worked out in detail. There are 6 figures and 4 Soviet-bloc references.

ASSOCIATION: Kyyivs'kyy politekhnichnyy instytut (Kiyev Polytechnic Institute)

PRESENTED: by H.M. Savin, Academician of the AS UkrSSR

SUBMITTED: April 18, 1960

Card 5/5

Agarkov, V.A.

29228

24.4200 1105, 2607, 1327

S/198/61/007/005/008/015
D274/D303

AUTHORS: Agar'oy, V.A., Ventsel', N.O., and Chornyy, M.M.
(Kyyiv)

TITLE: On the general solution, in polar coordinates, of the problem of plate bending

PERIODICAL: Prykladnaya mekhanika, v. 7, no. 5, 1961, 521 - 529

TEXT: In solving, by the method of initial functions, concrete problems of bending of sectorial circular plates, the calculations can be considerably simplified by taking as the initial line, one of the radial boundaries of the plate. The general solution of this problem is considered. The dimensionless radial coordinate

$$\xi = \frac{1}{\lambda} \ln \frac{r}{r_1}, \quad \lambda = \ln \frac{r_2}{r_1} \qquad (1)$$

is introduced; the bending is denoted by w, the angle of rotation of the normal - by $\vartheta$, the bending moments - by M, the torsion mo-

Card 1/10

ments - by $M_{r\theta}$, the reduced transverse stresses - by V, and the reaction - by R. The radial boundary $\theta = 0$ is taken as the initial line. The complete system of equations which describe the bending, is written in polar coordinates. Further, the canonical equations of the method of initial functions are set up. In this system,

$$L_{sj} = L_{sj}(\alpha, \theta) \qquad \begin{cases} s = w, \vartheta_r, \vartheta, M_r, M, V_r, V, R; \\ j = w, \vartheta, M, V \end{cases} \tag{11}$$

are operators which have to be determined. For that purpose, three groups of equations are set up. It is found that these operators ought to satisfy conditions:

$$L_{sj}(\alpha, 0) = \begin{cases} 1, & \text{if } j = s \\ 0, & \text{if } j \neq s \end{cases} \tag{17}$$

$(s, j = w, \vartheta', M, V)$. The expressions for the operators are found in the form of eight formulas

Card ~~2/10~~

On the general solution, in ...

$$[\alpha(\alpha-2\lambda)-\lambda^2\cos 2\eta_0\lambda-(\alpha^2-2\lambda\alpha-\lambda^2)\cos 2\eta_0(\alpha-\lambda)]\frac{1}{\alpha(\alpha-2\lambda)}\varphi(\xi)= \tag{29}$$

$$=8\lambda^2\left[\frac{L_M(\theta_0,\alpha)}{L_{w1}(\theta_0,\alpha)}w'_p(\xi,\theta_0)-\vartheta_p(\xi,\theta_0)\right]. \tag{30}$$

A particular solution for $w_p$ is found

$$w_p(\xi,\theta)=-\frac{r_1^3\lambda^2}{4}\int_0^{\theta}d\tau\int_{\xi-l\frac{\theta-\tau}{\lambda}}^{\xi+l\frac{\theta-\tau}{\lambda}}e^{2\lambda\zeta}d\zeta\int_0^{\tau}d\tau'\int_{\zeta-l\frac{\tau-\tau'}{\lambda}}^{\zeta+l\frac{\tau-\tau'}{\lambda}}e^{2\lambda\zeta'}p(\zeta',\tau')\,d\zeta'. \tag{38}$$

Further, several questions related to the use of the method of initial functions, are considered. It is noted that the transcendental operators (18) - (25) are interpreted as a shortened form of differential operators of infinite order. Such an interpretation

Card 9/10

S/198/61/007/005/008/015
D274/D303

On the general solution, in ...

imposes considerable restrictions on the initial functions: their unlimited differentiability is required. In certain cases it is possible to use the apparatus of generalized functions or to express the operators L in the form of integral- or functional operators. There are 3 figures and 7 Soviet-bloc references.

ASSOCIATION: Kyyivs'kyy politekhn...nnyy instytut (Kyyiv Polytechnical Institute)

SUBMITTED: December 2, 1960

Card 10/10

GADZHIYEV, S.N.; AGARUNOV, M.Ya.; SHARIFOV, K.A. (Baku)

Measurement of small temperature differences by means of a thermistor. Zhur. fiz. khim. 36 no.4:897-899 Ap '62. (MIRA 15:6)

1. Institut fiziki AN Azerbaydzhanskoy SSR.
(Thermistors) (Temperature--Measurement)

SHARIFOV, K.A.; GADZHIYEV, S.N.; AGARUNOV, M.Ya.

Use of thermistors in calorimetry. Zhur.fiz.khim. 37 no.10:2368-2370 O '63. (MIRA 17:2)

1. Institut fiziki AN Azerbaydzhanskoy SSR.

L 2138-65 EWT(m)/EWP(q)/EWP(b) IJP(c)/BSD/ASD(p)-3/AFETR/ASM(p)-2/AEDC(a)/
AFWL/SSD/ESD(t) JD/JW
ACCESSION NR: AP4044628 S/0233/64/000/002/0085/0087

25

AUTHORS: Sharifov, K. A.; Gadzhiyev, S. N.; Agarunov, M. Ya.

TITLE: Enthalpy of formation of gallium antimonide

SOURCE: AN AzerbSSR. Izvestiya. Seriya fiziko-tekhnicheskikh i matematicheskikh nauk, no. 2, 1964, 85-87

TOPIC TAGS: gallium antimonide, enthalpy, thermodynamic calculation, calorimeter

ABSTRACT: The enthalpy was measured with a calorimetric setup using an isothermal shell described by the authors elsewhere (Izv. AN Azerb. SSR, seriya fiz.-matem. i tekhn. nauk 1962, no. 7, 47), with the calorimeter temperature measured with a thermistor using a procedure developed by the authors (Zh. fizich. khimii v. 35, no. 5, 1147, 1961; v. 36, no. 4, 887, 1962; v. 37, no. 10, 2368, 1963). The enthalpy of formation of gallium antimonide was measured by a method

C Card 1/2

GADZHIYEV, S.N.; AGARUNOV, M.Ya. (Baku)

Calorimetric combustion of organosilicon compounds. Zhur. fiz. khim. 39 no. 1:239-241 Ja '65 (MIRA 19:1)

1. Fizicheskiy institut AN Azerbaydzhanskoy SSR. Submitted January 6, 1964.

AUTHORS: Gadzhiyev, S. N.; Chebotarev, V. N.; Namazov, F. A.; Nagdaliyeva, Yu. R.; Azizov, T. Kh.; Agarunov, M. Ya.

ORG: none

TITLE: Physicochemical investigation of organosilicon compounds. 1. Enthalpy of formation of some methylchlorosilanes

SOURCE: AN AzerbSSR. Seriya fiziko-tekhnicheskikh i matematicheskikh nauk, no. 3, 1966, 57-61

TOPIC TAGS: standard enthalpy, calorimeter, calorimetry, chlorinated aliphatic compound, silane, organosilicon compound

ABSTRACT: The standard enthalpies of formation (at 25C) of trimethylchlorosilane, dimethyldichlorosilane, and methyltrichlorosilane were determined. The investigation is an extension of earlier published work by S. N. Gadzhiyev and M. Ya. Agarunov (Zh. fiz. khimii, 39, 239, 1965). The experimental procedure followed is described by S. N. Gadzhiyev and K. A. Sharifov (Izv. AN Azerb. SSR, seriya fiz-tekh i matem. nauk, 1962, No. 1). The calorimeter used is described by M. P. Kozina (Diss. MGU, 1955). A schematic of the calorimeter is presented. The physical properties of the materials investigated and the experimentally measured enthalpies of formation are tabulated. It was found that the standard enthalpy of formation at 25C for trimethylchlorosilane

Card 1/2

ACC NR: AP6036946

was -80.0 ± 4.5 kcal/mole, for dimethyldichlorosilane -104.8 ± 5.0 kcal/mole, and for methyltrichlorosilane -150.5 ± 10.0 kcal/mole. Orig. art. has: 2 tables and 2 graphs.

SUB CODE: 07/ SUBM DATE: none/ ORIG REF: 007/ OTH REF: 008

Card 2/2

AGARUNOVA, Yu.S.; MINSKER, O.B.; SUTEYEVA, T.C.

Etiology of actinomycosis; a review of literature. Vest. derm. i ven. 38 no.1:34-41 Ja '64. (MIRA 17:8)

1. Otdel bor'by s aktinomikozom Instituta meditsinskoy parazitologii i tropicheskoy meditsiny imeni Ye.I. Martsinovskogo (dir. - deystvitel'nyy chlen AMN SSSR prof. P.G. Sergiyev) Ministerstva zdravookhraneniya SSSR.

S/035/61/000/009/019/036
A001/A101

AUTHORS: Pomerants, M.A., Agarval', S.P., Potnis, V.R.

TITLE: Investigation by means of balloons of primary cosmic rays during solar disturbances

PERIODICAL: Referativnyy zhurnal. Astronomiya i Geodeziya, no. 9, 1961, 38, abstract 9A298 ("Tr. Mezhdunar. konferentsii po kosmich. lucham., 1959, v. 4", Moscow, AN SSSR, 1960, 61 - 70)

TEXT: The authors discuss the data of measuring cosmic ray intensity in the stratosphere at a latitude of 51°N during 1957-1958. The general intensity level in the stratosphere during IGY was considerably lower than the level measured during the preceding solar activity maximum (1947-1952). It is noted that no marked intensity changes were detected during chromospheric flares. A comparison of stratospheric measurement data with measurements of the neutron component at Ottawa shows that the amplitude of variations in the stratosphere is greater by $1.6 \pm 0.3$ times than on the Earth's surface. There are 9 references.

[Abstracter's note: Complete translation] L. Dorman

Card 1/1

28826 S/169/61/000/004/001/026
A005/A130

3.2430 (1482, 1559)

AUTHORS: Pomerants, M.A.; Agarval', S.P.; Potnis, V.R.

TITLE: Balloon investigation of primary cosmic rays during solar disturbances

PERIODICAL: Referativnyy zhurnal. Geofizika, no. 4, 1961, 15, abstract 4 G 86. (Tr. Mezhdunar. konferentsii po kosmich. lucham, 1959, v. 4, Moscow AN SSSR, 1960, 61 - 70)

TEXT: Data are given on measurements of cosmic ray intensity in the stratosphere at 51°N latitude during 1957 - 1958. The authors point out that no marked variation of intensity was detected during chromospheric flares. The general intensity level in the stratosphere during the IGY turned out to be considerably lower than the level determined during the previous maximum of solar activity (1947 - 1952). Comparison of stratospheric measurements with neutron component measurements at Ottawa shows that the amplitude of variations in the stratosphere is 1.6 $\pm$ 0.3 times greater that the the earth's surface.

[Abstracter's note: Complete translation]

Card 1/1

AGARYSHEV, D.F., inzh.; ZADOROZHNAYA, D.I., inzh.

Modernization of the ND-1250 extractor. Masl.-zhir.prom. 28 no.11: 33-34 N '62. (MIRA 15:12)

1. Zaporozhskiy maslozhirovoy kombinat.
(Zaporozh'ye—Oil industries—Equipment and supplies)

MASLIKOV, V.A., kand.tekhn.nauk; LEBEDEV, V.A.; ARUTYUNYAN, N.S., inzh.; AGARYSHEV, D.F., inzh.

Experience in the use of hydrocyclones for the purification of sunflower seed micelle. Masl.-zhir.prom. 29 no.1:27-30 Ja '63. (MIRA 16:2)

1. Krasnodarskiy institut pishchevoy promyshlennosti (for Maslikov, Lebedev). 2. Zaporozhskiy maslozhirovoy kombinat (for Arutyunyan, Agaryshev).

(Oil industries--Equipment and supplies)

AGARYSHEV, D.F., inzh.; MAKHALKIN, I.N.

Use of capron in oil industries. Masl.-zhir.prom. 29 no.2:41-43 F '63. (MIRA 16:4)

1. Zaporozhskiy maslozhirovoy kombinat.
(Oil industries--Equipment and supplies)

BOGDANOV, K.A.; YAKUSHEVA, Ye.F.; AGARYSHEV, V.P.; GOL'DENSHTEYN, L.M.

Production of benzyl acetate by esterification and removal of water by toluene. Masl.-zhir.prom. 25 no.11: 38-39 '59. (MIRA 13:3)

1. Kalushskiy kombinat sinteticheskikh dushistykh veshchestv.
(Acetic acid) (Toluene)

BYCHKOVA, Z.N., inzh.; AGARYSHEVA, Z.I., inzh.; SHVAREV, N.M., inzh.; SEMENOV, V.P., inzh.

Vacuum rectification of lactones. Masl.-zhir. prom. 27 no.9:27-29 S '61. (MIRA 14:11)

1. Kaluzhskiy kombinat sinteticheskikh dushistykh veshchestv.
(Lactones)

AGARZAYEV, B.K.

Our poultry farm. Ptitsevodstvo 8 no.12:15 D '58. (MIRA 11:12)

1. Predsedatel' revizionnoy komissii kolkhoza imeni Karla Marksa Khasavyurtovskogo rayona Dagestanskoy ASSR.
(Khasavyurt District--Poultry)

AGASANDYAN, G.A.

Problem concerning the synthesis of a class of automatic control systems influenced by random factors. Dokl. AN SSSR 153 no.4:768-771 D '63. (MIRA 17:1)

1. Vychislitel'nyy tsentr AN SSSR. Predstavleno akademikom A.A. Dorodnitsynym.

ACCESSION NR: AP4015304 S/0280/64/000/001/0165/0174

AUTHOR: Agasandyan, G. A. (Moscow)

TITLE: Synthesizing one class of automatic-control random-excited systems

SOURCE: AN SSSR. Izvestiya. Tekhnicheskaya kibernetika, no. 1, 1964, 165-174

TOPIC TAGS: automatic control, Laplace equation automatic control, automatic control synthesis, automatic control theory, minimizing mean square error

ABSTRACT: As the general analytical solution of a system describable by variable-coefficient differential equations is practically impossible, a narrow class of such systems, viz., a system described by Laplace-type equations, is investigated in this article. The problem of minimizing (mean-square-error-wise) $D(T) = E[y(T) - w(T)]^2$, is solved; here, E is the mathematical expectation, and $T \in (0, t_0)$. The approach indicated by H. M. James, et al. (Theory of Servo-mechanisms, McGraw, N.Y., 1947) for constant-coefficient differential equations

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ACCESSION NR: AP4015304

is applied here to the variable-coefficient equation case. "The author is using this opportunity to deeply thank V. G. Sragovich for his constant attention to the work." Orig. art. has: 1 figure and 55 formulas.

ASSOCIATION: none

| | | |
|---|---|---|
| SUBMITTED: 09May63 | DATE ACQ: 12Mar64 | ENCL: 00 |
| SUB CODE: CG, IE | NO REF SOV: 005 | OTHER: 002 |

Card 2/2

TITLE: Analytic design of a regulator for stabilizing a linear system with a random delay

SOURCE: AN SSSR. Izvestiya. Tekhnicheskaya kibernetika, no. 1, 1965, 118-125

TOPIC TAGS: automatic control, optimal control, regulator analytic design, linear control system, delayed control system, Markov process

ABSTRACT: A study is made of the problem of constructing a controller (a control function) which stabilizes the linear control system described by the system of differential equations with a delayed argument

$$\frac{dx_i}{dt}=\sum_{j=1}^{n}a_{ij}x_j(t)+\sum_{j=1}^{n}b_{ij}x_j(t-\xi)+b_iu, \quad i=1, 2, \ldots, n, \qquad (1)$$

where $\xi(t)$ is not the constant delay analyzed in other articles, but a Markov stepwise process, $u(x, \xi)$ is a control action (control function) formed on the

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ACCESSION NR: AP5007257

basis of previous values of $x_i$ and $\xi$; $a_{ij}$, $b_{ij}$, and $b_i$ are constant numbers. The optimal control function $u_0(x, \xi)$ is sought at which the solution $x = 0$ of (1) is exponentially stable in the mean and minimizes the averaged integral squared error. Under the assumption that a special functional $v(x, \xi)$ which satisfies certain conditions exists, it is proved that such an optimal control $u_0$ can be found. Conditions for the functional $v(x, \xi)$ are considered as sufficient conditions for the existence of the optimal control $u_0$. A general expression for $u_0$ is derived and its structure analyzed. Orig. art. has: 3 formulas. [LK]

ASSOCIATION: none

SUBMITTED: 03Mar64 ENCL: 00 SUB CODE: MA

NO REF SOV: 006 OTHER: 000 ATD PRESS: 3206

Card 2/2

MANASYAN, S.M.; MARTIKYAN, M.K.; AGASARYAN, G.P., red.; BALASANYAN, G.G., red.; CHERTOVA, Zh., tekhn.red.

[Forty years of Soviet Armenia] 40 let Sovetskoi Armenii. Erevan, 1960. 1 v. (MIRA 14:2)
(Armenia--Views) (Armenia--Economic conditions)

AGASARYAN, R.A., dotsent

Salvarsan dermatites; according to materials from the infirmary of Erivan City Skin and Venereal Disease Dispensary from 1948 to 1955. Trudy Erev.med.inst. no.11:431-434 '60. (MIRA 15:11)

1. Iz kafedry kozhno-venericheskikh zabolevaniy (zav. kafedroy - prof. D.S.Khudadov) Yerevanskogo meditsinskogo instituta.
(SKIN--DISEASES) (SALVARSAN--TOXICOLOGY)

AGASHENKO, A. R.

Phenol-lignin-formaldehyde resins. I. I. Matveev, O. B. Iv, and A. R. Agashenko. U.S.S.R. 64,212, Jan. 31, 1945. Hydrolyzed lignin is condensed with phenol in the presence of an acid catalyst; the acid is neutralized, and the product is condensed with CH-O in the presence of 0.2-2.0% of an org. base. M. Hosch

ROMODANOV, A.P., otv. red.; ZOZULYA, Yu.A., zam. otv. red.; AGASHEV-KONSTANTINOVSKIY, A.L., red.; KHOMINSKIY, B.S., red.; BROTMAN, M.K., red.; DUKHIN, A.L., red.

[Problems of neurosurgery; clinical, pathophysiological and morphological principles in neurosurgical pathology] Problemy neirokhirurgii; klinicheskie, patofiziologicheskie i morfologicheskie zakonomernosti v neirokhirurgicheskoi patologii. Kiev, Zdorov'ia, 1964. 332 p. (MIRA 18:9)

1. Ukrainskiy nauchno-issledovatel'skiy institut neyrokhirurgii.

SOV/133-59-4-1/32

AUTHORS: Babarykin, N.N., Agashin, A.A., and Yushin, F.A., Engineers

TITLE: Determination of the Active Weight of Burden in an Operating Blast Furnace (Opredeleniye aktivnogo vesa shikhty v deystvuyushchey domennoy pechi)

PERIODICAL: Stal', 1959, Nr 4, pp 289-291 (USSR)

ABSTRACT: It is understood that the active weight of burden ($kg/cm^2$) means the difference between the vertical pressure of the burden and the gas pressure supporting the burden: $Qa = Qr - Pg$. An analytical method of determining vertical pressure of the blast furnace burden based on Jansen's formula is proposed. Experimental determinations of the active weight of the burden at various furnace levels (down to 14.5m from the stock level) in an operating furnace were carried out. The measuring method was based on introducing a probe tube into the burden to a required level and measuring with a dynamometer (fig 1) the force required to retain the tube in the stationary state. The experimental set up is shown in Fig 2. The results of the determinations of static pressure of gas

Determination of the Active Weight of Burden in an Operating Blast Furnace

and active weight of the burden as well as calculated values for vertical pressure of the layer of burden material at various furnace levels are assembled in the table. The experimental and calculated values for the vertical pressure of the burden within the limits of the "dry" zone agreed well (fig 3). The experimental data on changes in the degree of participation of the active weight in the vertical pressure of burden characterising the degree of driving of the blast furnace (the amount of passing gases) indicate that under conditions of a high top pressure operation the upper half of the furnace could be driven harder. This reserve of driving capacity of the upper part of the furnace can be utilised by blowing into the furnace

Determination of the Active Weight of Burden in an Operating Blast Furnace

stack some reducing gases. There are 3 figures, 1 table and 1 Soviet reference.

ASSOCIATION: Magnitogorskiy Metallurgicheskiy Kombinat (Magnitogorsk Metallurgical Combine)

AGASHIN, A.A.; BABARYKIN, N.N.; VOLKOV, Yu.P.; GALATONOV, A.L.; KRYUKOV, N.M.; MALIKOV, K.V.; OSTROUKHOV, M.Ya.; PISHVANOV, V.L.; CHERNYATIN, A.N.; YUSHIN, F.A.

Experimental operation of blast furnaces on mazut and natural gas. Stal' 25 no.5:393-400 My '65. (MIRA 18:6)

1. Magnitogorskiy metallurgicheskiy kombinat; Vsesoyuznyy nauchno-issledovatel'skiy institut metallurgicheskoy teplotekhniki i Chelyabinskiy nauchno-issledovatel'skiy institut metallurgii.

AGASHIN, N., inzhener.

Depth sounding by high efficiency cable. Mor.flot 7 no.8:38-43 Ag '47. (Sounding and soundings) (MLRA 9:6)

AGASHIN, N.

Sea routes in the sixth five-year plan. Mor.flot 16 no.11:20-21 N'56.
(MIRA 10:1)
(Waterways)

AGASHIN, N.

Profitable use of the dredging machinery in the river fleet.
Mor.flot 19 no.10:10-12 O '59. (MIRA 13:2)

1. Zamestitel' nachal'nika Glavnogo upravleniya portovogo khozyaystva i morskikh putey Ministerstva morskogo flota.
(Dredging machinery)

CHEBURAKHIN, Aleksandr Evseyevich; AGASHIN, N.I. red.; ZINOV'EVA, A.A., red. izd-va; LAVRENOVA, N.B., tekhn. red.

[Practices of maintenance men in the navigational aid service in the Sea of Azov] Opyt raboty puteitsev Azov'ia. Moskva, Izd-vo "Morskoi transport," 1957. 44 p. (MIRA 11:7)
(Azov, Sea of--Aids to navigation)

AGASHIN, N.I.

Efficient methods of using dredging equipment Biul.tekh.-ekon.-inform.Tekh.upr.Min.mor.flota 5 no.4:68-78 '60. (MIRA 15:1)

1. Zamestitel' nachal'nika Glavporta.
(Dredging machinery)

SELIVANOVA, V.M.; AGASHIN, V.K.; POLYAKOVA, I.N.

Effect of ascorbic acid on the urinary excretion of 4-pyridoxine acid in healthy persons. Vop. pit. 22 no.5:55-57 S-O '63. (MIRA 17:1)

1. Iz otdela vitaminov C i P (zav. - prof. N.S. Yarusova) Gosudarstvennogo nauchno-issledovatel'skogo instituta vitaminologii Ministerstva zdravookhraneniya SSSR, Moskva.

AGASHIN, Yu.A.

Measuring vibration with the VR-1 gauge. Vrach.delo supplement '57:104-105 (MIRA 11:3)

1. Vibratsionnaya laboratoriya Leningradskogo nauchno-issledovatel'skogo instituta gigiyeny truda i professional'nykh zabolevaniy.
(VIBRATION--MEASUREMENT)

BUTKOVSKAYA, Z.M., kand.med.nauk; AGASHIN, Yu.A., nauchnyy sotrudnik

Physiological and hygienic aspects of vibration during vibrocompression of concrete [with summary in English]. Gig. i san. 22 no.9: 21-26 S '57. (MIRA 10:12)

1. Iz Leningradskogo nauchno-issledovatel'skogo instituta gigiyeny truda i professional'nykh zabolevaniy.

(INDUSTRIAL HYGIENE
inj. eff. of vibrations of machines used for vibrocompression of concrete on neuromusc. & vasc. systems)
(VIBRATIONS, inj. eff.
on neuromusc. & vasc. systems of workers handling machines for vibrocompression of concrete)
(MUSCLES, innerv.
inj. eff. of vibration of machines used for vibrocompression of concrete)
(BLOOD VESSELS
same)

AGASHIN, Yu.A., Cand Med Sci--(diss) "Hygienic characteristic of the vibration of certain instruments and its effect on the cardio-vascular system of humans." Len, 1958. 14 pp (Min of Health RSFSR. Len Sanit-Hygienic Med Inst), 200 copies (KL,30-58,131)

AGASHIN, Yu.A.; BUTKOVSKAYA, Z.M. (Leningrad)

Change in venous pressure under the influence of vibration.
Gig.truda i prof.zab. 3 no.2:52 Mr-Ap '59. (MIRA 12:6)

1. Institut gigiyeny truda i profzabolevaniy.
(VIBRATION--PHYSIOLOGICAL EFFECT)
(BLOOD PRESSURE)

AGASHIN, Yu.A.; GRIGOR'YEV, Z.E.; KOVNATSKIY, M.A.; LEVIN, V.M.; OSIPOV, Yu.A.; RAZUMOVSKIY, M.D.; RETNEV, V.M.; YURKEVICH, A.Ya.

Meeting devoted to the results of the work of the Leningrad Research Institute on Industrial Hygiene and Occupational Diseases for 1959-1960. Gig. i san. 26 no.8:110-114 Ag '61. (MIRA 15:4)

1. Iz Leningradskogo nauchno-issledovatel'skogo instituta gigiyeny truda i professional'nykh zabolevaniy.
(INDUSTRIAL HYGIENE)

BUTKOVSKAYA, E. M.; AGASHIN, Yu. A.; KORYUKAYEV, Yu. S.; PALEY, I. A.
(Leningrad)

Physiological hygienic study of the spring back arising during a change in the conditions for testing a pneumatic hammer. Gig. truda i prof. zab. no.4:8-14 '62. (MIRA 15:4)

1. Institut gigiyeny truda i profzabolevaniy.

(PNEUMATIC TOOLS--TESTING)
(INDUSTRIAL HYGIENE)

AGASHIN, Yu.A. [deceased];BUTKOVSKAYA, Z.M.; KORYUKAYEV, Yu.S.

New riveting hammers with vibration absorbers as one of the means to prevent vibration sickness in riveters. Trudy LSGMI 75:111-118 '63. (MIRA 17:4)

1. Kafedra gigiyeny truda s klinikoy professional'nykh zabolevaniy (zav. kafedroy-prof. Ye.TS. Andreyeva-Galanina) Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta i Leningradskiy gosudarstvennyy nauchno-issledovatel'skiy institut gigiyeny truda i professional'nykh zabolevaniy (dir. instituta-doktor med. nauk Z.E. Grigor'yev).

AGASHKIN, O.V.
and
VERGUNAS, F. I.

"Dielectric Losses of ZnS-Cu and ZnS-Cu, Fe phosphors, " pp 377-382, ill, 5 ref

Abst: Results are presented of an examination of the Frequency relationship of two phosphors ZnS-Cu (Cu-$10^4$ g/g, firing temperature during preparation process - 1,200 C) and ZnC-Cu, Fe (Cu-$10^4$ g/g Fe-$10^5$ g/g)

SOURCE: Izvestiya Tomskogo Politechn. In-ta S. M. Kirova (News of the Tomsk Polytechnic Institute imeni S. M. Kiro.), Volume 91, Works of the Conference of Solid Dielectrics, Tomsk, September 1955, Tomsk, Publishing House of the Polytechnical Institute, 1956

Sum 1854

AGASHKIN, O. V.

Category: USSR / Physical Chemistry - Crystals B-5

Abs Jour: Referat Zhur-Khimiya, No 9, 1957, 29732

Author : Agashkin O. V., Vergunas F. I.
Inst : Siberian Physico-Technological Institute at the Tomsk University
Title : Investigation of Attenuation of the Afterglow of ZnS-Cu Phosphor in the Temperature Tenebrescence Region'

Orig Pub: Tr. Sibirsk. fiz.-tekhn. in-ta pri Tomskom un-te, 1956, No 35, 101-109

Abstract: Investigation of attenuation of afterglow of ZnS-Cu (10 ' g/g, 900°C) phosphor, near (364-493°K),'' It was found that near, and within, the tenebrescence region, the attenuation curves, recorded at full excitation and low intensities of exciting light, are defined by fractional Becquerel hyperbolas $I = At^{-}$, wherein is constant near the tenebrescence region and increases with temperature within the tenebrescence region. With high intensities of excitation these curves become exponentials. Depth of localization levels which bring about attenuation of afterglow, in the vicinity and within the tenebrescence region, is, respectively, of 0.2 and 0.17 eV, that is practically the same.

Card : 1/1 -27-

ACASHKIN , O.V. Cand Phys-Math Sci (diss) "Photodielectric effect phenomenon in zincsulfide phosphor crystal" Tomsk, 1957

11 pp 20 cm. (Tomsk State Univ im V.V. Kuybyshev) 100 copies

(KL, 11-57, 96)

Agashkin, O. V.

51-1-15/18

AUTHOR: Agashkin, O. V.

TITLE: On the Nature of the Photodielectric Effect in Phosphors ZnS-Cu and ZnS-Cu,Fe. (K Voprosu o prirode fotodielektricheskogo effekta v fosforakh ZnS-Cu i ZnS-Cu,Fe.)

PERIODICAL: Optika i Spektroskopiya, 1957, Vol.III, Nr.1, pp.87-90. (USSR)

ABSTRACT: This paper was presented at the Fifth All-Union Conference on Luminescence in Tartu in June 1956. There are two points of view on the nature of the photodielectric effect. Some authors (Ref.1) relate the photodielectric effect to polarization of localized electrons, other workers (Ref.2) relate this effect to photoconductivity of the crystalline sample. To obtain some information on the subject of the photodielectric effect this paper reports measurement of dielectric permittivity of phosphors ZnS-Cu and ZnS-Cu,Fe Fig.1 shows the frequency dependence of power factor and capacitance for ZnS-Cu,Fe. Observations were made at room temperature both in the darkness and on illumination. The results obtained suggest that in ZnS-Cu,Fe the photodielectric effect is due to a simultaneous change of

Card 1/2

On the Nature of the Photodielectric Effect in Phosphors ZnS-Cu and ZnS-Cu,Fe.

conductivity and filling of localization levels with electrons on illumination. Permittivity of both phosphors was measured by the following method. Samples of phosphors were prepared in the form of powder suspensions in polystyrene or perspex. The measuring circuit is shown in Fig.2. It is a combination of a Q-meter and an a.c. bridge. The results were obtained at a frequency high enough to eliminate the effect of polarization due to space charge at powder-grain boundaries. These results are given in a table on p.89. They indicate that in ZnS-Cu the main contribution to the photodielectric effect comes from photoconductivity. In ZnS-Cu,Fe polarization of weakly bound charges occurs with a relaxation time smaller than the frequency of measurement. In the latter phosphor, as mentioned above, photoconductivity effects are also present. There are 3 figures, 1 table and 7 references, 2 of which are Slavic.

Card 2/2

SUBMITTED: December 8, 1956 (to the Editor of "Izvestiya AN SSSR".)
AVAILABLE:

AGASHKIN, O.V.

51-4-7/26

AUTHORS: Vergunas, F. I. and Agashkin, O. V.

TITLE: Photo-dielectric Effect in ZnS-Cu Phosphor. (Fotodielektricheskiy effekt v fosfore ZnS-Cu).

PERIODICAL: Optika i Spektroskopiya, 1957, Vol.III, Nr.4, pp.338-344. (USSR)

ABSTRACT: Capacitance C and tangent of the loss-angle tan $\delta$ of a capacitor containing a crystal phosphor change when the latter is illuminated. This effect is called a photo-dielectric effect (p.d.e.). This effect is observed in photo-conducting phosphors (Ref.1). Some authors ascribe p.d.e. to (a) electrons localized at capture levels or to the stored light-sum (Ref.2), while others regard (b) photo-conductivity of the granular sample to be responsible for this effect (Ref.3). Irrespective of whether mechanism (a) or (b) is responsible on increase of frequency the change in the loss-angle tangent $\Delta\tan\delta$ passes through a maximum, and the change in capacitance $\Delta C/C_o$ decreases. Dependence of the capacitance change on the intensity of exciting light

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Photo-dielectric Effect in ZnS-Cu Phosphor.

should be the same for both mechanisms. The present authors studied phosphor ZnS-Cu (Cu concentration $10^{-4}$ g/g; 1100°C) in order to decide which mechanism is responsible for p.d.e. The optical properties of the samples were obtained by L.P. Krasovskaya and Yu.L. Lukantsever. All measurements were made using a Q-meter KB-1. One capacitor electrode was made of aluminium foil and the other of nickel-plated netting with 575 elements per $cm^2$. The electrode surface was 27 $cm^2$, the phosphor thickness was 20 $mg/cm^2$. A layer of mica was placed between the sample and the nickel electrode, and plate glass on top of the nickel electrode. Measurements can be made in a wide range of temperatures (116-550°K). The phosphor was excited by the mercury triplet at 365 mμ. Measurements of tanδ and C were made in the frequency range $3 \times 10^4 - 6 \times 10^6$ c/s. The frequency dependences of tanδ and C of the capacitor with ZnS-Cu were obtained at various intensities of the exciting light E and at various temperatures.

Card 2/6 Fig.1 shows the frequency dependences of the photo-

Photo-dielectric Effect in ZnS-Cu Phosphor.

dielectric effect for ZnS-Cu at various light intensities E (curve 1: E - 100%; curve 2: E - 3.3%; curve 3: E - 0.1%). Five weak maxima of $\Delta \tan\delta$ in Fig.1 are due either to electrons localized at capture centres, or to some properties of the granular structure of the sample. These maxima are superimposed on an intense maximum due to conductivity in the granular sample. Fig.2 shows the result obtained at three frequencies at room temperature (curves marked 1: 2.15 Mc/s; curves marked 2: 387 kc/s; curves marked 3: 77 kc/s). With increase of E the change in capacitance $\Delta C/C_0$ tends to saturation while $\Delta \tan\delta$ passes through a maximum. Both the frequency and the exciting-light intensity dependences of p.d.e. indicate that the effect of the localized electrons is not important, but that conductivity of the granular sample is dominant. The frequency dependence of p.d.e. was also obtained at liquid-oxygen temperature both during and after excitation. Luminescence and consequently conductivity, after the excitation had ceased, reached a certain low steady-state value in several seconds. After 2 minutes the p.d.e. fell to 5%

Photo-dielectric Effect in ZnS-Cu Phosphor.

of its value during excitation, and this effect may be ascribed to "frozen-in" light-sum or weak residual conductivity. It can be concluded, therefore, that above 116°K the localized electrons are responsible for no more than 5% of p.d.e. Fig.3 shows the temperature dependence of p.d.e. at 100-550°K at different frequencies and exciting-light intensities. This temperature dependence is satisfactorily explained by changes in concentrations of free electrons, and it is not due to localized electrons. The theoretical formulae obtained for the free-electron mechanism (case (b), conductivity of the granular sample) derived in this paper are in good agreement with the experimental curves of Fig.3 for $\Delta \tan \delta$ . Theory predicts saturation for $\Delta C/C_o$, while actually, after reaching a maximum this quantity decreases (Fig.3). This decrease is due to temperature quenching of luminescence. Again, the observed behaviour can be explained by changes of concentration of free electrons in the region where

quenching occurs. The latter conclusion was confirmed by finding the temperature dependence of a p.d.e. for ZnS-Zn phosphor in which quenching of the blue band began at 210°K. The results are shown in Fig.4 which indeed confirms that change of capacitance $\Delta C/C_o$ begins to fall at 210°K. Fig.5 shows thermo-curves of luminescence and p.d.e. of ZnS-Cu phosphor at various frequencies (thermo-curves are defined as temperature dependences when light illumination had ceased). In obtaining these curves the phosphor was excited for 10 minutes at liquid-oxygen temperature. Then the phosphor was left for 3 minutes in darkness and heating was carried out at a rate of 0.6 deg/sec. Thermo-curves for luminescence (Fig.5, curve 1) and for p.d.e. (Fig.5, curves 2-4) were obtained at E = 100%. The form of thermo-curves is ascribed by the present authors to change of concentration of free electrons in the process of heating of the phosphor. Thus all the experiments tend to confirm the hypothesis of the predominant role of conduction electrons in the photo-dielectric effect in ZnS-Cu. This does not preclude the possibility of

48-5-4/56

SUBJECT: USSR/Luminescence

AUTHOR: Agashkin O.V.

TITLE: Determination of Dielectric Permittivity in Excited ZnS-Cu and ZnS-Cu, Fe-Phosphors (Opredeleniye dielektricheskoy pronitsayemosti v vozbuzhdennykh ZnS-Cu i ZnS-Cu, Fe-fosforakh)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaya, 1957, Vol 21, #5, pp 652-653 (USSR)

ABSTRACT: Fine-grained powders of ZnS-Cu and ZnS-Cu Fe-phosphors were studied with an applied field whose frequency was 2 megacycles.

The values of dielectric permittivity were calculated by the Lichtenecker logarithmic formula and proved to be approximately 8 in darkness for both of these phosphors, the same in polystyrene and Plexiglas. The lighting of ZnS-Cu phosphor led to the increase of this value by 100 % while measured in polystyrene and by 200 % while measured in Plexiglas. At the same intensity of excitation, the dielectric permittivity value of ZnS-Cu, Fe phosphor increased by 80 % while measured in both polystyrene and Plexiglas.

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TITLE: Determination of Dielectric Permittivity in Excited ZnS-Cu and ZnS-Cu, Fe-Phosphors (Opredeleniye dielektricheskoy pronitsayemosti v vozbushdennykh ZnS-Cu i ZnS-Cu, Fe-fosforakh)

There are 2 Russian references cited.

INSTITUTION: Siberian Physico-Technical Institute

PRESENTED BY:

SUBMITTED: No date indicated.

AVAILABLE: At the Library of Congress.

Card 2/2

AGASHKIN O.V.

48-5-12/56

SUBJECT: USSR/Luminescence

AUTHORS: Vergunas F. I. and Agashkin O.V.

TITLE: Electric and Optical Properties of ZnS-Cu-Phosphor (Elektricheskiye i opticheskiye svoystva ZnS-Cu-fosfora)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaya, 1957, Vol 21, #5, p 653 (USSR)

ABSTRACT: Changes in the values of the tangent of the angle of dielectric losses, $\Delta tg\delta$, and capacitance $\Delta C/C_0$ of a condenser containing ZnS-Cu-phosphor ($10^{-4}$ g of Cu per 1 g of phosphor, t=1,100°C) occurring during the exposure to light of 365 mμ wavelength were determined. The dependences of $\Delta tg\delta$ and $\Delta C/C_0$ on frequency in the range from $3x10^4$ to $6x10^6$ cycles were measured. It was discovered that $\Delta tg\delta$ had 4 peaks and $\Delta C/C_0$ decreased from a larger constant value to a smaller one. The peaks of $\Delta tg\delta$ are ascribed to electrons localized in traps of various depths.

Temperature changes of $\Delta tg\delta$ and $\Delta C/C_0$ during excitation were studied and thermal curves of $\Delta tg\delta$ were obtained and compared with the thermal luminescence curves.

Card 1/2 Sibirskiy fiziko-tekhnicheskiy institut.
(Luminescence--Congresses) (Phosphors--Congresses)

TITLE: Electric and Optical Properties of ZnS-Cu-Phosphor (Elektricheskiye i opticheskiye svoyatva ZnS-Cu-fosfora)

It was concluded that frequency and temperature studies of tangent of the angle of dielectric losses and capacitance changes can furnish some information as to parameters of localization levels.

1 Russian reference is cited.

INSTITUTION: Siberian Physico-Technical Institute

PRESENTED BY:

SUBMITTED: No date indicated

AVAILABLE: At the Library of Congress.

Card 2/2

AGASHKIN, O. V.

Agashkin, O.V. and Vergunas, F. I. [Tomsk, Sibirskiy Fiziko-tekhnicheskiy Institut (Siberian Institute of Physical Technology)] On Reasons for the Photodielectric Effect of Zinc Sulfide Phosphors

(The Physics of Dielectrics; Transactions of the All-Union Conference on the Physics of Dielectrics) Moscow, Izd-vo AN SSSR, 1958 285 p. Printed copies printed.

This volume publishes reports presented at the All-Union Conference on the Physics of Dielectrics, held in Dnepropetrovsk in August 1956 sponsored by the "Physics of Dielectrics" Laboratory of the Fiziceskiy Institut imeni Lebedev AN SSSR (Physics Institute imeni Lebedev of the AS USSR), and the Electrophysics Department of the Dnepropetrovskiy gosudarstvennyy universitet (Dnepropetrovsk State University).

69707

24.2600 SOV/81-59-9-30326

Translation from: Referativnyy zhurnal. Khimiya, 1959, Nr 9, p 39 (USSR)

AUTHORS: Agashkin, O.V., Vergunas, F.I.

TITLE: The Problem of the Causes of the Photodielectrical Effect in Zinc Sulfide Phosphors

PERIODICAL: V sb.: Fiz. dielektrikov. Moscow, AS USSR, 1958, pp 28 - 35. Diskuss., 52

ABSTRACT: The frequency dependencies of the capacitance C and the tangent of the angle of dielectrical losses tg $\delta$ have been measured in capacitors containing ZnS-Cu and ZnS-Cu, Fe phosphors at excitation with light of various intensity E at various temperatures. The changes of C and tg $\delta$ with E for ZnS-Cu are connected principally with the electrons of conductivity at 116°K, as well as at higher temperatures. For ZnS-Cu, Fe the photodielectric effect is determined partially by the electrons of conductivity and partially by localized electrons. The dielectric constant ($\varepsilon$) of ZnS-Cu and ZnS-Cu, Fe has been determined in polystyrene and Plexiglas, both in the darkness and at illumination, and it has been established that the increase in $\varepsilon$ at the illumination of ZnS-Cu

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The Problem of the Causes of the Photodielectrical Effect in Zinc Sulfide Phosphors

in various fillers is different and for ZnS-Cu, Fe it does not depend on the filler. This points to the fact that the principal part of the photoelectrical effect in ZnS-Cu is connected with the photoconductivity, and in ZnS-Cu, Fe a real change of $\varepsilon$ is observed.

B. Gugel'

Card 2/2

SOV/81-59-8-26291

Translation from: Referativnyy zhurnal. Khimiya, 1959, Nr 8, p 35 (USSR)

AUTHOR: Agashkin, O.V.

TITLE: The Dielectric Losses in ZnS-Zn Phosphor

PERIODICAL: Tr. Sibirsk. fiz.-tekhn. in-ta, 1958, Nr 36, pp 337 - 340

ABSTRACT: The article has not been reviewed.

Card 1/1

AGASHKIN, O.V.; LITVINENKO, G.S.; SOKOLOV, D.V.; CHASNIKOVA, S.S.

Stereochemistry of nitrogen heterocycles. Part 11: Infrared spectra of the family of 2-methyl-4-hydroxydecahydroquinoline stereoisomers. Zhur. ob. khim. 31 no.3:862-870 Mr '61. (MIRA 14:3)

1. Institut khimii AN Kazakhskoy SSR.
(Quinoline--Spectra)

L 21341-65 EWT(m)/EWP(j)/T Pc-4 BSD/SSD/AFWL/APGC(b)/ESD(gs)/ESD(t)
RWH/RM

ACCESSION NR: AT5001011 S/2850/64/011/000/0104/0107

AUTHOR: Lyubman, N.Ya., Agashkin, O.V., Kushnikov, Yu.A., Kartseva, I.I., Shostak, I.T., Imangaziyeva, G.K. 37

TITLE: Membranes based on styrene-formadehyde resins. Part 2. A study of the structure of styrene-formaldehyde resins by infrared spectroscopy

SOURCE: AN KazSSR. Institut khimicheskikh nauk. Trudy, v. 11, 1964. Sintez i issledovaniye vysokomolekulyarnykh soyedineniy (Synthesis and research of high-molecular compounds), 104-107

TOPIC TAGS: styrene formaldehyde resin, polystyrene membrane, infrared spectroscopy, polymer composition, styrene polymerization

ABSTRACT: Styrene-formaldehyde resins were prepared by a method described in the first part of the paper (Izv. AN KazSSR, Seriya Khim. i Tekhn. Nauk (1963), #3), involving condensation in the presence of 45% sulfuric acid and when 0.5:1 to 3:1 molar ratios of

formaldehyde to styrene; they were analyzed by infrared spectroscopy in the [illegible] their solutions in carbon tetrachloride. The spectra shown in Fig. 1 of the Enclosure proved the absence of vinyl groups; thus, the reaction proceeds with the participation and

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L 21341-65
ACCESSION NR: AT5001011

elimination of double bonds in the styrene chain. Oxygen is bonded into ether and acetal groups, and the length of the acetal chain increases with the feed concentration of formaldehyde. Aromatic rings do not form a part of the linear chain, whose terminals are formed

by hydroxyl and methyl groups. Ketone groups are present, but the low intensity of the corresponding bands indicates a low concentration. Selected structures for the chain of styrene formaldehyde resins are proposed. Elemental composition, molecular weight, specific gravity, and refractive index of the studied specimens were determined and tabulated. Orig. art. has: 2 tables, 1 figure, and 4 formulas.

ASSOCIATION: Institut khimicheskikh nauk, Akademiya nauk Kazakhskoy SSR (Institute of Chemical Sciences, Academy of Sciences of the Kazakh SSR)

SUBMITTED: 00 ENCL: 01 SUB CODE: MM

NO REF SOV: 002 OTHER: 000

L 19013-65

ACCESSION NR: AR5012262 UR/0058/65/000/003/D036/D036

17
B

SOURCE: Ref. zh. Fizika, Abs. 3D270

AUTHOR: Agashkin, O. V.; Chasnikova, S. S.; Litvinenko, G. S.; Sokolov, D. V.

TITLE: Infrared and ultraviolet spectra of several batch alcohols

CITED SOURCE: Tr. Komis. po spektroskopii. AN SSSR, vyp. 1, 1964, 330-336

TOPIC TAGS: spectroscopy, ir spectra, ultraviolet spectra, batch alcohol

TRANSLATION: The equilibrium constants for monomers-associates were determined by measuring the intensities of bands of free and bonded hydroxyls in the infrared absorption spectra of solutions of stereoisomer batch alcohols. It was found that for equal conditions the larger equilibrium constants correspond to associates of equatorial isomers, rather than to associates of their axial epimers. The energies of hydrogen bonds, formed by various stereoisomers and corresponding to steric coefficients, were determined from temperature relations of equilibrium constants. It is explained that equatorial isomers form stronger hydrogen bonds than axial isomers. A test to interpret the observed effects was made by obtaining data on the electronic spectra of stereoisomer alcohols in the near and vacuum ultraviolet

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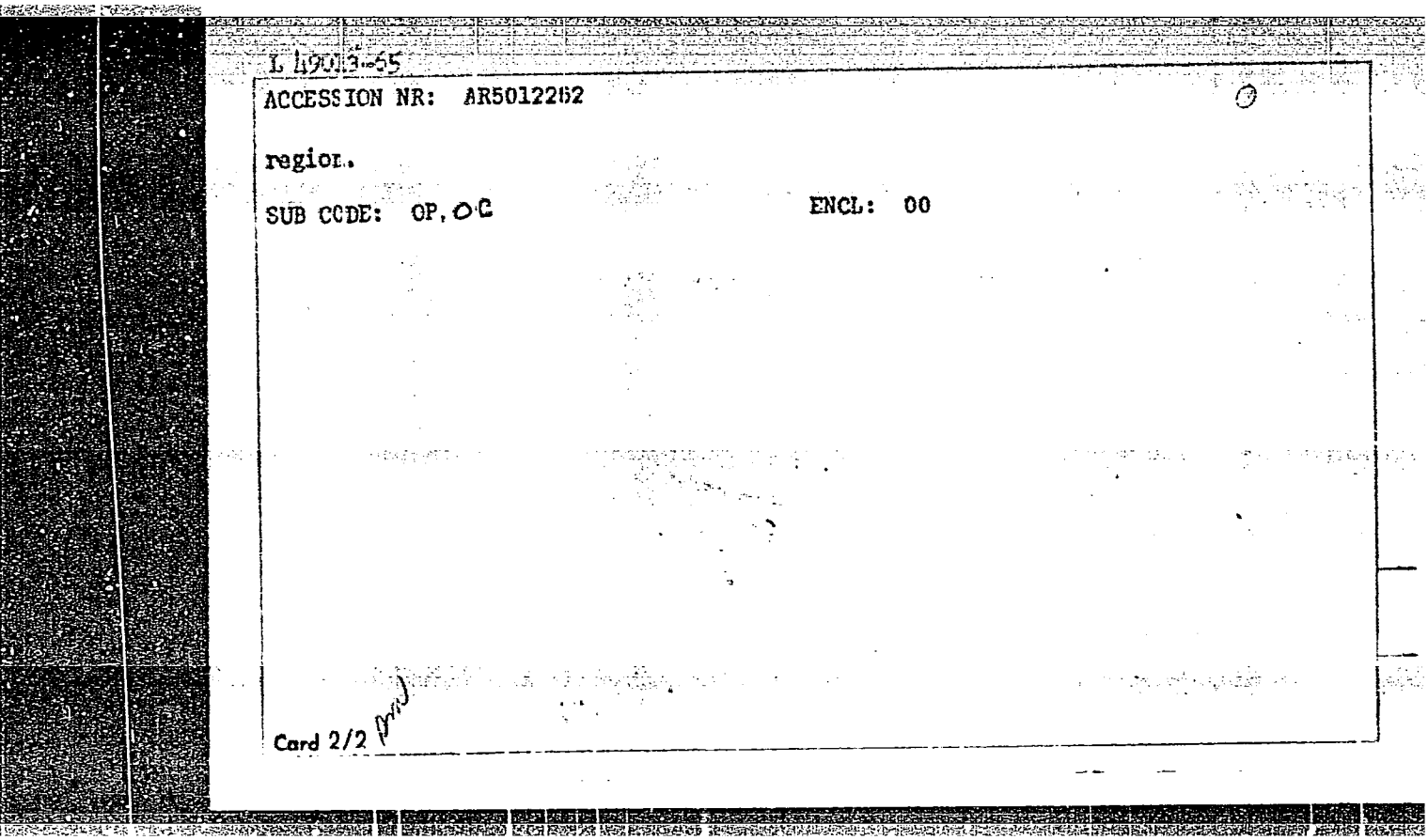

L 49013-65

ACCESSION NR: AR5012262

region.

SUB CODE: OP, OC ENCL: 00

Card 2/2

LYUBMAN, N.Ya.; AGASHKIN, O.V.; KUSHNIKOV, Yu.A.; KARTSEVA, I.I.; SHOSTAK, F.T.; IMANG/ZIYEVA, G.K.

Membranes based on styrene formaldehyde resins. Report No.2: Structure of styrene formaldehyde resins studies by infrared spectroscopy Trudy Inst. khim. nauk AN Kazakh. SSR 11:104-107 '64. (MIRA 17:11)

S/010/60/000/004/003/005/X X
A053/A026

AUTHOR: Agashkin, Yu.N.

TITLE: Investigation of Snow Melting by the Melting of Radioactive Isotopes

PERIODICAL: Izvestiya Akademii nauk SSSR, seriya geograficheskaya, 1960, No. 4, pp. 117 - 121

TEXT: The article describes a series of observations being carried out in connection with snow melting, as part of a program of complex investigations into the problem concerning "Heat and Water Regime of the Earths' Surface", conducted by the Institut geografii AN SSR (Institute of Geography of the AS USSR). The process of springtime snow melting has been observed by means of radioactive isotopes, which permit to ascertain the daily changes taking place in the water reserves contained in the snow during thawing. In this connection special devices are used to measure the change in the intensity of rays after passing through the mass of snow, the source of radiation being located under the snow cover. A.I. Danilin carried out the first investigations of this kind in 1957 with his isotope hygrometer ИВП-64 (IVP-64) and isotope snow meters. P.P. Kuz'min published in 1958 the results obtained with the instruments of Danilin in

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S/010/60/000/004/003/006/XX
A053/A026

Investigation of Snow Melting by the Method of Radioactive Isotopes

comparing these with results from other methods. The author has used for his observations the same radioactive cobalt $Co^{60}$ as did Danilin and Kuz'min, emitting γ-rays having an activity of 1.5 millicuries. The respective instruments were issued by the Isotope Laboratory of the Gidrometeorologicheskiy institut priborostroyeniya (Hydrometeorological Institute). The article describes the type of instrument shown in Figure 1. It consists of a stand with a scale measuring the depth of snow; to this stand is attached a bracket, which takes the tube-counter of γ-quanta, which can be adjusted, so that the receiving part is removed to a distance from the bottom of the stand, exceeding the thickness of the snow cover. Below the receiving part a 7 mm lead tube is placed in the snow going down to the ground, which at its extreme end has a container into which the isotope is introduced through the tube. The observation conducted by the author covered 5 different points, at which measurements and readings were taken, covering an area which consisted to 50% of mixed forest and 50% of fields and pasture land. Each installation point is named after the kind of land on which it stands, such as waste land, clover, clearing, fir-grove, mixed forest. The article describes each emplacement, giving full characteristics of location, soil and thickness of snow cover in each case. Measurements commenced to be taken on

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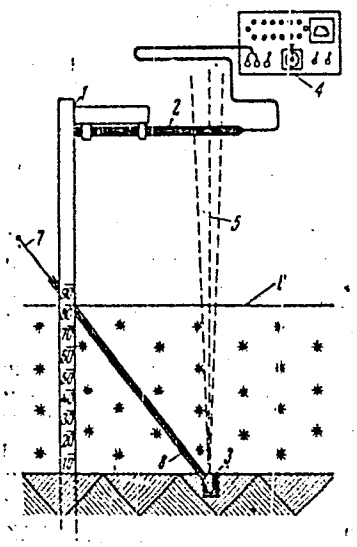
S/010/60/000/004/003/006/XX
A053/A026

Investigation of Snow Melting by the Method of Radioactive Isotopes

Figure 1. Arrangement for investigating snow melting by means of radioactive rays. 1 - stand with bracket; 2 - tube-counter of γ-quanta; 3 - lead container; 4 - conversion device; 5 - ray of γ-quanta; 6 - top surface of the snow; 7 - rod with isotope at the end; 8 - tube for inserting isotope.

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S/010/60/000/004/003/006/XX
A053/A026

Investigation of Snow Melting by the Method of Radioactive Isotopes

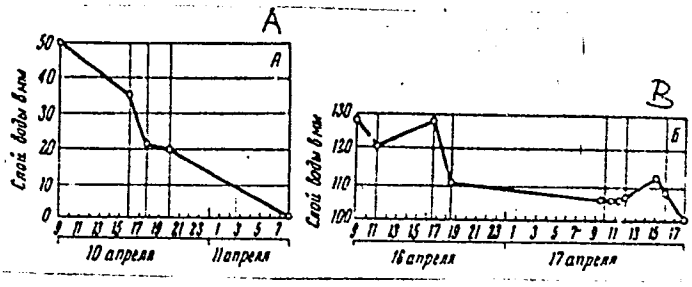


Figure 3. Graph showing course of water reserves in snow cover in clover field (A) and in mixed forest (B). Layer of water in mm - April 10, April 11; April 16, April 17.

Card 5/5

KARPACHEVA, S.M.; KHORKHORINA, L.P.; AGASHKINA, G.D.

Effect of some salting out substances on the distribution of uranyl nitrate between the aqueous solution and the extracting solvent. Zhur.neorg.khim. 2 no.4:961-969 Ap '57. (MLRA 10:8)
(Uranyl nitrate)

SOV/78-3-8-28/48

AUTHORS: Bol'shakov, K. A., Fedorov, P. I., Agashkina, G. D.

TITLE: The Ternary System of the Chlorides of Sodium, Cobalt, and Nickel (Troynaya sistema iz khloridov natriya, kobal'ta i nikelya)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1958, Vol. 3, Nr 8, pp. 1891-1895 (USSR)

ABSTRACT: By means of thermal analysis the binary system of the chlorides of cobalt and nickel and the ternary system of the chlorides of sodium, cobalt, and nickel were studied. The binary system $CoCl_2$-$NiCl_2$ was examined only in the range of small $NiCl_2$ contents. Uninterrupted solid solutions are formed in this system and a minimum appears on the melting-diagram. The minimum lies at 680°centigrade and 7 per cent $NiCl_2$. Solid solutions do not appear in the ternary system when sodium chloride is present, but there are eutectic points which practically coincide with the points of the binary eutectic of the system $NaCl$-$CoCl_2$. There are 11 figures and 2 references, 2 of

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The Ternary System of the Chlorides of Sodium, Cobalt, and Nickel

which are Soviet.

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M. V. Lomonosova (Institute of Fine Chemical Technology imeni M. V. Lomonosov, Moscow)

SUBMITTED: July 8, 1957

S/186/62/004/005/006/009
E075/E135

AUTHORS: Rozen, A.M., Khorkhorina, L.P., Karpacheva, S.M., and Agashkina, G.D.

TITLE: Influence of temperature on extraction with tributylphosphate

PERIODICAL: Radiokhimiya, v.4, no.5, 1962, 591-600

TEXT: The authors investigated the effect of temperature on the simultaneous distribution of uranyl nitrate and nitric acid between tributylphosphate (TBP) and the equilibrium aqueous phase for acidities up to 8.0 M and the concentration of uranyl nitrate from 0 to 1.0 M. The distribution was studied at 20, 40 and 70 °C. The extractant (TBP) was dissolved in saturated hydrocarbons and shaken with an equal volume of the aqueous solution. The distribution coefficient increases and passes through a maximum with the increasing concentration of $HNO_3$ (up to 3-4 N) and decreases at higher acidities. The distribution coefficient of uranyl nitrate is lowered by the increase of temperature from 20 to 70 °C but this increase has no effect on the distribution of $HNO_3$. The distribution of $HNO_3$ increases, however, with the increase of

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E075/E135

The constants for the aqueous solutions possessing different acidities are practically identical. At 20 °C the following approximate relation holds:

$$\tilde{K} \simeq 70\gamma_{\pm}^{3}$$

where $\gamma_{\pm}$ - activity coefficient of $UO_2(NO_3)_2$ in aqueous phase.

The constants decrease with the increasing temperature. The heat of extraction is approximately 4660 cal/mole at a constant effective concentration of $HNO_3$ in aqueous phase $x_{ef} = 0.2$ M and 3400 cal/mole for $x_{ef} = 1.2$ M.

There are 13 figures and 2 tables.

SUBMITTED: October 19, 1961

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PARIYSKAYA, L.V.; KOGAN, F.N.; KALACHEVA, A.P.; CHEREDNICHENKO, G.S.. Prinimali uchastiye: PASHNINA, V.I.; KOROBKOVA, T.N.; BURYAKOVA, G.I.; AGASHKINA, N.S.; ANTOKHINA, G.N.; ANUROVA, V.Ya.; BOBINA, M.L.; YERMAKOVA, Z.P.; YEFREMOV, Yu.A.; POLUTSKAYA, L.G.; SHISHKINA, V.G.; LAPTIYEV, P.P., otv.red.; ROGOVSKAYA, Ye.G., red.; SERGEYEV, A.N., tekhn.red.

[Agroclimatic reference book on Chita Province] Agroklimaticheskii spravochnik po Chitinskoi oblasti. Leningrad, Gidrometeor.izd-vo, 1959. 131 p. (MIRA 13:2)

1. Chita. Gidrometeorologicheskaya observatoriya. 2. Starshiy inzhener-agrometeorolog Chitinskoy gidrometeorologicheskoy observatorii (for Pariyskaya). 3. Chitinskaya gidrometeorologicheskaya observatoriya (for Kogan, Kalacheva, Cherednichenko). (Chita Province--Crops and climate)

AGASHKOV, I.

More about a school construction plot. Prof.-tekh. obr. 17 no.7:12 Jl '60. (MIRA 13:8)

1. Direktor stroitel'nogo uchilishcha No.25 (Lugansk).
(Lugansk--Building trades--Study and teaching)

AGASI, G.M.

Change in the oxygen tension in myocardiac tissues following stimulation of the chemoreceptors of the stomach. Izv. AN Azerb.SSR.Ser.biol.nauk no.5:95-101 '64. (MIRA 18:4)

AGASI, G.M.

Change in the $O_2$ tension in the tissues of the heart muscle following stimulation of mechanical and chemical receptors of the stomach and the changed functional state of the reticular formation of the brain stem. Izv. AN Azerb. SSR. Ser. biol. nauk no.2:94-99 '[illegible]. (MIRA 10:7)

KADYROV, G.K.; AGASI, G.S.

State of the electric activity of the reticular formations of the brain stem during chemical stimulation of the receptors of the bladder. Izv.AN Azerb.SSR.Ser.biol.i med.nauk no.3:119-130 '62. (MIRA 15:9)

(BLADDER--INNERVATION) (ELECTROPHYSIOLOGY) (BRAIN)

AGASI, N.M.

Present-day status of Iranian coal mining. Izv.AN Azerb.SSR. Ser.obshchestv.nauk no.4:109-121 '61. (MIRA 14:8)
(Iran--Coal mines and mining)

AGASIYEV, A.I.

Rare case of echinococcus of large dimensions in the spleen.
Azerb. med. zhur. no. 10:56-57 O '60. (MIRA 13:10)
(SPLEEN—HYDATIDS)

AGASIYEV, A.I.

Case of a transplantation of the ureters into the rectum and sigmoid with some characteristics of the surgical technique. Azerbaidzh. med. zh. 6:78-SC Je'63 (MIRA 17:1)

AGASIYEVAV. S.I.; BAREKYAN, A. Sh.

Change of mean velocities in the main channel and Chezy coefficient during flood flow. Meteor. i gidrol. no.9: 36-39 S '61. (MIRA 14:8)

(Floods)

AGASIYEVA, Sof'ya Ivanovna, kandidat tekhnicheskikh nauk; LATYSHENKOV, A.M., kandidat tekhnicheskikh nauk, nauchnyy redaktor; GOLUBENKOVA, L.A., redaktor izdatel'stva; MEL'NICHENKO, F.P., tekhnicheskiy redaktor

[Secondary spillways and trench spillways] Bokovye vodoslivy i transheinye vodosbrosy. Moskva, Gos. izd-vo lit-ry po stroit. i arkhitekture, 1956. 83 p. (MIRA 9:10)
(Spillways)

KHOMYAK, T.N. (Cheboksary); KOVALEVA, Yu.N. (Cheboksary); ANDREYEV, G.A. (Cheboksary); AGAS'KIN, V.N. (Cheboksary)

Scoliosis. Ortop., travm. i protez. 26 no.12:80 D '65. (MIRA 19:1)

1. Adres avtorov: Cheboksary, Chuvashskaya ASSR, Bol'nichnyy gorodok, Respublikanskaya bol'nitsa. Submitted June 16, 1965.

U.S.S.R. / Human and Animal Physiology. Blood Circu- T
lation.

Abs Jour: Ref Zhur-Biol., No 5, 1958, 22143.

Author : ~~Agaskin Y. A.~~
Inst : State Institute of Labor Hygiene and Occupational Diseases, L.
Title : Reflex Changes of the Cardio Vascular Function Under the Effect of Vibration Stimulation.

Orig Pub: Tr. Ubilein. Nauchen. Sessii, Posvyashen. 30--letnei deyatsti Gos. n,-e int-ta gigieny truda e profzabolevanii. L., 1957, 96-101.

Abstract: (Transaction of the Jubilee Scientific Session Dedicated to the Thirty Year Activity of the National Institute of Labor, Hygiene and Occupational Diseases). The first phalanx of the middle finger of the right hand was placed for three minutes on an ebonite plate of 25mm dia-



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AGASUAN, P.K.; VINOGRADOVA, Ye.N.; AN' TSZIN-ZHU [An Ching-ju]

Determination of the number of electrons taking part in the reduction of indium at dropping mercury electrode. Zav. lab. 27 no.2:131-135 '61. (MIRA 14:3)

1. Moskovskiy gosudarstvennyy universitet imeni M. V. Lomonosova. (Indium) (Electrodes, Dropping mercury)

AGAS'YAN, A.A., Kandidat tekhnicheskikh nauk, redaktor; TYAPKIN, B.G., redaktor; MEL'NICHENKO F.P., tekhnicheskiy redaktor.

[Machinery and equipment for earthwork] Mekhanizmy i mashiny dlia zemlianykh rabot. Moskva, Gos. izd-vo lit-ry po stroi. i arkhitekture, 1956. 20 p. (Ratsionalizatorskie i izobretatel'skie predlozheniia v stroitel'stve, no.132) (MLRA 9:8)
(Earthmoving machinery)

AGAS'YAN, A.A., kandidat tekhnicheskikh nauk.

Manufacturing precast reinforced concrete products at plant No.6: of the Moscow Executive Committee. Opyt stroi. no.7:81-100 '56. (MLRA 10:4)

(Moscow--Precast concrete)
(Moscow--Concrete plants)

NOVIKOV, I.I., kand.iskusstvovedeniya arkh.; MANDRIKOV, A.P., kand.[illegible] nauk; SEDOV, A.P., kand.arkhitektury; KONYUSHKOV, A.M., kand.tekhn. nauk; SOKOLOV, Ye.B., kand.arkhitektury; SHATSKIY, Ye.Z., kand. tekhn.nauk; KRICHEVSKAYA, Ye.I., kand.tekhn.nauk; SHLEINA, L.A., kand.tekhn.nauk; KOVEL'MAN, I.A., kand.tekhn.nauk; AGASYAN, A.A., kand.tekhn.nauk; USENKO, V.M., kand.tekhn.nauk, nauchnyy red.; RARSKOV, I.M., izuh., nauchnyy red.; YUDINA, L.A., red.izd-va; PECHKOVSKAYA, T.V., tekhn.red.

[Building practices in the peoples' democracies. Based on reports by delegations of Soviet biulders] Opyt stroitel'stva za rubezhom; v stranakh narodnoi demokratii. Po materialam ochetov delegatsii sovetskikh spetsialistov-stroitelei. Moskva, Gos. izd-vo lit-ry po stroit. i arkhit., 1957. 253 p. (MIRA 11:4)

1. Sotrudniki TSentral'nogo instituta nauchnoy informatsii po stroitel'stvu i arkhitekture Akademii stroitel'stva i arkhitektury SSSR (for Novikov, Mandrikov, Sedov, Konyushkov, Sokolov, Shatskiy, Krichevskaya, Shleina, Kovel'man, Agasyan)
(Building)

AGAS'YAN, A.A., kand.tekhn.nauk.

Constructing apartment houses with large-block walls. Opyt stroi. no.10:55-80 '57. (MIRA 11:1)
(Apartment houses) (Precast concrete construction)

AGAS'YAN, A.A., kandidat tekhnicheskikh nauk.

Metal form for making basement wall blocks. Biul. stroi. tekh. 14 no.3: 9-12 Mr '57. (MLRA 10:5)

1. TSentral'nyy nauchno-issledovatel'skiy institut stroitel'stva Akademii stroitel'stva i arkhitektury SSSR.
(Concrete blocks) (Concrete construction--Formwork)