

BUKHAYEV, V.P., inzh.; GEL'FAND, S.I., inzh.; DIDERIKHS, F.F.; KALERT,  
A.A., doktor tekhn. nauk, prof.; NIKISHINA, M.F., kand. tekhn.  
nauk; ~~TSENYUGA, N.S., inzh.~~; KOVRIZHNYKH, L.P., red.; BODANOVA,  
A.P., tekhn. red.

[Study of lightweight improved road pavements of the north-  
western part of the U.S.S.R.] Issledovanie oblegchennykh uso-  
vershenstvovannykh pokrytii avtomobil'nykh dorog severo-  
zapadnoi chasti SSSR. [By] V.P. Bukhaev i dr. Pod red. A.A. Kalerta.  
Moskva, Avtotransizdat, 1962. 124 p. (MIRA 16:1)  
(Russia, Northwestern--Pavements)

5(3), 5(4), 24(7)

SOV/51-7-1-19/27

AUTHORS: Bubnov, N.N., Kibalko, L.A., Tsepalov, V.F. and Shiyapintokh, V.Ya.

TITLE: On the Nature of the Intermediate Product in the Reaction of Photo-reduction of Eosin (O prirode promezhtochnogo produkta v reaktsii fotovosstanovleniya eozina)

PERIODICAL: Optika i spektroskopiya, 1959, Vol 7, Nr 1, pp 117-119 (USSR)

ABSTRACT: Eosin solution in pyridine ( $10^{-4}$  mole/litre) was photoreduced in the presence of ascorbic acid ( $10^{-3}$  mole/litre). A SVDSH-250 lamp was used as the light source and the reaction was studied using an electron-paramagnetic-resonance (e.p.r.) spectrometer with high-frequency modulation of the magnetic field. The e.p.r. spectrum (the upper figure on p 118) was a triplet with the component intensities in the ratio 1:2:1 (the hyperfine-structure splitting was  $\Delta H = 4.6 \pm 0.2$  oersted). The e.p.r. spectrum was due to an intermediate product in the photo-reduction reaction; the shape of the spectrum confirmed earlier

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On the Nature of the Intermediate Product in the Reaction of Photoreduction of Eosin SOV/51-7-1-19/27

suggestions (Refs 1, 2) that (1) the intermediate product is eosin semiquinone, and that (2), in the photochemically-active state, eosin is a metastable biradical. There are 2 figures and 10 references, 4 of which are Soviet, 3 German, 2 English and 1 French.

SUBMITTED: November 25, 1958

Card 2/2

TSEPALOV, V.F.; SHLYAPINTOKH, I.Ya.

Intermediate products of xanthene dyes in redox photoreactions.  
Dokl. AN SSSR 116 no.4:641-644 0 '57. (MIRA 11:3)

1. Predstavleno akademikom A.N. Tereninym.  
(Photochemistry) (Xanthene)

5(4)

SOV/20-124-4-43/67

AUTHORS: Tsepalov, V. F., Shlyapintokh, V. Ya.

TITLE: The Determination of the Elementary Constants of the Reaction of the Oxidation of Ethyl-benzene by the Method of Intermittent Illumination (Opredeleniye elementarnykh konstant reaktsii okisleniya etilbenzola metodom preryvistogo osveshcheniya)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 124, Nr 4, pp 883-886 (USSR)

ABSTRACT: According to present-day concepts, the oxidation of hydrocarbons in the liquid phase develops according to a chain mechanism accompanied by the formation of hydrogen peroxide as the primary stable product of oxidation. At moderate temperatures hydrogen peroxide is also the final product, and in this case the reaction develops in accordance with the following scheme: Production of radicals  $\dot{R}$  or  $\dot{RO}_2$ , rate  $w_i$ ;

(I). Continuation of the chain  $\dot{R} + O_2 \xrightarrow{k_2} \dot{RO}_2$  (II);

$\dot{RO}_2 + RH \xrightarrow{k_3} RO_2H + \dot{R}$  (III).  $2\dot{R} \xrightarrow{k_4} \text{inactive products}$

(IV),  $\dot{R} + \dot{RO}_2 \xrightarrow{k_5} \text{inactive products (V)}$ ;  $2\dot{RO}_2 \xrightarrow{k_6} \text{inactive products (VI)}$ . Here RH denotes the hydrocarbon,  $\dot{R}$  - an alkali

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The Determination of the Elementary Constants of the Reaction of the  
Oxidation of Ethyl-benzene by the Method of Intermittent Illumination

radical, and  $\dot{R}O_2$  -- a peroxide radical. Next, an expression is written down for the rate of the reaction for this scheme for the case of long chains, and is then specialized for the case of sufficiently high concentrations  $[O_2]$  of oxygen:

$$\frac{d [O_2]}{dt} = w_i^{1/2} k_3 k_6^{-1/2} [RH].$$

In the case of short chains

the initiation rate  $w_i$  must be added to the right part. The last-mentioned equation contains 3 unknown quantities  $w_i$ ,  $k_3$  and  $k_6$ , and accordingly, three independent relations are required for the separate determination of these three quantities. The theory of the method of continuous illumination of such a decomposition has already been discussed in an earlier paper (Ref 3). By means of this method it is possible to measure the mean life of this chain, or, which is the same thing, the mean life  $\tau$  of the radical. Formulas for the

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Oxidation of Ethyl-benzene by the Method of Intermittent Illumination

determination of  $\tau$  are written down. Carrying out of the experiments is described in short. The rate of reaction is determined from the absorption of oxygen in a vacuum device with automatic recording. The light source used was a mercury lamp 3VDSH-250, which was fed with direct current. The next chapter deals with the determination of the initiation rate. The experimentally determined dependence of  $d[O_2]/dt$  on

the concentration  $1/[B]$  of the inhibitor is shown by a diagram. The straight lines for 2 inhibitors at different temperatures intersect at one and the same point, which is indicative of the fact that the additions of these inhibitors do not modify the initiation rate itself and that the latter also does not depend on temperature. This fact was used for the direct measurement of the quantity  $w_i$ . For this purpose the dependence of the reaction rate on temperature was determined. In the case of sufficiently low temperatures (5-15°) the reaction rate does not depend on temperature. Within this temperature range the length of the chain is near zero, and it holds that  $d[O_2]/dt = w_i$ . The values of  $w_i$  determined by the inhibitor method and from the temperature-dependence

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SOV/20-124-4-43/67

The Determination of the Elementary Constants of the Reaction of the Oxidation of Ethyl-benzene by the Method of Intermittent Illumination

of the reaction rate are in practical agreement. Furthermore, the initiation rate was determined by means of the second method, because more accurate results may be obtained in this way within a shorter time. In the last part of this paper the life-times of peroxide radicals are determined. There are 4 figures, 1 table, and 6 referances, 1 of which is Soviet.

ASSOCIATION: Institut khimicheskoy fiziki Akademii nauk SSSR  
(Institute for Chemical Physics of the Academy of Sciences, USSR)

PRESENTED: October 11, 1958, by V. N. Kondrat 'yev, Academician

SUBMITTED: September 20, 1958

Card 4/4



TSEPALOV, V.F.; SHLYAPINTOKH, V.Ya.; CHZHOU PEY-KHUAN [Chou P'ei-huang]

Kinetics of cooxidation of cumene and ethylbenzene. Part 1.  
Zhur. fiz. khim. 38 no.1:52-58 Ja'64. (MIRA 17:2)

1. Institut khimicheskoy fiziki AN SSSR.

TSEPALOV, V.F.; SHLYAPINTOKH, V.Ya.

Determining constants of elementary reactions in the oxidation of ethylbenzene by means of intermittent illumination. Dokl. AN SSSR 124 no.4:883-886 F '59. (MIRA 12:1)

1. Institut khimicheskoy fiziki AN SSSR. Predstavleno akademikom V.N. Kondrat'yevym. (Oxidation) (Benzene) (Photochemistry)

28654

S/020/61/139/006/021/022

B103/B101

11. 1510

5.5450

AUTHORS: Lebedev, Ya. S.; Tsepalov, V. F., and Shlyapintokh, V. Ya.

TITLE: The possibility of using the method of electron paramagnetic resonance to record the active centers in the oxidation of hydrocarbons in the liquid phase

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 139, no. 6, 1961, 1409-1412

TEXT: The authors studied the applicability of electron paramagnetic resonance (epr): a) for determining free radicals; b) for measuring the steady concentration of these radicals in the oxidation of hydrocarbons. A continuation of these studies will probably contribute to the knowledge of the kinetics of processes of other types. From the measured values it is possible to determine directly the rate constants of the elementary reactions that constitute parts of the entire process. Since the concentration of the radicals is low, their determination under steady conditions is difficult. For this reason the active radicals could not be identified during the oxidation of hydrocarbons in the liquid phase. 2 types of active centers take part in the oxidation of hydrocarbons:

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B103/B101

The possibility of using the method...

hydrocarbon radicals  $\dot{R}$  and peroxide radicals  $\dot{RO}_2$ . At a given initiation rate the steady concentration is known for several substances. It is approximately equal for the following substances: cyclohexene, methyl cyclohexene, 1-octene, dihydromyrcene, ethyl linoleate, digeranyl, tetralin, ethyl benzene, cumene, n-decanal, and benzaldehyde. Under steady conditions:  $\frac{d(RO_2)}{dt} = 0$ , and  $(RO_2) = \sqrt{\frac{w_i}{k_6}}$  (1). Hence, the steady concentration of the  $\dot{RO}_2$ , at a given initiation rate, is the higher the lower the rate constant of  $\dot{RO}_2$  recombination. An increase of the constant to the threefold increases the steady concentration only to the 1.7-fold. In aromatic hydrocarbons, tetralin and ethyl benzene, in which the peroxide group is located at a secondary hydrocarbon atom, the recombination constant is by 1-2 orders of magnitude higher. Among the substances mentioned the cumyl peroxide radicals recombine with the smallest constant. In order to prove the existence of the peroxide radicals their concentration must amount to at least  $1 \cdot 10^{15}$  to  $5 \cdot 10^{15}$  radicals/cm<sup>3</sup>. The authors studied

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cumene since they expected the highest concentration in this substance. They used an epr-spectrometer  $\text{MK}\Phi\text{-2}$  (IKhF-2) with high-frequency modulation of the magnetic field (A. G. Semenov, N. N. Bubnov, PTE, 1, 92 (1959)). During the oxidation, oxygen was continuously bubbled through the hydrocarbon. The following substances were used for the oxidation: I) azobisisobutyronitrile, II) dicyclohexyl percarbonate, III) cobalt stearate, and IV) cobalt acetate. Different initiators give identical spectra. The spectrum is a wide, almost symmetrical singlet ( $\Delta H \approx 18 \pm 2$  oersteds) with a  $g$  factor of  $2.015 \pm 0.001$ . According to the shift of the  $g$  factor and the effective line width, this spectrum is similar to the epr spectrum of the peroxide radicals in the solid phase. In control tests in which isopropyl benzene was replaced by ethyl benzene no epr spectrum was observed in any of the initiators mentioned. Besides, epr absorption disappeared when the oxygen supply was stopped and when nitrogen was blown through for a short period. Ad I) The authors calculated the steady concentrations of the cumyl peroxide radicals at different initiation rates from the known values  $w_i$  and  $k_6$  of Eq. (1). These concentrations were also measured between 70 and 90°C and a

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concentration of I) between 0.05 and 0.55 mole/l. The absolute values of the concentrations of  $(\dot{R}O_2)_{meas}$  lie between  $2 \cdot 10^{15}$  and  $4 \cdot 10^{16}$  radicals/cm<sup>3</sup>.

The measured steady concentration of  $RO_2$  radicals was close to the calculated one. In experiments with II) the authors measured concentrations of  $4 \cdot 10^{15}$  to  $2 \cdot 10^{16}$  radicals/cm<sup>3</sup>. The rate constant of decay of II) into radicals is unknown. The authors assume that its decay rate is equal to the decay rate into radicals. Thus, they calculate the initiation rate and find that the measured concentrations of the  $RO_2$  radicals are

1/4 to 1/2 of the calculated values. Since this rate is unknown in experiments with III) and IV) the measured and calculated radical concentrations could not be intercompared. There are 2 figures, 1 table, and 11 references: 4 Soviet and 7 non-Soviet. The four most important references to English-language publications read as follows: Ref. 1: H. W. Melville, S. Richards, J. Chem. Soc. 1954, 944; Ref. 4: H. R. Cooper, H. W. Melville, J. Chem. Soc., 1951, 1993; Ref. 5: L. Bateman, G. Gee, Trans. Farad. Soc., 47, 155 (1951); Ref. 6: T. A. Ingles, H. W. Melville, Proc. Roy. Soc., A218, 163 (1953).

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S/020/61/139/006/021/022  
B103/B101

The possibility of using the method...

ASSOCIATION: Institut khimicheskoy fiziki Akademii nauk SSSR (Institute  
of Chemical Physics of the Academy of Sciences USSR)

PRESENTED: May 20, 1961, by V. N. Kondrat'yev, Academician

SUBMITTED: May 20, 1961

X

Card 5/5

TSEPALOV, V. F.

AUTHORS: Tsepalov, V. F., Shlyapintokh, I. Ya. 20-4-31/51

TITLE: Note on the Intermediate Products in Redox Photoreactions of Xanthine Dyes (O promezhutochnykh produktakh v okislitel'novosstanovitel'nykh fotoreaktsiyakh ksantenovykh krasiteley).

PERIODICAL: Doklady AN SSSR, 1957, Vol. 116, Nr 4, pp. 641-644 (USSR)

ABSTRACT: The xanthine dyes eosine, erythrosine and bengal pink are frequently utilized photosensitizer of oxydation and polymerization processes. A potentiometer method was employed for studying the photo reduction and photo oxydation of xanthine dyes. In the present paper the measurements of the photo galvanic effect permitted the recording of the formation of the intermediate products in the redox- reactions of some dyes. The experiments were conducted in a container with platinum electrodes. The authors established the following facts in complete accordance with the results obtained from chlorophyll theophitine (feofitin) and other pigments. The illumination of an alcoholic solution or of a pyridine solution of a xanthine dye ( $C = 10^{-6} - 10^{-3}$  Mol/l) shifts the electrode potential towards the positive in the presence of oxygen.

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Note on the Intermediate Products in Redox Photoreactions  
of Xanthine Dyes

20-4-31/51

An illumination in the presence of reducing substances (alcohol, pyridine, ascorbinic acid, aldehyde) shifts the electrode potential towards the negative. A diagram illustrates the kinetic curves of the modification of potential of a platinum electrode, which is immersed in a pyridine solution of eosine. The measurements were conducted with different light intensities from  $I = 1$  to  $I = 0,08$ . On illumination the potential decreases, reaches a certain minimum, the increases again and returns to the original value. The modification of the photo potential observed here is connected with the existence of an intermediate product. The considerations institute by the authors also explain the dependence of the kinetics of the modification of the potential on the concentration of the dye, which has been observed experimentally. An increase of concentration of eosine shows in general the same influence on the kinetics of the process as an increase of the light intensity. On a cooling down the velocity of the potential reversal decreases quickly. The character of the dependence of the kinetics of the modification of the potential on temperature

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• Note on the Intermediate Products in Redox Photoreactions  
of Xanthine Dyes

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• distinctly speaks in favour for a stage-like character  
of the reduction process. Finally, a few words are said  
concerning this reaction at various pigments.  
There are 4 figures, and 3 Slavic references.

PRESENTED: April 12, 1957, by A. N. Terenin, Academician

SUBMITTED: February 7, 1957

AVAILABLE: Library of Congress

Card 3/3

KULITSKI, Z.I.; TERMAN, L.M.; TSEPALOV, V.F.; SHLYAPINTOKH, V.Ya.

Determination of the rate constants of disintegration of  
initiators and of the efficiency of initiation. Izv. AN SSSR.  
Otd. khim. nauk no. 2: 253-257 F '63. (MIRA 16:4)

1. Institut khimicheskoy fiziki AN SSSR.  
(Chemical reaction, Rate of)

B/062/63/000/002/006/020  
B144/B186

AUTHORS: Kulitski, Z. I., Terman, L. M., Tsepalov, V. F., and Shlyapintokh, V. Ya.

TITLE: Determination of the rate constants of initiator decomposition and of the initiation efficiency

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye khimicheskikh nauk, no. 2, 1963, 253 - 257

TEXT: The rate constants of initiator decomposition can be determined from the relation between oxidation rate and concentration. The oxidation rates of cumol and ethyl benzene containing iso-bis-isobutyro nitrilo (I) and di-cyclohexyl peroxy dicarbonate (II) as initiators were studied at 60 - 90°C in an apparatus described previously (Kinetika i Kataliz (1962), no. 6). The O<sub>2</sub> absorption-versus-time curves showed that the oxidation rate is constant at low temperatures, where the initiator concentration remains constant, but decreases at higher temperatures owing to initiator decomposition. The order of the initiation reaction was determined using the equation

$$-d(O_2)/dt = k_3 k_6^{-1/2} (RH)(e \cdot k_{eff})^{1/2} \cdot (Y)^{n/2} \quad (3) \text{ for the rate of } O_2 \text{ absorption,}$$

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S/062/63/000/002/006/020  
B744/B186

Determination of the rate...

where RH is the substance to be oxidized,  $\epsilon$  the initiation efficiency,  $k_{\text{eff}}$  the effective rate constant of initiator decomposition,  $Y$  the initiator, and  $n$  the order of the initiation reaction. If

$(Y) = (Y)_0 e^{-k_{\text{eff}} t}$  is introduced into (3) under the assumption of a first-order reaction for the decomposition of the initiator,  $\log(-d(O_2)/dt) - \log(-d(O_2)/dt)_0 - k_{\text{eff}} t/4.6$  is obtained, where  $(-d(O_2)/dt)_0$  is the initial reaction rate and  $Y_0$  the initial concentration of the initiator. Plotting curves for the time dependence of  $\log(d(O_2)/dt)/(d(O_2)/dt)_0$  established that both initiators decompose in a first-order reaction. The rate constants of initiator decomposition,  $k_{\text{eff}}$ , were calculated from this graph.

The activation energies were 29.6 kcal/M for II, and 31.2 kcal/M for I. The decomposition rate constants were  $2.71 \cdot 10^{15} e^{-29600/RT}$  for II, and  $2.63 \cdot 10^{15} e^{-31200/RT}$  for I. The initiation efficiency was calculated from the initiation rate and the rate of initiator decomposition. The values

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Determination of the rate...

S/062/63/000/002/006/020  
B144/B186

obtained were 1.1 for I and 1.4 for II. There are 5 figures and 2 tables.

ASSOCIATION: Institut khimicheskoy fiziki Akademii nauk SSSR (Institute  
of Chemical Physics of the Academy of Sciences USSR)

SUBMITTED: May 14, 1962

Card 3/3

SEPALOV, V.F. (Moskva)

Chain reaction kinetics of multicomponent systems. Part 2:  
Two-component systems; effect of the composition of the system  
on the reaction kinetics. Zhur.fiz.khim. 35 no.7:1443-1452 (MIRA 14:7)  
JI '61.

1. Akademiya nauk SSSR, Institut khimicheskoy fiziki.  
(Systems (Chemistry)) (Chemical reaction, Rate of)

TSEPALOV, V.F.

Kinetics of the chain reaction of multicomponent systems  
Part 3: Two-component systems, integration of the rate and  
composition equations. Zhur.fiz.khim. 35 no.8:1691-1693 Ag  
'61. (MIRA 14:8)

1. Akademiya nauk SSR, Institut khimicheskoy fiziki.  
(Systems (Chemistry))  
(Chemical reaction, Rate of)



S/081/62/000/001/003/067  
B156/B101

AUTHOR: Tsepalov, V. F.

TITLE: The effects of the chemical compositions of systems on the kinetics of chain transformation

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 1, 1962, 58, abstract 1B418 (Tr. po khimii i khim. tekhnol. (Gor'kiy), no. 1, 1961, 192-197)

TEXT: The complex chain reaction taking place during simultaneous linear and quadratic stopping of chains is examined on a theoretical basis. A general expression is obtained with a stationary approximation for sufficiently long chains making no allowance for diffusion, for the consumption rate of any component of the reaction as a function solely of the concentrations of reacting substances. A few particular cases of complex chain reactions are examined (copolymerization, oxidation of hydrocarbons at very high and very low  $O_2$  pressures and the linked oxidation of two hydrocarbons). [Abstracter's note: Complete translation.] ✓

Card 1/1

LEBEDEV, Ya.S.; TSEPALOV, V.F.; SHLYAPINTOKH, V. Ya.

Possible use of the electron paramagnetic resonance method for recording active centers in the reactions of the liquid phase oxidation of hydrocarbons. Dokl. AN SSSR 139 no.6:1409-1412 Ag '61. (MIRA 14:8)

1. Institut khimicheskoy fiziki AN SSSR. Predstavleno akademikom V.N. Kondrat'yevym.  
(Hydrocarbons) (Oxidation)  
(Radicals (Chemistry)—Spectra)

PETROV, N.A., red.; PETRENKO, L.I., red.; SAVITSKIY, P.S., red.; RUMYANTSEV, S.V., red. toma; TSEPAYEV, V.A., red. toma; GRUZIN, P.L., red. toma; LEBEDEV, A.K., red. toma; GERASIMCHUK, G.S., red. toma; MIGAY, L.S., vedushchiy red.; SHOROKHOVA, L.I., vedushchiy red.; IONEL', A.G., vedushchiy red.; MUKHINA, E.A., tekhn. red.

[Transactions of the Conference on Radioactive Isotopes and Nuclear Radiation in the National Economy of the U.S.S.R.] Trudy Vsesoiuznogo soveshchaniia po vnedreniiu radioaktivnykh izotopov i iadernykh izluchchenii v narodnoe khoziaistvo SSSR. Riga, 1960, v chetyrekh tomakh. Pod red. N.A.Petrova, L.I.Petrenko i P.S.Savitskogo. Moskva, Gos. nauchno-tekhn. izd-vo neft. i gorno-toplivnoi lit-ry. Vol.3. [Machinery industry. Metallurgy] Mashinostroenie. Metallurgiiia. 1961. 224 p. (MIRA 14:6)

1. Vsesoyuznoye soveshchaniye po vnedreniyu radioaktivnykh izotopov i yadernykh izluchenyi v narodnom khozyaystve SSSR. Riga, 1960. (Metal industries) (Radioisotopes—Industrial applications)

KIDIN, I.N.; MOZZHUKHIN, Ye.I.; TSEPAYEV, V.A.; CHERNYAVSKIY, K.S.

Kinetics of the induction heating of porous iron. Izv. vys.  
ucheb. zav.; chern. met. 7 no.1:152-156 '64. (MIRA 17:2)

1. Moskovskiy institut stali i splavov.

SOV/84-58-4-7/48

AUTHOR: Tsepelev, A., Instructor, Political Department

TITLE: Communists Struggling for Plan Fulfillment (Kommunisty v bor'be za vypolneniye plana)

PERIODICAL: Grazhdanskaya aviatsiya, 1958, Nr 4, pp 9-11 (USSR)

ABSTRACT: The article deals with the state of political propaganda in various units of the Kazakh Territorial Administration. Individual units and individual political workers are evaluated in terms of the practical results of their work. The basis of evaluation is accident-free operation and the fulfillment of production quotas.

ASSOCIATION: Kazakhskoye territorial'noye upravleniye GVF (Kazakh Territorial Administration of the GVF)

1. Aviation--USSR 2. Communism 3. Propaganda

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35131

S/058/62/000/002/019/053  
A058/A101

1.1800

AUTHORS: Tsepelev, A. I., Larionov, N. I., Mikhaylov, F. G.

TITLE: Ultrasonic effect in the process of galvanic plating

PERIODICAL: Referativnyy zhurnal, Fizika, no. 2, 1962, 43, abstract 20321  
(V sb. "Primeneniye ul'traakust. k issled. veshchestva", no. 14,  
Moscow, 1961, 227-230)

TEXT: Nickel-plating in an ultrasonic field enables one to increase the current density 2-3 times over and to carry out nickel-plating at reduced temperatures (20 - 30°C); at the same time, the quality of the nickel platings is improved. The isotherms of current density as a function of ultrasonic power were found. It was found that the highest yield of chromium per current takes place when ultrasonic intensity = 1 watt/cm<sup>2</sup>. ✓

[Abstracter's note: Complete translation]

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11700

S/194/62/000/004/069/105  
D295/D308

AUTHORS: Tsepel'ev, A. I., Larionov, N. I. and Mikhaylov, F. G.

TITLE: The influence of ultrasound on the galvanic-coating process

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika, no. 4, 1962, abstract 4-5-40g (V sb. Primeneniye ul'traakust. k issled. veshchestva. no. 14, M., 1961, 227-230) ✓

TEXT: It is established that ultrasound of 22 kc/s enables one to increase the current density by 2 - 3 times and to carry out the nickel-plating process at a lowered temperature. The optimum ultrasonic intensity for the largest output of chromium for a given current is determined. The magnetostrictor is so placed that ultrasound propagates parallel to the surface of the object. The process of degreasing of the object before coating was intensified by ultrasound. 2 references. [Abstracter's note: Complete translation.]

Card 1/1

KAMENSKIY, I.V.; SMIRNOVA, G.P.; ~~TSEPELEV, A.S.~~

Melamine-acetone-formaldehyde resins. Trudy MKHTI no.29:108-113  
'59. (Resins, Synthetic) (Melamine) (Acetone) (Formaldehyde)  
(MIRA 13:11)



KAMENSKIY, I. V.; TSEPELEV, A. S.; YAKUSHINA, T. V.

Textolite based on melamine-formaldehyde resins modified by  
acetone. Plast. massy no. 5:67 '64. (MIRA 17:5)

88317

S/191/60/000/002/004/012  
B027/B058

15.8112

AUTHORS: Kamenskiy, I. V., Smirnova, Ye. P., Tsepelev, A. S.

TITLE: Melamine Acetone Formaldehyde Resins

PERIODICAL: Plasticheskiye massy, 1960, No. 2, pp. 17-19

TEXT: The disadvantage of melamine formaldehyde resins is their insolubility in organic solvents and their low stability while storing, thus making a modification of these products necessary. V. S. Kiselev and M. F. Sorokin (Ref. 2) studied the modification of melamine formaldehyde resins with alcohol. K. V. Lukina (Ref. 4) produced resins from dimethyl melamine and diethanol aniline which show higher stability in water and good dielectric properties. This study deals with the modification of melamine formaldehyde resins by acetone. Commercial melamine with a melamine content of 99.07%, formalin with a formaldehyde content of 40.3% and acetone with a boiling temperature of from 55.5 to 56.5°C served as initial materials. Best modification was obtained with acetone, if this product was introduced into the reaction after the formation of the methyl derivatives of melamine. The reaction was carried out in neutral or

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Melamine Acetone Formaldehyde Resins

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S/191/60/000/002/004/012  
B027/B058

alkaline medium.  $\text{Na}_2\text{CO}_3$ , NaOH, and 25% aqueous ammonia solution were used as catalysts. Only when applying the latter, transparent colorless resins of high stability, adhesion and good miscibility with various fillers were obtained. The modified resin has a slightly higher coking number, it has a higher thermal stability and may be stored for a long time. The yield of melamine acetone formaldehyde resin is 150% as compared to the melamine used, while the yield of melamine formaldehyde resin amounts to a maximum of 130%. Various pressed materials were manufactured on the basis of the synthesized resin. Glass fabric of the type «Г»ГОСТ 8481-57 ("т" GOST 8481-57) which contained 40% resin after saturation with the condensation solution, was used for the production of a laminated plastic. Tests with the glass textolite produced exhibited a high thermal and water stability as well as resistance against the influence of chemicals and organic solvents, and has good dielectric properties. There are 6 tables and 6 references: 4 Soviet, 1 British, and 1 US.

Card 2/2

KAMENSKIY, I.V.; TSEPELEV, A.S.; KOGAN, N.N.; ANDRIANOV, B.V.

Urea-acetone-formaldehyde resins. Plast.massy no.4:8-12 '62.  
(MIRA 15:4)

(Resins, Synthetic)

36191

S/191/62/000/004/004/017  
B110/B138

15.8350

AUTHORS:

Kamenskiy, I. V., Tsepelov, A. S., Kogan, N. N.,  
Andrianov, B. V.

TITLE:

Urea acetone formaldehyde resins

PERIODICAL:

Plasticheskiye massy, no. 4, 1962, 9-12

TEXT: MQA-1 (MFA-1) with 72 % dry residue, 620 sec viscosity and 1 % free formaldehyde was tested for suitability as a basis for glues and as a binder for glass textolite and shell molds. Catalysts used were: 10 % aqueous oxalic acid, 50 % orthophosphoric acid, 10 % hydrochloric acid, and 30 % NH<sub>4</sub>Cl. Activity decreases in the order: NH<sub>4</sub>Cl, orthophosphoric acid, hydrochloric acid, oxalic acid. The hardened films are only stable with oxalic or orthophosphoric acid. The lifetime of resin hardened with 10 % aqueous oxalic acid (2 % referred to dry resin) was 7.5 hr, at 10°C, 0.6 hr at 50°C. With 2 % catalyst, it was 4.5 hr, with 10 %, 0.5 hr. 1.6 % volatiles with 5 % formaldehyde and 95 % H<sub>2</sub>O were separated by hardening with 2 % oxalic acid. 0.5 N aqueous KOH caused

V  
A

Card 1/2

Urea acetone formaldehyde resins

S/191/62/000/004/004/017  
B110/B138

swelling and cracking, 25 %  $H_2SO_4$  destroyed the sample. Films hardened with oxalic acid remained unchanged in very moist air, keeping their luster. The ultimate tensile strength was  $48.4 \text{ kg/cm}^2$ . Glass textolite (ГОСТ 8481-57 (GOST 8481-57)) was hot or cold molded with resin, ratio 6:4. Glass fabric impregnated with resin (dry residue 70 %) was dried for 1.5-2.5 hr at  $100-110^\circ\text{C}$ . Non-laminated specimens were obtained at  $160^\circ\text{C}$ ,  $250 \text{ kg/cm}^2$ , and 4 min/mm. Glass fabric impregnated with the resin and 50 % orthophosphoric acid was held at room temperature for 1.5-2 hr, and pressed at  $1.5-2 \text{ kg/cm}^2$  for 8-24 hr. The resulting glass textolite had: 0.5 % hygroscopicity after 1 day, 1.1 % after 5 days,  $103^\circ\text{C}$  Martens thermal stability,  $205 \text{ kg}\cdot\text{cm/cm}^2$  specific impact toughness, and  $1350 \text{ kg/cm}^2$  tensile strength in bending. 100 parts by weight of sand (K100/200) and 6 parts by weight of resin (dry residue 41 %, viscosity 4-18 sec) were mixed for producing shell molds and rods for casting. Tensile strength was  $26.6-68.2 \text{ kg/cm}^2$  in tension and  $82.4-123.0 \text{ kg/cm}^2$  in bending. There are 6 figures and 2 tables. The most important English-language reference reads as follows: Hodgins, Hovey, Ind. Eng. Chem., 33, no. 6, 769 (1941).

Card 2/2

ACCESSION NR: AP4035110

S/0191/64/000/005/0067/0068

AUTHOR: Kamenskiy, I. V.; Tsepelev, A. S.; Yakushina, T. V.

TITLE: Textolite based on melamine-formaldehyde resin modified with acetone

SOURCE: Plasticheskiye massy\*, no. 5, 1964, 67-68

TOPIC TAGS: textolite, melamine formaldehyde resin, modified melamine formaldehyde resin, acetone modified melamine formaldehyde resin, mechanical strength, impact strength, tensile strength, breakdown voltage, electrical property, heat stability, light stability, dielectric property, water resistance

ABSTRACT: A textolite was prepared from an acetone-modified melamine-formaldehyde resin, more stable in concentrated solvents than the unmodified, made according to earlier findings (I. V. Kamenskiy, Ye. P. Smirnova, A. S. Tsepelev, Plast. massy\*, no. 2, 1960), and its physical mechanical and dielectric properties were investigated. A melamine-formaldehyde resin containing 9.9% formaldehyde and 2.3% acetone was formed at 70-75 C in 35-45 minutes at a pH of 7-7.5 using 2% (on the weight of the melamine) of a 25% solution of ammonia. The textolite containing 50% resin was made from cotton sheeting pressed at 150 C under 135 kgs/cm<sup>2</sup>

Card 1/2

ACCESSION NR: AP4035110

pressure with 5 minutes/mm holding. Water resistance of the textolite increased somewhat with increase in molding temperature. It has highly decorative properties and practically does not change upon prolonged irradiation by quartz mercury vapor lamps and under natural conditions. Its impact strength is 23 kgs.cm/cm<sup>2</sup>, tensile strength 843 kgs/cm<sup>2</sup>, Martens heat stability 167 C, specific surface resistance  $5.6 \times 10^{13}$  ohm, specific volume resistance  $1.4 \times 10^{13}$  ohm cm., dielectric permeability 5.4, breakdown voltage 10.9 kv/mm and arc resistance 4 seconds (at 10 milliamps). Orig. art. has: no graphics.

ASSOCIATION: None

SUBMITTED: 00

DATE ACQ: 26May64

ENCL: 00

SUB CODE: MT,OC

NO REF SOV: 001

OTHER: 000

Card 2/2



KAMENSKIY, I.V.; SMIRNOVA, Ye.P.; TSEPELEV, A.S.

Melamine-acetone-formaldehyde resins. Plast.massy no.2:  
17-19 '60. (MIRA 13:6)  
(Resins, Synthetic)

MASHRYKOV, K.; TSEPELEV, N.S.; KULIYEV, K.

Concretionary formations in coal measures of the Kugitang Jurassic deposits. Izv. AN Turk. SSR. Ser. fiz.-tekhn., khim. i geol. nauk no. 1: 66-71 '62. (MIRA 16:12)

1. Institut geologii AN Turkmenskoy SSR.

YUREVICH, A.L.; BEKMURADOV, N.; TSEPELEV, N.S.

Mineral composition of "caving clays" of Nebit-Dag. Izv. AN Turk.  
SSR no.2:57-58 '59. (MIRA 12:6)

1. Institut geologii AN Turkmenskoy SSR.  
(Clay—Analysis)

TSEPELEV, N.S.

Reestablishment of the accumulation time of organic mass buried during the formation of sediments. Izv. AN Turk. SSR. Ser. fiz.-tekh., khim. i geol. nauk no.3:129-130 '64 (MIRA 18:1)

1. Institut geologii AN Turkmenskoy SSR.

TSEPELEV, N.S.; TRUBIN, A.

X-ray examination of the mineralogical composition and genesis of  
clays in the variegated and lower coal-bearing series of the Tuar-  
Kyr region. Izv. AN Azerb.SSR. Ser.geol.-gecg.nauk i nefti no.3:  
59-69 '63. (MIRA 16:11)

TSEPELEV, N.S.; IBRAGIMOV, N.S.; KULIYEV, K.

Presence of gallium in the rocks of Kugitang. Izv. AN Turk. SSR. Ser.  
fiz.-tekh., khim. i geol. nauk no. 3:106-110 '61. (MIRA 14:7)

1. Institut geologii AN Turkmenskoy SSR.  
(Kugitangtau Range—Gallium)

TSEPELEV, N.S.

Genesis and facies significance of concretionlike bodies in the sandstone series of Bathonian sediments in Tuarkyr. Izv. AN Turk. SSR. Ser. fiz.-tekh., khim. i geol.nauk no.6:60-72 '63. (MIRA 18:1)

1. Institut geologii AN Turkmenskoy SSR.

TSEPELEV, N.V.,

ALEKSEYEV, A.S., TSEPELEV, N.V.

Intensity of reflected waves in a laminar nonhomogeneous elastic medium. Izv.AN SSSR. Ser.geofiz. no.9:1021-1035 (MLRA 9:12)  
S '56.

1. Akademiya nauk SSSR, Leningradskoye otdeleniye  
Matematicheskogo instituta imeni V.A. Steklova.  
(Seismology) (Seismic waves)



TSEPELEV, N.V.

SMIRNOVA, N.S.; TSEPELEV, N.V.; BERDENNIKOVA, N.I.

Plotting theoretical seismograms of reflected and leading waves  
propagated in media composed of plane-parallel layers. Vop. din.  
teor. raspr. seism. voln. no.1:213-248 '57. (MLRA 10:8)  
(Seismology--Graphic methods)

TSUPALEV, N. V.

"Wave Propagation in a Medium Containing an Inhomogenous Transition Layer,"

paper presented at the 4th All-Union Conference on Acoustics, Moscow, 25 May - 1 Jun 58

SOV/49-59-1-2/23

AUTHOR: Tsepelev, N. V.

TITLE: On Reflection of Elastic Waves in a Non-uniform Medium  
(Ob otrazhenii uprugikh voln v neodnorodnoy srede)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Geofizicheskaya,  
1959, Nr 1, pp 11-17 (USSR)

ABSTRACT: It is usually assumed that at the boundary where the elastic properties of the medium change discontinuously, the gradients of these properties also change discontinuously. The present paper deals with the case when elastic waves are propagated in a non-uniform medium, at the surface of which gradients of velocities and of density change discontinuously. It was found that such a surface has reflecting properties, and coefficients of reflection and refraction for elastic waves were obtained. The change of form of the reflected and refracted waves at the surface of the medium was derived. This change of form is related to the type of discontinuity of the wave-front. The paper is entirely theoretical. Acknowledgments are made to G. I. Petrashen' and A. S. Alekseyev for their advice.

Card 1/2

SOV/49-59-1-2/23

On Reflection of Elastic Waves in a Non-uniform Medium

There are 2 Soviet references.

ASSOCIATION: Akademiya nauk SSSR, Leningradskoye otdeleniye  
Matematicheskogo instituta (Ac.Sc. USSR, Leningrad  
Division of the Mathematics Institute)

SUBMITTED: July 30, 1957

Card 2/2

TSEPELEV, N.V.

Propagation of waves in acoustical media with transition  
layers. Vop. din. teor. raspr. seism. voln no.5:169-205  
'61. (MIRA 14:11)

(Waves)

TSEPELEV, Yu.A.

Microscope for use in surgery. Med.prom 12 no.8:53-58 Ag '58  
(MIRA 11:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut meditsinskogo  
instrumentariya i oborudovaniya.  
(MICROSCOPY, MEDICAL)  
(SURGERY, OPERATIVE)

TSEPELEV, Yu.A.

Endoscope construction in Czechoslovakia. Med.prom. 13  
no.3:51-55 Mr '59. (MIRA 12:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut meditsin-  
skogo instrumentariya i oborudovaniya.  
(CZECHOSLOVAKIA--ENDOSCOPE)

~~TSEPLNV, Yu.A.~~

Ophthalmological instruments in Czechoslovakia. Med.prom.  
13 no.4:56-59 Ap '59. (MIRA 12:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut meditsin-  
skogo instrumentariya i oborudovaniya.  
(CZECHOSLOVAKIA--EYE, INSTRUMENTS AND APPARATUS FOR)



FEDURKIN, V.V.; NESTERENKO, A.T.; KOVSHAROVA, L.A.; RAZUMOVSKAYA, Ye.I.;  
OSIPOVA, Ye.V.; VASIL'YEVA, G.S.; PEKARSKIY, M.D., otv.red.;  
ZVORONO, B.P., zamestitel' otv.red.; BOLDYREV, B.V., red.; VOLODIN,  
Ye.A., red.; DANIL'CHENKO, Ye.P., red.; ORSKIY, I.N., red.; MISHIN,  
L.N., red.; FREYDIN, G.S., red.; TSEPELEV, Yu.A., red.

[Technological instruction material; aluminum and aluminum alloys  
for medical articles] Rukovodiashchie tekhnicheskie materialy;  
aliuminii i aliuminievye splavy dlia meditsinskikh izdelii. Moskva,  
M-vo zdravookhraneniia, 1959. 70 p. (MIRA 13:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut meditsinskogo  
instrumentariya i oborudovaniya. (ALUMINUM)  
(MEDICAL INSTRUMENTS AND APPARATUS)

SMIRNOV, I.P., kand. tekhn.nauk, otv. red.; PEKARSKIY, M.D.,  
kand. tekhn. nauk, zam. otv. red.; BOLDYREV, B.V.,  
red.; VOLODIN, Ye.A., red.; GAYSINSKIY, B.Ye., red.;  
DANIL'CHENKO, Ye.P., red.; KABATOV, Yu.F., red.;  
KALANTAROV, K.D., red.; MISHIN, L.N., red.; ORSKIY, I.N.,  
red.; FEDURKIN, V.V., red.; TSEPELEV, Yu.A., red.

[Materials of the scientific session devoted to the 25th  
anniversary of the All-Union Scientific Research Insti-  
tute for Medical Instruments and Equipment] Materialy  
nauchnoi sessii, posviashchenoi 25-letiiu VNIIMIO. Mo-  
skva, 1962. 65 p. (MIRA 17:2)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut  
meditsinskogo instrumentariya i oborudovaniya. 2. Zame-  
stitel' direktora Vsesoyuznogo nauchno-issledovatel'skogo  
instituta meditsinskogo instrumentariya i oborudovaniya  
(for Pekarskiy). 2. Direktor Vsesoyuznogo nauchno-  
issledovatel'skogo instituta meditsinskogo instrumentariya  
i oborudovaniya (for Smirnov).

AUTHORS: Rez, I.S., Sonin, A.S., Tsepelevich, Ye.Ye. and  
Filimonov, A.A. SOV/70-4-1-11/26

TITLE: Experimental Investigations in Finding New Piezoelectric  
Materials (Eksperimental'nyye issledovaniya po vyyavleniyu  
novykh p'yezoelektrikov)

PERIODICAL: Kristallografiya, 1959, Vol 4, Nr 1, pp 65-68 (USSR)

ABSTRACT: Lists are given of materials tested for piezoelectricity  
(with a piezoelectric tester, PT-2). The authors found:  
39 inorganic and complex compounds showing marked piezo-  
effects; 43 inorganic and complex compounds with  
inappreciable piezoeffects; 90 organic compounds  
showing marked piezoeffects; 184 organic compounds  
showing inappreciable piezoeffects. There are 4 references,  
3 of which are Soviet and 1 English.

ASSOCIATION: TsNIILP

SUBMITTED: December 7, 1958

Card 1/1

ANASTASIADI, A.P.; BOROVSKIY, V.R.; VYBORNOV, G.V.; KOPELYANSKIY,  
G.D.; MAK, I.L.; PECHURO, S.S.; PIYEVSKIY, I.M.;  
RACHEVSKAYA, K.D.; REYZNER, Yu.B.; RYBAK, L.L.; TSEPELIOVICH,  
M.R.; SHUMAKHER, L.I.; YUSHKEVICH, M.O. [deceased]; AGEYENKO,  
Yu.G., nauchnyy red.; BELUGIN, A.T., nauchnyy red.; KOGAN,  
G.S., nauchnyy red.; KRZHEMINSKIY, S.A., nauchnyy red.;  
MITSKEVICH, M.I., nauchnyy red.; SILENOK, S.G., nauchnyy red.;  
TRILESNIK, Z.Ye., nauchnyy red.; ZUBAREV, K.A., glav. red.;  
TROFIMOV, I.P., red.; SKRAMTAYEV, B.G., glav. red.; BALAT'YEV,  
P.K., red.; KITAYEV, Ye.N., red.; KITAYGORODSKIY, I.I., red.;  
ROKHVARGER, Ye.L., red.; KHOLIN, I.I., red.; CHERKINSKAYA,  
R.L., red.; RODIONOVA, V.M., tekhn. red.

[Manual on the production of gypsum and gypsum products] Spra-  
vochnik po proizvodstvu gipsa i gipsovykh izdelii. [By] A.P.  
Anastasiadi i dr. Pod red. K.A.Zubareva. Moskva, Gosstroi-  
izdat, 1963. 464 p. (MIRA 16:7)  
(Gypsum) (Gypsum products)

28(1), 25(5)

AUTHOR:

Totoonov, A.T., Tsepenyuk, B.I., and  
Davydov, V.I., Engineers

SOV/118-59-3-13/22

TITLE:

A Hydraulic Method of Mine Working and Transportation  
of China Clay Ore (Gidravlicheskiy sposob razrabotki i  
transporta kaolinovoy rudy)

PERIODICAL:

Mekhanizatsiya i avtomatizatsiya proizvodstva, 1959,  
Nr 3, pp 38-40 (USSR)

ABSTRACT:

In mining china clay ore it has become necessary to search for new methods, because of difficult working conditions in the spring and fall, and the increasing demand for it in the national economy. In order to meet the requirements of the Glukhovetskiy combine, Vinnitsa sovnarkhoz, 100 million rubles are to be invested for its reorganization. Long examination of hydromechanical working methods and transportation of china clay ore in the combine have led to following conclusions: Using small and simple equipment operated by 4-5 persons, the hydro-processing plant can constantly be pro-

Card 1/2

SOV/118-59-3-13/22

A Hydraulic Method of Mine Working and Transportation of China Clay  
Ore

vided with raw material, not only to meet the present production capacity but for double the output. For digging and transportation 70 workers, 3 excavators, 3 trolleys and more than 100 dump-cars are needed at present. With the aid of hydromechanical methods they can be replaced by 2 earthpumps, 2 suction pumps, 2 hydromotors, 2 bulldozers and 15-20 workmen. There are 3 diagrams.

Card 2/2

L 10757-63

EPR/EWF(j)/EPF(c)/EWT(m)/BDS—AFFTC/ASD—Ps-l/Pc-l/Fr-l—

RM/WW

ACCESSION NR: AP3003291

S/0138/63/000/006/0031/0034 82  
18AUTHOR: Chuyko, A. A.; Neymark, I. Ye.; Landau, I. M. (Deceased); Tsepenyuk, E.V.;  
Chuyko, Ye. A. 15TITLE: Effect of the chemical nature of filler surface and ionizing radiation on  
the properties of rubbers 19

SOURCE: Kauchuk i rezina, no. 6, 1963, 31-34

TOPIC TAGS: rubbers, SKS-30, SKN-40, SKB; fillers; silica; Belaks; modified silica;  
vinyl-substituted silica; vulcanization; vulcanizate properties; tensile strength;  
modulus; swelling; ionizing radiation, butadiene-styrene rubber; nitrile rubber,  
sodium butadiene rubber; silica surface hydroxylsABSTRACT: The effect of the chemical nature of the filler surface on the physico-  
mechanical properties of rubbers has been studied. Butadiene-styrene (SKS-30), 15  
nitrile (SKN-40) and sodium butadiene (SKB) rubbers loaded with unmodified silica  
and with silica whose surface hydroxyls had been substituted by allyloxy or vinyl  
radicals were used. Use of modified silica in standard rubber mixes (containing  
100 parts rubber and 50 to 60 parts filler) was shown to improve the physico-  
mechanical properties of the vulcanizates. For example, the tensile strength of

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E 10757-53

ACCESSION NR: AP3003291

2

SKN-40 rubber containing 60% filler increased from 126.3 kg/cm<sup>2</sup> with unmodified silica to 163.6-168 kg/cm<sup>2</sup> with vinyl-substituted silica (vinyl silica); the respective values of the modulus at 600% elongation and swelling at equilibrium in benzene were 55.2 and 134 kg/cm<sup>2</sup> and 30 and 15%. This improvement was attributed to greater compatibility of the filler and the rubber and to a reaction between the olefin radicals of the filler surface and the rubber with the possible formation of C-C and C-S-C linkages. The effect was studied of ionizing radiation from a Co<sup>60</sup> source at a dose rate of 77 r/sec on nonloaded SKS-30 rubber and on SKS-30 loaded (ratio 1/1) with unmodified and with modified silica (Belaks) containing 2.5% vinyl, methyl, or ethyl radicals. Irradiation did not affect the tensile strength and the modulus at 100% elongation of unloaded rubber but considerably improved these properties in loaded rubbers, particularly with vinyl silica. The maximum effect of irradiation is attained after 48 hr. These results were attributed to the participation of the filler in the formation of the three-dimensional network. In particular, the allyl or vinyl groups of the filler and the rubber macromolecules form radicals which link the two through the formation of covalent bonds. It is concluded that the structure and the physico-mechanical properties of vulcanizates can be controlled by modifying the nature of the organic radicals on the silica surface, the number of such radicals, the composition of the vulcanizates, and the method of vulcanization. Orig. art. has:

Card 2/3



L 10757-63  
ACCESSION NR: AP3003291

2

1 figure and 2 tables.

ASSOCIATION: Institut fizicheskoy khimii im. L. V. Pisarzhhevskogo AN SSSR  
(Institute of Physical Chemistry, AN SSSR); Kiyevskiy regeneratorno-rezinovyy zavod  
(Kiev Reclaim Rubber Plant)

SUBMITTED: 00

DATE ACQ: 10Jul63

ENCL:00

SUB CODE: 00

NO REF SOV: 004

OTHER: 004

*rn/gz*  
Card 3/3

SEDOV, K.R., dotsent; TSEPILEVICH, B.M.

Work of the therapeutic department of a provincial clinical hospital. Zdrav. Ros. Feder. 7 no.8:40-44 Ag'63. (MIRA 16:10)

1. Iz kafedry gospital'noy terapii Irkutskogo meditsinskogo instituta (rektor - prof. A.I.Nikitin) i oblastnoy klinicheskoy bol'nitsy (glavnyy vrach - zasluzhennyy vrach RSFSR P.G. Rudina).

\*

ARMAND, G.B.; VYAZ'MIN, V.A.; GRINSHTEYN, L.M.; GOL'DBERG, G.I.; GOLUBEV,  
B.S.; KASHLAKOV, M.V.; KRASNOPEVTSEV, M.P.; KUZNETSOV, S.I.;  
KURAYEV, A.V.; KAYUKOV, G.I.; MASHATIN, V.I.; MOLOTOLOV, V.I.;  
NERUSH, A.R.; PRAL', G.I.; RAGUSKAYA, L.F.; RUBINSHTEYN, S.M.;  
SEMENKOV, P.L.; TARASOV, L.A.; FEDOROVA, A.A.; TSEPKIN, M.F.;  
SHAYEVICH, A.G.; ZARUBIN, A.G., *otv.red.*; VASIL'YEVA, I.A., *red.*  
*izd-va*; SOKOLOVA, T.F., *tekh.red.*

[ZIL-157 motortruck; operation and service] Avtomobil' ZIL-157;  
instruktsiia po ekspluatatsii. Gos.nauchno-tekhn.izd-vo mashino-  
stroit.lit-ry, 1958. 235 p. (MIRA 11:12)

1. Moskovskiy avtomobil'nyy zavod.  
(Motortrucks)

POBOL', L.D.; TSEPKIN, Ye.A.

Fishes from the ancient stronghold near Chaplin. Vestsi AN  
BSSR. Ser. biol. nav. no. 2:137-140 '60. (MIRA 13:7)  
(CHAPLIN REGION--FISHES, FOSSIL)

**TSEPENKOVA, V.P.**

Changes in the oral cavity during the experimental vitamin B<sub>2</sub>  
deficiency in dogs. Stomatologiya 35 no.2:13-14 Mr-Apr '56. (MLRA 9:8)

1. Iz kafedry terapevticheskoy stomatologii (zav.-prof. Ye.Ye.  
Platonov) Moskovskogo meditsinskogo stomatologicheskogo instituta  
(dir.-dotsent G.N.Beletskiy) i iz laboratorii izucheniya vitaminov  
(zav. V.V.Yefremov) AMN SSSR. (MOUTH--DISEASES)  
(RIBOFLAVIN) (DEFICIENCY DISEASES)

~~TSEPELEV, A.~~

Communists in the fight to fulfill the plan. Grazhd. av. 15 no.4:9-10  
Ap '58. (MIRA 11:5)

1. Instruktor politotdiela Kazakhskogo territorial'nogo upravleniya  
Grazhdanskogo vozdush'nogo flota.  
(Communist Party of the Soviet Union--Party work)

S-3

USSR/Morphology of Man and Animals - Digestive System.

Abs Jour : Ref Zhur - Biol., No 6, 1958, 26426

Author : Tsepenkova, V.P.

Inst :

Title :

Alterations in the Oral Cavity in Experimental Avitaminosis B<sub>2</sub> in Dogs.

Orig Pub : Stomatologiya, 1956, No 2, 13-14.

Abstract : Dryness of the tongue and oral mucosa were the first manifestations of ariboflavinosis in three experimental dogs 62-74 days after the onset of the experiment. Hyperemia of the mucous membranes was noted on the 95th, 103rd and 166th days. Ulcers on the oral mucosa, round in shape, measuring approximately 0.5 cm. in diameter and having undermined, elevated borders and a firm bottom covered with bleeding granulations were revealed on the 102nd-130th days. Dental deposits on the upper and

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USSR/Morphology of Man and Animals - Digestive System.

S-3

Abs Jour : Ref Zhur - Biol., No 6, 1950, 26426

lower molars were increased. The daily administration of riboflavin, 10 mg, initially and then 20 mg., resulted in the disappearance of pathologic changes after  $1\frac{1}{2}$ - $2\frac{1}{2}$  months.

Card 2/2



TSEPIN, A.

For you, rural teachers. Sov.profssoiuzy 19 no.5:28-29 Mr '63.  
(MIRA 16:2)

1. Pravovoy inspektor Tsentral'nogo komiteta profesional'nogo  
soyuza rabotnikov prosveshcheniya, vysshey shkoly i nauchnykh  
uchrezhdeniy.

(Teachers—Legal status, laws, etc.)

TSEPIN, Dmitriy Dmitriyevich; YEL'KOV, F., red.

[Plastics in industry and construction] Plasticheskie  
massy v promyshlennosti i stroitel'stve. Barnaul, Altaiskoe  
knizhnoe izd-vo, 1961. 54 p. (MIRA 18:4)

TSEPIN, D. D.

7553

TSEPIN, D. D. RATSIONALIZATSIYA V STROITEL'STVE. IZ OPYTA TRESTA  
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[The "Kommunarka" State Farm] Sovkhoz "Kommunarka." Moskva, Gos.  
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Synoptical conditions of extreme-warm and extreme-cold early winter synoptical seasons in European U. S. S. R. Trudy TSIP No. 11, 1949.

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Synoptic climatological study of some prognostic indications  
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and Western Siberia. Trudy TSIP no.89:74-87 '60. (MIRA 14:3)  
(Weather forecasting)

TSEPKANOVA, Ye.I.

Forecasting reliability of basic atmospheric processes in  
October. TRUDY TSIP no.115:80-85 '62. (MIRA 16:6)

(Weather forecasting)

ACC NR: AT7005069

SOURCE CODE: UR/2546/66/000/154/0018/0022

AUTHORS: Gritsenko, M. V.; Tsepkanova, Ye. I. (deceased)

ORG: none

TITLE: Prognosis of an average monthly temperature in the lower half of the troposphere and at the earth's surface

SOURCE: Moscow. Tsentral'nyy institut prognozov. Trudy, no. 154, 1966. Vzaimodeystviye protsessov v stratosfere i troposfere i dolgosrochnyye prognozy pogody (Interaction of processes in the stratosphere and troposphere and long-range weather forecasting), 18-22

TOPIC TAGS: long range weather forecasting, atmospheric temperature, troposphere, atmospheric model

ABSTRACT: A method for forecasting an average monthly temperature for the lower half of the troposphere (layer from earth to 500 millibars) and at the earth's surface is established by expanding the previous work of the authors (M. V. Gritsenko and Ye. I. Tsepkanova. Metodika prognoza znaka baricheskogopolya i sredney temperatury na mesyats. Trudy TsIP, vyp. 124, 1965). This method is based on a study dealing with the horizontal transfer of air for the preceding 25 days. The study involves a distance of 1800 km toward the cold and toward the warm air, thus giving a span of 3600 km of warm and cold air masses. A relationship between the temperature of the troposphere layer and that at the earth was established for 22 points of the European and 20 points of the Far

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ACC NR: AT7005069

Eastern SSSR. These relationships served to set up the regression equations which are tabulated. From these equations the average monthly earth's surface temperature may be prognosticated. Orig. art. has: 4 tables and 1 equation.

SUB CODE: 04/ SUM DATE: none/ ORIG REF: 002

Card 2/2

*Tsepkin, M.F.*

KURAYEV, A.V.; SEMENKOV, P.L.; BLEYZ, N.G.; BULAVA, V.P.; VYAZ'MIN, V.A.;  
GOLUBEV, B.S.; DYSHMAN, B.M.; KARMLIN, B.S.; KAYUKOV, G.I.; KUGEL',  
N.V.; MASHATIN, V.I.; RAGUSKAYA, L.F.; RUBINSHTEYN, S.M.; SUTRANOV,  
A.B.; TARASOV, L.A.; FEDOROVA, A.A.; FEDOROV, L.N.; TSEPKIN, M.F.;  
SHAYEVICH, A.G.; VASIL'YEVA, I.A., red. izd-va; TIKHANOV, A.Ya.,  
tekhn. red.

[ZIL-158 and ZIL-158A motorbuses; instructions for operation] Avtobusy  
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nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1958. 193 p.  
(MIRA 11:7)

1. Moskovskiy avtomobil'nyy zavod.  
(Motorbuses)

TSEPKIN, Ye.A.

Remnants of fish populations of the second and first millennium  
B.C. on the Peschanyy Peninsula in the Maritime Territory. Nauch.  
dokl. vys. shkoly; biol. nauki no. 2:35-38 '64. (MIRA 17:5)

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universiteta im. M.V.Lomonosova.

TSEPKIN, Ye.A.

Ichthyofauna of the Ingoda and Shilka Rivers and some of its biological characteristics. Nauch. dokl. vys. shkoly; biol. nauki no.2:40-43 '62. (MIRA 15:5)

1. Rekomendovana kafedroy ikhtiologii <sup>ii</sup> Moskovskogo gosudarstvennogo universiteta im. M.V.Lomonosova.  
(INGODA RIVER--FISHES) (SHILKA RIVER--FISHES)

TSEPKIN, Ye.A.

Fishes of the ancient stronghold of Tanais; fisheries in the  
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Neolithic fishes found in the Kullata settlement near the Lena River.  
Vest.Mosk. un. Ser. 6: Biol., pochv. 20 no.2:57-62 Mr-Ap '65.  
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Feeding habits of kingfisher in the Oka Preserve region.  
Trudy OGZ no.5:94-103 '63.

(MIRA 17:10)

Monograph

UR/

ACC NR: AM5026680

Antomonov, Yuriy, Gur'yevich; Kotova, Alina Borisovna; Ponomareva, Inna Dmitriyevna; Eustovoyt, Oksana Gavrilovna; Reshod'ko, Leonid Vasil'yevich; Tsepkov, Gennadiy Vasil'yevich

Mathematical patterns of excitation (Matematicheskiye modeli vozvuzhdeniya) Kiev, Izd-vo "Naukova dumka," 65. 0146 p. illus., biblio. (At head of title: Akademiya nauk Ukrainskoy SSR. Institut kibernetiki) 2,000 copies printed.

TOPIC TAGS; cybernatics, mathematic model, tissue physiology, muscle physiology, myology, neurology, nervous system

PURPOSE AND COVERAGE: The book discusses the properties of elements of nervous and muscle tissue by constructing mathematical models. A simple mathematical apparatus is used for constructing the models. The book is intended for biologists, engineers, mathematicians, and doctors interested in using cybernetic methods for the analysis of living tissue.

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JUDC: K34 62.15

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ACC NR: AM5026680

Ch. IV. Models of the muscle --75

Ch. V. Particular problems --108

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SUB CODE: 06,12/ SUBM DATE: 05Mar65/ ORIG REF: 031/ OFR REF: 015

Card

2/2

ASIKRITOVA, N.A., red.; BURTSEV, M.I., glavnyy inzh., red.; BURYAK, A.R., red.; GLOTOV, D.I., tokar', red.; ZAROVNYY, P.I., dispatcher, red.; NOSANOV, V.A., red.; TSEPKOV, I.V., red. [deceased]; AGISHEV, R.K., red.; MARKOVA, S.M., red.; KAYDALOVA, M.D., tekhn.red.

[Energomash; 25 anniversary of the Khabarovsk Electric Power Machinery Plant] Energomash; 25 let proizvodstvennoi deiatel'nosti Khabarovskogo zavoda energeticheskogo mashinostroeniia. (MIRA 12:9)  
Khabarovsk, 1958. 349 p.

1. Khabarovskiy zavod energeticheskogo mashinostroyeniya.
  2. Khabarovskiy zavod energeticheskogo mashinostroyeniya "Energomash" (for all except Markova, Kaydalova). 3. Zaveduyushchaya partiynym kabinetom zavoda "Energomash" (for Asikritova). 4. Sekretar' partiynogo byuro zavoda "Energomash" (for Buryak).
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- (Khabarovsk--Machinery industry)

TSEPKOV, L. P., Cand Tech Sci -- (diss) "Effect of the scaling factor on the stability of glass." Moscow, 1960. 12 pp; (State Scientific Research Inst for Glass); 200 copies; price not given; (KL, 21-60, 126)

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S/081/62/000/023/068/120  
B180/B144

15 2600

AUTHORS: Tsepkov, L. P., Bartenev, G. M.

TITLE: Experimental study of glass fatigue

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 23, 1962, 497, abstract  
23K456 (Steklo. Byul. Gos. n.-i. in-ta stekla, no. 2(111),  
1961, 73-77)

TEXT: It is confirmed experimentally that there is a safe load for glass, which is 30 % of its short-time resistance. If a specimen or object made of glass fails to break after one month under a particular load it should be able to stand this stress for a long time, several years in fact. The dimensional factor is found to be important with long periods under stress.  
[Abstracter's note: Complete translation.]

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