

SHEFER, D.G.; MALKIN, M.F.; NEYGALIKH, M.G.; RAZUMOVSKAYA, A.M.  
SHERSHEVER, S.M.; SOSKOVA, A.V.

Medical and prophylactic significance of the use of anticoagulants  
in disorders of the brain blood supply. Zhur. nerv. i psikh. 60  
no. 6:702-706 '60. (MIRA 13:12)

1. Klinika nervnykh bolezney Sverdlovskogo meditsinskogo  
instituta, Institut kurortologii i fizioterapii nervologicheskiye  
statsionary Sverdlovsk.

(BRAIN--BLOOD VESSELS)

(ANTICOAGULANTS)

SHERSHEVSKAYA, O. I.

SHERSHEVSKAYA, O. I. "Vascular reactions of the retina in cerebral wartime trauma",  
In the collection: Boyevaya travma nervnoy sistemy, Khar'kov, 1948; p. 114-21.

SO: U-3261, 10 April 53 (Letopis - Zhurnal 'nykh Statey No. 11, 1949)

SHERSHEVSKAYA, O. I., KOLEN, A. A., and LUK'YANOVA, N. D.

SHERSHEVSKAYA, O. I., KOLEN, A. A., and LUK'YANOVA, N. D. "Changes in the field of vision in cerebral battle trauma", In the collection: Boyevaya travma nervnoy sistemy, Khar'kov, 1948, p. 122-28.

SOP U-3261, 10 April 53 (Letopis - Zhurnal 'nykh S'atey No. 11, 1949)

SHERSHEVSKAYA, O. I. and KOPIL'-LEVINA, Z. A.

SHERSHEVSKAYA, O. I. and KOPIL'-LEVINA, Z. A. "On functional damage to vision and hearing in wartime" (Diagnostics and Therapy), In the collection: Boyevaya travma nervnoy sistemy, Khar'kov, 1948, p. 175-84.

SC: U-3261, 10 April 53 (Letopis - Zhurnal 'nykh Statey No. 11, 1949)

SHERSHEVSKAYA, O. I. and KOPIL'-LEVINA, Z. A.

SHERSHEVSKAYA, O. I. and KOPIL'-LEVINA, Z. A. "On certain disorders of the pupil in cerebral war trauma" In the collection: *Boevaya travma nervnoy sistemy*, Khar'kov, 1948, p. 185-89.

SO: U-3261, 10 April 53 (Letopis - Zhurnal 'nykh Statey No. 11, 1949)

SHERSHEVSKAYA, Docent V. I.

58/49160

USER/Medicine - Bee Venom  
Medicine - Rheumatic Iritis

May/Jun 49

"Treatment of Rheumatic Iritis With Bee Venom,"  
Docent O. I. Shershevskaya, Novosibirsk, 2 pp

"Vest Ophthalmol" Vol XVIII, No 3

Author's clinic is at present investigating the action of bee venom, which has been used for treating rheumatic diseases for many years. In acute rheumatic iritis, painful iridocyclitis with posterior synechia, turbid ocular humor and reduction of vision to 0.001, use of the venom produces an astonishing effect. Inflammatory condition subsides and, after 3 or 4 days, a complete restoration of normal vision is indicated. This method also shortens duration of treatment considerably. Attempts are being made to find a suitable extract or synthetic preparation since it is impractical to keep a supply of bees at all hospitals.

END

58/49160

SHERSHEVSKAYA, O.I., professor

Ophthalmologic findings in endarteritis obliterans. Vest. oft. 33  
no.5:11-16 S-0 '54. (MLRA 7:10)

1. Direktor glaznoy kliniki Stalinskogo instituta usovershenstvovaniya vrachey.

(ENDARTERITIS OBLITERANS, manifestations,  
eye)

(EYE, in various diseases,  
endarteritis obliterans)

SHERSHEVSKAYA, O.I., professor

Extraction of non-magnetic foreign bodies from the eye. Vest.  
oft. 33 no.6:31-35 N-D '54. (MLRA 8:1)

1. Iz glaznoy kliniki Stalinskogo instituta usovershenstvovaniya  
vrachey.

(EYE, foreign bodies,  
extraction, non-magnetic)

(FOREIGN BODIES,  
eye, extraction, non-magnetic)



EXCERPTA MEDICA Sec.12 Vol.11/4 Ophthalmology Apr57

619. SHERSHEVSKAYA O. \*Ophthalmologic manifestations in thyreotoxicosis (Russian text) VESTN.OFTAL. 1956, 4 (16-20)

The author observed a stubborn, recurrent spasm of the accommodation with lenticular astigmatism and asthenopia in 6 patients with thyreotoxicosis. Atropinization produced only a temporary effect. The spasm was eliminated only after treatment of the thyreotoxicosis by small doses of iodine (under the observation of an endocrinologist). The next changes were observed in the retinal vessels: there were present not only dilatation and pulsation of the retinal arteries, but also dilatation of the retinal veins (in 12 out of 60 patients), oedema of the peripapillar and macular regions, cotton-wool patches and haemorrhages in the retina in 3 patients. These haemorrhages could be explained by vascular dystonia and by lack of vitamin C due to the faulty basal metabolism in these patients. The circulatory disturbance and the marked lability of the retinal vessels was confirmed by the measurement of the pressure of the central retinal artery in 30 patients aged 18 to 35 yr. suffering from thyreotoxicosis. In 12 patients, the systolic pressure was above 75 mm. and the diastolic above 55 mm., in 2 patients it was hypotonic, in 16 it was normal. The next phenomenon in patients suffering from hyperthyroidism was the development of allergic reactions. Severe, recurrent eczema of the lids caused by the use of atropine in uveitis was alleviated by microdoses of iodine. Several case histories illustrate these interesting observations.

Sitchevska - New York, N. Y.

SHERSHEVSKAYA, O.I., professor

Surgical treatment of dislocations and subluxations of the crystalline lens into the vitreous humor body. Vest.oft. 69 no.5:3-7 S-0 '56.  
(MLRA 9:12)

1. Zav. kafedroy glaznykh bolezney stalinskogo instituta usovershenstvovaniya vrachey.

(CRYSTALLINE LENS, dislocation  
disloc. & subluxation into vitreous body, surg.)

SHERSHEVSKAYA, Ol'ga Isaakovna

[Eye injuries in industry and their prevention] Proizvodstvennyi  
travmatizm glaz i ego profilaktika. Leningrad, Medgiz, 1959.  
222 p. (MIRA 13:7)  
(EYE--WOUNDS AND INJURIES) (INDUSTRIAL SAFETY)

SHERSHEVSKAYA, O.I.

Rheumatic changes in the fundus oculi. Vest.oft. 74 no.1:28-33  
'61. (EYE---DISEASES AND DEFECTS) (MIRA 14:3)  
(RHEUMATIC FEVER)

SHERSHEVSKAYA, O.I., prof.

Clinical aspects of choroidal and retinal vascular pathology in  
rheumatic fever. Vop.revm. 2 no.3:73-77 JI-S '62. (MIRA 1612)

1. Iz kafedry glaznykh bolezney (zav. - prof. O.I. Shershevskaya)  
Novokuznetskogo instituta usovershenstvovaniya vrachey.  
(RHEUMATIC FEVER) (EYE--DISEASES AND DEFECTS)

SHERSHEVSKAYA, Ol'ga Isaakovna; GURA, Ye.V., red.

[Changes in the visual organ in some cardiovascular diseases] Izmeneniia organa zreniia pri nekotorykh serdechno-sosudistykh zabolevaniakh. Moskva, Meditsina, 1964. 254 p. (MIRA 17:8)

RYZHKOV, P.Ya., inzh.; SHERSHEVSKAYA, R.M., inzh.; RASHBA, T.S., inzh.

Hardening spare metallurgical equipment parts at the Petrovskii plant.  
Met. i gornorud. prom. no.3:76-80 My-Jè '63. (MIRA 17:1)

SHERSHEVSKAYA, R.S.

Rate and degree of adaptation of Shigella to antibiotics. Zhur. mikrobiol.  
epid. i immun. 29 no. 12:70-74 D '58. (MIRA 12:1)

1. Iz Khabarovskogo meditsinskogo instituta.

(ANTIBIOTICS, eff.

in Shigella, adaptation rate & degree (Rus))

(SHIGELLA, eff. of drugs on,

antibiotics, adaptation rate & degree (Rus))



17(2,12)

SOV/16-59-6-24/46

AUTHOR: Shershevskaya, R.S.

TITLE: The Variation in Shigella Shigae in the Process of Their Adaptation to Antibiotics. Author's Summary.

PERIODICAL: Zhurnal mikrobiologii, epidemiologii i immunobiologii, 1959, Nr 6, pp 117-118 (USSR)

ABSTRACT: The author studied the variation of various strains of Shigella shigae in the course of their adaptation to the following antibiotics: synthomycin, levomycetin, streptomycin, erythromycin, biomycin, terramycin and tetracyclin. The morphological changes observed corresponded to those noted by other researchers and were most marked in the tests with synthomycin, levomycetin, streptomycin and erythromycin. The changes in the cultural properties had to do with the nature of growth in liquid and on solid media (dwarf and sister colonies) and were most often noted in synthomycin-resistant strains. Changes in the biochemical properties were observed in adaptation to all the antibiotics and were expressed by retardation or loss of the power to ferment certain carbohydrates, and also mannitol and glycerine. As far as changes in the antigen properties of the strains were concerned, the adaptation process led to a drop in

Card 1/2

SOV/16-09-6-24/46

The Variation in *Shigella Shigae* in the Process of Their Adaptation to Antibiotics.  
Author's Summary.

agglutinability in a linear agglutination reaction with specific sera. Even more pronounced changes were noted in reactions with monoreceptor sera. The strains retained their newly-acquired antigen features for a year (period of observation) despite frequent passages on nutrient media containing streptomycin and terramycin. The virulence of the strains for white mice also diminished through adaptation.

ASSOCIATION: Khabarovskiy meditsinskiy institut (Khabarovsk Medical Institute)

SUBMITTED: April 15, 1958

Card 2/2

SHERSHEVSKAYA, R.S.

Crossed resistance of dysentery bacteria to various antibiotics.  
Antibiotiki 5 no. 5:86-89 S-0 '60. (MIRA 13:10)

1. Kafedra mikrobiologii (zav. - prof. Ye.G. Livkina) Khabarovskogo  
meditsinskogo instituta.  
(SHIGELLA) (ANTIBIOTICS)

SHERSHEVSKAYA, R.S.

Variability of dysenteric bacteria during the process of their  
adaptation to antibiotics. Trudy Khab.med.inst. no.20:33-37 '60.  
(MIRA 15:10)

1. Iz kafedry mikrobiologii (zav. prof. Ye.G.Livkina) Khabarov-  
skogo meditsinskogo instituta.  
(SHIGELIA) (ANTIBIOTICS)

SHERSHEVSKAYA, R. S.

Cand Med Sci - (diss) "Study of the action of antibiotics on dysenteric bacteria." Khabarovsk, 1961. 24 pp; (Khabarovsk State Med Inst); 250 copies; price not given; (KL, 7-61 sup, 263)

SHERSHEVSKAYA, R.S.

Antigenic variability of dysentery bacteria under the influence of antibiotics. Antibiotiki 9 no.7:637-641 J1 '64. (MIRA 18:3)

1. Kafedra mikrobiologii (zav. - prof. Ye.G. Livkina) Khabarovskogo meditsinskogo instituta.

SHERSHEVSKAYA, S. F.

Cand Med Sci - (diss) "Action on the eye of intra-ocular fragments of several non-ferrous alloys. (Experimental study)." Stalingrad, 1961 - inserted by translator, assumed as correct. 21 pp; (Stalingrad State Med Inst); 200 copies; free; (KL, 6-61 sup, 242)

SHERSHEVSKAYA, S.F.

Peculiarities of the histomorphological reaction of eye tissues  
to intraocular fragments of some non-ferrous alloys. Oft.zhur.  
15 no.1:10-14 '60. (MIRA 13:5)

1. Iz eksperimental'noy laboratorii Stalinskogo instituta usover-  
shenstvovaniya vrachey.  
(EYE--FOREIGN BODIES)



SHERSHEVSKAYA, S.F.

Chalcosis in the presence of intraocular bronze fragments (experimental  
histochemical investigations. Vest. oft. 73 ro. 2:3-7 Mr-Ap '60.  
(MIRA 14:1)

(EYE--FOREIGN BODIES) (COPPER--TOXICOLOGY)

SHERSHEVSKAYA, Ye.Ya.

Anatomy of three species of Cyripedium. Bot. zhur. 48 no.11;  
1692-1696 N '63. (MIRA 17:4)

1. Tomskiy meditsinskiy institut.

SHERSHEVSKIY, A.M.; DULOV, A.V.

I.P. Merzhevskii in the medical council! Zhur. nevr. i psikh 59 no.3:  
360-361 '59 (MIRA 12:4)

1. Kafedra psikhiatrii (nachal'nik - prof. A.S. Chistovich) Voyenno-  
meditsinskiy ordena Lenina akademii imeni S.M. Kirova.

(BIOGRAPHIES,

Merzhevskii, Ivan P. (Rus))

SHERSHEVSKIY, A.M.; GERSHKOVICH, B.Ya.; BUTENKO, L.I., red.; STEBIYANKO,  
T.B., tekhn. red.

[Two worlds and two different courses; socialist and capitalist roads  
of the development of agriculture] Dva mira - dva puti; o sotsialisti-  
cheskom i kapitalisticheskom putiakh razvitiia sel'skogo khoziaistva.  
Stavropol', Stavropol'skoe knizhnoe izd-vo, 1960. 149 p.

(MIRA 14:11)

(Agriculture)

(United States--Agriculture)

CH  
SHERSHEVSKIY B. M.

116

Blood gases in pneumonia. B. M. Shershevskiy (Leningrad. Smit. Hyg. Med. Inst.). *Vopr. 1951*, No. 2, 67-76 (1951).—In pneumonia the appearance of anoxemia is not a const. phenomenon and its gravity varies with individual cases. In graver cases it is caused largely by toxic infestation of the alveolar epithelium and reduced permeability to the gas. In pneumonia the CO<sub>2</sub> capacity of arterial blood and its content of CO<sub>2</sub> are subnormal, but not out of line with the levels found in any febrile ailment. A decrease in the arterial and venous difference of O<sub>2</sub> content is observed. G. M. Kosolapoff

*Prophylactic Therapeutic Clinic,*

SHERSHEVSKIY, B. M.; AFANAS'YEVA, Ye. K.

Role of massive bloodletting in the treatment of cardiac  
insufficiency. Klin. med., Moskva 29 no.7:38-43 July 1951.  
(CIML 21:1)

1. Docent Shershevskiy. 2. Of the Propedeutic Therapeutic  
Clinic (Head -- Prof. S. M. Ryss), Leningrad Sanitary-  
Hygienic Medical Institute (Director -- Prof. D. A. Zhdanov,  
Corresponding Member of the Academy of Medical Sciences USSR).

SHERSHEVSKIY, B.M.

[Blood gases in diseases and wounds of the respiratory organs]  
Gazy krovi pri zabolevaniakh i raneniakh apparata dykhaniiia.  
Tomsk, Izd-vo Tomskogo univ., 1959. 209 p. (MIRA 13:11)  
(BLOOD, GASES IN)  
(RESPIRATORY ORGANS--DISEASES)





SHERSHEVSKIY, G.M.

Treatment of hyperthyrecsis with methyl thiouracil. Ter.  
arkh. 23 no.3:47-51 May-June 1951. (CML 20:11)

1. Of the Therapeutic Clinic, Novosibirsk Institute for  
the Advanced Training of Physicians. 2. Prof. Shershevskiy.

SHERSHEVSKIY, G M

U.S.S.R. 1

✓ The sugar tongue-test as a new method of study of carbohydrate metabolism in the clinic. G. M. Shershevskii. *Terap. Arkh.* 27, No. 3, 70-80 (1955). This method permits the study of the effect of nerve complexes upon carbohydrate metabolism before the carbohydrate is absorbed by the digestive system. The following technique was used. The patient's blood is examined twice at 10-min. intervals for sugar; a lump of sugar is placed on the tongue and kept there for 5 min.; the blood is then tested twice at 15-min. intervals and 4 times at 30-min. intervals. The blood sugar level of healthy persons and nondiabetic patients remains either unchanged or is slightly elevated for a short period. The blood sugar level of diabetic persons is distinctly decreased for a considerable period. The glycaemic curve is different from the one obtained after ingestion of sugar.

A. S. Mirkin

Therapeutic Clinic, Stalin Inst for Adv. Trng Physicians

ALEKSEYEV, G.A., prof.; BAGDASAROV, A.A., prof.[deceased]; BEYER, V.A., prof.; VOGRALIK, V.G., prof.; DEMIDCVA, A.V., kand. med. nauk; DUL'TSIN, M.S., prof.; ZAKRZHEVSKIY, Ye.B., prof.; KONCHALOVSKAYA, N.M., prof.; KASSIRSKIY, I.A., prof.; KOST, Ye.A., prof.; LOGINOV, A.S., kand. med. nauk; NESTEROV, V.S., prof.; SHERSHEVSKIY, G.M., prof.; YANOVSKIY, D.N., prof.; MYASNIKOV, A.L., prof., otv. red.; TAREYEV, Ye.M., prof., am. otv. red.; SHAPIRO, Ya.Ye., red.; LYUDKOVSKAYA, N.I., tekhn. red.

[Multivolume manual on internal diseases]Mnogotomnoe rukovodstvo po vnutrennim bolezniam. Otv.red. A.L.Miasnikov. Moskva, Medgiz. Vol.6. [Diseases of the blood system and hemopoietic organs]Bolezni sistemy krovi i krovotvornykh organov. 1962. 700 p. (MIRA 15:12)

1. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR (for Bagdasarov, Myasnikov, Tareyev). 2. Chlen-korrespondent Akademii meditsinskikh nauk SSSR (for Kassirskiy).

(BLOOD--DISEASES)

(HEMOPOIETIC SYSTEM--DISEASES)

SHERSHEVSKIY, M.G.

Effect of iodine, estrogens and lipocaine on ketone bodies in the blood in atherosclerosis before eating and after eating fats.

Terap. arkh. 30 no.4:41-45 Ap '58.

(MIRA 11:4)

1. Iz bol'nitsy No.23 v Stalinske (glavnyy vrach R.F. Usbenskaya) i terapevticheskoy kliniki (zav. klinikoy i konsul'tant bol'nitsy prof. G.M.Shershevskiy) Stalinskogo instituta usovershenstvovaniya vrachev

(KETONE BODIES, in blood,

in arteriosclerosis, eff. of estrogens, iodine & lipocaine on preprandial level & changes after fatty meal (Rus)

(ARTERIOSCLEROSIS, blood in,

ketone bodies, eff. of estrogens, iodine & lipocaine on preprandial level & on changes after fatty meal (Rus)

(ESTROGENS, effects,

on blood ketone bodies in arteriosclerosis before meal & after fatty load (Rus)

(IODINE, effects, same)

(LIPOCAIC, effects,

same)

SHERSHEVSKIY, M.G.

Influence of vitamin B<sub>12</sub> on fibrinolysis in atherosclerosis.  
Terap. arkh. 35 no.2:58-60'63. (MIRA 16:10)

1. Iz 2-y kafedry terapii (zav. G.A.Gol'dberg) Novokuznetskogo  
instituta usovershenstvovaniya vrachey (rektor G.L.Starkov).  
(CYANOCOBALAMINE) (ARTEIOSCLEROSIS)  
(FIBRINOLYSIS)

21

077

Gas producer for finely ground solid fuel. A. A.  
 Shershnev - Russ. 42,245, March 31, 1945. Con-  
 struction and operation details.

MATERIALS INDEX

METALLURGICAL LITERATURE CLASSIFICATION

E2

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

SHERSHNEV, A.A., laureat Stalinskoy premii, kandidat tekhnicheskikh nauk;  
POMERANTSEV, V.V., kandidat tekhnicheskikh nauk, retsenzent; BARSHTEYN,  
I.K., kandidat tekhnicheskikh nauk, redaktor.

[Pneumatic furnaces for low-capacity boilers] Pnevmaticheskie topki  
TsKTI sistemy Shershneva dlia kotlov maloi moshchnosti. Moskva, Gos.  
nauchno-tekhn. izd-vo mashinostroit. i sudostroit. lit-ry, 1954. 101 p.  
(MLRA 7:6)

(Furnaces)

SHERSHNEV, A.A.

2743. FIRING OF WOOD WASTE IN TSKII SHERSHNEV PNEUMATIC FURNACES. Sherashnev, A.A. (Energetik (Pur Engr, Moscow), Apr. 1954, 26-30). A description and performance figures are given for a furnace which can be used with locomotive type, Lancashire and other boilers. It can also be fired with peat or brown coal. The furnace is in the shape of a W in section. Fuel arrives through a cross feeder at the top of the left hand arm of the W and is set by a blast of air from the bottom, where there is a grate for large pieces of fuel and for starting up. Small particles burn in suspension, are carried over into the right hand V to complete their combustion and the gases go on through the boiler. If air is preheated, wood waste with a moisture content of 57-60% can be burned continuously. (L).

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Исследования

Изучение влияния угла зарядов на длину линии  
наименьшего сопротивления при индивидуальных взрывах зарядов  
столбчатых зарядов, расположенных параллельно плоскости взрыва.  
Изв. вуз. техн. зав. г. гор. з.б.ч. № 7:109-115 '68.

(MIRA 13:13)

Исследования проводились в лаборатории. Научно-исследовательской кафедры  
горно-технических специальностей горно-технического института.

(RLOV, L.K.; SHERSHNEV, K.S.

Evaluation of oil and gas occurrences in Perm Province based  
on radiometric data. Neftegaz. geol. i geof. no.5:42-44 '65.  
(MIRA 18:7)

1. Perm'neftegeofizika.

SAFONOVA, T.P.; SHERSHNEV, K.S.

Stratigraphy and paleogeography of terrigenous sediments in the  
lower Carboniferous in the Kama portion of Perm Province. Trudy  
VNIGNI no.13:132-145 '59. (MIRA 13:1)  
(Perm Province--Geology, Stratigraphic)  
(Perm Province--Paleogeography)

SOFRONITSKIY, P.A.; SHERSHNEV, K.S.

Tectonics of the Kama Valley portion of Perm Province in the  
light of new data. Trudy VNIIGI no.36:18-31 '63. (MIRA 17:9)

~~SHERSNEV, M.~~ SHERSNEV, M

AUTHOR: SHERSNEV, M.

42-5-14/17

TITLE: Characterization of the Dimension of Metric Spaces by  
Continuous Mappings Into Euclidean Spaces (Kharakterizatsiya  
razmernosti metriceskikh prostranstv posredstvom nepreryvnykh  
otobrazheniy v evklidovy prostranstva)

PERIODICAL: Uspekhi Mat.Nauk, 1957, Vol. 12, Nr.5, pp. 245-248 (USSR)

ABSTRACT: Let  $R$  be an  $n$ -dimensional metric space and  $E^k$  a  $k$ -dimensional  
Euclidean space. Let  $C(R, E^n)$  be the space of all bounded  
mappings of  $R$  into  $E^n$ .  
Theorem: For every  $R$  and every  $k \leq n$ , the set of all  $(n-k)$ -  
dimensional mappings of  $R$  into  $E^n$  is everywhere dense in the  
space  $C(R, E^n)$ .  
Five Soviet references are quoted.

SUBMITTED: October 18, 1956

AVAILABLE: Library of Congress

1. Topology 2. Conformal mapping

Card 1/1

TATUNIN, A.T., nauchn. sotr.; MANILOVA, R.Z., nauchn. sotr.;  
ROVNYIY, A.A., nauchn. sotr. Primali uchastiye:  
KOZ'MIN, Yu.G.; RAYNEN, Z.V.; SHEBYAKIN, O.S.;  
BELOGOLOVYY, A.A.; KHARO, Ye.N.; SHERSHNEV, N.N.;  
NEKLEPAYEVA, Z.A., red.

[Guide for the determination of the load capacity of  
metal spans of railroad bridges] Rukovodstvo po opredele-  
niyu gruzopod'emnosti metallicheskih proletrykh stroenii  
zheleznodorozhnykh mostov. Moskva, Transport, 1965. 255 p.  
(MIRA 18:10)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye puti i  
sooruzheniy. 2. Nauchno-issledovatel'skiy institut mostov  
Leningradskogo instituta inzhenerov zheleznodorozhnogo  
transporta (for Tatunin, Manilova, Rovnyy,

SILVERSTEIN, I. A., and ZEMANIN, R. V.

"Screening Effect of Sols of Gallic Acid and Hydrates of Tin on Silver Sols,"  
ZhRKhO, 60, 1592, 1928.



STANDARD INDEX

PROCESSES AND PROPERTIES INDEX

STUDY OF THE KINETICS OF COAGULATION OF COLLOIDS BY THE AID OF A PHOTOELEMENT. A. V. DUMANSKIĬ AND P. A. SIZANOV. *J. Russ. Phys.-Chem. Soc.* 62, 187-195 (1930).

The curves connecting opacity with time for  $As_2S_3$  sols after the addn. of  $BaCl_2$  and for  $Fe(OH)_3$  sols after the addn. of  $K_2SO_4$ , at first rise, and then fall, with the commencement of flocculation. The expression  $\tau = acn$  is obtained, in which  $\tau$  is the time after addn. of the coagulating electrolyte,  $c$  is the no. of cc. of the latter added, and  $a$  and  $n$  are consta. for a given system.

B. C. A.

AS 631 A METALLURGICAL LITERATURE CLASSIFICATION

PROCESSES AND PROPERTIES INDEX

118

Phenomena of mutual induction in liquid yeast cultures. P. A. Shershnev. *Arch. sci. biol.* (U. S. S. R.) 32, 350-63(1932).—A study of the induction of mitogenetic radiation of one cell upon another at a distance ("telemutoinduction"). Cf. Gurvich and Gurvich (*C. A.* 26, 4379). W. A. Perlzweiz

METALLURGICAL LITERATURE CLASSIFICATION

E-2

151 AND 152 (INDEX)

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

118

ca

The use of electrodialysis for the separation of carnosine from muscle extract. P. A. Shershnev. *Arch. ser. biol.* (U. S. S. R.) 37, 376-80 (in German 380) (1935). By means of a double electrodialysis of horse-meat ext. the purification of carnosine was greatly simplified. W.A.P.

AS - S.L.A. METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS

1ST AND 2ND ORDERS

1ST AND 2ND ORDERS

SHERSHNEV, P.A.

Using animal membranes in dialysis and concentration of serums;  
from laboratory practice. Izv. Irk.gos.protivochum. inst. 9:87-90  
'51. (MIRA 10:12)

1. Iz syvorotochnogo otdela (zav. L.Ye.Khundanov) Irkutskogo  
gosudarstvennogo nauchno-issledovatel'skogo protivochumnogo insti-  
tuta (direktor - N.D.Altareva)  
(DIALYSIS) (SERUM)

SHKERSHNEV, P.A.

Variation of the fractional composition of proteins in antiplague  
serum producers. Izv. Irk.gos. protivochum. inst. 12:126-129 '54.  
(BLOOD PROTEINS) (SERUM) (MIRA 10:12)  
(HORSES)

SEBRSHEV, P.A.; SHKURKO, Ye.D.; LYASKOVSKAYA, Ye.I.; KHUNDANOV, L.Ye.

Purification and concentration of antiplague sera with neutral salts.  
Tez.i dokl.konf.Irk.gos.nauch.-issl.protivochum.inst. no.1:45-46  
'55. (MIRA 11:3)

(PLAGUE) (SERUM)

*SHERSHNEV, P.A.*  
KHUNDANOV, L.Ye.; SHERSHNEV, P.A.; SHKURKO, Ye.D.; KALMYKOVA, A.P.;  
TOKAREVA, A.A.; MIKHAEVA, V.Ya.; LYASKOVSKAYA, Ye.I.

Therapeutic and prophylactic properties of separate protein fractions  
of plague serum. Tez. i dokl.konf.Irk.gos.nauch.-issl.protivochum.  
inst. no.2:69-70 '57. (MIRA 11:3)  
(SERUM) (PLAGUE) (PROTEINS)

SHERSHNEV, P.A.

Comparative evaluation of various methods of purifying and  
concentrating antiplague sera. Izv. Irk. gos. nauch.-issl.  
protivochn. inst. 14:188-206 '57. (MIRA 13:7)  
(SERUM) (PLAGUE)



USSR / Microbiology. Human and Animal Pathogens. F  
Pasteurellae.

Abs Jour: Ref Zhur-Biol., No 2, 1959, 5602.

Author : Shershnev, P. A.; Khundanov, L. Yo.; Shkurko,  
Yo. D.; Leonov, N. P.

Inst : Irkutsk Sci. Res. Antiplague Institute of  
Siberia and the Far East.

Title : Experiment in Preparation of Dry Antiplague  
Serum and Study of its Effectiveness.

Orig Pub: Izv. Irkutskovo n.-i. protivochumn. in-ta  
Sibiri i Dal'n Vost., 1957, 14, 217-219.

Abstract: No abstract.

Card 1/1

51

TOKAREVA, A.A.; SHERSHNEV, P.A.

Some remarks on a method for the paper electrophoresis of blood  
proteins. Izv.Irk.gos.nauch.-issl.prirodovedch.inst. 18:15-23  
'58. (MIRA 13:7)

(PAPER ELECTROPHORESIS) (BLOOD PROTEINS)

SHERSHNEV, P.A.; TOKAREVA, A.A.; KALMYKOVA, A.P.; SHKURKO, Ye.D.;  
KHUNDANOV, L.Ye.

Study of protein fractions of antiplage sera. Izv.Irk.gos.  
nauch.-issl.prirodichum.inst. 18:25-31 '58. (MIRA 13:7)  
(BLOOD PROTEINS) (PLAGUE)

KHUNDANOV, L.Ye.; SHERSHNEV, P.A. SHKURKO, Ye.D.; KALMYKOVA, A.P.;  
TOKAREVA, A.A.; LYASKOVSKAYA, Ye.I.; MIKHALEVA, V.Ya.

Therapeutic and prophylactic properties of individual protein  
fractions of antiplague serum. Izv.Irk.gos.nauch.-issl.protivoc-  
chum.inst. 18:33-41 '58. (MIRA 13:7)  
(BLOOD PROTEINS) (PLAGUE)

KHUNDANOV, L.Ye., SHERSHNEV, P.A., SHKURKO, Ye.D., KALMYKOVA, A.P.,  
TOKAREVA, A.A., LYASKOVSKAYA, Ye.I. MIKHALEVA, V.Ya.

Therapeutic and preventive properties of separate protein fractions  
of anti-plague serum. Zhur.mikrobiol.epid. i immun. 29 no.7:55 J1'58  
(MIRA 11:8)

1. Iz Irkutskogo nauchno-issledovatel'skogo instituta Ministerstva  
zdavookhraneniya SSSR.

(PLAGUE, immunology,

ther. & prev. properties of beta & gamma globulins in  
immune sera (Rus))

(GAMMA GLOBULIN,

in anti-plague serum, ther. & prev. properties (Rus))

NIKITIN, A.I., prof., otv.red.; DOBYCHIN, B.D., prof., zam.otv.red.;  
ABRAMOV, K.T., kand.med.nauk, red.; KAZANTSEV, A.I., prof.,  
red.; TIMOFEYEV, S.I., prof., red.; KHODOS, Kh.B., prof., red.;  
BOLOTOV, M.P., prof., red.; ~~SHERSHNEV, P.A.,~~ prof., red.;  
VAYS, S.I., prof., red.; KLIMOV, K.A., dotsent, red.; SEMENOV,  
V.V., dotsent, red.; DONSKOV, V.V., dotsent, red.; KARNAKOV,  
B.I., dotsent, red.; KRAKAU, S.I., red.

[Collection of works of the Irkutsk State Medical Institute  
devoted to its 40th anniversary] Sbornik trudov Irkutskogo  
gosudarstvennogo meditsinskogo instituta, posviashchennyi  
40-letiiu so dnia ego osnovaniia. Irkutsk, 1959. 442 p.

(MIRA 14:1)

1. Russia (1917- R.S.F.S.R.) Ministerstvo zdarvookhraneniya.
2. Zaveduyushchiy kafedroy normal'noy fiziologii Irkutskogo  
meditsinskogo instituta (for Nikitin).
3. Zaveduyushchiy fakul'-  
tetskoy khirurgicheskoy kliniko y Irkutskogo gosudarstvennogo medi-  
tsinskogo instituta (for Dobychin).
4. Zaveduyushchiy kafedroy bio-  
khimii Irkutskogo meditsinskogo instituta (for Shershnev).
5. Za-  
veduyushchiy kafedroy propedevtiki vnutrennikh bolezney Irkutskogo  
meditsinskogo instituta (for Karnakov).

(MEDICINE)

17(2,3)

SOV/16-59-9-37/47

AUTHOR: Shershnev, P.A.

TITLE: The Purification and Concentration of Plague Antisera by Using Magnesium Sulfate

PERIODICAL: Zhurnal mikrobiologii, epidemiologii i immunobiologii, 1959, Nr 9, pp 131 (USSR)

ABSTRACT: An attempt was made to purify and concentrate plague antisera by using magnesium sulfate. To this end the albumin fraction was removed from the sera by precipitating the globulins with crystalline 70% magnesium sulfate with subsequent hydrodialysis. The purified antisera were tested and found to have increased their gamma-globulin content to 60 - 70% and decreased their ballast protein content (albumins) to 5 - 6%. The purified sera caused a lesser anaphylactic effect than crude sera and their pyrogenicity did not exceed established norms. The efficacy of the serum was more than tripled and the dose needed for treatment could therefore be cut.

Card 1/2

SOV/16-59-9-37/47

The Purification and Concentration of Plague Antisera by Using Magnesium Sulfate

ASSOCIATION: Irkutskiy nauchno-issledovatel'skiy institut Ministerstva zdra-  
vookhraneniya SSSR (Research Institute of the Ministry of Public  
Health of the USSR, Irkutsk)

SUBMITTED: May 20, 1958

Card 2/2



NIKITIN, A.I., prof., otv. red.; DOBYCHIN, B.D., prof., zam. otv. red.;  
ABRAMOV, K.T., dots., red.; KAZANTSEV, A.I., prof., red.;  
TIMOFEYEV, S.I., prof., red.; KHODOS, Kh.B., prof., red.;  
BOLOTOV, M.P., prof., red.; ~~SHERSHNEV, E.A., prof., red.~~; VAYS,  
S.I., prof., red.; KLIMOV, K.A., dots., red.; SEMENOV, V.V., dots.,  
red.; KARNAKOV, B.I., dots., red.;

[Materials on the influence of physical, chemical and biological factors on the animal and human organism]Materialy o vliianii fizicheskikh, khimicheskikh i biologicheskikh faktorov na organizm zhivotnykh i cheloveka. Irkutsk, 1961. 317 p. (MIRA 15:12)

1. Irkutsk. Gosudarstvennyy meditsinskiy institut. 2. Zaveduyushchiy kafedroy terapevticheskoy stomatologii Irkutskogo meditsinskogo instituta (for Vays). 3. Zaveduyushchiy kafedroy fakul'tetskoy khirurgii Irkutskogo meditsinskogo instituta (for Dobychin). 4. Zaveduyushchiy kafedroy infektsionnykh bolezney Irkutskogo meditsinskogo instituta (for Karnakov). 5. Zaveduyushchiy kafedroy normal'noy fiziologii Irkutskogo meditsinskogo instituta (for Nikitin).

(PHYSIOLOGY, PATHOLOGICAL)

DOMARADSKIY, I.V.; MAKAROVA, L.K.; AZARGINOVA, F.S.; SHCHEKUNOVA, Z.I.;  
SHERSHNEV, P.A.

Immunological effectiveness of a lysed cholera vaccine. Dokl.  
Irk. gos. nauch.-issl. protivochum. inst. no.5:61-66 '63  
(MIRA 18:1)

SHERSHNEV, S.T., inzhener

Designing protective shells for nuclear reactors. Sbor. trud.  
MISI no.36:101-119 '61. (MIRA 14:~")  
(Nuclear reactors  
(Shielding (Radiation))

S/124/62/000/005/046/048  
D251/D308

211000

AUTHOR: Shershnev, S.T.

TITLE: Calculating the protecting shells of nuclear reactors

PERIODICAL: Referativnyy zhurnal. Mekhanika, no. 5, 1962, 14,  
abstract 5V86 (Sb. Tr. Mosk. inzh.-stroit. in-t, 1961,  
no. 36, 101-119)

TEXT: A short description is given of the reasons for breakdown and a calculation of the strength of the protecting shells of nuclear reactors. The generally-known differential equations and the relationships of the momental theory of thin shells is described. The stress component in shells built in the form of surfaces with positive Gaussian curvature are divided into two groups: 1) A local stress with a large coefficient of variation and 2) a tangential or momentless component; for such shells a method is indicated of finding the forces, moments and deformations. An example is given of the calculation of a nuclear reactor's protecting shell which has the form of a hemisphere and is supported by hinges on the contour. 4 references. [Abstractor's note: Complete translation] Card 1/1

AUTHOR: - Shershnev, V. A. SOV/138-58-11-10/14

TITLE: Determination of Thiuram and its Conversion Products by Conductometric Titration (Opredeleniye tiurama i produktov yego prevrashcheniya metodom konduktometricheskogo titrovaniya)

PERIODICAL: Kauchuk i Rezina, 1958, Nr 11, pp 33 - 34 (USSR)

ABSTRACT: Conductometric titration is used for determining vulcanisation accelerators, especially thiurams. Scheele et al. (Refs. 1 and 2) did not describe the apparatus they used for these investigations. The author used Scheele's method. A Wheatstone bridge with a telephone or galvanometer was used (Fig.1). Three coils of 5000, 500 and 100 ohms were used instead of a slide wire. The A.C. galvanometer VG was used as zero-instrument. A beaker was used as electrolytic cell in which the platinum wire electrodes were submerged. The solution is added dropwise through an opening in the lid and the beaker is shaken. Tetramethyl thiuram disulphide was titrated in a 0.1 N  $\text{CuSO}_4$  solution in the presence of hydroquinone and dithiocarbamates in a 0.1 N HCl solution. Titration curves are shown in Fig.2. Scheele et al. recommended to titrate in water-acetone solutions

Card1/3

SOV/138-58-11-10/14

Determination of Thiuram and its Conversion Products by Conductometric Titration

at 40°C. The authors found, however, that an 8% error occurred at this temperature which could be decreased to 2 - 3% at 25°C. Results of these experiments are tabulated (Table 1 and 2). A formula for the qualitative calculation of the analysed substances is given. Details of a simultaneous titration of zinc dithiocarbamate and thiuram in the same test tube are described. This method was also used for the determination of thiuram and zinc dithiocarbamate in vulcanisation extracts. It was found that when the vulcanisation process lasted for a considerable time, free thiuram was decomposed during the extraction process. Vulcanisates of natural rubber containing stearic acid were also analysed. The stearic acid decomposes part of the zinc dithiocarbamate and it is possible that dimethylamine stearate is formed. In a different experiment it was found that the test was not affected when phenyl-β-naphthylamine was added as anti-ageing agent. The co-operation of B. A . Dogadkin and

Card2/3

SOV/138-58-11-10/14

Determination of Thiuram and its Conversion Products by Conductometric Titration

A. V. Dobromyslova is acknowledged. There are 2 Tables, 2 Figures and 3 References: 2 German and 1 Soviet.

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M. V. Lomonosova (The Moscow Institute for Chemical Precision Technology, im. M.V. Lomonosov)

Card 3/3

S/190/60/002/004/006/020  
B004/B056

AUTHORS: Dogadkin, B. A., Shershnev, V. A., Dobromyslova, A. V.

TITLE: Reversion Phenomena in the Vulcanization of Rubber With  
Tetramethylthiuramdisulfide

PERIODICAL: Vysokomolekulyarnyye soyedineniya, 1960, Vol. 2, No. 4,  
pp. 514-517

TEXT: The authors investigated the vulcanization of natural rubber and СКМ (SKI) isoprene rubber with tetramethylthiuramdisulfide at 143°C in the absence or in the presence of oxides of zinc, magnesium, or calcium in air and argon. Fig. 1 shows the change in the steric network in SKS rubber in air and argon as function of the duration of vulcanization; Fig. 2 shows the kinetics of sulfur accumulation, and Fig. 3 shows the change in the steric network in natural rubber as a function of the duration of vulcanization. Addition of phenyl-β-naphthylamine-1 increases the cross-linking. A decrease of the density of the steric network, i.e., a reversion of vulcanization was observed when natural

Card 1/2



*SHERSHNEV, V.A.*

AUTHOR: Dogadkin, B.A., Shershnev, V.A.

69-20-1-20/20

TITLE: The Action of Metallic Oxides in the Vulcanization of Rubber by Tetramethylthiuram Disulfide (Deystviye okislov metallov pri vulkanizatsii kauchuka tetrametiltiuramdisul'fidom)

PERIODICAL: Kolloidnyy Zhurnal, 1958, Vol XX, # 1, pp 124-127 (USSR)

ABSTRACT: In the article, the vulcanization of rubber at 143°C and 100 atm is investigated. The interaction of tetramethylthiuram disulfide with rubber under these conditions leads to its reduction of dimethylthiocarbamic acid, which, with zinc, becomes zinc dithiocarbamate. Figure 1 shows that in the process of vulcanization, part of the sulfur is separated again from the rubber. This separation is caused by the formation of volatile products. In the presence of zinc oxide, the formation of volatile products is considerably reduced. The stable zinc salt causes increased structuration and a fall in the effect of reversal of vulcanization.

Card 1/2

There are 4 figures, 1 table, and 6 references, 5 of which are Soviet, 1 German.

SHERSHNEV, V. A., Candidate Chem Sci (diss) -- "Investigation of the process of vulcanizing rubber with tetramethyl thiuram disulfide without elemental sulfur". Moscow, 1959. 11 pp (Min Higher Educ USSR, Moscow Inst of Fine Chem Tech im M. V. Lomonosov), 150 copies (KL, No 23, 1959, 161)

DOGADKIN, B.A.; SHERSENEV, V.A.

Reaction of tetramethylthiuram disulfide with rubber and with  
compounds containing a labile hydrogen atom. Vysokom.sosed. 1  
no.1:53-67 Ja '59. (MIRA 12:9)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M.V.  
Lomonosova. (Disulfide) (Rubber)

BRESLER, S.Ye.; DOGADKIN, B.A.; KAZBEKOV, E.N.; SAMINSKIY, Ye.M.;  
SHERSHNEV, V.A.

On the article by B.A.Dogadkin and V.A.Shershnev "The reaction  
of tetramethylthiuram disulfide with rubber and with compounds  
possessing a labile hydrogen atom." Vysokom.soed. 2 no.1:174  
Ja '60. (MIRA 13:5)  
(Rubber) (Vulcanization) (Thiuram disulfide)  
(Dogadkin, B.A.) (Shershnev, V.A.)

5(4)

SOV/69-21-2-20/22

AUTHORS: Dogadkin, B.A., Skershnev, V.A.

TITLE: On the Interaction of Tetramethylthiuram Disulfide and Tetramethylthiuram Monosulfide With Rubber (O vzaimodeystvii tetrametiltiuramdisul'fida i tetrametiltiurammonosul'fida s kauchukom)

PERIODICAL: Kolloidnyy zhurnal, 1959, Nr 2, pp 244-245 (USSR)

ABSTRACT: In order to clarify the character of interaction between rubber and tetramethylthiuram disulfide (TMTD) and tetramethylthiuram monosulfide (TMTM), the authors investigated electronic paramagnetic resonance spectra during the heating process of mixtures of rubber with TMTD and TMTM. The mixtures were prepared on micro-rolls in an argon medium and placed into quartz ampules, which were heated immediately in the resonator (in argon, vacuum or air). At the heating of all mixtures (140%), unique spectra appeared (see graph 2), the least intensive in the mixture with TMTM. This shows that the interaction mechanism of TMTD and TMTM with rubber, probably is common, whereas the kinetic

Card 1/2

15.9000

1436, 2209

22566  
S/190/61/003/005/009/014  
B110/2220

AUTHORS:

Dogadkin, B. A., Tutorskiy, I. A., Tugov, I. I.,  
Al'tzitsler, V. S., Krokhina, L. S., Shershnev, V. A.

TITLE:

The chemical modification of vulcanizates. I. The reaction  
of vulcanizates with styrene, methyl methacrylate, and  
isoprene

PERIODICAL:

Vysokomolekulyarnyye soyedineniya, v. 3, no. 5, 1961,  
729-733

TEXT: The chemical modification of vulcanizates is completely new and hardly mentioned in literature. The purpose of the present paper was to study the chemical modification process caused by copolymerization of the vulcanizates with the monomer. Natural rubber (I) or a mixture of natural rubber and butadiene styrene rubber ККС-30 (SKS-30) (II) were disintegrated to particles of about 1 mm, scrubbed in the Soxhlet with acetone, and filled into a weighed ampulla. The monomer (purified styrene, methyl methacrylate, or isoprene) was added in quantities assuring the uniform swelling of the vulcanizate. Then the ampulla was sealed and heated in

Card 1/2 ✓

The chemical...

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S/190/61/003/005/009/014  
3110/3220

are able to act as branching points in the chain of the trimeric polymer and, thus, form the graft polymer. Moreover, the initial polymerization may be effected by oxygen-containing groups existing on the surface of the crushed vulcanizate. The surface increase effected by adsorption of monomers on the crushed polymerizate also accelerates the reaction. When polymerizing the non-ozonized vulcanizates with styrene at 150-180°C, the polymerization reaches its maximum already after the first 2 to 3 hr and then remains constant, since the thermopolymerization of styrene is practically completed. With a decrease in temperature of polymerization the yield in copolymers increases as compared to the total monomer polymerized. Yu. M. Yemel'yanov assisted in the experiments. There are 7 figures and 8 references: 3 Soviet-bloc and 5 non-Soviet-bloc. The two references to English-language publications read as follows:  
Ref. 1: R. I. Ceresa, W. F. Watson, Trans. and Proceed 35, 19, 1959.  
Ref. 4: I. Green, E. F. Sverdrup, Industr. and Engng. Chem. 48, 2138, 1956. X

Card 3/8 4

15 9120

26281  
S/074/61/030/008/002/002  
B117/B226

AUTHORS: Dogadkin, B. A., and Shershnev, V. A.

TITLE: Vulcanization of rubbers in the presence of organic accelerators

PERIODICAL: Uspekhi khimii, v. 30, no. 8, 1961, 1013 - 1049

TEXT: The present paper was written to complete the survey by D. Craig (Ref. 1: Rubb. Chem. Techn., 30, 1291 (1957)) in which the Soviet, German, and Japanese papers of the last ten years were not considered. When studying the vulcanization the following problems were dealt with: Elementary chemical reactions of vulcanization, mode of action of the accelerators, nature of vulcanization structures and their effect upon the physico-chemical properties of the vulcanization product. For solving these problems both special chemical-analytical procedures and physical methods are used, viz., the optical and electron spectroscopy, isotopic exchange and kinetic studies by radioactive sulfur. Notable results could be obtained in the investigation of the reaction of sulfur with low-molecular model compounds. Two kinds of studies were made: Some of the authors ex-

Card 1/3



26281

S/074/61/030/008/002/002

B117/B226

Vulcanization of rubbers in ...

versibility and the optimum of vulcanization; vulcanization structures and their effect upon the static and dynamic properties and the fatigue of vulcanization products. The following authors are mentioned: S. Ye. Bresler, I. A. Tutorskiy, G. A. Blokh, Ye. N. Gur'yanova, I. Beniska, E. N. Belyayeva, Z. N. Tarasova, A. S. Kuz'minskiy. There are 22 figures, 2 tables, and 112 references: 57 Soviet and 55 non-Soviet. The three most important references to English-language publications read as follows: Ref. 1: D. Craig, Rubb. Chem. Tehn., 30, 1291 (1957); J. R. Shelton, E. T. McDonel, Lecture at the International Conference on Caoutchouc and Resin, Washington, November 9 - 14, 1959; L. Bateman, R. W. Glasebrook, C. G. Moore, M. Porter, G. W. Ross, R. W. Sawille. Rub. Chem. Techn., 31, 1055 (1958).

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

Card 3/3

DOGADKIN, B.A.; SHERSHNEV, V.A.

Vulcanization of rubbers in the presence of organic accelerators.  
Usp.khim. 30 no.8:1013-1049 Ag '61. (MIRA 14:9)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni  
M.V. Lomonosova. (Vulcanization)

~~L 12684-63~~ ~~EPR/EPF(c)/EWP(j)/EWT(m)/BDS~~ ~~APFTC/ASD~~ ~~Ps-4/Pc-4/Pr-4~~ ~~RM/WW~~  
ACCESSION NR: AP3001594 S/0138/63/000/005/0020/0023

73  
71

AUTHOR: Shershnev, V. A.; Ginsburg, L. V.; Dogadkin, B. A.

TITLE: Kinetics of vulcanized rubber structuration by phenol-formaldehyde derivatives

SOURCE: Kauchuk i rezina, no. 5, 1963, 20-23

TOPIC TAGS: kinetics of structuration, vulcanized rubber, phenol-formaldehyde derivate, methylol group

ABSTRACT: The study was conducted on natural rubber as well as on synthetic rubbers SKS-30-AM and SKS-30-1, which were heated with rolling at 160 and 180C with 2,6-dimethylol-4-butylphenol and the resin 101, a p-butylphenol-formaldehyde oligomer. Two types of mixtures were used, each containing 12% of resin 101, while only one of them contained 3% of stannous chloride. The resulting products were characterized by low break test values, especially in the absence of stannous chloride. In another series of experiments, 12, 3, and 1 parts of 2,6-dimethylol-4-butylphenol and 3% stannous chloride were added to natural rubber under similar conditions. These produced vulcanized rubbers of a higher break test, as compared with resin 101, which was not adversely affected by

Card 1/2

L 12684-63  
ACCESSION NR: AP3001594

2

aging. The authors conclude that the effectiveness of a vulcanizing agent<sup>15</sup> may be related to the number of methylol groups contained therein, which are responsible for the formation of cross links. Orig. art. has: 3 charts and 2 tables.

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M. V. Lomonsova (Moscow Institute of Advanced Chemical Technology)

SUBMITTED: 00

DATE ACQ: 08Jul63

ENCL: 00

SUB CODE: 00

NO REF SOV: 004

OTHER: 006

Card 2/2

SHERSHNEV, V.A.; GINZBURG, L.V.; DOGADKIN, B.A.

Behavior in the stretching of natural rubber vulcanizates with  
p-tert-butylidimethylolphenol. Koll.zhur. 25 no.5:626-627 S-O  
'63. (MIRA 16:10)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M.V.Lomono-  
sova.

GINZBURG, L.V.; SHERSHNEV, V.A.; DOGADKIN, B.A.

Interaction of 2,6-dimethylol-4-tert-butylphenol with unsaturated elastomers. Dokl. AN SSSR 152 no.2:335-337 S '63. (MIRA 16:11)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M.V. Lomonosova. Predstavleno akademikom A.A. Balandinym.

L 19612-65 EWG(j)/EWT(m)/EPF(c)/EPF(n)-2/EWP(j)/EWA(h)/EWA(1) Pc-4/Pr-4/  
Pu-4/Pe5 GG/RM/MLK  
ACCESSION NR: AT4049862 S/0000/64/000/000/0233/0236 3-  
B+1

AUTHOR: Dogadkin, B. A., Shershnev, V. A., Boyarchuk, Yu. M., Dudenkova, S. V.

TITLE: The problem of the role of metal oxides in the vulcanization of rubber in the presence of tetramethylthiuramdisulfide

SOURCE: Khimicheskiye svoystva i modifikatsiya polimerov (Chemical properties and the modification of polymers); sbornik statey. Moscow, Izd-vo Nauka, 1964, 233-236

TOPIC TAGS: metal oxide, rubber vulcanization, tetramethylthiuramdisulfide, free radical reaction, radiation yield, transverse bond

ABSTRACT: An attempt was made to track the course of free-radical reactions during irradiation of natural rubber and to clarify the role in these processes of additions of tetramethylthiuramdisulfide (TMTD) and metal oxides. The addition of TMTD increased the radiation yield of radicals per 100 ev from 0.6 to 1.3, which may be explained by the transfer of energy during irradiation; the number of transverse bonds per 100 ev increased from 0.9 to 1.1. Oxides of Zn and Bi decreased the yield to 0.4, but raised the number of transverse bonds to 3.2 and 3.7, in the presence of TMTD, the numbers were 3.2 and 3.7, respectively. In the presence of TMTD, MgO and NiO have practically no

Card 1/2

L 19612-65

ACCESSION NR: AT4049862

effect on the radiation yield, while MgO, in addition, does not affect formation of transverse bonds. The largest number of transverse bonds forms in the systems rubber + TMTD+ZnO and rubber + TMTD + Bi<sub>2</sub>O<sub>3</sub> and the smallest - in the systems with additions of NiO and CdO (in comparison with the system rubber + TMTD). The different effect of metal oxides on the radiation cross-linking of rubber, with and without TMTD, can be related to their effect on the reactions of free radicals which determine the cross-linking of the rubber molecules. "The authors are grateful to N. Ya. Buben for the opportunity to conduct the work."

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M. V. Lomonosava, (Moscow Institute of Fine Chemical Technology) Institut khimicheskoy fiziki AN SSSR (Institute of Chemical Physics, AN SSSR)

SUBMITTED: 16Feb63

ENCL: 00

SUB CODE: MT

NO REF SOV: 007

OTHER: 002

Card 2/2



L 25264-65 EWT(m)/EPF(c)/EPR/EWP(j)/T Pc-l/Pr-l/Ps-l WW/RM  
ACCESSION NR: AP5002920 S/0138/65/000/001/0009/0012

36  
34  
B

AUTHOR: Ginzburg, L. V.; Shvarts, A. G.; Shershnev, V. A.; Dogadkin, B. A.

TITLE: Vulcanization of carboxylated rubber with alkylphenol-formaldehyde resin

SOURCE: Kauchuk i rezina, no. 1, 1965, 9-12

TOPIC TAGS: vulcanization, carboxylated rubber, synthetic rubber, phenol formaldehyde resin, alkylphenol polymer, butadiene styrene rubber, methacrylate copolymer, vulcanizate crosslinking, vulcanizate mechanical property, metal oxide, thiuram, oxide filler

ABSTRACT: Vulcanization of SKA-30-1, a carboxylated 70:30 butadiene-styrene copolymer with 1.25% methacrylic acid, was studied with alkylphenol-formaldehyde resin as a vulcanizer in the presence and absence of zinc or magnesium oxides to define the effect of the metal oxides on crosslinking and on the mechanical properties and fatigue strength of vulcanizates. Vulcanizates, prepared with 8% resin and 3% magnesium or zinc oxide, without or with admixture of 2% stearic acid, 50% carbon black, KhAF 10% oil extender NP-6, 1% paraffin wax and 2% rosin, were tested for cross-linking by swelling tests and for elasticity, tensile strength, relative elongation and strength after multiple deformation. Vulcanizates with "thiuram" and vulcanizates of SKS-30ARK (modified, 70:30 butadiene-styrene, copolymerized at 5C with rosin soap emulsifier obtained under similar conditions

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L 25264-65

ACCESSION NR: AP5002920

2

were also tested. Alkylphenol-formaldehyde resin was shown to have good activity as a curing agent of carboxylated butadiene-styrene rubber, particularly in the presence of zinc oxide. Magnesium oxide decreased the crosslinking effect. The filled and resin-cured SKS-30-1 had better physical-mechanical properties than thiuram-cured rubber and particularly higher resistance to wear and fatigue. The resin-vulcanized SKS-30-1 rubber showed also less tendency to scorching than conventional SKS-30-1 tire tread mixture and approximately equal physical-mechanical properties. Orig. art. has: 3 figures and 4 tables.

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M.V. Lomonosova (Moscow fine-chemical technology institute); Nauchno-issledovatel'nyy institut shirnoy promyshlennosti (Tire industry scientific research institute)

SUBMITTED: 00

ENCL: 00

SUB CODE: MT

NO REF SOV: 005

OTHER: 002

Card 2/2

L 43099-65 EWT(m)/EPF(c)/EPR/EMP(j)/T Pc-l/Pr-l/Ps-l RPL WW/RM  
S/0190/65/007/003/0417/0419  
ACCESSION NR: AP5008365

AUTHORS: Al'tzitzer, V. S.; Gul', V. Ye.; Tutor'skiy, I. A.; Shershnev, V. A.;  
Dogadkin, B. A.

TITLE: Copolymerization of ozonated pulverized vulcanizers with polyacrylate esters.

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 7, no. 3, 1965, 417-419

TOPIC TAGS: rubber, copolymerization, ozone, vulcanizer, resin/ SKI vulcanizer, NK  
vulcanizer, SKS 30-ARM vulcanizer, SKB vulcanizer, SKD vulcanizer

ABSTRACT: This article, the third of the series "Chemical Modification of Vul-  
canizers," presents data from an investigation of the interaction between ozonated  
pulverized vulcanizers and polyacrylate esters. Vulcanizers SKI, NK, SKS-30 ARM,  
SKB, and SKD, and polyester resin MGF-9 were tested. Figure 1 shows the amount of  
peroxides formed by ozone and various vulcanizers. These peroxide groups, though  
stable at room temperature, readily decompose upon heating, and apparently form free  
radicals, initiating polymerization. Heating of ozonized pulverized vulcanizers  
with polyester resin causes the hardening of the mixture. Modified products formed  
during the latter process show properties common to both substances, the elastic  
vulcanized rubber, and the oil-, gasoline-, and heat-resistant polyacrylate ester.

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2

L 43099-65  
ACCESSION NR: AP5008365

The authors postulate that the vulcanizate particles are bound chemically with the polyacrylate ester molecules, forming a composite three-dimensional polymer structure. Orig. art. has: 3 figures.

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii (Moscow Institute of Fine Chemical Technology)

SUBMITTED: 06May64

ENCL: 01

SUB CODE: CC, MT

NO REF SOV: 003

OTHER: 000

Card 2/3

GINZBURG, L.V.; SHVARTS, A.G.; SHERSHNEV, V.A.; DOGADKIN, B.A.

Vulcanization of carboxyl-containing rubber with alkylphenol-  
formaldehyde resin. Kauch.i rez. 24 no.1:9-12 Ja '65. (MIRA 18:3)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii im.  
M.V.Lomonosova i Nauchno-issledovatel'skiy institut shinnoy  
promyshlennosti.

L 56672-65 EWT(m)/EWP(j) Pc-4 RM  
ACCESSION NR: AP5017842

UR/0286735/0007011/0078/0078  
678.043:547.412.74

AUTHOR: Shershnev, V. A.; Sidnev, V. A.; Dogadkin, B. A.

TITLE: A method for vulcanizing rubber. Class 39, No. 171568

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 11, 1965, 78

TOPIC TAGS: rubber vulcanization, thiourea

ABSTRACT: This Author's Certificate introduces a method for vulcanizing rubber using polyhalide compounds. Volatility and nonuniformity in mixing the vulcanizing agent are eliminated by using a complex compound of hexachloroethane and thiourea.

ASSOCIATION: none

SUBMITTED: 19Mar64

ENCL: 00

SUB CODE: KT,GC

NO REF SOV: 000

OTHER: 000

Card 1/1

L 56671-65 EWT(m)/EPF(c)/EWP(j) Pc-4/Pr-4 HM  
ACCESSION NR: AP5017944

UR/0286/65/000/011/0079/0079  
678.7.028.294.044 :  
547.563.3

23  
8

AUTHOR: Ginzburg, L. V.; Shershnev, V. A.; Shvarts, A. G.; Dogadkin, B. A.;  
Neratova, T. N.

TITLE: A method for vulcanizing rubber. Class 39, No. 171570

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 11, 1965, 79

TOPIC TAGS: rubber vulcanization, vulcanization acceleration

ABSTRACT: This Author's Certificate introduces a method for vulcanizing rubber using alkylphenolformaldehyde resins in the presence of accelerators of halide-containing organic substances. The vulcanization process is intensified by using 2,6-dibromodimethyl-4-*tert*-butylphenol as the halide-containing organic substance.

ASSOCIATION: none

SUBMITTED: 19Mar64

ENCL: 00

SUB CODE: MT, GO

NO REF SOV: 000

OTHER: 000

Card 1/1 782

GINZBURG, L.V.; SHERSHNEV, V.A.; PSHENITSYNA, V.P.; EOGADKIN, B.A.

Reaction of unsaturated elastomers with alkyl phenol-formaldehyde derivatives under vulcanization conditions. Vysokom.soed. 7 no.1: 55-62 Ja '65. (MIRA 18:5)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni Lomonosova.



AL'TEITSER, V.S.; GUL', V.Ye.; TUTORSKIY, I.A.; SHERSHNEV, V.A.  
BOGADKIN, B.A.

Copolymerization of ozonized pulverized vulcanizates with  
polyester acrylates. *Vysokom. speed.* 7 no.3:417-419 Apr '65.  
(MIRA 18:7)

1. Moskovskiy institut tenkoy khimicheskoy tekhnologii.

L 23532-66 EWP(j)/EWT(m) IJP(c) RM

ACC NR: AF6007855

(A)

SOURCE CODE: UR/0138/66/000/002/0015/0018

AUTHOR: Sidnev, V. A.; Anupyl'd, O. L.; Dogadkin, B. A.; Shershnev, V. A.

39

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

TITLE: Crosslinking of caoutchouc by polyhalide compounds of the aliphatic series

SOURCE: Kauchuk i rezina, no. 2, 1966, 15-18

TOPIC TAGS: rubber, synthetic process

heat resistance, vulcanization, organic

ABSTRACT: The use of hexachlorethane and 1,1,1,5-tetrachloropentane as vulcanizing agents made it possible to produce heat-resistant vulcanized rubber having high physico-mechanical properties. The molecular compound of hexachloroethane with tetrachloropentane (15:85), called vulkaton (SSSR Patent no. 165300 of 23 Sept 1963), and combination of tetrachloropentane with DFG (5 and 2 parts by weight respectively) were the most efficient vulcanizing substances. Both chemical and salt crosslinkages were formed during vulcanizing caoutchouc SKS-30-1<sup>2</sup> with tetrachloropentane. Vulcanization was practically absent at temperatures  $\leq 153^{\circ}\text{C}$ . An addition into the mixture of a small amount of DFG or an increase of temperature to 163<sup>0</sup> accelerated the vulcanization considerably. Similar results were obtained for caoutchouc of other types. Cross-

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UDC: 678.7:678.028:547:412.13

L 23532-66

ACC NR: AP6007855

linking in caotchuk SKS-30-1 was not affected by 1,1.5 trichloropentane-1, (product of the dehydrochlorization of tetrachloropentane). A. N. Nesmeyanov et al. (Usp. khim., 25, vyp. 6, 665, 1956) showed that tetrachloroalkane had a tendency toward dehydrochlorization while forming trichloroalkanes. Therefore, the vulcanizing of chloroalkanes was related to the presence in them of trichloromethyl groups. The fact that N and Cl did not link with caotchouc during vulcanizing by tetrachloropentane with VFG and that the trichloroalkanes did not vulcanize suggested that vulcanization was related to the liberation of HCl from the tetrachloropentane. Orig. art. has: 3 fig.

SUB CODE: 07,11/ SUBM DATE: 28Oct64/ ORIG REF: 007/ OTH REF: 003

Card

2/2

90

L 24483-66 EWT(m)/EWP(j) IJP(c) RM

ACC NR: AP6006988

SOURCE CODE: UR/0190/66/008/002/0357/0360

AUTHORS: Ginzburg, L. V.; Shvarts, A. G.; Shershnev, V. A.; Neratova, T. N. 28  
B

ORG: Moscow Institute of Fine Chemicals Technology im. M. V. Lomonosov (Moskovskiy institut tonkoy khimicheskoy tekhnologii)

TITLE: Vulcanization of rubber with products of hydrohalogenation of phenol dimethylol derivatives

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 8, no. 2, 1966, 357-360

TOPIC TAGS: vulcanization, rubber, chemical reaction kinetics, tracer study

ABSTRACT: Vulcanization of rubber with 2, 6-dibromodimethyl-4-tert-butylphenol (I) and 2, 6-dichlorodimethyl-4-tert-butylphenol (II) was investigated. It was hoped that the reactivity of I and II would prove high enough to make the use of accelerators unnecessary. Compounds I (m.p. 71C) and II (m.p. 68C) were synthesized by passing the corresponding hydrogen halide through a solution of 2,6-dimethylol-4-tert-butylphenol in glacial acetic acid. The kinetics of vulcanization was investigated by using labeling techniques. It was established that the process of vulcanization occurs in two stages: 1) addition, and 2) formation of cross-links. 2

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UDC: 678.01:54+678.41