S/120/61/000/002/024/042
E032/E114

A controlled source of positive ions, free of neutral particles (0.22 mm in diameter), the diameter of the two-turn coil being 3 mm. Preliminary collimation is obtained by means of the porcelain ring 3, which is 2 mm long and has an aperture 2.6 mm in diameter. Fig.1 also indicates the separation of the particle beam into neutral particle 5 and positive potassium ions 6. This is achieved by the positive grid 4 and negative plate 7. Fig.2 shows a more detailed drawing of the source. The grid 4 is in the form of a cone bent through an angle of 90°, as shown. The neutral particles can freely pass through the grid while the positive ions are deflected to the right. An additional electric field gradient is produced at the base of the grid 4 by means of two tungsten wires located immediately above the exit aperture. Fig.4 shows the ion current as a function of the voltage between the grid and the spirals. The source can be controlled electrically as shown in Fig.3, so that the apparatus does not incorporate any mechanical shutters. This is facilitated by the introduction of an additional controlling grid 12 (Fig.5) which replaces the two tungsten wires mentioned above. The ion current

can be cut off by the application of about 14 volts to this grid.
There are 5 figures and 3 references: 1 Soviet and 2 non-Soviet.
ASSOCIATION: Fiziko-tekhnicheskiy institut AN SSSR
(Physico-technical Institute, AS USSR)
SUBMITTED: April 30, 1960

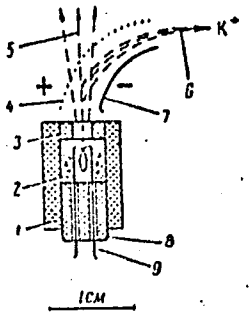


Fig.1

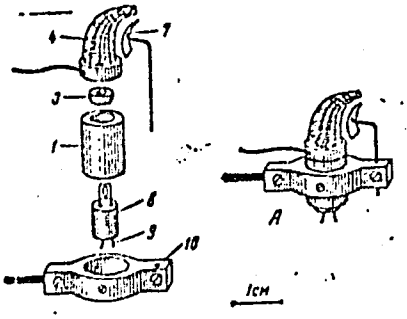


Fig.2

21413

S/120/61/000/002/024/042
E032/E114

A controlled source of positive ... E032/E114

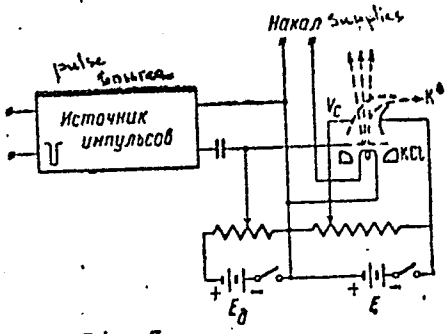


Fig.3

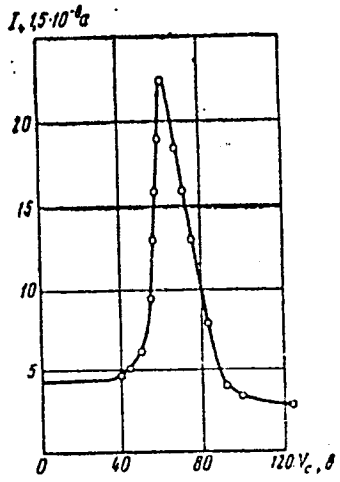


Fig.4

Card 4/5

A controlled source of positive ...

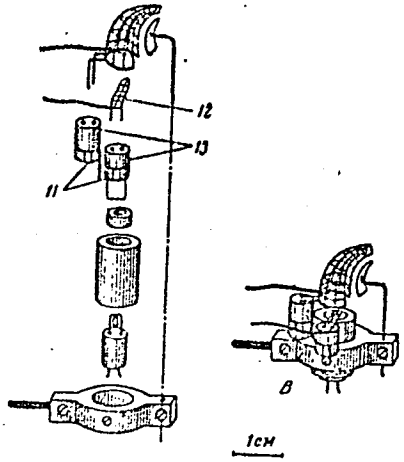


Fig.5

Fig.5 on page 125 attached to this

Card 5/5

TSVETAYEV, M.N.

Controlled positive ion source free of neutral particles. Prib. i tekh. eksp. 6 no.2:126-128 Mr-Ap '61. (MIRA 14:9)

1. Fiziko-tekhnicheskiy institut AN SSSR.
(Ion sources)

TSVETAYEV, N.; ZUYEV, N.

Differentiate deductions from current accounts of collective farms. Den. i kred. 17 no.2:66-67 F '59. (MIRA 12:5)
(Collective farms--Finance)

TSVETAYEV, N.; HEYZER, P.

Tie between the bank and regional economic council. Den. i kred. 15 no.12:35-36 D '57. (MIRA 11:2)
(Moldavia--Finance)

TSVETAYEV, N.; TSAP, S.

Struggle of Moldavian State Bank departments against excessive wage fund expenditures. Den. i kred. 19 no.7:62-66 Jl '61. (MIRA 14:7)

1. Nachal'nik proizvodstvenno-ekspluatatsionnogo otdela Moldavskoy kontory Gosbanka (for TSvetayev). 2. Starshiy kreditnyy inspektor Moldavskoy kontory Gosbanka (for TSap).
(Moldavia--Banks and banking) (Wages)
(Auditing)

TSVETAYEV, N.; BEYZER, P.; YAKERSON, B., kreditnyy inspektor; KROL', V.

Effectiveness of State Bank credit in financing the mechanization of production. Den. i kred. 17 no.8:54-59 Ag '59. (MIRA 12:11)

1. Nachal'nik proizvodstvenno-ekspluatatsionnogo otdela Moldavskoy respublikanskoy kontory Gosbanka (for TSvetayev). 2. Nachal'nik otdela kreditovaniya predpriyatiy sovnarkhoza Moldavskoy SSR (for Beyzer). 3. Starshiy inzh.-ekonomist Izyumskogo parovozoremontnogo zavoda (for Krol').
(Moldavia--Machinery in industry--Finance)

TSVETAYEV, N.; BEYZER, P.; KARTELISHEV, V.

For a wider dissemination of efficient practice in paying for goods and services. Den. i kred. 9 no.11:65-69 N '61. (MIRA 14:12)

1. Nachal'nik proizvodstvenno-ekspluatatsionnogo otdela Moldavskoy kontory Gosbanka (for TSvetayev). 2. Nachal'nik otdela kreditovaniya predpriyatiy sovnarkhoza Moldavskoy kontory Gosbanka (for Beyzer). 3. Nachal'nik uchetno-finansovogo otdela energoupravleniya Moldavskogo sovnarkhoza (for Kartelishev).
(Moldavia--Payment)

LOSYATINSKIY, A.; TSVETAYEV, N.; NAYENKO, A.

Increase the volume of payments by checks in the turnover of payments. Den. i kred. 20 no.11:49-52 N '62. (MIRA 16:1)

(Moldavia—Checks)

TSVETAYEV, N.Ye.

Shape of the curve for β-absorption in aluminum. Atom. energ. 9 no.6:507-508 D '60. (MIRA 13:12)
(Aluminum) (Beta rays)

TSVETAYEV, Ye., polkovnik, kand. istoricheskikh nauk

Leader of the Leninist school. Kom. Vooruzh. Sil 5 no.2: 86-88 Ja '65. (MIRA 18:3)

TSVETAYEV, V.V., inzh.

Renovation of rotary cement kilns. Mov.tekh.mont.i spets. rab.v stroi. 21 no.12:23-25 D '59. (MIRA 13:3)

1. Pikalevskoye montazhnoye upravleniye tresta Stroymontazh.
(Kilns, Rotary—Maintenance and repair)

L 22334-66 EWT(1)/EWP(m)/EWA(d)/EWA(h)/EWA(l) WW

ACC NR: AP6013206 SOURCE CODE: UR/0421/66/000/002/0108/0114

AUTHOR: Bogoslovskiy, K. Ye. (Moscow); Kireyeva, N. I. (Moscow); Makarevich, G. A. (Moscow); Tsvetayev, Yu. A. (Moscow); Shimarev, S. K. (Moscow); Tarantov, Ye. A. (Moscow)

ORG: none

TITLE: Investigation of unsteady flows past models in an electromagnetic shock tube

SOURCE: AN SSSR. Izvestiya. Mekhanika zhidkosti i gaza, no. 2, 1966, 108-114

TOPIC TAGS: experiment aerodynamics, electromagnetic shock tube, strong shock wave, detached shock wave, shock wave reflection, supersonic flow

ABSTRACT: An experimental investigation of unsteady flows moving behind strong shock waves produced by electric discharges past models of various shape was carried out in an electromagnetic shock tube. The purpose of this study was to determine the time of flow transition from an unsteady to a steady state in the stagnation-point region and to check the theoretical data on flow parameters behind strong shock waves. The electromagnetic shock tube, experimental set-up, instrumentation, and test procedure are described. The results obtained in an electric discharge shock tube with wave velocity of the order of 8000 m/sec show that: 1) the obtained dependence of the nondimensional value of the relative shock wave detachment on bluntness as a function of nondimensional time makes it possible to determine the time of the estab-

Card 1/2

L 22334-66
ACC NR: AP6013206 O

lishment of the flow near the stagnation point of spheres and cylinders in flows behind strong shock waves; 2) the experimental values of velocity and pressure behind reflected shock waves from the end plate of a shock tube are in satisfactory agreement with theoretical computations, taking account of dissociation and ionization; 3) the values of the relative, steady shock-wave detachment from the stagnation point of spheres and cylinders with flat bluntness in axial flows agree well with theoretical data obtained by others. Orig. art. has: 9 figures. [AB]

SUB CODE: 20/ SUBM DATE: 23Apr65/ ORIG REF: 006/ OTH REF: 002/ ATD PRESS: 4242

Card 2/2 dda

TARANTOV, Ye.A.; TSVETAYEV, Yu.A.

Exposure time for high-speed cameras with optical compensation of prisms. Zhur.nauch.i prikl.fot.i kin. 5 no.4:280-288 Jl-Ag '60. (MIRA 13:8)
(Photography, High-speed--Exposure)

TSVETAYEV, Yuriy Vladimirovich; TSVETKOVA, V.A., red.; GRAKHOVSKAYA, T.M., red.izd-va; GALAKTIONOVA, Ye.N., tekhn. red.

[By automobile through the Caucasus; a guidebook] Na avtomobile po Kavkazu; putevoditel'. Moskva, Avtotransizdat, 1962. 221 p. (MIRA 16:4)
(Caucasus--Automobiles--Road guides)

GORYSHIN, N. I.; TSVETAYEVA, G. F.

Effect of intermittent lighting on the photoperiodic reaction and behavior of the moth Acronycta rumicis L. Trudy PBI no.19:122-135 '62. (MIRA 16:1)

1. Laboratoriya entomologii Petergofskogo biologicheskogo instituta.

(Photoperiodism) (Owlet moths)

TSVETAYEVA, I.A.

Characteristics of feeding habits of the larvae of the spinach leaf miner Pegomya hyoscyami Panz. (Diptera, Anthomyidae) as related to its way of life. Ent. oboz. 42 no.3:481-491 '63. (MIRA 17:1)

1. TSentral'naya karantinnaya laboratoriya Ministerstva sel'skogo khozyaystva SSSR, Moskva.

KAPKOVA, Ye.A.; TSVETAYEVA, I.A.

Heptachlor in corn protection. Zashch.rast.ot vred.i bol.4 no.4: 37 Jl-Ag '59. (MIRA 16:5)

(Corn (Maize)— Diseases and pests) (Heptachlor)

TSVETAYEVA, I.A., aspirant

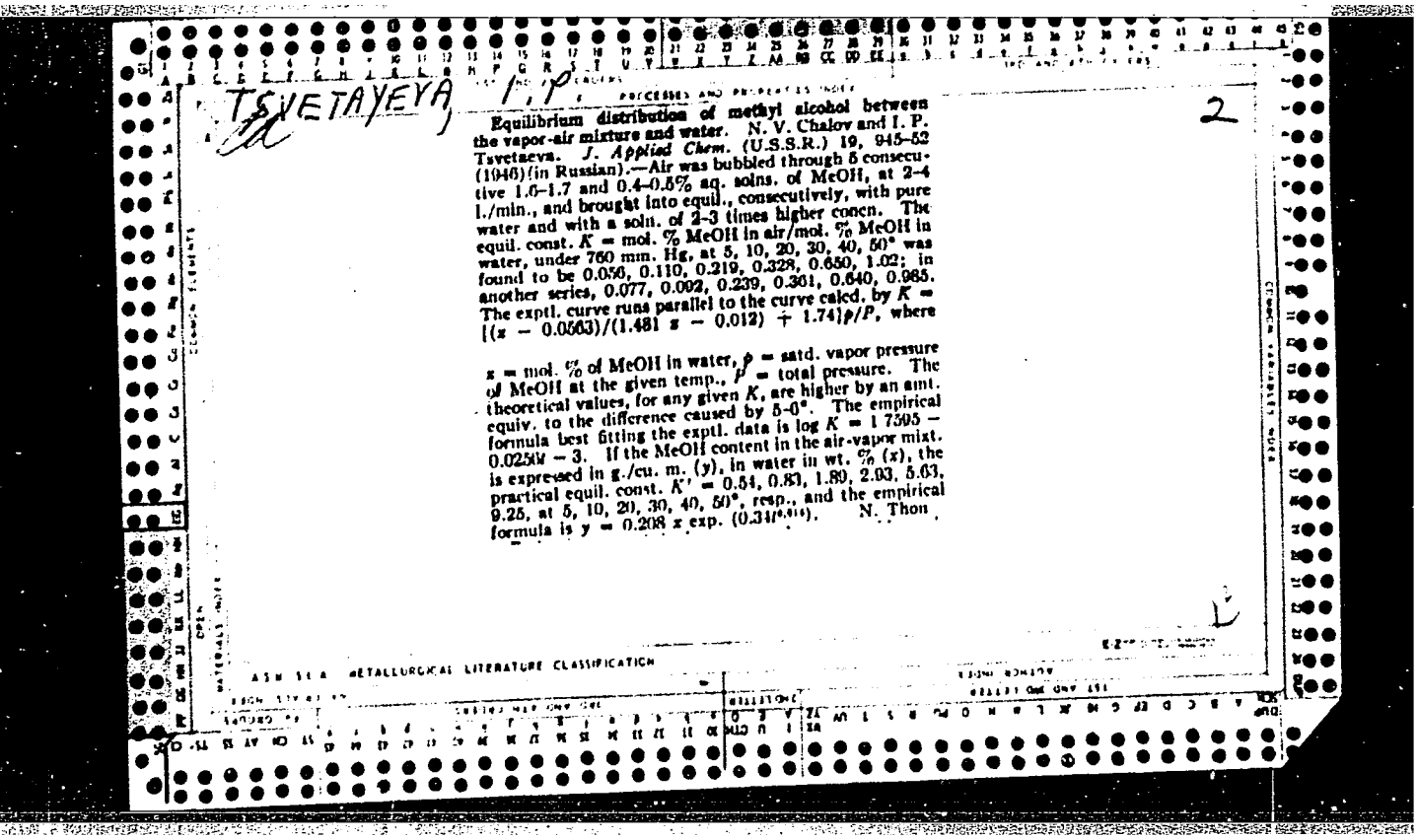
Damage to beets by the spinach beet miner. Zashch. rast. ot vred. i bol. 8 no.2:54 F '63. (MIRA 16:7)

1. Vsesoyuznyy institut zashchity rasteniy.
(Beets—Diseases and pests)

KRUG, G.K.; SIRMAY, I.A.; TSVETAYEVA, I.L.

Use of a composite system in the study of complex industrial processes. Trudy MEI no.59:195-212 '65.

(MIRA 18:10)



TSVETAYEVA, I. P.

2

Equilibrium distribution of methyl alcohol between the vapor-air mixture and water. N. V. Chalov and I. P. Tsvetaeva. *J. Applied Chem.* (U.S.S.R.) 19, 945–52 (1946)(in Russian).—Air was bubbled through 5 consecutive 1.6–1.7 and 0.4–0.5% aq. solns. of MeOH, at 2–4 l./min., and brought into equil., consecutively, with pure water and with a soln. of 2–3 times higher concn. The equil. const. K = mol. % MeOH in air/mol. % MeOH in water, under 760 mm. Hg, at 5, 10, 20, 30, 40, 50° was found to be 0.050, 0.110, 0.219, 0.328, 0.650, 1.02; in another series, 0.077, 0.092, 0.239, 0.361, 0.640, 0.985. The exptl. curve runs parallel to the curve calcd. by $K = [(x - 0.0563)/(1.481\ x - 0.012) + 1.74]p/P$, where x = mol. % of MeOH in water, p = satd. vapor pressure of MeOH at the given temp., P = total pressure. The theoretical values, for any given K, are higher by an amt. equiv. to the difference caused by 5–0°. The empirical formula best fitting the exptl. data is $\log K = 1.7595 - 0.0258M - 3$. If the MeOH content in the air-vapor mixt. is expressed in g./cu. m. (y), in water in wt. % (x), the practical equil. const. $K' = 0.54, 0.83, 1.89, 2.93, 5.63, 9.25$, at 5, 10, 20, 30, 40, 50°, resp., and the empirical formula is $y = 0.208\ x \exp.(0.34t^{0.414})$. N. Thon

ASM SEA METALLURGICAL LITERATURE CLASSIFICATION

TSVETAYEVA, I. F. [illegible], M. K., [illegible], N. I.

Wood - Chemistry

Chemical composition of the wood of the Daurian larch. Zuhr. prikl. khim. 25 no. 2 (1952)

9. Monthly List of Russian Accessions, Library of Congress, August 1953. Unclassified.

TSVETAYEVA, I.P.

Chemical Abst.
Vol. 48 No. 9
May 10, 1954
Cellulose and Paper

The chemical composition of the wood of Larix dehurica. I. P. Tsvetaeva, M. K. Mukovnikova, and N. I. Nikitin. *J. Appl. Chem. U.S.S.R.* 25, 183–200(1952)(Engl. translation).—See *C.A.* 48, 1676f. H. L. H.

AID P - 3751

Subject : USSR/Chemistry

Card 1/1 Pub. 152 - 15/22

Author : Tsvetayeva, I. P.

Title : Study of the hydrolysis of Far Eastern conifers

Periodical : Zhur. prikl. khim. 28, 9, 1000-1005, 1955

Abstract : The analytical data showed that the chemical composition of Far Eastern conifers differs from that of the European ones (pentosan-content: 5-7% and 9-11%; galactan-content: 1.2% and 2-3% resp.; the cellulose and lignin contents are about the same). Three tables, 6 references, 5 Russian (1945-1953).

Institution : None

Submitted : No date

TSVETAYEVA, I. P.

Tsvetaeva, I.

Distribution of Daurian-larch-wood gum. p. 211.

BIOLOGICHESKAIA NAUKA: SELSHOMU L LASNOMU. (Latvijas PSR Zinatnu Akademija Biologijas Zinatnu nodala) Riga, Latvia, No. 16, 1958. In Russian.

Monthly list of East European Accessions (EEAI) LC, Vol. 8, No. 8, August 1959.
Uncl.

TSVETAYEVA, I.P.; YUR'YEVA, M.K.; NIKITIN, N.I.

Characteristics of the chemical composition of the Dahurian larch wood. Trudy Inst. lesa 45:22-30 '58. (MIRA 11:11)
(Larch) (Wood--Chemistry)

CHOCHIYEVA, M.M.; TSVETAYEVA, I.P.; YUR'YEVA, M.K.; ZAYTSEVA, A.F.; PETROPAVLOVSKIY, G.A.; NIKITIN, N.I.

Distribution of arabogalactan in the Dahurian larch wood. Trudy Inst. lesa 45:31-49 '58. (MIRA 11:11)
(Larch) (Galactan)

TSVETAYEVA, I.P.; LYSYAK, N.K.

Determination of the changes in the degree of polymerization of wood pulp during the initial stages of cooking process using the direct nitration of wood. Zhur.prikl.khim. 38 no.6:1340-1345 Je '65. (MIRA 18:10)

TSVETAYEVA, I.P.; PASKEROVA, Ye.D.

Change in the composition of arabogalactan of Siberian larch as dependent on the conditions of its extraction from the wood. Zhur.prikl.khim. 35 no.5:1128-1132 My '62. (MIRA 15:5)
(Arabogalactans) (Extraction (Chemistry)) (Larch)

NIKITIN, Nikolay Ignat'yevich. Prinimali uchastiye: ABRAMOVA, Ye.A., starshiy nauchnyy sotr., kand. khim. nauk; AKIM, E.L., inzh.-tekhnolog; ANTONOVSKIY, S.D., dots., kand. tekhn. nauk; VASIL'YEVA, G.G., inzh.-tekhnolog; ZAYTSEVA, A.F., starshiy nauchnyy sotr., kand. tekhn.nauk; KLENKOVA, N.I., kand. tekhn. nauk; MALEVSKAYA, S.S., kand. khim. nauk; NIKITIN, V.N.starshiy nauchnyy sotr., kand. fiz.-mat. nauk; OBOLENSKAYA, A.V., kand. tekhn. nauk, dotsent; PETROPAVLOVSKIY, G.A., starshiy nauchnyy sotr., kand. tekhn. nauk; PONOMAREV, A.N., kand. tekhn. nauk, dots.; SOLECHNIK, N.Ya., prof., doktor tekhn. nauk; TOKAREV, B.I., inzh.; TSVETAYEVA, I.P., kand. tekhn. nauk; CHOCHIYEVA, M.M., kand. tekhn. nauk; ELIASHBERG, M.G., doktor tekhn. nauk; YUR'YEV, V.I.; KARAPETYAN, G.O., red.izd-va; ZAMARAYEVA, R.A., tekhn. red.

[Wood chemistry and cellulose] Khimiia drevesiny i tselliulozy. Moskva, Izd-vo Akad.nauk SSSR, 1962. 711 p. (MIRA 15:2)

1. Chlen-korrespondent Akademii nauk SSSR (for Nikitin). 2. Zaveduyushchiy kafedroy fizicheskoy i kolloidnoy khimii Lesotekhnicheskoy akademii (for Yur'yev).

(Cellulose)

TSVETAYEVA, Nina Aleksandrovna

Of the Question about the Influence of the Carrier of Blood Stains and the Time of its Storage in Reaction of (izogemong glyutinatsii)

Dissertation for candidate of a Medical Science degree. Chair of Legal Medicines (head, prof. L.B. Leytman) Saratov Medical Institute, 1951

TSVETAYEVA, N. P.

Tsvetayeva, N. P. - "Contagious enteritis of domestic and wild cats," Trudy Mosk. zooparka, Vol. I., 1949, p. 241-69, - Bibliog: 14 items

SO: U-4355, 14 August 53, (Letopis 'Zhurnal 'nykh Statey, No. 15, 1949)

TSVETAYEVA, N.P.

Action of carbon tetrachloride on the sheep. D. I. Panasiuk and N. P. Tsvetaeva. *Trudy Vsesoyuz. Inst. Gel'mintol.* 1953, No. 5, 124–5; *Referat. Zhur., Khim.* 1954, No. 27505.—A therapeutic dose of CCl_4 (2 ml.) had no effect on 2 sheep (out of 8 tested), and recurrent clinical and pathohistological changes occurred in 2 other sheep. Toxic doses (32, 34, and 35 ml.) caused grave sickness in the animals. Disturbances were observed in the functions of the nervous and cardiovascular systems and in blood-producing organs. After dissection degenerative changes were found in the liver and kidneys. Addn. of Ca salts and vitamins P and K into the feed of sheep either before or after giving CCl_4 increased the resistance of the organism to the toxic action.

M. H.

TSVETAYEVA, N. P.

TSVETAYEVA, N.P., kand. vet. nauk.

Pathology of Echinuria infections in water fowl. Trudy VIGIS 5: 150-157 '53. (MIRA 11:1)
(Moscow--Nematoda) (Parasites--Water birds)

TSVETAYEVA, N. P.

USSR/Medicine - Veterinary FD-1270

Card 1/2 Pub. 137-7/17

Author : Tsvetayeva, N. P., Candidate of Veterinary Sciences

Title : Some questions on the pathology and diagnosis of dictyocaulosis in sheep

Periodical : Veterinariya, 10, 39-44, Oct 1954

Abstract : Development of dictyocaulus in sheep depends on the biology of larvae of Dictyocaulus filaria. Pathologically the chronic stage of dictyocaulosis is characterized by spread of catarrhal-desquamative bronchitis with collapse of bronchial wall or by adenomatous growth of bronchial epithelium, bronchiectasis, hypertrophy of muscular walls, peribronchitis, atelectasis, and emphysema. The first or acute stage of dictyocaulosis lasts 34-47 days; the second or chronic stage lasts several months. In examining lamb for presence of so-called nonspecific pneumonia, it is necessary to consider possible presence of early stages of dictyocaulosis.

Institution : All-Union Inst. Helminthology im. K. I. Skryabin

Submitted :

Card 2/2

FD-1270

Periodical : Veterinariya, 10, 39-44, Oct 1954

Abstract : Diagnosis of chronic dictyocaulosis. Diagnosis of chronic dictyocaulosis is based on discovery of Dictyocaulus larvae in the excrement. Eosinophilia of tissues is an invariable symptom of the disease. Illustrations.

TSVETAYEVA, N.P., kand. veter. nauk; VASIL'YEV, [illegible], kand. veter. nauk

Restorative processes in the [illegible] of [illegible] after [illegible].
Trudy VIGIS 10:[illegible] '63. (MIRA 17:9)

BELOKUROVA, M.A.; TSVETAYEVA, N.Ye.; KULICHENKO, M.N.; IVANOVA, L.A.

Measurement of radioactivity on the surface of aqueous solutions. Atom. energ. 18 no.3:296-298 Mr '65.

(MIRA 18:3)

TSVETAYEVA, N.P., referent; KASHINSKIY, A.D., referent

Veterinary medicine abroad. Veterinariia no.12:64-65 D '63.
(MIRA 17:2)

TSVETAYEVA, N.P., kand.veter. nauk

Pathogenic role of helminths. Veterinariia no.12:16-17 D '63.
(MIRA 17:2)

1. Vsesoyuznyy institut gel'mintologii imeni akademika K.I.Skryabina.

TSVETAYEVA, N. P.

"The pathogenic behavior or helminths at different stages of development."

report to be submitted at the 17th World Veterinary Congress, Hanover, West Germany, 14-21 Aug 63.

TSVETAYEVA, N.P., kand.veterinarnykh nauk

Pathomorphological changes in the intestines of ducks infected with Filicollis anatis. Trudy VIGIS 6:338-346 '59. (MIRA 15:5)
(Parasites--Ducks) (Filicollis)

TSVETAYEVA, N.P., kand.veterinarnykh nauk

Pathomorphologic changes in sheep in dictyocaulosis. Trudy VIGIS 6:347-373 '59. (MIRA 15:5)
(Dictyocaulus)
(Parasites--Sheep)

TSVETAYEVA, N.P., kand.veterinarnykh nauk

Pathomorpholgy of Plagiorchis infection in chickens. Trudy VIGIS 6:374-386 '59. (MIRA 15:5)

(Plagiorchis)
(Poultry--Diseases and pests)

AUTHORS: Tsvetayeva, N.Ye., Brusentsova, M.N. SOV/89-4-6-13/30

TITLE: The Measurement of β-Activities With a Window Counting-Tube (Izmereniye β-aktivnosti na tortsovom schetchike)

PERIODICAL: Atomnaya energiya, 1958, Vol. 4, Nr 6, pp. 583-585 (USSR)

ABSTRACT: When determining β-activities by means of window counting-tubes a number of corrections must be carried out. The correction for the thickness of the window of the counting tube and the absorption of air between the window and the preparation can be determined jointly by means of the formula

$$T = 2\,\frac{t_\omega + t_a}{t_{1/2}}$$

where t_ω denotes the thickness of the window, t_a - the thickness of the interspace of air, $t_{1/2}$ - the thickness of half-width absorption (in each case expressed in mg/cm^2).
The value of $t_{1/2}$ was measured for the following nuclei:

Card 1/3

The Measurement of β-Activities With a Window Counting-Tube

SOV/89-4-6-13/30

	E_0(MeV)	$t_{1/2}$ in mg/cm^2
S^{35}	0.167	2.8
Ca^{45}	0.254	3.9
Tl^{204}	0.765	15.1
Sr^{90}	0.54	8.7
RaE	1.17	19
P^{32}	1.7	34

Furthermore, for the nuclei N^{95}, S^{35}, Ca^{45}, Co^{60}, Zr^{95}, Cs^{137}, Tl^{204}, RaE and Rh^{106} the correction coefficients for the β-absorption of these nuclei in air was determined and the corresponding curve was plotted.
The following window counting tubes were used: BFL -25, MSI -17.
With these correction coefficients the absolute β-activity of Cs^{137}, Sr^{90}-Y^{90}, Co^{60} was determined; satisfactory agreement

Card 2/3

The Measurement of β-Activities With a Window Counting-Tube

SOV/89-4-6-13/30

with the values obtained by means of a 4π -counting device was attained. Thre are 3 figures, 2 tables and 5 references, 3 of which are Soviet.

SUBMITTED: December 20, 1957

1. Beta rays--Counting methods 2. Mathematics--Applications

Card 3/3

Tsvetayeva, N. Ye.

PHASE I BOOK EXPLOITATION SOV/3589

Sbornik radiokhimicheskikh i dozimetricheskikh metodik (Collection of Radio-Chemical and Dosimetric Methods) Moscow, Medgiz, 1959. 459 p. Errata slip inserted. 9,000 copies printed.

Eds. (Title page): N.G. Gusev, U.Ya. Margulis, A.N. Marey, N.Yu. Tarasenko, Yu.M. Shtukkenberg; Ed. (Inside book): V.I. Labaznov; Tech. Ed.: A.I. Zakharova.

PURPOSE: This collection of articles is intended for physicists, sanitation and public health doctors, chemists and other specialists working in radioactive dosimetry.

COVERAGE: This work discusses the following subjects: (1) principles of organizing sanitation and dosimetric control in institutions where work is carried on with radioactive substances; (2) radio-chemical and chemical methods for determining certain radioactive substances in samples of air, water, soil and foodstuffs; (3) physical methods of measuring contamination of the air by radioactive gases and aerosols, and methods for determining the level of contamination of working surfaces, clothes and leather coverings; (4) methods of measuring external streams of x- and gamma-radiation, and methods of individual dosimetric monitoring; (5) Absolute and relative methods of measuring the activity of solid and liquid radioactive sources. There are four appendixes dealing with methods of calculating the total dosage from sources of ionizing radiation, units of activity, and doses from natural (background) radioactivity in the calcium of foodstuffs. Sanitary regulations observed during transportation, storage, and handling of radioactive substances are discussed, as well as the permissible level of ionizing radiation. The editors thank Yu.V. Sivintsev and R.P. Shirshov. References appear at the end of each chapter.

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AVAILABLE: Library of Congress

Card 11/11

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S/120/60/000/02/009/052
E032/E414

24,6810

AUTHORS: Dmitriyevskaya, T.I., Kravtsev, V.V. and Tsvetayeva, N.Ye.

TITLE: Application of End-Window Counters in the Measurement of Low Beta-Activities

PERIODICAL: Pribory i tekhnika eksperimenta, 1960, Nr 2, pp 38-40 (USSR)

ABSTRACT: The present authors discuss the possibility of using end-window counters manufactured in the Soviet Union in the measurement of low beta-activities. It is well known that the background in end-window counters is largely due to external gamma-fields (including the soft component of the cosmic radiation), the hard component of cosmic radiation, and traces of radioactive materials in the counters and the screen. In the present work, the external gamma-field was almost entirely excluded by a steel screen 180 mm thick, and the hard component of cosmic radiation was eliminated with the aid of a screen consisting of Geiger counters in anti-coincidence with the working counter (Fig 1). In Fig 1, 1 is the working counter, 2 and 3 are screening counters (MS-9), 4 is a perspex cover and 5 is a

Card 1/3

Application of End-Window Counters in the Measurement of Low Beta-Activities

support for the working counter. It is shown that if the glass from which the counters are made has a potassium concentration of less than 0.1% and use is made of quartz diaphragms, which screen the working volume from the counter head and the mica window, the counter background can be considerably reduced. When such counters are used in conjunction with the anti-coincidence screen mentioned above, concentrations of the order of 10^{-7} curies/litre of C^{14} and 5×10^{-10} curies/litre of Sr^{90}-Y^{90} can be determined to an accuracy of $\pm$ 15%. This corresponds to the maximum permissible concentration of Sr^{90}-Y^{90}, in water. A comprehensive table is given of various types of Soviet counters and their natural background.

Acknowledgment is made to S.P.Tselishchev and A.B.Dmitriyev for advice and assistance, to V.S.Izhevskiy and Ye.A.Verney for carrying out chemical analysis of the glass and to S.I.Abakumov, L.A.Rozenfel'd and others for taking part in the present work. There

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Application of End-Window Counters in the Measurement of Low Beta-Activities

are 2 figures, 1 table and 7 references, 2 of which are Soviet and 5 English.

SUBMITTED: February 14, 1959

Card 3/3

TSVETAYEVA, N. YE.

82030
S/056/60/038/02/47/061
B006/B014

24.6800

AUTHORS: Tsvetayeva, N. Ye., Rozenfel'd, L. A.

TITLE: Investigation of the Beta Radiation of Nb^{95} and Ce^{144} by the Method of Absorption in Air

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1960, Vol. 38, No. 2, pp. 641 - 643

TEXT: The β-radiation of Nb^{95} has repeatedly been examined spectrometrically. The resulting energy values differ by up to 20%. The writers of the present "Letter to the Editor" studied this radiation by a method described in Ref. 5. The resulting absorption curve of β-radiation in air is illustrated in Fig. 1. It was obtained by a change in the atmospheric pressure between the counter (of the type T-25 БФЛ (T-25 BFL)) and the preparation within the range $\approx$ 0 and 800 torr. The empirical function $K(E_0)$ was determined, where $K = I(p=0)/I(p=1\ atm)$ - (Fig. 2) - ; for $K_{Nb^{95}} = 8.75$ the β-radiation energy of Nb^{95}, E_0, was (0.166±0.004)Mev.

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Investigation of the Beta Radiation of Nb^{95} and Ce^{144} by the Method of Absorption in Air

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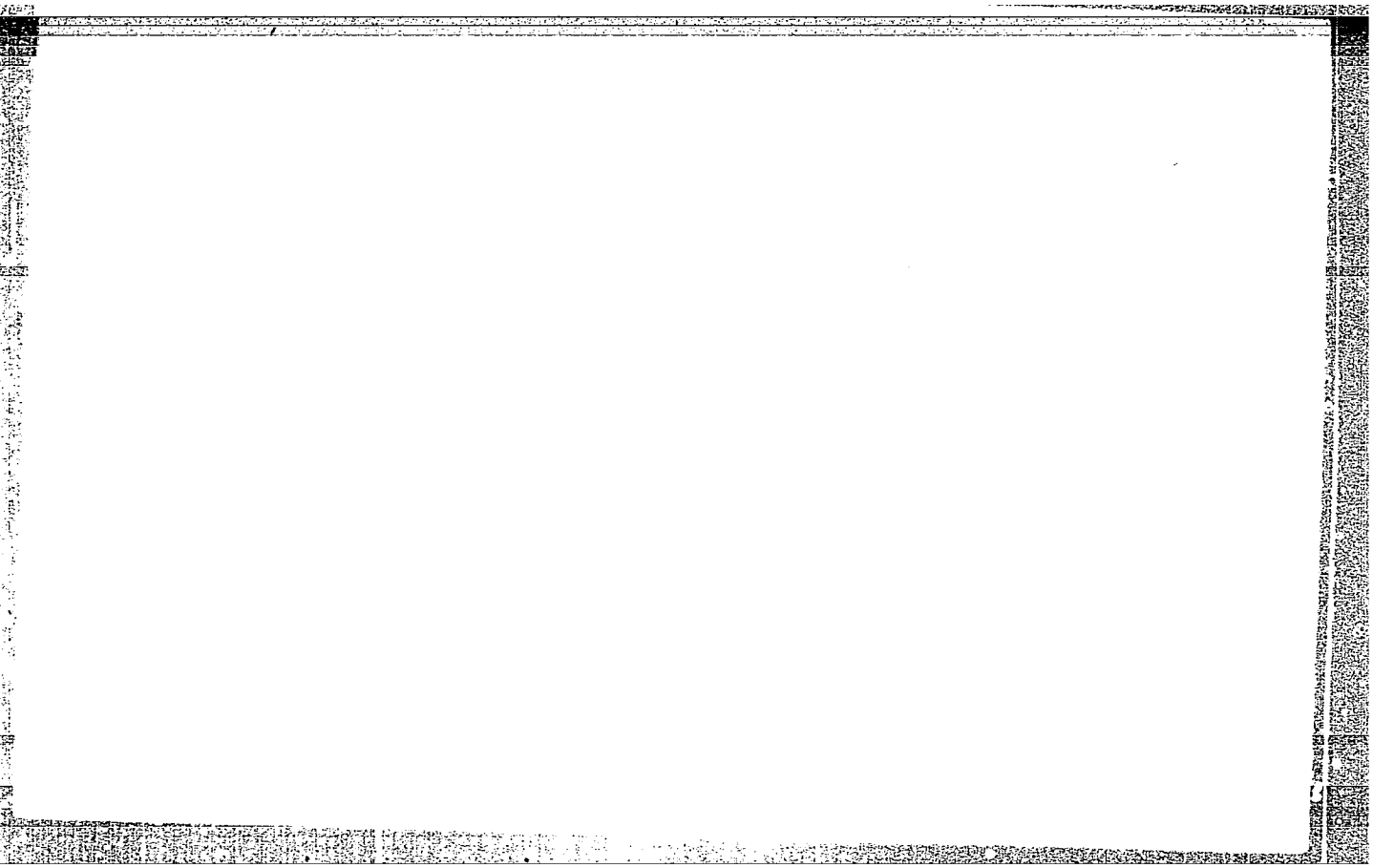
B006/B014

The β-radiation of Ce^{144} was studied by the same method. Fig. 3 shows the absorption curve of β-radiation of Ce^{144} + Pr^{144}. The β-radiation of Pr^{144}(E_o=3Mev) was separated from the sum of the two β-radiations by means of absorption in an aluminum foil. The curve of absorption in Al was extrapolated for zero thickness of the foil. The coefficient of Ce^{144} absorption in air, K, was equal to 3.35. This is in contrast with the β-component found by other research workers (~0.3 Mev; 0.3 Mev corresponds to K = 2.30). The energy E_o = (0.168 $^{+0.032}_{-0.020}$) Mev was determined from the $K(E_o)$ curve and a formula derived in Ref. 5. In addition to the 0.3-Mev component, at least a softer one must exist the fraction of which is estimated to be (40±12)%. This is in agreement with the results furnished by other authors (Refs. 8-10). There are 3 figures and 10 references: 4 Soviet and 6 American.

SUBMITTED: September 29, 1959

Card 2/2



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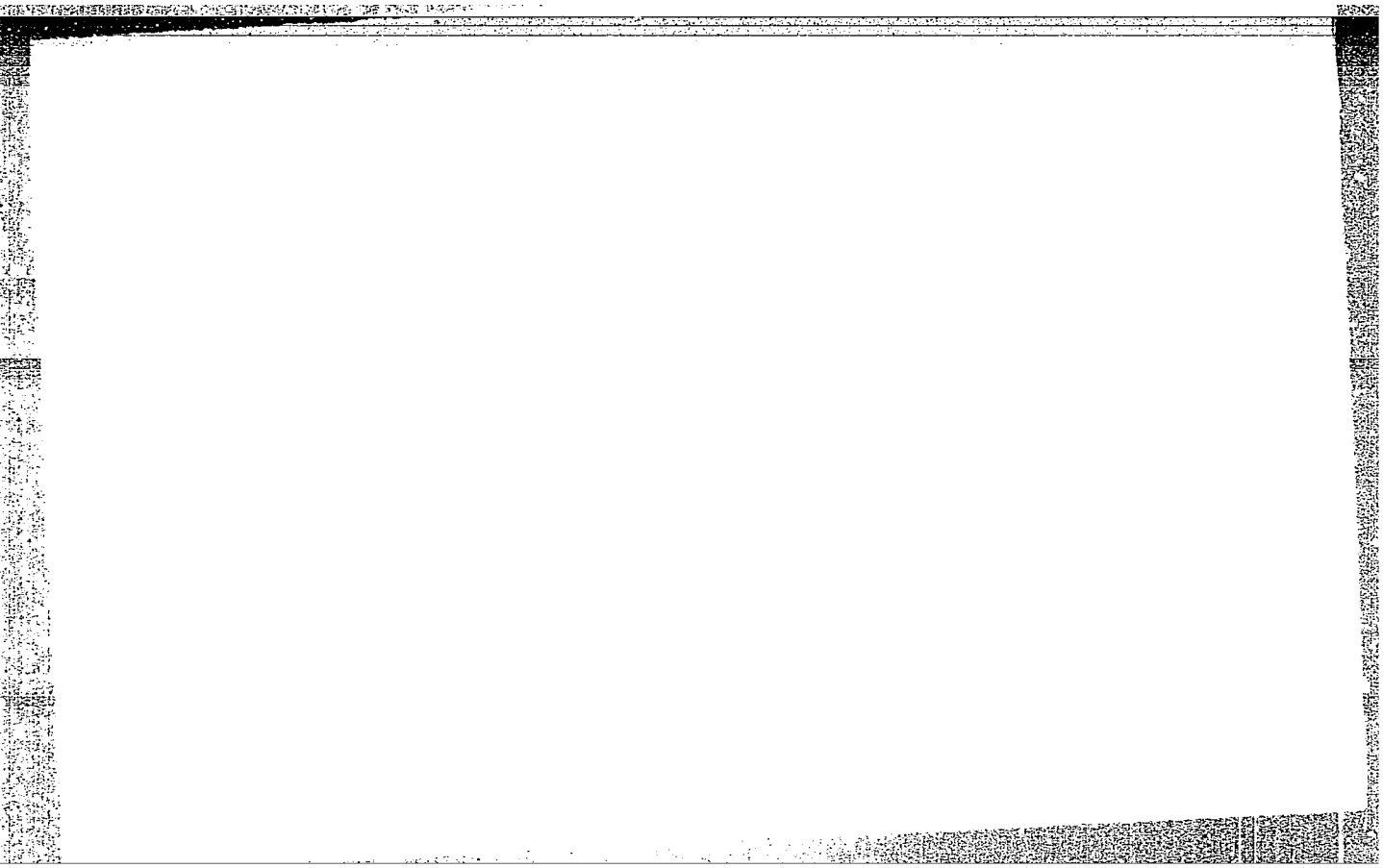


APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001757220001-6"

TSVETAYEVA, N.Ye.; ROZENFEL'D, L.A.

Investigating the β-radiation of Nb^{95} and Ce^{144} by absorption in the air. Zhur.eksp.i teor.fiz. 38 no.2:641-643 F '60. (MIRA 14:5)

(Niobium--Isotopes) (Cerium--Isotopes) (Beta rays)

ROZENFEL'D, L.M., kand.tekhn.nauk; TESLER, P.A., kand.tekhn.nauk;
TSVETAYEVA, R.A., inzh.

Using ashes from thermoelectric power plants in housing construction. Trudy NIIZHB no.8:158-171 '59. (MIRA 13:4)

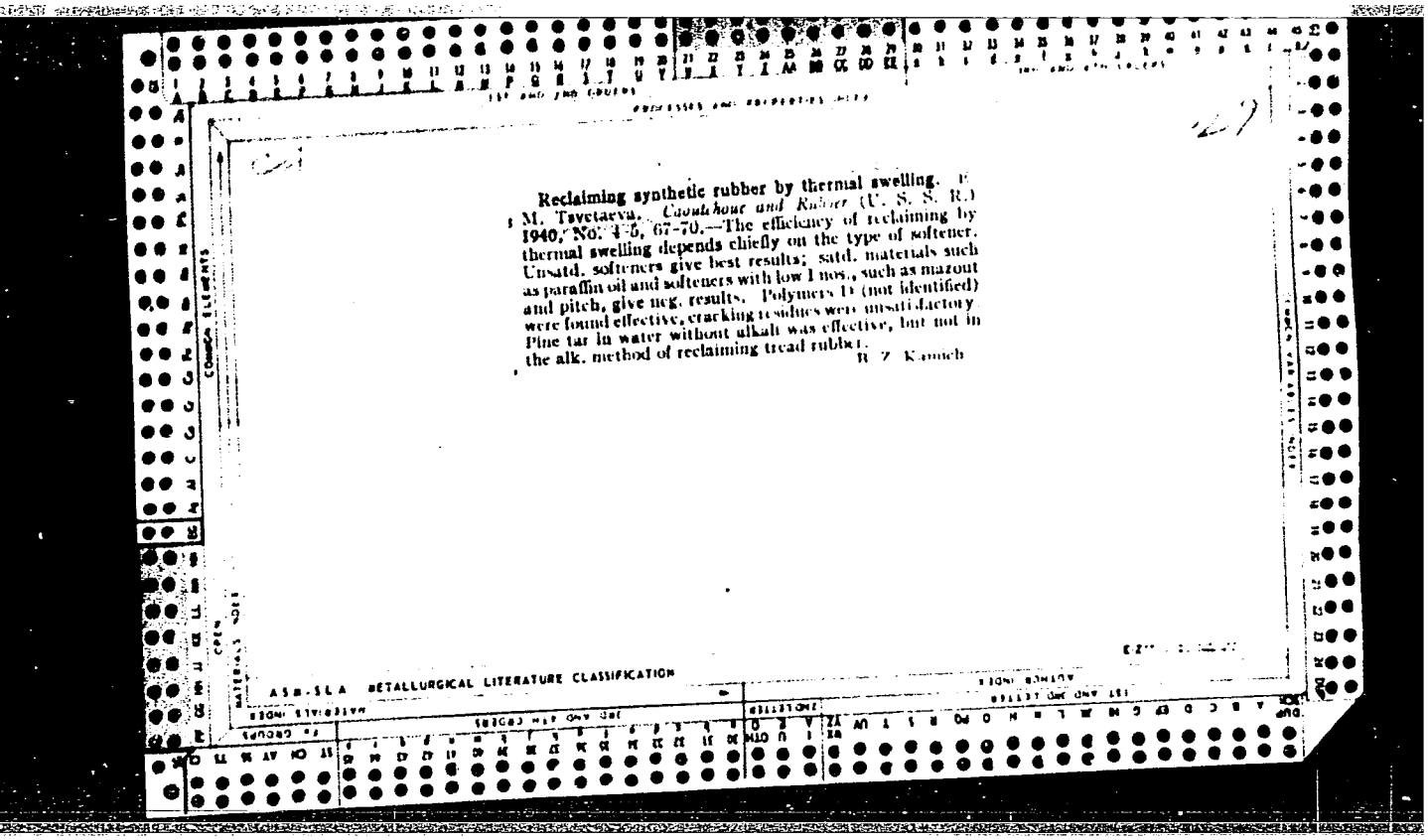
1. Nauchno-issledovatel'skiy institut betona i zhelezobetona Akademii stroitel'stva i arkhitektury SSSR.
(Lightweight concrete) (Berezniki--Precast concrete construction)

BURLACHENKO, G.A., prof., TSVETAYEVA, T.A., dots.

Observations on cardiac changes in acute physical stress. Vest.rent. i rad. 33 no.3:65 My-Je '58 (MIRA 11:8)

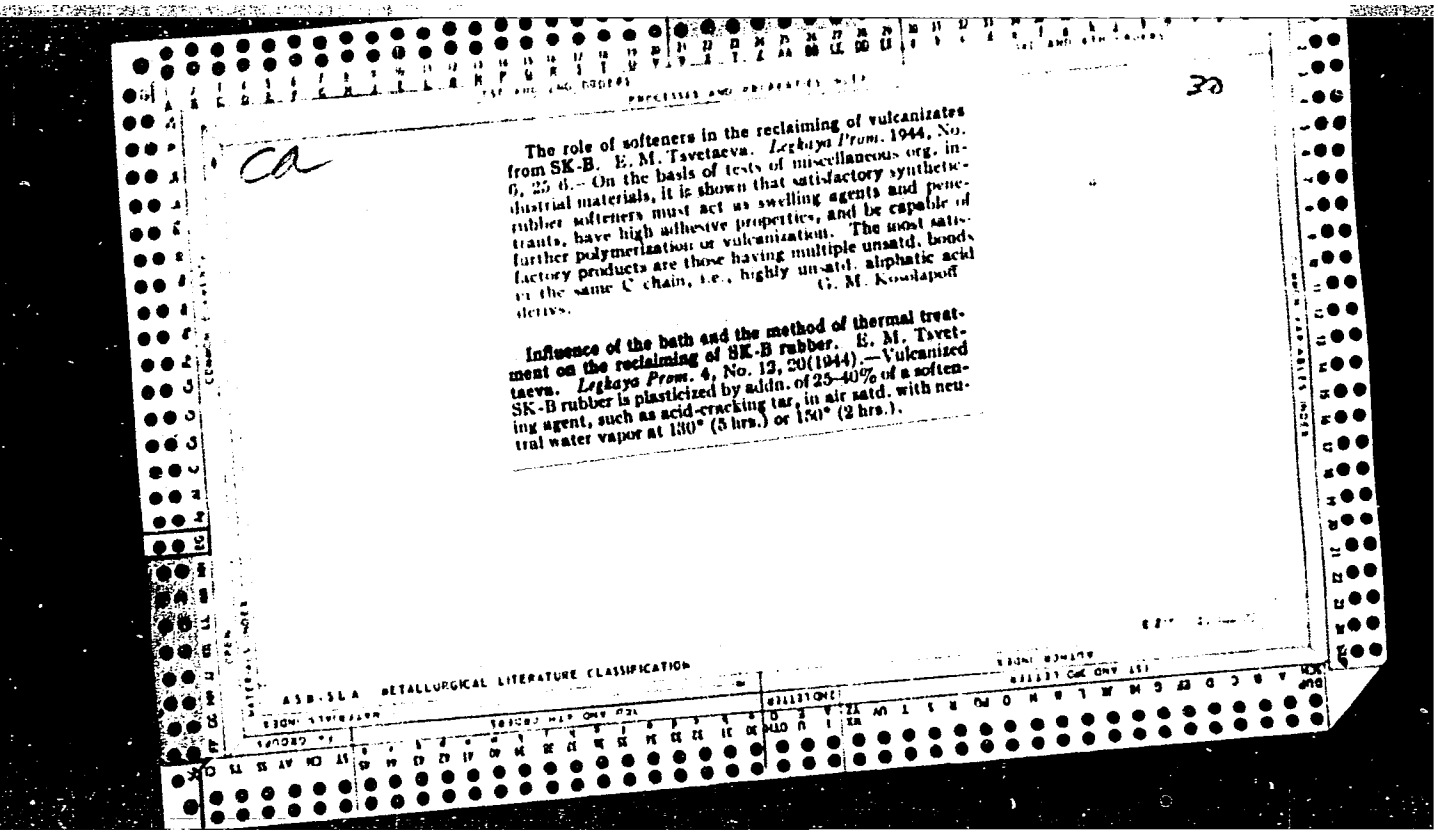
1. Iz kafedry rentgenologii i radiologii (zav. prof. G.A. Burlachenko) Khar'kovskogo meditsinskogo instituta (dir. - dotsent., I.F. Konenenko) i kafedry fizicheskogo vospitaniya (zav. - dots. T.A. TSvetayev) Pediatricheskogo instituta (dir. dots. I.P.Demet'yev).

(HEART, physiol.
radiography (Rus))
(STRESS, eff.
acute phys. stress on heart (Rus))
(KYMOGRAPHY,
roentgenokymography of heart, eff. of exercise (Rus))
(EXERCISE, effects,
on heart roentgenokymography (Rus))



Reclaiming synthetic rubber by thermal swelling. P. M. Tsvetaeva. *Caoutchouc and Rubber* (U. S. S. R.) 1940, No. 4-5, 67-70.—The efficiency of reclaiming by thermal swelling depends chiefly on the type of softener. Unsatd. softeners give best results; satd. materials such as paraffin oil and softeners with low I nos., such as mazout and pitch, give neg. results. Polymers 15 (not identified) were found effective, cracking residues were unsatisfactory. Pine tar in water without alkali was effective, but not in the alk. method of reclaiming tread rubber.

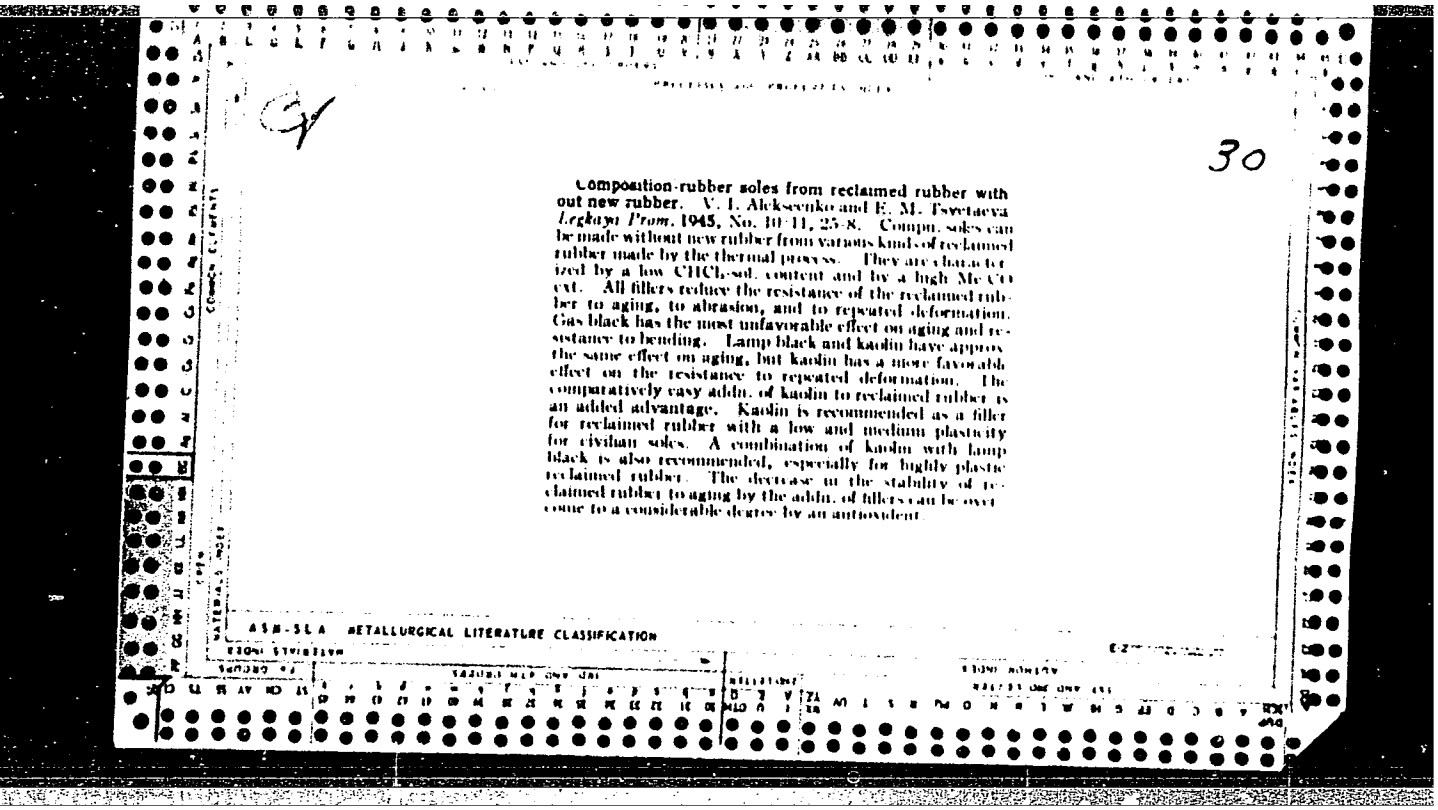
R. Z. Kamich



The role of softeners in the reclaiming of vulcanizates from SK-B. E. M. Tsvetaeva. *Legkaya Prom.* 1944, No. 6, 25 ff.—On the basis of tests of miscellaneous org. industrial materials, it is shown that satisfactory synthetic-rubber softeners must act as swelling agents and penetrants, have high adhesive properties, and be capable of further polymerization or vulcanization. The most satisfactory products are those having multiple unsatd. bonds in the same C chain, i.e., highly unsatd. aliphatic acid derivs.

G. M. Kosolapoff

Influence of the bath and the method of thermal treatment on the reclaiming of SK-B rubber. E. M. Tsvetaeva. *Legkaya Prom.* 4, No. 12, 20(1944).—Vulcanized SK-B rubber is plasticized by addn. of 25–40% of a softening agent, such as acid-cracking tar, in air satd. with neutral water vapor at 130° (5 hrs.) or 150° (2 hrs.).



Composition-rubber soles from reclaimed rubber without new rubber. V. I. Alekseenko and E. M. Tsvetaeva *Legkaya Prom.* 1945, No. 10-11, 25-8. Compn. soles can be made without new rubber from various kinds of reclaimed rubber made by the thermal process. They are characterized by a low $CHCl_3$-sol. content and by a high Mc'Coy ext. All fillers reduce the resistance of the reclaimed rubber to aging, to abrasion, and to repeated deformation. Gas black has the most unfavorable effect on aging and resistance to bending. Lamp black and kaolin have approx. the same effect on aging, but kaolin has a more favorable effect on the resistance to repeated deformation. The comparatively easy addn. of kaolin to reclaimed rubber is an added advantage. Kaolin is recommended as a filler for reclaimed rubber with a low and medium plasticity for civilian soles. A combination of kaolin with lamp black is also recommended, especially for highly plastic reclaimed rubber. The decrease in the stability of reclaimed rubber to aging by the addn. of fillers can be overcome to a considerable degree by an antioxidant.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

GINZBURG, F.S.; TSVETAYEVA, Ye.M.; PAYATSYK, V.V., redaktor; BENENSON, A.N., redaktor; RGZEN, E.A., tekhnicheskiy redaktor

[Let us increase the production of potatoes and vegetables; an annotated bibliography] Uvelichim proizvodstvo kartofelia i ovoshchei; annotirovannyi ukazatel' literatury. Moskva, Gos. izd-vo kul'turno-prosvetitel'noi lit-ry, 1956. 36 p. (MLRA 9:11)

1. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk imeni V.I.Lenina.
(Bibliography--Potatoes)
(Bibliography--Vegetable gardening)

TSVETAYEVA, Ye.M.

PARKHOMENKO, Ye.V.; TSVETAYEVA, Ye.M.; KALININ, M.S.redaktor; LEVINA, I.M.,redaktor; TAIROVA, M.V.,tekhnicheskiy redaktor

[Hybrid corn; annotated bibliography] Gibridnaia kukuruza; annotirovannyi ukazatel' literatury. Moskva, Gos. izd-vo kul'turno-prosv. lit-ry, 1956. 33 p. (MLRA 10:4)

1. Moscow. TSentral'naya nauchnaya sel'skokhozyastvennaya biblioteka.
(Bibliography--Corn (Maize))

TSVETAYEVA, Ye.M.

Effect of organomineral granules on cabbage yields in northern districts. Dokl. Akad. sel'khoz. 21 no.8:24-27 '56.
(MLRA 9:10)

1. Berezovskaya sel'skokhozyaystvennaya opytnaya stantsiya. Predstavleno akademikom I.I. Samoylovym.
(Russia, Northern--Cabbage) (Fertilizers and manures)

Country	: USSR
Category	: Farm Animals. Q General Problems.
Abs. Jour	: Ref Zhur-Biol., No 21, 1958, 96816
Author	: Tsvetayeva, Ye. N.
Institut.	: -
Title	: Urea as a Partial Protein Substitute in Animal Rations (Review of Foreign Literature).
Orig Pub.	: Zhivotnovodstvo, 1957, No 9, 84-88
Abstract	: No abstract.

Card: 1/1

TSVETAYEVA, Ye.M

LYSENKO, T.D.; OL'SHANSKIY, M.A.; SINYAGIN, I.I.; GLUSHCHENKO, I.Ye.; VARUNTSYAN, I.S.; PREZENT, I.I.; SHCHERBINOVSKIY, N.S.; SHUNKOV, V.I.; YEVSTIGNEYEV, S.N.; POCHEVER, A.M.; LITVIN, V.M.; YAYKOVA, A.T.; PODVOYSKIY, I.I.; SAKS, Ye.I.; KHALIFMAN, I.A.; FKYGINSON, N.I.; SHCHEGLOVA, Yu.N.; DLUGACH, G.V.; STERNIN, R.A.; LISOVSKAYA, O.V.; GUBINA, T.I.; ROZENFEL'D, M.I.: TSVETAYEVA, Ye.M.; PARKHOMENKO, Ye.V.; NEYMAN, N.F.

Sofia IAkovlevna Voitinskaia; an obituary. Agrobiologiia no.4:121 Jl-Ag '58. (MIRA 11:9)
(Voitinskaia, Sofi'ia Iakovlevna, 1898-1958)

SOV-3-58-10-22/23

AUTHOR: Kudryavtseva, A.A., Candidate of Agricultural Sciences, and Tsvetayeva, Ye.M., Senior Scientific Worker

TITLE: The Golitsyn Advanced Agricultural Courses for Women (Vyshiye zhenskiye golitsynskiye sel'skokhozyaystvennyye kursy)

PERIODICAL: Vestnik vysshey shkoly, 1958, Nr 10, pp 91 - 95 (USSR)

ABSTRACT: The authors give a review of female education in pre-revolutionary Russia and turn then to the Golitsyn Higher Agricultural Courses for Women which were established 50 years ago. They give an account of its development up to 1922 when the courses were merged with the Timiryazev Agricultural Academy. There are 8 Soviet references.

Card 1/1

BARYSHEVA, M.D.; TRULEVICH, V.K.; TUL'ZHENKOVA, F.F.; TSVETAYEVA, Ye.M.; POSTRELOVA, T.A., red.

[Vegetable and potato growing in the Far North; bibliographic index for 1932-1957] Ovoshchevodstvo i kartofelevodstvo na Krainem Severe; bibliograficheskii ukazatel' 1932-1957 gg. Leningrad, 1959. 51 p. (MIRA 13:11)

1. Moscow. TSentral'naya nauchnaya sel'skokhozyaystvennaya biblioteka.

(Russia, Northern--Vegetable gardening)
(Russia, Northern--Potatoes)

TSVETAYEVA, Ye.M.; SAL'NIKOV, V.K.

Studying the morphogenesis of cabbage. Agrobiologiia no.1:154 Ja-F '59. (MIRA 12:4)
(Morphogenesis) (Cabbage)

SOV/138-59-4-7/26

AUTHOR: Tsvetayeva, Ye. M.

TITLE: Relation Between the Chemical Nature of Plasticizers and Their Activity During Regeneration of Rubbers (Zavisimost' mezhdu khimicheskoy prirodoy myagchiteley i ikh aktivnost'yu pri regeneratsii reziny)

PERIODICAL: Kauchuk i Rezina, 1959, Nr 4, pp 23-29 (USSR)

ABSTRACT: This article deals with concepts on the structure of active plasticizers and the mechanism of their action. The plasticizing action, in conjunction with the effect on the strength of the regenerated rubber, is defined as the regenerating action of the plasticizer. Experiments were carried out on the effect of various plasticizers on the plasticity and strength of regenerated rubber from SKS-30A rubber (Table 1). The experimental conditions were as follows: 45% weight/volume of plasticizer; thermal processing was carried out for 6 hours at 180°C, in an aqueous medium; the product was subsequently dried for 4 hours at a temperature of 60 to 70°C and a residual pressure of 10 mm Hg. 100 to 120 g of the regenerated rubber was subsequently processed on laboratory rollers for 5 minutes. It was observed that in most cases the relative elongation of the regenerated rubber was dependent on the activity of

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Relation Between the Chemical Nature of Plasticizers and Their Activity During Regeneration of Rubbers

the plasticizing agent. Results confirmed that the degree of unsaturation and the cyclic structure of the plasticizer affected the plasticizing activity of the same. Cyclisation of the plasticizer also affects the strength of the regenerated rubber. A liquid product, obtained by the pyrolysis of rubber, was used for preparing a product with an increased content of cyclic groups by treating the starting material with a 10% concentrated sulphuric acid solution and subsequent distillation in an atmosphere of nitrogen in order to separate the light fractions. In this way the molecular weight of the heavy fractions was reduced and substances insoluble in petroleum ether were obtained. This indicates that the fraction has a higher content of cyclic groups which is partly due to the isomerising action of the sulphuric acid, and also to the cleavage of aliphatic side groups during high-temperature distillation (400 to 500°C). Analyses, carried out by

Relation Between the Chemical Nature of Plasticizers and Their Activity During Regeneration of Rubbers

R.I. Sidorova showed that the content of cyclic groups increased from 58 to 75%. The physical and chemical characteristics of the plasticizer are tabulated in Table 3. The strength of the regenerated rubber does not only depend on the ratio of cyclic and aliphatic groups in the plasticizer, but also on the presence of polar groups in it. This assumption was verified by carrying out experiments with SKS-30A and SKB rubbers. Experimental conditions were as follows: the substance was processed for 4 hours at 150°C, in an aqueous medium whilst using 50% weight/volume of plasticizer. The vulcanisate was dried for 4 hours at 60 to 70°C, at a residual pressure of 10 mm Hg. The relative effect of cyclic and aliphatic groups in the plasticizer was tested by dividing the compounds into three groups: 1) plasticizers with aliphatic structure; 2) plasticizers with complex structure and 3) plasticizers with cyclic structure. Data in Table 4 indicate that the regenerated rubber shows greater strength when the dielectric strength of the plasticizer is increased. The effect of the polarity of the plasticizer is understandable when taking into account the fact that

Relation Between the Chemical Nature of Plasticizers and Their Activity During Regeneration of Rubbers

no pure hydrocarbons are contained in the rubber, but that the polar groups contain sulphur, nitrogen and oxygen atoms. The swelling and regeneration of rubber proceeds at an even rate when plasticizers containing polar groups are used, and this leads to an increased strength of the regenerated rubber. The presence of polar groups in the plasticizer also increase the forces of inter-molecular action in the regenerated rubber. The regenerating action of plasticizers of different chemical structure is tabulated in Table 5. The interrelation between the structure and action mechanism of an active plasticizer is shown in a graph.
There are 5 tables, 1 figure and 11 references, 9 of which are Soviet and 2 English.

ASSOCIATION: Nauchno-issledovatel'skiy institut shinnoy promyshlennosti (Tyre Industry Research Institute)

SOV/26-59-5-26/47

30(1)

AUTHOR: Tsvetayeva, Ye.M. (Moscow)

TITLE: Growth of Plants on Artificial Nutrient Media

PERIODICAL: Priroda, 1959, 48 Nr 5, pp 100 - 102 (USSR)

ABSTRACT: The author states that basic factors of plant life (light, air, warmth, moisture and nourishment) can be regulated and, therefore, artificial plant cultivation is not only feasible but may result in better crops and in earlier ripening. The author refers to the experiments in the artificial growing of cucumbers, tomatoes and other plants, carried out by Professor V.A. Chesnokov, Ye.N. Bazyrina, N.A. Kholodkov, T.P. Golyatina, F.F. Tul'zhenkova and G.Geyssler. (GDR). There are 2 photographs.

Card 1/1

VADIKOVSKAYA, L.M.; KIRILLOV, G.N.; KOZLOVA, M.M.; CHZHAO, A.Ye.; TYUTCHEVA, F.M., red.; TSVETAYEVA, Ye.M., red.; POLESITSKAYA, S.M., tekhn.red.

[Plant growing; recommended literature] Rastenievodstvo; rekomendatel'nyi ukazatel' literatury. Moskva, M-vo kul'tury RSFSR, 1960. 245 p. (MIRA 13:10)

1. Moscow. Publichnaya biblioteka.
(Bibliography--Agriculture)

S/138/60/000/012/008/009
A051/A027

AUTHORS: Tsvetayeva, Ye. M., Sidorova, R.I., Drugovskaya, M.N., Shokhin, I.A.

TITLE: Synthetic Softeners for the Reclaiming of Rubber Produced From the Products of Its Pyrolysis

PERIODICAL: Kauchuk i rezina, 1960, No.12, pp. 31-34

TEXT: The authors have developed a method for the production of a polymer from rubber oil, which can serve as an active softener in rubber reclaiming. The method also helps to deodorize the rubber oil. Mention is made of the method presently used in the USSR for the production of rubber oil, containing 90% of compounds, which react with strong H_2SO_4 (Ref.2) (Fig. 1). The medium and heavy fractions of the oil contain more of these compounds than the light ones. Since the oil contains 80% of medium and heavy fractions with the greater unsaturation, this product can be processed without preliminary fractionating. The method developed by the authors is described as follows: 98% H_2SO_4 (12 w.p.) is poured into an apparatus

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Synthetic Softeners for the Reclaiming of Rubber Produced From the Products of Its Pyrolysis

equipped with a mixer and a jacket, in which the rubber oil (100 w.p.) is vigorously mixed for 20-30 min, at a temperature of 10-25°C in small portions. Then the mixing continues for 2-3 hours more at the same temperature. After holding 4-5 hours the acidic petroleum asphalt is let out of the apparatus and the remaining oil is processed a second time with H_2SO_4 (10 w.p. based on the initial oil). The second asphalt let out after holding of 16-20 hours is mixed with the first one. The purified oil is washed with hot water 3-4 times and is neutralized with a 0.5% solution of NaOH at 60-70°C. Then a second washing with water is done. Due to this processing an oil is produced with an odor of kerosene. The water is separated from the oil by heating for 2-3 hours at 80-95°C. The formed acidic asphalt is washed 4-5 times with hot water and is then neutralized with a 10% solution of NaOH at 60-70°C, whereby the alkali solution is introduced in 4-5 portions. Each portion is about one quarter of the asphalt volume. The reaction of the last rinsing water should be neutral or weakly acidic. The obtained organic

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Synthetic Softeners for the Reclaiming of Rubber Produced From the Products of Its Pyrolysis

mass (subsequently called polymer) contains up to 40% of emulsion water, the main quantity of which can be separated after heating for 3-4 hours at 90-95°C. In order to produce a well-deodorized polymer, it is suggested distilling the volatile components at 130-140°C. The described method can be recommended for industrial use. The polymer yield was 46% and the deodorized oil 43% of the initial oil. The deodorized oil as compared to the non-processed one has a lower iodine number and contains less sulfur. The increase in the molecular weight, viscosity, specific gravity and relative content of heavy fractions when processed with sulfuric acid points to the fact that the deodorized oil contains also polymers in addition to unchanged components of the non-processed oil. The latter differ from polymers passed into the asphalt by lesser polarity and unsaturation. A conclusion is drawn that when processing rubber oil with sulfuric acid together with other processes dehydro- and hydropolymerization take place (Ref.3). It was also seen that the deodorized oil contrary to the initial oil contains sulfur in the form of odorless compounds. When heated under atmospheric

Synthetic Softeners for the Reclaiming of Rubber Produced From the Products of Its Pyrolysis

pressure, these sulfur compounds begin to decompose at a temperature of 150°C forming substances with an unpleasant odor. When heating the oil mixture with rubber and rubber chunks even at 190°C no odor is noted. The polymer obtained from the asphalt is found to contain more hetero-atoms (especially sulfur and oxygen) than the non-processed and deodorized oil. In the deodorizing process the quantity of oxygen in the oil even increases somewhat. It is concluded that the increase in the quantity of the hetero--atoms in the polymer can take place as a result of the extraction of compounds with hetero-atoms from the oil with sulfuric acid and the formation of new polar compounds by sulfurization of certain components of the oil. Due to a lower iodine number the deodorized oil differs from the non-processed oil by a lowered masticating action. Both oils do not have sufficient intensifying action due to a low content of polar compounds in them (Ref.4). It is pointed out, therefore, that these oils can be used in rubber reclaiming only in combination with more polar softeners. The polymer is said to

Synthetic Softeners for the Reclaiming of Rubber Produced From the Products of Its Pyrolysis

be a very active reclaiming agent, easily used without any addition of other softeners. The reclaimed rubber thus obtained has good physico-mechanical indices and an elevated chloroform extract. It also has a lowered acetone extract. The polymer samples and the deodorized oil were tested at the Chekhovskiy regeneratnyy zavod (Chekhov Reclaiming Plant) under semiindustrial conditions in reclaiming tire rubber by the water-neutral method. The results corresponded well with laboratory findings. It is pointed out that the deodorized rubber oil is not recommended as a universal softener, as it is applicable only to the reclamation of rubber not requiring very large amounts of softener. An estimation of the cost showed that the polymer would be twice as low in cost (1,000 rubles/ton) as the applied combined softener in most plants based on Arkhangel'sk pine resin and fuel oil. There are 5 tables and 4 Soviet references.

ASSOCIATION: Nauchno-issledovatel'skiy institut shinnoy promyshlennosti i Chekhovskiy regeneratornyy zavod (Scientific Research Institute of the Tire Industry and Chekhov Reclaiming Plant).

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A051/A027

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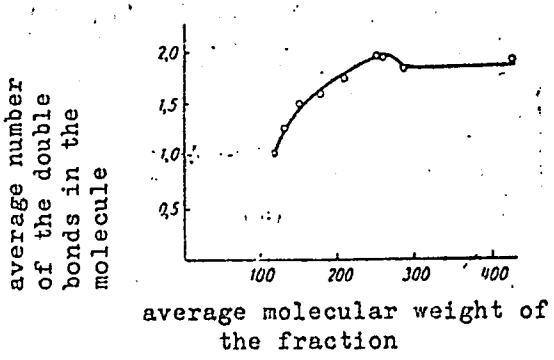
Synthetic Softeners for the Reclaiming of Rubber Produced From the Products of Its Pyrolysis

Fig. 1 Relationship between the unsaturation of the rubber oil fraction and the molecular weight.



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