

25687
S/181/61/003/007/009/023
Investigation of adhesive binding of ... B102/B214

joined to the sample. The rupture with the given rate of 0.5 mm/sec is brought about by a magnetic mechanism. The fluctuations in tension are recorded by electric resistance tensiometers (5). The spectroscopic investigations of the samples were carried out with a spectrograph of the type ИСК-14 (ISK-14) for which a special vacuum chamber was constructed. Luminescence was also investigated. The adhesive binding of the following systems was studied; semiconductor - metal, polymer - semiconductor, polymer - glass, and polymer - polymer. The investigations showed, inter alia, that the adhesion between indium and germanium substantially increases if the surface of the latter has previously been subjected to a glow discharge. The increase of adhesion may be explained as being due to the appearance of a large number of adhesion-active recombination centers, which is indicated by the decrease of the carrier lifetime experimentally observed. These results are in agreement with those of V. P. Smilga and B. V. Deryagin (DAN SSSR, 122, v. 6, 1049, 1958) who have shown that the field at the junction of the semiconductor and the metal increases rapidly with an increase in the number of ionized centers at the surface of the semiconductor (before contact). The adhesive power is given by $F = E^2 / 8\pi$. The surface recombination which depends essentially on adhesion, is

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Investigation of adhesive binding of ...

directly proportional to the number of surface states which, in their turn, are related to the number of ionized centers on the free surface of the semiconductor. In the cases investigated, the establishment of an adhesive binding between polymer and glass is due to the appearance of a hydrogen bond between the hydroxyls of the glass and the functional groups of the polymer. On breaking the contact the glass surface is found to be protonized while the polymer surface emits electrons. From this, it may be concluded that the total statistical effect that accompanies the destruction of the hydrogen bonds acting in the interfacial plane gives rise predominantly to positive charges on the glass, caused by protons of the broken bonds. The establishment of an adhesive binding between two polymers is introduced by electrostatic processes. Thereupon, diffusion processes take place on the interface, as was shown by luminescence studies. The interface is blurred, and on separating the two polymers no further electrical phenomena appear. T. A. Sokolova and L. A. Ovsyannikova are mentioned. There are 5 figures, 4 tables, and 15 references: 12 Soviet-bloc and 3 non-Soviet-bloc.

ASSOCIATION: Institut fizicheskoy khimii AN SSSR Moskva (Institute of Physical Chemistry, AS USSR, Moscow)

Card 3/5

hh5h6

S/020/62/147/006/031/034
B144/B186

017750

AUTHORS: Sokolina, G. A., Krotova, N. A., Khrustalev, Yu. A.

TITLE: Study of the properties of a polymer-semiconductor interface

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 147, no. 6, 1962, 1409-1412

TEXT: The adsorption process occurring at polymer-semiconductor interfaces was investigated by measuring the surface conductivity in the "field effect". The sample used was n-type germanium with a resistivity of 40 ohm-cm and a diffusion length of 2.5 mm etched in a H₂O₂-alkali mixture and coated with films of linear vinyl-type polymers or methylmethacrylate-methacrylic acid copolymers. The field applied had a strength of 10⁶ v/cm. First, the surface conductivity was measured in a sample of uncoated Ge: here the Δσ-versus-time curve showed a sharp rise when the field was applied, followed quickly by the minimum and returning then to the initial value. On Ge, two surface states were observed: the "fast" states at the Ge oxide - Ge interface and the "slow" states at the external face of the oxide or in the oxide. These slow surface states characterizing the adsorption and adhesion processes were studied by applying a constant

Card 1/2

f

ACCESSION NR: AP4023500

S/0069/64/026/002/0207/0214

AUTHORS: Krotova, N.A.; Morozova, L.P.; Polyakov, A.M.; Sokolina,
G.A.; Stefanovich, N.N.

TITLE: Investigation of various types of adhesion bonds

SOURCE: Kolloidny*zhurnal, v. 26, no. 2, 1964, 207-214

TOPIC TAGS: adhesion mechanism, adhesion bond, interface erosion,
chemisorption, donor acceptor interaction, functional group, electron
emission, semiconductor surface conductivity, surface modifi-
cation, high speed semiconductor, germanium

ABSTRACT: In order to determine the mechanism of adhesion, several
phenomena at the polymer-solid substrate interface were investigated.
Adhesive bonds resulting from diffusion processes in which the in-
terface is eroded, from the formation of a new phase on the sub-
strate by the polymerization of organometallic compounds, and from
chemisorption on the interface leading to the formation of a double
electric layer are discussed. By IR spectroscopy it has been
established that adhesion of polymers is largely due to chemical

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ACCESSION NR: AP4023500

donor-acceptor interactions. The adhesion can therefore be controlled by rational selection of the function groups of the adhesive and substrate on the basis of their donor-acceptor properties. A number of functional polymer groups were arranged in series according to their ability to impart a positive charge to the surface on tearing the film from the substrate (i.e., decrease in their donor properties). A method was worked out for determining the effect of the functional groups of the polymer by measuring the intensity of electron emission formed by the breakdown of the adhesion bond between the polymer and the glass substrate (figs. 1 and 2): There are changes in the characteristics of a semiconductor upon formation of adhesion bonds between it and the polymer; the part played by the functional groups of the polymer responsible for the degree of charge of the surface was investigated. The surface conductivity in the field effect of germanium crystals modified with alkylchlorosilanes (fig. 3) was determined in an apparatus shown in fig. 4. Modification significantly changes (reduces) the high speed properties of the semiconductor surface. Orig. art. has: 7 figures

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ACCESSION NR: AP4023500

ENCLOSURE: 01

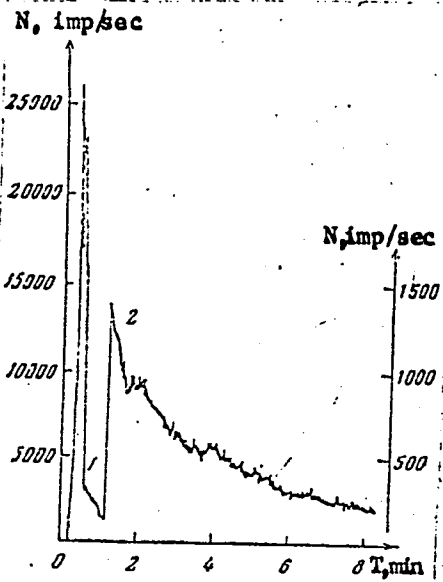


Fig. 1. Diagram of a recording of after-emission of electrons with gutta-percha film torn away from glass

ACCESSION NR: AP4023500

ENCLOSURE: 02

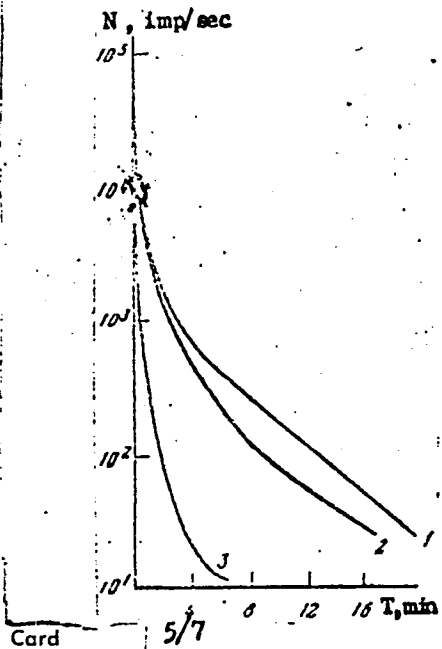


Fig. 2. Curves of the relationship of the intensity of after-emission to time for different polymers after removing from glass

1 - Nitrile rubber, 2 - gutta-percha, 3 - carboxylate rubber

ACCESSION NR: AP4023500

ENCLOSURE: 03

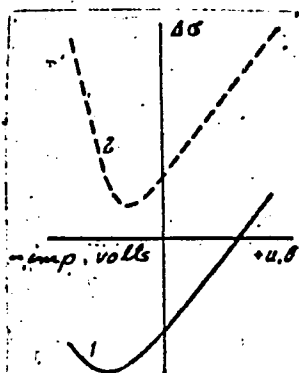


Fig. 3. Surface conductivity in the field effect for sample of germanium, modified with alkylchlorosilane. The dark (1) and light (2) curves were obtained by the method of static photoconductivity. Picture taken from oscillograph screen

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ACCESSION NR: AP4023500

ENCLOSURE: 04

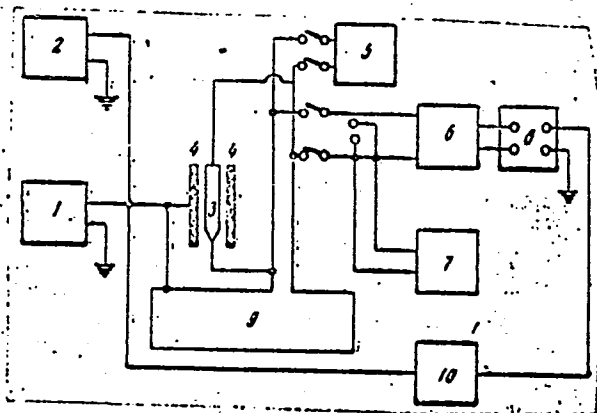


Fig. 4. Block diagram of apparatus for measuring surface conductivity in the field effect by the fixed conductivity method

1 - Generator, 2 - voltmeter, 3 - sample, 4 - electrodes, 5 - potentiometer, 6 - amplifier, 7 - condenser, 8 - oscillator, 9 - radiodiagram, 10 - phase scanner.

Card 7/7

L 01286-66 ENT(1)/ENT(m)/EPF(c)/EWP(j)/T/EWP(t)/EWP(b)/EWA(h) IJP(c)/RPL
JD/W/GS/AT RM

ACCESSION NR: AT5020453

UR/0000/64/000/000/0087/0104

AUTHOR: ^{44,55} Krotova, N. A.; ^{44,55} Sokolina, G. A.; ^{44,55} Khrustalev, Yu. A.; ^{44,55} Agranenko, N. P.
^{44,55} Lomova, N. F.; ^{44,55} Khomutov, A. M.

89
80
B+1

TITLE: Change in the surface state of germanium during the formation of an adhesion bond with a polymer

27

SOURCE: ¹⁶⁵ Mezhvuzovskaya nauchno-tekhnicheskaya konferentsiya po fizike poluprovodnikov (poverkhnostnyye i kontaktnyye yavleniya). Tomsk, 1962. Poverkhnostnyye i kontaktnyye yavleniya v poluprovodnikakh (Surface and contact phenomena in semiconductors). Tomsk, Izd-vo Tomskogo univ., 1964, 87-104

TOPIC TAGS: polymer, ^{44,55} semiconductor research, ^{44,55,21} protective coating, surface property, crystal surface, lacquer/ LVS-31 lacquer, MBK-1 lacquer

ABSTRACT: The authors study the effect which the functional groups in a polymer have on the surface state of germanium in connection with the use of organic polymer materials for protecting semiconductor devices from atmospheric action. The field effect method was used for experimentally studying the surface conductivity with the application of a constant field. The slow changes in conductivity with time were

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L 01286-66

ACCESSION NR: AT5020453

6

recorded. The material studied was *n*-germanium with a resistivity of $40 \Omega\text{-cm}$ and a diffusion length of 2.5 mm. The specimen was a plate with dimensions of $20 \times 5 \times 5$ mm cut from a single crystal of germanium parallel to plane (111). Ohmic contacts were fused to the ends of the specimen. The sample was etched in a peroxide-alkali mixture. The surface conductivity is shown as a function of time in fig. 1 of the Enclosure. Typical curves for conductivity in the field effect for high resistance *n*-germanium are given in fig. 2 of the Enclosure. These curves may be given as $\Delta\sigma = f(U)$ or as $\Delta\sigma = \phi(Q)$, if Q is the induced charge of a condenser determined from the capacity. Here $\Delta\sigma$ indicates the change in surface conductivity, and U gives the potential. Polymers of the vinyl series were studied with regard to the effect of the nature of functional groups and their concentration in the chain of a copolymer on the shape of $\Delta\sigma = \phi(Q)$ curves plotted from measurements in vacuum. The results are shown in fig. 3 of the Enclosure. Curves are also given for copolymers of methyl-methacrylate with methacrylic acid, for a gelatin-germanium interface (where the gelatin has functional radicals NH_2 , OH and COOH) and for polyhydroxyethylene--a polymer which has no functional polar radicals and which has oxygen bound by single bonds in the chains. A comparison of the curves indicates that functional radicals change the position of $\Delta\sigma_{\text{min}}$ noticeably, while polymers without strongly polar groups have little effect on this parameter. Compositions of polymers were studied

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ACCESSION NR: AT5020453

along with individual polymers. It was found that two industrial lacquers, MBK-1 and LVS-31, offer more protection against moisture than do the individual polymers. However, the lacquer films are much thicker than the individual polymer films. It is shown that LVS-31 has a few advantages over MBK-1 as a protective film for semiconductor devices. Orig. art. has: 13 figures, 6 tables.

ASSOCIATION: none

SUBMITTED: 06Oct64

ENCL: 03

SUB CODE: SS, MT

NO REF SOV: 006

OTHER: 005

Card 3/6

L 01286-66

ACCESSION NR: AT5020453

ENCLOSURE: 01

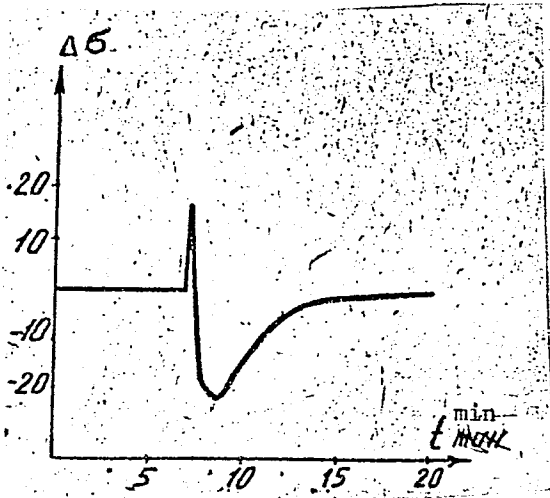


Fig. 1. Change in surface conductivity with time

Card 4/6

L 01286-66

ACCESSION NR: AT5020453

ENCLOSURE: 02

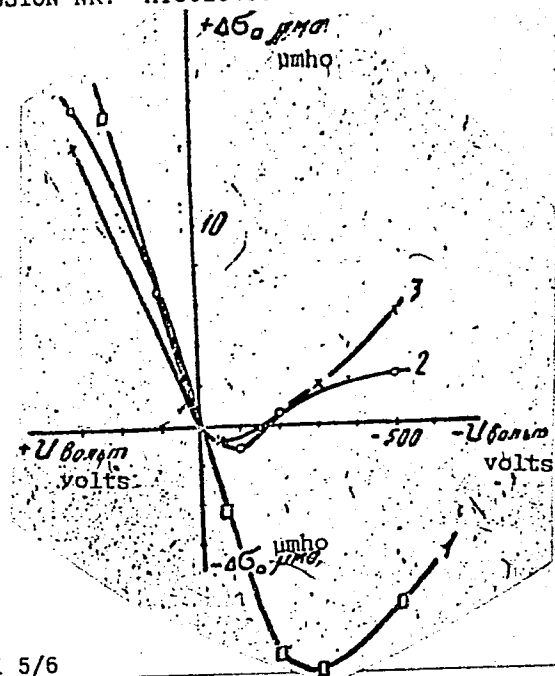


Fig. 2. $\Delta\sigma$ in field effect for high-resistance n-germanium

Card 5/6

L 01286-66

ACCESSION NR: AT5020453

ENCLOSURE: 03

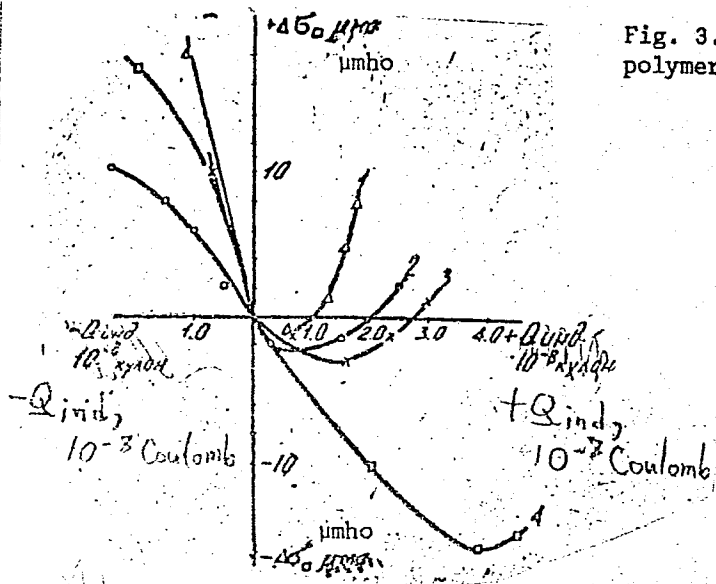


Fig. 3. $\Delta\sigma$ as a function of Q for polymers of the vinyl series

Card 6/6

L 17412-66

ACCESSION NR: AP5021793 (A)

SOURCE CODE: UR/0340/65/000/008/0016/0016

AUTHOR: Sokolin, I. (Chauffeur)

ORG: none

12
B

TITLE: Spring reinforcement

SOURCE: Sel'skiy mekhanizator, no. 8, 1965, 16
1744

TOPIC TAGS: spring, automotive industry

ABSTRACT: The author states that an attachment developed by workers at an automobile shop and shown on the accompanying figure doubles the life of a spring and eliminates the need for a shock absorber. The attachment consists of the following: a corner plate (1) 50x50x1000 mm; a tightening screw (2) 16 mm in diameter; a spring (3) from the "kheder" SK-3 combine; a special screw (4) with an ear whose diameter equals that of the spring pin - 25 mm; and the extended rod (5) of the rear blade of the spring, 140 mm in length. Orig. art. has: 1 figure.

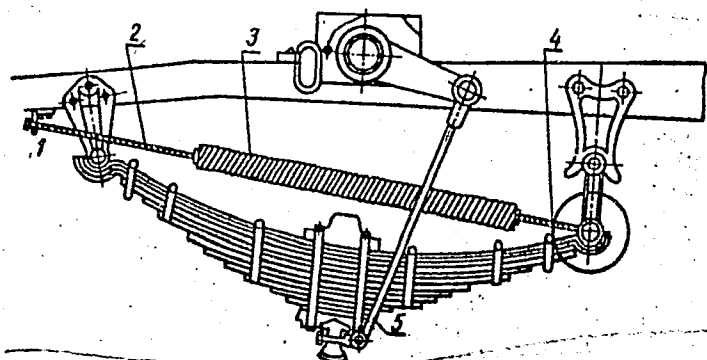
Card 1/2

2

L 17412-66

ACCESSION NR: AP5021793

0



SUB CODE: 13 SUBM DATE: 00 ORIG REF: 000 OTH REF: 000

Card 2/2 net

Sokolina, S. Sh.

~~Preparation of *p*-methylstyrene from unsym-*p*,*p*-ditolyl-
ethane) V. L. Valser, V. D. Ryabov, and S. Sh. Sokolina.
Proc. Acad. Sci. U.S.S.R., Sect. Chem. 108, 43-6 (1956)
(Engl. translation).—See C.A. 50, 13832g. B. M. R.~~

chem

3

10/11
2/11/57

11/11

Sokolina, S. Sh.

USSR/ Chemistry

Card 1/2 Pub. 22 - 26/54

Authors : Vayser, V. L.; Ryabov, V. D.; Sokolina, S. Sh.

Title : Derivation of p-methylstyrene from asymmetrical p,p-ditolylethane

Periodical : Dok. AN SSSR 106/2, 271-274, Jan 11, 1956

Abstract : Experiments were conducted for the purpose of obtaining p-methylstyrene from asymmetrical p,p-ditolylethane and to investigate some catalysts under conditions of cracking. The basic constants (boiling point, density and viscosity) of p,p-ditolylethane, after several vacuum distillations, were established. The results obtained during the application of a synthetic aluminum silicate catalyst ($Al_2O_3 : SiO_2 = 1 : 1$) are listed. The effect of temperature on the cracking characteristics is analyzed. Seven references: 2 USSR, 1 Germ., 3 USA and 1 Canad. (1923-1954). Table; graphs; drawing.

Institution : Moscow Petroleum Institute in. I. M. Gubkin

Presented by: Academician A. V. Topchiyev, July 11, 1955

24.5600

37867
S/056/62/042/005/011/050
B104/B102

AUTHORS: Sevast'yanov, B. K., Sokolina, V. A.

TITLE: The magnetic moment of superconducting films

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 42,
no. 5, 1962, 1212-1218

TEXT: The temperature dependence of the magnetic moment M_{\perp} perpendicular to the surface of the superconducting layer was determined in tin films of $(3.3) \cdot 10^{-6}$ and $(5.5) \cdot 10^{-6}$ cm² area and 10^{-5} - 10^{-6} cm thickness. M_{\perp} was measured using a magnetic torsion balance with electrodynamic compensation system. The films were condensed in vacuo ($< 2 \cdot 10^{-6}$ mm Hg) onto polished quartz plates cooled by liquid nitrogen. The quartz base was covered with an electrolytic net as used for making preparations in electron microscopy. M_{\perp} depends not only on the film thickness but also on its other dimensions. M_{\perp} increases with increasing $x = \pi d D / 16 \delta^2$, and reaches the value M_{\perp}^0 of a massive superconducting film at about $x = 30$. d is the film thickness, D the diameter of the film covered area, δ the penetration depth of the magnetic field. The experimental results are well described
Card 1/2

The magnetic moment of ...

S/056/62/042/005/011/050
B104/B102

by a formula developed by G. F. Zharkov (ZhETF, present issue, p. 1397).
This formula was obtained for local interaction between the field and the
superconduction current. Near the critical point, tin is a London-type
superconductor. There are 7 figures. *f.*

ASSOCIATION: Institut kristallografii Akademii nauk SSSR (Institute of
Crystallography of the Academy of Sciences USSR).
Moskovskiy gosudarstvennyy universitet (Moscow State
University)

SUBMITTED: January 3, 1962

Card 2/2

L 17716-63

EWP(j)/EPF(c)/EWT(m)/BDS AFFTC/ASD Pc-4/Pr-4 RM/WW

S/0076/63/037/007/1594/1597

ACCESSION NR: AP3004069

AUTHORS: Likhtenshteyn, G. I.; Sokolina, Ye. A.

TITLE: Critical effects during the oxidation of hydrocarbons in the presence of some antioxidants.

SOURCE: Zhurnal fizicheskoy khimii, v. 37, no. 7, 1963, 1594-1597

TOPIC TAGS: diphenylamine, butylphenol, naphthol, cetane, polypropylene, methyldecene, rubber

ABSTRACT: The critical concentrations of diphenylamine, tert. butylphenol and Alpha-naphthol in cetane polypropylene, 4-methyldecene-2 and rubber in a temperature interval of 130 to 170C has been determined. It was established that the critical concentrations found experimentally are two to three times smaller, however, the temperature coefficients are considerably greater than the ones calculated theoretically which assumes the participation of inhibitor only in the chain termination reactions. A supposition is made that the general plan of the inhibitor oxidation cannot be applied with small concentrations of antioxidant. The critical effects need a further theoretical and practical study. "The authors express their gratitude to Prof. M. B. Neyman for his advice and help in this work." Orig. art. has: 1 table, 2 figures and 10 formulas.

Card 1/2

L 17716-63

ACCESSION NR: AP3004069

ASSOCIATION: Akademiya nauk SSSR, Institut khimicheskoy fiziki (Academy of /
sciences SSSR, Institute of chemical physics)

SUBMITTED: 20Jul62

DATE ACQ: 15Aug63

ENCL: 00

SUB CODE: CH

NO REF SOV: 007

OTHER: 001

Card 2/2

VLASOV, B.V., doktor ekonom.nauk; SOKOLINA, Ye.D.

Characteristics of the specialization of various productions.
Mashinostroitel' no.3:38-40 Mr '64. (MIRA 17:4)

SOKOLINA, Yelena Dmitriyevna; KOGAN, Yel.L., red.

[From a multiple-line production plant to a specialized one] Ot universal'nogo zavoda - k spetsializirovannomu. Moskva, Izd-vo "Znanie," 1965. 31 p. (Novoe v zhizni, nauke, tekhnike. III Seriya: Ekonomika, no.4)
(MIRA 18:3)

LEVITSKIY, Yu.V., inzh.; SOKOLINSKAYA, I.G., inzh.; TSEYTLIN, M.A., inzh.

Ultrasonic method of testing welded joints in steam lines of
pearlitic steels. Elek.sta.29 no.3:83-84 Mr '58. (MIRA 11:5)
(Ultrasonic waves--Industrial applications)
(Welding--Testing)

S/032/62/028/004/008/026
B101/B113

AUTHOR: Sokolinskaya, I. G.

TITLE: Accuracy of the magnetographic method for pipe weld testing

PERIODICAL: Zavodskaya laboratoriya, v. 28, no. 4, 1962, 462-464

TEXT: The author studied the dependability of the magnetographic method for detecting welding defects in pipes (4.5 - 6 mm wall thickness and 100-150 mm diameter, or 8-10 mm wall thickness and 300-500 mm diameter). Magnetization was conducted (a) with a solenoid (30-70 turns, capacitance of the capacitor 600-1200 μ f, battery voltage 290-330 v); (b) with an electromagnet (500 turns, at 10 a, a magnetic field of about 1500 oe). A comparison of this test with a test of the specimens on an MM4-30 (IMCh-30) tension tester yielded the following results: (1) There is a 65-70% probability of finding a 0.5 mm deep nonfusion with 4-6 mm wall thickness; (2) with 8-10 mm wall thickness, the probability of finding a 1 mm deep nonfusion drops to zero with a solenoid and is 20% with an electromagnet; (3) no distinct relationship was established between the

Card 1/2

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Accuracy of the ...

S/032/62/028/004/008/026
B101/B113

shape of oscillographic peaks and the shape of defects. On the basis of these results, it is recommended to control pipes with wall thicknesses of more than 6-7 mm by the more sensitive ultrasonic method. There are 3 figures.

ASSOCIATION: Upravleniye Metallurgkhimmashstroy Donetskogo sovnarkhoza
(Administration of the Metallurgkhimmashstroy of the
Donetskiy sovnarkhoz)

Card 2/2

SHVARTSER, A. Ya.; SOKOLINSKAYA, I. G.

Techniques of ultrasonic testing of the hard facing of bore
bit rollers. Avtom. svar. 16 no.3:84-86 Mr '63.
(MIRA 16:4)

1. Donetskij politekhnicheskij institut.

(Hard facing--Testing)
(Ultrasonic testing)

L 27648-66 EWP(c)/EWP(k)/EWT(d)/EWT(m)/EWP(h)/ETC(m)-6/EWA(d)/EWP(l)/EWP(v)/EWP(t)/

ACC NR: AP6018520 ETI IJP(c) JD SOURCE CODE: UR/0381/65/000/006/0035/0040

AUTHOR: Bogdanov, V. A.; Krasnyuk, S. V.; Medvedev, V. S.; Sokolinskaya, I. G.

4A
B

ORG: Base Isotope Laboratory, Donets Sovnarkhoz (Bazovaya izotopnaya laboratoriya Donetskogo sovnarkhoza)

TITLE: Automatic device for the hardness inspection of cast-iron nipples

SOURCE: Defektoskopiya, no. 6, 1965, 35-40

TOPIC TAGS: cast iron, hardness, pig iron, magnetic property, magnetization, nondestructive test/KCL-36 pig iron

ABSTRACT: A study of the relationship of magnetic properties of cast iron nipples made of pig iron KCh-36 to hardness is described. A description of the design and electrical circuit of the device is presented.

Cast nipples made of pig iron KCh-36, made by the Lugan Foundry and Machinery Plant, for connecting radiator sections of a heating system, are usually obtained with differing hardness (Bhn 100-500). During subsequent machining, considerable wear, putting the cutting instrument out of action, and sometimes breakdown of the lathes occur. Experience of the plant has shown that a nipple hardness over Bhn 170-180 should not be machined. However there are no methods which would permit the complete processing of the great quantity (50,000 pieces/day).

Card 1/2

UDC: 620.179.14

L 27048-66

ACC NR: AP6018520

An automatic device has been developed for the hardness testing of 3,000 nipples/hour at the Nondestructive Testing Division of the Base Isotope Laboratory, Donetsk Sovmarkhoz. 0

The study has shown that there is a well-defined relationship between magnetic properties and hardness of cast-iron nipples.

The most suitable characteristic for testing nipple hardness is residual magnetization since it is averaged over the entire nipple.

Magnetometry is the most suitable method of measuring residual magnetization. Orig. art. has 6 figures and 1 table. /JPRS/

SUB CODE: 13, 11, 20 / SUBM DATE: 01Sep65/ ORIG REF: 002/ OTH REF: 001

Card 2/2 CC

SOKOLINSKAYA, L.B.

SOKOLINSKAYA, L.B., inzhener, redaktor; OTSEP, S.A., kandidat tekhnicheskikh nauk, starshiy nauchnyy sotrudnik.

[Modern methods of manufacturing air conductors for ventilation systems]
Sovremennye metody izgotovleniya ventilyatsionnykh vozdukhovodov.

[Doklad podgotovlen st. nauch. sotrudnikom TsIINS S.A.Otsepom] Moskva,
Gos. izd-vo lit-ry po stroitel'stvu i arkhitekture, 1953. 37 p. (MLRA 7:6)

1. Moscow. Tsentral'nyy institut informatsii po stroitel'stvu (for
Otsep). (Ventilation)

SOKOLINSKAYA, L. B.

SOKOLINSKAYA, L.B., inzhener, nauchnyy redaktor; GUSEV, Yu.L., redaktor izdatel'stva; TOKER, A.M., tekhnicheskiy redaktor.

[Lowering the cost of water pipe and sewer] Snizhenie stoimosti vodoprovodnykh i kanalisatsionnykh sooruzhenii. [Nauch. redaktor L.B.Sokolinskaia] Moskva, Gos. izd-vo lit-ry po stroitel'stvu i arkhitekture, 1953. 54 p. (MLRA 7:8)

1. Moscow. Tsentral'nyy institut informatsii po stroitel'stvu. (Water pipes) (Sewerage)

SOKOLINSKAYA, L.B., inzhener, nauchnyy redaktor; GUSEV, Yu.L., redaktor
izdatel'stva; TOKER, A.M., tekhnicheskiy redaktor.

[New research and projected solutions in the realm of water supply]
Novye issledovaniia i proektnye resheniia v oblasti vodosnabzheniia.
Moskva, Gos. izd-vo lit-ry po stroitel'stvu i arkhitekture, 1954.
46 p. (MIRA 7:9)

1. Moscow. Tsentral'nyy institut informatsii po stroitel'stvu.
(Water--Purification) (Water-supply engineering)

OTSEP, S.A., kandidat tekhnicheskikh nauk; SOKOLINSKAYA, L.B., inzhener, nauchnyy redaktor; UROD, V.Ya., redaktor izdatel'stva; VOLKOV, V.S., tekhnicheskiiy redaktor.

[Machine tools, devices, and parts used in sanitary engineering]
Stanki, prispособleniia i detali dlia sanitarno-tekhnicheskikh rabot. Moskva, Gos. izd-vo lit-ry po stroit. i arkhit., 1955. 36 p. (Ratsionalizatorskie i izobretatel'skie predlozheniia v stroitel'stve, no.114). (MLRA 10:8)

1. Tsentral'nyy institut informatsii po stroitel'stvu (for Oteap). (Plumbing)

SOKOLINSKAYA, L.B., inzhener, redaktor; UDOD, V.Ya., redaktor; MEDVEDEV,
L.Ya., tekhnicheskiy redaktor

[Collection of suggestions by efficiency experts on the manufacture
of reinforced concrete products and units] Sbornik ratsionalizator-
skikh predlozhenii po izgotovleniiu zhelezobetonnykh izdelii i kon-
struktsii. Moskva, Gos. izd-vo lit-ry po stroit. i arkhitekture,
1955. 142 p. (MIRA 8:6)

1. Moscow. Tsentral'nyy institut informatsii po stroitel'stvu.
(Reinforced concrete construction)

KONYUSHOV, A.M., starshiy nauchnyy sotrudnik, kandidat tekhnicheskikh nauk;
PAVLOVA, D.A., nauchnyy sotrudnik; SOKOLINSKAYA, L.B., inzhener,
nauchnyy redaktor; MUNITS, A.P., redaktor izdatel'stva; MEDVEDEV,
L.Ya., tekhnicheskiiy redaktor

[Laying pipe lines without trenches] Bestransheinaia ukladka truboprovodov. Moskva, Gos. izd-vo lit-ry po stroit. i arkhitekture, 1956. 57 p. (MLRA 10:1)

1. Moscow. TSentral'nyy institut informatsii po stroitel'stvu. 2. TSentral'nyy institut informatsii po stroitel'stvu (for Konyushov, Pavlova)
(Pipe lines)

KONYUSHKOV, A.M., kandidat tekhnicheskikh nauk, starshiy nauchnyy sotrudnik;
SOKOLINSKAYA, L.B., inzhener, redaktor; MUNITTS, A.P., redaktor
izdatel'stva; GUSEVA, S.S., tekhnicheskii redaktor

[Equipment used in western Europe to purify waste water] Sooruzhenia
dlia ochistki stochnykh vod v stranakh zapadnoi Evropy. Moskva, Gos.
izd-vo lit-ry po stroit. i arkhitekture, 1956. 80 p. (MLRA 9:9)

1. Moscow. Tsentral'nyy institut informatsii po stroitel'stvu.
2. Tsentral'nyy institut informatsii po stroitel'stvu (for Konyushkin)
(Europe, Western--Sewage--Purification)

KONYUSHKOV, A.M., kandidat tekhnicheskikh nauk; SOKOLINSKAYA, L.B., inzhener, redakter; GOLUBENKOVA, L.A., redakter; TOKER, A.M., tekhnicheskii redakter; GUSEVA, S.S., tekhnicheskii redakter.

[Water supply for cities and towns in foreign countries] Vedosnabzhenie naselennykh punktov v zarubezhnykh stranakh. Moskva, Gos.izd-vo lit-ry po stroit. i arkhitekture, 1956. 87 p. (MIRA 9:6)

1.Moscow. Tsentral'nyy institut informatsii po stroitel'stvu. 2.Starshiy nauchnyy sotrudnik TsIINS (for Konyushkov). (Water supply)

15.2140

78212
SOV/80-33-3-13/47

AUTHOR: Glav, Moscow, Yu. G. Maslina, L. N., Sokolinskaya,
O. P.

TITLE: Study of the Crystallization of Boron-Free,
Strontium-Calcium Glazes

PERIODICAL: Zhurnal prikladnoy khimii, 1960, Vol 33, Nr 3,
pp 582-590 (USSR)

ABSTRACT: Frits and glazes of the above type, all without
magnesium, were studied in order to determine the
effect of varying quantities of Sr and Ca on
their crystallization. Chemical compositions of the
frits used are given by Table 1. It was determined
that the ability of the frits and of the glazes
made from them to crystallize is least at SrO and
CaO concentrations corresponding to the minimum
of the melting temperature on Eskola's diagram of
solid solutions of Sr and Ca metasilicates (Fig. 2).
Also, only glazes made from frits 53 and 54 had

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Study of the Crystallization of Boron-Free, Strontium-Calcium Glazes

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SOV/80-33-3-13/47

normal luster, and these glazes crystallized less than the others. The existence of these minima is probably related to the greatest degree of imperfection of the structurally rearranging lattice and, possibly, the structure of the solid solution on replacement of the Sr by Ca. A continuous series of solid solutions is formed in the crystallized frits, with an almost linear increase of both indices of refraction (Fig. 1), decrease of specific gravity (Fig. 5), interplanar spacing (Fig. 4), and lattice parameters (Fig. 3), as the Ca content in the mixed crystal increases. The interplanar spacing values of the sample "M" (see Figs. 2 and 4) deviate somewhat from the rule, a fact which should be further investigated. X-ray analysis of the powdered, crystallized frits showed the closeness of all the crystals to the hexagonal system and their complete miscibility in the solid phase. The system may be considered isodimorphic. Shmeleva, N. A., and Kondrat'yeva, V. V., took part in the work. Frank-Kamenetskiy, V. A., is thanked for his advice.

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Study of the Crystallization of Boron-Free, Strontium-Calcium Glazes

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SOV/80-33-3-13/47

Table 1. Chemical composition of investigated frits (wt %). (A) Frit Nr; (B) SrO : CaO (parts by wt)

A	B	SiO ₂	Al ₂ O ₃	SrO	CaO	K ₂ O	Na ₂ O
51	1.00 : 0	57.7	7.40	23.6	—	3.92	7.40
52	7.45 : 1	58.5	7.70	19.50	2.60	4.0	7.64
53	2.78 : 1	60.0	7.85	14.80	5.32	4.1	7.83
54	1.85 : 1	60.7	7.95	12.50	6.75	4.15	7.93
55	1.23 : 1	61.5	8.05	10.10	8.17	4.2	8.00
56	0.81 : 1	62.1	8.14	7.70	9.70	4.24	8.10
57	0.00 : 1	64.5	8.42	—	14.3	4.40	8.40

Card 3/8

Study of the Crystallization of Boron-Free, Strontium-Calcium Glazes

78212
SOV/80-33-3-13/47

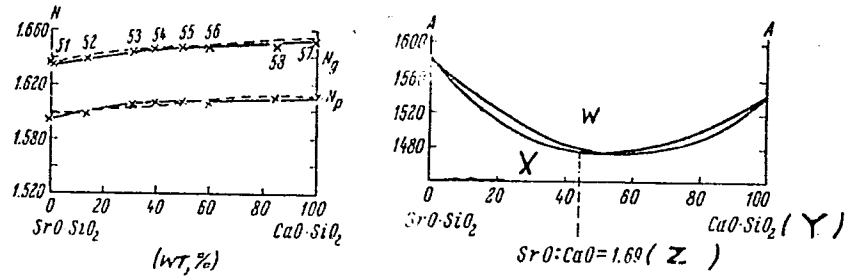


Fig. 1. Indices of refraction N in system $SrO \cdot SiO_2 - CaO \cdot SiO_2$. Numbers on curves are frit numbers. Dotted lines are Eskola's data, solid lines the present authors'.
Fig. 2. Eskola's diagram for system $SrO \cdot SiO_2 - CaO \cdot SiO_2$
(A) Temperature ($^{\circ}C$); (W) melt; (X) mixed crystals;
(Y) wt %; (Z) by wt.

Card 4/8

Study of the Crystallization of Boron-Free, Strontium-doped Silicates

78212
SOV/80-33-3-13/47

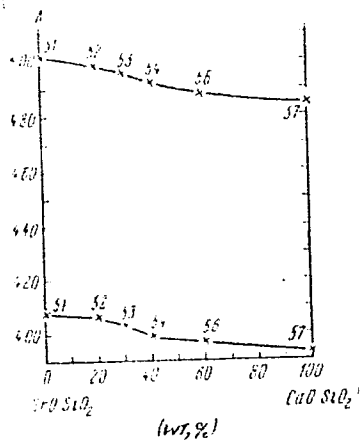


Fig. 3. Lattice parameters in system SrO·SiO₂ - CaO·SiO₂. (A) Lattice parameters in Angstroms. Numbers on curves are frit numbers.

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Study of the Crystallization of Boron-Free, Strontium-Calcium Glasses

78212
 SIV/80-33-3-13/47

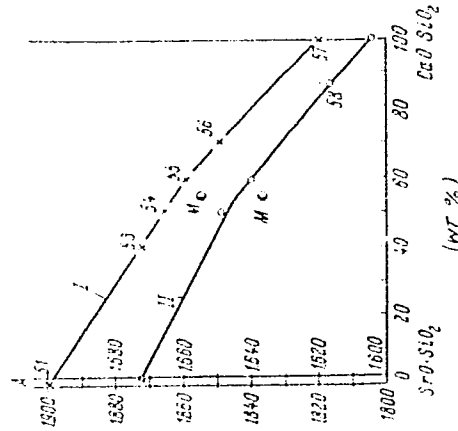


Fig. 4. Interplanar spacing in system $SrO \cdot SiO_2 - CaO \cdot SiO_2$ for two most intense lines. (A) Interplanar spacing d/n in Angstroms. Numbers on curves are frit numbers. Note: "M" is with $SrO:CaO = 1.69$ by wt (see Fig. 2).

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Study of the Crystallization of Strontium-Free, Strontium-Calcium Glasses

75212
 SOI/60-33-3-13/47

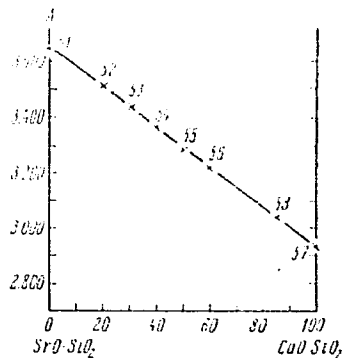


Fig. 5. Specific gravity in system SrO·SiO₂ - CaO·SiO₂. (A) Specific gravity (g/cm³); B. CaO·SiO₂ content in system (wt %)

There are 4 tables; 5 figures; and 13 references, 3 U.S., 2 U.K., 1 Danish, 7 Soviet. The U.S. and U.K. references are: P. Eskola, Am J. Sci., 4,

Card 7/8

Study of the Crystallization of Boron-
Free, Strontium-Calcium Glazes

78212

SOV/80-33-3-13/47

23, 331 (1921); E. T. Carlson, L. S. Wels, J. Res.
N. Bur. Stnd., 51, 2, 73 (1953); A. W. Hull, W. P.
Davey, Phys. Rev., 17, 549 (1921); R. W. Nurse, J.
Appl. Chem., 2, 244 (1952); F. Booth, H. Breneu,
Brit. Pat., 242996 (1924).

SUBMITTED: May 15, 1959

Card 8/8

KASSIL', G.N.; MATLINA, E.A.; SOKOLINSKAYA, R.A.

Dynamic studies on adrenalielike substances and on the biological activity of the blood in certain forms of diencephalic pathology. (MIRA 13:5)
Biul.eksp.biol.i med. 48 no.12:31-36 D '59.

1. Gruppya chlena-korrespondenta AN SSSR N.I. Grashchenkova pri Otdelenii biologicheskikh nauk AN SSSR na baze kliniki nervnykh bolezney I Moskovskogo meditsinskogo instituta. Predstavlena deystvitel'nym chlenom AMN SSSR N.I. Grashchenkovym.
(SYMPATHOMIMETICS physiol.)
(DIENCEPHALON physiol.)

17(4), 17(12)
AUTHORS: Kassil', G. N., Matlina, E. A., Sokolinskaya, R. A. SOV/20-126-2-61/64

TITLE: Adrenaline-like Substances and the Biological Activity of Blood in the Case of Cold Essay Under Normal Conditions and Those of Diencephalic Pathology (Adrenalinopodobnyye veshchestva i biologicheskaya aktivnost' krovi pri kholodovoy probe v usloviyakh normy i dientsefal'noy patologii)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 126, Nr 2, pp 446-449 (USSR)

ABSTRACT: The state of the vegetative nervous system is to a certain extent characterized by the different forms of the adrenaline-like substances. On the other hand it is impossible to gain by only one determination of the chemical composition and the biological properties of blood a conception concerning the "homeostase" boundaries or the structure of the pathological syndrome as the latter is always a combined expression of pathological processes and compensation phenomena. The main principle of the collective group of the authors is a dynamical investigation of the human organism: of a healthy, a sick, and a recovering one. The authors did not restrict themselves to the determination of a physiological or biochemical final

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SOV/20-126-2-61/64

Adrenaline-like Substances and the Biological Activity of Blood in the Case of Cold Essay Under Normal Conditions and Those of Diencephalic Pathology

sick persons can be divided into 4 groups according to the results: Ist g r o u p . The reaction does not differ considerably from the normal reaction. Often there occur, however, considerable shifts which surpass the physiological fluctuations of the content of the investigated substances. Mainly persons with functional disturbances of the activity of the regulatory hypothalamus nerves were concerned. The disease is curable in spite of the patients' complaints and shows a favorable course. IIInd g r o u p . The sympathetic activity (accumulation of "sympathines") increases here, the adrenaline-like substances increase, sometimes also the SpC in the case of a simultaneous increase in acetyl-chinoline. IIIrd. g r o u p . The sympathetic blood activity and the acetyl-chinoline decrease are reduced. An additional heat essay is recommended (Ref 4). IVth g r o u p . The sympathetic blood activity is reduced. Reduction of the adrenaline-like substances, sometimes reduction of SpC. Acetyl-chinoline increases (Fig 2). This occurs in severe diencephalic pathology and is scarcely curable. The increase in the sympathetic blood activity can depend on the accumulation of the adrenaline-

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SOV/20-126-2-61/64

Adrenaline-like Substances and the Biological Activity of Blood in the Case of Cold Essay Under Normal Conditions and Those of Diencephalic Pathology

like substances, on the transition of the oxidized forms to reduced ones, but also on the reduction of the "parasympathine" level. The increase in "parasympathine" level is often connected with the reduction of the sympathetic activity. There are 1 figure and 7 Soviet references.

ASSOCIATION: Gruppa chl.-korr. AN SSSR N. I. Grashchenkova pri Otdelenii biologicheskikh nauk Akademii nauk SSSR
(Group of the Corresponding Member AS USSR N. I. Grashchenkov at the Department of Biological Sciences of the Academy of Sciences USSR)

PRESENTED: December 4, 1958, by L. S. Shtern, Academician

SUBMITTED: November 29, 1958

Card 4/4

SOKOLINSKAYA, R. A., UGOLEVA, S. V., SHREYBER, G. L., KASSIL, G. N.,
WAYSFIELD, I. L., and MATLINA, E. SH. (USSR)

"Biochemical Mechanism of Physiological and Pathological Reactions
of an Organism of the Introduction of Certain Hormone Preparations."

Report presented at the 5th International Biochemistry Congress,
Moscow, 10-16 Aug 1961

SOKOLINSKAYA, R.A.

Influence of small doses of adrenalin on the biological activity of the blood under normal conditions and in some forms of disease of the diencephalic region. Biul. eksp. biol. i med. 52 no.9:40-45 S '61. (MIRA 15:6)

1. Iz laboratorii neyro-gumoral'noy regulyatsii (zav. - chlen-korrespondent AN SSSR N.I. Grashchenkov, rukovoditel' raboty - prof. G.N. Kassil') Instituta vysshey nervnoy deyatel'nosti i neyrofiziologii AN SSSR, Moskva. Predstavlena akademikom V.N. Chernigovskim.
(ADRENALINE) (BLOOD) (DIENCEPHALON)

KASSIL', G.N.; SOKOLINSKAYA, R.A.

Phenomenon of acetylcholine fixation by the human blood in vitro.
Dokl. AN SSSR 140 no.4:959-962 0 '61. (MIRA 14:9)

1. Institut vysshey nervnoy deyatel'nosti i neyrofiziologii AN SSSR.
Predstavleno akademikom V.N.Chernigovskim.
(CHOLINE) (BLOOD--ANALYSIS AND CHEMISTRY)

G.W. BOH NEDV, M.D.; FAYN, G.D.; V. Y. FAYN, I.I.; VEYN, I.M.; MASHKIN, S.D.;
RITT, M.L.; LUKATSKAYA, R.A.; SHREYBERG, G.L.

Analysis of normal, abnormal and abnormal changes in nerve fibers
of visual disorders. Vestn. MN SSSR 19 no.6:54-62 '63.
(MIRA 1844)

1. Intentionally normal fibers of the optic chiasm.

MAJID, H.I.; SUKAMINAKAYA, H.A.

Mechanism of acetylcholine binding with human blood in vitro.
Biol. eksp. biol. i med. 57 no.4:38-42 Ap '63.

(MIRA 18:3)

1. Laboratoriya neyro-gumoral'noy regulyatsii (zav. - chlen-korrespondent AN SSSR N.I. Grashchankov) AN SSSR. Submitted April 2, 1963.

6

PAUSHKIN, YA.M., POLAK, L.S., VISHNYAKOVA, T.P., PATALAKH, I.I.,
MACHUS, F.F., SOKOLINSKAYA, T.A.

New ferrus-containing polymers on the basis of ferrocene and their electrophysical properties.

Report submitted for the International Symposium of Macromolecular chemistry
Paris, 1-6 July 63

L 16996-63
RM/WW/JD/JW/MAY

EWP(j)/EPF(c)/EWP(q)/EWT(m)/BDS AFFTC/ASD Pc-4/Pr-4

S/204/63/003/002/006/006 ⁷⁷/₇₆

AUTHOR: Paushkin, Ya. M., Vishnyakova, T. P., Sokolinskaya, T. A., Zimina, K. I., and Kotova, G. G.

TITLE: Alkylation of Ferrocene⁷ by olefins in the presence of the compounds boron fluoride and aluminum chloride

PERIODICAL: Neftekhimiya, v. 3, no. 2, 1963, 280-284 ²⁷/₂₇

TEXT: The number of olefins used for alkylation of ferrocene was expanded, and such catalysts as the strong complex acid $H_3PO_4 \cdot BF_3$ and $BF_3 \cdot O(C_2H_5)_2$, in addition to $AlCl_3$, were used, which allowed the concept on the mechanisms of ferrocene alkylation to be widened and new previously unknown alkylferrocenes to be synthesized. A considerable increase in yields of mono-alkyl derivatives of ferrocene is reported. The mono- and di-isooctylferrocenes were obtained by the direct alkylation of ferrocene by olefins. There are 3 tables and 1 figure. The most important English-language references read as follows: T. I. Kealy, P. L. Pavson, Nature, 168, 1039, 1951; G. Wilkinson, F. A. Gotton, J. M. Birmingham, J. Inorg. and Nucl. Chem., 2 95, 1956.

ASSOCIATION: Moscow Institution of Petrochemical and Gas Industry imeni I.M. Gubkin.
Card 1/1;

PAUSHKIN, Ya.M.; VISHNYAKOVA, T.P.; PATALAKH, I.I.; SOKOLINSKAYA, T.A.;
MACHUS, F.F.

Ferrocene-based synthesis of polymers and some of their electro-
physical properties. Dokl. AN SSSR 149 no.4:856-859 Ap '63.
(MIRA 16:3)

1. Institut neftekhimicheskoy i gazovoy promyshlennosti im. I.M.
Gubkina. Predstavleno akademikom A.V.Topchiyevym.
(Polymers) (Ferrocene)

L 8767-65 EWT(m)/EPF(c)/EWP(j)/T Pc-4/Pr-4 WE/RM

ACCESSION NR: AT4008695

S/2982/63/000/044/0015/0026

B

AUTHOR: Paushkin, Ya. M., Vishnyakova, T.P., Sokolinskaya, T.A., Patalakh, I.I.,
Machus, F.F., Kurasheva, I.D.

TITLE: New iron-containing monomers and polymers of five-membered ring naphthenes

SOURCE: Moscow. Institut neftekhimicheskoy i gazovoy promy*shlennosti. Trudy*, no. 44, 1963. Neftekhimiya, pererabotka nefiti i gaza, 15-26

TOPIC TAGS: cyclopentadiene, ferrocene, iron dicyclopentadieny¹-, iron containing polymer, antiknock additive, manganese, (cyclopentadienyl) tricarbonyl-, five-membered ring naphthene, five-membered ring cyclane, epoxy resin, ferrocene derivative, ferrocene alkyl-, ferrocene acetyl-, ferrocene. polymer, naphthene, cyclane, antiknock compound, knock inhibitor, monomer, manganese compound

ABSTRACT: The production of cyclopentadiene and its homologs is of great importance since it is used as a basis for the production of the following products: ferrocene and its homologs, iron-containing polymers, a new antiknock compound¹- cyclopentadienyltricarbonyl manganese, epoxy resins, polymerized plastics, additives for copolymerization and high activity chemical poisons. Cyclopentadiene can be produced by the

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L 8767-65

ACCESSION NR: AT4008695

dehydrogenation of five-membered ring naphthenic petroleums. The metallo-organic compound ferrocene, based on cyclopentadiene, is obtained by the widely used amine method which guarantees a yield of 84-88%. The physical and chemical properties of ferrocene are discussed in detail. The preparation of ferrocene polymers and derivatives as described in the literature is presented. The alkylation of ferrocene by different olefins (iso-C₄H₈, iso-C₅H₁₀, and iso-C₈H₁₆) in the presence of 25% H₃PO₄ · BF₃ at the optimum conditions of 60C and a 5-hr. agitation period, is compared. With an increase in olefin molecular weight, there is a decrease in alkylate yield and ferrocene conversion accompanied by an increase of monoalkylferrocene content. The physical-chemical properties of the prepared alkylferrocenes are listed. Ferrocene and alkylferrocene were then used to obtain ferrocenyl-containing polymers by the polyrecombination reaction which consists of peroxide treatment at 170-200C. The joint polyrecombination of ferrocene with paradichlorobenzene, diphenol, α-bromonaphthalene and quinoline was also investigated and the data are tabulated. Soluble polymers were obtained by the polycondensation of ferrocene with acetone in the presence of ZnCl₂ + HCl. The preparation of polyferrocenylvinylene from acetylferrocene is described. All the iron-containing polymers give a single component signal in the

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L 8767-65

ACCESSION NR: AT4008695

EPR spectra, which indicates the presence of π -unpaired electrons. The electro-physical properties of iron-containing polymers are discussed. The structure of all the investigated polymers was confirmed by infrared spectroscopy. Orig. art. has: 5 tables and 4 formulas.

ASSOCIATION: Institut neftekhimicheskoy i gazovoy promy*shlennosti, Moscow (Institute of the Petroleum Chemistry and Gas Industry)

SUBMITTED: 00

ENCL: 00

SUB CODE: FP

NO REF SOV: 021

OTHER: 010

Card3/3

ACCESSION NR: AP4030375

S/0190/64/006/003/0545/0550

AUTHOR: Paushkin, Ya. M.; Polak, L. S.; Vishnyakova, T. P.;
Patalakh, I. I.; Machus, F. F.; Sokolinskaya, T. A.

TITLE: New iron-containing ferrocene-based polymers and their
electrophysical properties.

SOURCE: Vy*sokomolekulyarny*ye soedineniya, v. 6, no. 3, 1964, 545-
550

TOPIC TAGS: organic semiconductor, semiconducting polymer, ferrocene
polymer, ferrocene polymer preparation, electrical property

ABSTRACT: Fourteen new polymers based on ferrocene and a number
of aromatic compounds have been prepared by polyrecombination or
polycondensation, and their electrical properties have been studied
at the Moscow Institute of the Petrochemical and Gas Industry imeni
Gubkin. The polyrecombination of ferrocene and α -bromonaphthalene,
p-dichlorobenzene, benzonitrile, salicylic acid, salicylaldehyde, or
benzaldehyde, and of isobutyl-, isopentyl-, or isoctylferrocene alone

Card 1/3

ACCESSION NR: AP4030375

was carried out at 175—200C in the presence of tert-butyl peroxide at various starting material-to-peroxide molar ratios. Yields of 3—39% for soluble (dark-brown) and 23—77% for insoluble (black) solid polymers were obtained. The polycondensation of ferrocene with acetone in the presence of $ZnCl_2$ and hydrogen chloride at 56C formed soluble polymers; that of acetyl- or 1,1'-diacetylferrocene alone in the presence of $ZnCl_2$ at 200C and 180C respectively yielded both soluble and insoluble polymers. All the polymers but alkylferrocene-polyrecombination products gave a one-component signal in the EPR spectrum; x-ray structural analysis showed them to be amorphous, and IR spectroscopy, to be conjugated polymers. Electrical conductivity was studied at 20—300C and 1×10^{-4} or 760 mm Hg after degassing at 1×10^{-4} mm Hg and 50C for 3 hr. All the polymers showed a positive temperature coefficient and an exponential temperature dependence of conductivity. Electrical conductivity at 50C ranged from 1×10^{-12} to 1×10^{-9} $ohm^{-1} \cdot cm^{-1}$; and activation energy, from 0.3 to 1.74 eV (no degassing). Study of the effect of surface adsorption on the semiconducting properties of the 1,1'-diacetylferrocene polymer showed that the high activation energies (1.5 eV) are

Card 2/3

ACCESSION NR: AP4030375

caused mostly by surface adsorption and only to a small degree by π -electron excitation from the valence to the conduction band.
Orig. art. has: 4 tables, 2 figures, and 3 formulas.

ASSOCIATION: Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti im. Gubkina (Moscow Institute of the Petrochemical and Gas Industry)

SUBMITTED: 02Apr63

DATE ACQ: 07May64

ENCL: 00

SUB CODE: CH,PH

NO REF SOV: 011

OTHER: 002

Card 3/3

L 33539-65 EFA(s)-2/EAT(m)/EPF(c)/EWP(j)/T Pc-L/Pr-L/Pt-10 RM

ACCESSION NR: AT5006931

S/2982/64/000/051/0048/0053

AUTHOR: Belash, P. M. (Professor); Paushkin, Ya. M.; Belov, V. F.; Vishnyakova, T. P.; Nechushkin, A. M.; Sokolinskaya, T. A.; Machus, F. F.

TITLE: The magnetic properties of ferrocene-containing polymers

SOURCE: Moscow. Institut neftekhimicheskoy i gazovoy promyshlennosti. Trudy, no. 51 51, 1964. Neftekhimiya, neftekhimicheskiye protsessy i neftepererabotka (Petroleum chemistry, petrochemical processes and oil refining), 48-53

TOPIC TAGS: ferrocene, polymer magnetic property, electron paramagnetic resonance, bromonaphthalene polymer, dichlorobenzene polymer, acetylferrocene, hydroxylamine

ABSTRACT: The electron paramagnetic resonance, magnetic susceptibility and magnetization of ferrocene-containing polymers was determined. The study covered previously described polymers (Dokl. Akad. Nauk v. 149, no. 4, 1963) obtained by the tert.-butyl peroxide initiated reaction of ferrocene with α -bromonaphthalene in 2:1 (I) and 1:1 (II) molar ratios or of 1:1 molar amounts of ferrocene and p-dichlorobenzene (III); and polymers obtained by polycondensation of ferrocene, acetylferrocene and hydroxylamine

Card 1/3

L 33539-65

ACCESSION NR: AT5006931

hydrochloride (IV) or of acetylferrocene and hydroxylamino hydrochloride (V) in the presence of zinc chloride. The EPR spectra (see Fig. 1 of the Enclosure) show high intensity and width, ΔH , indicating the presence of strong internal fields. The magnetic susceptibility was measured by a published technique and values for specific magnetic susceptibility and g factor are tabulated. The temperature dependence of the magnetic susceptibility of II indicated onset of decomposition at 400C. The g factor values, 1.950-2.0004, indicate that the ferromagnetic properties of the studied polymers are based on the organic structure, but the presence of stabilized iron oxides is not ruled out. Orig. art. has: 6 figures, 1 table and 2 formulas.

ASSOCIATION: Institut neftekhimicheskoy i gazovoy promyshlennosti, Moscow (Petro-chemical and gas industry institute)

SUBMITTED: 00

ENCL: 01

SUB CODE: OC, EM

NO REF SOV: 005

OTHER: 002

Card 2/3

BELOV, V.F.; VISHNYAKOVA, T.P.; GOL'DANSKIY, V.I.; MAKAROV, Ye.F.;
PAUSHKIN, Ya.M.; SOKOLINSKAYA, T.A.; STUKAN, R.A.; TRUKHTANOV,
V.A .

Study of ferrocene copolymers by means of the Mössbauer effect.
Dokl. AN SSSR 159 no.4:831-834 D '64 (MIRA 18:1)

1. Institut khimicheskoy fiziki AN SSSR i Moskovskiy institut
neftekhimicheskoy i gazovoy promyshlennosti i . I.M. Gubkina.
2. Chlen-korrespondent AN SSSR (for Gol'danskiy).

L 22097-66 EWT(d)/FSS-2/EWT(1)
ACC NR: AP6005291

SOURCE CODE: UR/0413/66/000/001/0034/0034

INVENTOR: Sokolinskiy, A. G.; Orlov, V. N.

ORG: none

15
B

TITLE: Method of suppressing false signals ⁶ Class 21, No. 177458

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 1, 1966, 34

TOPIC TAGS: signal reflection, acoustic line, false signal, signal suppression

ABSTRACT: An Author Certificate has been issued describing a method of false-signal suppression in ultrasonic delay lines with multiple signal reflection in a

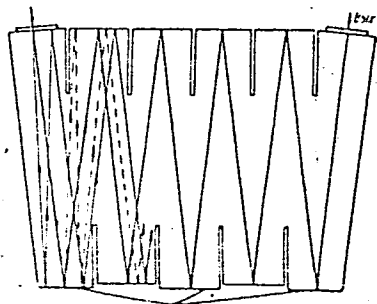


Fig. 1. False-signal suppression

1-3 - Offset reflecting platforms.

Card 1/2

UDC: 621.374.5

L 32007-66

ACC NR: AP6005291

rectangular acoustic line containing reflecting platforms. To equalize false signals
at the output of lines, part of reflecting platforms is offset in parallel to the
other in the plane of the beam direction (see Fig. 1). Orig. art. has: 1 figure.
[Translation of abstract] [NT]

SUB CODE: 17/ SUBM DATE: 27Aug64

Card 2/2 20

L 07449-67

AFC NR: AP6035845

0

rigid sound conductor is made from a quartz and a magnesium part to reduce the temperature coefficient. Both parts are located in the same plane and are polygon-shaped. The two parts, linked by a transition layer, are mechanically connected with a tightening bracket. Orig. art. has: 1 figure.

SUB CODE: 09/ SUBM DATE: 27Apr64/ ATD PRESS: 5104

Card 2/2 LS

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

100 AND 110 GROUPS

PROCESSES AND PROPERTIES INDEX

BC

A-4

Mechanism of shock therapy of allergic diseases. D. A. SOKOLINSKI (Proc. Shock Congress, Kiev, 1937, 188-193). Transfusion of citrated blood causes transient exacerbation of the symptoms of acute rheumatoid arthritis, followed by considerable improvement, associated with a fall in serum-protein content, alkali reserve, and erythrocyte sedimentation rate, and a rise in albumin/globulin ratio. R. T.

COMMON ELEMENTS

COMMON VARIABLES INDEX

ASS-51A METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

5TH AND 6TH ORDERS

7TH AND 8TH ORDERS

9TH AND 10TH ORDERS

11TH AND 12TH ORDERS

13TH AND 14TH ORDERS

15TH AND 16TH ORDERS

17TH AND 18TH ORDERS

19TH AND 20TH ORDERS

21ST AND 22ND ORDERS

23RD AND 24TH ORDERS

25TH AND 26TH ORDERS

27TH AND 28TH ORDERS

29TH AND 30TH ORDERS

31ST AND 32ND ORDERS

33RD AND 34TH ORDERS

35TH AND 36TH ORDERS

37TH AND 38TH ORDERS

39TH AND 40TH ORDERS

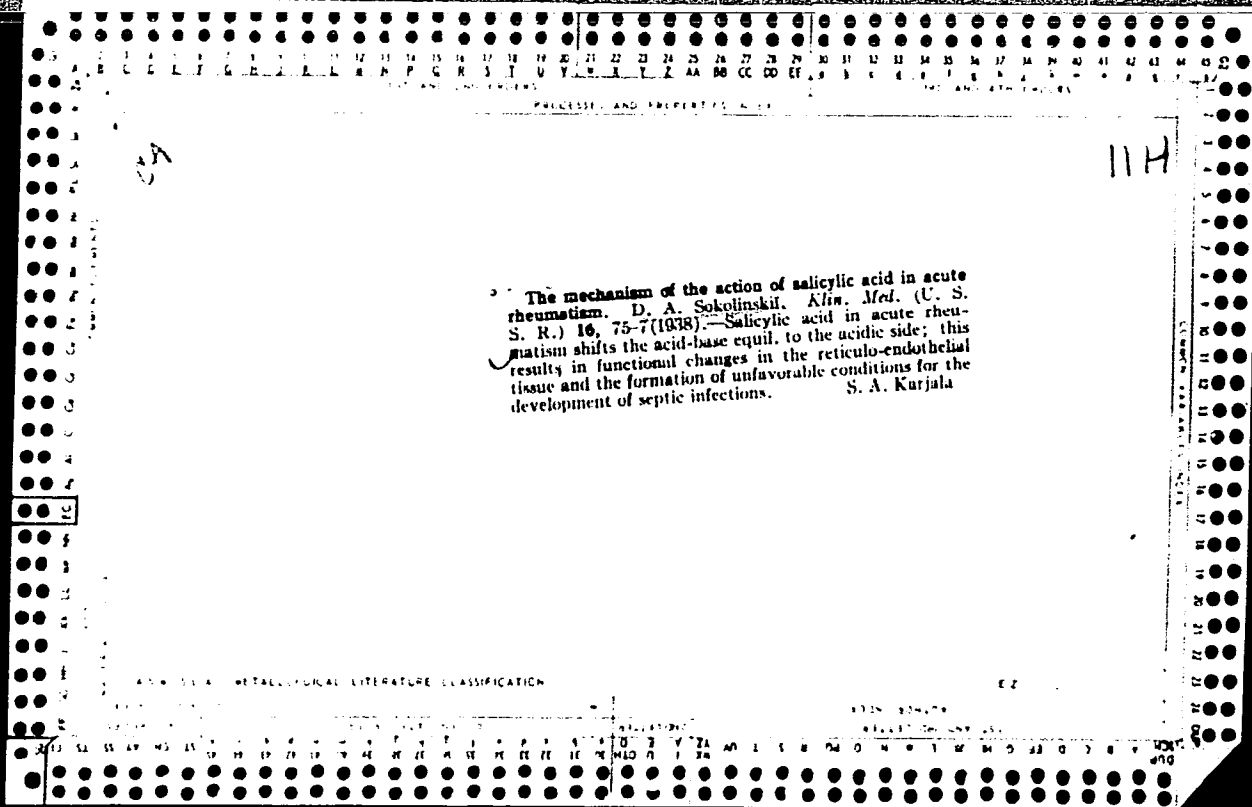
41ST AND 42ND ORDERS

43RD AND 44TH ORDERS

45TH AND 46TH ORDERS

47TH AND 48TH ORDERS

49TH AND 50TH ORDERS



1. SCROBINSKIY, D. A., Docent; LEVIN, G. I.; LYUCOVYCH, V. I.; FEBIN, M. B.;
PTUKHA, R. N.; SCROCHKINA, S. N.

2. USSR (600)

4. Influenza

7. Cardiovascular system in grippe, Medych. zhur., 22, no. 1, 1952.

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

SOKOLINSKIY, D.A., dotsent

Characteristics of the course of rheumatism following influenzal
infection. Vrach. delo no.11:64-69 N '61. (MIRA 14:11)

1. Kafedra terapii (zav. - prof. T.T.Glukhen'kiy) pediatricheskogo
fakul'teta Kiyevskogo meditsinskogo instituta.
(RHEUMATIC FEVER) (INFLUENZA)

ESTRIN, B.M.; SOKOLINSKIY, F.D.

Purification of technical gases having a high oxygen content.
Khim. prom. no.8:588-591 Ag '63. (MIRA 16:12)

SOKOLINSKIY, I.R.

Combined treatment of trichocephaliasis in children with oxygen and diathermy. Med.paraz. i paraz.bol. 28 no.4:438-440 J1-Ag '59.
(MIRA 12:12)

1. Iz 22-y detskoy polikliniki Leningradskogo rayona Moskvyy (glavnyy vrach M.V. Pyatyari).
(TRICHURIASIS therapy)
(OXYGEN therapy)
(DIATHERMY)

SOKOLINSKIY, I.R. (Moskva)

Oxygen therapy in nocturnal enuresis, Fel'd. i akush. 28.
no.2:15-20 F'63. (MIRA 16:9)

1. Iz Detskoy polikliniki No.22 Leningradskogo rayona.
(OXYGEN THERAPY) (URINE--INCONTENENCE)

ACCESSION NR: AT4033626

S/0000/63/000/000/0084/0108

AUTHOR: Sokolinskiy, I. Ya.; Mishchenko, I. M.

TITLE: The OM-9 teaching machine with a ramified program X

SOURCE: Programmirovannoye obucheniye i kiberneticheskiye obuchayushchiye mashiny* (Programmed instruction and cybernetic teaching machines); nauchno-telkhn. sb. shtatey. Moscow, Izd-vo "Sovetskoye radio," 1963, 84-108

TOPIC TAGS: teaching machine, programmed instruction, language teaching, ramified program

ABSTRACT: The article outlines the basic characteristics and possibilities of the OM-9 teaching machine operating on an expanded or "ramified" program. The operational logic, basic circuitry and examples of the teaching programs are discussed. The OM-9 is able, to a certain degree, to free the instructor from individual seminar work, while aiding him in improving his supervision of the work of each student. The machine is designed, primarily, for individual working-up of material in any technical discipline and also in the technique of analyzing and translating sentences from a foreign language into Russian.

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ACCESSION NR: AT4033626

Work with the machine takes place in the form of a dialogue, at the end of which the machine evaluates the assimilation of the material covered and the ability to apply it to the solution of problems. It is likewise established which question areas the student assimilated poorly and the necessary explanations are furnished for these areas. The logic of the machine operation makes it possible to teach using the ramified programs shown in Figures 1,a and 1,b of the Enclosure. The program shown in Figure 1,a is written on the assumption that the student is somewhat familiar with the given subject. The teaching process takes place as follows: the machine proposes to the student, sequentially one after the other, a series of not more than 18 logically connected questions on a given subject 1.0, 2.0,, N.0. Analyzing the answers of the student, the machine supplies him either with the next question over channels "f", if the answer was correct, or furnishes, over channels "a", information leading to the correct answer (hints) 1.1, 2.1, 3.1,, N.1, if the answer was incorrect. In the event of correct answers after the suggestions, the next question is proposed over channels "d". If the student answers incorrectly even after the additional information, then the machine provides exhaustive clarifications on the troublesome questions over channels "b", after which the next question is submitted over channels "a". If the stu-

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dent has difficulty in answering any of the proposed questions, he can request "assistance", in which event full information 1.2, 2.2,N.2 is immediately provided over channels "c". Operation with the program shown in Figure 1,b differs from the above only in that the machine first submits the new material 1.0, 1.1, 1.2, with question 2.0 then posed as a development of what has gone before, and, if the student answers correctly, the exposition of the subsequent material begins. If the answer is incorrect, then leading advice 2.1 and exhaustive explanations 2.2 are given, followed thereafter by the exposition of the new section 3.0, 3.1, 3.2, etc. Depending on its volume, the material may be arranged on a larger number of frames as well, but the number of frames must be a multiple of three. The machine is particularly applicable to the study of individual aspects of the theory of automatic control and foreign languages. The complete OM-9 machine contains a modernized LETI-55 slide projector, control panel and set of programs with answer cards. The programs are filmed on motion picture film and stored in special cassettes. The volume of the programmed themes depends on the capacity of the cassettes of the projector and must not exceed 54 standard film frames. The sequence with which the program texts are arranged on the film frames is indicated in appendices to the article. The material is projected on a screen and the answers are introduced

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ACCESSION NR: AT4033626

by the selection method by means of buttons. For each new subject new answer values are ascribed to these buttons and, simultaneously with the working up of teaching programs, correct and incorrect answer card sets are compiled which are interchangeable together with the film-program. The operation of the circuitry is described, certain particularities of the programming of the machine are discussed and certain conclusions and possible improvements are advanced. Two examples of programming are given in the appendices to the article: one from the theory of automatic control, the other dealing with the translation of a complex German sentence into Russian. Orig. art. has: 3 figures.

ASSOCIATION: none

SUBMITTED: 03Dec63

DATE ACQ: 16Apr64

ENCL: 01

SUB CODE: DP

NO REF SOV: 003

OTHER: 001

Card 4/5

ACCESSION NR: AP4033626

ENCLOSURE: 01

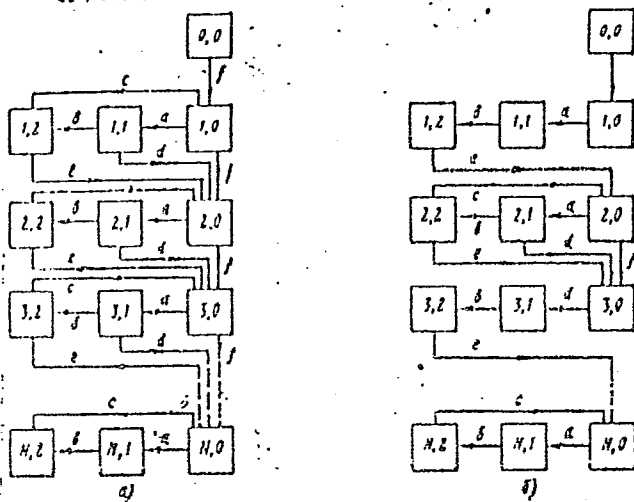


Figure 1. Operating logic of the OM-9 machine

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23851-65 EWT(d)/TDB(jj)/BXT/EED-2/EWP(1) Po-l/Pq-l/Pg-l/Pk-l IJP(c) BB/GG
ACCESSION NR AR4046320 S/0044/64/000/008/V033/V033

SOURCE: Ref. zh. Matematika, Abs. 8V227

AUTHOR: Sokolinskiy, I. Ya.; Mishchenko, I. M.

TITLE: The teaching machine OM-9 with branched program

CITED SOURCE: Sb. Programmir. obucheniye i kibernet. obuchayushchiye mashiny*. M., Sov. radio, 1963, 84-108

TOPIC TAGS: teaching machine, branched program, program variant, diaproyector, control panel, control button, machine learning, machine programming, teaching example

TRANSLATION: The machine OM-9 is designed to free teachers of higher institutes of learning from conducting special seminar assignments and to help the instructor improve supervision of each student's work. The student converses with the machine; this may facilitate independent study of material in any technical discipline and the acquisition of translation technique from a foreign into the

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ACCESSION NR: AR4046320

Russian language. As a result of the conversation, the machine will evaluate the degree to which the material has been assimilated and the student's skill of applying it in practice. On all questions which require additional knowledge, the machine gives the necessary explanations. Two variants of branched program teaching are presented, the first of which has been set up based on the student's having some knowledge of the material. In this case, the machine asks a succession of logically related questions. After analyzing the answers, the machine asks a new question or supplies information leading to the correct answer. In the second variant, the machine issues new information, then asks a control question. If the answer is correct, new material will be presented; if it is incorrect directive advice is given. At the end of the study period of the subject, the machine evaluates how the student has assimilated the material. Setting up of the study program requires as much time as needed by the instructor to prepare for the lecture or the seminar. The machine contains a modernized diaprojector LETI-55, a control panel and an assembly of programs with answer cards. The frontal part of the control panel has 30 answer buttons, 4 control buttons-"start up", "proceed", "help" and "result of fields". The basic arrangement of the control panel is described and individual stages of its work characterized in de-
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tail. The specific features of programming for the OM-9 machine are discussed. It is noted that skilful programming of the subject to be handled by the machine will considerably increase teaching efficiency. Possible directions for modernizing the machine are outlined. Examples are given for programs for studying the following subjects: "Transfer, transit and frequency characteristics of the aperiodic link" and "Technique of analysis and translation of a complex proposition from German into Russian".

SUB CODE: DP

ENCL: 00

Card 3/3

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Classification, requirements, and structural principles of
simple teaching machines. Izv. vys. ucheb. zav. radiotekh.
6 no.4: 387-394 J1-Ag '63. (MIRA 16:11)

SOKOLINSKIY, I.Ya.; MISHCHENKO, I.M.

Teaching machine with a ramified program. Izv. vys. ucheb.
zav.; radiotekh. 6 no.4:425-434 J1-Ag '63. (MIRA 16:11)

MIKHNUSHEV, A.G.; SOKOLINSKIY, I.Ya.

Teaching machine with automatic answers. Izv. vys. ucheb.
zav.; radiotekh. 6 no.4:435-439 J1-Ag '63. (MIRA 16:11)

SOKOLINSKIY, Isif Yakovlevich, kand.tekhn.nauk, dotsent; MIKHNECHTV, Aleksey Gur'yevich, преподаvatel'

The OM-9-5 teaching machine. Izv.vys.ucheb.zav.; elektromekh. 8
no.8:895-900 '65. (MIRA 18:10)

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PICHKUR, I.F.; SOKOLINSKIY, L.M.

Method of taking and culturing feces for dysentery examination.
Zhur.mikrobiol.epid.i immun. no.1:44 Ja '54. (MLRA 7:2)

1. Iz sanitarno-epidemiologicheskogo otryada.
(Dysentery) (Feces--Analysis)

SOKOLINSKIY, L.M., podpolkovnik meditsinskoy sluzhby

Frontal magnifying glass in bacteriological practice. Voen.-med.
zhur. no.9:66 S '55. (MLRA 9:9)
(BACTERIOLOGY--APPARATUS AND SUPPLIES)

SOKOLINSKIY, L.M., polkovnik med. sluzhby.

Modification of Peshkov's medium for macroscopic diagnosis of the
mobility of enteric bacteria. Voen.-med. zhur. no.11:85 N '56.

(INTESTINES--BACTERIOLOGY)

(MIRA 12:1)

(BACTERIOLOGY--CULTURES AND CULTURE MEDIA)

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Textbook for correspondence students of economical institutes
("Organization and planning of machinery plants" E.G. Liberman
and others). Reviewed by L. Bartashev and others.
Mashinostroitel' no.6:46 Je '61. (MIRA 14:6)
(Liberman, E.G.) (Zviagintsev, I.U.E.) (Zolotarev, A.N.)
(Kononenko, V.V.) (Makarova, G.M.) (Oleinik, S.U.)
(Industrial management)

VOLKOV, V.A., Inzh.; SOKOLINSKIY, P.S., Inzh.

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of technical preparation of production processes. Vest. mashinostr.
45 no.5:84-85 My '65. (MIRA 18:6)

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Conference on scientific organization of labor. Vest. mashinostr.
45 no.7:84 J1 '65. (MIRA 18:10)

SOKOLINSKIY, V.B.

Calculating hydropercussion mechanisms. Izv.vys.ucheb.zav.;
geol.i razv. 2 no.3:102-111 Mr '59. (MIRA 12:12)

1. Institut gornogo dela AN SSSR.
(Boring machinery)

SOKOLINSKIY, V. B.

Cand Tech Sci - (diss) "Study of the operating process of water-percussion drilling mechanisms." Moscow, 1961. 13 pp; (Ministry of Higher and Secondary Specialist Education RSFSR, Moscow Geological Survey Inst imeni S. Ordzhonikidze); 160 copies; price not given; (KL, 10-61 sup, 219)

SOKOLINSKIY, V.B., inzh.

Using the wave method to calculate the dynamics of a percus-
sion tool. Nauch. soob. IGD 18:121-131 '63. (MIRA 16:11)

L 8782-66 EWT(1)/EWA(h)
ACC NR: AP5028141

SOURCE CODE: UR/0106/65/000/011/0041/0047

AUTHOR: Sokolinskiy, V. G.

ORG: none

TITLE: Operation of an external-feedback shf FM oscillator with an unmatched long line

SOURCE: Elektrosvyaz', no. 11, 1965, 41-47

TOPIC TAGS: shf oscillator¹⁵, FM oscillator

ABSTRACT: The characteristics of an external-feedback shf oscillator (e.g., a TW tube) with FM in the feedback loop operating in conjunction with an unmatched (or incompletely matched) long transmission line are theoretically investigated. It is found that, under the above conditions, the slope of the modulation characteristic changes, nonlinear distortion appears, and the modulation affects

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UDC: 621.396.61:029.64:621.373.029.64
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