

CHUST, I. V. Cand Biol Sci -- (diss) "Arteries of the short dorsal muscles of the occiput of certain types of domestic animals." L'vov, 1957. 18 pp (L'vov Zoovet Inst. Chair of Anatomy and Histology of Domestic Animals). (KL, 36-58, 111)

CHEN, N.G.; BOCHAROV, V.A.; FURSOV, P.F.; SHUST, T.F.; DEKTYAREVA, V.K.;  
BOROZDINA, R.R.; YUDINA, S.M.

Reducing the etching of welded joints in carbon and stainless  
steels by acid solutions. Zashch.met. 1 no.6:726-728 N-D '65.  
(MIRA 18:11)

1. Dneprodzerzhinskiy metallurgicheskiy zavod-vtuz.

L 27343-66 EWT(m)/T/EWA(d)/EWP(v)/EWP(t) IJP(c) JD/HM/HW/WB

ACC NR: AP6008631

SOURCE CODE: UR/0365/65/001/006/0726/0728

AUTHORS: Chen, N. G.; Bocharov, V. A.; Fursov, P. F.; Shust, T. F.; Dektyareva, V. K.; Borozdina, R. R.; Yudina, S. M.

ORG: Dneprodzerzhinsk Metallurgical Factory - vtuz  
(Dneprodzhezhijskiy metallurgicheskiy zavod-vtuz)

73  
69  
8

TITLE: On the inhibition of corrosion of welded joints of carbon and stainless steels

18 18

SOURCE: Zashchita metallov, v. 1, no. 6, 1965, 726-728

TOPIC TAGS: steel, stainless steel, electrochemistry, carbon steel, anti-corrosion agent, corrosion, arc welding, corrosion inhibitor / lKh18N9T steel, St-3 steel, lKh8N9T steel, KKh-2 anticorrosion agent

ABSTRACT: This investigation was conducted to check experimentally the effectiveness of the agent KKh-2, described by N. G. Chen (Zh. prikl. khimii, 1964, 37, 1958) as an inhibitor of corrosion in welded joints of carbon and stainless steels during the pickling process. The extent and nature of corrosion were determined metallographically. Polarization curves for the welds and for base

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Card 1/3

UDC: 620.193.41

L 27343-66

ACC NR: AP6008631

metals in 20% H<sub>2</sub>SO<sub>4</sub> solution were also determined. The experimental results are presented in graphs and tables (see Fig. 1).

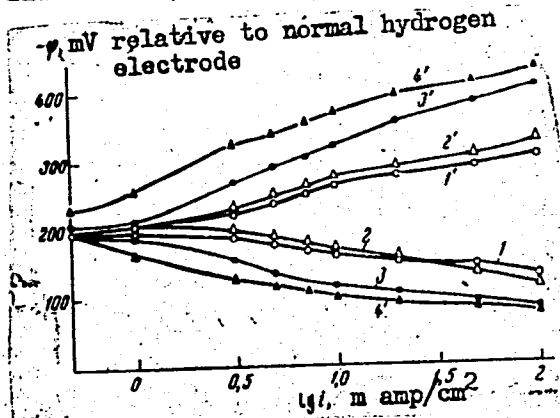


Fig. 1. Polarization curves for steel St-3, determined for the welding seam and base metal in 20% H<sub>2</sub>SO<sub>4</sub>. 1 - 1' welding seam (without KKh-2); 2 - 2' base metal (without KKh-2); 3 - 3' welding seam (with KKh-2); 4 - 4' base metal (with KKh-2).

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L 27343-66

ACC NR: AP6008631

4  
It was found that the addition of the inhibiting agent KKh-2 to the pickling solution inhibits the corrosion of carbon steel St-3 welds and completely prevents the corrosion of stainless steel 1Kh18N9T. It is suggested that the inhibiting action of the inhibitor KKh-2 is due to the presence of surface active agents in the latter. These agents prevent the adsorption of chloride ions on the surface of the metal and retard the rate of the cathodic and anodic processes. Orig. art. has: 2 tables and 1 graph.

SUB CODE: 13,11/ SUBM DATE: 14Feb65/ ORIG REF: 002

Card 3/3

P.B

L 1734-66 EWT(m)/EPF(c)/EWA(d)/EWP(t)/EWP(k)/EWP(z)/EWP(b) MFI/SD/WB

ACCESSION NR: AP5023350

UR/0304/65/000/005/0082/0083  
620.179.3

AUTHORS: Chen, N. G. (Engineer); Fedorov, Yu. V. (Engineer); Bocharov, V. A. (Engineer); Fursov, P. F. (Engineer); Shust, T. F. (Engineer); Stolbova, Ya. A. (Engineer)

TITLE: Application of corrosion inhibitor KKh-2 in etching of steel products

SOURCE: Mashinostroyeniye, no. 5, 1965, 82-83

TOPIC TAGS: corrosion inhibitor, rust inhibitor, coke, ammonia, nitric acid, sulfuric acid, hydrochloric acid, metal etching, carbon steel, stainless steel/ Kh18N10T steel, KKh 2 inhibitor, ChM inhibitor

ABSTRACT: A new corrosion inhibitor KKh-2 is proposed for use as an additive to etching compounds. Consisting of organic and inorganic waste products of the coke-chemical industry in ammonia water, the inhibitor is highly effective for protecting carbon steels against sulfuric, nitric, and hydrochloric acid solutions and against alkali. Tests at the Zhdanovskiy zavod tyazhelego mashinostroyeniya (Zhdanov Heavy Machinery Construction Plant) with Kh18N10T stainless steel proved the inhibitor to be three times more effective than the previously used additive.

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L 1734-66

ACCESSION NR: AP5023350

When tested on St.3 carbon steel, it not only produced the desired effects but, unlike other inhibitors, it did not increase the time necessary for etching; it also reduced both the waste of metal and the acid used. KKh-2 is recommended as an efficient and cheap inhibitor in steel etching, especially for metallurgical and machine construction establishments located near coke-chemical plants. Orig. art. has: 1 table.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: IE, MM

NO REF SOV: 000

OTHER: 000

Card 2/2

AID P - 304

Subject : USSR/Aeronautics  
Card : 1/1  
Author : Shust, V., Engineer, Lt. Col.  
Title : Operation of jet aircraft on dusty airfields  
Periodical : Vest. Vozd. Flota, 7, 51-56, J1 1954  
Abstract : Jet aircraft may be operated even on very dusty air-  
fields. This article discusses conditions required for  
this operation. Flights of single aircraft and forma-  
tion flights are considered. Names of officers who  
worked out arrangements or apparatus for protection  
against dust appear in the text. Diagrams.  
Institution : None  
Submitted : No date



SHUST, I.V.

Effect of uranium on the alkaline phosphatase of some organs in rats.  
Farm. i toks. 27 no.3:362-363 My-Je '64. (MIRA '8:4)

1. Kafedra gistologii (zav. - dotsent I.P.Tyurina) Ternopol'skogo  
meditsinskogo instituta.

SHUST, V.

Decompression changes in the blood. Fiziol. zhur. 46 no. 5:618-622  
My '60. (MIRA 13:12)

1. From the Comparative Physiology Department of the Institute of  
Experimental Medicine, Leningrad.

(DECOMPRESSION SICKNESS) (BLOOD)

(X RAYS—PHYSIOLOGICAL EFFECT)

SHUSTANOVA, L.A.; KURACHKO, K.; MARKMAN, A.I.; UMAROV, A.U.

Oils from the plants of the Papaveraceae family. Uzb.khim.zhur. 8  
no.5:38-42 '64. (MIRA 18:5)

1. Institut khimii rastitel'nykh veshchestv AN UzSSR.

SHUSTAREV, N.P.; SERKOV, I.I.

Automatic charging of tunnel kilns. Stroi.mat. 6 no.5:28 My  
'60. (MIRA 13:7)

1. Glavnyy inzhener Bakinskogo kirpichnogo zavoda (for Shustarev).
2. Energetik Bakinskogo kirpichnogo zavoda (for Serkov).  
(Kilns)

NOGINSKIY, V.M., inzh.; SHUSTAREV, Yu.N.

Mechanization, automation and advanced technological processes  
in the woodworking industry. Mekh.i avtom.proizv. 15 no.8:  
17-20 Ag '61. (MIRA 14:9)  
(Leningrad Province--Woodworking industry)  
(Automation)

MOROZOV, N.A., kand. tekhn. nauk; VOSKRESENSKIY, V.Ye., inzh.;  
SHUSTAREV, Yu.N., inzh.

Formation of packets by means of flexible strings. Mekh. i  
avtom. proizvod. 19 no.4:27-29 Ap '65.

(MIRA 18:6)

SHUSTEF, F.M. (Minsk)

Review of the literature on teaching mathematics published in  
1952 and 1953. Mat. v shkole no.6:75-84 N-D '54. (MLRA 7:11)  
(Bibliography--Mathematics) (Mathematics--Bibliography)

SHUSTEF, P.M. (Minsk)

Survey of literature on the teaching of mathematics. Mat. v  
shkole no.2:64-73 Mr-Apr '56. (MLRA 9:6)  
(Bibliography--Mathematics--Study and teaching)



SHUSTEF, F.M. (Minsk)

Survey of literature on the teaching of mathematics. Mat.v  
shkole no.3:71-77 My-Je '56. (MLRA 9:8)  
(Mathematics--Study and teaching)

SHUSTEF, F.M. (Minsk)

Review of literature published in 1955 on teaching mathematics.  
Mat. v shkole no.2:81-86 Mr-Ap '57 (NIRA 10:9)  
(Bibliography--Mathematics)

SHUSTEF, F.M. (Minsk).

Review of literature published in 1955 on questions of teaching  
mathematics. Mat. v shkole no.3:83-92 My-Je '57. (MLRA 10:6)  
(Bibliography--Mathematics--Study and teaching)

SHUSTEF, F.M.

SHUSTEF, F.M. (Minsk).

Reviewing the literature on mathematics teaching published in 1956.  
Mat. v shkole no.1:73-80 Ja-F '58. (MIRA 11:1)  
(Bibliography--Mathematics--Study and teaching)

SHUSTEF, F.M. (Minsk).

Survey of literature published on mathematics teaching in 1956.  
Mat. v shkole no.2:84-88 Mr-Apr '58. (MIRA 11:2)  
(Bibliography--Mathematics)

SHUSTEF, F.M. (Minsk)

Literature on mathematics-teaching problems published in 1957.  
Mat. v shkole no.3:77-83 My-Je '59. (MIRA 12:9)  
(Bibliography--Mathematics--Study and teaching)

SHUSTEF, Frida Maksovna; FEL'DMAN, Aleksandr Markovich; GUREVICH, Vladimir Yudelevich; MALYAVKO, L.T., red.; ZHUK, V.N., tekhn. red.

["Olympic" mathematical problems] Sbornik olimpiadnykh zadach po matematike. Pod red. F.M. Shustef, Minsk, Gos. uchebno-pedagog. izd-vo M-va prosv. BSSR, 1962. 82 p.

(MIRA 16:7)

(White Russia--Mathematics--Study and teaching)

SHUSTEF, Frida Maksovna; FEL'DMAN, Aleksandr Markovich; GUREVICH,  
Vladimir Yudelevich; STARINSKAYA, Z.V., red.

[Collection of problems for "Mathematical Olympics"]  
Sbornik olimpiadnykh zadach po matematike. Minsk, Na-  
rodnaia asveta, 1965. 82 p. (MIRA 18:12)



STASENKOV, V.V., SHUSHEVA, L.M., MURADIMOV, M.I.

Regularity in the distribution of certain reservoir parameters.  
Trudy VNIIL no.49:119-130 '65. (MIRA 18:6)

POPE, I.I.

Effect of the relations of the viscosity of oil and water and the amount of water passing through a pipe on the oil reservoir producing capacity. Nauch.-tekh. sbor. po vob. nefti no.25:7-11 (MIRA 17:12)

1. Vostochnyy neftegorny nauchno-issledovatel'skiy institut.

MURADIMOV, Z.I.; SHUSTER, I.H.

Statistical study of the thickness of strata. Nauch.-tekhn. sbor. po  
dob. nefti no.24:8-14 '64. (MIRA 17:10)

1. Vsesoyuznyy neftegazovyy nauchno-issledovatel'skiy institut.

YEGUPTSOV, N.N.; SOKHACHEVSKAYA, I.A.; SHUSTEF, I.N.

Development of the layer B<sub>0</sub> of the Tula horizon in the Karlovo-Sytovskaya field. Trudy Giprovostoknefti no.5:191-196 '62.  
(MIRA 16:8)  
(Samara Bend--Oil reservoir engineering)

SHUSTEF, M.M., inzh.

New hydraulic jack. Put' 1 put.khos. 4 no. 5:28 My '60.  
(MIRA 13:11)

(Hydraulic jacks)

SHUSTEF, M.M., inzh.

Machine for the manufacture of round wooden rods. Put' i put. khoz.  
5 no. 1:39 Ja '61. (MIRA 14:5)  
(Woodworking machinery) (Railroads--Ties)

AID P -1348

Subject : USSR/Mining

Card 1/1 Pub. 78 - 11/30

Author : Shustef, N. L.

Title : Significance of disappearance of sulfates from water of Devonian deposits.

Periodical : Neft. khoz., v.32, #12, 36-39, D 1954

Abstract : Complete or partial disappearance of sulfates from water is related to presence of petroleum deposits. A series of experiments demonstrated that the solubility of gypsum in petroleum was determined by the asphaltenes and poly-cyclic compounds which have the characteristics of hydrophobic colloids. One table and 2 Russian references (1947, 48).

Institution: None

Submitted : No date

SHUSTEF, N.D.; NEDOBOYEVA, Ye.I.

Effect of the "NCHK" demulsifier on precipitation in dehydration  
of petroleum. Neft. khoz. 39 no.4:51 Ap '61.

(MIRA 14:6)

(Emulsions)



SMIRNOV, G.N.; SHUSTENKOVA, K.G.; IVANOV, A.I.

Pneumatic removal of dust and waste from bat wool carding machines. Tekst.prom. 20 no.8:52-54 Ag '60. (MIRA 13:9)

1. Sotrudniki Vsesoyuznogo nauchno-issledovatel'skogo instituta okhrany truda (for Smirnov, Shustenkova). 2. Master remontno-montazhnogo otdela Moskovskoy vatnoy fabriki imeni Sakko i Vantsetti (for Ivanov).

(Dust collectors) (Carding machines)

SHUSTER, A.

Current problems of the economic efficiency of capital investments  
and new machinery. Vop.ekon. no.4:156-160 Ap '63.

(MIRA 16:4)

(Capital investments)

(Technological innovations)

ZAVALI, Pavlo Volodimirovich; IGOSHKIN, Georgiy Stepanovich  
[Ihoshkin, H.S.]; SHENDRIK, Lyudmila Karpo na  
[Shendryk, L.K.], red.; SHKOL'NIKOV, B., red.; SHUSTER, A.,  
red.

[Get acquainted with the Ukraine] Poznaiomtes' z Ukrainoiu.  
Kyiv, Mystetstvo, 1964. 1 v. (MIRA 18:10)

SAZONOV, V.; SHUSTER, A., red.

Kharkiv. Kharkov. Kyiv, Mystetstvo, 1964. 31 p.  
(MIRA 17:12)

KHOMENKO, V.A.; SHUSTER, A.A., red.

Ialta. Yalta. Kiev, Mystetstvo, 1964. 87 p. (MIRA 17:12)

KRIVENKO, G.A.; SHUSTER, A.A., red.

Odessa. Kiev, Mystetstvo, 1964. 46 p.

BURMISTROV, N.S., inzh, [deceased]; GALKIN, M.A.; MATVEYEV, P.F.; NESHITOV, G.A.;  
OZHIMKOV, N.G.; VOSKRESENSKIY, B.V., ekonomist, retsenzent;  
KALININ, P.G., ekonomist, retsenzent; SHUSTER, A.I., ekonomist,  
retsenzent; SALYANSKIY, A.A., red.izd-va; EL'KIND, V.D., tekhn.red.

[Planning auxiliary shops in machinery manufacturing factories]  
Planirovanie vspomogatel'nykh tsekhov mashinostroitel'nogo zavoda.  
Pod red. N.S. Burmistrova. Izd. 2. Moskva, Gos. nauchno-tekhn.  
izd-vo mashinostroil. lit-ry, 1958. 278 p. (MIRA 12:2)  
(Machinery industry)

KHACHATUROV, T.S.. Prinsipalni uchastiye: BAKULEV, G.D., doktor ekon.nauk;  
VAYNSHTEYN, B.S.; VARENTSOV, Ya.P.; KLIMENKO, K.I., doktor ekon.  
nauk; KRASOVSKIY, V.P., kand.ekon.nauk; KURAKOV, I.G.; FERBERG,  
A.S., kand.ekon.nauk. SHUSTER, A.I., otv.red.; STREL'NIKOVA, M.A.,  
red.; GERASIMOVA, Ye.S., tekhn.red.

[Standard method for determining the economic effectiveness of capital  
investments and new technology in the national economy of the U.S.S.R.]  
Tipovaya metodika opredeleniya ekonomicheskoi effektivnosti kapital'nykh  
vlozhenii i novoi tekhniki v narodnom khoziaistve SSSR. Moskva, Gos-  
planizdat, 1960. 21 p. (MIRA 13:7)

1. Akademiya nauk SSSR.
  2. Chlen-korrespondent Akademii nauk SSSR (for Khachaturov).
  3. Institut ekonomiki AN SSSR (for Bakulev, Klimenko).
  4. Institut ekonomiki stroitel'stva Akademii stroitel'stva i arkhitektury SSSR (for Vaynshteyn).
  5. Gosplan SSSR (for Varentsov).
  6. Nauchno-issledovatel'skiy ekonomicheskii institut Gosplana SSSR (for Krasovskiy).
  7. Gosudarstvennyy nauchno-tekhnicheskii komitet SSSR (for Kurakov).
  8. Stroybank SSSR (for Ferberg).
  9. Nauchnyy sovet po probleme ekonomicheskoy effektivnosti kapital'nykh vlozheniy i novoy tekhniki (for Shuster).
- (Capital investments) (Machinery in industry)



SHUSTER, A.

Give attention to the problems of economic efficiency. NTO 2  
no.5:21-24 My '60 (MIRA 14:5)

1. Uchenyy sekretar' nauchnogo soveta Akademii nauk SSSR po  
probleme ekonomicheskoy effektivnosti kapital'nykh vlozheniy i  
novoy tekhniki, Chlen komiteta Vsesoyuznogo soveta nauchno-tekhnicheskogo  
obshchestva.

(Industrial management)

SHUSTER, A.

In the Academic Council on the Problem of the Economic Efficiency of  
Capital Investments and Modern Technology. Vop. ekon. no.3:148-150  
Mr '60. (MIRA 13:2)

1. Uchenyy sekretar' Nauchnogo soveta AN SSSR po probleme ekonomicheskoy  
effektivnosti kapital'nykh vlozheniy i novoy tekhniki.  
(Capital investments)

SHUSTER, A.I.

Conferences on problems in the economic efficiency of new  
equipment. Vest. AN SSSR 31 no.4:120-121 Ap '61. (MIRA 14:4)  
(Machinery in industry)

SHUSTER, A.

Studying the efficiency of capital investments. Vop. ekon. no. 5:  
148-150 My '62. (MIRA 15:6)  
(Capital investments)

KHACHATUROV, T.S., otv. red. Prinimali uchastiye: BOR, M.Z., kand. ekon. i istor. nauk, red.; BOL'SHAKOV, Ya.A., red.; DYLEVSKIY, A.A., red.; YEMEL'YANOV, A.D., kand. ekon. nauk, red.; KRASOVSKIY, V.P., red.; SHUSTER, A.I., red.

[Methodology for determining the economic efficiency of introducing new machinery, mechanization and automation of industrial production processes. Approved by the State Planning Commission of the U.S.S.R. on December 9, 1961] Metodika opredeleniia ekonomicheskoi effektivnosti vnedreniia novoi tekhniki, mekhanizatsii i avtomatizatsii proizvodstvennykh protsessov v promyshlennosti. Utverzhdeno 9 dekabria 1961 g. Moskva, Izdvo Akad. nauk SSSR, 1962. 45 p. (MIRA 15:11)

1. Russia (1923- U.S.S.R.) Gosudarstvennaya planovaya komissiya.
  2. Chlen-korrespondent Akademii nauk SSSR (for Khachaturov).
  3. Gosudarstvennyy planovyy komitet Soveta Ministrov SSSR (for Bor, Dylevskiy).
  4. Moskovskiy oblastnoy sovet narodnogo khozyaystva (for Bol'shakov).
  5. Nauchno-issledovatel'skiy ekonomicheskii institut Gosudarstvennogo ekonomicheskogo soveta pri Sovete Ministrov SSSR po tekushchemu planirovaniyu narodnogo khozyaystva (for Yemel'yanov, Krasovskiy).
  6. Akademiya nauk SSSR (for Shuster).
- (Technological innovations) (Automation)

SHUSTER, A., red.; VALUYEV, Yu., red.; KONTAR', Ye., tekhn.red.

[Odessa; photographic sketch] Odessa; fotocherk. Kiev,  
Gos.izd-vo izobraz.iskus. i muzykal'noi lit-ry USSR, 1960.  
1 v. (MIRA 14:4)

(Odessa--Views)

SHUSTER, A., red.; GURZHIY, M. [Hurzhii, M.], cekhn. red.

Krym. Crimea. Kyiv, Derzh.vyd-vo obrazotvorchoho mystetstva  
i muzychnoi lit-ry URSR, 1961. 1 v. (Chiefly illus).  
(MIRA 15:2)

(Crimea—Views)

PESTUN, V.P.; SHUSTER, A.O., red.; KONTAR, K.F., tekhn.red.

[The Ukraine in photographs; album compiled from photographs shown at two photoexhibitions: "Soviet Ukraine", 1960 and "The seven-year plan in action", 1961] Ukraina u fotoillu-stratsiakh; al'bom pobudovano na osnovi ekspozytsii respublikans'koi fotovystavky "Radians'ka Ukraina", 1960 r. Ta robit ukrains'kykh fotomaistriv, predstavlenykh na Vsesoiuznii vystav-tsi "Semyrichka v dii," 1961 r. Kyiv, Derzh. vyd-vo obrazo-tvorchoho mystetstva i muzychnoi lit-ry URSR, 1961. [11] p. illus.

— Supplement.

(MIRA 15:3)

(Ukraine--Views)



SHUSTER, A.Ya., podpolkovnik med. sluzhby; VERBYAKOVA, A.Ya., kapitan med.  
~~sluzhby~~

Intratracheal penicillin administration in lung suppurations. Voen.-med.  
zhur. no.6:21-25 Je '58. (MIRA 12:7)

(LUNG DISEASES, ther.

suppurative, penicillin, intratracheal admin. (Rus))

(PENICILLIN, ther. use

suppurative lung dis., intratracheal admin. (Rus))

KHOMENKO, V.A.; SHUSTER, A.O., red.; GURZHIY, M.Ye.[Hurzhii, M.IE.],  
tekhn. red.

[The southern coast of the Crimea] Pivdennyi bereg Krymu.  
Kyiv, Derzh. vyd-vo "Mystetstvo," 1963. 1 v. (MIRA 17:2)

ZAKHAROV, M.K.; BOYBISOZONOVICH, S.P.; SHUSTER, A.Ye.; REYNSBURG, A.M.;  
KOPKHOV, S.M.

Reducing electric motors of construction finishing machines.  
Stroi. i dor. mash. 10 no.8-17-19 Ag '65. (MIRA 18:9)

ZAKHAROV, M.K., kand. tekhn. nauk; BOYAR-SOZONOVICH, S.P., kand. tekhn. nauk;  
SHUSTER, A.Ye., inzh.; POL'SHINSKIY, V.M., inzh.

Reducing drum-type motors for driving belt conveyors. Energ.  
i elektrotekh. prom. no.4:41-42 O-D '65. (MIRA 19:1)

ZAKHAROV, MIKHAIL KONSTANTINOVICH, dotsent; BOYAR-SOZONOVICH,  
STANISLAV PAVLOVICH, dotsent; SHUSTER, ALEKSANDR YEFIMOVICH,  
inzh.

Method for mechanized arranging of the stator windings of  
converted asynchronous motors. Izv. vys. ucheb. zav.;  
elekromekh. 4 no.7:116-118 '61. (MIKA 14:7)

1. Kafedra elektricheskikh mashin Odesskogo politekhnicheskogo  
instituta (for Zakharov, Boyar-Sozonovich). 2. Odesskiy zavod  
stroitel'no-otdelochnykh mashin (for Shuster).  
(Electric motors, Induction--Windings)

ZABLONSKIY, K.I., kand. tekhn. nauk; ARTMENKO, V.I., kand. tekhn. nauk;  
SHUSTER, A.Ye., inzh.

Outlook for the manufacture of geared motors. Mashinostroenie  
no.5:98-100 S-O '64 (MIRA 1822)

BOYAR-SOZONOVICH, S.P., kand.tekhn.nauk; ZABLONSKIY, K.I., kand.tekhn.nauk;  
ZAKHAROV, M.K., kand.tekhn.nauk; SHUSTER, A.Ye., inzh.

Reduction motors with general industrial design. Energ. i elektrotekh.  
prom. no.2:38-39 Ap-Je '65. (MIRA 18:8)

VUL'FSON, V., dotsent; PUTOV, V., starshiy inzhener; SHUSTER, D., mladshiy  
nauchnyy sotrudnik

Ship laboratory for the analysis of petroleum products. Mor. flot 22  
no.7:23-25 J1 '62. (MIRA 15:7)

1. Leningradskoye vyssheye inzhenernoye morskoye uchilishche im.  
admirala Makarova.

(Lubrication and lubricants--Testing)  
(Marine diesel engines--Lubrication)



GOL'DENBERG, A.Ya.; BEGLYAROVA, N.T.; KURYACHAYA, D.K.; KLETSKINA, K.T.;  
BISKUBOVA, Z.O.; BAYRAMOV, M.N.; SHUSTER, D.Ye.; TOLL', M.Kh.

Prophylactic examination of the population for tuberculosis. Sov.  
med. 25 no.5:78-82 My '62. (MIRA 15:8)

1. Iz organizatsionno-metodicheskogo sektora (rukovoditel' - kand.  
med.nauk A.Ya.Gol'denberg) Khar'kovskogo instituta tuberkuleza i  
oblastnykh protivotuberkuleznykh dispanserov: Khar'kovskogo  
(glavnyy vrach N.T.Beglyarova), Dnepropetrovskogo (glavnyy vrach  
K.T.Kletskina), Zaporozhskogo (glavnyy vrach M.M.Bayramov) i  
Sevastopol'skogo gorodskogo dispansera (glavnyy vrach M.Kh.Toll').  
(TUBERCULOSIS—PREVENTION) (MEDICAL SCREENING)

SHUSTER, F.D.; TARASOV, N.I.

Bilateral tumor of retained testicles combined with pseudohermaphroditism. Vop. onk. 11 no.8:97-100 '65.

(MIRA 18:11)

1. Kafedra gospital'noy khirurgii (zav. - chlen-korrespondent AMN SSSR prof. F.G.Uglov) i kafedra urologii (zav. - prof. A.M. Gasparyan) I Leningradskogo meditsinskogo instituta imeni I.P. Pavlova.

L 58517-65 EWA(h)/EWT(1)/T Pz-6/Peb IJP(c)

ACCESSION NR. AP5016275

UR/0386/65/001/005/0001/0005

AUTHOR: Sirota, D.; Uritskiy, Z.; Shuster, G.

TITLE: Contribution to the theory of diamagnetism of semiconductors in a quantizing magnetic field

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 1, no. 5, 1965, 1-5

TOPIC TAGS: diamagnetic susceptibility, semiconductor diamagnetism, carrier scattering, optical phonon, quantizing magnetic field

ABSTRACT: The purpose of the investigation was to ascertain whether the diamagnetic susceptibility of the carriers in a quantizing magnetic field exhibits singularities similar to the singularities observed in the scattering of the carriers by optical phonons. The authors start with the Hamiltonian

$$H = \sum_p \epsilon_p a_p^+ a_p + \sum_q \omega_q (c_q^+ c_q + 1/2) + \sum_{pp'q} G_{pp'q} (1_{pp'q} a_p^+ c_q a_{p'} + \text{Herm. conj.})$$

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ACCESSION NR: AP5016275

and obtain by means of a procedure described elsewhere (ZhETF v. 49, 1965) the following carrier spectrum in the second order of the interaction:

1965)

$$E = \epsilon_{p'} - \sum \int d^3q \left[ \frac{R^2 |L_n^{n'-n}(q_{\perp}^2)|^2 N_0}{(\epsilon_{n'p'_z+q_z} - \epsilon_{mp'_z} - \omega)} + \frac{R^2 |L_n^{n'-n}(q_{\perp}^2)|^2 (1 + N_0)}{(\epsilon_{n'p'_z-q_z} - \epsilon_{mp'_z} + \omega)} \right]$$

The final expression for the diamagnetic susceptibility is:

$$\begin{aligned} \mu = \frac{N}{\beta H} \frac{\partial \ln z}{\partial H} = \mu_0 + \frac{R^2 e (2m^*)^{1/2} N}{\hbar^2 H c \beta^{3/2} z_0} \sum_{nn'} K_{nn'} e^{-\beta \Omega (n+1/2)} \{ (1 + N_0) [\Omega (n' - n) + \omega]^{1/2} \\ + N_0 [\Omega (n' - n) - \omega]^{-1/2} - \frac{\beta \Omega (n + 1/2)}{H} [(1 + N_0) (\Omega (n' - n) + \omega)^{-1/2} \\ + N_0 (\Omega (n' - n) - \omega)^{-1/2}] - \frac{\Omega (n' - n)}{H} [(1 + N_0) (\Omega (n' - n) + \omega)^{-3/2} \\ + N_0 (\Omega (n' - n) - \omega)^{-3/2}] \} \end{aligned}$$

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ACCESSION NR: AP5016275

It is obvious that the resonant absorption of the optical phonons leads to peaks also when  $\omega$  is an integer multiple of  $\Omega$ . However, owing to the exponential decrease of  $N_0$ , for each succeeding peak with increasing  $\beta\omega$ , the most essential contribution will be made by the resonant absorption of the phonon at the peak  $\omega = \Omega$ . In the terms corresponding to resonant emission, the singularities will be observed at  $n > n'$ . An essential nonmonotonicity of the diamagnetic susceptibility is expected only when  $\omega = \Omega$ . A complete calculation, with account of attenuation in the carrier spectrum, entails no difficulty of principal nature but is technically very cumbersome. The calculation presented determines correctly the position of the resonant peaks. Orig. art. has: 8 formulas.

ASSOCIATION: Ural'skiy gosudarstvennyy universitet im. A. M. Gor'kogo (Ural State University)

SUBMITTED: 14Apr65

ENCL: 00

SUB CODE: SS, OP

NR REF SOV: 003

OTHER: 001

*bjp*  
Card 3/3

L 2962-66 FSS-2/EWT(1)/FS(v)-3/EWA(d)  
ACCESSION NR: AT5023566

TT/GS/GW

UR/0000/65/000/000/0065/0077

AUTHOR: Lebedinskiy, A. I.; Glovatskiy, D. N.; Tulupov, V. I.; Khlopov, B. V.; Fomichev, A. A.; Shuster, G. I. 7.  
Btl

TITLE: Infrared spectrophotometry of the Earth's thermal radiation 55.4

SOURCE: Vsesoyuznaya konferentsiya po fizike kosmicheskogo prostranstva. Moscow, 1965. Issledovaniya kosmicheskogo prostranstva (Space research); trudy konferentsii. Moscow, Izd-vo Nauka, 1965, 65-77

TOPIC TAGS: spectrophotometer, IR spectrum, instrumentation satellite, thermal radiation, atmospheric radiation, radiation intensity, radiation spectrometer/Cosmos 45 satellite

ABSTRACT: Results and equipment used in an experimental study of the energy distribution of the Earth's thermal radiation are reported. A diffraction scanning spectrophotometer mounted on Cosmos-45 comprised the basic equipment. The spectrophotometer was designed to measure thermal radiation in two bands, 7-20  $\mu$  and 14-38  $\mu$ . The spectral resolution for the first band ranged from 1.4  $\mu$  for the 7- $\mu$  wavelength to 1.1  $\mu$  for the 18- $\mu$  wavelength. For the second band, the range was from 2.8  $\mu$  for

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L 2962-66

ACCESSION NR: AT5023566

the 14- $\mu$  wavelength to 2.1  $\mu$  for the 36- $\mu$  wavelength. The instantaneous field of vision of the optical system was 1°46' x 2°20', encompassing a radiating-surface area of 7.5 x 10 km at the average altitude of 250 km. The instrument was capable of field of vision scanning within  $\pm 8^{\circ}30'$ . Spectral intensity measurements were carried out at  $\lambda = 9.5 \pm 0.6 \mu$  for the first band and  $\lambda = 18.5 \pm 1.35 \mu$  for the second. Semiconductor bolometers with a sensitive area of 1 mm<sup>2</sup> were employed as radiation sensors. Radiation detected by the bolometers was converted into electrical signals with a frequency of 27 cps. The signals were amplified and converted into d-c voltages proportional to the radiation flux. To measure cloud cover below the satellite, a photometer operating at 6000-8000 Å with a resolution of about 30 km was used. From the data obtained during the flight of Cosmos 45, the following conclusions concerning the intensity of the Earth's thermal radiation were drawn: 1) The intensity at the minimum of the absorption band near 15  $\mu$  is almost constant. 2) A close correlation between the intensities at the other wavelengths was noted. This provides evidence that the effective radiation levels differ but slightly for various regions of the spectrum within 8-35  $\mu$ . 3) The lower layers of the troposphere are the basic source of the thermal radiation leaving the Earth's atmosphere. 4) There is a strong variable intensity of the ozone band with its center at 9.6  $\mu$ . Orig. art. has: 14 figures.

[CS]

ASSOCIATION: none  
Card 2/3

L 2962-66

ACCESSION NR: AT5023566

SUBMITTED: 02Sep65

ENCL: 00

SUB CODE: ES, SV

NO REF SOV: 004

OTHER: 007

ATD PRESS: 7109

BVK  
Card 3/3

13



L 63102-65 EWT(d)/EWT(1)/T/EWA(h) IJP(c) AT

ACCESSION NR: AP5019231

UR/0056/65/049/001/0182/0187

AUTHOR: Uritskiy, Z. I.; Shuster, G. V.

TITLE: Use of Green's function in the theory of optical properties of  
semiconductors

21  
20  
P

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 49, no. 1, 1965,  
182-187

TOPIC TAGS: Green function, optical property, absorption, dispersion, resonance  
line shape, magneto-optic resonance, free carrier absorption

ABSTRACT: The authors consider the application of the Green's function method to the theory of the dispersion and absorption of electromagnetic radiation in semiconductors, and also to the theory of resonance-line shape. The advantage claimed for this method (over the approach involving current density and conductivity) is that it permits a simple determination, by means of a unified scheme, of the line shape in the case of resonance absorption, since the damping of the quasiparticles that absorb the photon is also included in the imaginary part of the spectrum in accordance with a definite rule. Expressions are obtained in closed form for the optical constants and the line

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L 63102-65

ACCESSION NR: AP5019231

shape, by finding the energy spectrum of the photons. The method developed is applied to the theory of the line shape of magneto-optic resonance and to the theory of the absorption of radiation by free carriers. It is shown that in a quantizing magnetic field resonance oscillations can occur in scattering both by optical and acoustical phonons. Orig. art. has: 29 formulas. [02]

ASSOCIATION: Ural'skiy gosudarstvennyy universitet (Ural State University)

SUBMITTED: 18Dec64

ENCL: 00

SUB CODE: SS, OP

NO REF SOV: 004

OTHER: 004

ATD, PRESS: 4074

*lab*  
Card 2/2

I. 8479-66 EWT(1)  
ACC NR: AP5027429

IJP(c)

SOURCE CODE: UR/0181/65/007/011/3415/3417

AUTHOR: <sup>55 54</sup>Uritskiy, Z. I.; <sup>55 54</sup>Shuster, G. V.

ORG: Ural State Institute im. A. M. Gor'kiy, Sverdlovsk (Ural'skiy gosudarstvennyy universitet) <sup>44, 55</sup> 54 B

TITLE: Theoretical study of intraband magneto-optical effects

SOURCE: Fizika tverdogo tela, v. 7, no. 11, 1965, 3415-3417

TOPIC TAGS: Faraday effect, <sup>21, 44, 55</sup>magneto-optic effect, semiconductor band structure, semiconductor theory, theoretic physics

ABSTRACT: The Faraday and Voigt magneto-optical effects are studied with regard to transitions with a change in spin direction. A formula is derived for the angle of rotation of the polarization plane for the Faraday effect. The first term of this equation describes ordinary rotation due to transitions between Landau levels. The second term accounts for rotation due to spin transitions. The contribution from this second term may be considerable for bands with a large  $g$ -factor. An equation is found for phase discontinuity in the case of the Voigt effect. The second term in this formula accounts for combined transition and the third describes spin inversion. These formulas may be used to find conditions of resonance spin as a function of frequency.

Card 1/2

I. 8979-66

ACC NR: AP5027429

Analysis of intraband Faraday and Voigt effects in lattice-type electric and magnetic fields shows that the forms of these expressions are invariant for simple bands. Orig. art. has: 9 formulas.

SUB CODE: 20/

SUBM DATE: 17May65/

ORIG REF: 002/

OTH REF: 001

  
Card 2/2

L 22628-66 T/EWA(h) IJP(c) AT

ACC NR: AP6002049

SOURCE CODE: GE/0030/65/012/002/K101/K104

AUTHOR: Uritsky, S. I.; Shuster, G. V.

60  
B

ORG: Ural State University, Sverdlovsk

TITLE: Effect of <sup>2/1, 4/1, 5/5</sup> spin magnetophonon interaction on the <sup>2/1, 4/1, 5/5</sup> light absorption in semi-conductors

SOURCE: Physica status solidi, v. 12, no. 2, 1965, K101-K104

TOPIC TAGS: magnetic field, magnetophonon, phonon, phonon interaction, ~~acoustical~~ photon, ~~optical phonon~~, photon, light absorption, semiconducting material

ABSTRACT: In an earlier study (Zh. eksper. teor. fiz. 49, 182, 1965) the authors have shown that the interaction with phonons in quantum magnetic fields leads to new resonance effects. The present paper deals with transitions involving spin inversions of electrons due to interaction with acoustical phonons, optical phonons, and photons producing additional resonance peaks in the absorption. Mathematical expressions for spin inversion by photons, acoustical phonons and optical phonons are proposed. It is shown that spin inversion is mainly caused by transversal acoustical phonons, and a mathematical expression is given to describe it. A formula is also suggested to describe the spin inversion of an electron by a photon of polarization and interaction with acoustical and optical phonons. When the resonance condition  $\Delta = 0$  is realized, the absorption index has a logarithmic

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2

L 22628-66

ACC NR: AP6002049

singularity. The form of resonance peaks is determined by damping of carrier states. According to the authors, spin inversion induced by optical phonons does not result in resonance oscillations of the absorption index. Orig. art. has: 3 formulas.[LD]

SUB CODE: 20/ SUBM DATE: 28Oct65/ ORIG REF: 004/ OTH REF: 002/

Card

2/2 ULR

L 46935-66 FWI(1) (c) WW/GG

SOURCE CODE: UR/0181/66/008/005/1621/1622

ACC NR: AP6015495

58  
B

AUTHOR: Uritskiy, Z. I.; Shuster, G. V.; Kozinskaya, A. I.

ORG: Ural State University im. A. M. Gor'kiy, Sverdlovsk (Ural'skiy gosudarstvennyy universitet)

TITLE: On the theory of <sup>2/</sup>light absorption by carriers in a quantized magnetic field

SOURCE: Fizika tverdogo tela, v. 8, no. 5, 1966, 1621-1622

TOPIC TAGS: light absorption, carrier scattering, resonance scattering, cyclotron resonance

ABSTRACT: An expression for the light absorption coefficient is developed for the case where the principal scattering mechanism is the scattering of the current carriers on an ionized admixture, which apparently takes place at low temperatures. It appears that the coefficient of radiation absorption in a quantized magnetic field has resonance peaks when  $\omega_k = \omega_c^n$ , where  $\omega_k$  is the photon frequency. When  $n=1$ , the resonance coincides with the cyclotron resonance. It follows that the cyclotron resonance line cannot be determined by this type of scattering. This confirms a previously derived conclusion for the case where the scattering takes place on phonons. Orig. art. has: 3 formulas.

SUB CODE: 20/

SUBM DATE: 29Nov65/

ORIG REF: 002

Card 1/1 *all*

ZIGMANTOVICH, M.; SHUSTER, I.

Using natural gasoline to improve automobile fuel quality. Avt.  
transp.33 no.9:20-21 S'55. (MLRA 8:12)

1. Kuybyshevskoye tovarno-transportnoye upravleniye Glavneftesbyta  
(for Zigmantovich) 2. Kuybyshevskiy oblastnoy avtotrest (for Shuster)  
(Gasoline)



SHUSTER, I.

New mechanized repair shops in automotive transportation units.  
Avt. transp. 37 no.7:25-26 JI '59. (MIRA 12:10)

1. Glavnyy inzhener Kuybyshevskogo avtotresta.  
(Motortrucks--Maintenance and repair)

SHUSTER, I., inzh.

Building-up machine parts by pulsation welding. Avt. transp. 37  
no.9:23-24 S '59. (MIRA 12:12)  
(Electric welding)

SHUSTER, I.

Utilization of resources. Avt. transp. 37 no.10:13-14 0 '59.  
(MIRA 13:2)

1. Glavnyy inzhener Kuybyshevskogo avtotresta.  
(Tractor trains)

BULYKIN, V.M.; SHUSTER, I.I.

Pulse transformer for the modulator of an injector in a linear  
electron accelerator. Uskriteli no. 5:175-186 '63. (MIRA 17:4)

SHUSTER, K.Sh.; EL'KIN, A.G.

The UVL-4 ultrasonic tinning bath. Biul.tekh.-ekon.inform.Gos.nauch.-  
issl.inst.nauch.i tekh.inform. no.12:64-65 '63. (MIRA 17:3)

SHUSTER, L. A. 12

CA

Drying macroni in Igetro driers in the Moscow Macaroni Works. L. A. Shuster. *Pishcheyaya Prom.* 1949, No. 3, 89-9. —Time of drying macroni to 13.5 - 1% moisture in Igetro driers was shortened from 18 to 20 hrs. to about 10 hrs. and the quality of product was improved. A major factor was temp. control. An even temp. of 141° caused no more damage than fluctuating temps. averaging only 40°. The Igetro drier was modified by omitting the sealed chamber after the 2 drying chambers. The Igetro 3-chamber drier is slower than the 2-chamber drier, but has about 10.5% greater capacity. Julian F. Smith

ASS. S. L. A. METALLURGICAL LITERATURE CLASSIFICATION

COMMON ELEMENTS

COMMON SYMBOLS

LIST AND LETTERS

GROUPS

INDICES

LIST AND LETTERS

GROUPS

INDICES

SHUSTER, L.A.

Case of fracture of the vertebral column in a seven-months-old  
child. Sud.-med.ekspert. 2 no.4:54 O-D '59. (MIRA 13:5)  
(SPINE--FRACTURE)

SHUSTER, L. P.

2382 Blizhayshiyе Zadachi Mekhanizatsii Kozhevennogo Proizvodstva. Degkaya  
Prom-st', 19.9. No. 6, s. 8-9.

SO: LETOPIS NO. 31, 1949



SHUSTER, L.P., Chgo.

Shoe Machinery

"Construction and adjustment of shoe machinery." V.N. Levinson. Reviewed by Eng. L.P. Shuster. *Ing. prom.* 12, no. 7, 1952.

9. Monthly List of Russian Accessions. Library of Congress, NOVEMBER 1952, ~~1953~~, Uncl.

SHKTEP, B.Sh., inzh.

Effect of cutting conditions on the wear of cutting tools.  
Vest. mashinostr. 45 no.1:65-68 Ja '65. (MIRA 18:3)

SHUSTER, M.A. (Moskva)

Surgical therapy of facial paralysis in fractures of the temporal bone. Vop.neirokhir. 23 no.3:32-35 My-Je '59. (MIRA 12:8)

1. Klinika bolezney ukha, gorla i nosa TSentral'nogo instituta usovershenstvovaniya vrachey.

(TEMPORAL BONE, fract.

causing facial paralysis, surg. (Bus))

PRESSMAN, L.P., prof., red.; FRANTSEV, V.I., doktor med. nauk, red.;  
LEONENKO, A.V., red.; SMIRNOV, B.V., red.; SHUSTER, M.A.,  
kand. med. nauk, red.; ZAVRAZHIN, N.M., red.; URSOV, I.G.,  
kand. med. nauk, red.

[Problems of clinical medicine and occupational pathology]  
Voprosy klinicheskoi meditsiny i profpatologii. Moskva,  
1965. 143 p. (MIRA 18:4)

1. Moscow. Oblastnoy nauchno-issledovatel'skiy klinicheskiy  
institut.

PRESSMAN, L.P., doktor med. nauk, red.; LUBOV, S.I., prof. red.;  
ZHEBRIVAN, A.T., st. nauchn. sotr., red.; BRIZ, V.Ye.,  
red. red. med. red.; KRYVAKHIN, I.S., red.; KRYVILICH,  
I.M., red.; KIRILOV, B.V., red.; BUDNIK, S.S., kand. med.  
nauk, red.

[Problems of practical medicine] Voprosy prakticheskoi me-  
ditsiny; sbornik trudov. Moskva, 1960. - 14 p.

(U.S.S.R. 17:9)

1. Moscow. Moskvoyskiy oblastnoy nauchno-issledovatel'skiy  
institut imeni N.F.Vladimirovogo. N. Gavrovyuchenskiy Fervoy  
khirurgicheskoy kliniki Moskvoyskogo oblastnogo nauchno-  
issledovatel'skogo klinicheskogo instituta im. N.F.Vladimir-  
skogo (for Makhev).

CHIBTER, N.A., Cand Med Sci - - (diss) "Concerning the question  
on the surgical treatment of otogenic paralysis of the  
facial nerve," Moscow, 1960, 17 pp (Academy of Medical Sciences  
USSR) (KL, 34-60, 12)

SHUSTER, M.A.

Indications and methods in the surgical treatment of otogenic  
paralyses of the facial nerve. Vest.otorin. 22 no.3:64-71  
My-Je '60. (MIRA 13:10)

(PARALYSIS, FACIAL)

UMANSKIY, K. G., kand. med. nauk; SIBORCHUK, T. V.; SHUSTER, M. A.  
(Moskva)

Gustatory sensitivity in peripheral lesions of the facial nerve.  
Klin. med. no.9:70-74 '61. (MIRA 15:6)

1. Iz klinicheskogo otdeleniya (zav. - prof. Ye. N. Bartoshevich)  
Instituta po izucheniyu poliomiylita AMN SSSR (dir. - chlen-  
korrespondent AMN SSSR prof. M. P. Chumakov), kafedry bolezney  
ukha, gorla i nosa (zav. - prof. I. I. Potapov), Tsentral'nogo  
instituta usovershenstvovaniya vrachey (dir. M. D. Kovrigina)  
na baze 2-y klinicheskoy infektsionnoy bol'nitsy (glavnyy vrach  
A. M. Pyl'tsova)

(NERVES, FACIAL—DISEASES) (TASTE)



SHUSTER, M.A., kand.med.nauk

Immediate and late results of surgery in paralysis of the  
facial nerve. Vest.otorin. no.5:52-57 '62. (MIRA 15:9)

1. Iz kafedry bolezney ukha, gorla i nosa (zav. - prof. I.I.  
Potanov) Tsentral'nogo instituta usovershenstvovaniya vrachey,  
Moskva.

(PARALYSIS, FACIAL)

SHUSTER, M.A., kand.med.nauk

Case of complete subcutaneous avulsion of the trachea. Zhur.ush., nos.  
i gor.bol. 22 no.6:60-61 N-D'62. (MIRA 16:7)

1. Iz otolaringologicheskogo otdeleniya 2-oy gorodskoy bol'nitsy  
g. Klina (glavnyy vrach - B.V.Smirnov)  
(TRACHEA—WOUNDS AND INJURIES)

UMANSKIY, K.G.; SHUSTER, M.A.; YUDIN, L.A.

Determination of the extent of a lesion of the facial nerve  
by the saliva radioindication method. Med. rad. 7 no.12:  
21-25 D'62. (MIRA 16:10)

1. Iz kafedry rentgenologii i radiologii (zav. - prof. L.D.  
Lindenbraten) I Moskovskogo ordena Lenina meditsinskogo in-  
stituta imeni I.M. Sechenova i Instituta po izucheniyu po-  
liomiyelita i virusnykh entsefalitov AMN SSSR.



SOV/137-59-3-6884

Translation from: Referativnyy zhurnal Metallurgiya, 1959, Nr 3, p 281 (USSR)

AUTHOR: Shuster, M. D.

TITLE Rationalization of the Thermal Processes of the Heating of Metal in the Forge Shop of the ChTZ (Chelyabinsk Tractor Plant) (Ratsionalizatsiya teplovykh protsessov nagreva metalla v kuznechnom korpusе ChTZ)

PERIODICAL V sb. Chelyabinsk kuznetsy v bor'be za tekhn. progress Chelyabinsk, 1958, pp 44-56

ABSTRACT: A presentation of a number of examples illustrating the rationalization of heating operations: Modified furnaces for heating of rods prior to cutting as well as furnaces for heating of metal strips employed in the manufacture of leaf springs; modification of methods of heating of blanks in accordance with technological changes; mechanization of operations of charging of forgings into the rotary furnace; utilization of heat from heated blanks after stamping for tempering operations (tension spring) and for the elimination of heat-treatment procedures (caterpillar track links). An automatic temperature-control system planned for the heat-treatment furnaces operating on producer gas is described. Ye L.

Card 1/1

SHUSTER, M.D., inzh.; GUREVICH, Yu.G.

From practices of the heat-treating shop of the Chelyabinsk  
Tractor Plant. Metalloyed. i term.obr.met. no.12:30-38 D '61.  
(MIRA 14:12)

(Chelyabinsk--Tractor industry)  
(Furnaces, Heat-treating)

SHUSTER, M. I.

heparin and its properties. M. I. Shuster, M. S. Gaevskaya, M. I. Telicheva, E. N. Tishina and V. A. Negovskii. *Bull. biol. med. expl. U. R. S. S. S.* 5, 329-331 (in English) (1938). Heparin is prepared in the following manner: The lungs of healthy cattle are freed of fat and minced. The mince is allowed to stand 5-6 days under toluene to complete autolysis, filtered and extd. for 1 hr. at 50° with 1400 cc. of 0.5 N NaOH and 140 cc. of satd. (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub> per kg. of mince. The temp. is then rapidly raised to 80-85° and kept there for 10 min., the soln. is filtered and the residue pressed. The soln. must remain alk. to phenolphthalein throughout. The filtrate is acidified to Congo red with H<sub>2</sub>SO<sub>4</sub>, heated to 60° for 10 min., filtered and washed with hot 0.1% H<sub>2</sub>SO<sub>4</sub>, 1 l. being used for each kg. of mince. The ppt. is stored under 95% EtOH for 15 hrs., filtered and dissolved in 0.25 N NaOH (150-200 cc. per kg. of mince). The soln. is treated with 1:4 HCl until colorless to phenolphthalein but still blue to litmus. Flocculation occurs and disappears on stirring. The soln. is then filtered through gauze and heparin is pptd. with Me<sub>2</sub>CO, washed with EtOH and dried at a temp. below 80°. The crude product is ground, dissolved in 60 vols. of distd. H<sub>2</sub>O, filtered, centrifuged and concd. *in vacuo*. The yield is 2-3 g. per kg. of mince. The product consists of light scales readily sol. in H<sub>2</sub>O and contg. 10.52% N, 3.83% S, 5.07% P, 23.36% ash and 13.00% moisture. One g. of the product will stabilize 3500-5000 cc. of blood for 24 hrs. S. A. Karjala

ASS. S.L.A. METALLURGICAL LITERATURE CLASSIFICATION

SHUSTER, M. I.  
CA

11F

Variation of the content of inorganic phosphorus and readily hydrolyzable phosphorus of adenosine triphosphate (ATP) in the brain tissues of dogs during dying and resuscitation. M. I. Shuster (Ministry Health, Moscow). *Trkh. Patol.* 14, No. 1, 36-45 (1952). - Severe anoxia caused by mortal blood letting (5.5-6% of body wt.) causes an increase of inorg. phosphate in the brain tissue and a decrease of org. phosphate, particularly that of ATP. Resuscitation (blood transfusion with adrenaline and glucose) leads to demineralization of phosphate and resynthesis of ATP. When self-respiration manifests itself again, the level of inorg. phosphate and that of ATP are substantially normal. G. M. Kosolapoff

SHUSTER, M.I.

Creatine-phosphoric acid content in the brain in dying and in subsequent resuscitation. Arkh. pat., Moskva 15 no.2:55-60 Mar-Apr 1953.  
(CJML 24:3)

1. Of the Laboratory of Experimental Physiology for Revival of the Organism (Head -- Prof. V. A. Negovskiy) of the Academy of Medical Sciences USSR.



ACC NR: AP6015638

SOURCE CODE: UR/0413/66/000/009/0046/0046

INVENTORS: Shuster, O. I.; Makovkin, V. D.; Konstantinov, V. G.

ORG: none

TITLE: Transistorized dc to ac bridge converter. Class 21, No. 181186

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 9, 1966, 46

TOPIC TAGS: dc to ac converter, transistorized circuit

ABSTRACT: This Author Certificate presents a transistorized dc to ac converter with output voltage regulation by voltage pulse width modulation. To increase the reliability of operation and to simplify the device, two series connected transistors operate as the master oscillator voltage amplifier (see Fig. 1). The other two

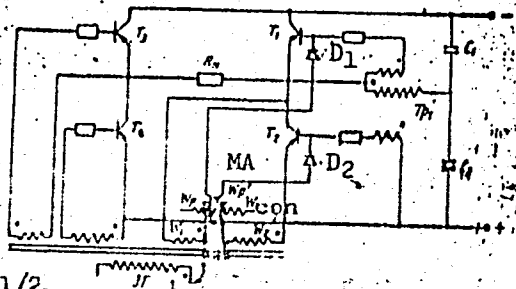


Fig. 1.  $T_1$  and  $T_2$  - self-excited oscillator transistors; MO - master oscillator;  $T_3$  and  $T_4$  - master oscillator voltage amplifier transistors; MA - magnetic amplifier

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UDC: 621.314.57:621.302.3

ACC No. AP6015630

Series connected transistors operate as a self-excited oscillator synchronized from the same master oscillator through a magnetic amplifier (or other pulse-width modulator). Orig. art. has: 1 diagram.

SUB CODE: 09/      SUBM DATE: 11Nov63

Card 2/2

SUUSTER, R. L.

Journal of The American Ceramic  
Society June 1, 1954  
Glass

② 3  
✓ ~~Determination of the softening temperature of glass. L. K. KOVALEY AND R. L. SUUSTER. Vestnik Akad. Nauk Kazakh. S.S.R., 1953, No. 1, pp. 81-82.~~ The method is based on the measurement of the sagging of glass threads during heating. Four or five threads about 150 $\mu$  in diameter and not less than 70 to 75 mm. long are placed across a V-shaped trough and heated at 5° to 6°/min. in a horizontal type electric furnace. Sagging is observed visually with a binocular lens (magnification up to 40). Deflection of 1 to 0.5 mm. is taken as the initial softening point. Results agree closely with those obtained by the method of vertically suspended threads. The error is  $\pm 5^\circ$  to  $10^\circ$ .

~~D.K.~~  
MF  
10-1-54

SHUSTER, R.L.

Chemical Abstracts  
May 25, 1954  
Cement, Concrete and  
other Building Materials

(3)  
Use of foam glass as a structural material. L. K. Kovalev  
and R. L. Shuster. *Vestnik Akad. Nauk Kazakh. S.S.R.*  
10, No. 11 (Whole No. 104), 98-103 (1953).—Several brands  
of foam-glass bricks were compared with usual building  
bricks as to water retention, strength, and durability. The  
water retention of foam-glass brick is generally below that of  
usual brick, provided the pores are of closed type in the  
former. For mortar material the foam-glass units require  
mixts. of cement-CaO-sand which have to be properly  
formulated; simple mixts. with clay give unsatisfactory  
binding. G. M. Kosolapoff