VILENSKIY, D. G., REMEZOV, N. P., SOBOLEV, S. S.

Forest Soils

Erroneous views on the fertility of forest soils. Les i step' 14 No. 5, 1952.

Monthly List of Russian Accessions, Library of Congress, August 1952. UNCLASSIFIED.

SOBOLEV, S. S., SADOVNIKOV, I. F.

Erosion

Map of the depth of the principal regional base-levels of erosion in the U. S. S. R. Pochvovedenie No. 2, 1953.

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

SOBOLEV, S.S.

The fight against soil erosion in the Central Russian Upland. Trudy Pochv. inst. 40:5-11 '53. (MLRA 6:11)

(Soil conservation)

SOBOLEV, S.S.

USSR

9894* The Spread of Soil Erosion and Its Prevention in Regions Where Virgin and Long-Unused Soils Are Being Put Into Use. **Rasprostranenie erozii pochv i preduprezhdenie ee v raionakh osvoeniia tselinnykh i zalezhnykh zemel'.** (Russian.) S. S. Sobolev and I. F. Sadovnikov. *Pochvovedenie*, 1955, no. 1, Jan., p. 16-24 + 4 plates.

Types of plowing, fallow strips, trenching, other measures against washout and wind. Use of forest and grass belts. Map.

J-5

USSR / Soil Science. Cultivation. Melioration. Erosion.

Abs Jour: Ref Zhur-Biol., No 8, 1958, 34445.

Author : Sobolev, S.
Inst : Not given.
Title : Soil Erosion Control

Orig Pub: Sots. S. kh., 1956, No 3, 83-90.

Abstract: Under various conditions of arid and half-arid soils in the areas of the land, it is recommended in soil cultivation to provide for a maximum conservation of stubble. An effective method of protection against erosion appears to be the grooving type of sowing of winter and summer cultivations. Analyzed are the optimum conditions of application of various fertilizers, the heaping of slopes, wood-planting and examples of rational

Card 1/2

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SOBOLEV, S.S.; SADOVNIKOV, I.F.

Controlling wind and water erosion of soils in the U.S.S.R.
Pochvovedenie no.7:18-29 Jl '56. (MLRA 9:11)

1. Pochvennyy institut imeni V.V.Dokuchayeva Akademii nauk SSSR.
(Soil conservation)

SOBOLEV, S.S., doktor sel'skokhozyaystvennykh nauk; MALYSHKIN, M.N.

Soil and farm land classification. Zemledelie 6 no.10:56-66
(Soils--Classification)

SOBOLEV, S.S., red.

[Controlling soil erosion and its prevention on virgin and waste lands under reclamation] Bor'ba s eroziei pochv i ee preduprezhdenie v raionakh osvoeniia tselinnykh i zalezhnykh zemel'. Moskva, Sel'-khozgiz, 1957. 98 p. (MIRA 11:2)
(Erosion)

SOBOLEV, S.S., prof., doktor sel'skokhozyaystvennykh nauk, red.; KOREYSHO, Ye.G.; PAVLOVA, M.M., tekhn. red.

[Soil erosion and its control; conference materials] Eroziia pochv i bor'ba s neiu; materialy soveshchaniia. Pod red. S.S. Soboleva. Moskva, Gos. izd-vo sel'khoz. lit-ry, 1957. 679 p. (MIRA 11:7)

1. Vsesoyuznoye soveshchaniye po bor'be s eroziyey pochv, 1955.
(Erosion)

SOBOLEV, Sergey Stepanovich, prof.; KATSNEL'SON, S.M., red.; TROF'IMOV, A.V., tekhn.red.

[Controlling soil erosion] Bor'ba s eroziei pochv. Moskva, Izd-vo "Znanie," 1958. 31 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii. Ser. 5, no.7) (MIRA 11:5)
(Erosion)

GORSHENIN, Konstantin Pavlovich, prof., laureat Leninskoy premii; ALEKSANDROVA, Lyudmila Nikolayevna; ANTIPOV-KARATAYEV, Ivan Nikolayevich; GARKUSHA, Ivan Fedoseyevich; SOBOLEV, Sergey Stepanovich; PLESHKOV, B.I., red.; SOKOLOVA, N.N., tekhn.red.

[Soil science] Pochvovedenie. Pod obshchei red. K.P.Gorshenina. Moskva, Gos.izd-vo sel'khoz.lit-ry, 1958. 438 p. (MIRA 12:8)

1. Omskiy sel'skokhoz.institut (for Gorshenin). 2. Leningradskiy sel'skokhoz.institut (for Aleksandrova). 3. Pochvennyy institut Akademii nauk SSSR (for Antipov-Karatayev, Sobolev). 4. Belorusskaya sel'skokhoz.akademiya (for Garkusha).
(Soils)

SOBOLEV, S.S., doktor sel'skokhoz.nauk

Soil cultivation practices in areas of water and wind erosion. Zem- (MIRA 12:11)
ledelie 6 no.8:3-8 Ag '58.
(Soil conservation)

SOBOLEV, S.S.; MALYSHKIN, M.N.

Problems of the qualitative evaluation(classification) of soils of the U.S.S.R. [with summary in English]. Pochvovedenie no. 9:10-28 '58. (MIRA 11:10)

1. Pochvennyy institut imeni V.V.Dokuchayeva AN SSSR.
(Soils--Classification)

TYURIN, I.V.; SOKOLOV, A.V.; BUSHINSKIY, V.P.; SOBOLEV, S.S.; FRANTSESSON, V.A.; KARPINSKIY, N.P.; BALYABO, N.K.; GRINCHENKO, A.M.; KRUPSKIY, N.K.

Aleksei Nikanorovich Sokolovskii; obituary. Pochvovedenie no.10:124-125 O '59. (MIRA 13:2)
(Sokolovskii, Aleksei Nikanorovich, 1884-1959)

SOBOLEV, S.S.

Soil erosion control [with summary in English]. Izv. AN SSSR Ser. biol. 24 no.1:55-67 Ja-F '59. (MIRA 12:2)

1. Soil Institute, Academy of Sciences of the U.S.S.R., Moscow. (EROSION)

SOBOLEV, S.S.; VILENSKIY, D.G., prof., doktor geologo-mineralog. nauk, otv. red.; BOYARKINA, V.A., red.; KUZNETSOV, N.S., red. kart; GLEYKH, D.A., tekhn.red.

[Soil erosion and its control] Eroziia pochv i bor'ba s neiu. Moskva, Gos.izd-vo geogr.lit-ry, 1960. 173 p. (MIRA 14:5)

(Erosion)

SOBOLEV, Sergey Stepanovich, prof., doktor sel'skokhoz.nauk; TYURIN, I.V., akademik, otv.red.; PAVLOV, A.N., red.izd-va; BRUZGUL', V.V., tekhn.red.

[Erosion processes in the European part of the U.S.S.R. and their control] Razvitie erozionnykh protsessov na territorii Evropeiskoi chasti SSSR i bor'ba s nimi. Moskva, Izd-vo Akad. nauk SSSR. Vol.2. 1960. 247 p. (MIRA 14:2)
(Soil conservation)

SOBOLEV, S.S.

Life and activities of Nikolai Mikhailovich Sibirtsev.
Pochvovedenie no.7:3-7 '60. (MIRA 13:7)

1. Pochvennyy institut im. V.V.Dokuchayeva AN SSSR.
(Sibirtsev, Nikolai Mikhailovich, 1860-1900)

SOBOLEV, S. S.

D.G. Vilenskii. Pochvovedenie no.10:116-119 '60. (MIRA 13:10)
(Vilenskii, Dmitrii Germogenovich, 1892-1960)

SOBOLEV, S.S., prof., doktor sel'skokhozyaystvennykh nauk, MALYSHKIN, M.M.; SAVCHENKO, S.M.; RODIONOV, V.S.

Effectiveness of cultivation practices in the control of dust storms. Zemledelie 8 no.10:55-61 O '60. (MIRA 13:10)
(Dust storms) (Soil conservation)

SOBOLEV, Sergey Stepanovich, prof., doktor sel'skokhoz.nauk; KANTOROVICH, A.V., red.; ATROSHCHENKO, L.Ye., tekhn.red.

[Soil erosion and its control] Eroziia pochv i mery bor'by s nei. Moskva, Izd-vo "Znanie," 1961. 45 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii. Ser.5, Sel'skoe khoziaistvo, no.2). (MIRA 14:1)
(Erosion)

SOBOLEV, S.S.

[Preventing soil erosion and increasing soil fertility] Zashchita pochv ot erozii i povyshenie ikh plodorodiia. Moskva, Izd-vo sel'khoz.lit-ry, zhurnalov i plakatov, 1961. 230 p. (MIRA 15:10)

(Erosion) (Soil fertility)

VILENSKIY, Dmitriy Germogenovich, prof. pochvoved [deceased]; SOBOLEV, S.S., prof., red.; VASIL'YEVA, O.S., red.; GOROKHOVA, S.S., tekhn. red.

[Geography of soils] Geografiia pochv. Pod red. S.S.Soboleva. Moskva, Gos. izd-vo "Vysshaia shkola," 1961. 342 p. (MIRA 14:8)
(Soils)

SOBOLEV, S.S.

CIASTEA, St.

SURNAME (in caps); Given Names

Country: Rumania

Academic Degrees: Engineer

Affiliation: [not given]

Source: Bucharest, Revista de Geodezie si Organizarea Teritoriului, Vol 5, No 3, 1961, pp 78.

Data: "The Development of Erosion Processes in the European Part of the Territory of the Soviet Union and the Battle Against It," [- a review of SOBOLEV's Razvitie erozonnih protsessov na teritori evropeiskoi ciasti SSSR i borba s nimi. Vol II. Moscow, 1960.]

SOBOLEV, S.S.

(6)

BRAUDE, Izrail' D. — "Methods of forest improvement to prevent erosion"

LOFATIN, G. V., — "The intensity of water erosion on the territory of the USSR"

MESHCHERYAKOV, Yuriy A., — "The influence of movement of the crust of the earth on erosion processes"

PRESNYAKOVA, Galina A., — "Soil erosion caused by the irregular flow of ground waters and methods of combatting it"

SILVESTROV, S. I. — "On the division of territories subject to erosion in the USSR"

SOBOLEV, Sergey S. — "The principal types of soil erosion and the geographic distribution of erosion factors in the territory of the USSR"

reports to be submitted for the Intl. Association of Scientific Hydrology, Symposium on Continental Erosion, Bari, Italy 1-6 Oct 1962 sponsored by IUGG

TYURIN, I.V., akademik, glav. red.; ZONN, S.V., prof., otv. red.; ALEKSANDROVA, L.N., red.; ANTIPOV-KARATAYEV, I.N., red.; VERNANDER, N.V., red.; VOLOBUYEV, V.R., red.; DARASELIYA, M.K., red.; IVANOVA, Ye.N., red.; KACHINSKIY, N.A., red.; KONONOVA, M.M. red.; NOGINA, N.A., red.; RODE, A,A., red.; SOBOLEV, S.S., red.; SOKOLOV, A.V., red.; MARKOV, V.Ya., red. izd-va; ASTAF'YEVA, G.A., tekhn. red.

[Problems of soil research] Problemy pochvovedeniya. Moskva, Izd-vo Akad. nauk SSSR, 1962. 287 p. (MIRA 15:7)

1. Vsesoyuznoye obshchestvo pochvovedov. 2. Prezident Vsesoyuznogo obshchestva pochvovedov (for Tyurin).
(Soil research)

SOBOLEV, S.S., prof., doktor sel'skokhozyaystvennykh nauk

Controlling erosion in crop rotations including row-crops. (MIRA 15:11)
Zemledelie 24 no.6:22-27 Je '62.
(Soil conservation)

SOBOLEV, S.S., prof., doktor sel'skokhozyaystvennykh nauk

In agriculture the soil is the main means of production. Nauka i zhizn' 29 no.4:50-52 Ap '62. (MIRA 15:7)
(Erosion)

SOBOLEV, S.S., doktor sel'skokhozyaystvennykh nauk

Tasks in the control of soil erosion. Zemledelie 25 no.8:16-27 Ag '63. (MIRA 16:10)

1. Pochvennyy institut imeni V.V. Dokuchayeva.
(Soil conservation)

ZABOROVSKIY, Yevgeniy Pavlovich; LISIN, Serafim Sergeyevich; SOBOLEV, Sergey Stepanovich. Prinimali uchastiye: VERESIN, M.M.; RUBTSOV, V.G.; OBNOVLENSKIY, V.M., prof., retsenzent; SHARAPOV, A.N., inzh.-lesovod, retsenzent

[Forest plantations and forest drainage] Lesnye kul'tury i lesnye melioratsii. Moskva, Izd-vo "Lesnaia promyshlennost'," 1964. 391 p. (MIRA 17:5)

BRAUDE, Izrail' Danilovich; SOBOLEV, S.S., akademik, prof., otv. red.

[Soil erosion, drought and their control in the Central Chernozem Region] Eroziia pochv, zasukha i bor'ba s nimi v TsChO. Moskva, Nauka, 1965. 138 p. (MIRA 18:7)

1. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk imeni V.I.Lenina (for Sobolev).

L 46324-65 EWT(1)/EEC(b)-2/EWA(h) Peb

ACCESSION NR: AP5011883 UR/0120/65/000/002/0121/0126 30 24 B

AUTHOR: Gel'tsel', M. Yu.; Panfilov, A. D.; Sobolev, S. S.; Yudin, L. I. 25

TITLE: Some characteristics of hydrogen thyratrons in the nanosecond range

SOURCE: Pribory i tekhnika eksperimenta, no. 2, 1965, 121-126

TOPIC TAGS: thyratron, hydrogen thyratron / TGI hydrogen thyratron

ABSTRACT: The results are reported of an experimental investigation of the firing time, discharge-development time, firing-time certainty depending on the anode voltage, hydrogen pressure, and firing-pulse rise time of thyratrons. These thyratrons were tested: TGI-50/5, TGI 1-325/16, TGI 1-400/16, TGI 1-700/25, TGI 1-2500/35. Conditions were found which ensure the discharge-development delay within ±1 nsec, with a total delay behind the initiating pulse of 50—200 nsec, depending on the thyratron type. These results also hold true when several thyratrons are operating in parallel. The uncertainty is reduced to a fraction of a

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L 46324-65

ACCESSION NR: AP5011883

nanosecond when four TGI 1-325/16 thyratrons operate in parallel. The above results permitted building nanosecond-pulse generators having a pulse-height of up to 50 kv which have operated reliably. "In conclusion, the authors wish to thank A. A. Naumov for organizing the project, V. S. Panasyuk and Yu. Ye. Nesterikhin for their valuable advice, and S. Latushkin and A. Fatil'nikov for their help in carrying out the work." Orig. art. has: 8 figures and 1 table. [03]

ASSOCIATION: Institut yadernoy fiziki SO AN SSSR (Institute of Nuclear Physics, SO AN SSSR)

SUBMITTED: 21Feb64 ENCL: 00 SUB CODE: EC

NO REF SOV: 004 OTHER: 000 ATD PRESS: 4002

Card 2/2

L 34381-66 EWT(1)

ACC NR: AP6022004 SOURCE CODE: UR/0120/66/000/003/0101/0107

AUTHOR: Gel'tsel', M. Yu.; Panfilov, A. D.; Panasyuk, V. S.; Sobolev, S. S.; Yudin, L. I.

ORG: Institute of Nuclear Physics, SO AN SSSR, Novosibirsk (Institut yadernoy fiziki, SO AN SSSR)

TITLE: High-voltage nanosecond pulse generator

SOURCE: Pribory i tekhnika eksperimenta, no. 3, 1966, 101-107

TOPIC TAGS: nanosecond pulse, pulse generator, thyratron

ABSTRACT: A high-voltage pulse generator is described which develops 5—50 nsec square pulses of up to 50 kv with rise times from 1 to 5 nsec. The basic circuit consists of a thyratron, anode pulse-forming line, and a cathode output featuring a coaxial line with square-loop ferrite as a nonlinear pulse-forming element. In Fig. 1 is shown one design variant, and in Fig. 2 is shown the ferrite line detail. Another feature of the circuit is the balanced-T form of line termination, which has one arm shorted and the other terminated in a small lumped capacitance, providing a reflection-free pulse output. If the pulse were used, for example, to gate a particle beam passing between plane electrodes, the inherent capacity of the electrodes could act as the required terminating load. Design parameters, including coupling

Card 1/2 UDC: 621.374.2

ACC NR: AT7004004 SOURCE CODE: UR/0000/66/000/000/0278/0286

AUTHOR: Gel'tsel', M. Yu.; Panasyuk, V. S.; Panfilov, A. D.; Sobolev, S. S.; Yudin, L. I.

ORG: Institute of Nuclear Physics, SO AN SSSR (Institut yadernoy fiziki SO AN SSSR)

TITLE: Nanosecond-pulse generator intended for synchrotron inflector

SOURCE: Mezhvuzovskaya konferentsiya po elektronnym uskoritelyam. 5th, Tomsk, 1964. Elektronnyye uskoriteli (Electron accelerators); trudy konferentsii. Moscow, Atomizdat, 1966, 278-286

TOPIC TAGS: nanosecond pulse, pulse generator, synchrotron

ABSTRACT: The development of a 30-nanosecond-pulse generator is reported; rise time, 5 nsec; pulse height, 50 kv; repetition rate, 50 cps. The generator (see figure) comprises a switching hydrogen thyratron, a 5-m long externally magnetized oil-immersed ferrite line FL, and a T-shaper with one arm short-circuited and another connected to inflector plates C. The ferrite-line stability remains within 1 nsec if the voltage at each point is stabilized within 1%; with an

Card 1/2

SOV/98-58-11-9/15

AUTHORS: Sobolev, S.V. and Krylov, V.V., Engineers

TITLE: The Construction of a Prefabricated Reinforced-Concrete Spillway Dam (Sbornaya konstruktsiya zhelezobetonnoy vodoslivnoy plotiny). For Discussion Purposes (V poryadke obsuzhdeniya)

PERICDICAL: Gidrotekhnicheskoye stroitel'stvo, 1958, Nr 11, pp 48-50 (USSR)

ABSTRACT: The use of prefabricated reinforced-concrete parts in the construction of hydroelectric power plants may considerably shorten the construction period. The authors developed the plan of construction of a spillway dam from such blocks of a simple but universal shape suited for all fundamental structures of a hydraulic system. According to the authors such construction will need less concrete, speed-

Card 1/2

The Construction of a Prefabricated Reinforced-Concrete Spillway Dam
For Discussion Purposes

up, and simplify the building process, which will consist mainly of mechanized assembly of the structure. A detailed description of the proposed method is given. There are 3 diagrams and 1 table.

1. Dams--Construction 2. Reinforced concrete--Applications

Card 2/2

KRYLOV, V., inzh.; SOBOLEV, S., inzh.

Industrially sectional construction of navigational sluiceways. (MIRA 13:7)
Rech.transp. 19 no.5:36-38 My '60.
(Hydraulic engineering--Equipment and supplies)
(Precast concrete construction)

SOBOLEV, S.V.; GUSEVA, Ye.M., redaktor; NEKRASOVA, O.I., tekhnicheskiy redaktor.

[Design and maintenance of bast fiber drawing frame and roving machines] Ustroistvo i obsluzhivanie lentochnykh i rovnichnykh mashin dlia lubianykh volokon. Moskva, Gos. nauchno-tekhn. izd-vo Ministerstva promyshlennykh tovarov shirokogo potrebleniia SSSR, 1954. 187 p. (MLRA 7:11)
(Textile machinery)

VALOV, B.I., nauchnyy sotrudnik; SOBOLEV, S.V.

Simplified method for making rope yarn. Tekst.prom. 20 no.6:25-27 Je '60. (MIRA 13:7)

1. TSentral'nyy nauchno-issledovatel'skiy institut l'nyanogo volokna (for Valov). 2. Vedushchiy inzhener TSentral'nogo Konstruktorskogo byuro tekstil'nogo mashinostroyeniya (for Sobolev).
(Rope) (Spinning)

SOKOLOV, S.V.

The PG-300-P comb spinning machine. Biul. tekh.-ekon. inform. no. 2:50-51 '61. (MIRA 14:2)
(Spinning machinery)

SOBOLEV, S.V.

The LK-1-P, LK-2-P, and LK-3-P hemp-band processing machine. (MIRA 14:3)
Biul.tekh.-ekon.inform. no.3:43-44 '61.
(Textile machinery)

SOBOLEV, S.V.

The KFT-620-P and KFP-520-P twisting machines. Biul.tekh.-ekon. inform. no.7:62-64 '61. (MIRA 14:8)
(Textile machinery)

SOBOLEV, S.V.

The VP-350-P yarn-twisting machine. Biul.tekh.-ekon.inform. no.8:57-59 '61. (MIRA 14:8)
(Textile machinery)

SOBOLEV, S.V.

The VV-350-P cord-making machine. Biul.tekh.-ekon.inform.Gos. nauch.-issl.inst.nauch.i tekh.inform. no.3:42-44 '62. (MIRA 15:5)

(Textile machinery)

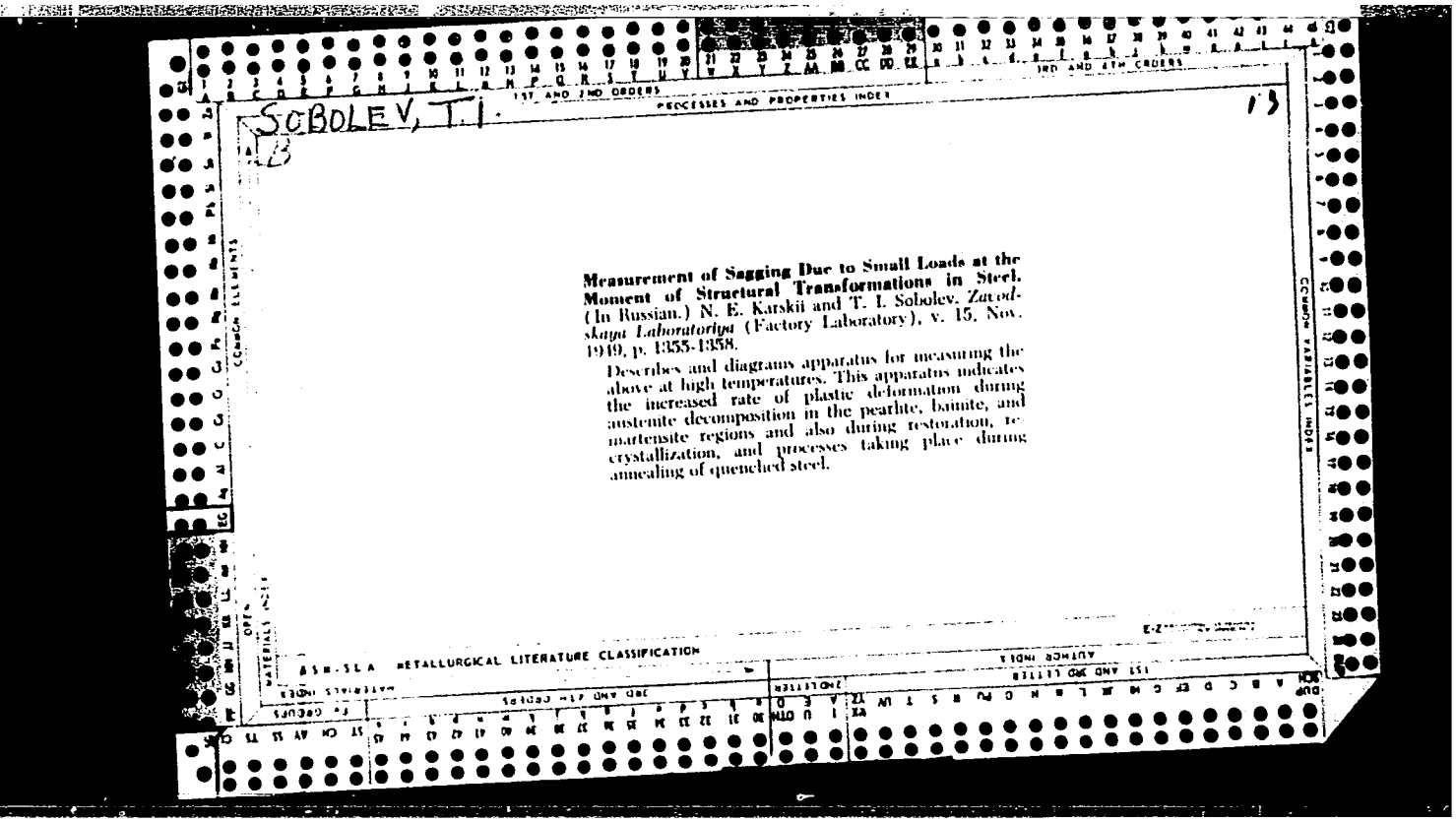
SOBOLEV, S.V.

The AR-500-L automatic spreader. Biul.tekh.-ekon.inform.Gos.nauch.-issl.inst.nauch. i tekh.inform. no.8:60-61 '62. (MIRA 15:7)
(Flax processing machinery)

SOBOLEV, S.V.

The PS-105-L ring spinner. Biul.tekh.-ekon.inform.Gos.nauch.-issl.inst.nauch.i tekh.inform. 16 no.8:45-46 '63.

The LCh-2-L, LCh-3-L, LCh-4-L high-speed ribbon lapping machines. 47-48 (MIRA 16:10)



SOBOLEV, T. I.

13

Measurement of Sagging Due to Small Loads at the Moment of Structural Transformations in Steel. (In Russian.) N. E. Karskii and T. I. Sobolev, *Zavodskaya Laboratoriya* (Factory Laboratory), v. 15, Nov. 1949, p. 1355-1358.

Describes and diagrams apparatus for measuring the above at high temperatures. This apparatus indicates the increased rate of plastic deformation during austenite decomposition in the pearlite, bainite, and martensite regions and also during restoration, recrystallization, and processes taking place during annealing of quenched steel.

SOBOLEV, V.

Marxist students from Riga politically exiled to Vyatka. Vestis Latv ak no.3:13-24 '62.

NARTOV, Yu.; SOBOLEV, V.

Contactless selective relay. Radio no.4:40 Ap '63. (MIRA 16:3)
(Electric relays)

Sobolev, V.A.

381. Sobolev, V. A., Dynamic stability of the deformation of a thin bar under eccentric compression and pure bending (in Russian), *Inzhener. Sbornik, Akad. Nauk SSSR* 19, 65–72, 1954.

A thin bar of rectangular cross section is subjected to bending in its plane by moments or eccentric longitudinal forces applied on the ends, which are hinged for the deformations out of the plane of the bar. The end forces or moments are assumed to consist of a constant part plus a variable, changing with time in accordance with the cosine law. The ensuing oscillatory bending may become unstable.

The partial differential equation of motion, after some simplifications, is reduced to an ordinary second-order equation in time of Hill's type, which is then investigated for the region of instability, whose limits are expressed in terms of physical and elastic constants of the beam and of the applied loads. Experimental study of the problem corroborates the theoretical limiting curves of the region of instability within 20% and results in some further observations regarding the behavior of the bar.

A. Hrennikoff, Canada

VMH

SOBOLEV, V. A.

32-2-44/60

AUTHOR: Sobolev, V. A.

TITLE: Arrangement for the Investigation of the Dynamic Resistance in Bars (Rods) (Ustanovka dlya issledovaniya dinamicheskoy ustoychivosti sterzhney)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol. 24, Nr 2, pp. 230-230 (USSR)

ABSTRACT: The arrangement described here makes it possible to vary the power and frequency parameters in contrast to the methods described hitherto. The working principle is based on the change of compression in a cup spring which an eccentric brings about by way of a lever. By shifting the eccentric we can change the extent of the compression power whilst its frequency is regulated by a thermostat. For the measuring of the central dynamic compression resistance the supports of the joint are exchanged. One diagram is given.

ASSOCIATION: Leningrad Polytechnical Institute imeni M. I. Kalinin (Leningradskiy politekhnicheskiy institut imeni M. I. Kalinina)

Card 1/2

SOBOLEV, V.A.

Forced vibrations of rods subjected to the action of eccentric periodic compressing forces. Trudy LPI no.211:103-115 '60.
(MIRA 13:11)
(Elastic rods and wires--Vibration)

SOBOLEV, V.A., dotsent

Effect of minor deviations of the dimensions of jib-unit elements on the trajectory of the movement of load. Izv.vys.ucheb.zav.; mashinostr. no.8:142-155 '63. (MIRA 16:11)

1. Leningradskiy politekhnicheskiy institut.

SOBOLEV, V.A., kand. veterin. nauk, dotsent; SAKHNOVSKIY, Yu.G., nauchnyy sotrudnik; KUZNETSOV, V.I., inzh.

Veterinary hygienic characteristics of a swine house for mother sows with electric heating of the floor. Izv. TSKHA no.4:158-166 '63. (MIRA 17:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut elektrifikatsii sel'skogo khozyaystva (for Kuznetsov).

SOBOLEV, S.Ya.

"Iron ore sintering" by A.I.Nikitin, V.A.Arbuzov. Reviewed by S.IA.Sobolev. Metallurg 4 no.1:3 of cover Ja '59. (MIRA 12:1)

1. Zaveduyushchiy tekhnicheskoy bibliotekoy Kamysh-Burunskogo zhelezorudnogo kombinata.
(Sintering) (Nikitin, A.I.) (Arbuzov, V.A.)

SOBOLEV, V. A.

"Changes in the Cardiovascular System in Mares With Foal." Cand Vet Sci, Moscow Veterinary Acad, Moscow, 1953. (RZhBiol, No 6, Nov 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (11)

SO: Sum. No. 521, 2 Jun 55

Sobolev, V. A.

Glutathione in the blood of cardiovascular patients. V. A. Sobolev. *Nauch. Issled. Kazakh. Med. Inst.* 1953, No. 11, 41-7; *Referat. Zhur. Khim., Biol. Khim.* 1955, No. 4004.--Patients with rheumatic and septic types of cardiovascular disease were the study subjects. Reduced glutathione (I) was detd. iodometrically (according to Woodward and Fry (*C.A.* 26, 5599). In rheumatic patients with no circulatory disturbance and in septic endocarditis I was low but rose in rheumatic patients if the inflammatory process was obviated. In patients free from active inflammation, but with circulatory disturbance, I was consistently high. It fell when the circulatory disturbance became very grave. It is believed that in rheumatic infection detns. of I are of diagnostic and prognostic value. B. S. Levine

SOBOLEV, V.A.; TELYATNIKOV, S.I., professor, zasluzhennyy deyatel' nauki, direktor; OCHKUR, P.P., professor, zasluzhennyy deyatel' nauki, direktor.

Myocardial infarction with rupture of the heart. Klin.med. 31 no.7:77-78 Jl '53. (MLRA 6:9)

1. Kafedra gospital'noy terapii Kazakhskogo meditsinskogo instituta im. V.M. Molotova (for Telyatnikov). 2. Kafedra patologicheskoy anatomii Kazakhskogo meditsinskogo instituta im. V.M.Molotova (for Ochkur).
(Heart--Infraction)

Biochemical and physiological indexes in diseases of the cardiovascular system. V. A. Sokolov (V. M. Molotov Med. Inst., Alma-Ata). *Klin. Med. (U.S.S.R.)* 32, No. 1, 52–7(1954).—In acute rheumatic fever with cardiac involvement, relapsing rheumatic endomyocarditis, mitral stenosis, and circulatory insufficiency, there is a decrease of reduced glutathione, catalase, absorbed O, exhaled CO_2, and vital capacity. With improvement all the values tend to return to normal. Estn. of reduced glutathione is a more reliable indicator of improvement than sedimentation rate. Although both run parallel during the length of sickness the sedimentation rate is likely to become normal before termination of the rheumatic process, which is not the case with glutathione. A. Mirkin

MD
Chair Hosp. Therapy

SOBOLEV, V.A.

Gas metabolism in rheumatism. Trudy Semipal. med. inst. 2:184-192 '59. (MIRA 15:4)

1. Kafedra fakul'tetskoy terapii Semipalatinskogo gosudarstvennogo meditsinskogo instituta (zav.kafedroy dotsent V.A.Sobolev).
(RESPIRATION) (RHEUMATIC HEART DISEASE)

SOBOLEV, V.A.

Rail planing on the track. Put' i put.khoz. 10 no.1: 21 '66. (MIRA 19:1)

1. Nachal'nik distantsii puti, stantsiya Inskaya, Zapadno-Sibirskoy dorogi.

SOBOLEV, V.A.

Selecting some geometrical parameters of a multifrequency vibrator with a shifted axis of revolution. Trudy LPI no. 254:59-64 '65. (MIRA 19:1)

SOBOLEV, V.A.

Railroaders achieve savings in car-hours. Put' i put'khoz. 8 no.8: 31 '64. (MIRA 17:9)

1. Nachal'nik distantsii puti, stantsiya Inskaya, Zapadno-Sibirskoy dorogi.

SOBOLEV, V.A.

Effect of meteorological factors on the course of hypertension. Zdrav. Kazakh. 22 no.8:14-19 '62 (MIRA 17:4)

1. Iz kafedry gospital'noy terapii (zav. - prof. R.A. Satpayeva) Kazakhskogo meditsinskogo instituta i kafedry fakul'tetskoy terapii (zav. - dotsent V.A. Sobolev) Semipalatinskogo meditsinskogo instituta.

SOBOLEV, V.A.

Comparative data on the course of hypertension under the conditions of Alma-Ata and Semipalatinsk. Zdrav. Kazakh. 22 no.10:34-40 '62. (MIRA 17:5)

1. Iz kafedry gospital'noy terapii (zav. - prof. R.A. Satpayeva) Kazakhskogo meditsinskogo instituta i kafedry fakul'tetskoy terapii (zav. - dotsent V.A. Sobolev) Semipalatinskogo meditsinskogo instituta.

[illegible], T. D.

[illegible] T. D.--"Measurement of The Absorption of Ultrasonic Waves in Ethyl Acetate According to a Zone of Saturation by a Double Fixed Distance Impulse Method." (Dissertation for Degrees in Science and Engineering* Defended at USSR Higher Educational Institutions) Min Education RSFSR, Moscow Oblast Pedagogical Inst, Moscow, 1955. * Physicomathematical Sciences

SO: Knizhnaya Letopis' No. 37, 10 September 1955.

SOBOLEV, V. D., YAKOVLEV, V. F., KOLOBOV, V. F., KOSKIN, N. I. and SHIRKEVICH, M. V.

"Impulse Method of Fixed Distances, Its Physical Basis and Practical Application". Abstracted for inclusion in the Second international Congress on Acoustics, Cambridge, Mass., 17-24, Jun 1956

Moscow State University

SOBOLEV, V. D., NOSKOV, V. F., SULTANOV, A. K. BORNOSOV, U. N.

"Experimental Investigation of Relaxation Processes Arising When Ultrasonic Waves Pass Through Liquids".
Abstracted for inclusion in the Second International Congress on Acoustics, Cambridge, Mass., 17-24, 1956 June

Moscow State University

USSR/Acoustics - Ultrasonics, J-4

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 35564

Author: Bormosov, Yu. N., Nozdrev, V. F., Sobolev, V. D., Sultanov, A. M.

Institution: None

Title: Experimental Investigations of Relaxation Processes, Occurring Upon the Passage of Ultrasonic Waves Through Liquids

Original Periodical: Akust. zh., 1956, 2, No 2, 118-123

Abstract: Description of experimentally-observed relaxation processes in acetates and formates. The investigation was performed by pulse and optical methods at frequencies of 1 - 30 mc. In the temperature range from -40 to +30° several complete relaxation regions were observed in metal acetate, ethyl acetate, methyl formate, and ethyl formate. An investigation was made in ethyl acetate of the absorption of ultrasonic waves along the saturation line, including the critical region, and new relaxation phenomena were established and investigated. For each relaxation region a

Card 1/2

Sobolev, V.D.

534.23

8054. A PULSE METHOD OF FIXED SEPARATIONS, ITS PHYSICAL BASIS AND PRACTICAL APPLICATION. N.I.Koshkin, V.F.Nozdrev, V.D.Sobolev, M.G.Shirkevich and V.F.Yakovlev. Akust. Zh., Vol. 2, No. 2, 161-6 (April-June, 1956). In Russian.

The apparatus is designed for the measurement of absorption of ultrasounds. Two fixed reflectors are set up in a tank and a quartz oscillator in a fixed position between them. Pulses are sent out towards the two reflectors and the amplitudes of the returning signals are compared. It is claimed that the authors' design allows measurements to be made not only more rapidly than with other methods, but also at high temperature and pressure and during phase transitions. Some results are given and compared with those for other methods. It is proposed that the equipment could be readily adapted for use as a control method.

C.R.S.Manders

Sobolev, V. D.

534.22 : 536.44

3081. INVESTIGATION OF THE ULTRASONIC PROPERTIES OF ETHYLACETATE IN THE CRITICAL REGION. V.F.Nozdrev and V.D.Sobolev. Akust. Zh., Vol. 2, No. 4, 379-81 (1956). In Russian.

Reports the measurements, by a pulse method, of the velocity and absorption of ultrasound in ethylacetate along the liquid, saturated vapour and superheated vapour lines. It was found for the liquid phase that the velocity decreases with rise of the temperature and is minimum at the critical temperature. A law of rectilinear diameters is found for the acoustic rigidity of the liquid and vapour phases of ethylacetate, which was established theoretically by Nozdrev (Dokl. Akad. Nauk SSSR, Vol. 92, No. 6, 1145-6, 1953).

C.R.S.Manders

Category : USSR/Acoustics - Ultrasound

Abs Jour : Ref Zhur - Fizika, No 1, 1957 No 2163

Author : Sobolev, V.D.
Title : Development of a Pulse Procedure for a Double Fixed Distance

Orig Pub : Primeneniye ul'traakustiki k issled. veshchestva. Vyp. 3, M., MOPI, 1956, 117-123

Abstract : Description of a method in which a quartz plate is fastened between silver rings in the center of a working vessel filled with the investigated liquid, and in which the radiation propagates in both directions. The oscillograph screen displays simultaneously signals reflected by two reflectors, placed at different distances from the quartz plates. By using an attenuator to equalize the signal applied to the amplifier in such a way that the pipe remains constant on the oscillograph screen, and knowing the difference of the distances from the quartz to the first and second reflectors, it is possible to calculate the sound absorption coefficient (χ). Of primary importance is that the quartz and the reflectors must all be parallel to each other. The average relative error in the determination of α amounts to approximately 3%. Check measurements of χ in n-butyl alcohol (0-90°) and toluol (20-270°) are in good agreement with the data found in the literature. The method described

Card : 1/2

SOBOLEV, V. D

CARD 1 / 2 PA - 1798

SUBJECT USSR / PHYSICS
AUTHOR NOZDREV, V.F., SOBOLEV, V.D.
TITLE The Measuring of the Absorption of Ultrasonic Waves in Ethyl Acetate from the Saturation Line by the Impulse Method of the Two-fold-fixed Distance.
PERIODICAL Dokl. Akad. Nauk, 111, fasc. 4, 808-810 (1956)
Issued: 1 / 1957

By means of this new measuring method which was developed by the authors it is possible to deal with a wide temperature- and pressure interval. This method is a combination of the methods of the variable and fixed distances. A quartz plate transforms an electric impulse into an ultrasonic impulse and radiates in the direction of two reflectors located at different distances from the quartz. The signals return to the quartz after reflection (at different times) and cause two spatially separated impulses to appear on the screen of the oscillograph. The absorption coefficient is computed according to the formula $\alpha = \Delta A / 20\Delta l \lg e$. Here ΔA denotes the modification of the amplitude of sound pressure in decibels; Δl - the difference of the acoustic paths of the impulses reflected by the first and by the second reflector. Within the domain with high absorption of ultrasound the impulse method developed by V.F.JAKOVLEV with fixed distance was employed. Measuring tests carried out by the method of the double fixed distance in n-butyl alcohol at from 0° to 90° and in toluol at from 20° to 270° showed good agreement with the results obtained by other measuring methods. As measuring chamber a steel autoclave for some hundred atmospheres and for a

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SOV/58-59-5-11487

24.1201

Translation from: Referativnyy Zhurnal Fizika, 1959, Nr 5, p 225 (USSR)

AUTHOR: Sobolev, V.D.

TITLE: The Application of a Telescopic System to the Measurement of Ultrasonic Velocity by the Optical Method

PERIODICAL: V sb.: Primeneniye ul'traakust. k issled. veshchestva. Nr 7, Moscow, 1958, pp 217 - 219

ABSTRACT: For the purpose of enhancing the accuracy of determining the velocity of ultrasonic propagation by the optical diffraction method, the laboratory-type telescope in the setup is replaced with a telescope 0,85 m long. Using the telescope in conjunction with a micrometric screw made it possible to increase the accuracy of measuring the angle of deflection of the diffraction-pattern maxima to 1.2 X 10^{-5} radian, and thereby to enhance the accuracy of determining the velocity of ultrasonic propagation to 1%.

A.N. Rivin

Card 1/1

PHASE I BOOK EXPLOITATION SOV/4342

Vsesoyuznaya konferentsiya prepodavateley pedagogicheskikh institutov.

Primeneniye ul'trakustiki k issledovaniyu veshchestva; trudy konferentsii, vyp. 9 (Application of Ultrasonics in the Study of Substances, No. 9) Moscow, Izd. MGPI, 1959. 245 p. Errata slip inserted. 1,000 copies printed.

Eds.: V. P. Rondrev, Professor, and B. B. Kudryavtsev, Professor.

PURPOSE: This collection of articles is intended for scientists specializing in ultrasonics, and for those interested in the application of ultrasonics to the study of the properties of materials, and to the quality control of machined parts and structural elements.

COVERAGE: The collection constitutes the transactions of the All-Russian Conference of Professors and Teachers of Pedagogical Institutes. The articles report on recent theoretical and experimental investigations in the field of ultrasonics and discuss the application of ultrasonics to the study of

Card 1/7

Application of Ultrasonics (Cont.) SOV/4342

Application of Ultrasonics (Cont.) SOV/4342

Card 2/7

Sobolev V.D.

L 03762-67 EWT(1)/T/EWP(k)

ACC NR: AR6025726 SOURCE CODE: UR/0058/66/000/004/A007/A008

60
B

AUTHOR: Sobolev, V. D.

TITLE: Use of a telescopic system for the measurement of the velocity of ultrasound by an optical method

SOURCE: Ref. zh. Fizika, Abs. 4A99

REF. SOURCE: Sb. Primeneniye ul'traakust. k issled. veshchestva. Vyp. 19. M., 1964, 25-27

TOPIC TAGS: ultrasonic velocity, light diffraction, acoustic measurement, optic method, telescopic equipment

ABSTRACT: It is noted that when the velocity of propagation of ultrasound is measured by a diffraction method and the diffraction pattern is observed with the aid of a sighting tube, the measurement accuracy is ~ 5%. The accuracy can be increased by several times if the sighting is replaced by a telescopic tube. Apparatus with the aid of which the velocity of ultrasound can be measured with accuracy is 1% is described. B. B. [Translation of abstract].

SUB CODE: 20

Card 1/1

SOV/162-58-3-26/26

9(3)
AUTHORS: Sobolev, V.D., and Urlapova, M.N.

TITLE: Measuring the Thermal Electron Emission of an Oxide Cathode in Ionic Devices (Izmereniye termoelektronnoy emissii oksidnogo katoda v ionnykh priborakh)

PERIODICAL: Nauchnyye doklady vysshey shkoly, Radiotekhnika i elektronika, 1958, Nr 3, pp 192-198 (USSR)

ABSTRACT: The volt-ampere characteristic of a hot-cathode gas-discharge rectifier tube, plotted with dc, shows a saturation point at anode currents greater than the emission current of the cathode, as shown by figure 1. With hot-cathode gas-discharge rectifier tubes having an oxide-coated cathode, it is not possible to detect this point due to the Schottky effect and due to the considerable heating of the cathode by the anode current. For determining the emission current of an oxide-coated cathode in vacuum devices, the volt-ampere characteristic is frequently plotted at a reduced cathode temperature with subsequent extrapolation of the Richardson line within the range

Card 1/3

Measuring the Thermal Electron Emission of an Oxide Cathode in Ionic Devices

by the cathode of the TG1-0.1/1.3 thyratron was used for the latter. The cathode emission during discharge work was compared with the cathode emission in a vacuum as shown by figure 8, whereby it was established that the pulse volt-ampere characteristic is determined by the thermal electron emission current of the cathode. There are 1 circuit diagram, 7 graphs and 7 Soviet references.

ASSOCIATION: Kafedra promyshlennoy elektroniki Moskovskogo energeticheskogo instituta (Chair of Industrial Electronics of the Moscow Power Engineering Institute)

SUBMITTED: June 7, 1958

66326
SOV/162-59-1-26/27

Measuring the Emission of an Oxide-Coated Cathode in an Ionic Device During Its Useful Life

/Ref 1/ numerical data characterizing the thermionic emission of an oxide-coated cathode in ionic devices may be obtained from the analysis of the pulse voltampere characteristic, which is plotted at low current densities. The experiments were performed with TG1-01/1.3 thyratrons (the screen was connected with the anode). The pulse voltampere characteristics were plotted prior to testing the useful life of the thyratrons and at certain intervals during the service life tests. The pulse circuit used consisted of a conventional modulator connected in series with a load and the thyratron to be tested. The voltampere characteristics were plotted using rectangular pulses of 5 microseconds duration and a pulse repetition rate of 200 cps. There are 4 graphs and 1 Soviet reference.

ASSOCIATION: Kafedra promyshlennoy elektroniki Moskovskogo energeticheskogo instituta (Chair of Industrial Electro-

Card 2/3

66326

SOV/162-59-1-26/27

Measuring the Emission of an Oxide-Coated Cathode in an Ionic Device During Its Useful Life

nics of the Moscow Power Engineering Institute)

SUBMITTED: October 28, 1958

Card 3/3

L 59413-65 EWP(j)/EWP(k)/EWT(m)/EWT(l)/T Pc-4/Pf-4/Pi-4 RM
UR/0058/65/000/005/E008/E008

ACCESSION NR: AR5015981

27
B

SOURCE: Ref. zh. Fizika, Abs. 5E59

AUTHOR: Sobolev, V. D.

TITLE: Influence of thermal conductivity on the absorption of ultrasound in the liquid phase of ethyl acetate 21

CITED SOURCE: Sb. Primeneniye ul'traakust, k issled. veshchestva. Vyp. 18. M., 1963, 57-63

TOPIC TAGS: ethyl acetate, liquid phase, thermal conductivity, ultrasound absorption

TRANSLATION: Results are presented of the calculation of the coefficient of absorption of ultrasound in ethyl acetate due to the Kirchhoff thermal conductivity. It is found that the fraction of the absorbed ultrasound due to the thermal conductivity is initially small, but increases with increasing temperature and reaches a maximum at 245C (in this case absorption due to thermal conductivity is 1.6 times larger than the absorption due to the shear viscosity).

SUB CODE: GP ENCL: 00

Card 1/1

SOBOLEV, V.D., kand. tekhn. nauk; ANTONOV, I.M., inzh.; ATAYEV, A.Ye., inzh.

Development of methods for calculating the permeability of thyratron control grids. Trudy MEI 55:213-225 '65. (MIRA 18:10)

BACHURIN, N.I., inzh.; VOLKOV, S.S., inzh.; GORODETSKIY, S.S., prof., doktor tekhn. nauk; GUSEV, S.A., dotsent, kand. tekhn. nauk; ZHUKHOVITSKIY, B.Ya., dots., kand. tekhn. nauk; IVANOV-SMOLENSKIY, A.V., dots., kand. tekhn. nauk; KIFER, I.I., dots., kand. tekhn.nauk; KORYTIN, A.A., starshiy prepodavatel'; KULIKOV, F.V., dots.; NIKULIN, N.V., dots., kand. tekhn. nauk; PODMAR'KOV, A.N., dots.; PRIVEZENTSEV, V.A., prof., doktor tekhn. nauk; RUMSHINSKIY, L.A., dots., kand. fiz.-mat. nauk; SOBOLEV, V.D., dots., kand. tekhn.nauk; URLAPOVA, M.N., inzh.; TIKHOMIROV, P.M., dots., kand. tekhn. nauk; FEDOROV, A.A., dots., kand. tekhn. nauk; CHUNIKHIN, A.A., dots., kand. tekhn. nauk; CHILIKIN, M.G., prof., glav. red.; GOLOVAN, A.T., prof., red.; GRUDINSKIY, P.G., prof., red.; PETROV, G.N., prof., doktor tekhn. nauk, red.; FEDOSEYEV, A.M., prof., red.; ANTIK, I.V., inzh., red.; BORUNOV, N.I., tekhn. red.

[Electrical engineering handbook]Elektrotekhnicheskii spravochnik. 3., perer. i dop. izd. Pod obshchei red. A.T. Golovana i dr. Moskva, Gosenergoizdat. Vol.1. 1962. 732 p. (MIRA 15:10)

1. Moskovskiy energeticheskiy institut (for Golovan, Grudinskiy, Petrov, Fedoseyev, Chilikin, Antik).
(Electric engineering--Handbooks, manuals, etc.)

SOBOLEV, V.G., inzh.

Review of the electric load ratings of flexible mine cables.
Izv. vys. uch. zav.; gor. zhur. 5 no.6:129-135 .'62.
(MIRA 15:9)

1. Moskovskiy gornyy institut. Rekomendovana kafedroy obshchey i gornoy elektrotekhniki.
(Electric cables--Standards) (Electricity in mining)

KRAUS, E.G.; ZUBOV, B.S.; SOBOLEV, V.G.

New flexible shielded cables and their use in Karaganda mines. Nauch. trudy KNIUI no. 11:110-124 '62. (MIRA 17:7)

KRAUS, E.G.; SOBOLEV, V.G.; ZUBOV, B.S.

Life of flexible shielded cables for cutter-loader drives.
Nauch. trudy KNIUI no.15:51-55 '64. (MIRA 18:8)

SOBOL', V.A.

Determining the criteria of longevity and the ultimate allowable working temperature of flexible mine cables. Nauch. trudy VNIIK no.15:55-63 '64. (MIRA 18:8)

PRAVOVEROV, K.N.; SOBOLEV, V.I.; KOROLEVA, L.F.

Ovens with flameless burners. Nauch. trudy AKKH no.23:17-30 '63.
(MIRA 17:12)

SOBOLEV, V. I.

Britanishskiy, G. E., Lapitskiy, D. A., and Sobolev, V. I. "The recording of diaphragm currents -- electrodiaphragmography", In the collection: Mekhanizm patol. reaktsiy, Issues 11-15, Leningrad, 1949, p. 384-90.

SO: U-4392, 19 August 53, (Letopis 'Zhurnal 'nykh Statey, No 21, 1949).

ISAKOV, I. I.; SIMENKO, L. F.; SOBOLEV, V. I.

Electrodiaphragmography; new clinical methods of examination of the diaphragm in man. Ter. arkh., Moskva 23 no.4:54-57 July-Aug 1951. (CLML 21:1)

1. Docent Isakov; Docent Sobolev. 2. Of the Department of Faculty Therapy (Head -- Prof. A. A. Nechayev) and of the Department of Roentgenology (Head -- Prof. G. A. Zedgenidze), Naval Medical Academy.

SOBOLEV, V.I., professor.

X-ray diagnosis of pulmonary actinomycosis. Vest.rent. i rad. no.5:47-56 S-O '55. (MLRA 9:1)

1. Iz kafedry rentgenologii (zav.--prof. V.I.Sobolev) Leningradskogo gosudarstvenoogo instituta dlia usovershenstvovaniya vrachey imeni S.M.Kirova (dir.--prof. N.I.Blinov) i iz kafedry rentgenologii (prof. G.A.Zegdenidze) Voyenno-morskoy meditsinskoy akademii (nach.--general-mayor A.M.Zotov)

(ACTINOMYCOSIS
lungs, diag.x-ray)
(LUNGS, dis.
actinomycosis, x-ray diag.)

BIRYUKOV, Yuriy Ivanovich; SOBOLEV, Viktor Ivanovich; DYAGILEV, V.D., red.; YUSFINA, N.L., tekhn. red.

[Economics of Socialist agricultural enterprises; visual-aid album for rural elementary schools and study groups in economics] Ekonomika sotsialisticheskikh sel'skokhoziaistvennykh predpriiatii; al'bom nagliadnykh posobii dlia sel'skikh nachal'nykh ekonomicheskikh shkol i kruzhkov. IAroslavl', Izd-vo "Sovetskaia Rossiia," 1960. (MIRA 14:6)
26 plates.
(Agriculture--Economic aspects--Audio-visual aids)

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B102/B209

The technique of ...

part is an ionization fission chamber. The pulses generated in both canals of the chamber reach, via the amplifiers I and III, the double-coincidence circuit II (time resolution 0.5 μsec). The pulses are counted in IV by a mechanical counting device. The fission chamber is brass filled with argon and sealed hermetically. It contains the following: 1) a U_3O_8 preparation (90% U^{235}, ~0.1 mg/cm^2) upon an Al foil (0.4 mg/cm^2), 2) collimators, 3) a set of differently thick foils of the metal to be examined, 4) collector electrodes. Collimator thickness and argon pressure (~100 mm Hg) were chosen so as to keep the fragment energy losses in the collimator negligibly low. This arrangement excludes counting of spurious pulses (from γ-quanta or recoil nuclei); all measurements may be carried out at the reactor at a thermal neutron flux of between 10^6 and 10^8 n/cm^2 sec. In order to illustrate the operation of the device, the determination of the ranges and specific energy losses for fragments with equal range is discussed. Zero thickness of the material in which the range is to be examined gives rise to N_0 coinciding pulses. The number of coincidences decreases if d rises for the same amount in each of the channels. At a certain $d = d_1$, the num-

Card 2/4

The technique of ...

ber of coincidences becomes zero or drops to a minute fraction (α) of N_o, according to the sensitivity of the detector; thus, d_c characterizes the range of the fragments. The specific energy losses are determined as follows: Foil sets with $d = d_c$ of a material whose range dependence of the specific losses is known are inserted into both canals. Then, in one canal all foils, one after the other, are replaced by foils of the material to be examined; on this occasion, these foils must have such a thickness that the number of pulses does not vary on exchange. In this way the specific energy losses can be determined for all ranges. Range and specific energy loss of heavy and light fragments may be determined separately, too. For this purpose, N_o is determined as before, then the foils to be investigated are successively removed from one canal until the number of coincidences becomes small with respect to N_o. By this processing, the fragments of maximum range are separated. Then, the foils from the second canal are successively removed until the number of coincidences is equal to zero. The number of foils in the second canal now characterizes the range of the heavy fragments. The energy losses are determined analogously. Finally, the yield-to-range curves for Au and Al as determined by this method are compared

The technique of ...

with the results of other authors. Agreement with Ref. 2 is not good; it is good, however, with Ref. 4. There are 4 figures and 5 references: 3 Soviet-bloc and 2 non-Soviet-bloc.

SUBMITTED: November 21, 1959

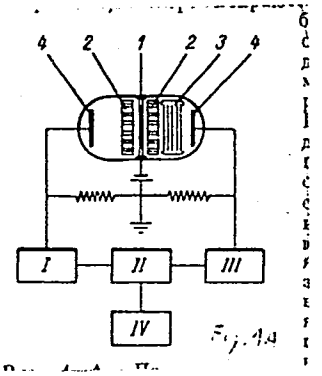

Fig. 4a

Card 4/4

AUTHORS: Sobolev, V.I. and Pilyutskiy, N.D. SOV/118-58-11-14/19

TITLE: Transshipping Operations at the Leningrad Commercial Sea Port (Peregruzochnyye raboty v Leningradskom morskom torgovom portu)

PERIODICAL: Mekhanizatsiya trudoyëmkikh i tyazhëlykh rabot, 1958, Nr 11, pp 40-42 (USSR)

ABSTRACT: This is a list of the various mechanical means applied in transshipping operations at the Leningrad port. The following devices are mentioned: a special grab for the removal of lumber from water; a truck-mounted loading device for bale-goods with a grab clamp on the side of the loader; truck-mounted loaders of the type UPM-6 and 4004 for the loading of cotton into freight cars; truck-mounted loaders equipped with various load-lifting appliances like fork-shaped claws, crane arms, buckets, etc.; a loading machine of the type PTS-2 for the stowing of salt in holds, and a machine of the type MVS-1 for the unloading of salt from freight cars and various other re-loading apparatus . Though the standard of complex mechanization at the Leningrad port has risen

Card 1/2

Transshipping Operations at the Leningrad Commercial Sea Port

by 2.9 % over 1956, there are still many problems to be solved by the scientific research organizations of the Ministerstvo morskogo flota (Ministry of Merchant Marine) There are 2 photos and 2 diagrams.

1. Harbors--Equipment 2. Materials--Handling 3. Industrial equipment

SOBOLEV, V.I.

Mass measurements of characteristics of power units by means of deformation pickups. Izm.tekh.no.8:30-32 Ag '62. (MIRA 16:4)

(Strain gauges)

L 11267-65 EWT(1)/EEC(m)/EEC(k)-2 Po-4 ASD(a)-5
ACCESSION NR: AP4048836 S/0119/64/000/011/0003/0005

B

AUTHOR: Sobolev, V. I.

TITLE: Structural analysis of static errors of instruments with compensation-type conversion

SOURCE: Priborostroyeniye, no. 11, 1964, 3-5

TOPIC TAGS: measuring instrument, measuring instrument error

ABSTRACT: A class of feedback-type instruments is considered which has a measuring unit, whose transfer constant is infinite (e.g., an integrating motor or a double integrating element), in its feedback closed loop. Formulas are developed for the "first-kind error" which is due to zero drift and dead zone, and the "second-kind error" due to transfer-constant variation (both related to the feedback loop). These errors are combined with those of the open-loop part of the instrument, and an overall error formula is evolved. An astatic accelerometer

Card 1/2