SHTAMBERG, G.Y.

Effect of hydroaeroionization on animals according to some morphological indices. Trudy Uz.gos.nauch.-issl. inst.kur. i fizioter. 13:125-131 '55.

Effect of hydroaeroionization on the gastric secretion in dogs with an isolated pouch (according to I.P.Pavlov's method). Ibid.: 133-138

Effect of hydroaeroionization on the peripheral blood of healthy guinea pigs. Ibid.:205-214 (MIRA 18:2)

SHTAMBERG, O. P.

36843. MILENKOV, S. M. i SHTAMBERG, O. P. Gistomorfologicheskiye pokazateli deystviya otritsatel'noy ionizatsii, poluchayemoy po metodu prof. Chernyavskogo, na eksperimental'nykh zhivotnykh. Trudy Uzbek. gos. nauch.-issled. in-ta kurortologii i fizioterapii im. Semashko, sb. 11, 1949, c. 56-61

SO: Letopis' Zhurnal'nykh Statey, Vol. 50, Moskva, 1949

SHTAMBERG, O.P.

Influence of Tashkent mineral water on the external secretory function of the pancreas in dogs. Trudy Uz. gos. nauch.-issl. inst. kur. i fizioter. no.15:95-113 '59. (MIRA 14:9)
(MINERAL WATERS) (PANCREAS)

SHTAMBERG, Yuriy [Stamberg, Jurij]; YURACHKA, Frantishek [Juracka, Frantisek]

New method for determining the exchange capacities of anion exchangers. Zhur.prikl.khim. 35 no.10:2295-2302 O '62. (MIRA 15:12)

1. Pardubitskiy nauchno-issledovatel'skiy institut sinteticheskikh smol i lakov, Chekhoslovakiya.
(Ion exchange resins)

KARANDEYEV, K.B.; MIZYUK, L.Ya.; SHTAMBERGER, G.A.

Measuring total resistance in a.c. semibalance bridges. Nauch.zap. IMA AN URSR. Ser.avtom. i izm. tekh. 5:64-82 '55. (MLRA 9:10)

(Electric resistance)

KARANDEYEV, K.B., MIZYUK, L.Ya., SHTAMBERGER, G.A.

Separate measurement of active and idle components of complex resistances. Dop. AN URSR no.5: 458-461 '55. (MLRA 9:3)

1. Institut mashinoznavstva ta avtomatiki AN URSR. Predstaviv diysniy chlen AN URSR G.M. Savin.
(Electric resistance)

KARANDEYEV, K.B.; MIZYUK, L.Ya.; SOGOLOVSKIY, Ye.P.; SHTAMBERGER, G.A.

The ESK-1 electrical prospecting automatic compensator with direct reading. Razved.i okh.nedr 22 no.7:39-49 Jl '56. (MLRA 9:11)

1. Institut mashinovedeniya i avtomatiki Akademii nauk USSR. (Prospecting--Geophysical methods) (Electric instruments)

Translation U-3,053,900 - 30 Apr 57

KARANDEYEV, K.B.; MIZYUK , L.Ya.; SHTAMBERGER, G.A.

Automatic electronic compensators used in geophysical measurements.
Avtom. kont. i izm. tekh. no.1:5-20 '57. (MIRA 11:6)
(Electronic measurements)
(Prospecting)

SHTAYERGER, G.A., Cand Tech Sci -- (diss) "Quasi-balanced AC bridges ~~of alternating current~~." M., 1958, 15 pp with drawings; 1 sheet ~~with~~ of tables (Mos Power Engineering Inst) 110 copies

Bibliography: p 14-15 (18 titles) (KL, 27-58, 113)

SOV/115-58-1-26/50

AUTHORS: Karandeyev, K.B., and Shtamberger, G.A.

TITLE: On a Schematic Diagram for Measuring the Active Component of Combined Resistance (Ob odnoy skheme izmereniya aktivnoy sostavlyayushchey kompleksnogo soprotivleniya)

PERIODICAL: Izmeritel'naya tekhnika, 1958, Nr 1, pp 53 - 55 (USSR)

ABSTRACT: The authors suggest a diagram which would be convenient for many cases of technical measurements, and in particular for measuring non-electrical values in the control of production in the radio industry. The method permits measurements of the resistance components separately and independently. The suggested diagram (shown in Figure 1) presents in principle an unbalanced bridge, with an electronic differential a.c. indicator (which is not sensitive to phases) with an input resistance of several megohm. It

Card 1/2

On a Schematic Diagram for Measuring the Active Component of Combined Resistance

provides constant sensitivity in a sufficiently wide range of the phase angle changes, since the values of the input resistances on the indicator will not depend on the interrelation between the reactive and the active components of the combined resistance being measured. There are 2 diagrams, 1 graph and 3 Soviet references.

1. Radio equipment--Production 2. Electrical equipment--Resistance
3. Recording devices--Performance

KARANDEYEV, K.B. [Karandieiev, K.B.]; SHTAMBERGER, G.A. [Shtamberher, H.A.]

Generalized equation for balanced and unbalanced alternating current bridge circuits [with summary in English]. Dop. AN URSR no.3:276-279 '58. (MIRA 11:5)

1.Chlen-korrespondent AN USSR (for Karandeyev).
(Wheatstone bridge)

SHTAMBERGER, G. A.

report to be presented at the 1st Intl Congress of the Intl Federation of Automatic Control, 25 Jun-5 Jul 1960, Moscow, USSR.

BYKHOVSKIY, M. L. - "Ultra stability in electronic calculating devices
in the solution of nonlinear equations in indefinite form"
CHELYUSTKIN, A. B. - "Use of calculating devices in systems for
the automatic control of rolling mills"
CHICHINADZE, V. K. - "Concerning some problems of the organization of
self-adjusting and self-teaching systems of automatic control,
based on principles of random search"
DAVYDOV, N. I. - "Development of automatic control systems for boiler
units"
DUDNIKOV, Ye. G. - "Determination of optimum adjustments of industrial
automatic regulation systems according to initial data obtained from
experience"
DUR'YE, A. I., and ROZENVASSER, E. N. - "Methods of organizing Lyapunov
functions in the theory of nonlinear regulating systems"
DRUZHININ, N. N. - "Balanced regulation and inter-communications of
a multi-motor electric drive and technology in continuous rolling
mills"
FEL'DBAUM, A. A. - "Problems of statistical theory of automatic
optimization systems"
FEYGIN, Y. I. - "Automation of a reversible cold rolling mill for
nonferrous metals"
FILIPPOV, A. F. - "Application of the theory of differential equations
with a discontinuous right side to nonlinear problems of automatic
regulation"
GAVRILOV, M.A. - "Structural surplus and operational reliability of
relay devices"
GANKIN, M. Z. - "Automation of irrigation systems"
GERTSENBERG, G. R., KASHTELYAN, V. E., KOSTENKO, M. P., NEYMAN, L. R.,
and SIRYY, N. S. - "Power regulation of disturbance and problems of
the stability of electric power systems"
GINZBURG, S. A. - "Logical method of synthesis of functional converters"
IL'IN, V. A. - "Methods of transmission of information and the structure
of telemechanical systems for dispersed structures"
INOSOV, V. L., and LUTSKIY (fnu) - "The code-impulse system of tele-
measurement for dispatched operations of trunk-line gas pipe lines"
IVAKHNENKO, A.G. - "Concerning the application of the theory of combined
regulation systems for cybernetic adaptation systems"
KARANDEYEV, K. B., and SHTAMBERGER, G. A. - "A quasi-equilibrated bridge
as an element in a system of automatic control"
KAZAKEVICH, V. V. - "Concerning the process of extra regulation of inert
objects in the presence of disturbance"
KAZAKOV, I. E. - "Some problems of the theory of statistical linearization
and its application"
KILIN, F. M. - "Some problems of the theory of impulse systems with
time selectors"
KOBRINSKIY, A. E., BOLKHOVITIN, S. V., VOSKOBOYNIKOV, L.M., IOFFE, D. M.,
POLYAN, E. P., POPOV, B. P., SLAVUTSKIY, Ya. L., SYSIN, A. Ya., and
YAKOBSON, Ya. S. - "The problem of bioelectric control"
KOLOMIYETS, B.T. - "New types of photo resistances and their field of use"
KOROBKO, M.I., MIKHYUKOV, B. G., and SHUMILOV, K. A. - "System of
automatic control and regulation of blast distribution in the tuyeres
of blast furnace"
KOROBOCHKIN, B. L. - "Investigation of the dynamics of the hydraulic
duct of a copying lathe"
KRASOVSKIY, A. A. - "Dynamics of continuous systems of automatic
regulation with extra self-adjustment of corrective devices"
KRASOVSKIY, N. N. - "Concerning the selection of parameters of
optimum stability systems"
KUKHTENKO, A. I. - "The dynamics of devices imitating living organisms"
KULEBAKIN, V. S. - "The invariant theory of automatic regulation and
control systems"
LANIN, I. D. - "Pneumatic calculating devices as a means of insuring the
reliability of complex automation systems"
LAZAREV, V. G., and PARKHOMENKO, P. P. - "Mechanization of processes
of analysis and synthesis of the structure of relay devices"

KARANDEYEV, Konstantin Borisovich [Karandieiev, K.B.]; SHTAMBERGER, Genrikh Abramovich [Shtamberger, H.A.]; SIGORSKIY, V.P. [Sihors'kyi, V.P.], kand.tekhn.nauk, otv.red.; SHTUL'MAN, I.F., red.izd-va; KADASHEVICH, O.O., tekhn.red.

[Quasi-balanced a.c.bridges] Kvazizrivnovazheni mosty zminnoho strumu. Kyiv, Vyd-vo Akad.nauk URSR, 1960. 184 p. (MIRA 13:7)
(Bridge circuits)

S/115/60/000/010/026/028
B021/B058

16.9500

AUTHORS: Karandeyev, K. B., Shtamberger, G. A.

TITLE: "Quasi Balanced Bridge as an Element of the Automatic Control System"

PERIODICAL: Izmeritel'naya tekhnika, 1960, No. 10, pp. 62-63

TEXT: The complex resistance and its parameters are indicated as being a suitable element for solving a series of transformation problems and for obtaining information. Ways are described for the continuous measurement and recording of the changes of information parameters. The method of utilizing the a.c. bridge under scalar conditions permits to simplify the measuring- and control procedure. Two cases are possible here: coordinating the scheme to the module- and phase condition respectively. Analytical conditions are mentioned, characterizing separate measurement of the components for the schemes of both conditions. Concrete variants of the schemes of quasi balanced bridges are mentioned for the separate measurement of the active and reactive components of complex resistances.

Card 1/1

KARANDEYEV, K.B.; SHTAMBERGER, G.A.

Simultaneous measurement of capacitance or inductance and resistance with independent adjustment of network elements. Avtom.kont.i elek izm. no.1:5-11 '60. (MIRA 15:8)
(Electric measurements) (Impedance (Electricity)--Measurement)

GRINEVICH, F.B.; SHTAMBERGER, G.A.

Automatic bridge indicating the condition of capacitors in terms of a percentage. Avtom.kont.i elek.izm. no.1:13-20 '60. (MIRA 15:8)

(Condensers (Electricity)--Measurement)

MIZYUK, L.Ya.; SHEREMET'YEV, E.V.; SHTAMBERGER, G.A.

Transistorized attachment to the EP-1 potentiometer. Avtom.kont.i elek.izm. no.1:93-100 '60. (MIRA 15:8)
(Electric prospecting—Electronic equipment)
(Potentiometer)

KARANDEYEV, K.B.; SHTAMBERGER, G.A.; DUDNIK, R.L., red.; SHMAKOVA, Ye.G., tekhn. red.

[Generalized theory of a.c. bridge networks] Obobshchennaia teoriia mostovykh tsepei peremennogo toka. Novosibirsk, Izd-vo Sibirskogo otd-niia AN SSSR, 1961. 222 p. (MIRA 14:10)
(Bridge circuits)

SHTAMBERGER, G.A.

Effect of the reciprocal of pulse duty factor of a square control voltage on the performance of a synchronous detector. Izm.tekh. no.9:46-48 S '62. (MIRA 15:11)
(Pulse techniques (Electronics))
(Electronic measurements)

KOTYUK, A.F.; LEVCHENKO, D.G.; PAS'KO, E.V.; SHTAMBERGER, G.A.; KARANDEYEV, K.B., otv. red.; VYALYKH, A.M., tekhn. red.

[Apparatus for aerial electric prospecting using the infinitely long cable method]Apparatura dlia aeroelektrorazvedki metodom beskonechno dlinnogo kabelia. Otvet. red. K.B.Karandeev. Novosibirsk, Izd-vo Sibirskogo ot-niia AN SSSR, 1962. 78 p. (MIRA 15:9)

1. Chlen-korrespondent Akademii nauk SSSR (for Karandeyev).
(Electric prospecting—Equipment and supplies)
(Aeronautics in geology)

L 14985-63 BDS JXT(DE)

ACCESSION NR: AP3004225 S/0105/63/000/007/0092/0094

48

AUTHOR: Shtamberger, G. A.

TITLE: Conference on automatic control and methods of electrical measurements (11-15 September 1962, Novosibirsk)

SOURCE: Elektrichestvo, no. 7, 1963, 92-94

TOPIC TAGS: automatic control, electrical measurement

ABSTRACT: The Fourth All-Union Conference on Automatic Control and Methods of Electrical Measurements was organized by the Institute of Automation and Electrometry, Siberian Branch of AN SSSR, jointly with the West-Siberian Sovnarkhoz. The Conference counted 600 members of 48 cities who represented 228 scientific-research, design, and industrial enterprises. About 150 reports were delivered before the plenary and sectional sessions, the main topics having been these: theory of measuring and information systems, analysis and synthesis of balance circuits, methods of automatic control, digital measuring systems, reliability problems, etc. All topics of the reports are listed in the article, as wellas the following names of the reporters: V. I. Rabinovich, M. P. Tsapenko, M. A. Rozov, B. V. Karpyuk, Yu. P. Drobyshev, B. M. Pushnoy, V. I. Chistyakov, B. S. Sinitsy*n, A. S. Anisimov, K. P. Buteyko, N. G. Bury*y, N. V. Vas'kova,

Card 1/2

L 14985-63

ACCESSION NR: AP3004225

A. K. Romanov, I. I. Smirnova, Yu. I. Baklanov, F. B. Grinevich, G. Ye. Yeremenchuk, N. I. Zubkov, I. F. Ivlev, I. M. Filonenko, V. P. Shul'ts, V. K. Petunin, O. V. Ulin, A. N. Kasperovich, V. S. Sobolev, P. F. Kalinin (Novosibirsk); V. I. Yazdovskiy, O. G. Gazenko, R. M. Bayevskiy, A. D. Voskresenskiy, A. D. Yegorov, N. A. Chekhonadskiy, A. I. Govor, A. S. Yeremin, B. S. Rozov, B. A. Rozanov, A. F. Alekseyev, V. S. Mel'nikov, V. P. Antipenkov, V. V. Bogdanov, I. I. Popov, M. I. Levin, S. D. Dodik (Moscow); P. P. Kemeshis (Kaunas); P. I. Dekhtyarenko, I. S. Yeremeyev (Kiev); A. A. Bessonov, N. P. Pomukhin, Yu. B. Gerasimenko, S. A. Beldovskiy, Yu. V. Nepovinskiy, S. V. Tanton (Leningrad); T. M. Aliyev and V. P. Stepanov (Sumgait); L. A. Prudnikov (Kemerovo); Yu. A. Vdovin and L. A. Polovnikova (Sverdlovsk); B. Ya. Sun'yan, N. N. Shtarev, and V. S. Chernyshev (Tomsk); A. M. Bamdas and S. V. Shapiro (Gor'kiy); B. I. Shvetskiy (L'vov); A. I. Novik, A. V. Chebotarev, and Sh. M. Taukin (Frunze); G. A. Ali-Zade (Baku); B. I. Borde (Krasnoyarsk); V. V. Yefimenko (Novosibirsk). Orig. art. has: no figures, formulas or tables.

ASSOCIATION: none

SUBMITTED: 00 DATE ACQ: 08Aug63 ENCL: 00

SUB CODE: IE,EE NO REF SOV: 000 OTHER: 000

Card 2/2

SHTAMBERGER, G.A.

Quadrature indicator with an alternating output voltage. (MIRA 17:1)
Izm. tekh. no.9:35-37 S '63.

ZAGORSKIY, Ya.T.; SHEREMET'YEV, E.V.; SHTAMBERGER, G.A.

Universal wide-band d.c.device. Priborostroenie no.10:12-14 O '63. (MIRA 16:11)

SHTAMBERGER, G.A.

Separate measurement of complex-magnitude components by balancing methods. Izv.vys.ucheb.zav.; prib. 6 no.3:3-9 '63. (MIRA 16:9)

1. Institut avtomatiki i elektrometrii, Sibirskoye otdeleniye AN SSSR.

KARANDEYEV, K.B.; SHTAMBERGER, G.A.; GEL'FAND, V.D.

Dependence of the selectivity of a synchronous detector on the asymmetry of the controlling voltage. Radiotekhnika 18 no.3: 37-41 Mr '63. (MIRA 16:3)
(Radio detectors) (Pulse techniques (Electronics))

KARANDEYEV, K.B.; DAYEV, D.S.; PAS'KO, E.V.; SHTAMBERGER, G.A.

Design principles of apparatus for geophysical prospecting by alternating current methods. Izv. AN SSSR. Ser. geofiz. no.2:254-259 F '64. (MIRA 17:3)

1. Institut avtomatiki i elektrometrii Sibirskogo otdeleniya AN SSSR.

SHTAMBERGER, G.A.

Measuring the components of a complex voltage by means of a quasi-compensatory circuit. Priborostroenie no.3:14-7 Mr '64. (MIRA 17:6)

SHTAMBERGER, G.A.

A.c. balancing measuring circuits. Izv. vys. ucheb. zav.; prib. 7 no.4:16-21 '64 (MIRA 18:1)

1. Institut avtomatiki i elektrometrii Sibirskogo otdeleniya AN SSSR.

SHTAMBERGER, G.A.

Some common characteristics of balancing circuits. Trudy Inst. avtom. i elektrometr. SO AN SSSR no.10:11-19 '65. (MIRA 18:8)

L 54594-65

ACCESSION NR: AT5009798 UR/0000/64/001/000/0024/0028 3 B41

AUTHOR: Shtamberger, G. A. (Novosibirsk); Shvetsova, E. P. (Novosibirsk)

TITLE: One variant of the quasi-compensation circuit

SOURCE: Vsesoyuznaya konferentsiya po avtomaticheskomu kontrolyu i metodam elektricheskikh izmereniy. 4th, Novosibirsk, 1962. Avtomaticheskiy kontrol' i metody elektricheskikh izmereniy; trudy konferentsii, t. 1: Metody elektricheskikh izmereniy. Tsifrovyye izmeritel'nyye pribory. Elementy izmeritel'nykh sistem (Automatic control and electrical measuring techniques; transactions of the conference, v. 1: Electrical measuring techniques. Digital measuring instruments. Elements of measurement systems). Novosibirsk, Redizdat Sib. otd. AN SSSR, 1964, 24-28

TOPIC TAGS: ac compensator, ac quasicompensator

ABSTRACT: An a-c quasicompensator (QC) is a simplified version of an a-c compensator which permits an accurate measurement of one component and a less accurate determination of a second component. The present article describes a

Card 1/2

L 54594-65

ACCESSION NR: AT5009798

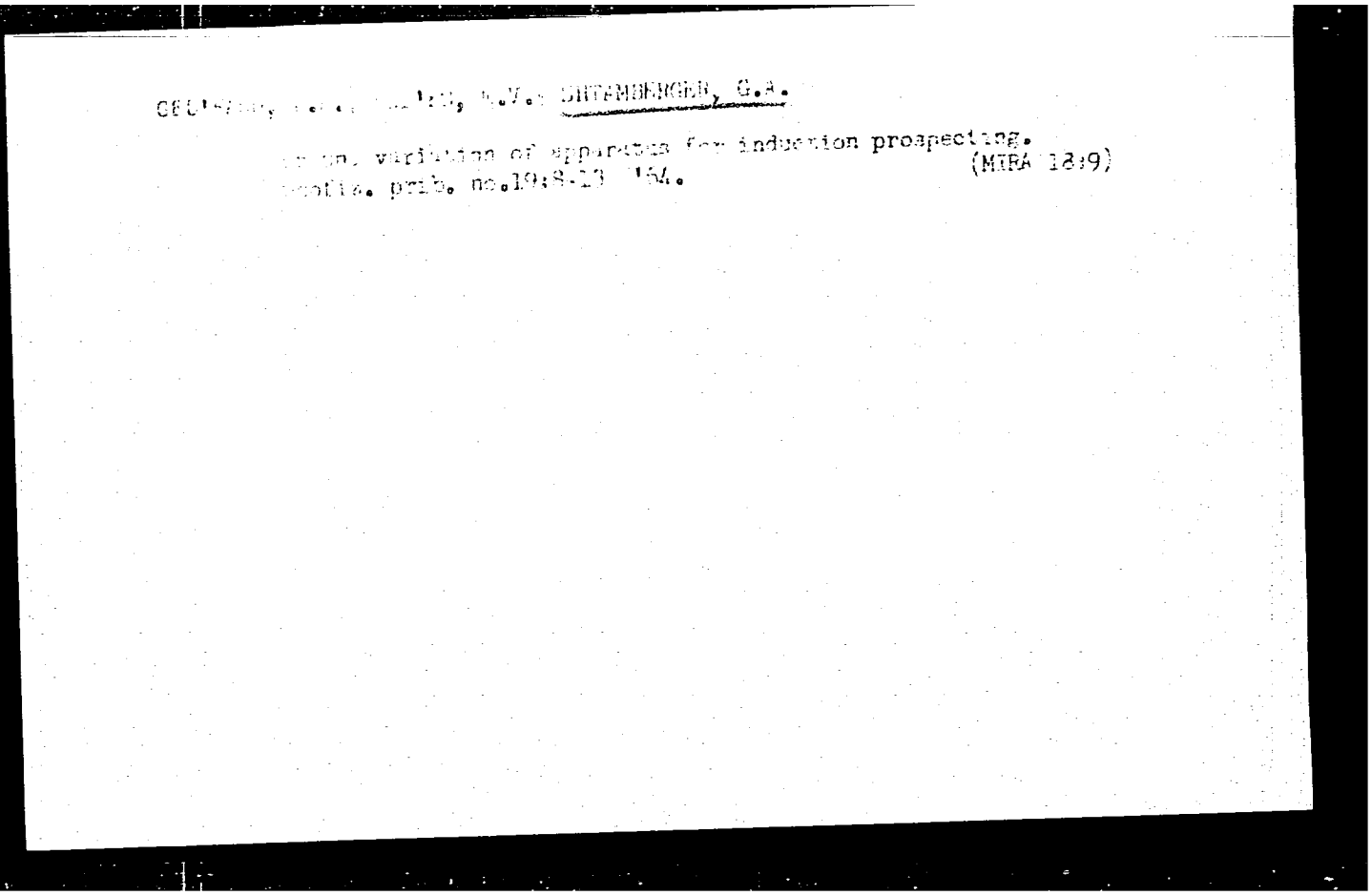
QC intended for measuring the active and reactive components of a test voltage and comprising (see Enclosure 1) the following units: an operating-current control unit (CC), a variable resistor R with a sliding contact m, a phase indicator (PI) with a limiter (L), and a broadband phase shifter (PS), all supplied by a source of the compensating voltage $\dot{U}_0$. The error of measurement by the above QC is claimed to be 1% or less. The QC lends itself easily to automation. Orig. art. has: 2 figures and 13 formulas.

ASSOCIATION: none

SUBMITTED: 25Sep64 ENCL: 01 SUB CODE: EE, EC

NO REF SOV: 011 OTHER: 000

Card 2/3



L 53707-65 EWT(1) GW

ACCESSION NR: AP5008088 UR/0030/65/000/002/0058/0061 34 27 B

AUTHOR: Karandeyev, K. B. (Corresponding member AN SSSR); Shtamberger, G. A. (Candidate of technical sciences)

TITLE: Measurement information systems for geophysical investigations

SOURCE: AN SSSR. Vestnik, no. 2, 1965, 58-61

TOPIC TAGS: geophysics, geophysic instrument, aerial survey, data processing

ABSTRACT: Soviet methods and equipment for obtaining and processing geophysical data are found to be outdated and must be improved to step up the exploration and exploitation of mineral resources. Like the scientists of other countries, Soviet geophysicists favor the use of aerial over ground methods for surveying large areas with a minimum expenditure of time and money, especially to pinpoint prospective mining areas in which to conduct more expensive ground surveys. One major defect is that frequently several types of surveys (magnetic, gravimetric, radiometric, electrical) must be flown separately over the same area because each type of operation requires the use of different types of equipment, all of which must be

Card 1/3

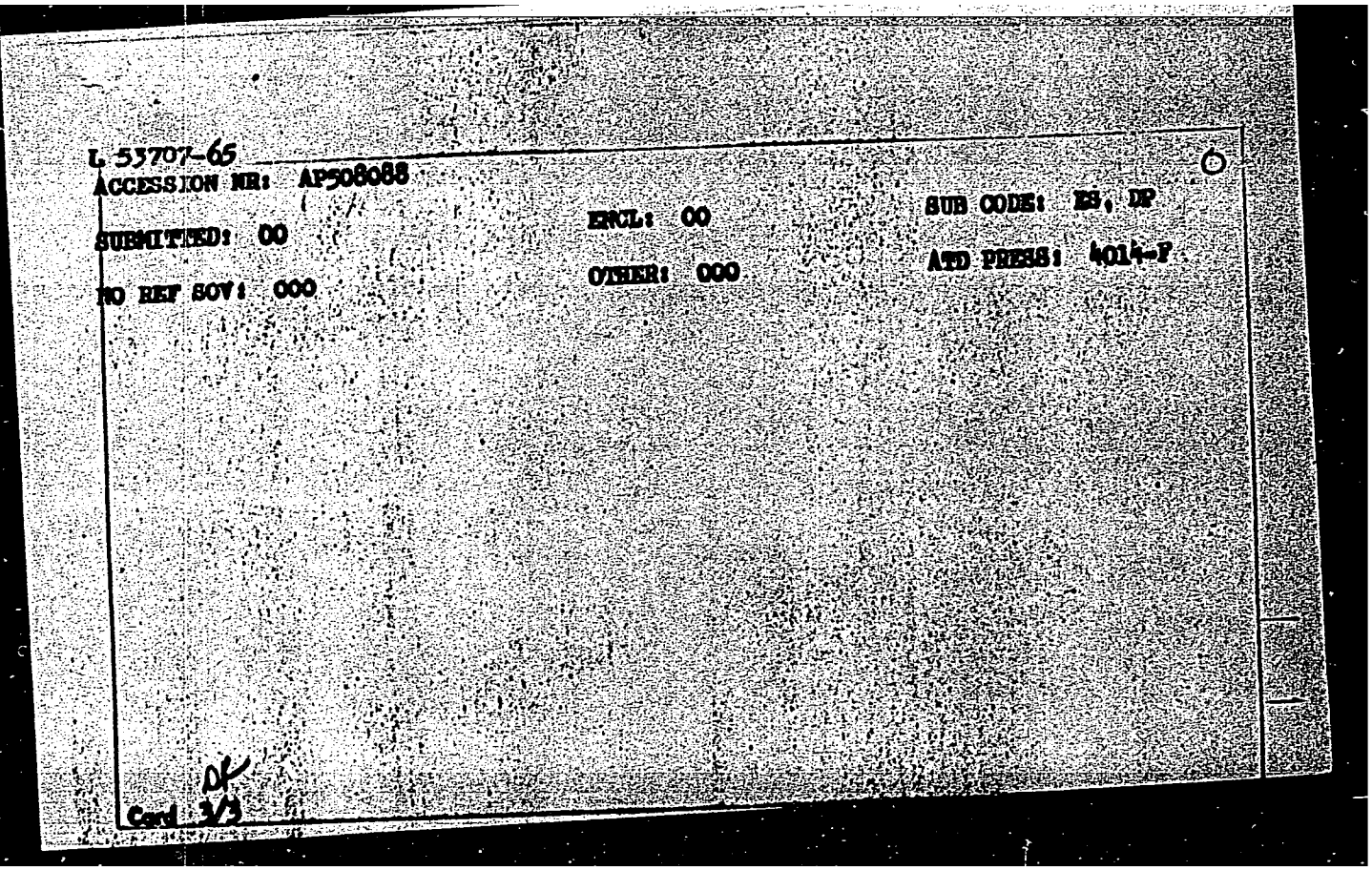
L 53707-65
ACCESSION NR: AP5008088

powered by the aircraft's electrical system and which are too heavy and bulky to be carried together.

It is recommended that immediate steps be taken to devise information-gathering systems which are capable of making simultaneous measurements of magnetic, gravimetric, electrical, and radiometric parameters. In addition, the lack of specialized equipment with which the data obtained by various systems can be partially analyzed in flight is noted. Finally, attention is called to the fact that Soviet automation of field data processing has failed to keep pace with developments in data-gathering instrumentation. A combination analog-digital computing system, now being built at the Institute of Automation and Electrometry to process magnetic seismograms, is designed to help fill this gap and is expected to be adaptable to a wide range of geophysical computations. Orig. art. has 2 figures.

ASSOCIATION: Institut avtomatiki i elektrometrii Sibirskogo otdeleniya Akademii nauk SSSR (Institute of Automation and Electric Measurement, Siberian Branch, Academy of Sciences, SSSR)

Card 2/3



L 53707-65
ACCESSION NR: AP5008088

SUBMITTED: 00 ENCL: 00 SUB CODE: ES, DP

NO REF SOV: 000 OTHER: 000 ATD PRESS: 4014-F

Card 3/3

L 47095-66 EWT(1) GW

ACC NR: AR6016016 SOURCE CODE: UR/0271/66/000/001/A035/A035

AUTHOR: Gel'fand, V. D.; Shtamberger, G. A.

TITLE: Method of measuring rectangular-voltage off-duty factors

SOURCE: Ref. zh. Avtomat telemekh. i vychisl. tekhn., Abs. 1A256

REF SOURCE: Sb. Geofiz. priborostr. Vyp. 22, L., Nedra, 1965, 66-73

TOPIC TAGS: rectangular voltage, off duty factor, geophysical equipment

ABSTRACT: It is noted that geophysical a-c equipment uses various circuits operating under key conditions. In these circuits it is sometimes necessary to maintain an invariable off-duty factor of the control voltage. A method is described for controlling and measuring the off-duty factor of rectangular voltage, which is free of many drawbacks inherent in other methods, e.g., measurement of the constant component or the second harmonic. Rectangular voltage is differentiated by means of an R-C circuit. The resulting heteropolar pulses are

Card 1/2 UDC: 658.562:533

L 56639-65 EWT(1)/EWA(h) Pn-4/Peb UR/0142/65/008/001/0089/0092
ACCESSION NR: AP5011954 621.376.239

AUTHOR: Shtamberger, G. A.; Gel'fand, V. D.

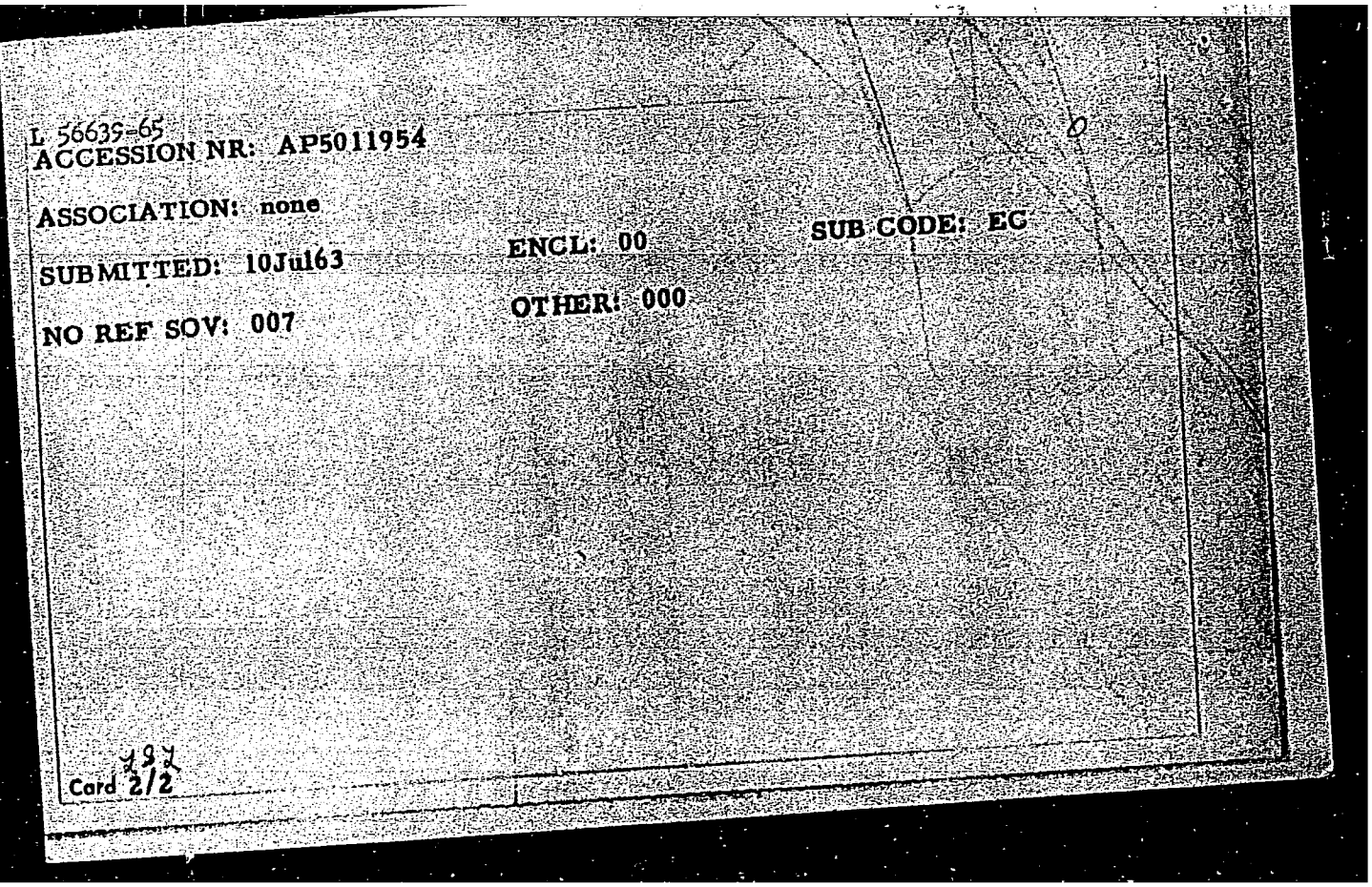
TITLE: Selectivity of a synchronous detector with a pre-filter

SOURCE: IVUZ. Radiotekhnika, v. 8, no. 1, 1965, 89-92

TOPIC TAGS: synchronous detector

ABSTRACT: A formula for the mean voltage at the output of a synchronous detector having a pre-filter is derived; this voltage is determined by the sum of odd harmonics in the input signal reduced according to the number of a harmonic and additionally reduced by the pre-filtration. The mean voltage also depends on the phase shifts caused by the filter. The use of a selective pre-amplifier having a rather low Q results in a considerably higher noise immunity of the synchronous detector within a wide range of the initial phase angle. Orig. art. has: 12 formulas.

Card 1/2



L 56639-65
ACCESSION NR: AP5011954

ASSOCIATION: none

SUBMITTED: 10Jul63 ENCL: 00 SUB CODE: EC

NO REF SOV: 007 OTHER: 000

Card 2/2

L 58324-65
ACCESSION NR: AP5016462 UR/0146/65/008/003/0023/0028

AUTHOR: Zhuravleva, T. A.; Karandeyev, K. B.; Shtamberger, G. A.

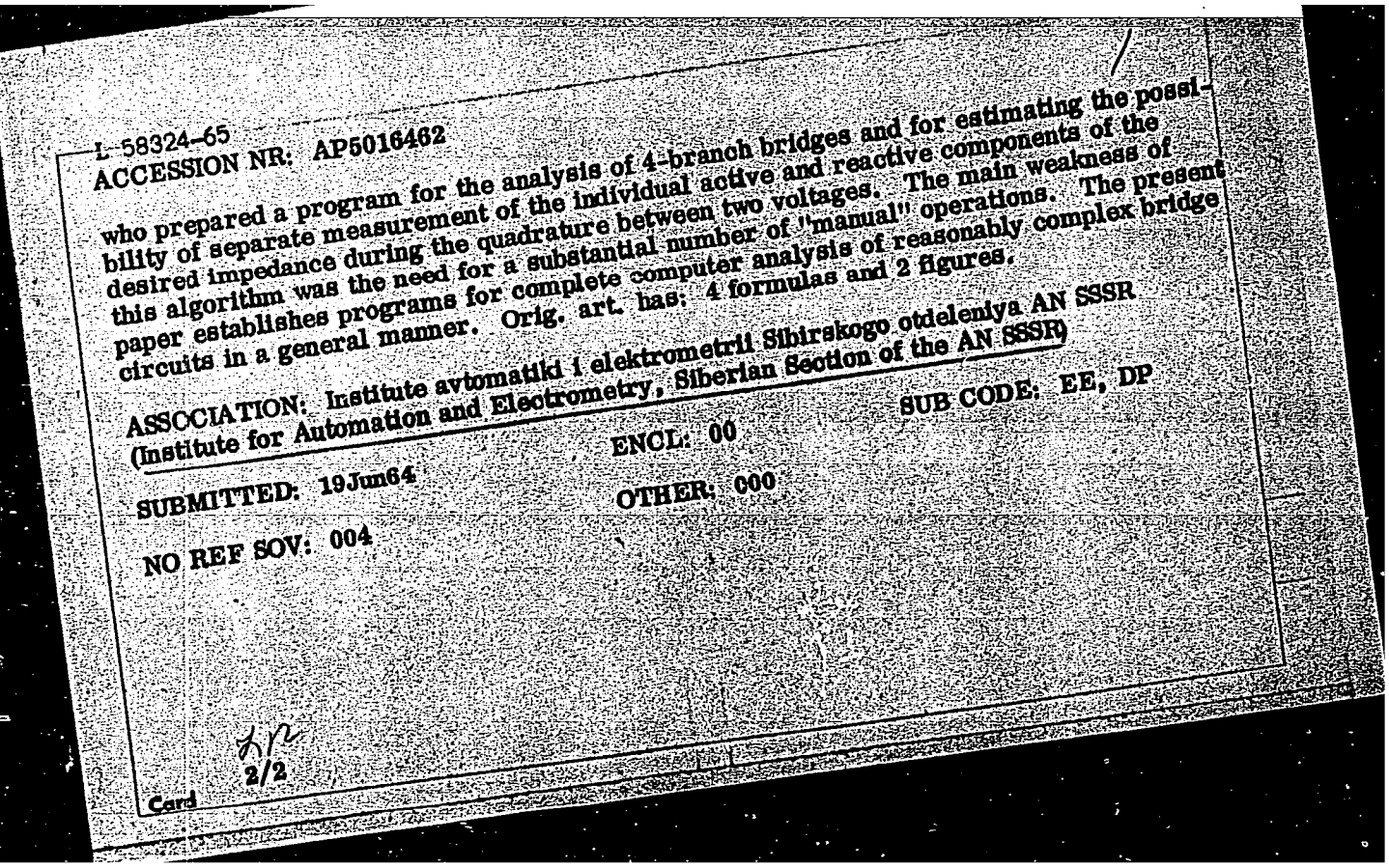
TITLE: The use of electronic computers for the selection of structures of quasi-equilibrated bridges allowing separate measurements of complex impedance components

SOURCE: IVUZ. Priborostroyeniye, v. 8, no. 3, 1965, 23-28

TOPIC TAGS: electric bridge analysis, complex impedance bridge circuit, impedance component measurement, quasiequilibrated bridge, bridge circuit analysis, computer program

ABSTRACT: By means of quasi-equilibrated a. c. bridges, one can carry out separate independent measurements of the module, phase angle, active and reactive components, Q-factor, losses, and other characteristics of a complex impedance (see, e. g., K. B. Karandeyev, G. A. Shtamberger, Obobshchennaya teoriya mostovykh tsepey peremennogo toka, Novosibirsk, Izd. Sibirskogo otdeleniya AN SSSR, 1961). The applicability of electronic computers for the analysis of quasi-equilibrated bridges was demonstrated by V. I. Obukhov (Issledovaniye sistemy avtomaticheskogo kontrolya khimicheskogo protsessa s ispol'zovaniyem kvaziuravnoveshennogo mosta. Thesis, Minsk, Institut mashinovedeniya i avtomatizatsii AN BSSR (Institute of Machines and Automation, AN BSSR), 1962),

Card 1/2



L 58324-65
ACCESSION NR: AP5016462

who prepared a program for the analysis of 4-branch bridges and for estimating the possibility of separate measurement of the individual active and reactive components of the desired impedance during the quadrature between two voltages. The main weakness of this algorithm was the need for a substantial number of "manual" operations. The present paper establishes programs for complete computer analysis of reasonably complex bridge circuits in a general manner. Orig. art. has: 4 formulas and 2 figures.

ASSOCIATION: Institute avtomatiki i elektrometrii Sibirskogo otdeleniya AN SSSR (Institute for Automation and Electrometry, Siberian Section of the AN SSSR)

SUBMITTED: 19Jun64 ENCL: 00 SUB CODE: EE, DP

NO REF SOV: 004 OTHER: 000

2/2
Card

ACC NR: AP7009076 SOURCE CODE: UR/0413/67/000/003/

INVENTOR: Shtamberger, G. A.; Shul'ts, V. P.; Mezentseva, A. D.

ORG: None

TITLE: A device for measuring the intensity ratio between two electric signals. Class 21, No. 190985 [announced by the Institution of Automation and Electrometry, Siberian Department AN SSSR (Institut avtomatiki i elektrometrii Sibirskogo otdelniya AN SSSR)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 3, 1967, 53

TOPIC TAGS: electronic measurement, electronic signal, signal analysis

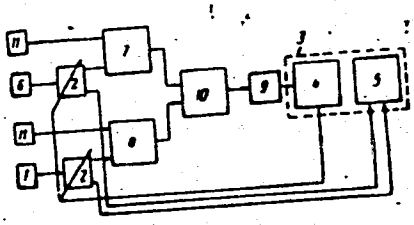
ABSTRACT: This Author's Certificate introduces a device for measuring the intensity ratio between two electric signals. The unit contains two receiving elements for the first signal, a single receiving element for the second signal, an adding stage and a subtracting stage. The input of the adder and that of the subtractor are each connected to one of the receiving elements for the first signal, while the outputs of these stages are connected to a multiplier. The multiplier output is connected through an averaging unit to the comparison result indicator. To improve accuracy in ratio measurement when both the signals to be compared are subject to interference, the installation is equipped with an extra receiving element for the second signal and two

UDC: 621.317.61.082

Card 1/2

ACC NR: AP7009076

interlocked variable dividers with identical transmission coefficients. The comparison result indicator is made up of a control unit and a final registration device. The receiving elements for the second signal are each connected through one of the dividers to the inputs of the adding and subtracting stages. The output of the averaging unit is connected through the control unit to the controlling input of the dividers. When mismatch reaches zero, the transmission coefficient of the dividers is fed to the final registration unit.



1--additional receiving element for the second signal; 2--dividers; 3--comparison result indicator; 4--servosystem; 5--final registration unit; 6--receiving element for the second signal; 7--adding stage; 8--subtracting stage; 9--averaging unit; 10--multiplier; 11--receiving elements for the first signal

SUBM CODE: 09/ SUBM DATE: 14Jun65

Card 2/2

L 27652-66

ACC NR: AP6018489 SOURCE CODE: UR/0410/65/000/004/0008/0016

35
B

AUTHOR: Grinevich, F. B.; Karandeyev, K. B.; Shtamberger, G. A.

ORG: none

TITLE: Principles of design of measuring apparatus for electrical prospecting by the natural electromagnetic fields method

SOURCE: Avtometriya, no. 4, 1965, 8-16

TOPIC TAGS: prospecting, integrated electronic device, electromagnetic field

ABSTRACT: This is a review of the principle of design of apparatus for electrical prospecting based on measurement of correlations between the signals of natural electromagnetic fields having a random character. The authors note that non-Soviet authors have not described the principles of design of apparatus, only its efficiency and the practical feasibility of its use. There is a brief discussion of the factors which must be taken into account in designing such apparatus. Orig. art. has: 4 figures and 19 formulas. [JPRS]

SUB CODE: 08,09,20/ SUBM DATE: 25Feb65 / ORIG REF: 003/ OTH REF: 002

UDC: 550.837

Card 1/1 CC

SHTAMBURG, N.G., inzh.

Construction of a precast reinforced concrete dam on the Stepnoy Zay River. Gidr.stroi. 31 no.4:20-22 Ap '61. (MIRA 14:5)
(Precast concrete construction)
(Stepnoy Zay River—Dams)

SHTAMBURG, V.F.

Conditions for the operation of drill pipes in deep drilling and the possibility of replacing steel pipes with light-alloy pipes. Trudy VNIIBT no.12:8-15 '64. (MIRA 18:4)

TIMOFEYEV, N.S.; SHTAMBERG, V.F.

Brief account of the results of scientific-research and experimental-structural work on the manufacture of drilling pipes from aluminum alloys. Neft. khoz. 42 no.12:1-6 D '64 (MIRA 18:2)

KUZNETSOV, German Ivanovich; FAYN, Genrikh Moiseyevich; SHTAMBURG, Valentin Fedorovich; SHEINA, Antonina Aleksandrovna; MIKHEYEV, N.I., red.

[Drilling pipes from light alloys] Buril'nye truby iz legkikh splavov. Kuibyshev, Kuibyshevskoe knizhnoe izd-vo, 1964. 51 p. (MIRA 17:12)

L 30045-65 EPR/EWT(l)/EWT(m)/EWP(k)/EWP(b)/T/EWA(d)/EWP(w)/EWP(t)
Pf-4/Ps-4 IJP(c) EM/GW/MJW/JD/HW S/3130/64/000/012/0008/0015

ACCESSION NR: AT5004705

AUTHOR: Shtamburg, V. F.

TITLE: Working conditions of drill pipes in deep drilling and the possibility of replacing steel pipes by light alloy ones

SOURCE: Vsesoyuznyy nauchno-issledovatel'skiy institut burovoy tekhniki. Trudy, no. 12, 1964. Buril'nyye truby iz legkikh splavov (Drill pipes made of light alloys), 8-15

TOPIC TAGS: alloy, aluminum, steel, aluminum alloy, titanium alloy, drill, stress analysis, stress calculation, stress concentration, stress corrosion, metal corrosion, D steel, K(Em) steel, E steel, L steel, M steel, D16T aluminum, VAD23 aluminum, V95 aluminum, V96Ts aluminum

ABSTRACT: Working conditions of drill pipes in rotary and turbodrilling were analyzed. In turbodrilling the pipes were subjected primarily to static forces: own weight, internal mud-pressure, reaction torques, and bending forces. Additional dynamic forces were: extension due to hoisting and vibration caused by bits and pumps. Basic load producing the greatest extension at the suspension point was the own weight of the pipe string. Torques caused by a reaction

Card 1/3

ACCESSION NR: AT5004705

moment of bit rotation were maximum at the lower part of the string. The absolute values of torques and mud pressure were negligible in turbodrilling. In rotary drilling twisting loads increased the summary stress at the suspension point and decreased the depth of drilling. Maximum drilling depth for steel pipes of uniform sizes (141 x 10 mm) and varied strength (yield-stress 38-95 kg/mm^2) was from 2.8-7.0 km (turbodrill) and 2.5-6.2 km (rotary drill). Similar decrease in drilling depths was determined by the static calculations of light pipes. Considerable alternating loads appearing in the rotary drilling complicated the working conditions of steel and light pipes. The applicability of light alloy pipe was evaluated according to its resistance to alternating loads under the action of stress concentrations and corrosive forces. Analyses revealed that the above conditions had a smaller effect on some aluminum alloys than on steel. Titanium pipes with higher strength and corrosion resistance than aluminum proved too expensive. The drilling depth of the medium strength aluminum D16T with the yield-point 33 kg/mm^2 was greater than that of the steel with the yield-stress 90 kg/mm^2. Very strong aluminum alloys VAD23, V95, V96Ts (yield-stress 55-60 kg/mm^2) could withstand a drilling depth exceeding 42 km with mud solution weight 2.0 g/cm^3. The alloy D16T had the optimum combination of mechanical and

Card 2/3

ACCESSION NR: AT5004705

economic features for rotary drilling. Orig. art. has: 1 figure, 3 tables, and 6 formulas.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut burovoy tekhniki (All-Union Scientific Research Institute of Drilling Technology)

SUBMITTED: 27May63 ENCL: 00 SUB CODE: MM

NO REF SOV: 009 OTHER: 003

Card 3/3

TIMOFEYEV, N.S.; SHTAMBURG, V.F.

Designing drilling pipes made from light alloys for various drilling conditions. Trudy VNIIBT no.12:48-56 '64. (MIRA 18:4)

SHPAMBURG, V.F.; KONDRAT'YEV, E.P.; KUZNETSOV, G.I.; MELNA, A.A.; PAIN, G.M.

Drilling wells using light-alloy drilling pipes. Trudy VNIIBT no.12:72-92 '64 (MIRA 18:4)

PEYSAKHOVA, I.A.; SUTYRINA, V.A.; SHTAMBURG, V.F.; YAKUBOVICH, M.A.

Bench for testing drilling pipes for fatigue strength. Mash. i neft. obor. no.1:7-10 '65. (MIRA 18:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut burovoy tekhniki.

TRAKHTENBERG, D.M.; RODIONOVSKAYA, E.I.; KLEYNER, G.I.; SHTAMER, V.Ya.

Study of some physicochemical properties of oleandomycin. Antibiotiki 10 no.11:982-989 N '65. (MIRA 19:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov, Moskva, i Rizhskiy zavod medpreparatov. Submitted January 16, 1965.

SHTAMLER, S. M.

USSR/Medicine - Evolution
Medicine - Reflex Action

Sep/Oct 48

"Ontogenesis of the Mechanism of Emetic Reflex Action," S. M. Shtamler, Lab Growth Physiol, Cen Pediatric Inst, Moscow, 7 pp

"Fiziol Zhur SSSR" Vol XXXIV, No 5

Describes experiments on cats and dogs. Notes differences between reactions of kittens and puppies and those of adult animals. Submitted 7 May 46.

34/49T18

SHTAMLER, S.M.

YENIKEYEVA, S.I.; SHTAMLER, S.M.

Characteristics of neural regulation of the rhythm of cardiac contractions in rabbits in various stages of ontogenesis. Biul. eksp. biol. i med. 38 no.7:10-13 Jl '54. (MLRA 7:8)

1. Iz laboratorii vozrastnoy fiziologii (zav. prof. I.A.Arshavskiy) Instituta obshchey i eksperimental'noy patologii (dir. akad. A.D. Speranskiy) AMN SSSR, Moskva.

(HEART, physiology,
rhythm, neural regulation, age factor in rabbits)

SHTAMM, A., konditer (g.Bogdanovich, Sverdlovskoy obl.)

Inexpensive confectionery products. Obshchestv. pit. no. 5:47 My '61. (MIRA 14:5)

(Confectionery)

SHTAMM, A., konditer (g.Bogdanovich)

Confectioneries made of flour. Obshchestv. pit no.9:28-29 S '61. (MIRA 14:11)

(Confectionery)

PUSHKAREVA, Z.V.; MEDOVSHCHIKOVA, F.F.; SHTAMM, A.K.; SMIRNOVA, L.V.

Investigations of chemical processes in the synthesis of papaverine; synthesis and properties of certain acyl derivatives of -amino- -(3,4-dimethoxy)-cinnamic acid. Med.prom. no.2:25-29 Ap-Je '55. (MLRA 9:12)

1. Laboratoriya organicheskogo sinteza Ural'skogo politekhnicheskogo instituta imeni S.M.Kirova.

(ACIDS,
cinnamic acid, α-amino-β-(3,4-dimethoxy)-cinnamic acid acyl deriv., synthesis in prod. of papaverine)
(PAPAVERINE, preparation of,
synthesis of α-amino-β-(3,4-dimethoxy)-cinnamic acid acyl deriv. in)

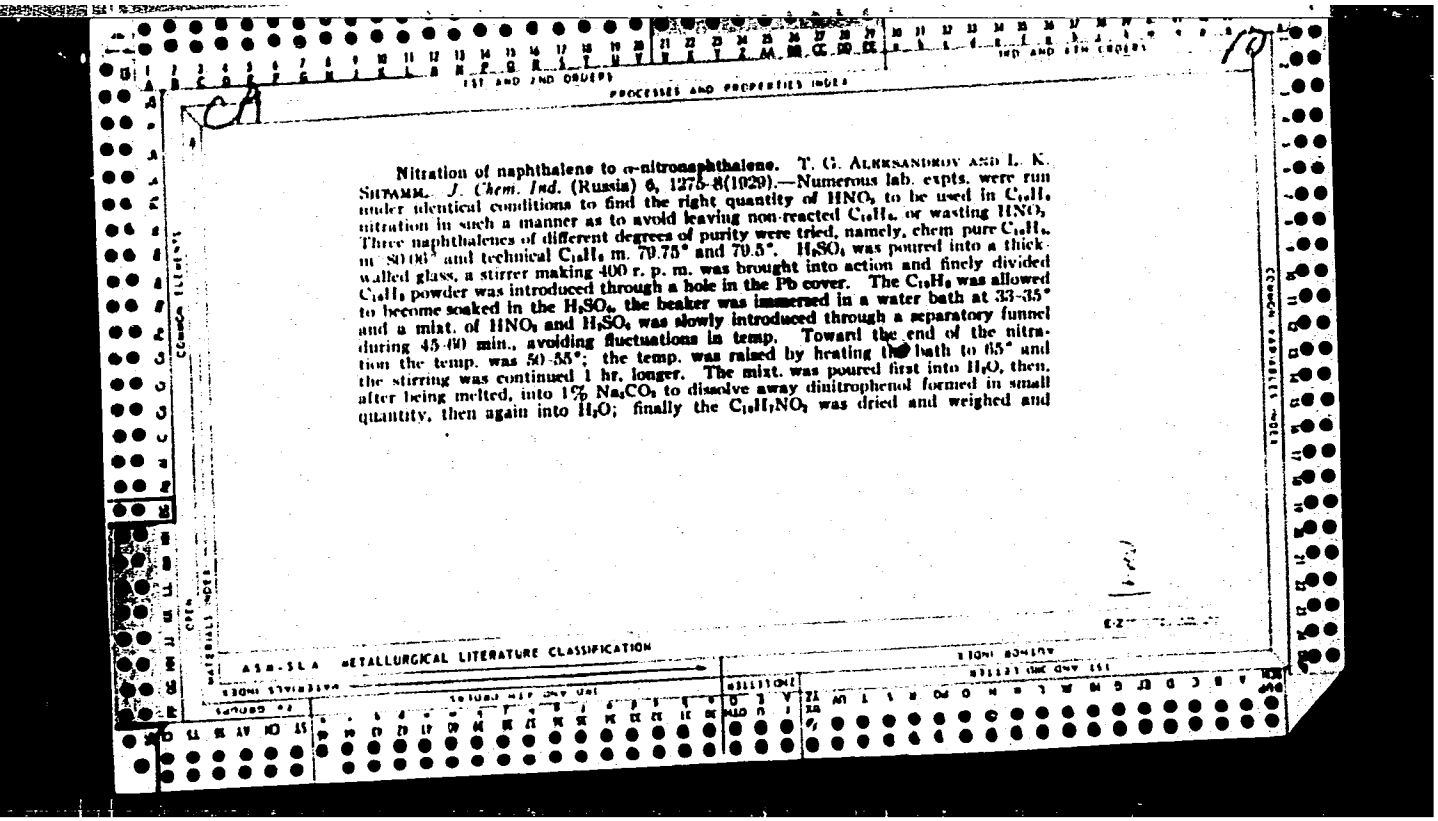
SHTAMM, A.M., inzhener.

Removing edges and weak corners in pressing plywood. Der. i leso-khim. prom.3 no.11:15-16 N '54. (MLRA 7:12)

1. TsNIIFM.
(Plywood)

SHTAMM, A.M.

New method of gluing high-grade plywood. Der.prom. 9 no.10:28 O '60. (MIRA 13:10)
(Plywood) (Gluing)



PROCESSES AND PROPERTIES INDEX

CA

Nitration of naphthalene to α-nitronaphthalene. T. G. Aleksandrov and L. K. Shtamm. *J. Chem. Ind.* (Russia) 6, 1275-8(1929).—Numerous lab. expts. were run under identical conditions to find the right quantity of HNO_3 to be used in $C_{10}H_8$ nitration in such a manner as to avoid leaving non-reacted $C_{10}H_8$ or wasting HNO_3. Three naphthalenes of different degrees of purity were tried, namely, chem pure $C_{10}H_8$ m. 80.06° and technical $C_{10}H_8$ m. 79.75° and 79.5°. H_2SO_4 was poured into a thick-walled glass, a stirrer making 400 r. p. m. was brought into action and finely divided $C_{10}H_8$ powder was introduced through a hole in the Pb cover. The $C_{10}H_8$ was allowed to become soaked in the H_2SO_4, the beaker was immersed in a water bath at 33-35° and a mixt. of HNO_3 and H_2SO_4 was slowly introduced through a separatory funnel during 45-60 min., avoiding fluctuations in temp. Toward the end of the nitration the temp. was 50-55°; the temp. was raised by heating the bath to 65° and the stirring was continued 1 hr. longer. The mixt. was poured first into H_2O, then, after being melted, into 1% Na_2CO_3 to dissolve away dinitrophenol formed in small quantity, then again into H_2O; finally the $C_{10}H_7NO_2$ was dried and weighed and

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

its m. p. was detd. The m. p. was taken as the criterion of the purity of the nitro deriv. Exptl. results show that the best yields, viz., 98.98%, are obtained with a 3% excess of HNO_3 over the theoretically needed 1 mol. per mol. of $C_{10}H_8$; in that case the m. p. of the product obtained is the highest. If HNO_3 is taken in lesser quantity, the reaction is incomplete, whereas by-products are formed if too large a quantity of HNO_3 is taken. The quality of the $C_{10}H_8$ taken is of little importance, provided its m. p. is not lower than 79.3°; the differences of the m. ps. of the $C_{10}H_7NO_2$ obtained were not more than 0.15–0.6° with all the 3 grades of $C_{10}H_8$. If HNO_3 prepd. by Valentiner's process is used for nitration, this acid contg. NO and NO_2, the m. p. of the product obtained is only 0.1–0.2° lower. If the spent H_2SO_4 of one operation is utilized again for the next operation, this only lowers the m. p. of the $C_{10}H_7NO_2$ by 0.2°. HNO_2 present in slight quantity in HNO_3 speeds up the commencement of the reaction, which is otherwise slow to start when using pure $C_{10}H_8$; in larger quantity, however, HNO_2 is harmful, as it causes excessive fluctuations of temp. during nitration and thus badly affects the results. II. *Ibid* 1523–4.—As stated above, on washing the reaction product with 1% Na_2CO_3 the latter exts. from it an admixt. The elimination of this admixt. raises the m. p. of $C_{10}H_7NO_2$ by 0.75°. The admixt. is found to consist of 2,4-dinitro-α-naphthol, the salts of which are the Marcius yellow (a dye); it can be sepd. in the pure state in the quantity of 1% of the wt. of $C_{10}H_7NO_2$ obtained. The formation of this by-product is the reason why nitration of $C_{10}H_8$ requires a 3% excess over the equimol. quantity; each mol. of the dinitronaphthol in the course of its formation consumes 3 mols. HNO_2, viz., 1 for oxidation and 2 for nitration. B. N.

SHTAMM, L. K.

Feb 1947

USSR/Chemistry - Synthesis
Albucid

"New on the Synthesis of the Preparation Albucid,"
L K Shtamm and E J Tsekhanovich, 1 p

"Farmatsiya" No 2

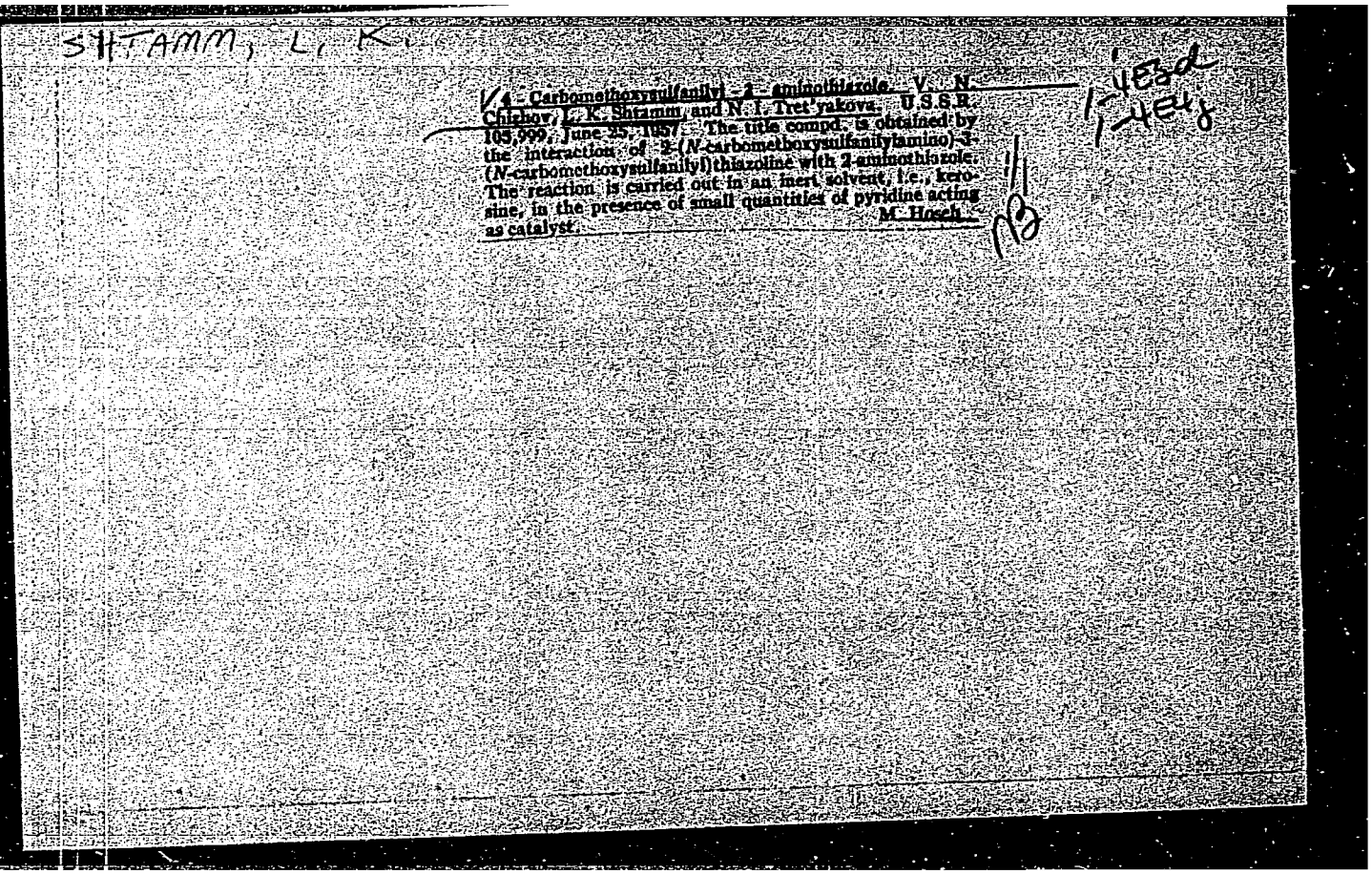
On the basis of the experimental data obtained, a new method is proposed for obtaining Diacetamide by the acetylization of acetamide. This method was successfully introduced into the production of albucid

1T66

PETROVA, A.F.; KHALILI, N.A.; SHTAMM, L.K.; TRAKHTENBERG, D.M.; RODIONOVSKAYA, E.I.; GORDINA, Z.V.

Extraction of a crystalline erythromycin base from aqueous solutions. Med. prom. 14 no.9:32-36 S '60. (MIRA 13:9)

1. Sverdlovskiy zavod meditsinskikh preparatov i Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.
(ERYTHROMYCIN)



SHTAMM, L. K.

2-(N-Carbomethoxysulfanilyl)-2-aminothiazole. V. N. Chighov, L. K. Shtamm and N. I. Tret'yakova. U.S.S.R. 105,999, June 25, 1957. The title compd. is obtained by the interaction of 2-(N-carbomethoxysulfanilylamino)-3-(N-carbomethoxysulfanilyl)thiazoline with 2-aminothiazole. The reaction is carried out in an inert solvent, i.e., kerosine, in the presence of small quantities of pyridine acting as catalyst. M. Hosch

MELAMED, I.; SHTAMM, V., inzh.

Page of the watchmaker. Mest.prom.i khud.promys. 1 no.2/3:[illegible] N-D '60. (MIRA 14:4)

1. Zaveduyushchiy tsentralizirovannoy chasovoy masterskoy, Saratov (for Melamed).
(Clockmaking and watchmaking—Machinery)

SHUKHMAN, Z.; SHTAMM, V.; SHLEYMOVICH, S.; KALMYKOV, P.; RAL'TSEVICH, V.; PYATENKOV, V.; POTEMIN, I.; SOKRATOV, Yu.

There are all conditions for building strong and good elevators. Muk.-elev. prom. 29 no.8:18-19 Ag '63. (MIRA 17:1)

1. Zamestitel' upravlyayushchego trestom TSentroelevatormel'stroy (for Shtamm). 2. Nachal'nik sektora organizatsii stroitel'nykh rabot Gosudarstvennogo instituta Promzernoproyekt (for Ral'tsevich). 3. Starshiy inzh. TSentral'nogo konstruktorskogo byuro tresta Spetselevatormel'montazh (for Potemin). 4. Zamestitel' nachal'nika proizvodstvenno-tekhnicheskogo otdeleniya tresta Petropavlovskelevatormel'stroy (for Sokratov).

SHTAMM, V.A.

Shtamm, V.A. "Indoor forcing of plants," Byulleten' Glav. botan. sada, Issue 1, 1948, p. 91-92

SO: U-2888, Letopis Zhurnal'nykh Statey, No. 1, 1949

SHTAMM, V.A.

22587 Shtamm, V.A. Opyt Kul'tury Knyazheniki. Byulleten' Glav. Botan. Sada, Vyp. 2, 1949, S.-101-02.

SO: Letopis No. 30, 1949

SHTAMM, V.A.

Causes of irregular blossoming of the filbert. Biul.Glav.bot.sada no.16:93-95 '53. (MLRA 7:4)

1. Glavnyy botanicheskiy sad Akademii nauk SSSR. (Filbert)

SHTAMM, V.A.

Biology of Gagea lutea L. Biul.Glav.bot. sada no.19:90-95 '54. (MLRA 8:2)

1. Glavnyy botanicheskiy sad Akademii nauk SSSR.
(Liliaceae)

SHTAMM, Valentin Vol'demarovich, inzh., EYMONT, P.A., inzh.red.; KOCHETKOV, L.I., red.; GOLUBKOVA, L.A., tekhn.red.

[Technology of the construction of storage elevators] Tekhnologiia stroitel'stva zagotovitel'nykh elevatorov. Pod red. P.A. Eimonta. Moskva, Izd-vo tekhn. i ekon. lit-ry po voprosam mukomol'nokrupianoi, kombikormovaoi promyshli. i elevatorno-skladskogo khoziaistva, 1957. 162 p. (MIRA 11:9)

(Grain elevators)

1. [illegible]

2. USSR (600)

4. Cement Industries

7. Most advantageous height of cement factory warehouse bulkheads TSement/ No. 1, 1952 18

9. Monthly List of Russian Accessions, Library of Congress, June 1952. Unclassified.

KRYLOV, S. M., Eng.; SHTARM, Ye. L.

Cement Industries

Bulkheads of the mixing shed of cement plants. TSement 19, No. 1, 1953.

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

SHTAMM, Ye., kandidat tekhnicheskikh nauk.

Prefabricated, reinforced-concrete bunkers for grain storage with hinged joints. Mor. i rech. flot 13 no.4:29-30 Ag '53. (MLRA 6:10)
(Grain--Storage)

KRYLOV,S.M., inzhener; SHTAMM,Ye.L., kandidat tekhnicheskikh nauk

The building of horizontal 25m. diameter tanks with the use of sliding forms. TSement 21 no.2:20-22 Mr-Ap '55. (MLRA 8:8)
(Concrete construction)

MALENKOV, A.G.; SHTAMM, Ye.V.

Changes in the intensity of adhesion between cells in the series normal liver - solid hepatoma - ascitic hepatoma. TSitologiia 7 no.3:414-416 My-Je '65. (MIRA 18:10)

1. Laboratoriya mekhanizmov kantserogeneza Instituta eksperimental'noy i klinicheskoy onkologii AMN SSSR, Moskva.

MALENKOV, A.G.; VASIL'YEV, Yu.M.; MODYANOVA, Ye.A.; ROZHKOVA, Z.A.; SHTAMM, Ye.V.

Nature of cohesion of liver cells. Biofizika 8 no.3:354-360 '63. (MIRA 17:11)

1. Institut eksperimental'noy i klinicheskoy onkologii AMN SSSR, Moskva.

L 22401-66 EWT(1)/EWA(h)

ACC NR: AP6009888 SOURCE CODE: UR/0413/66/000/004/0080/0081

INVENTOR: Gerasimov, A. Ya.; Khrushchev, V. V.; Lur'ye, L. Z.; Shtamm, Yu. P.; Ivanov, V. V.; Nokaln, E. A.

ORG: none

TITLE: Device for the display of voltage curves on the screen of a cathode-ray oscilloscope. Class 42, No. 179019 [announced by the Special Design Office, AN Estonian SSR (Spetsial'noye Konstruktorskoye byuro AN Estonskoy SSR)]

SOURCE: Izobreteniya, promyshlennyye boraztsy, tovarnyye znaki, no. 4, 1966, 80-81

TOPIC TAGS: oscilloscope, data display, visual signal, display device

ABSTRACT: The Author Certificate introduces a device for displaying voltage curves on an oscilloscope screen. For enhanced speed and occuracy, the electronic switches are fitted with elements which correct the characteristics of the pickups and the tubes. A contactless ring distributor of rectangular pulses is included; it is synchronized by the voltage of the generator which feeds the pickups. In order to move the cali-

Card 1/2 UDC: 681.14

L 22401-66

ACC NR: AP6009888

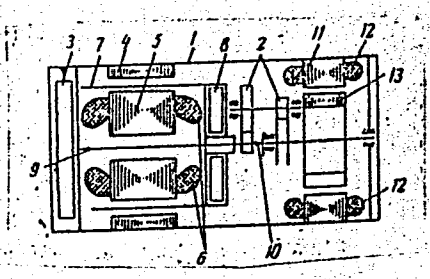


Fig. 1. Display device

1 - Electronic switches; 2 - pickups; 3 - oscilloscope; 4 - calibration pickup; 5 - delay unit.

bration pickup is connected to the electronic switch through a controlled delay unit (see Fig. 1). Orig. art. has: 1 figure. [DW]

SUB CODE: 09/ SUBM DATE: 12Aug64/

Card 2/2

Shtan' A. S.

AUTHORS: Leshchinskiy, N. I., Shtan', A. S., Sinitsyn, V. I. 32-11-59/60

TITLE: On the Problem of the Organization of Laboratories for Work With Radioactive Substances (K voprosu ob organizatsii laboratoriy dlya raboty s radioaktivnymi veshchestvami).

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol. 23, Nr 11, pp. 1396-1398 (USSR).

ABSTRACT: In the introduction to this article it is explained that the problem concerned has not been dealt with sufficient clearness in scientific publications. A publication with the title "Planning of Laboratories for Work with Radioactive Isotopes" by I. V. Malashenko is declared most descidedly to be at fault because it is based upon wrong and obsolete conceptions. The article mainly criticizes several measures mentioned in the publication by Malashenko, and the allegedly "correct measures" are given in order to be compared with the former. The article contains a sample plan for the laboratory concerned, from which it is possible to distinguish strictly between "contaminated rooms","passage rooms" and "pure (uncontamined) rooms". According to the plan the laboratory consists of the following parts: 1. A storage room for radioactive substances. 2. A repair room to deal with the "contaminated zone" from within. 3. Medical and dressing stations, shower baths, and rooms where clothes can be changed. 4.

Card 1/2

On the Problem of the Organization of Laboratories for Work With Radioactive Substances. 32-11-59/60

Washroom with special facilities for conveying "contaminated washing", and a device for taking over "pure (decontaminated) clothes". 5. A room for work carried out with little active substances with built-in chest of drawers. A "pure corridor" with doors leading to "pure rooms". 7. Emergency exit from the "contaminated zone". An automatic manipulating device for the transport and handing out of radioactive substances to the row of protective chambers ("boxes"), where work is carried out. It is pointed out in the article that the use of wooden material (also if painted) for boxes, chests, etc., in the "contaminated zone" is not permitted. Provision is made for thorough ventilation and corresponding filtering of rooms. Filters may be exchanged only on the "contaminated side". "Contaminated waste" must be examined as to the degree of their contamination, and must be removed and isolated. In conclusion it is said that planning of the sanitary installations is further studied and developed in various different forms to suit scientific institutes as well as technical and agricultural institutes.
There are 1 figure, and 3 Slavic references.

AVAILABLE: Library of Congress.

Card 2/2

SOV/89-7-4-24/28

11(7), 21(8), 21(3)

AUTHORS: Shtan', A., Leshchinskiy, N.

TITLE: New Rules for the Transport of Radioactive Substances

PERIODICAL: Atomnaya energiya, 1959, Vol 7, Nr 4, p 399 (USSR)

ABSTRACT: The Glavnoye upravleniye po ispol'zovaniyu atomnoy energii pri Sovete Ministrov SSSR (Main Administration for the Use of Atomic Energy of the Ministers' Council of the USSR) and the Gosudarstvennaya sanitarnaya inspektsiya SSSR (State Sanitary Inspectorate of the USSR) confirm the new rules for the transport of radioactive substances by rail, aircraft, and automobiles. According to these new rules radioactive substances are subdivided according to the physical characteristics of their radiation into three groups. The first group comprises radioactive substances, which, besides α- and β-particles, radiate also γ-quanta (Co^{60}, J^{131}, Ir^{192}, Cs^{137} and others). The second group comprises such radioactive substances as are sources of a neutron-radiation or also of a neutron- and a γ-radiation. The third group comprises such substances as emit only α- and β-particles (Po^{210}, Sr^{90}, P^{32}, S^{35}, C^{14} and others). The packings in which the radioactive sub-

Card 1/3

stances are transported are subdivided according to the dose rate of γ-radiation on their surface or at a distance of 1 m from the packing into 4 transport categories: 1) The first category comprises such packings on the surface of which the dose rate of γ-radiation does not exceed 0.1 millicurie/sec. These packings are completely undangerous, may be transported by any kind of conveyance, and may stored in any kind of store-room together with other goods. However, the total activity in one package must not exceed 2000 millicurie. 2) The second category comprises such packings in which the dose rate of γ-radiation does not exceed 3 millicurie per second (and at a distance of 1 m from the package does not exceed 0.1 millicurie per second). Also these packages may be transported by any means of conveyance and may be stored in ordinary store-rooms, but not more than 10 units (in the case of transport aircraft 20 units) per transport unit or store-room. 3) In the case of the third category 55 millicurie per second and 2.5 millicurie per second at a distance of 1 m are prescribed. This category of packages must, according to the kind of transport, be kept at a distance of at least 1 to 10 m from human dwellings and at least 5 m from photographic materials. Should a transport in packages of the afore-

mentioned categories be found to be unrational (e.g. because of their too high weight), a fourth transport category is provided. Such packages may be transported in individual cars, automobiles, aircrafts, or at remote spots in ships. Liquids and gases must be transported in hermetically sealed vessels, powders and solids in tightly closed containers. The main package must be enclosed in an additional outer packing. These rules hold for all organizations producing, transporting, and using radioactive substances. There is 1 Soviet reference.

POSTNIKOV, Vladimir Ivanovich; LETENKO, Viktor Aleksandrovich; TATOCHENKO, L.K., kand.tekhn.nauk, retsenzent; KALINOVA, R.S., retsenzent; SHTAN', A.S., kand.khim.nauk, red.; SEMENOVA, M.M., red.izd-va; EL'KIND, V.D., tekhn.red.

[Efficiency of radioactive control in the machinery industry applied to gamma-ray flaw detection] Effektivnost' radioaktivnogo kontrolia v mashinostroenii; primenitel'no k gamma-defektoskopii. Predisl. A.V.Topchieva. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1960. 143 p. (MIRA 14:4)

(Radioisotopes--Industrial applications)

RUMYANTSEV, Stepan Vasil'yevich; MATSYUK, L.N., kand.tekhn.nauk, retsenzent; SHTAN', A.S., kand.khim.nauk, retsenzent; MISHARIN, G.I., inzh., retsenzent; MATVEYEVA, A.V., red.; MAZEL', Ye.I., tekhn.red.

[Use of radioactive isotopes for flaw detection] Primenenie radioaktivnykh izotopov v defektoskopii; rukovodstvo po primeneniiu radioaktivnykh izotopov v promyshlennoi defektoskopii. Moskva, Izd-vo glav.upr.po ispol'zovaniiu atomnoi energii pri Sovete Ministrov SSSR, 1960. 293 p. (MIRA 13:7)
(Metals--Defects)
(Radioisotopes--Industrial applications)

SHTAN, A S.

~~[illegible] G. D.~~

176

PHASE I BOOK EXPLOITATION SOV/5410

Tashkentskaya konferentsiya po mirnomu ispol'zovaniyu atomnoy energii. Tashkent, 1959.

Trudy (Transactions of the Tashkent Conference on the Peaceful Uses of Atomic Energy) v. 2. Tashkent, Izd-vo AN UzSSR, 1960. 449 p. Errata slip inserted. 1,500 copies printed.

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Card 1/20

Transactions of the Tashkent (Cont.) SOV/5410

Candidate of Physics and Mathematics; Ya. Kh. Turakulov, Doctor of Biological Sciences. Ed.: R. I. Khamidov; Tech. Ed.: A. G. Babakhanova.

PURPOSE : The publication is intended for scientific workers and specialists employed in enterprises where radioactive isotopes and nuclear radiation are used for research in chemical, geological, and technological fields.

COVERAGE: This collection of 133 articles represents the second volume of the Transactions of the Tashkent Conference on the Peaceful Uses of Atomic Energy. The individual articles deal with a wide range of problems in the field of nuclear radiation, including: production and chemical analysis of radioactive isotopes; investigation of the kinetics of chemical reactions by means of isotopes; application of spectral analysis for the manufacturing of radioactive preparations; radioactive methods for determining the content of elements in the rocks; and an analysis of methods for obtaining pure substances. Certain

Card 2/20

instruments used, such as automatic regulators, flowmeters, level gauges, and high-sensitivity gamma-relays, are described. No personalities are mentioned. References follow individual articles.

TABLE OF CONTENTS:

RADIOACTIVE ISOTOPES AND NUCLEAR RADIATION IN ENGINEERING AND GEOLOGY

Lobanov, Ye. M. [Institut yadernoy fiziki UzSSR - Institute of Nuclear Physics AS UzSSR]. Application of Radioactive Isotopes and Nuclear Radiation in Uzbekistan 7

Taksar, I. M., and V. A. Yanushkovskiy [Institut fiziki AN Latv SSR - Institute of Physics AS Latvian SSR]. Problems of the Typification of Automatic-Control Apparatus Based on the Use of Radioactive Isotopes 9

Transactions of the Tashkent (Cont.) SOV/5410

Leshchinskiy, N. I., G. N. Lokhanin, and A. S. Shtan' [Glavatom - Main Administration for the Utilization of Atomic Energy]. Organization of Laboratories for Experiments Using Radioactive Substances 132

Bibergal', A. V., N. I. Leshchinskiy, M. M. Korotkov, and O. G. Arakelov. Development of a Transportable Gamma-Plant for Seed Irradiation Before Sowing 148

Artmeladze, I. D., A. A. Bibergal', and T. V. Tsetskhladze [Institut fiziki AN GruzSSR - Institute of Physics AS GruzSSR] Experimental Semi-Industrial Gamma-Plant for Radiation Processing of Agricultural Products in Georgia 155

Bibergal', A. V., N. I. Leshchinskiy, U. Ya. Margulis, and V. G. Khrushchev [Ministerstvo zdradvookhraneniya - Ministry of Health USSR]. Some Problems of Design and Construction of High-Capacity Gamma-Plants 164

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[Protective equipment and devices for working with radioactive substances] Zashchitnoe oborudovanie i prisposobleniia dlia raboty s radioaktivnymi veshchestvami. Moskva, Gos. izd-vo lit-ry v oblasti atomnoi nauki i tekhniki, 1961. 129 p. (MIRA 14:11)
(Radiation protection)

S/081/62/000/010/049/085
B168/B180

AUTHORS: Sinitsyn, V. I., Shtan', A. S.

TITLE: Appliances and apparatus based on the use of radioactive isotopes for the control and regulation of technological processes in the chemical industry

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 10, 1962, 357-358, abstract 10I177 (Vestn. tekhn. i ekon. inform. N.-i. in-t tekhn.-ekon. issled. Gos. kom-ta Sov. Min. SSSR po khimii, no. 5, 1961, 35-43)

TEXT: Mass-produced Soviet appliances of interest to the chemical industry are briefly described, together with some planned for mass-production in 1961. 1. A level indicator for the interface between two media. Co^{60} radiator, gamma-rays, activity 0.5-60 mg-equiv radium ("Kalugapribor" Factory). 2. Level regulator-indicator with pneumatic outlet РУП-1 (RUP-1), made at the same factory. 3. A series of relay-type appliances, made at the Talinn Plant, based on the УРАП (URAP) electronic relay unit: level recorder for measuring vessels, with an accuracy of

Card 1/3

Appliances and apparatus based...

± 2 mm: maximum level recorder РПРУ-4 (RPRU-4), accuracy ± 5 cm; device РК-4 (RK-4) for regulating the filling of containers on a conveyor, a tracking level-gage УР-6-А (UR-6-A) for storage tanks; continuous density gage ПЖР-2 (PZhR-2), range 1-1.5 g/cm^3, error 0.5 %. 4. Ionization gage МИР-3А (MIR-3A) for inactive gases and steam, range 0.01-10 mm Hg, error ± 5%, alpha-particle source Pu^{239} ("Kalugapribor" Factory). 5. Non-contact device БИВ (BIV) for weighing sheet materials in the course of manufacture, range 200-800 g/m^2, error ± 5 %, source Tl^{204}. 6. Gage for measuring deviation of sheet thickness from a standard УРИТ-1 (URIT-1), range 50-500 g/m^2, error ± 3 %, beta-radiation, consisting of 5 units. 7. One- or two-level regulator АРПУ (ARPU) for the interface between two media, difference in densities 10 and 50 %, operating time 10 sec, error ± 40 mm, model У-3Г (V-3G) (Talinn Factory). 8. β-thickness gage БТП (BTP) for coatings (varnish, paints, electroplating, etc.), range - a few mg/cm^2, accuracy ± 2 %, source Tl^{204}, 120 μc (Talinn Factory). 9. Pulp density gage ИПП (IPP), range

1.0-1.5 and 1.6-2.1 g/cm^3, error 1.5 %, gamma-radiation source Cs^{137}, 50 mg-equiv. The following are being developed: 10. Potassium concentration gage RKK-B-1 (RKK-B-1) for measuring the intensity of inherent radiation of K^{40}, range 0-20 %, error ± 1.5 % (In-t avtomatiki USSR (Institute of Automation UkrSSR)). 11. Densitometer for liquids PZhR-5,4 (PZhR-5.4), range 0.1 to 0.6 g/cm^3, error ± 2 %; gamma-radiation source Cs^{137} (NIITeplopribor). 12. Liquid analyzer RAZh-1 (RAZh-1) for determining the concentration of one of the components of a binary mixture, source Sr^{90} (OKBA). 13. Ionization methanometer TM-4 (TM-4) (for atmospheric air), range 0-5 %, error ± 0.2 %, source - tritium. 14. Level indicator compressed cylinder gas IU-3 (IU-3), portable, accuracy ±10 mm, source Co^{60} 1 mg-equiv. [Abstracter's note: Complete translation.]

Card 3/3

BOCHKAREV, V.V.; SHTAN', A.S.

International Conference on the Uses of Radioisotopes in the Physical Sciences and Industry. Atom. energ. 10 no.2:180-185 F '61. (MIRA 14:1)

(Radioisotopes--Congresses)

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21.4140

AUTHORS: Leshchinskiy, N. I., Shtan', A. S.

TITLE: New rules for the transport of radioactive substances

PERIODICAL: Atomnaya energiya, v. 10, no. 5, 1961, 544-545

TEXT: On December 26, 1960 the Gosudarstvennyy komitet Soveta Ministrov SSSR po ispolzovaniyu atomnoy energii (State Committee of the Council of Ministers of the USSR for the Use of Atomic Energy) and the Gosudarstvennaya sanitarnaya inspektsiya SSSR (State Sanitary Inspection of the USSR) published new rules for the transport of radioactive substances. These rules were published in accordance with the Soviet sanitary regulations and the recommendations of MAGATE (Vienna). The rules concern packing, labelling, and transport of the articles. The radioactive articles for transport are divided in three groups: 1) Substances emitting α-, β-, and γ-radiations (such as Co^{60}, Cs^{137}, etc), 2) those emitting neutrons or neutrons + gamma radiation, and 3) those emitting α- or γ-radiation (Po^{210}, Sr^{90}, C^{14}, etc.). According to the dose rate or neutron flux at the packing surface or at 1 m from it four categories of packing for trans-

Card 1/3