L 25380-65

ACCESSION NR: AP5002147

5

hundreds of kv. The spark-discharge chambers used are large (600 x 600 mm; gap, 100 mm); their design is described in detail. A "shower-master" circuit with gas-filled counter tubes has a delay exceeding that of a scintillator-type circuit by 100 nsec. The overall delay — from the instant of appearance of the shower in the scintillator to the instant of application of h-v impulse to the chambers — is less than 0.3 microsec. "The authors wish to thank N. A. Golubchikov, V. N. Nikolayev, M. F. Kuzmichev, and K. M. Smyslov for their assistance in building the outfit." Orig. art. has: 5 figures. [03]

ASSOCIATION: Fizicheskiy institut AN SSSR (Physics Institute, AN SSSR)

SUBMITTED: 09Dec63 ENCL: 00. SUB CODE: EM, NP

NO REF SOV: 005 OTHER: 001 ATD PRESS: 3182

Card 2/2

BOLOTOV, V.K.; DEVISHEV, M.I.

Efficiency of a spark chamber in shower investigations.
Zhur.eksp.i teor.fiz. 46 no.6:1990-1995 Je '64.

1. Fizicheskiy institut imeni P.N. Lebedeva AN SSSR.

(MIRA 17:10)

L 4489-66 EWT(m)/FCC/T IJP(c)

ACC NR: AP5024660 SOURCE CODE: UR/0048/65/029/009/1777/1780

AUTHOR: Bolotov, V.N.; Devishev, M.I.; Klimanova, L.F.; Luchkov, B.I.; Shmeleva, A.P.

ORG: none

TITLE: Some characteristics of wide gap spark chambers and applications of such chambers in cosmic ray physics /Report, All-Union Conference on Cosmic Ray Physics held at Apatity 24-31 August 1964/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 29, no. 9, 1965, 1777-1780

TOPIC TAGS: spark chamber, particle detector, particle track, cosmic ray particle

ABSTRACT: Recent literature on the characteristics of wide gap spark chambers is briefly reviewed from the point of view of the applicability of such chambers to problems of cosmic ray physics. The "streamer chamber" of B.A.Dolgoshein, B.I.Luchkov, and B.U.Rodionov (Zh. eksperim. i teor. fiz., 46, 1953 (1964); Doklad na konferentsii po fizike vysokikh energiy, Dubna, 1964) is also discussed briefly. The root-mean-square angle between the two tracks of the same particle successively traversing two chambers with 20 cm gaps in a direction making an angle of less than 80 with the electric field was found to be 5×10^{-4} radian. With this small angular dispersion it would be possible to measure momenta up to 550 BeV/c with the aid of a 150 cm long 10 kOe magnetic field. This angular dispersion can be decreased by improving the uniformity of the electric field and the purity of the gas, and by reducing the delay be-

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ACC NR: AP5024660

tween passage of the particle and application of the field. The direction of the spark agrees with that of the track within 1° even when the angle between the track and the electric field is as large as 40-50°. The shower efficiency of a spark chamber with a 10 cm gap has been found to be 100 % for showers of up to 200 particle tracks making angles less than 20° with the electric field, and under certain conditions it is possible to distinguish tracks of heavily ionizing particles against a background of minimum ionizing particle tracks. It is possible to increase the delay between particle passage and field application up to 20 microsec without reducing the recording efficiency for single particles below 100 %, but the quality of the track deteriorates when the delay exceeds 2 microsec. In the streamer chamber the duration of the high voltage pulse is nicely controlled so that streamer development begins but the spark discharge stage is not reached. It is thus possible to record narrow tracks for particles moving in an arbitrary direction with respect to the electric field. The streamer chamber appears to be the best of all track chambers for accurate determinations of track directions and curvatures. Orig. art. has: 5 figures.

SUB CODE: NP/ SUBM DATE: 00/ ORIG REF: 008/ OTH REF: 007

OC

Card 2/2

BOLOTOV, Valentin Vladimirovich.

Theoretical fundamentals of choosing an efficient method for a complicated electrical power system Moskva, 1947. 271 p. (49-29761)

TK1001.B66

BOLOTOV, V. V.

At the plenary meeting of the conference of the Power Establishments of the Academies of Science of the Union Republics and of the Affiliates of the Academy of Science, USSR, the following paper was presented by Doctor of Technical Sciences, V. V. Bolotov, on "Basic problems in the rational design and operation of complicated electric-power systems"

SO: Elektrichestvo, No. 9 Moscow, Sept. 1947 (U-5534)

USSR/Engineering Jan 49
Power Plants - Installations
Efficiency, Industrial

"Selecting Equipment for Power Installations Utilizing Primary Power on a Fixed Schedule," V. V. Bolotov, Power Eng Inst imeni G. M. Krzhizhanovskiy, Acad Sci USSR, 15 pp

"Iz Ak Nauk SSSR, Otdel Tekh Nauk" No 1

Bolotov introduces a principle he believes applicable to many industries which have two interdependent processes. One operation should be made independent, while the other should use primary energy according to the manner of operation of

24/49T25

USSR/Engineering (Contd) Jan 49

the first. Attempts to apply this principle to power installations, using graphs to determine experimental results.

24/49T25

Bolotov, V-V.

SHATELEN, M. A., ZALESSKIY, A. M., LEBEDEV, V. I., TYUSHEV, P. A., ZHERRIN, S. M., ARKHANGEL'SKIY, F. K. BAUMGOL'TS, A. I., ZOLOTAREV, T. L., PUSHKOVEV, M. N., PROSKURYAKOV, V., CHIVICH, A. V., YES'MAN, A. I., SHVETS, F. T., KONDRAT'YEV, G. M., USOV, S. V., ALEKSEYEV, A. YE., BOLOTOV, V. V., TIKHODEYEV, I. M., GERASIMOV, N. V., MELENT'YEV, L. A., LEVIT, G. O., ORLOVSKIY, A. V., VEDIKHOV, V. M., STRIKOVICH, M. A., GREYNER, L. K., NIKIFOROV, V. V., SOLODOVNIKOV, G. S., SMIRNOV, S. P., ZOLOTAREVA, N. A., KALEKINA, N. M., GOL'DENBERSHTEYN, T. L., KLEBANOV, L. D., SALUYEV, N. F., ZAIKO, A. A., MARTENS, M. F.

A. S. Rumyantsev, Obituary. Elektrichestvo, No. 2, 1952.

SO: Monthly List of Russian Accessions, Library of Congress, July 1952 //////1953, Uncl.

BOLOTOV, V.V., doktor tekhnicheskikh nauk; MELENT'YEV, L.A., doktor ekonomicheskikh nauk; BRIL, R.F., kandidat tekhnicheskikh nauk; LEVENTAL', G.B., kandidat tekhnicheskikh nauk; MICHURINA, K.I., kandidat tekhnicheskikh nauk [reviewers]; DUNAYEVSKIY, N.I. [author].

"Technical and economic principles of heating systems." N.I. Dunaevskii. Reviewed by V.V.Bolotov, L.A.Melent'ev, R.F.Bril', G.B.Levental', K.I.Michurina. Elek. sta. 24 no.12:56-57 D '53. (MLRA 6:12)

(Dunaevskii, N.I.) (Heating from central stations)

AID P - 2835

Subject : USSR/Electricity

Card 1/2 Pub. 27 - 24/30

Authors : Bolotov, V. V., Doc. of Tech. Sci., Prof. and I. F., Polovoy, Senior Scientific Assistant

Title : Problems of technical and economic calculation of long-distance electric transmission lines (Current events)

Periodical : Elektrichestvo, 6, 82-83, Je 1955

Abstract : In October 1954 was organized a joint meeting of the chairs of high voltage technique and of organization and planning of power engineering of the Leningrad Polytechnical Institute. Representatives of planning and operational organizations and of other departments of the Polytechnical Institute im. Kalinin and of the Power Engineering Institute im. Molotov participated in the sessions. The authors enumerate the list of reports and their authors and summarize the results. These sessions were concerned mainly with the

Elektrichestvo, 6, 82-83, Je 1955 AID P - 2835

Card 2/2 Pub. 27 - 24/30

problems arising from the construction of long-distance electric transmission lines from the new hydroelectric power stations being built on the Volga River, as well as those planned in Siberia.

Institution : None

Submitted : No date

KRZHIZHANOVSKIY, G.M.; SHATELEN, M.A.; VINTER, A.V.; KOSTENKO, M.P.; POPKOV, V.I.; NEYMAN, L.R.; BOLOTOV, V.V.; KAMENSKIY, M.D.; ZALESSKIY, A.M.; USOV, S.V.

A.A. Morozov; obituary. Elektrichestvo no.12:88-89 D '56.
(Morozov, Aleksandr Aleksandrovich, d. 1956) (MIRA 11:3)

BOLOTOV, V.V., doktor tekhn. nauk

Effect of fuel cost on efficient increase of initial parameters of condensing electric power plants. Energomashinostroenie 4 no.10:2-5 O '58. (MIRA 11:11)
(Electric power plants)

SOV/105-58-7-18/32

AUTHORS: Neyman, L. R., Corresponding Member, Academy of Sciences, USSR
Bolotov, V. V., Doctor of Technical Sciences
Melent'yev, L. A., Doctor of Economic Sciences
Glinternik, S. M., Candidate of Technical Sciences
Ravdonik, V. M., Candidate of Technical Sciences

TITLE: On the Prospects of Using Direct Current Transmissions in the USSR (O perspektivakh primeneniya elektroperedach postoyannogo toka v Sovetskom Soyuze)

PERIODICAL: Elektrichestvo, 1958, Nr 7, pp. 71 - 74 (USSR)

ABSTRACT: This work comments on the article written by M. M. Mel'gunov in Elektrichestvo, 1957, Nr 2. The following view is expressed: 1) If restrictions for the nominal output of long-distance intermediate-system main electric transmission lines comparison of alternating current- and direct current transmissions must be carried out for optimum outputs. 2) In the case of a transmission of great amounts of energy over long distances by utilizing the technical maximum capacity of a line, the advantages in case of a direct current

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transmission are so great with respect to capital investments and to annual expenses that they cover the amount of any possible error caused by estimating expenses. 3) The power moment per circuit may serve as a characteristic index for a large-scale main transmission. This index is equal to the product of the nominal output P of the circuit and the length L of the transmission line. In the case of $M < 1200$ GW.km alternating current transmission, and in the case of $M > 2400$ GW.km direct current transmission is more advantageous. 4) The existence of large hydroelectric power reserves and easily accessible coal deposits (which allow surface mining) of low heating value, in West- and Central Siberia without doubt makes it possible to use d.c. transmissions on the main lines in consideration of the great fuel deficit in the Ural and other Western areas. 5) Besides the continuation of work in the Institut postoyannogo toka (Institute of Direct Current), in the Energeticheskiy institut Akademii nauk SSSR (Institute of Power Engineering, AS USSR), in the Vsesoyuznyy elektrotekhnicheskiy institut (All-Union Institute of Electro-Engineering) and in other organizations for the improvement of the circuits of

transforming stations and their elements especially in the field of direct current switches, - it is absolutely necessary to pay attention to the industrial production of this promising type of new engineering and to apply it under real operational conditions. From this point of view, the construction of the transmission of the hydroelectric power station Stalingrad - Donbass would also be necessary even if substantial additional sums would have to be invested, but this is, in reality, not the case. There are 4 tables.

ASSOCIATION: Energeticheskiy institut im. Krzhizhanovskogo Akademii nauk SSSR (Institute of Power Engineering imeni Krzhizhanovskiy, AS USSR)

1. Transmission lines--Performance

8(5)

AUTHOR: Bolotov, V. V., Doctor of Technical Sciences, Professor

SOV/105-59-3-2/27

TITLE: The Problem of Reserve Capacity in Designing and Planning Power System Developments (Problema rezervov pri proyektirovanii i planirovanii razvitiya energetiki)

PERIODICAL: Elektrichestvo, 1959, Nr 3, pp 5-10 (USSR)

ABSTRACT: The present paper is subjected to discussion. The author directs attention towards the principles of reserve estimation in projecting power system developments in the USSR. Besides, problems are mentioned which have hitherto remained unsolved because of their difficulty, and clear definitions for energy reserve terminology are given. In continuously operating power systems the installed power $N_i^{(S)}$ must be considered to be given. The total power reserve of a power system $R_G^{(S)}$ is determined by the difference

$$R_G^{(S)} = N_i^{(S)} - P^{(S)}.$$

It varies continuously due to the load fluctuations $P^{(S)}$. A high reliability of power supply systems will be guaranteed the better, the larger the free reserve $R_{free}^{(S)} \leqslant R_G^{(S)}$ of the system is at any

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moment. In order to be able to determine the total power $N_i^{(S)}$ to be installed in power stations, taking into account the assumed future rate of economical development, which is characterized by the quantity of total maximum load $P_{max}^{(S)}$ the amount of the total reserve power must be assumed. In papers approaching this problem either on a scientific or a planning basis the following categorization of reserve power is to be found: 1) load reserve, 2) emergency reserve, 3) repair reserve, 4) operational reserve, and 5) economic reserve. The first four items represent only technical reserves, whereas the fifth conceals something quite different. This reserve must be estimated taking into account the following factors: 1) The development of the next 10-15 years cannot always be foreseen. 2) Newly built power stations may become operational earlier or later than provided. The proposition advanced in the "Technical Specifications for the Planning of Power Stations and Energy Systems", dating from 1958 is strongly opposed to. It stipulates a power reserve of 10 % irrespective of the actual power and the nature of power systems. This would mean, with regard to the level of 1965, that every unnecessary percent of power reserve would require about

1 billion roubles of additional capital investment. The most fundamental shortcoming of the majority of calculations is the absence of sufficient substantiation of the initial data. The investigations of a number of power stations carried out by the kafedra ekonomiki i organizatsii energetiki LPI (Chair of Power Economy and Power Organization at the LPI) showed the difficulties encountered in the choice of initial data, the most fundamental of which are enumerated in this paper.

ASSOCIATION: Leningradskaya energeticheskaya laboratoriya im. Shatelena Energeticheskogo instituta Akademii nauk SSSR (Leningrad Power Laboratory imeni Shatelen at the Power Institute of the Academy of Sciences, USSR)

SUBMITTED: September 27, 1958

DARMANCHEV, Aleksey Konstantinovich; BOLOTOV, V.V., prof., retsenzent; ZIGEL', A.D., inzh., red.; SOBOLEVA, Ye.M., tekhn.red.

[Principles of the operational control of electric power systems] Osnovy operativnogo upravleniia energosistemami. Moskva, Gos. energ.izd-vo, 1960. 395 p. (MIRA 13:12)
(Electric power)

BOLOTOV, V.V., doktor tekhn.nauk (Leningrad); BURTSEVA, G.Ye., kand.tekhn. nauk (Leningrad); ZAKHAROVA, Ye.P., inzh. (Leningrad)

Taking the intersystem effect into account when designing large power transmission systems. Elektrichestvo no.8:16-22 Ag '60. (MIRA 13:8)
(Electric power distribution)

BOLOTOV, V.V.; GERASIMOV, V.N.; GOFMAN, I.V.; KAMENSKIY, M.D.; MELENT'YEV, L.A.; PRIKTSEV, A.A.; USOV, S.V.; SHEGLOV, A.P.

Suren Nikolaevich Nikogosov; obituary. Elektrichestvo no.10: 93 O '60. (MIRA 14:9)
(Nikogosov, Suren Nikolaevich, 1900-1960)

S/196/62/000/001/008/013
E194/E155

AUTHORS: Bolotov, ~~V.~~V., and Ivanov, I.I.

TITLE: The economic current density for transmitting a.c. and d.c.

PERIODICAL: Referativnyy zhurnal, Elektrotekhnika i energetika, no.1, 1962, 13, abstract 1E 87. (Sb. rabot po vopr. elektromekhan. In-t elektromekhan. AN SSSR, no.6, 1961, 60-69)

TEXT: The economic value of current density to be used in the conductors of d.c. and a.c. transmission lines can be determined by analysis of a general expression of calculated costs c in transmitting 1 kWh electric power:

$$c = \frac{a}{P} + \beta \frac{S}{P} + d \frac{P}{S} + \ell \quad \text{kop/kWh.} \qquad (1)$$

Here: S - conductor section; P - power transmitted; a, β, d and ℓ are coefficients which do not depend on the economic current density and which depend on the length and voltage of the

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transmission line, the structural costs of the line, sub-station and power-station, the compensating losses, the annual contributions to capital cost, the shape of the load curve of the transmission line, etc. The surface $c = c(S,P)$ given by Eq.(1) has no extreme points. However, curves of $c = c(S)$ when $P = \text{const}$ and of $c = c(P)$ when $S = \text{const}$ each have a minimum point to which correspond two different values of economic current density j. The value of j_{ec} when $P = \text{const}$ should not depend on the length of the transmission line; and when the line is longer than 1000 km the length of line has no appreciable influence on j_{ec} when $S = \text{const}$. In the general case, when $S = \text{const}$ j_{ec} is 15-20% greater than when $P = \text{const}$. Therefore, to each value of transmitted power, for example P_1, there corresponds one economic conductor section S_{ec1} for which the calculated cost of transmitting one kWh, c_1 is minimum. However, if for the calculated value of S_{ec1} the transmitted power is increased to P_2 corresponding to j_{ec} when $S = \text{const}$, the calculated cost is lower. However, the power P_2 corresponds to an economic section S_{ec2} greater than S_{ec1}, etc. If there are no limitations on

The economic current density for ... S/196/62/000/001/008/013
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S and on P the calculated costs are reduced as these characteristics are increased. For most design calculations when the transmitted power of the line and its operating conditions are given, the governing factor when selecting the conductor section is the economic current density j_{ec} when P = const. If it is a question of constructing one or several circuits of maximum capacity the calculation should be made for j_{ec} when S = const.

[Abstractor's note: Complete translation.]

Card 3/3

BOLOTOV, V.V., doktor tekhn.nauk, prof.; GUSEV, V.N., kand.tekhn.nauk, dotsent; DOLGOV, P.P., kand.tekhn.nauk, dotsent

"Optimum operation of hydroelectric power stations in consolidated electric power systems" by V.M. Gornshtein. Reviewed by V.V. Bolotov, V.N. Gusev, and P.P. Dolgov. Elektrichestvo no.5:93-95 My '62. (MIRA 15:5)
(Interconnected electric utility systems)
(Hydroelectric power stations)
(Gornshtein, V.M.)

BOLOTOV, V.V., doktor tekhn.nauk, prof.; GUSEV, V.N., kand.tekhn.nauk, dotsent; DOLGOV, P.P., kand.tekhn.nauk, dotsent

"Optimum operation of hydroelectric power stations in consolidated electric power systems" by V.M. Gornshtein. Reviewed by V.V. Bolotov, V.N. Gusev, and P.P. Dolgov. Elektrichestvo no.5:93-95 My '62. (MIRA 15:5)
(Interconnected electric utility systems)
(Hydroelectric power stations)
(Gornshtein, V.M.)

BOLOTOV, V.V., doktor tekhn.nauk, prof.; GEL'TMAN, A.E., kand.tekhn.nauk

Economic efficiency of increasing the power of machinery units and blocks in a steam condensation electric power plants. Teploenergetika 9 no.2:8-15 F '62. (MIRA 15:2)

1. Leningradskiy politekhnicheskiy institut i TSentral'nyy nauchno-issledovatel'skiy kotloturbinnyy institut imeni I.I.Polzunova.
(Electric power plants--Costs)

KOSTENKO, M.V.; NEYMAN, L.R.; MELENT'YEV, L.A.; KAMENSKIY, M.D.; BOLOTOV, V.V.; ZALESSKIY, A.M.; USOV, S.V.; SHCHEDRIN, N.N.; GERASIMOV, V.N.; DUBINSKIY, L.A.

B.L.Aizenberg; on his 60th birthday. Elektrichestvo no.11:94 N '62. (MIRA 15:11)

(Aizenberg, Boris L'vovich, 1902-)

BOLOTOV, V.V.; GUSEV, V.N.; DOLGOV, P.P.

Concerning V.M. Gornshtein's reply to the review of "Optimum operating modes of hydroelectric power stations in consolidated power systems." Elektrichestvo no.12:84 D '62. (MIRA 15:12)
(Hydroelectric power stations)
(Interconnected electric utility systems) (Gornshtein, V.M.)

BOLOTOV, V.V., doktor tekhn.nauk (Leningrad); AYVAZ'YAN, V.G., doktor tekhn.nauk (Moskva)

Methodology for determining the economic efficiency of hydroelectric power stations. Elektrichestvo no.9:88-92 S '62. (MIRA 15:9)

(Hydroelectric power stations)

BOLOTOV, V.V., doktor tekhn.nauk

Methodology for calculation or a calculation formula? Elek.sta. 33 no.12:83-84 D '62. (MIRA 16:2)
(Hydroelectric power stations—Accounting)

BOLOTOV, V.V., doktor tekhn.nauk, prof.

Economic nature of "time in which object pays for itself" methods. Izv. vys. ucheb. zav.; energ. 6 no.7:121-125 Jl '63. (MIRA 16:8)

1. Leningradskiy politekhnicheskiy institut imeni M.I.Kalinina.
(Power engineering—Accounting)

BOLOTOV, V.V. (Leningrad); RAVDONIK, V.S. (Leningrad); IVANOV, I.I. (Leningrad); CHERVONENKIS, Ya.M., kand.tekhn.nauk (Moskva)

Transmission of electric power at long distances. Prospects of stepping-up the voltages of overhead power transmission lines. Elektrichestvo no.9:77-80 S '63. (MIRA 16:10)

KOSTENKO, M.P.; MELENT'YEV, L.A.; KAMENSKIY, M.D.; ZALESSKIY, A.M.; BRIL', R.Ya.; GORSHKOV, A.S.; SAVASHINSKAYA, V.I.; DOVGAL', S.A.; KOVALEV, N.N.; BOLOTOV, V.V.; USOV, S.V.; GERASIMOV, V.N.; SIVAKOV, Ye.R.; AVRUKH, A.Ya.; STARIKOV, V.G.; MIKHAILEVICH, A.I.

I.V. Gofman; obituary. Elek. sta. 34 no.6:95 Je '63. (MIRA 16:9)
(Gofman, Igor' Valentinovich, 1903-1963)

AYZENBERG, B.L.; BOLOTOV, V.V. ; BRIL', R.Ya.; GERASIMOV, V.N.; GREKOV, V.I.; DOVETOV, M.Sh.; KAMENSKIY, M.D.; KLEBANOV, L.D.; KONSTANTINOV, B.A.; KUZ'MIN, V.G.; LYUBAVSKIY, V.I.; MELENT'YEV, L.A.; MIKHALEV, N.N.; POLYANSKIY, V.A.; RAZDROGINA, L.A.; SIVAKOV, Ye.R.; STARIKOV, V.G.; SAVASHINSKAYA, V.I.; SHAYOVICH, L.L.

Igor' Valentinovich Gofman, 1903-1963; obituary. Trudy LIEI no.51:3-4 '64. (MIRA 18:11)

BOLOTOV, Yu.N.

External action on self-oscillaters. Trudy MEI no.28:268-284 '56.
(Oscillators, Electric) (MLRA 10:6)

BOLOTOV, Yu. N., Cand Tech Sci -- (diss) "Autogenerator as a frequency divider." Mos, 1957. 16 pp (Min of Higher Education USSR, Mos Order of Lenin Power Engineering Inst), 100 copies (KL, 52-57, 106)

BOLOTOV, Yu.N.

Seizure band of oscillators subjected to frequency division.
Izv. vys. ucheb. zav.; radiotekh. no.3:319-328 My-Je '58.
(MIRA 11:7)

1.Rekomendovana kafedroy radioperedayushchikh ustroystv Ural'skogo politekhnicheskogo instituta im. S.M. Kirova.
(Oscillators, Electron-tube)

BOLOTOV, Yu.N.

Resonator of the second order. Nauch. dokl. vys. shkoly; radiotekh. i elektron. no.2:152-159 '59. (MIRA 14:5)
(Radio resonators)

S/142/60/000/003/003/017
E192/E482

9.2584 (also 2204)

AUTHOR: Bolotov, Yu.N.

TITLE: Stability of the Oscillations in the Presence of an External Asynchronous Signal

PERIODICAL: Izvestiya vysshikh uchebnyk zavedeniy, Radiotekhnika, 1960, No.3, pp.319-325

TEXT: An oscillator with a self-biasing circuit in the grid is considered; an asynchronous external signal is applied to the system, that is the frequency of the signal is not a multiple of the oscillation frequency. The system is described by (Ref.4):

$$T\dot{U} = RI_{01} - U \qquad (1)$$

$$T_c\dot{E}_c = -(R_cI_{c00} + E_c) \qquad (2)$$

These equations were derived (see Ref.4) under the assumption that the oscillation frequency is approximately equal to the natural frequency of the resonant circuit and that the system is

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Stability of the Oscillations in the Presence of an External Asynchronous Signal

conservative. The quantities T and T_c in the equations denote the time constants $T = 2/\omega_o\delta$ of the resonant circuit and the biasing circuit ($T_c = R_cC_c$); U and E_c are the amplitudes of the control voltage at the grid of the tube and the bias voltage respectively; R is the dynamic impedance of the resonant circuit. The amplitude of the first harmonic I_{01} of the anode current and the d.c. component of the I_{c0} of the grid current in Eq.(1) and (2) are determined by the method of the modulation characteristics (Ref.4 and 5). Eq.(1) and (2) can be written as Eq.(3) and (4). The right-hand side portions of these equations represent certain functions of U and E_c; these are expressed by Eq.(5) and (6). In the steady state, $U = 0$ and $E_c = 0$, so that Eq.(5) and (6) can be written as Eq.(7) and (8). In order to determine the conditions under which the solutions of the Eq.(7) and (8) are stable solution, it is necessary to investigate Eq.(3) and (4). For this purpose, it is assumed that the voltages U and E_c are perturbed by amounts α and β respectively.

Stability of the Oscillations in the Presence of an External Asynchronous Signal

conservative. The quantities T and T_c in the equations denote the time constants $T = 2/\omega_0\delta$ of the resonant circuit and the biasing circuit ($T_c = R_cC_c$); U and E_c are the amplitudes of the control voltage at the grid of the tube and the bias voltage respectively; R is the dynamic impedance of the resonant circuit. The amplitude of the first harmonic I_{01} of the anode current and the d.c. component of the I_{c0} of the grid current in Eq.(1) and (2) are determined by the method of the modulation characteristics (Ref.4 and 5). Eq.(1) and (2) can be written as Eq.(3) and (4). The right-hand side portions of these equations represent certain functions of U and E_c; these are expressed by Eq.(5) and (6). In the steady state, $U = 0$ and $E_c = 0$, so that Eq.(5) and (6) can be written as Eq.(7) and (8). In order to determine the conditions under which the solutions of the Eq.(7) and (8) are stable solution, it is necessary to investigate Eq.(3) and (4). For this purpose, it is assumed that the voltages U and E_c are perturbed by amounts α and β respectively.

Stability of the Oscillations in the Presence of an External Asynchronous Signal

It can be assumed that $\alpha = Ae^{\gamma t}$ and $\beta = Be^{\gamma t}$. On the basis of Eq.(1) and (2) it is found that the characteristic equation of the system is in the form of Eq.(9). The solution for the steady-state values U_0 and E_{c0} is stable if the coefficients of this characteristic equation are positive. These conditions are represented by Eq.(10) and (11). Eq.(10) can be written as Eq.(15). This shows that the oscillations are stable only in the case if the transients in the grid circuit (self-biasing circuit) are faster than the transients in the resonant circuit. If the condition of Eq.(15) is not fulfilled the oscillations of the system are intermittent (the so-called squegging effect). The effect of the amplitude of the external signal on the stability of the oscillations is also considered. For this purpose the anode and grid currents of the tube are approximated by a polygon and it is assumed that an external signal is applied to the grid. The anode current characteristic is described by Eq.(16) and (17), where E_1 is the amplitude of the external signal, θ is the

Stability of the Oscillations in the Presence of an External Asynchronous Signal

current flow angle, E_c' is the shift of the idealized anode current characteristic with respect to the origin of the coordinates and $\gamma_0(\theta)$ represent the expansion coefficients of a co-sinusoidal pulse (see Ref.5 and 6). The grid current is similarly expressed by Eq.(18) and (19); the amplitude of the fundamental harmonic of the anode current and the d.c. component of the grid current can therefore be expressed by Eq.(21) and (22); now by differentiating Eq.(21) and (22), the stability condition expressed by Eq.(15) can be written as Eq.(23). From this it is seen that, if the system is stable for large amplitudes of the external signal, its stability can be impaired if the amplitude is reduced. It follows, therefore, that for a given system with prescribed parameters it is possible to eliminate squegging by increasing the amplitude of the external signal. The above conclusion was verified experimentally. There are 2 figures and 6 Soviet references.

86790

S/142/60/000/003/003/017
E192/E482

Stability of the Oscillations in the Presence of an External Asynchronous Signal

ASSOCIATION: Kafedra radioperedayushchikh ustroystv Ural'skogo politekhnicheskogo instituta im. S.M.Kirova (Chair of Radio Transmitting Devices of Ural Polytechnical Institute imeni S.M.Kirov)

SUBMITTED: October 15, 1959

Card 5/5

BOLOTOV, Yu.N.

Harmonic analysis with current approximation using a parabola with cutoffs. Izv.vys.ucheb.zav.; radiotekh. 5 no.5:624-629 S-O '62. (MIRA 15:11)

1. Rekomendovana kafedroy radioperedayushchikh ustroystv Ural'skogo politekhnicheskogo instituta imeni S.M.Kirova.
(Electron tubes)

FEDOROVA, N.Ye., dotsent; MORYGANOV, P.V., doktor tekhn.nauk, prof.; Prinimali uchastiye: BROVTSEV, V.V.; BOLOTOVA, A.A.; KISELEVA, L.M., inzh.; VINOGRADOVA, V.A., inzh.; LOBANOVA, S.K., studentka

Continuous method of bleaching cotton fabrics. Tekst.prom. 21 no.6:50-54 Je '61. (MIRA 15:2)

1. Ivanovskiy khimiko-tekhnologicheskiy institut (for Fedorova, Lobanova). 2. Glavnyy inzh. fabriki "Krasnaya Talka" (for Brovtsev).

(Bleaching)

SHARKOV, V.I.; LEVANOVA, V.P.; BOLOTOVA, A.K.

Supermolecular structure of extrastrong cellulose hydrate fibers. Khim.volok. no.5:32-36 '62. (MIRA 15:11)
(Textile fibers, Synthetic)
(Cellulose)

BOLOTOVA, A.K.; SHARKOV, V.I.

Using the method of dielectric constant measurement in the study of the supramolecular structure of cellulose. Sbor.trud.NIIGS 12:49-59 '64.

Investigating the capillary structure of cellulose. Ibid.:60-70

Retarding effect of water in the hydrolysis reaction of cellulose. Ibid.:71-86 (MIRA 18:3)

ISAGULYANTS, V.I.; TISHKOVA, V.N.; BOLOTOVA, G.I.; [illegible]

Synthesis of substituted diatomic phenols of tertiary butylpyrocatechol, tertiary butylhydroquinone, and tertiary butylresorcinol. Zhur. prikl. khim. 37 no.12:2729-2733 D '64.

(MIRA 18:3)

BOLOTOVA, G.I.; KOTOVA, G.G.; ZIMINA, K.I.; ISAGULYANTS, V.I.

Investigating the synthesis of homologous series of individual potassium dialkyl- and diaryldithiophosphates and studying their structure by the method of infrared spectrometry. Izv. vys. ucheb. zav.; neft' i gaz. 8 no.5:62 '65. (MIRA 18:7)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti im. akademika I.M.Gubkina.

BOLOTOVA, G.I.; KOTOVA, G.G.; ZIMINA, K.I.; ISAGULYANTS, V.I.

Synthesis of the homologous series of individual potassium dialkyl- and diaryldithiophosphates and the study of their structure by infrared spectroscopy. Zhur. prikl. khim. 38 no.7:1580-1585 Jl '65. (MIRA 18:7)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti imeni Gubkina.

L 34189-65 EWT(m)/EPF(c)/EWG(m)/EWP(j) Pc-4/Pr-4 RM/RWH
ACCESSION NR: AT5006941 S/2982/64/000/051/0122/0125

AUTHOR: Isagulyants, V. I.; Tishkova, V. N.; Kolotova, G. I.; Kirichenko, L. P.

TITLE: Synthesis of alkyl derivatives or divalent phenols

SOURCE: Moscow. Institut neftekhimicheskoy i gazovoy promyshlennosti. Trudy, no. 51, 1964. Neftekhimiya, neftekhimicheskiye protsessy i neftepererabotka (Petroleum chemistry, petrochemical processes and oil refining), 122-125

TOPIC TAGS: dihydroxybenzene, divalent phenol, resorcinol, phenol alkylation, cation exchange resin, exchange resin catalyst, hydroquinone, pyrocatechol, antioxidant, butylhydroquinone, transformer oil

ABSTRACT: The authors used the cation-exchange resin KU-2 as a catalyst for the alkylation of divalent phenols by olefins and alcohols. The optimum conditions for the alkylation of hydroquinone and resorcinol by isobutylene were established. In the presence of KU-2, the alkylation reaction of pyrocatechol has a selective course in which only a monosubstituted pyrocatechol is formed, but in the reaction of hydroquinone with isobutylene, both mono- and disubstituted derivatives or their mixture are formed, depending upon the conditions (this is explained by the

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L 34189-65
ACCESSION NR: AT5006941

presence of hydroxyl groups in the para position). A study of the antioxidant properties of di-tert-butylhydroquinone revealed that when the latter was added in the amount of 0.2% to transformer oil obtained from eastern petroleums, the stability of the oil was doubled. Orig. art. has: 5 chemical formulas.

ASSOCIATION: Institut neftekhimicheskoy i gazovoy promyshlennosti, Moscow (Petrochemical and gas industry institute)

SUBMITTED: 00 ENCL: 00 SUB CODE: OC,FP

NO REF SOV: 003 OTHER: 000

Card 2/2

05605

5.2620 2209, 1273, 1318

S/078/60/005/010/022/030/XX
B017/B067

AUTHORS: Golovnya, V. A., Pospelova, L. A., and Bolotova, G. T.

TITLE: Acido Complex Compounds of Cerium (IV) and Uranium (IV)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol. 5, No. 10, pp. 2204-2210

TEXT: On the basis of the coordination theory, the authors derive genetic series of complexes of tetravalent uranium and tetravalent cerium with different acid addenda. Table 1 shows such series of uranium (IV) and cerium (IV) from diacido- to hexaacido sulfate complexes. The coordination number of complex compounds of cerium (IV) and uranium (IV) is 8. Water enters these complex compounds as inner addendum so that in all cases, even when not all places are occupied by acido groups, the coordination number is 8. The thermographic analyses of the sulfate compounds of uranium (IV) and cerium (IV) indicate that four water molecules are contained in the inner sphere of complex compounds. Table 2 shows the dehydration temperatures of cerium (IV)- and uranium (IV)-sulfate complexes with eight water molecules and with four water molecules. The distribution of the addenda

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Acido Complex Compounds of Cerium (IV) and Uranium (IV)

S/078/60/005/010/022/030/XX
B017/B067

in the inner spheres of penta- and hexasulfate complex compounds is discussed. It is assumed that bivalent acid radicals are also capable of occupying two coordination places. The authors succeeded in synthesizing the following complexes with two different acid addenda by partial, gradual exchange of the addenda of the inner sphere: $Rb_4[U_2(C_2O_4)_3(SO_4)_3] \cdot 6H_2O$; $(NH_4)_6[U_2(C_2O_4)_3(SO_4)_4] \cdot 4H_2O$; $Rb_6[U_2(C_2O_4)_3(SO_4)_4] \cdot 4H_2O$; $(CN_3H_6)_3NH_4[U(CO_3)_3C_2O_4] \cdot nH_2O$; $(CN_3H_6)_8(NH_4)_2[U_2(CO_3)_8C_2O_4] \cdot 6H_2O$; $(CN_3H_6)_5NH_4[Ce_2(CO_3)_5F_4]$; $(CN_3H_6)_3(NH_4)_3[Ce(CO_3)_4SO_4] \cdot H_2O$; $(CN_3H_6)_4(NH_4)_4[Ce(CO_3)_4(SO_4)_2]$; $(CN_3H_6)_3(NH_4)_2[Ce(CO_3)_3F_3]$; $(CN_3H_6)_3(NH_4)_3[Ce(CO_3)_3F_4]$. The synthesis of these compounds and their properties will be described in subsequent papers. There are 4 figures, 4 tables, and 16 references: 1 Soviet, 1 Canadian, 1 Danish, 12 German, and 2 Italian.

Card 2/3

85605

Acido Complex Compounds of Cerium (IV) and Uranium (IV)

S/078/60/005/010/022/030/XX
B017/B067

ASSOCIATION: Institut obshchey i neorganicheskoy khimii im. N. S. Kurnakova Akademii nauk SSSR (Institute of General and Inorganic Chemistry imeni N. S. Kurnakov of the Academy of Sciences USSR)

SUBMITTED: November 14, 1959

X

Card 3/3

S/078/61/006/003/009/022
B121/B208

AUTHORS: Golovnya, V. A., Bolotova, G. T.

TITLE: Sulfate compounds of tetravalent uranium

PERIODICAL: Zhurnal neorganicheskoy khimii, v. 6, no. 3, 1961, 566-574

TEXT: The complex compounds of tetravalent uranium with oxygen-containing addenda, especially sulfate ion, and with neutral addenda, such as water, urea, and acetamide, were synthesized, and the isolated were compounds studied by chemical and thermographical analyses. New complex compounds of tetravalent uranium with different numbers of sulfate addenda were obtained. Thiourea dioxide was used to reduce U(IV). Thiourea dioxide reacts very quickly with uranyl salts in neutral and alkaline solutions, particularly on heating. The reduction process follows the equation

$$UO_2^{2+} + (NH_2)_2CSO_2 + H_2O \rightarrow U^{IV} + SO_3^{2-} + (NH_2)_2CO.$$

In a strongly acid medium, thiourea dioxide does not react as a reducing

Sulfate compounds of ...

agent, but as an addendum to form $UO_2SO_4(NH_2)_2CSO_2 \cdot H_2O$. $U(SO_4)_2 \cdot 4H_2O$ was synthesized from sulfuric acid solutions with a content of 7 - 10% H_2SO_4. From weakly acid solutions and at low temperatures, also $U(SO_4)_2 \cdot 8H_2O$ is formed. A thermogram of $[U(SO_4)_2 \cdot 4H_2O] \cdot 4H_2O$ was taken. The following sulfate complex compounds of tetravalent uranium were synthesized from sulfuric acid solutions of different acidity and with an excess of sulfate ion: $(NH_4)_4[U(SO_4)_4]$, $(NH_4)_4[U(SO_4)_4] \cdot 3H_2O$, $Na_4[U(SO_4)_4] \cdot 6H_2O$, $K_4[U(SO_4)_4] \cdot 2H_2O$, $Rb_4[U(SO_4)_4] \cdot 2H_2O$. Compound $(NH_4)_4[U(SO_4)_4]$ crystallizes in quadrangular, nearly square platelets. It is completely dissociated in aqueous solutions, and hydrolysis occurs on dilution under precipitation of basic uranium (IV) sulfate. Dark-green prismatic crystals with the composition $(NH_4)_4[U(SO_4)_4] \cdot 3H_2O$ are obtained from concentrated solutions. The three water molecules may be split off at 70°C. Compound

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Sulfate compounds of ...

$Na_4[U(SO_4)_4] \cdot 6H_2O$ crystallizes in fine filamentous crystals which are easily hydrolyzable when dissolved in water. A thermogram of the compound was taken. Compounds $K_4[U(SO_4)_4] \cdot 2H_2O$ and $Rb[U(SO_4)_4] \cdot 2H_2O$ crystallize in the form of large rhombic crystals by slow evaporation of the solutions. Unlike sodium and ammonium salts, they are sparingly soluble in water and sulfuric acid. Thermographical analyses of the alkali-metal tetrasulfate compounds of uranium show that the water in these compounds may be completely split off on heating to elevated temperatures. The water in $Na_4[U(SO_4)_4] \cdot 6H_2O$ is completely split off at 200 - 210°C, that in $K_4[U(SO_4)_4] \cdot 2H_2O$ at 120 - 180°C, and that in $Rb[U(SO_4)_4] \cdot 2H_2O$ at 180°C. Some compounds of tetravalent uranium with less than four sulfate groups were synthesized: $K_2[U(SO_4)_3 \cdot 2H_2O]$, $Cs_2[U(SO_4)_3 \cdot 2H_2O]$, and $Na_6[U(SO_4)_7 \cdot 2H_2O] \cdot 2H_2O$. The sodium compound is obtained in the form of prismatic, light green crystals by considerable acidification of a solution containing 2 - 4% uranium and 10% Na_2SO_4. Thermographical analysis disclosed that two molecules of

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water are split off at 140 - 150°C, and the remaining two water molecules at 220°C. This indicates that two water molecules appear as an addendum in the inner sphere of the complex. The sulfate compounds of uranium with urea and acetamide were synthesized: compound $[U(SO_4)_2 \cdot 4CO(NH_2)_2] \cdot 4H_2O$ crystallized in the form of light green, needle-shaped crystals. Compound $[U(SO_4)_2 \cdot 4CO(NH_2)_2]$ was obtained in light green, prismatic crystals. The urea compounds are easily soluble in urea solutions, presumably by inclusion of additional urea molecules into the inner sphere of the complex and displacement of the sulfate addenda. Uranium (IV)-disulfate complex compounds with more than four molecules of urea could not be isolated. Compound $[U(SO_4)_2 \cdot 4CH_3CONH_2]$ crystallized in the form of light green crystals on saturation of the molten acetamide with $U(SO_4)_2 \cdot 4H_2O$. Furthermore, the compounds $(NH_4)_8[U(SO_4)_6] \cdot 3H_2O$ (light green crystals), and $(NH_4)_6[U(SO_4)_5] \cdot 4H_2O$ (dark green prismatic crystals) were synthesized. There are 8 figures, 6 tables, and 25 references: 9 Soviet-bloc and 2 non-Soviet-bloc.

SUBMITTED: February 8, 1960

Card 4/4

GOLOVNYA, V.A.; BOLOTOVA, G.T.

Reducing properties of thiourea dioxide and its degradation products. Zhur.neorg.khim. 6 no.10:2254-2262 O '61. (MIRA 14:9)
(Urea) (Reduction)

GOLOVNYA, V.A.; BOLOTOVA, G.T.

Complex carbonate compounds of uranium (IV). Zhur.neorg.khim. 6 no.11:2481-2487 '61. (MIRA 14:10)
(Uranium compounds) (Carbonates)

GOLOVNYA, V.A.; BOLOTOVA, G.T.

Complex carbonate-oxalate compounds of uranium (IV). Zhur. neorg.khim. 6 no.11:2488-2495 '61. (MIRA 14:10)
(Uranium compounds)

GOLOVNYA, V.A., doktor khim. nauk; ELLERT, G.V., kand. khim. nauk; SHUBOCHKIN, L.K., kand. khim. nauk; SHCHELOKOV. R.N., kand. khim. nauk; TSAPKINA, I.V., kand. khim. nauk; TRAGGEYM, Ye.N., kand. khim. nauk; MARKOV, V.P., doktor khim. nau, [deceased]; ALTKHANOVA, Z.M.; DYATKINA, M.Ye., doktor khim. nauk; MIKHAYLOV, Yu.N.; TSAPKIN, V.V., kand. khim. nauk; BOLOTOVA, G.T., kand. khim. nauk; CHERNYAYEV, V.A., doktor khim. nauk; KORCHEMNAYA, Ye.K., red.

[Complex compounds of uranium] Kompleksnye soedineniia urana. Moskva, Izd-vo "Nauka," 1964. 488 p. (MIRA 17:7)

1. Akademiya nauk SSSR. Institut obshchey i neorganicheskoy khimii. 2. Laboratoriya khimii kompleksnykh soyedineniy aktinidov Instituta obshchey i neorganicheskoy khimii AN SSSR (for all except Korchemnaya).

GOLOVNYA, V.A.; BOLOTOVA, G.T.

Oxalate and mixed compounds of uranium (IV). Zhur. neorg. khim. 9 no.2:283-294 F'64. (MIRA 17:2)

1. Institut obshchey i neorganicheskoy khimii imeni N.S. Kurnakova AN SSSR.

SAPARGALIYEV, G.; BOLOTOVA, L.M.

New institute. Vest. AN Kazakh. SSR 14 no.4:97-98 Ap '58.
(Academy of Sciences of the Kazakhstan S.S.R.) (MIRA 11:6)

BOLOTOVA, N.I., starshiy inzh.

Technical conference on the inversion of electric power in traction substations. Elek.i tepl.tiaga 6 no.4:38-39 Ap '62. (MIRA 15:5)

1. Sluzhba elektrifikatsii i energeticheskogo khozyaystva Zakavkazskoy dorogi.

(Electric railroads--Substations)

Bolotova, N. P.

99-58-4-3/7

AUTHORS: Bolotova, N.P.; Vinokur Ya.Ye.; Girshkan, S.A.; Koklyanov,A.F; Kundzich. M.M.: Nefedov, V.D.; Offengenden, S.R.; Pishchikov, R. S.; Poslavskiy, V. V.; Tomilov, V. S.; Sharov, N. A.; Shtarev, Ya. K.; Shubladze, K. K.

TITLE: Means of Raising the Technical Level and Lowering the Construction Cost of Irrigating and Meliorating Systems (Puti povysheniya tekhnicheskogo urovnya i snizheniya stoimosti stroitel'stva orositel'nykh, osushitel'nykh i obvodnitel'nykh sistem)

PERIODICAL: Gidrotekhnika i Melioratsiya, 1958, # 4, pp 17-39 (USSR)

ABSTRACT: A general review of past achievements and future tasks in the field of irrigation and melioration is given. The main deficiencies in the field are: insufficient mechanization of construction work, a shortage of excavating machines and other construction equipment, late deliveries of spare parts for machines and a too wide dispersal of funds over a multitude of enterprises. The main shortcomings at the planning stage are: insufficient use of means to cut down filtration losses of water in the canals; insufficient utilization of sprinkling; insufficient development of drainage systems, a careless levelling of irrigated fields, the most important factor in an

Card 1/3

Means of a Raising the Technical Level and Lowering the Construction Cost of Irrigating and Meliorating Systems

economical use of water. During the 6th 5-year plan, the drainage system in the south-western parts of the Belorussian SSR, in the Poles'ye part of the Ukrainian SSR, and in other parts of the USSR, is to be greatly developed. Only 8,4 million hectares out of a total of 200 million hectars of marshes or marshy soils were being drained at the beginning of 1957. More than 4 million of these undrained hectares are used as natural meadows and pastures with low yields. The article also recommends to replace the system of open drainage ditches by subsurface drains.

During the 6th 5-year plan 81,1 million hectares will be watered by new wells, reservoirs, artificial lakes and spring water. Many sheep-breeding farms in Uzbekistan will install electric pumps, until now impossible due to the shortage of needed equipment. In 1957 production of hydraulic equipment lagged considerably behind requirements. The article lists the various projects to be constructed in various republics. The melioration works will cover an area of 13 million hectares in the Belorussian and Ukrainian SSR. the acreage of arable land will be increased by 3,8 million

99-58-4-3/7

Means of a Raising the Technical Level and Lowering the Construction Cost of Irrigating and Meliorating Systems

hectares.
There are 8 photos and 1 table and 4 maps.

AVAILABLE: Library of Congress

Card 3/3

[redacted], N.I., inzh.

Use of hydraulic mechanization and [illegible] for the further development. Gidr. i mel. 17 no.6:[illegible] My '65.

(MIRA 18:7)

1. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk im. Lenina.

BOLOTOVA, N.[illegible], inzh.

Conference on problems concerning seepage from canals and reservoirs. Gidr. i mel. 17 no.3:53-56 Mr '65. (MIRA 18:4)

1. Vsesoyuznaya akademiya sel'skogo khozyaystva im. V.I.Lenina.

BERDYSHEV, V.D., inzh. (Moskva); BOLOTOVA, N.P., inzh. (Moskva)

Improvement of meadows and pastures in the non-Chernozem belt of the U.S.S.R. Gidr. i mel. 17 no.12:49-57 D '65. (MIRA 19:1)

USSR/ General Problems of Pathology. Tumors U-4

Abs Jour : Ref Zhur - Biol., No 5, 1958, 23063

Author : Bolotova, N.Ye., Pavlova, N.S.
Inst :
Title : On Fibrosarcomas in Cattle.

Orig Pub : Tr. Ulyanovskogo, S-kh. in-ta, 1956, 4, 355-357

Abstract : A fibrosarcoma in the cow is described. The tumor, measuring 1.7 x 8.5 cm., was protruding from a wall of the rumen.

Card 1/1

BOLTUNOVA, T.V. (Orel); ARZHANOVA, I.G. (Orel); BOLOTOVA, O.G. (Orel)

Treatment of chronic tonsillitis. Vop. okhr. mat. i det. 6 no.6:16-18 Je '61. (MIRA 15:7)

(TONSILS—DISEASES)

KOVALEVA, Ye.P.; PYASHKA, Ya.M.; BOLOTOVA, S.A.

Toxoplasmosis in the workers of the Moscow Meat Combine. Vak. i syv. no.1:236-239 '63. (MIRA 18:8)

1. TSentral'nyy institut usovershenstvovaniya vrachey, Moskovskiy institut vaktsin i syvorotok im. Mechnikova i Moskovskaya gorodskaya sanitarno-epidemiologicheskaya stantsiya.

MOSUNOV, V.B.; NESELOVSKAYA, V.K.; GOL'DINA, G.S.; SERAFIMOVA, A.M.; BIRALO, T.I.; VASILENKO, L.N.; SUKHOVA, M.N.; GROVZDEVA, I.V.; MYSHIK, Yu.N.; TETEROVSKAYA, T.O.; BOLOTOVA, T.A.; KHOLODOVA, G.K.; STOROZHEVA, Ye.M.; SAMSONOVA, A.M.

Sensitivity to chlorophos, trichlorometaphos, DDT, hexachlorocyclohexane and polychloropinene in housefly populations following the use of these insecticides for several years. Zhur. mikrobiol., epid. i immun. 42 no.8:7-14 Ag '65. (MIRA 18:9)

1. TSentral'nyy nauchno-issledovatel'skiy dezinfektsionnyy institut, Moskva, Mytishchinskaya i Tashkentskaya gorodskiye sanitarno-epidemiologicheskiye stantsii, Tashkentskaya i Minskaya gorodskiye dezinfektsionnyye stantsii i Brestskaya gorodskaya i Brestskaya oblastnaya sanitarno-epidemiologicheskiye stantsii.

BOLOTOVA, T.A.

Use of chlorophos insecticide paper in the control of houseflies in Mytishchi during 1959. Zhur. mikrobiol. epid. i immun. 32 no.5: 123-124 My '61. (MIRA 14:6)

1. Iz Mytishchinskoy gorodskoy sanitarno-epidemiologicheskoy stantsii.
(INSECTICIDES) (MYTISHCHI--FLIES--EXTERMINATION)

Bolotova T.P.

BOLOTOVA, T.P.(Moskva)

Thyroid gland in adults in the region of Abakan railroad construction.Probl. endokr. i gorm. 1 no.5:36-42 S-O '55. (MLRA 8:10)

1. Iz Vsesoyuznogo instituta eksperimental'noy endokrinologii.

(GOITER,
endemic in Russia, clin.aspects)

L 23405-66 EWT(1)/T RO/JK

ACC NR: AP6014013 SOURCE CODE: UR/0016/65/000/008/0007/0014

AUTHOR: Sukhova, M. N.; Gvozdeva, I. V.; Misnik, Yu. N.; Teterovskaya, T. O.; Bolotova, T. A.; Kholodova, G. K.; Samsonova, A. M.; Gol'dina, G. S.--Goldina, G. S.; Storozheva, Ye. M.--Storozheva, E. M.; Mosunov, V. B.; Nasalovskaya, V. K.; Serafimova, A. M.; Biralo, T. I.; Vasilenko, L. N.

ORG: Central Scientific Research Disinfection Institute, Moscow (Tsentral'nyy nauchno-issledovatel'skiy dezinfektsionnyy institut); Mytishchi City Sanitary Epidemiological Station, Mytishchi (Mytishchitsskaya gorodskaya sanitarno-epidemiologicheskaya stantsiya); Tashkent City Sanitary Epidemiological Station, Tashkent (Tashkentskaya gorodskaya sanitarno-epidemiologicheskaya stantsiya); Tashkent City Disinfection Station, Tashkent (Tashkentskaya gorodskaya dezinfektsionnaya stantsiya); Minsk City Disinfection Station, Minsk (Minskaya gorodskaya dezinfektsionnaya stantsiya); Brest City Sanitary Epidemiological Station, Brest (Brestskaya gorodskaya sanitarno-epidemiologicheskaya stantsiya); Brest Oblast Sanitary Epidemiological Station (Brestskaya oblastnaya sanitarno-epidemiologicheskaya stantsiya)

TITLE: Sensitivity of the house fly population to chlorophos, trichlorometaphos-3, DDT, hexachlorocyclohexane, and polychloropinene after many years of application of these insecticides

SOURCE: Zhurnal mikrobiologii, epidemiologii i immunobiologii, no. 8, 1965, 7-14

TOPIC TAGS: entomology, insecticide, organic phosphorus compound, chlorinated organic compound

Card 1/3 UDC: 614.57:615.777/779]:[576.895.772.095.18

L 23405-66

ACC NR: AP6014013

ABSTRACT: The sensitivity of flies to insecticides was studied in a number of cities. Tests were carried out on female flies by applying an acetone solution of the insecticide to the back and determining the LD_{50}. At Minsk and Brest, where sprinkling of walls with a 2-3% aqueous solution of chlorophos was applied for 7 and 6 years, respectively, increased tolerance of flies to this insecticide was observed. At Mytishchi, where chlorophos baits were used, particularly in the form of mixtures containing ammonium carbonate, the sensitivity of flies to this insecticide remained undiminished. No increase in the tolerance of southern house flies (Musca domestica vicina Macg.) to chlorophos after application of this insecticide in Tashkent for 4-5 years was observed. Use of trichlorometaphos as a larvicide reduced the sensitivity of flies to this insecticide to a small extent in Mytishchi, Minsk, and Brest, but not to a degree which could be regarded as an increase in tolerance (defined as a decrease of sensitivity by a factor of 2-4). The sensitivity of flies to trichlorophos was unaffected after use of this insecticide in Tashkent. Flies at Minsk and Brest which had developed a tolerance to chlorophos also showed an increased resistance to DDT and hexachlorocyclohexane (this increase in resistance also developed to a minor extent at Mytishchi). However, the increase in the resistance to hexachlorocyclohexane was presumably not related to the use of organophosphorus compounds, but due to the application of polychloropinene in these localities. Existence of a relation between increased resistance to DDT and tolerance to chlorophos was more likely. Southern flies in Tashkent, which retained sensitivity to chlorophos to the full extent, did not exhibit an increase in the resistance to DDT. After a

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6 to 7 year discontinuance of the use of chlorinated hydrocarbons in Tashkent, a moderate tolerance to DDT that was on the initial level remained, while the resistance to hexachlorocychlohexane decreased by a factor of three. The most expedient methods for the extermination of flies are used of chlorophos - ammonium carbonate baits to exterminate imago and application of larvicides, specifically those containing trichlorometaphos - 3 in optimum doses, so that development of tolerance will be prevented. Orig. art. has: 4 figures and 2 tables. [JPRS]

SUB CODE: 06, 07 / SUBM DATE: 24Sep65 / ORIG REF: 004 / OTH REF: 004

Card 3/3

BOLOTOVA, V.M., kandidat biologicheskikh nauk.

Forest pastures in the southern part of the Komi A.S.S.R. Trudy Komi fil. AN SSSR no.3:105-111 '55. (MLRA 9:10)
(Komi A.S.S.R.--Pastures and meadows)

TOLMACHEV, A.I.; BOLOTOVA, V.M.; DEDOV, A.A.; LASHCHENKOVA, A.N.; SHOLENINOVA, T.P.; GARNOVSKIY, K.V., red. izd-va; VINOGRADOVA, N.F., tekhn. red.

[Classification key of higher plants of the Komi A.S.S.R.] Opredelitel' vysshikh rastenii Komi ASSR. Moskva, Izd-vo Akad. nauk SSSR, 1962. 356 p. (MIRA 15:7)
(Komi A.S.S.R.--Botany--Classification)

BOLOTOVA, YA. YA.

DYSENTERY

"Materials for the Study of the Epidemiological and Clinical Effectiveness of an Enteral Vaccination against Dysentery", by E.N. Shlyakhov and Ya.Ya. Bolotova, Sbornik Trudov Moldavskogo Instituta Epidemiologii i Gigiyeny, 1956, 1, pp 111-118 (from Meditsinskiy Referativnyy Zhurnal Section 1, No 2, 1957, p 65.)

The effect of the vaccines of the Odessa Institute of Epidemiology and Microbiology (Flexner's and Shiga's bacilli) and the Institute of Epidemiology and Microbiology of the Academy of Medical Sciences USSR (Flexner's, Shiga's and Sonne's bacilli) is discussed by the authors. Although their observations are set forth in detail, the article concludes that enteral vaccination against dysentery is of no consequence.

Card 1/1

KHENKIN, M.L., kand. tekhn. nauk; NIKONOROVA, A.I., kand. tekhn. nauk; GLADYSHEV, S.A., inzh.; BOLOTOVA, Ye.P., inzh.; SOBOLEVA, N.P., inzh.

Stainless steel for thin-walled castings. Lit. proizv. no.11: 3-5 N '65. (MIRA 18:12)

L 26030-66 EWT(m)/EWA(d)/T/EWP(t) IJP(c) JD/HW

ACC NR: AP6008863 SOURCE CODE: UR/0128/65/000/011/0003/0005

AUTHOR: Khenkin, M. L. (Candidate of technical sciences); Nikonorova, A. I. (Candidate of technical sciences); Gladyshev, S. A. (Engineer); Bolotova, Ye. P. (Engineer); Soboleva, N. P. (Engineer)

ORG: none

44
42
B

TITLE: Stainless steel for thin-walled castings

18 18

SOURCE: Liteynoye proizvodstvo, no. 11, 1965, 3-5

TOPIC TAGS: metal casting, martensite steel, copper, corrosion resistance, tempering, austenitic steel, steel, stainless steel/ ØKh15N4D3L stainless steel, 35L steel

ABSTRACT: The steel used for thin-walled and intricate castings of parts of precision machinery and devices must display a high resistance to atmospheric corrosion without requiring a protective coating, a satisfactory fluidity, a high dimensional stability, adequate physico-mechanical properties, and a satisfactory machinability. Of the standard stainless steels not one satisfies the entire set of these requirements. Cr-Ni austenitic steels have a high corrosion resistance but a low fluidity, while martensitic-class steels have a low corrosion resistance but an insufficient fluidity. Hence it is normally necessary to employ for these purposes 35L steel despite the highly undesirable necessity of coating it electrochemically with zinc. Of the elements

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Card 1/2 UDC: 621.74.045:669.14.018.8

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enhancing the fluidity of stainless steels, Cu is the most effective. In this connection, six melts of the newly developed ØKh15N4D3L martensitic stainless steel (up to 0.08% C, 0.8% Si, 0.7% Mn, 14.5-17% Cr, 3-4% Ni and 3-4% Cu) were tested for fluidity, as a function of temperature and shape of metal. Tests of various intricate thin-walled (1.5 mm thick) castings confirmed the definitely satisfactory casting properties of this steel -- high fluidity and absence of hot cracking. Since steels used for thin-walled and precision castings also must satisfy high requirements with respect to corrosion resistance in non-coated state, high dimensional stability, and machinability, these properties were also investigated for ØKh15N4D3L steel as compared with 35L steel. Findings: the dimensional stability of ØKh15N4D3L steel is such that, after its air quenching from 1020°C, 2-hr treatment with cold at -70°C and 2-hr tempering at 600°C, this steel remains stable in time even in the presence of temperature fluctuations of from ±150°C to -40°C. Compared with 35L steel, ØKh15N4D3L steel displays superior strength properties (1.5-2 times higher) as well as superior corrosion resistance and superior machinability (30-40% higher). Thus ØKh15N4D3L steel may be accepted as a replacement for 35L steel which previously had to be used for this purpose. Orig. art. has: 6 figures, 4 tables.

SUB CODE: 11, 13 / SUBM DATE: none/ ORIG REF: 00

Card 2/2 PB

APTER, I.M.; BOLOTOVA, Z.M.; LITVINOVA, N.M. [Lytvynova, N.M.]; TARANSKAYA, A.D. [Taranskaya, A.D.]

Some patterns of the action of different neurotropic substances on the higher divisions of the brain. Fiziol. zhur. [Ukr.] 7 no.5:585-591 S-O '61. (MIRA 14:9)

1. Laboratoriya patofiziologii vysshey nervnoy deyatel'nosti Ukrainskogo nauchno-issledovatel'skogo psikhonevrologicheskogo instituta, Khar'kov.
(BRAIN) (PHARMACOLOGY)

BOLOTOVA, Z. N.

USSR/Medicine - Neurophysiology, electroshock FD-2378

Card 1/1 Pub. 154-9/18

Author : Apter, I. M.; Bolotova, Z. N.; and Sineyko, I. G.

Title : Concerning the effect of combined application of electroshock and protracted sleep on higher nervous activity.

Periodical : Zhur. vys. nerv. deyat., 70-75, Jan/Feb 1955

Abstract : Application of electroshock in combination with protracted intermittent sleep is suggested as an effective method for the treatment of psychotic patients. Sleep alleviates, to some extent, harmful effects of spasmodic attacks on the higher nervous activity. Results of experiments on two dogs with different type of nervous system demonstrated that artificial sleep produces satisfactory results after 5-6 electroshock applications. Extreme care must be used in clinical practice not only when electroshock is applied alone, but also when it is used in combination with protracted intermittent sleep.

Institution: Department of Neurosis and Borderline Conditions, Ukrainian Institute of Psychoneurosis.

Submitted : March 17, 1954

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206120018-1"

BOLOTOVA, Z.N.

Effect of hexenal (sodium evipan) on the higher nervous activity of dogs. Fiziol. zhur. [Ukr.] 6 no.6:757-763 N-D '60. (MIRA 14:1)

1. Ukrainian Psychoneurological Institute, Kharkov.
(HEXOBARBITAL) (BRAIN)

BERLINER, Mark Aleksandrovich, dots.; BOLOTOVSKAYA, Mona Yur'yevna, assistent [deceased]; MOROZOVA, Nina Vladimirovna, assistent; KOMAROVA, M.V., red.

[Principles of industrial electronics and automatic control] Osnovy promyshlennoi elektroniki i avtomatiki. [n.p.] Vysshaia shkola, 1964. 86 p. (MIRA 17:11)

1. Kafedra "Promyshlennaya elektronika i avtomatika" Moskovskogo avtomobil'no-dorozhnogo instituta im. Molotova.

YANISHEVSKIY, A.V.; RESHANOV, A.S.; BOLOTOVSKAYA, R.M.

Production of high dispersion polyvinyl acetate powders.
Plast. massy no.8:31-33 '65. (MIRA 18:9)

BOLOTOVSKAYA, T. P.

AID P - 4481

Subject : USSR/Engineering

Card 1/1 Pub. 128 - 8/29

Authors : Bolotovskaya, T. P., Engineer, I. A. Bolotovskiy, Kand. Tech. Sci., and V. E. Smirnov, Kand. Tech. Sci., Dotsent.

Title : Teeth interference of wheels cut on a broaching-type machine.

Periodical : Vest. mash., #4, p. 31-34, Ap 1956

Abstract : A geometrical analysis of the angular correction of a straight-tooth involute profile is presented. Charts.

Institution : None

Submitted : No date

BOLOTOVSKAYA, T.P., starshiy prepodavatel'

Gear correction securing the pitch-point position in the area of the two-pair engagement. Izv.vys.ucheb.zav.; mashinostr. no.7:142-149 '61. (MIRA 14:9)

1. Ufimskiy neftyanoy institut. (Gearing)

BOLOTOVSKAYA, Tat'yana Petrovna; BOLOTOVSKIY, Izrail' Arkad'yevich, kand. tekhn. nauk; SMIRNOV, Vsevolod Erazmovich; EYDINOV, M.S., kand. tekhn. nauk, retsenzent; BOGOSLAVETS, N.P., tekhn. red.

[Manual on gear correction]Spravochnik po korrigirovaniiu zubchatykh koles. Pod red. I.A.Bolotovskogo. Moskva, Mashgiz, 1962. 215 p. (MIRA 15:10)

(Gearing)

BOLOTOVSKAYA, T.P., inzh.

Geometrical calculation of transmissions with internal meshing. Vest.mashinostr. 45 no.11:12-14 N '65.
(MIRA 18:12)

LAZAREV, Mikhail Pavlovich; BOLOTSKAYA, Ye.L., red.; PROTANSKAYA, I.V., red. izd-va; PARAKHINA, N.L., tekhn. red.

[Manual on the improvement of lumber floating routes] Spravochnik melioratora lesosplavnykh putei. Moskva, Goslesbumizdat, 1961. 164 p. (MIRA 14:11)

(Rivers—Regulation) (Lumber—Transportation)