"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

Synthetic Anesthetics. Part 12. 79-2-16/58

the organo-magnesium compound is followed by a drop in the yield of the tertiary amino alcohol and an increase in the yield of the intermediate reaction product - aminoketone. All tertiary amino alcohols derived by the authors submitted easily to esterification with acid chlorides converting into homologous esters. Certain benzoates and phenoxyacetates of tertiary gamma-dialkylaminobutanols were found to possess high anesthetic characteristics close to that of dicaine.

1 table. There are 3 references, of which 1 is Slavic

ASSOCIATION: Moscow Institute of Fine Chemical Technology

PRESENTED BY:

SUBMITTED: November 9, 1955

AVAILABLE: Library of Congress

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

AUTHORS: Nazarov, I. N., Kruglikova, R. I., Nikolayev, G. M. SOV/79-29-6-18/72

TITLE: Acetylene-amino Alcohols and Their Esters (Atsetilenovyye aminospirty i ikh slozhnyye efiry)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 6, pp 1859 - 1866 (USSR)

ABSTRACT: In order to investigate the dependence of the physiological activity of the alkanolamine esters on their structure the synthesis of a number of butanol amine esters was carried out, of the saturated and of those with double and triple bonds (Scheme 1). The method recently described for synthesizing acetylene alcohols and butanol amines by condensation of the acetylene amines with ketones (Ref 1) and subsequent reduction of the acetylene-amino alcohols offers small yields only. The synthesis of the substituted butanol amines, in particular of 5-diethyl--amino-pentanol-2, the semi-product for the synthesis of acrichin, plasmochin and other products, offers good yields. This synthesis is carried out on the basis of aceto-acetic ester which, of course, limits the substitution at the carbon which is bound to the hydroxyl group (Scheme 2). In order to obtain

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various amino-butanols as well as the amino-butine and amino--butenols and their esters the authors used the simple and general synthesis by Mannich with the corresponding esters of the acetylene-alcohols. The saponification of these esters with subsequent selective hydrogenation permit the synthesis of the corresponding acetylene, ethylene and saturated amino alcohols (Scheme 3). The acetylene alcohols were obtained by reaction of acetylene with acetone, methyl-ethyl-ketone, cyclohexanone and cyclopentanone. The acetates of the acetylene-amino alcohols yielded by saponification with alcoholic caustic potash solution the corresponding amino-alcohols in yields of 80-90%. Thus a number of acetates, benzoates, and phenoxy-acetates were obtained by means of Mannich's reaction with esters of the tertiary acetylene alcohols. The hydrochlorides of the benzoates and phenoxy acetates are to be investigated with respect to their anesthetic activity. There are 3 tables and 10 references, 1 of which is Soviet.

SUBMITTED: March 21, 1958

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5.3400,5.3610

77079
SOV/79-30-2-21/78

AUTHORS: Nazarov, I. N., Kruglikova, R. I., Nikolayev, G. M.

TITLE: Reduction of Acetylenic Aminoalcohols and Their Esters

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 2, pp 462-469 (USSR)

ABSTRACT: The authors studied hydrogenation of the previously synthesized α -acetylenic aminoalcohols and their benzoates (Zhur. obshchey khim., 29, 1859 (1959)). Hydrogenation of the hydrochlorides of benzoates of dimethyl- γ -piperidinepropyne-1-ol (I) and 1- γ -piperidinepropynylcyclopentanlol (IV) over 6% $Pd/BaSO_4$ (by shaking an absolute alcohol solution of the reagent in a hydrogen atmosphere) is accompanied by cleavage of the C-O bond with formation of a saturated amine and benzoic acid, along with the reduced benzoates (II) and (V), as shown in the schemes below. (In preliminary experiments, it was found that the hydrochlorides are hydrogenolyzed to a lesser extent than the

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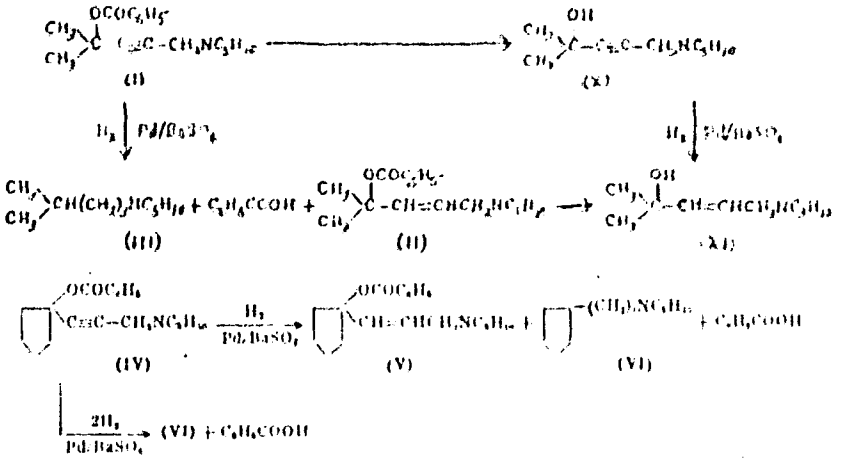
Reduction of Acetylenic Aminoalcohols and Their Esters

77870
SOV/79-30-2-21/78

respective bases.)



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Reduction of Acetylenic Aminoalcohols and Their Esters

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Absorption of 1 mole of H_2 per mole of benzoate gave 25% benzoate and 26% hydrogenolysis products. When 2 moles of hydrogen are absorbed, the degree of hydrogenolysis reaches 50-70% with no reduced benzoates among the isolated products. On the other hand, hydrogenation of α-acetylenic aminoalcohols under these conditions results in α-ethylenic and saturated alcohols in 80-90% yields. Tables 1 and 2 give yields and constants of the reduced aminoalcohols. An attempt to esterify the reduced (as well as acetylenic) aminoalcohols (with acetic and benzoic anhydrides, benzoyl chloride at 20° and 130°, or by action of benzoyl chloride upon MgI-alcoholates) failed. There are 2 tables; and 6 references, 4 Soviet, 1 French, 1 U.K. The U.K. reference is: H. Huggill, J. Rose, J. Chem. Soc., 335 (1950).

ASSOCIATION: Moscow Institute of Fine Chemical Technology (Moskovskiy institut tonkoy khimicheskoy tekhnologii)

SUBMITTED: March 2, 1959

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77870, SOV/79-30-2-21/78

Key to Tables 1 and 2: (1) Nr of substance; (2) boiling point (pressure in mm); (3) yield (in %); (4) melting point of hydrochloride; (5) found; (6) calculated; (7) empirical formula. Table 1. Ethylene aminoalcohols.

$$R_2\overset{OH}{\overset{|}{C}}-CH=CHCH_2C_5H_{10}$$

(1)	$R_2\overset{\vert}{C}-$	(2)	n_D^{20}	d_{20}^{20}	(3)	(4)	% N (5)	% N (6)	(7)
(XIV)	$(CH_3)_2\overset{\vert}{C}-$	70–71° (2.5)	1.4720	0.9155	85	183–184°	7.52, 7.68	7.64	$C_{11}H_{21}ON$
(XV)	$C_2H_5(CH_3)\overset{\vert}{C}-$	72 (2)	1.4758	0.9169	80	154–155	7.00, 6.90	7.10	$C_{12}H_{23}ON$
(XVI)		98–100 (2.5)	1.5012	0.9806	98	189–189.5	6.71, 6.88	6.70	$C_{13}H_{23}ON$
(XVII)		120 (2)	1.4973	0.9786	78	198–199	6.08, 5.98	6.30	$C_{14}H_{25}ON$

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Table 2. Saturated aminoalcohols.

$R_2C(OH)(CH_2)_3NC_5H_{10}$

(1)	R_2	(2)	n_D^{20}	d_{20}^{20}	(3)	(4)	% N (5)	% N (6)	(7)
(XVIII)	$(CH_3)_2C$—	69—70° (2.5)	1.4700	0.9151	85	179—180.5°	7.49, 7.62	7.56	$C_{11}H_{25}ON$
(XIX)	$C_2H_5(CH_3)C$—	98—100 (2)	1.4739	0.9166	75	181.5—182.3	6.85, 6.77	7.03	$C_{12}H_{25}ON$
(XX)		107—109 (2)	1.4966	0.9814	83	183.8—184.5	6.87, 6.90	6.64	$C_{13}H_{25}ON$
(XXI)		122—123 (2)	1.4953	0.9765	90	208—209	6.54, 6.24	6.22	$C_{14}H_{27}ON$

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NAZAROV, I.N.; KRUGLIKOVA, R.I.; MEL'NIK, S.Ya.

Synthesis of acetals of 2,6-dimethyl- -tetrahydrobenzaldehyde. Zhur.ob.khim. 30 no.7:2269-2274 Jl '60. (MIRA 13:7)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii. (Benzaldehyde)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

KRUGLIKOVA, R.I.; ROKACHEVSKAYA O.P.; SABLINA, T.S.

Synthesis of actals of substituted tetrahydrobenzaldehyde.
Zhur. ob. khim. 31 no.4:1166-1173 Ap '61. (MIRA 14:4)

1. Institut tonkoy khimicheskoy tekhnologii imeni M. V. Lomonosova.
(Benzaldehyde)
(Acetals)

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

KRUGLIKOVA, R.I.; UMANSKAYA, T.A.

Production of acylated primary-tertiary acetylenic diamines. Zhur.org.khim. 1 no.2:230-232 F '65. (MIRA 18:4)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni V.M.Lomonosova.

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

KRUGLIKOVA, R.I.; PIKALOV, V.Ye.

Mannich reaction with primary amines. Obtaining ethyl-bis-(4-diethylaminobutyne-2-yl-1)amine. Izv.vys.ucheb.zav.; khim. i khim.tekh. 8 no.2:349-351 '65. (MIRA 18:8)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni Lomonosova, kafedra organicheskoy khimii.

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

KRUGLIKOVA, TS. P.

21

The chemical composition of exhaust gases and the determination of hydrocarbons in them by the condensation method. Ts. P. Kruglikova. *Trudy Moskov. Sanit. Inst. im. Erismana* 1939, 74-84; *Khim. Referat. Zhur.* 1940, No. 2, 71.—The exhaust gas samples were analyzed for CO_2, O_2 and CO according to Hempel and total hydrocarbons by the combustion method. The hydrocarbons were then fractionally condensed at −80° with solid CO_2 and acetone and −185° with liquid air. The unsatd. hydrocarbons, nearly completely condensed in the −185° fraction, were detd. by (1) treating with Br water in a gas buret, (2) treating with standard Br in CCl_4 and titrating the excess Br with SO_2, (3) by dissolving according to Senderikhina. The satd. hydrocarbons were detd. by combustion. The contents of unsatd. hydrocarbons varied from 0.1 to 0.2%. The exhaust gases contained also aldehydes and phenols. Diagrams of the app. used for condensation and combustion of hydrocarbons are given and the methods described in detail.

W. R. Henn

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

KRUGLIKOVA, Ts. P.

14

Dinitrophenol in the air of inhabitable premises. Ts. P. Kruglikova. *Hig. i Sanit.* (U. S. S. R.) 1940, No. 2-3, 29-30; cf. 2,4-Dinitrophenol mixed with NaF and with other substances has been largely used as an antiseptic in inhabitable premises. Three mg. of dinitrophenol was found per cu. m. of air. Dinitrophenol was detd. in wood and in the plaster by bromination; in the air by the colorimetric method. To prevent the toxic effect of dinitrophenol on the human organism, a 15% soda soln. was applied to the surface of the wood. This formed the nonvolatile Na dinitrophenolate, which has antiseptic properties. S. Machelson

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

KRUGLIKOVA, TS.P.,kand.med.nauk; YEFIMOVA, V.K.,vrach.

Sulfur dioxide in the atmosphere as a source of air pollution in dwellings. Gig. & san. 23 no.3:75-78 Mr '58. (MIRA 11:4)

1. Iz sanitarno-epidemiologicheskoy stantsii Moskvy.
(AIR POLLUTION
sulfur dioxide in dwellings)
(SULFUR
dioxide air pollution in dwellings)

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

24786
S/152/61/000/006/001/003
B103/B206

11.1210

AUTHORS: Pitskhelauri, Ye. N., Pospelova, T. A., Kruglikova, V. S.

TITLE: Desulfurization of straight-run kerosene distillate by ozonization and adsorption

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Neft' i gaz, no. 6, 1961, 81-87

TEXT: Starting from the results of previous investigations (Ye. N. Pitskhelauri and T. A. Pospelova, Ref. 1: "Neft' i gaz", no. 4, 1960) and publication data (I. L. Gurevich et al., Ref. 2: Pererabotka nefti (Petroleum processing), t.2. Gostoptekhizdat, 1958, str. 158; L. G. Gurvich, Ref. 3: Nauchnyye osnovy pererabotki nefti (Scientific basis of petroleum processing), 1925, p. 515; Ye. N. Karaulova, Ref. 4: "Itogi nauki" (Results from Science), Chapter "Khimicheskiye nauki" (Chemical Sciences). Izd. AN SSSR, 1958, p. 130), the authors assumed that the method of the oxidation of sulfur containing fuel compounds by ozone with subsequent adsorption of the oxidation products, will considerably increase the effectiveness of desulfurization. The methods of ozonization and analyses were taken from a

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Desulfurization of straight-run ...

previous paper (Ref. 1). Characteristics of the investigated kerosene distillate of Devonian petroleum from Romashki: boiling temperature 155-255°C, density 0.802, total sulfur content 0.35%, iodine number 6.6. Alumosilicate catalyst, Cherenkov aluminum oxide, silica gel from the Voskresenskiy zavod (Voskresensk Plant), bentonite and activated charcoal were used as adsorbents. The distillate was oxidized with ozonized oxygen (ozone concentration about 0.5-1%) at room temperature in the presence of water (5:1). The adsorption of acid products and resins was made in a glass- and metal column, respectively. The rate of introduction of the distillate was 0.5-1.0 ml/min. In the case of bentonite, the distillate was previously rinsed with 10% NaOH solution at low temperature (0.5% of the weight of the distillate). Before the process, the adsorbents were roasted at t = 400-500°C. The adsorption effectiveness was judged by the relative consumption of the adsorbent A as ratio between the amount of adsorbent in g and the amount by weight of the refined distillate; A = g adsorbent/g distillate. The distillate was considered to be refined when its acid content amounted to 1-2 mg/100 ml, and the resin content did not exceed 3-5 mg/100 ml. The consumption of ozone and adsorbent was decisive in obtaining a suitable degree of desulfurization. Therefore, the authors investigated the effect

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Desulfurization of straight-run ...

of the ozonization intensity α (α = ozone adsorption/g sulfur) and relative consumption of the adsorbent A on the degree of desulfurization β ($\beta = S_{initial} - S_{rest}/S_{initial}$). When the ozonization intensity is varied between 1.7 and 4.0, the optimum result (β = 96% and A = 0.24) was reached at α = 3. As shown in Table 2, silica gel and alumosilicate catalyst are the most effective adsorbents. Tables 5 and 6 show the changes of the distillate in the ozone-adsorption refining process. The authors summarize their results as follows: 1) The ozonization-adsorption process safeguards and ozonization intensity of 97% when using kerosene distillate. The ozone consumption amounts to about 10 kg per 1 t distillate, and the yield of the refined product to 97-98%. 2) The high effectiveness of the ozone-adsorption process is achieved by the interaction between the oxidation of sulfur containing compounds and the subsequent selective adsorption of the oxidation products, which results in considerable desulfurization and reduction of heat consumption during steaming of the adsorbent to between one fourth and one fifth (as compared with the method of direct adsorption, MNI imeni Gubkina (Moscow Petroleum Institute imeni I. M. Gubkin) (Ref. 2). 3) The ozone-adsorption process yields a product puri-

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Desulfurization of straight-run ...

fied to a higher degree (from acid compounds and resins) than the ozonization method, with a simultaneous reduction of the heat consumption to one tenth during the second processing of the distillate. 4) The oxidation products formed through the effect of ozone from sulfur containing compounds are selectively adsorbed to an almost equal degree by the two synthetic adsorbents (silica gel and alumosilicate catalyst); but the alumosilicate catalyst reduces the concentration of the peroxide compounds in the refined distillate four times more actively than silica gel. 5) The special tests of the refined distillate for stability showed that the distillate can be stored in daylight for two years without deterioration of its quality. Tests for thermal stability under dynamic conditions proved that the purification process described increases the stability of the distillate, specially at 150°C. Studies by Gal'pern and Novozhilova (Ref. 4) are mentioned. The specific surface of the adsorbent was determined by the senior staff member A. Ye. Agronomoy. Thermal stability was studied at the Nauchno-issledovatel'skiy institut goryuchikh i smazovykh materialov (Scientific Research Institute of Fuels and Lubricants) under the direction of senior staff member Z. A. Sablina. There are 1 figure, 7 tables, and 6 Soviet-bloc references.

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

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S/152/61/000/006/001/003
B103/B206

Desulfurization of straight-run ...

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED: February 11, 1961

Legend to Table 2: (1) Adsorbent; (2) refined distillate, ml; (3) yield of distillate without steaming of the adsorbent, %; (4) degree of desulfurization, $\beta = S_{initial} - S_{rest}/S_{initial}$; (5) relative consumption of adsorbent A = g adsorb/g distillate; (6) silica gel; (7) alumosilicate catalyst; (8) aluminum oxide; (9) activated charcoal; (10) bentonite.

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

BEREZKIN, V.G.; KUGLIKOVA, V.S.

Relation of the elution characteristics to the molecular structure of compounds in chromatographic analysis. Neftekhimiia 2 no.6:844-851 N-D '62. (MIRA 17:10)

1. Institut neftekhimicheskogo sinteza AN SSSR.

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

BEREZKIN, V.G.; KRUGLIKOVA, V.S.

Structural characteristics of interaction between the compound being chromatographed and the sationary phase. Izv. AN SSSR. Ser. khim. no.8:1505-1507 Ag '64. (MIRA 17:9)

1. Institut neftekhimicheskogo sinteza im. A.V. Topchiyeva AN SSSR.

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

BEREZKIN, V.G.; KRUGLIKOVA, V.S.; BELIKOVA, N.A.

Kinetics of bimolecular chemical reactions as studied by a pulse chromatographic technique. Dokl. AN SSSR 158 no.1:182-185 S-O '64 (MIRA 17:8)

1. Institut neftekhimicheskogo sinteza AN SSSR i Moskovskiy gosudarstvennyy universitet . Predstavleno akademikom V.N. Kondrtat'yevym.

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

BERE[illegible]IN, V.[illegible]. [illegible]IKOVA, V.S., [illegible]YEVA, V.Ye.

Chromatographic method of studying the kinetics of chemical reactions in the steady-state phase. Kin. i kat. 6 no.4:758-760 Jl-Ag '65. (MIRA 18:9)

1. Institut neftekhimicheskogo sinteza imeni A.V. Topchiyeva AN SSSR.

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

KRUGLIKOVA, YE. N.

USSR/Medicine - Dysentery

Nov 53

"Attempt at the Therapy of Chronic Dysentery of Children by Adapted Bacteriophage," Ye. P. Kremer, A. V. Burukina, Ye. N. Kruglikova, N. G. Grigor'yeva, Chair of Faculty Pediatry, Kazan' Med Inst; Kazan' Inst of Epidemiol and Microbiol

Zhur Mikro, Epid, i Immun, No 11, p 69

Bacteriophage adapted to local strains of dysentery bacteria proved effective in the treatment of chronic dysentery of children.

271T48

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

KRUGLIKOVA, Z. L. 183T69

USSR/Medicine - Infectious Diseases Mar/Apr 51

"Treatment of Whooping Cough With Streptomycin," Z. L. Kruglikova, Infectious Diseases Dept, Inst of Pediatry, Acad Med Sci USSR, Hosp imeni Rusakov

"Pediatriya" No 2, pp 20-23

Streptomycin is effective remedy for whooping cough. It is also effective in combine whooping cough-tuberculosis infections, but ineffective when patient has both whooping cough and dysentery.

183T69

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

SOBOLEVA, V.D., doktor med. nauk; KRUGLIKOVA, Z.L.

Adenoviral infections in children. Sov. med. 27 no.2:93-96 F '64. (MIRA 17:10)

1. Institut pediatrii (dir. - dotsent M.Ya. Studenikin) AMN SSSR, Moskva.

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

KRUGLIKOVA-L'VOVA, R.P.; MASHKOVSKIY, M.D., professor, zaveduyushchiy.

Comparative investigation of the effect of "promedol" and morphine upon reflexes from internal organs. Farm.i toks. 16 no.3:8-11 My-Je '53. (MLRA 6:7)

1. Otdel farmakologii Vsesoyuznogo nauchno-issledovatel'skogo khimiko-farmatsevticheskogo instituta imeni S.Ordzhonikidze.
(Reflexes) (Morphine)

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KRUGLIKOVA-L'VOVA, R.P.; VOSKRESENSKAYA, T.N.

Control of commercial tetracycline preparations. Antibiotiki 5 no.2:115-117 Mr-Ap '60. (MIRA 14:5)

1. Zavod medpreparatov No.1, Moskva.
(TETRACYCLINE)

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OGNEV, V.N., prof., otv. red.; KRUGLINA, T.I., red.; ZHUKOVA, Ye.G., tekhn. red.

[Geology of Central Asia] Geologiia Srednei Azii; sbornik statei. Leningrad, Izd-vo Leningr. univ., 1961. 235 p. (MIRA 14:7)

1. Leningrad. University.
(Asia, Central—Geology)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

ALENT'YEV, A.A. [Alent'iev, O.O.] [deceased]; KRUGLITSKAYA, V.A. [Kruhlyts'ka, V.IA.]; KRUGLITSKIY, N.N. [Kruhlyts'kyi, M.M.]

Effect of compacting pressure and firing temperature on the physico-mechanical properties of basalt-containing refractories. Dop. AN URSR no.3:351-353 '65. (MIRA 18:3)

1. Kiyevskiy politekhnicheskiy institut.

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

ALENT'YEV, A.A. [Alent'iev, O.O.] [deceased]; KRUGLITSKAYA, V.Ya. [Kruhlyts'ka, V.IA.]; KRUGLITSKIY, N.N. [Kruhlyts'kyi, M.M.]

Gas permeability of basalt-containing refractory materials. Dop. AN URSR no.10:1346-1350 '64. (MIRA 17:12)

1. Kiyevskiy politekhnicheskiy institut. Predstavleno akademikom AN UkrSSR F.D. Ovcharenko.

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

KRUGLITSKAYA, V.Ya. [Kruhlyts'ka, V.IA.]; ALENT'YEV, A.A. [Alent'iev, O.O.] [deceased]; KRUGLITSKIY, N.N. [Kruhlyts'kyi, M.M.]

High-density refractory based on Kirov clays. Dop. AN URSR no.8: 1067-1070 '65. (MIRA 18:8)

1. Kiyevskiy politekhnicheskiy institut.

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

OVCHARENKO, F.D.; KRUGLITSKIY, N.N.; NICHIPORENKO, S.P.; OROBCHENKO, V.I.

New structural and mechanical criteria of suspensions used in drilling. Ukr. khim. zhur. 29 no.4:376-382 '63. (MIRA 16:6)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.
(Drilling fluids)
(Suspensions (Chemistry))

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

OVCHARENKO, F.D., akademik; TRETINNIK, V.Yu.; KRUGLITSKIY, N.N.

Structural and mechanical criteria in estimating the coagulating action of electrolytes on the aqueous dispersions of montmorillonite. Dokl. AN SSSR 153 no.4:869-870 D '63. (MIRA 17:1)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.
2. AN UkrSSR (for Ovcharenko).

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

OVCHARENKO, Fedor Danilovich, akademik; KUKOVSKIY, Yevgeniy Georgiyevich; NICHIPORENKO, Sergey Petrovich; VDOVENKO, Sergey Petrovich; VDOVENKO, Nadezhda Vasil'yevna; TRETINNIK, Vikentiy Yur'yevich; KRUGLITSKIY, Nikolay Nikolayevich; PANASEVICH, Aleksandr Aleksandrovich; [redacted] red. izd-va; MONZHERAN, P.F., tekhn. red.

[Colloid chemistry of palygorskite] Kolloidnaia khimiia palygorskita. Pod obshchei red. F.D.Ovcharenko. Kiev, Izd-vo AN Ukr.SSR, 1963. 119 p. (MIRA 16:7)

1. AN Ukr.SSR (for Ovcharenko).
(Palygorskite) (Colloids)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

OVCHARENKO, F.D., akademik; TRETINNIK, V.Yu.; KRUGLITSKIY, N.N.

Kinetics of the processes involved in the formation of structure by coagulation in aqueous clay dispersions. Dokl. AN SSSR 153 no.6:1385-1386 D '63. (MIRA 17:1)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.
2. AN UkrSSR (for Ovcharenko).

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

KRUGLITSKIY, N.N. (Kruhlyts'kyi, M.M.); GROBCHENKO, V.I.

Processes of structure formation in aqueous dispersions of Aswan clays. Dop. AN URSR no.7:939-942 '64. (MIRA 17:9)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR. Predstavlene akademikom AN UkrSSR F.E.Ovcharenko.

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

OVCHARENKO, F.D.; KRUGLITSKIY, N.N.; NICHIPORENKO, S.P.; OROBCHENKO, V.I.

Regulation of the properties of drilling fluids on the basis of structural and mechanical characteristics. Ukr. khim. zhur. 30 no.3:300-305 '64. (MIRA 17:10)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

TRETINNIK, V.Yu.; KRUGLITSKIY, N.N.

Effect of a polyacrylonitrile preparation on the structural and mechanical properties of palygorskite suspensions. Ukr. khim. zhur. 30 no.4:419-421 '64. (MIRA 17:6)

1. Institut obshchey i neorganicheskoy khimii AN Ukr.SSR.

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

[illegible], [illegible]; [illegible], [illegible].

Regulation of the structural and [illegible] [illegible] by protective colloids. Ukr. [illegible] [illegible] '64. ([illegible])

1. Institut obshchey i neorganicheskoy [illegible].

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

KRUGLITSKIY, N.N. [Kruhlyts'kyi, M.M.]

Evaluating the stability of aqueous dispersions of clays. Dop. AN URSR no.1:73-77 '65. (MIRA 18:2)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR. Predstavlono akademikom AN UkrSSR F.D. Ovcharenko.

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

OVCHARENKO, Fedor Danilovich; NICHIPORENKO, Sergey Petrovich; KRUGLITSKIY, Nikolay Nikolayevich; TRETINNIK, Vikentiy Yur'yevich; REBINDER, P.A., akademik, otv. red.; POKROVSKAYA, Z.S., red.

[Study of the physicochemical mechanics of the dispersion of clay minerals] Issledovaniia v oblasti fiziko-khimicheskoi mekhaniki dispersii glinistykh mineralov. Kiev, Naukova dumka, 1965. 177 p. (MIRA 18:2)

1. Akademiya nauk SSSR (for Rebinder).

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

KRUGLITSKIY, N.N.; SIMUROV, V.V.

Regulation of coagulation structure-forming processes in aqueous clay dispersions by means of ultrasonic vibrations. Part 1: Effect of ultrasonic vibrations on the stability of aqueous suspensions of clays. Ukr. khim. zhur. 30 no.8:823-830 '64.

(MIRA 17:11)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

KRUGLITSKIY, N.N.; SIMUROV, V.V.; OVCHARENKO, F.D., akademik; NICHIPORENKO, S.P.

Mechanism by which the ultrasonic vibrations influence the coagulative structure-forming processes in aqueous clay dispersions. Dokl. AN SSSR 159 no.6:1367-1370 D '64 (MIRA 18:1)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR. 2. AN UkrSSR (for Ovcharenko).

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

KRUGLITSKIY, N.N. [Kruhlyts'kyi, M.M.]; OVCHARENKO, [illegible], akademik; TRETYNNYK, V.Yu. [Tretynnyk, V.Ye.]

Structure-forming processes in stabilized aqueous dispersions of palygorskite-montmorillonite clays. Dop. AN UkrSSR no.5:612-615 '65. (MIRA 18:5)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR. 2. AN UkrSSR (for Ovcharenko).

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

TRETINNIK, V.Yu., KRUGLITSKIY, N.N.; SKAL'SKAYA, U.L., RADUL, S.M.

Hydrolyzed polyacrilamide is an efficient stabilizer for clay muds. Neft. i gaz. prom. no.3:33-35 Jl-S '64.

(MIRA 17:12)

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

KRUGLITSKIY, N.N.

Method of regulating the structural and mechanical properties of drilling fluids. Ukr.khim.zhur. 30 no.5:533-537 '64. (MIRA 18:4)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

OVCHARENKO, F.D.; KRUGLITSKIY, N.N.; TRETYENNIK, V. Yu.; OROBCHENKO, V.I.

Stabilizing effect of sodium hydroxide on aqueous dispersions of clays. Ukr. khim. zhur. 30 no.7:709-714 '64 (MIRA 18:1)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

KRUGLITSKIY, N.N.

Structural and mechanical characteristics of aqueous dispersions of clays processed by chemical reagents. Ukr. khim. zhur. 30 no.7:714-719 '64 (MIRA 18:1)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

[illegible], [illegible]; SHUROV, V.V.; [illegible], [illegible]; [illegible], [illegible]; OSTROVSKAYA, A.B.

Control of the processes of coagulative [illegible] in aqueous dispersions of clays by ultrasonic [illegible]. Part 2: Particular features of the coagulative structure formation in ultrasonically processed aqueous dispersions of montmorillonite. Ukr. khim. zhur. [illegible] (MIRA [illegible])

1. Institut obshchey i neorganicheskoy khimii AN [illegible]SSR.

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

OVCHARENKO, F.D., akademik; AGABAL'YANTS, E.G.; KRUGLITSKIY, N.N.

Physicochemical mechanics of aqueous clay dispersions treated with calcium hydroxide. Dokl. AN SSSR 159 no.5:1131-1133 D '64 (MIRA 18:1)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR. 2. AN UkrSSR (for Ovcharenko).

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

OVCHARENKO, F.D.; KROGLITSKIY, N.N.; [illegible]

Effect of sodium and calcium chlorides on the [illegible] and rheological properties of drilling fluids. Ukr.Khim.Zhur. 30 no.5:480-487 '64. (MIRA 18:1)

1. Institut obshchey i neorganicheskoy khimii AN [illegible].

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

ALENT'YEV, A.A. [Alent'iev, O.O.] [deceased]; KRUGLITSKAYA, V.Ya. [Kruhlyts'ka, V.IA.]; KRUGLITSKIY, N.N. [Kruhlyts'kyi, M.M.]

Gas permeability of basalt-containing refractory materials. Dop. AN URSR no.10:1346-1350 '64. (MIRA 17:12)

1. Kiyevskiy politekhnicheskiy institut. Predstavleno akademikom AN UkrSSR F.D. Ovcharenko.

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

KRUGLITSKIY, N.N.; OVCHARENKO, F.D.; TRETINNIK, V.Yu.; OROBCHENKO, V.I.

Controlling the processes of coagulation structuration in aqueous clay dispersions. Ukr. khim. zhur. 31 no.4:421-422 '65. (MIRA 18:5)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

TRETINNIK, V.Yu.; OVCHARENKO, F.D.; KRUGLITSKIY, N.N.

Diluting effect of a tannin reagent on aqueous dispersions of a palygorskite. Ukr. khim. zhur. 31 no.1:53-55 '65. (MIRA18:5)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

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OVCHARENKO, F.D.; TRETINNIK, V.Yu.; KRUGLITSKIY, N.N.

Structure formation in mineralized dispersions of palygorskite clays. Ukr. khim. zhur. 30 no.6:594-595 '64. (MIRA 18:5)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

KRUGLITSKIY, N.N.; MARTSIN, I.I.; OVCHARENKO, F.D., akademik; NICHIPORENKO, S.P.

Characteristics of coagulation structure formation in dispersions of argillaceous minerals after autoclave treatment. Dokl. AN SSSR 164, no.6:1351-1354 O '65. (MIRA 18:10)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR. 2. AN UkrSSR (for Ovcharenko).

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KRUGLITSKIY, N.N.; OVCHARENKO, F.D., akademik; NICHIPORENKO, S.P.; VAGNER, G.R.

Salt resistance of dispersed argillaceous minerals. Dokl. AN SSSR 165 no.2:380-382 N '65. (MIRA 18:11)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.
2. AN UkrSSR (for Ovcharenko).

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KRUGLITSKIY, N.N.

Formation of coagulation structures in aqueous dispersions of natural mixtures of clay minerals in connection with particular features of their crystalline structure. Ukr. khim. zhur. 31 no. 12:1258-1262 '65 (MIRA 19:1)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR. Submitted June 30, 1964.

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

ALENT'YEV, A.A. [Alent'iev, O.O.] [deceased]; KRUGLITSKAYA, V.A. [Kruhlyts'ka, V.IA.]; KRUGLITSKIY, N.N. [Kruhlyts'kyi, M.M.]

Effect of compacting pressure and firing temperature on the physico-mechanical properties of basalt-containing refractories. Dop. AN URSR no.3:351-353 '65. (MIRA 18:3)

1. Kiyevskiy politekhnicheskiy institut.

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KRUGLITSKAYA, V.Ya. [Kruhlyts'ka, V.IA.]; ALENT'YEV, A.A. [Alent'iev, O.O.] [deceased]; KRUGLITSKIY, N.N. [Kruhlyts'kyi, M.M.]

High-density refractory based on Kirov clays. Dop. AN URSR no.8: 1067-1070 '65. (MIRA 18:8)

1. Kiyevskiy politekhnicheskiy institut.

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L 15757-66 EWP(e)/EWT(m)/EWP(t)/EWP(b) IJP(c) JD/WH

ACC NR: AP5027461 (A) SOURCE CODE: UR/0032/65/031/011/1366/1366

AUTHOR: Kryzhanovskiy, B. P.; Kruglova, A. V.; Kuznetsov, A. Ya.

ORG: none

TITLE: Electroconductive transparent coatings on mica

SOURCE: Zavodskaya laboratoriya, v. 31, no. 11, 1965, 1366

TOPIC TAGS: mica product, electric conductivity, vaporization, specialized coating

ABSTRACT: Strong, well-adhering layers of SnO_2 cannot be produced on mica with existing methods despite the fact that SnO_2 coatings on silicate glasses are widely used. A method was developed for the production of strong, transparent layers on micas, involving the removal of hygroscopic water by heating muscovite for 2.5-4 hr at 450-500 C (heating at > 550 C affects the liberation of 4.5% of the water of crystallization and swelling of the mica) with a heating and cooling rate of 150-200 C per hour. After cooling, the mica surface was coated with a layer of SiO_2, TiO_2, or Zr_2O (0.1-0.3 μ thick) produced from alcohol solutions: SiO_2 from 3-4% solution of silicon ethyl ether in dry ethyl alcohol; TiO_2 from 3% alcohol solution of ethyl ether or thiotitanate; and ZrO_2 either from 3% solution of

1/2

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

L 15757-66

ACC NR: AP5027461

$ZrOCl_2$ in 94-98.5% ethyl alcohol or 3% solution of $ZrOCl_2(C_2H_5O)_2$ ether in 99.5% alcohol] by using the chemical illumination method described by I. V. Grebenshchikov (Prosvetleniy optiki, OGIZ, 1946). The coating was heated for 0.5-1 hr at 150-200, and then applied on a fixed layer of SiO_2, TiO_2, or ZrO_2 of the electroconductive transparent SnO_2 layer by heating mica at 400C in vapors from the hydrolysis of $SnCl_2$. Into the initial $SnCl_2$ 4-6% ammonium fluoride was added to increase the transparency and electric conductivity of the coating. Layers of SnO_2 with an electric resistivity of 20-30 ohm and a transparency of 80-85% could be produced by this method.

SUB CODE: 11/ ORIG. REF: 004/

2/2 SMW

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

SOV/84-58-11-58/58

AUTHOR: Kruglov, A.

TITLE: Exterminating Predatory Animals (Unichtozhayut Khishchnikov)

PERIODICAL: Grazhdanskaya aviatsiya, 1958, Nr 11, p 40 (USSR)

ABSTRACT: The author states that Yak-12 planes and Mi-1 helicopters are used to exterminate predatory animals in the north. Pilots O. Kutuzov and P. Sevast'yanov (G. Stroyev unit commander) are mentioned.

Card 1/1

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DUL'NEV, G.N., doktor tekhn.nauk; KRUGLOV, A.A., assistent; RODKEVICH, S.D., dotsent, kand.fiz.-mat.nauk

Calorimetric method for measuring thermal losses in capacitors operating under pulse conditions. Izv.vys.ucheb.zav.; prib. no.3:127-133 '59. (MIRA 13:4)

1. Leningradskiy tochnoy mekhaniki i optiki. Rekomendovana kafedroy radiotekhniki.
(Condensers (Electricity))

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

USSR/Pharmacology. Toxicology. Analgesics U-3

Abs Jour : Ref Zhur-Biol., No 7, 1958, 32860

Author : Kruglov A. A.
Inst : Not given
Title : Effect of Analgesic Drugs on the Functional Motility (Lability) of the Nerve Center.

Orig Pub : Farmakol. i toksikologiya, 1957, 20, No 1, 7-13

Abstract : The experiments were conducted on prepared lumbar sections of a cat. For the stimulation and for the registration of biocurrents the upper preferably the sensitive branch of the fibula nerve which is a part of the receptor pole of the flexor and the deep muscular branch which innervates the flexors of the talocalcaneal joints were prepared. A preliminary study of the reflex rhythms at different frequencies of

Card 1/

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

USSR/Pharmacology. Toxicology. Analgesics U-3

Abs Jour : Ref Zhur-Biol., No 7, 1958, 32860

Abstract : stimuli indicate that the lability of the flexor center approximately corresponds to 40-60 periods a second. Following the intravenous administration of analgesics a recordable drop in functional motility sets in, which is manifested in a decrease of the zone of optimal frequencies. Minimal doses of the analgesics producing the given effect are 2 mg/kg for morphine and tecodine, 0.25 mg/kg for phenadone, and 1mg/kg for promedol; the decrease in lability normaly does not exceed 10 to 20 hertz upon the administration of threshhold doses. A more signicant lability in the direction of smaller frequancies reaching 20-30 hertz sets in with an increase in the doses of the analgesics. In experiments with miographic registration of reflex

Card 2/

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

USSR/Pharmacology. Toxicology. Analgesics U-3

Abs Jour : Ref Zhur-Biol., No 7, 1958, 32860

Abstract : contractions of the semitendinous muscle caused by the stimulation of the fibula nerve with stimuli of different frequencies, the pessimal character of the reflex reactions (manifested in the rapid drop of the tetanus) under the influence of the analgesics is aroused by a lesser than a normal frequency of stimili. Hence, analgesics lower the functional motility of the flexor center and contribute to the development in the center of a pessimal state (pessimum of frequency), an indication of the intensification of the processes of inhibition in the central links of the corresponding reflex arc.

The effect of morphine on the rhythms of reflex stimulation. Bio-currents of the fibular muscle to (1) and after (11) the administration of morphine in a dose of 5mg/kg, a-before stimulation, b-and c-in the 3rd and 4th seconds.

Card 3/4

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USSR/Pharmacology. Toxicology. Analgesics U-3

Abs Jour : Ref Zhur-Biol., No 7, 1958, 32860

[Diagram available if desired]

Card 4/4

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

KRUGLOV, Aleksandr Andreyevich.

["Pravda's" interpretation of the problems in socialist competition during the first five-year plan] Osveshchenie "Pravdoi" voprosov sotsialisticheskogo sorevnovaniia v pervoi piatiletke. Moskva, Vysshaia partiinaia shkola pri TsK KPSS.1957. 58 p. (MIRA 10:5)
(Russian newspapers) (Socialist competition)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

AFONCHIKOV, V.S.; KRUGLOV, A.A.; MIKERKOV, A.G.

Decatron equipped devices for discrete counting of electric pulses. Izv. vys.uchab.zav.; prib. 6 no.3:55-62 '63. (MIRA 16:9)

1. Leningradskiy institut tochnoy mekhaniki i optiki. Rekomendovana kafedroy radiotekhniki.

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

ZAYTSEVA, L.L.; KONAREV, M.I.; KRUGLOV, A.A.; CHEBOTAREV, P.T.

Double sodium sulfates of rare-earth elements. Zhur. neorg. khim. 9 no.11:2554-2558 N '64 (MIRA 18:1)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

lanthanum compound cerium compound

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

ACCESSION NR: AP5015017

of the x-ray patterns of $La_2(SO_4)_3 \cdot Na_2SO_4$ and $Ce_2(SO_4)_3 \cdot Na_2SO_4$ were calculated. It

SUBMITTED: 03Jan64 ENCL: 00 SUB CODE: IC

OTHER:

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

ACC NR: AT6012692 SOURCE CODE: UR/3136/65/000/991/0001/0044

AUTHOR: Goncharov, V. V.; Babulevich, Ye. N.; Shavrov, P. I.; Ryazantsev, Ye. P. Novikov, I. M.; Yegorenkov, P. M.; Chervyatsov, A. A.; Frolov, I. P.; Zhigachev, V. M.; Pushnin, B. T.; Fishevskiy, V. K.; Zakharov, L. K.; Kruglov, A. B.; Karasev, N. A.; Goncharov, L. A.

ORG: State Committee on the Use of Atomic Energy SSSR, Institute of Atomic Energy im. I. V. Kurchatov, Moscow (Gosudarstvennyy komitet po ispol'zovaniyu atomnoy energii SSSR, Institut atomnoy energii)

TITLE: Experience in operation of the MR reactor and tests of fuel elements and materials

SOURCE: Moscow. Institut atomnoy energii. Doklady, no. 991, 1965. Opyt ekspluatatsii reaktora MR i provedeniye ispytaniy TVEL i materialov, 1-44

TOPIC TAGS: nuclear research reactor, reactor fuel element, nuclear reactor material, nuclear reactor characteristic

ABSTRACT: The authors discuss the loop research reactor MR constructed at the Kurchatov Institute of Atomic Energy and intended for the test of fuel elements and materials in new atomic installations. It is described in paper P/323 of the Third Geneva Conference in 1964. The present article describes in detail its con-

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ACC NR: AT0012692

struction and the various test loops in it. The section headings are: I - Introduction. II. Operation of reactor. 1. Certain physical characteristics of the reactor. a) Fuel burnup. b) Efficiency of control valves, scram rods, and movable fuel assemblies. c) Fluxes of thermal and fast neutrons. 2. Control and protection system of the reactor. 3. Technological systems of the reactor. a) Cooling loop for fuel element assembly. b) Cooling loop for the reactor assembly blocks. c) Intermediate (second) cooling loop of reactor. d) Third cooling loop of reactor. e) Water purification system. 4. Fuel assembly operating conditions and conditions for the graphite stacking blocks. 5. Reloading operations. III. Operation of loop installations. Organization and performance of tests on fuel elements and materials. IV. Dosimetric control. Radiation shielding of reactor. The reactor has been in operation since 24 July 1964, and its power has been gradually increased from the initial 20 MW to 30 MW. The usual operation is at 25 MW. The reactor has 3 loop channels with 7 associated experimental channels. Various characteristics of the reactor at different power ratings are tabulated. Major contributions to the adjustment of the MR reactor were made by A. Ye. Alekseyev, B. A. Alekseyev, S. N. Begichev, A. B. Bugayenko, Yu. I. Kovalev, V. K. Lebedev, A. M. Rotankov, V. D. Rusov, N. V. Sarychev, Ye. S. Chernorotov, and Yu. A. Shikov. Orig. art. has: 13 figures and 6 tables.

SUB CODE: SUBM DATE: 00/ ORIG REF: 001

Card 2/2

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

KRUGLOV, A.D., inzh.-kapitan-leytenant.

Work boats of rescue ships. Mor. sbor. 47 no.3:74-78 Mr '64.
(MIRA 18:7)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

SMIRNOV, Leonid Flegontovich, kand. sel'khoz. nauk; KRUGLOV, A.I., prof., red.; GRACHEV, A.F., red.; KRASULINA, T.N., tekhn. red.

[Raising Romanov sheep] Romanovskoe qvtsevodstvo. Pod red. A.I. Kruglova. IAroslavl', IAroslavskoe knizhnoe izd-vo, 1961. 229 p. (MIRA 14:8)

(Sheep)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

VOYEVODIN, Stanislav Aleksandrovich; KRUGLOV, Aleksandr Mikhaylovich; GLUHIN, V.I., otv.red.; ZAKHMATOVA, M.R., red.izd-va; NEGRIMOVSKAYA, R.A., tekhn.red.

[Socialist reorganization of capitalist industry and trade in the Chinese People's Republic] Sotsialisticheskoe preobrazovanie kapitalisticheskoi promyshlennosti i torgovli v Kitaiskoi Narodnoi Respublike. Moskva, Izd-vo vostochnoi lit-ry, 1959. 164 p. (MIRA 12:11)

(China--Economic policy)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

BYREYEV, P.A., prof.; VAESHAMOV, L.A., prof.; VOLYNSKIY, B.G., dotsent; GERASIMOV, N.V., dotsent; GUREVICH, L.I., dotsent; ZHELYABOVSKIY, G.M., prof.; KARTASHOV, P.P., prof.; KOCHETOV, K.P., dotsent; KRUGLOV, A.N., prof.; KUTANIN, M.P., prof.; LARINA, V.S., dotsent; LOBKO, I.S., doktor [deceased]; LUKOVA, A.I., prof.; MAKHLIN, Ye.Yu., prof.; NAUMOV, A.I., kand.med.nauk; POPOV'YAN, I.M., prof.; SOLUN, N.S., kand.med.nauk; TARABUKHIN, M.M., dotsent; TRET'YAKOV, K.N., prof.; TRISHINA, A.A., kand.med.nauk; UL'YANOVA, A.V., dotsent; FAYN, A.E., kand.med.nauk; FAKTOROVICH, A.M., dotsent; FRANKFURT, A.I., prof.; FISHER, L.I., dotsent; CHASOVNIKOVA, Ye.P., kand.med. nauk; SHAMARIN, P.I., prof.; SHAPIRO, M.Ya., dotsent; SHVARTS, L.S., prof.; SHUSTERMAN, I.B., dotsent; FOY, A.M., prof.; FREYDMAN, S.L., kand.med.nauk; NIKITIN, B.A., dotsent, red.; AFANAS'YEV, I.A., red.; LUKASHEVICH, V., tekhn.red.

[Concise medical reference book] Kratkii terapevticheskii spravochnik. Izd.3., ispr. i dop. Saratov, Saratovskoe knizhnoe izd-vo, 1959. 919 p. (MIRA 13:7)

1. Chlen-korrespondent AMN SSSR (for Tret'yakov).
(MEDICINE--HANDBOOKS, MANUALS, ETC.)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

KRUGLOV, A.N., prof.; ZARBEYEVA, M.S., kand.med.nauk

Tissue therapy in severe forms of trachoma. Kaz. med. zhur. no.1:47-48 Ja-F '62. (MIRA 15:3)

1. Kafedra glaznykh bolezney (zav. - prof. A.N. Kruglov) Kazanskogo gosudarstvennogo instituta dlya usovershenstvovaniya vrachey imeni Lenina.

(CONJUNCTIVITIS, GRANULAR)
(TISSUES—TRANSPLANTATION)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

YEDIGAROV, S.G.; LEVENTSOV, A.N.; KRUGLOV, A.N.; RASHCHEPKIN, K.Ye.; OVCHINNIKOV, I.S.

Mechanization of the packaging of solid petroleum bitumens. Neft. khoz. 40 no.4:60-65 Ap '62. (MIRA 15:5)
(Bitumen)
(Packaging machinery)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

ZOLOTYKH, B.N.; MOKUDVINOV, Yu.V.; KHUGLOV, A.I.

Power pulse generators used for feeding electric-spark machining units and their characteristics. Trudy TSNIL-ELEKTROM no.1:133-158 '57. (MIRA 11:12)

(Electric cutting machinery) (Electric generators)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

[illegible], B. N. and MORIVINOV, Yu. B.;

"Mechanical Type discharge Machines for Feeding Electrospark Installations and Their Characteristics," Elektroiskrovaya obrabotka metallov (Electrospark Machining of Metals), Moscow, Izd-vo AN SSSR, 1957. page 133.

According to the article an increase in machining rate by the electrospark machining method may be achieved by the two following methods: 1) by pulse frequency 2) by increasing pulse energy. Since previous investigations have shown that the quality of a machined surface is inversely proportional to pulse energy, increase in energy will result in the reduction of surface quality. Thus this is not a practical method for increasing the rate of machining. On the other hand, an increase in pulse frequency does not affect surface quality, but can not be achieved in a system having condenser-charging circuit. As a result it was necessary to develop new types of pulse generators. A detailed description and an experimental investigation of such pulse generators are presented. It is stated that the maximum machining rate achieved by use of a new machine generator during the process of producing holes at the full load was between 500 and 5500 mm /min., and the use of MIG-3A and MIG-3B electrospark generators increases the rate of machining steel and hard alloys from 2-3 times more than the estimated rate when using a condenser-charging system.

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

ZOLOTYKH, B.N.; KASPRZHAK, G.M.; KONDRATENKO, V.N.; KRUGLOV, A.I.; RABINOVICH, I.Yn.; SLEPUSHKIN, Ye.I.; CHERTVERIKOV, S.S.

"Using electric erosion method in machining metals" by A.L. Livshchits. Reviewed by B.N. Zolotykh and others. Izv. AN SSSR, Otd. tekh. nauk no.2:163-165 F '58. (MIRA 11:3)

(Metal cutting, Electric)
(Livshchits, A.L.)

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8"

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

ZOLOTYKH, B.N.; KRUGLOV, A.I.

High-speed photography of a pulse discharge in a liquid dielectric medium using SKS-1 and SFR cameras and in X-rays as applied to the investigation of the dynamics of electric erosion fragmentation of metals. Usp.nauch.fot. 6:185-192 '59. (MIRA 13:6)
(Photography--Scientific applications)
(Electric discharges)

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32195
S/196/61/000/010/032/037
E073/E535

AUTHORS: Zolotykh, B.N., Kruglov, A.I.

TITLE: Thermal processes at the surface of electrodes during electrospark machining of metals

PERIODICAL: Referativnyy zhurnal, Elektrotekhnika i energetika, no.10, 1961, 42, abstract 10 K240. (Symposium "Problems of electrical machining of materials", M., AS USSR, 1960, 65-76)

TEXT: The shape of calculated curves of the dependence of the volume of the cavity on the pulse energy for pulses of constant duration are in agreement with experimental data. Both calculated and experimental curves of the dependence of the erosion on the pulse energy show inflection points. The location of these points corresponds with the duration of the pulse at which maximum erosion occurs for a given value of energy. The fact that there is an inflection point shift towards higher values of energy in the case of increasing pulse duration indicates a shift of the maximum erosion towards pulses of long duration with increasing pulse energies. The shift is attributed

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to an increase in the density of the energy of the source on the electrode with increasing source energy. This increase is more pronounced for metals with ferromagnetic properties and from this the conclusion can be drawn that the magnetic fields which are generated during the discharge affect the dimensions of the heat sources at the surface of the electrodes and, consequently, they also affect the diameter of the discharge channel. The obtained results are of practical interest; they show that by using pulse generators with pulses of the order of 10^{-3} sec and longer the increase in productivity with increasing energies is faster than linear and consequently machining of steel by using current pulses of longer durations is most favourable in the case of high pulse energies of the order of tens of Joules. The given results of the thermal calculation explain the quantitative and the qualitative relations observed in the case of machining with pulses of the order of 10^{-4} sec, which corresponds to the average regimes obtained with a typical RC circuit and also to characteristics which pertain to machining with pulses which last for 10^{-3} sec and longer. This is a further proof that there is no justification

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Thermal processes at the ... S/196/61/000/010/032/037
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for singling out spark erosion machining with pulses of the order of 10^{-3} sec and referring to it as a new "electric pulse" method. Formulae are given and graphs are included which illustrate the investigations that have been carried out.
8 literature references.

[Abstractor's Note: Complete translation]

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

S/196/61/000/010/030/037
E194/E155

AUTHORS: Zolotykh, B.N., and Kruglov, A.I.

TITLE: The procedure and results of investigation of channel potentials of a low-voltage impulse discharge

PERIODICAL: Referativnyy zhurnal, Elektrotekhnika i energetika, no.10, 1961, 41, abstract 10K 238. (Symposium "Problems of electrical machining of materials", M., AS USSR, 1960, 77-85)

TEXT: This article briefly describes the procedure and results of measurement of energy distribution in the spark gap for impulses of 8 - 20 microsecond duration (no-load voltage 60 - 140 V). The impulse energy comprises energy dispersed in the discharge column and energy transmitted to the surface of the electrodes. The former consists of losses on heating the gas, on ionisation and on radiation; part is expended in forming and moving gas bubbles and impact waves. The energy transmitted to the electrodes consists of losses on the anode and on the cathode. The impulse energy is easily determined from synchronised oscillograms of current and voltage. The amount dissipated in

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the discharge column can be calculated from the voltage gradient in the column, which is determined by an oscillograph. A procedure was developed for measuring voltage gradients and the sum of anode and cathode voltage drops in low-voltage impulse discharges in a liquid dielectric. The potential gradient in the discharge column and the cathode and anode voltage drops were governed by elementary processes in the discharge channel. Alteration of these values with time reflects changes in the processes of formation of space charge and in the thermodynamic condition of the plasma. The experimental results show that during the initial development of the discharge, volume charges play a vital part in the discharge channel. At the end of an impulse the condition of the discharge column is probably near to that of plasma in thermal equilibrium. Consequently, in describing electrical processes occurring in spark gaps during spark machining, the part played by space charges must be allowed for. The results obtained give clear ideas about the effective dimensions of a plane heat source formed on the electrode under the influence of impulse discharge. This in its turn is

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The procedure and results of ... S/196/61/000/010/030/037
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essential for solution of the thermal problem and calculation of the erosion process. Diagrams, graphs and oscillograms are given to illustrate the procedure and results of the investigation.
8 literature references.

[Abstractor's note: Complete translation.]

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

S/196/61/000/012/025/029
E194/E155

AUTHOR: Kruglov, A.I.

TITLE: The requirements of generators and generator circuits for spark machining of metals, using capacitative energy storage

PERIODICAL: Referativnyy zhurnal, Elektrotekhnika i energetika, no.12, 1961, 41, abstract 12K 235. (In the Symposium "Problems of Electrical Machining of Metals", M., AS USSR, 1960, 152-187)

TEXT: Investigations of the properties of the spark gap considered as the electrical load of an impulse generator show that in the first approximation the spark gap may be considered as a back e.m.f. and an ohmic resistance connected in series. An analysis is made of the charging circuits of generators with capacitative energy storage. It is found that because of instability of the load characteristic (the spark gap) the use in the charging circuit of inductors of low ohmic resistance when switching a device having valve-type properties causes fault

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

The requirements of generators ... S/196/61/000/012/025/029
E194/E155

overvoltages to be developed in the system which can be avoided by connecting damping devices (diodes) in the circuit. An analysis is made of the operation of a charging circuit of a generator with impulse transformer; relationships are established for the parameters of the transformer circuit which ensure maximum transmission to the spark gap of the stored energy. It is found that the proportion of stored energy delivered to the spark gap depends very much on the ratio of the leakage inductance to the magnetisation inductance of the transformer. The amount of power delivered decreases as this ratio rises. It is advisable to use transformers with cores made of material of high permeability, for example cold-rolled steel or ferrites. 14 literature references.

[Abstractor's note: Complete translation.]

Card 2/2

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

KRUGLOV, A. I.

PHASE I BOOK EXPLOITATION SOV/5186

Akademiya nauk SSSR. Tsentral'naya nauchno-issledovatel'skaya laboratoriya elektricheskoy obrabotki materialov

Problemy elektricheskoy obrabotki materialov (Problems of the Electrical Machining of Materials) Moscow, Izd-vo AN SSSR, 1960. 247 p. Errata slip inserted. 4,200 copies printed. (Series: Its: Trudy)

Sponsoring Agency: Akademiya nauk SSSR. Resp. Ed.: B. R. Lazarenko; Ed. of Publishing House: M. L. Podgoyetskiy; Tech. Ed.: S. P. Golub'.

PURPOSE: This collection of articles is intended for scientists and technicians concerned with the investigation of new ways of applying electrical energy.

COVERAGE: The book contains articles on studies carried out by the staff of the Tsentral'naya nauchno-issledovatel'skaya

Problems of the Electrical (Cont.) SOV/5186

laboratoriya elektricheskoy obrabotki materialov Akademii nauk SSSR (TsNIL-ELEKTROM AN SSSR) (Central Scientific Research Laboratory for the Electrical Machining of Materials of the AS USSR) in searching for new applications of electrical energy. The results of these studies include: the dimensional machining of dielectrics and the utilization of electric pulsed discharges in carrying out certain chemical reactions, new information on processes occurring on electrodes and in the interelectrode space during short pulsing, and some new data on the technological processes in metal machining by electric current pulses. Much attention is paid to the analysis of the operation of power-supply sources used in the electrical machining and arc welding of metals. No personalities are mentioned. References accompany most of the articles.

Lazarenko

Zoletykh, B. N., and A. I. Kruglov. Thermal Processes on Electrode Surfaces During Electric-Spark Machining of Metals 65

Zoletykh, B. N., and A. I. Kruglov. Methods and Results of Studies on the Channel Potential of a Low-Voltage Pulse Discharge 77

Mogilevskiy, I. Z. (Deceased). Structural Changes in Iron and Steel After Electric-Spark Machining of Their Surfaces by Graphite 86

Mogilevskiy, I. Z. (Deceased), and Ye. L. Linetskiy. Study of the Physicochemical Changes in the Surface Layers of Steels and Alloys After Electric-Spark Machining in Kerosene 98

Kasprzhak, O. N., and Ye. L. Orkina. Analysis of Excitation Dynamics of Welding Generators Supplied by Semiconductor Amplifiers 115

Kruglov, A. I. Requirements of Generators and Generator Circuits for Electric-Spark Machining of Metals With a Capacitive Energy-Storing Device 132

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

KRUGLOV, A. I., elektromekhanik; KASHIRSKIY, A. I., starshiy inzh.

Determination of faults in the switches of electric interlocking system. Avtom. telem. i sviaz' 5 no.9:43-45 S '61.
(MIRA 14:10)

1. Kalininskaya distantsiya signalizatsii i svyazi Oktyabr'skoy dorogi (for Kruglov).

(Railroads--Switches)
(Railroads--Signaling--Interlocking systems)

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

KRUGLOV, A.I., elektromekhanik

Determination of faults in electrical relay-type interlocking devices. Avtom., telem. i sviaz' 6 no.9:33 S '62. (MIRA 15:9)

1. Kalininskaya distantsiya signalizatsii i svyazi Oktyabr'skoy dorogi.
(Railroads—Signaling—Interlocking systems)

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000826710018-8

ACCESSION NR: AT4012866 S/3060/63/000/000/0029/0037

AUTHOR: Kruglov, A. I.; Fukin, V. N.

TITLE: Electrode erosion as a function of the current pulse form

SOURCE: AN SSSR. Tsentr. n.-i. lab. elektr. obrabotki metallov. Elektroiskrovaya obrabotka metallov. Moscow, 1963, 29-37

TOPIC TAGS: electroplating, electrode, electrode erosion, electrode erosion pulse form dependence

ABSTRACT: In most work dealing with the erosion characteristics of metals under the influence of low-voltage pulse discharges in a liquid dielectric medium, the energy and duration of the pulse have been regarded as the fundamental pulse parameters. There is almost no work on the effect of the form of the pulse fed to the spark gap. The authors criticize the hypothesis of S. V. Divers (Spark machining. - Aircraft Production, 1961, 23, no. 12), claiming that his work lacks an experimental analysis of the effect of pulses of varying form, with the result that his conclusions are unsubstantiated. The major part of this article deals with preliminary findings on the effect of pulse form on electrode erosion. The authors designed a laboratory set-up for their experiments which consists principally of a pulse generator, a lab-type electroerosion unit with automatic feed control and

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ACCESSION NR: AT4012866

a working-pulse counter. Figure 1 in the Enclosure illustrates the dependence of the intensity of erosion of copper electrodes on the time shift τ of a short (duration: 1.5 microsec., amplitude: 400 amps) pulse with respect to the leading edge of a long (duration: 20 microsec., amplitude: 60 amps) pulse. As the delay τ in the arrival of the short pulse is increased, cathode and anode erosion increases, reaching a maximum at τ = 11 microsec. With further increase in delay, the erosion value falls off somewhat. The authors state that the results cannot be interpreted on the basis of the hypothesis of additive laws of material ablation during the effect of a unit pulse, as proposed by Divers, E. M., Williams (Theory of electric spark machining. - Electr. Engng, 1952, v. 71, no. 3) and others. Rather, they lend themselves to an explanation in line with the theory developed in the work of B. N. Zoloty*kh (Fizicheskiye osnovy* elektroiskrovoy obrabotki metallov. Gostekhteoretizdat, 1953) who regards erosion as the result of the processes of heat propagation under the effect of the plane sources which form on the anode and cathode because of the energy coming from the discharge channel. Orig. art. has: 14 formulas and 5 figures.

ASSOCIATION: Tsentral'naya n.-i. laboratoriya elektricheskoy obrabotki metallov AN SSSR (Central Scientific Research Laboratory for Electrical Machining of Metals AN SSSR)

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AUTHOR: Kruglov, A. I.

TITLE: Investigation of the frequency properties of a spark gap

SOURCE: AN SSSR. Tsentr. n.-i. lab. elektr. obrabotki metallov. Elektroiskrovaya obrabotka metallov. Moscow, 1963, 38-43

TOPIC TAGS: electric discharge, pulse frequency, spark gap, electrode spacing, plasma, deionization time, liquid dielectric, pulse generator loading, electric spark welding, electrical metal finishing

ABSTRACT: An experimental method is developed for determining the maximum pulse frequency of the pulses used in electric discharge machining. Even though a liquid dielectric, such as kerosene, may be pumped through the gap at high velocity to remove the erosion products and gases created there after each pulse, the pulse frequency is limited by the finite deionization time of the plasma in the discharge channel. When the interpulse period

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