"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIBASHEV, I.M., kand.med.nauk (Baku, ul. Voroshilova, d.10); MIRZOYEV, M.A.

Tuberculosis of the mesenterial lymph nodes and its treatment. (MIRA 12:6)
Vest.khir. 82 no.4:55-57 Ap '59.

1. Iz khirurgicheskogo otdeleniya (zav. - I.M.Topchibashev) Mashtaginskoy rayonnoy bol'nitsy.
(LYMPHATICS--TUBERCULOSIS)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIBASHEV, I. M. Doc Med Sci p- "Cancer of the pancreas and Vater's papilla (Clinical experimental and morphological study)." Baku, 1960 (Azerbaydzhan State Med Inst im N. Narimanov). (KL, 1-61, 205)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIBASHEV, I.M., dotsent

Clinical aspects and diagnosis of cancer of Vater's papilla. Azerb.med.zhur. no.3:10-16 Mr '60. (MIRA 13:6)

1. Iz fakul'tetskoy khirurgicheskoy kliniki lechebno-profilakticheskogo fakul'teta Azerbaydzhanskogo gosudarstvennogo meditsinskogo instituta im. N. Narimanova.
(BILE DUCTS--CANCER)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIBASHEV, I.M.; SHUBENKO-GABUZOVA, I.N.

Histological changes in pancreatojejunal anastomosis.
Dokl. AN Azerb. SSR 16 no. 6:597-601 '60. (MIRA 13:10)

1. Predstavleno akademikom AN Azerbaydzhanskoy SSR M.A. Topchibashevym.
(PANCREAS--DISEASES) (JEJUNUM--DISEASES)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIBASHEV, I.M., dotsent

Plastic formation of the vagina by the Popov-Mandel'shtamm method in its congenital aplasia. Azerb. med. zhur. no.11:45-48 N '61. (MIRA 15:2)

1. Iz fakul'tetskoy khirurgicheskoy kliniki (zav. - deystvitel'nyy chlen AMN SSSR, akademik AN AzSSR M.A. Topchibashev) Azerbaydzhanskogo meditsinskogo instituta imeni N.Narimanova.
(VAGINA--SURGERY)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIBASHEV, I.M.; EFENDIYEV, F.A., red.; DZHAFAROVA, A., red. izd-va; IBRAGIMOV, M., tekhn. red.

[Cancer of the pancreas and Vater's papilla] Rak podzheludochnoi zhelezy i faterova sosochka. Baku, Izd-vo Akad. Azerbaidzhanskoi SSR, 1963. 311 p. (MIRA 16:7)
(PANCREAS--CANCER) (DUODENUM--CANCER)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIBASHEV, I.M., prof.; MAMEDOV, Z., prof., red.

[Analgesic anesthesia in surgery] Anal'gezinovoe obezbolivanie v khirurgii. Baku, Azerbaidzhanskoe gos. izd-vo, 1964. 195 p. (MIRA 17:12)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

MAMEDOV, Yu.A.; TOPCHIBASHEV, I.M., prof., nauchnyy rukovoditel' raboty

Causes of death following transverse resection of the caudal portion of the pancreas in an experiment. Azerb. med. zhur. 42 no.8:32-35 Ag '65. (MIRA 18:11)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIBASHEV, M. A.

PA 22/49T4

USSR/Electricity
Resistors -- Nonlinear

Jan 49

"Results of the Study of Volt-Ampere Characteristics of Some Nonlinear Resistances," M. A. Topchibashev, Power Eng Inst imeni I. G. Yes'man, Acad Sci Azerbaydzhan SSR, Baku, 12 pp

"Avtomat i Telemekh" No 1

Examines classification and computation of certain active (ohmic) nonlinear resistances. Indicates most convenient method of calculating them. Gives results of experimental and theoretical investigation of many kinds and types of nonlinear resistances, both varistors and thermistors. Tabulates

22/49T4

USSR/Electricity (Contd)

Jan 49

all active nonlinear resistances investigated, giving coefficients of their equations and permissible limits of error in a given voltage range. Submitted 6 Dec 47.

22/49T4

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

Translation from: Referativnyy zhurnal, Elektrotekhnika, 1958, Nr 1, p 150 (USSR) SOV/112-58-1-1010

AUTHOR: Topchibashev, M. A., Alekperov, A. A., and Parshina, A. A.

TITLE: Automatic Compressed-Air Distribution Over a Group of Automatically-Controlled Oil Wells (Avtomaticheskoye raspredeleniye raskhoda szhatogo vozdukha, podavayemogo v gruppu avtomatizirovannykh skvazhin)

PERIODICAL: Tr. Energ. in-ta AN AzerbSSR, 1956, Nr 13, pp 19-34

ABSTRACT: In lieu of today's manual distribution of compressed air over oil wells on a prescribed schedule, an automatic control has been developed and experimentally verified in which a common command device (OE-MG-410), a common switchgear, and individual actuating devices with limiters are added. Specifications on the automatic distribution system are presented. Methods of alignment, experimental data, and diagrams are given. There are 8 illustrations. Bibliography: 2 items.

AVAILABLE: Library of Congress V.F.R.

Card 1/1 1. Petroleum industry 2. Compressed air--Control systems

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

[illegible], ... A.

ALIYEV, M.M., akademik, redaktor; ALIYEV, G.A., akademik, redaktor; KASHKAY, M.-A., akademik, redaktor; TOPCHIBASHEV, M.A., akademik, redaktor; USEYNOV, M.A., akademik, redaktor; KHALILOV, Z.I., akademik, redaktor; KULIYEV, S.M., redaktor; SUMBATZADE, A.S., redaktor; EFENDIZADE, A.A., redaktor; PEVZNER, M.N., tekhnicheskiy redaktor

[Proceedings of the first scientific session of the Coordination Council of the Academy of Sciences of the Azerbaijanian S.S.R.] Trudy pervoi nauchnoi sessii Soveta po koordinatsii akademii nauk Azerbaidzhanskoi SSR. Baku, 1957. 323 p. (MIRA 10:10)

1. Akademiya nauk Azerbaidzhanskoy SSR, Baku. Sovet po koordinatsii nauchno-issledovatel'skikh rabot respubliki. 2. Chlen-korrespondent Akademii nauk Azerbaydzhanskoy SSR (for Kuliyev, Sumbatzade, Efendizade)

(Research)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIBASHEV, M.A.; ALEKPEROV, A.A.; ABILOV, A.G.

Investigation of the carrying capacity of drivers and their parallel operation [in Azerbaijani with summary in Russian]. Izv. AN Azerb. SSR. Ser.fiz.-tekh. i khim. nauk no.6:61-72 '58. (MIRA 12:2)
(Automatic control)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIBASHEV, N. A.

Topchibashev, N. A. "On an effective approach to the subdiaphragmal abscesses of the liver," (Report), Trudy III Zakavkazsk. s"yezda khirurgov, Yerevan, 1949 (on cover: 1949), p. 226-234

SO: U-5240, 17 Dec. 53, (Letopis 'Zhurnal 'nykh Statey, No. 25, 1949).

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

Topchibashev, M.A. "Methods of detecting and extraction of foreign substances," Trudy XXV Vsesoyuz. s'yezda khirurgov. Moscow, 1948, p. 547-49

SO: U-3264, 10 April 1953, (Letopis 'Zhurnal 'nykh Statey, No. 3, 1949)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIBASHEV. M. A.

Topchibashev. M. A. "The characteristics of the first series of investigations of the use of the author 's equipment fore removing foreign bodies", Izvestiya Akad. nauk Azerbaydzh, SSR, 1949, No. 4, p. 153-66, (Resume in Azerbaijani)

SO: U-4630, 16 Sept. 53, (Letopis 'Zhurnal 'nykh Statey, No. 23, 1949).

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIBASHEV, M.A.

Abdomen--Surgery

Surgical approach to organs located under the diaphragm; preliminary communication. Khirurgiia no. 2, Feb. 1952.

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

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIBASHEV, M.A.; OSTROVSKIY, M.I.

Cirrhosis of the liver and dropsy under experimental conditions.
Trudy Sekt.fiziol.AN Azerb.SSR 2:115-122 '58.(MIRA 12:7)
(LIVER--CIRRHOSIS) (DROPSY) (MEDICINE, EXPERIMENTAL)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIBASHEV, M.A.; ABRAKHANOVA, B.N.

Effect of hypothermia on the course of peritonitis. Trudy Sekt. fiziol. AN Azerb. SSR 4:23-27 '60. (MIRA 15:1)
(HYPOTHERMIA) (PERITONITIS)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIBASHEV, M.A., prof., zasluzhennyy deyatel' nauki; ABRAKHANOVA, B.N., doktor

Influence of medicinal inhibition on the course of an acute infectious process. Azerb. med. zhur. no.9:12-15 S '60. (MIRA 13:9)

1. Iz 1-y fakul'tetskoy khirurgicheskoy kliniki Azerbaydzhanskogo meditsinskogo instituta im. N.Narimanova (zav. - deystv. chlen AMN SSSR, akad. AN AzerbSSR, zasluzh. deyatel' nauki, prof. M.A. Topchibashev).
(SLEEP--THERAPEUTIC USE) (AMOBARBITAL)
(INFECTION)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIBASHEV, M.A., prof. (Baku)

Some problems in antethoracic esophagoplasty. Khirurgiia no.10: 49-54 '61. (MIRA 14:10)

(ESOPHAGUS—SURGERY)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

ALIKHANOV, E.N.; ARUSHANOV, N.A.; AKHUNDOV, V.Yu.; ALIZADE, M.A.; AZIZBEKOV, Sh.A.; BAGIROV, M.A.; VEZIROV, S.A.; VOLOBUYEV, V.R.; BEKILOV, F.M.; GADZHIYEV, N.M.; GUSEYNOV, D.M.; GUSEYNOV, I.A.; DADASHEV, E.A.; DADASHZADE, M.A.; DALIN, M.A.; ISKENDEROV, M.A.; KAZIYEV, M.A.; KARAYEV, A.I.; KASHKAY, M.S.; KEL'DYSH, M.V.; KERIMOV, A.G.; LEMBERANSKIY, A.D.; MAMEDOV, G.K.; MEKHTIYEV, M.R.; MIRZOYEV, S.A.; NAGIYEV, M.F.; NESRULLAYEV, N.I.; ORUDZHEV, A.K.; RADZHABOV, R.A.; RUDNEV, K.N.; SADYKHOV, R.N.; SEMENOV, N.N.; TOPCHIYEV, A.V.; ~~TOPCHIBASHEV, M.A.;~~ TAIROVA, T.A.; KHALILOV, Z.I.; EFENDIYEV, G.Kh.; SHUKYUROVA, Z.Z.

IUsif Geidarovich Mamedaliev; obituary. Dokl. AN Azerb. SSR 17 no.12:1123-1126 '61. (MIRA 15:2)
(Mamedaliev, Iusif Geidarovich, 1905-1961)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

L 27813-66 EWT(d)/EWP(e)/EWP(v)/T/EWP(k)/EWP(h)/EWP(1)

ACC NR: AP6005615 SOURCE CODE: UR/0233/65/000/003/0123/0129

AUTHOR: Topchibashev, M. A.; Allakhkuliyev, A. S.

ORG: none

58
B

TITLE: Methods for solving equations of the dynamics of a plant element (with distributed interrelations)

SOURCE: AN AzerbSSR. Izvestiya. Seriya fiziko-tekhnicheskikh i matematicheskikh nauk, no. 3, 1965, 123-129

TOPIC TAGS: automatic control, automatic control system, automatic control theory, combination, matrix function, Laplace transform, Cauchy problem

ABSTRACT: This set of equations has been widely used in composing algorithms for automatic control systems containing elements with distributed interrelations:

$$\left.\begin{aligned} \frac{\partial u_1}{\partial x} &= L_1\frac{\partial i_1}{\partial t} + \overline{M}\frac{\partial i_2}{\partial t} + R_1 i_1; & \frac{\partial i_1}{\partial x} &= C_1\frac{\partial U_1}{dt} - \overline{C}\frac{\partial U_2}{\partial t} - G_1 U_1 \\ \frac{\partial u_2}{\partial x} &= L_2\frac{\partial i_2}{\partial t} + \overline{M}\frac{\partial i_1}{\partial t} + R_2 i_2; & \frac{\partial i_2}{\partial x} &= C_2\frac{\partial U_2}{\partial t} - \overline{C}\frac{\partial U_1}{dt} - G_2 U_2 \end{aligned}\right\}$$

Two methods suitable for numerical problems are suggested for solving these equations: (1) A combination (classic and operational) method

Card 1/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

L 27813-66

ACC NR: AP6005615

0

and (2) A matrix function method. In the first method, the initial equations are reduced to a canonical form, the operational method with a Laplace transform is applied, an auxiliary Cauchy problem is applied to the resultant 4th order differential equation, a general solution is obtained, its coefficients are found from a system of algebraic equations by the Cramer rule, and finally, the originals are determined. In the second method, it is assumed that $R_1 = R_2 \approx 0$ and $G_1 = G_2 \approx 0$; the partial differential equations are converted into ordinary by using a Laplace transform; by differentiating two of the equations with respect to x, combining the systems and solving the resultant system for the Cauchy problem, the solution is sought in the square-matrix form; finally, application of the convolution theorems results in determining the originals. Orig. art. has: 38 formulas.

SUB CODE: 13, 12 / SUBM DATE: 20Oct64 / ORIG REF: 005

Card 2/2 RB

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIBASHEV, M.A.; ZEYNALOV, R.I.

Automatic control of operating conditions of a standard petroleum refining unit by the quality of raw materials and residue. Za tekh.prog. 3 no.10:1-6 O '63. (MIRA 16:12)

1. Energeticheskiy institut imeni I.G.Yes'mana.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

ALIKHANOV, E.N.; ARUSHANOV, N.A.; AKHUNDOV, V.Yu.: ALIZADE, M.A.; AZIZBEKOV, Sh.A.; BAGIROV, M.A.; VEZIROV, S.A.; VOLOBUYEV, V.R.; VEKILOV, F.M.; GADZHIYEV, N.M.; GUSEYNOV, D.M.; GUSEYNOV, I.A.; DADASHEV, K.K.; DADASHZADE, M.A.; DALIN, M.A.; ISKENDEROV, M.A.; KAZIYEV, M.A.; KARAYEV, A.I.; KASHKAY, M.S.; KEL'DYSH, M.V.; KERIMOV, A.G.; LEMBERANSKIY, A.D.; MAMEDOV, G.K.; MEKHTIYEV, M.R.; MIRZOYEV, S.A.; NAGIYEV, M.F.; NASRULLAYEV, N.I.; OGUDZHEV, A.K.; RADZHABOV, R.A.; RUDNEV, K.N.; SADYKHOV, R.N.; SEMENOV, N.N.; TOPCHIYEV, A.V.; TOPCHIBASHEV, M.A.; TAIROVA, T.A.; KHALILOV, Z.I.; EFENDIYEV, G.Kh.; SHUKYUROVA, Z.Z.

IUsif Geidarovich Mamedaliev. Azerb.khim.zhur. no.6:5-6 '61. (MIRA 15:5)

(Mamedaliev, IUsif Geidarovich, 1905-1961)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIBASHEV, M. A.; MAMEDOV, I. A.

Use of ultrasonic techniques in the automatic control of the quality of the parameters of petroleum products. Trudy ENIN AN Azerb. SSR 15:155-165 '62. (MIRA 15:10)

(Petroleum products) (Automatic control)
(Ultrasonic waves—Industrial applications)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIBASHEV, M.A.; ALEKPEROV, A.A.; ABILOV, A.G.; ALIYEV, M.A.

Experimental study of the static and dynamic characteristics of a tubular testing furnace. Izv. AN Azerb. SSR. Ser. fiz.-mat. i tekh. nauk no.3:93-105 '61. (MIRA 14:10)
(Furnaces)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIBASHEV, N.K.

Operation of intake works on mountain rivers. Trudy ENIN AN Azerb. SSR 13:135-139 '56. (MLRA 10:4)
(Hydroelectric power stations)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

SOV/124-58-3-2903

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 3, p 50 (USSR)

AUTHOR: Topchibashev, N.K.

TITLE: On the Question of the Design of a Lateral Open Water Intake (K voprosu rascheta otkrytogo bokovogo vodopriyema)

PERIODICAL: Tr. Energ. in-ta AN AzerbSSR, 1953, Vol 11, pp 99-114

ABSTRACT: The article contains: 1) Brief information concerning the existing methods of hydraulic design of a submerged broad-crested weir; 2) an account of field observations of one of the water intakes; 3) comparison of the actual discharge of such water intakes with the discharges calculated in accordance with several existing methods. The author points out that it is customary to base the hydraulic design of open water intakes of hydroelectric power plants on the methods developed for broad-crested weirs, and that these methods do not give sufficient consideration to the actual working conditions of the water intakes, particularly the direction of the current in the forebay. Field observations conducted for the purpose of investigating the shape of the free surface of the stream and the range of velocities, also of determining the discharge,

Card 1/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

SOV/124-58-3-2903

On the Question of the Design of a Lateral Open Water Intake

were made on the water intakes of one of the hydroelectric installations in the Azerbaydzhan SSR. From the comparison of the discharges it is evident that the calculation methods offered in the article under review provide exaggerated values. It is, however, necessary to note that the measured drops in the levels which appear in the design formulae were only about 3 - 8 cm. The article is written carelessly and contains many typographic errors; some of the author's thoughts are unclear. The water intake is described in an extremely schematic manner, information regarding its shape is lacking, not a single dimension is given, and no facts are submitted regarding the character of the water flow at the entrance to the collector in front of the water intake. Bibliography: 14 references.

D. I. Kumin

Card 2/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIBASHEV, N.K.

"The Question of the Irregularity of the Distribution of Velocities in Open Water Currents" Tr. Energ. In-ta AN Az SSSR, Vol 12, 1954, 121-135 (Azerbaydzhani resume)

The author presents a short survey of the formulas of various authors for determining the coefficient of kinetic energy of flow in open waterways. He calculates the values of this coefficient for a number of waterways in the Azerbaydzhan SSR, stating that his calculations were based on observations. He recommends a wider experimental program which would help in determining the proper values to be used in future construction. (RZhMekh, No, 9, 1955)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIBASHEV, N.K.

"Some Properties of the Hydraulics of a Reservoir" Izv. AN Az SSR, No12, 1954, 3-29 (Azerbaydzhani resume)

The author discusses laboratory and natural investigations of the reservoirs of several hydrological electric power stations. He mentions that the actual conditions of the approach of a flow to a reservoir situated parallel to the course of a river do not correspond to the theoretical systems of calculating a submerged spillway. He determines that the coefficient of nonuniformity of velocity distribution varies from 1.04 to 2.86, and therefore cannot be ignored in the calculation of lateral outlets. (RZhMekh, NO 9, 1955)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIBASHEV, N.K.

Some hydraulic indices for water reservoirs. Izv. AN Azerb. SSR no.12:3-29 D'54. (MLRA 8:11)
(Hydraulic engineering) (Spillways)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIBASHEV, N. K.

Race forming processes in the under water of the Samur Hydro-electric Development. Trudy ENIN AN Azerb. SSR 15:166-179 '62. (MIRA 15:10)

(Samur River--Hydraulic structures)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

M

Country : USSR
Category: Cultivated Plants. Grains.

Abs Jour: RZhBiol., No 11, 1958, 48858

Author : Topchibashev, T.; Mekhtizade, R.; Seleznev, A.
Inst : -
Title : Some Notes on the Article "Experiment in Sowing Wheat on Cotton Plant Field"

Orig Pub: Sots. s.-kh. Azerbaydzjana, 1956, No 1, 44-46

Abstract: The article points out the errors in the method contained in work of B. Agayev and R. Mamedov "Experiment of Sowing Wheat Over Cotton".

Card : 1/1

M-19

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIBASHEV, T.A.

6778. Topchibashev, T. A. i Andreyev, V. D.
Sortovoye rayonirovaniyei kharakteristika sortov zernovykh, maslichnykh kul'tur i trav v Azerbaydzhane. Baku, Azerneshr, 1954. 88 s. s. ill. 20 sm. 3.000 ekz. 1 r. 10 k. -- Na azerbaydzh. yaz.--(55-2514)
633:631.52 (47.924)

SO: Knizhnaya Letopis' No. 6, 1955

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

SHEYN, T.I.; TOPCHIBASHEVA, V.N.

Depolymerization of polyamides based on ω-aminocarboxylic acids in the presence of alkaline catalysts. Khim.volok. no.5:21-24 '59. (MIRA 13:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna (VNIIV).
(Amides) (Lactams)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

15.5540

~~5(3)~~

66963

SOV/183-59-5-5/28

AUTHORS: Sheyn, T. I., Topchibasheva, V. N.

TITLE: Depolymerization of Polyamides on the Basis of ω-Aminocarboxylic Acids in the Presence of Alkaline Catalysts

PERIODICAL: Khimicheskiye volokna, 1959, Nr 5, pp 21-24 (USSR)

ABSTRACT: The authors depolymerized polyamide resins produced from aminoenanthic, aminopelargonic, and aminoundecanic acids. 5 to 20 grams of the respective resin were heated in nitrogen atmosphere with the addition of a corresponding amount of catalyst, and the resulting cleavage products were distilled off in the vacuum. The cleavage products were purified and identified on the basis of their melting points, or the polymers which can be produced from them, respectively. It was shown that such a depolymerization mainly produces monomeric, 8-12 membered (depending on the size of the basic molecule of the initial polymer) cycles - lactams - whereas only few cyclic dimers are formed (Table 1). In the USSR, the production of fibers from the polymerization product of aminoenanthic acid was started on an experimental scale. Therefore depolymerization of this synthetic material with the production of lactam of the monomer is im-

Card 1/3

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

66963

SOV/183-59-5-5/28

Depolymerization of Polyamides on the Basis of ω-Aminocarboxylic Acids in the Presence of Alkaline Catalysts

portant for the regeneration of oxidized and contaminated production waste. For this reason, further investigations only dealt with this substance. It was shown that among the alkaline catalysts used (anhydrous soda, soda produced by heating sodium bicarbonate, a lactam compound produced from dry caprolactam and metallic sodium, solid sodium hydroxide, solid potassium hydroxide) KOH in a quantity of 1-1.5% of the resin amount employed, and NaOH in a quantity of 5%, are most efficient. The sodium compound of caprolactam is much less efficient; an increase of its quantity to 3-4% produces undesirable side reactions. Therefore, further investigations were carried out with a corresponding percentage of KOH or NaOH as catalysts, respectively. The observation of the influence of temperature on the depolymerization showed that at a pressure of 5-7 mm Hg a temperature increase from 290 to 340°C causes no considerable increase in yield, but accelerates the reaction considerably (Table 3). Temperatures above 340°C reduce the quality of the lactam obtained. It was shown that a change in pressure in the reaction exerts a great influence on the final product. Thus,

Card 2/3

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

66963

SOV/183-59-5-5/28

Depolymerization of Polyamides on the Basis of ω-Aminocarboxylic Acids in the Presence of Alkaline Catalysts

an increase in pressure from 4 to 18 mm Hg reduces the lactam yield from 77 to 30%, and increases the content of dimeric (16-membered) lactam from 2 to 35%. Purification of the lactam obtained from aminoenanthic acid is done by distillation over concentrated sulfuric acid. There are 3 tables and 8 references, 1 of which is Soviet.

ASSOCIATION: VNIIV

Card 3/3

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

STREPIKHEYEV, A.A.; TOPCHIBASHEVA, V.N.; SHEYN, T.I.

A new polyamide fiber, enant. Tekst.prom.16 no.1:33-34 Ja '56. (MIRA 9:4)
(Nylon)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

MIKHAYLOV, N.V.; SHEYN, T.I.; GORBACHEVA, V.O.; TOPCHIBASHEVA, V.N.; v rabote prinimali uchastiye tekhniki-laboranty: LARIONOV, P.M.; VLASOVA, L.P.; MURASHKINA, S.I.

Investigating the molecular structure of synthetic fibers. Part 14: Physicochemical and physicomechanical properties of the polycapramide - polyundecanamide polyamide group. Vysokom. soed. 1 no.2:185-190 F '59. (MIRA 12:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna.
(Textile fibers, Synthetic) (Amides)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

Topchibayev, M. A. (Prof.); Aliyev, A. K.--Baku

"The Treatment of Burns with Paraffin Dressings."

report submitted for the 27th Congress of Surgeons of the USSR, Moscow, 23-28 May 1960

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIEV, Aleksander

Mikhail Lomonosov on the 250th anniversary of his birth (1711-1961). Kwart hist nauki i tech 7 no.3:243-258 '62.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIISKI, Sl., st.asistent; KHRISTOV,L., st.n.sutrudnik

Black currant and its nutrient and medicinal properties.
Prir i znanie 16 no.3:4-7 Mr'63.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHISHVILI, I.A.

Constantly improve labor protection and safety engineering. Elek. i tepl. tiaga no.7:9-10 Jl '63. (MIRA 16:9)

1. Glavnyy inzh. sluzhby elektrifikatsii i energeticheskogo khozyaystva Zakavkazskoy dorogi.
(Railroads--Safety measures)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

VORONIN, A.V.; TOPCHISHVILI, I.A.

Book about a prospective new system of electric traction ("Using industrial-frequency single-phase current for railroad electrification" by A.S.Avatkov. Reviewed by A.V.Voronin, I.A.Topchishvili). Elek. i tepl.tiaga 2 no.12:3 of cover D '58. (MIRA 12:1)

1. Zaveduyushchiy laboratoriyey instituta kompleksnykh transportnykh problem AN SSSR (for Voronin). 2. Glavnyy inzh. sluzhby elektrifikatsii i energeticheskogo khozyaystva Zakavkazskoy dorogi (for Topchishvili).
(Railroads--Electrification) (Avatkov, A.S.)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHISHVILI, I.A. (Tbilisi).

Contact networks require reliable insulators. Elek. i tepl. tiaga 2 no.1:15 Ja '58. (MIRA 11:3)

1.Glavnyy inzhener sluzhby eledtrifikatsii i energeticheskogo khozyaystva Zakavkazskoy dorogi.
(Electric railroads--Wires and wiring)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHISHVILI, M.V.

Stratigraphy of loess sediments in the southwestern periphery of the Dzirula Massif. Soob. AN Gruz. SSR 40 no.1:113-118 O '65. (MIRA 18:12)

1. Geologicheskiy institut AN Gruzinskoy SSR. Submitted July 13, 1965.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHISHVILI, M.V.

Age of the Liassic terrigenous series in the southern periphery of the Dzirula Massif. Soob. AN Gruz. SSR 37 no.3:623-626 Mr '65. (MIRA 18:5)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIU,

RUMANIA/Virology - Human and Animal Viruses. E-3

Abs Jour : Ref Zhur - Biol., No 4, 1958, 14603

Author : Bushile, Bechile, Roshiu, Topchiu, Berbulesku, Damian
Inst : -
Title : Epidemiology of Q-fever.

Orig Pub : Studii si cercetari inframicrobiol., microbiol. si parazitol. Acad. RPR, 1956, 7, No 3-4, 295-301

Abstract : No abstract.

Card 1/1

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

MEDVINSKIY, Ye.O., kand.med.nauk; ZUBKO, G.I.; TOPCHIY, E.G. (Kiyev)

Treatment of peptic ulcer patients with serum "F". Vrach.delo no.10: 1079 O '59. (MIRA 13:2)

1. Dorozhnaya ob"yedinennaya bol'nitsa No.2 Yugo-Zapadnykh zheleznykh dorog.

(PEPTIC ULCER) (SERUM THERAPY)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

SOLOMENKO, F., inzh.-ekonomist; TOPCHIY, F.; VERLIN, A.; KHALIMOV, N.

Our readers' suggestions. Fin.SSSR 21 no.6:77-78 Je '60. (MIRA 13:6)

1. Starshiy kreditnyy inspektor Kabardino-Balkarskoy kontory Stroybanka (for Topchiy). 2. Zaveduyushchiy Ertil'skim rayfinotdelom Voronezhskoy oblasti (for Verlin). 3. Zaveduyushchiy Charodinskim rayfinotdelom Dagestanskoy ASSR (for Khalimov).
(Finance)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIY, M.K.

Cultivation of a typical fowl plague and vaccinia viruses in an ascit mouse cancer. Vop.virus. 3 no.1:12-16 Ja-F '58. (MIRA 11:4)

1. Laboratoriya bioterapii raka Kiyevskogo nauchno-issledovatel'skogo instituta epidemiologii, mikrobiologii i gigiyeny.

(VACCINIA, virus
culture in mouse ascites carcinoma (Rus)
(VIRUSES,
fowl plague virus, culture in mouse ascites carcinoma (Rus)
(NEOPLASMS, experimental
ascites carcinoma, use as medium for culture of fowl plague virus & vaccinia virus (Rus)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIY, M.K.

Interference between viruses of fowl Asiatic plague and vaccinia. (MIRA 11:10)
Vop.virus. 3 no.5:302-304 S-O '58

1. Laboratoriya etiologii epukholey Kiyevskogo instituta epidemiologii i mikrobiologii.
(PLAGUE, VIRUSES,
Asiatic fowl plague virus, interference with vaccinia viruses (Rus))
(VACCINIA, viruses,
interference with Asiatic fowl plague virus (Rus))

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIY, M. K., Cand Biol Sci -- (diss) "Cultivation of viruses in tumors. Production of vacuum variant of Newcastle disease virus." Kiev, 1959. 14 pp; (Academy of Sciences Ukrainian SSR, Division of Biological Sciences); 180 copies; price not given; (KL, 17-60, 148)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

Topchiy, M. K., and Mazurenko, F. P.

Investigation under the electron microscope of extracts of the tissue of precancerous changes of the lactiferous glands of man, as a subject for detecting globular formations. Report 1.

Materialy nauchnykh konferentsii, Kiev, 1959. 288pp
(Kievskiy Nauchno-issledovatel'skiy Institut Epidemiologii i Mikrobiologii)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

Topchiy, M. R., and Mazurenko, N. P.

Attempt to cultivate globular formations of pre-cancerous changed tissue of the lactiferour gland of man in chorio-allantoic tissue of chick embryos.

A question: Is there an agent in pre-cancerous changed tissues of the lactiferous human gland, indentical to the (Lactobacillus) "milk factor" of mice? Report 3.

Materialy nauchnykh konferentsii, Kiev, 1959. 288pp
(Kievskiy Nauchno-issledovatel'skiy Institut Epidemiologii i Mikrobiologii)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

Topchiy, M. K.

Study of the pathogenic and vaccinal variants of the Newcastic disease under the electron microscope.

Topchiy, M. K.

Study of the seroiogical properties of the virus of Newcastie disease during a lengthy cultivation in Ehrlich's murine cancer.

Materialy nauchnykh konferentsii, Kiev, 1959. 288pp
(Kievskiy Nauchno-issledovatel'skiy Institut Epidemiologii i Mikrobiologii)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIY, M.K.

Antiblastic effect of the newcastle virus on Ehrlich's ascitic cancer. Vrach.delo no.2:169-171 F '59. (MIRA 12:6)

1. Laboratoriya etiologii opukholey (zav. - deyst.chlen AMN SSSR, prof.A.D.Timofeyevskiy) Kiyevskogo nauchno-issledovatel'skogo instituta epidemiologii i mikrobiologii. (Rukovoditel'raboty - kand.med.nauk N.P.Mazurenko).
(VIRUSES) (CANCER)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIY, M.K.

Production of nonpathogenic and immunogenic strains of Asian fowl plague virus by prolonged cultivation in Ehrlich ascites carcinoma. Vop.virus. 4 no.3:345-348 My-Je '59. (MIRA 12:8)

1. Laboratoriya etiologii opukholey Kiyevskogo nauchno-issledovatel'skogo instituta epidemiologii i mikrobiologii.
(NEOPLASMS, exper.
Asian fowl plague virus in Ehrlich ascites carcinoma tissue (Rus))
(VIRUSES,
same)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

MAZURENKO, N.P.; TOPCHIY, M.K.

Study of the virol nature of precancerous diseases of the breast in man. Vop.virus. 4 no.5:604-610 S-O '59. (MIRA 13:2)

1. Laboratoriya etiologii opukholey Instituta epidemiologii i mikrobiologii Kiyev.
(BREAST, neoplasms)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

MAZURENKO, N.P.; TOPCHIY, M.K.; NADGORNAYA, N.I.

Cultivation of the virus of hemocytoblastosis-reticulosis of mice in explanted tissues. Vop. virus. 7 no.3:281-284 My-Je '62. (MIRA 16:8)

1. Laboratoriya etiologii opukholey Instituta epidemiologii i mikrobiologii, Kiyev.
(VIRUSES) (LEUKEMIA) (TISSUE CULTURE)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

MAZURENKO, N.P.; NADGORNAYA, N.I.; TOPCHIY, M.K.

Study of the activity in mice of tissue extracts from leukemic patients by means of the method of tissue culture. Vop. virus. 7 no.3:323-327 My-Je'62. (MIRA 16:8)

1. Laboratoriya etiologii opukholey Kiyevskogo instituta epidemiologii i mikrobiologii.
(LEUKEMIA) (TISSUE CULTURE) (VIRUSES)
(TISSUE EXTRACTS)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIY, M. K., MAZURENKO, N. P., and NADGORNAYA, N. I. (USSR)

"Investigations of the cultivation of the virus of leukaemia in mice in vitro and of extracts of human leukaemic tissues."

report submitted for the European Conference on Tumor Biology (VICC),
Warsaw, Poland
22-27 May 1961

Topchiy, M. K.-Inst. of Experimental and Clinical Oncology, A.M.S.,

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

KOGAN, L.A.; TOPCHIY, M.P.

Automatic control of the hydraulic conditions of coke ovens. Koks i khim. no.8:25-28 '60. (MIRA 13:8)

1. Nizhne-Tagil'skiy metallurgicheskiy kombinat. 2. Vostochnyy uglekhimicheskiy institut (for Kogan).
(Coke ovens) (Hydraulic control)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIY, P.

Calculation of work standards in continuous production. Sots. trud no.7:107-110 Jl '57. (MLRA 10:8)

(Production standards)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIY, P.A.

USSR/Chemical Technology - Chemical Products and Their Application. Fermentation Industry, I-27

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 63613

Author: Topchiy, P. A.

Institution: None

Title: Two-Blade Propeller Stirrer

Original Periodical: Vinodeliye i vinogradarstvo SSSR, 1956, No 2, 51-52

Abstract: Description of a horizontal 2-blade propeller stirrer designed by Savchenko, V. A., used at the Novocherkassk wine plant in square iron reinforced brick tanks of 3,000 dkl capacity, the stirrer being inserted through the bottom port. Power rating of electric motor 4.5-6 kw, maximum rpm 2,800. Mixing of 3,000 dkl wine requires 25 minutes.

Card 1/1

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

SMOLYAKOV, V.F.; SHUL'TE, Yu.A.; MEDOVAR, B.I.; GAREVSKIKH, I.A.; LATASH, Yu.V.; TSIVIRKO, E.I.; ZABALUYEV, Yu.I.; TOPCHIY, S.E.

Nonmetallic inclusions in electric slag refined 12Kh2N4A structural steel. Met. i gornorud. prom. no.4:35-37 Jl-Ag '64. (MIRA 18:7)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIY, Spiridon Mikhaylovich, SHULYANSKIY, Grigoriy Fot'yevich; MIRONENKO, Anatoliy Fedorovich; SOKOLOV, L.P., red.; KRUGLOVA, Ye.M., red.izd-va; TIKHONOVA, Ye.A., tekhn.red.

[Movement control in the merchant marine]Organizatsiia dvizheniia morskogo flota. [By]S.M.Topchii, G.F.Shulianskii, A.F.Mironenko. Moskva, Izd-vo "Morskoi transport," 1962. 267 p. (MIRA 16:3)

(Merchant ships)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIY, V.A., Cand Tech Sci--(diss) "On the use of revolving ribs in the prow [redacted] of [redacted] icebreakers." Len, 1953. 16 pp with graphs (Len Shipbuilding Inst), 150 copies (KL,47-58, 134)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

RABINOVICH, S.G., inzh.; TOPCHIY, V.D., inzh.; SOVALOV, I.G., kand. tekhn. nauk, red.

[Album of drawings of molds and forms for monolithic and precast concrete structures] Al'bom chertezhei opalubki i form dlia monolitnykh i sbornykh zhelezobetonnykh konstruktsii. [By] S.G.Rabinovich i V.D.Topchii. Izd.3., dop. i perer. Moskva, Stroiizdat, 1964. 125 p. (MIRA 17:11)

1. Moscow. Nauchno-issledovatel'skiy institut organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

SOVALOV, I.G., kand. tekhn. nauk; TOPCHIY, V.D., inzh.

Multipurpose standard formworks in industrial construction. Prom. stroi. 42 no.4:14-18 '65. (MIRA 18:4)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIY, V.T., gornyy inzh.

System of miningh without haulage at the Ordzhonikidze mine. Gor. zhur. no.1:31-34 Ja '64. (MIRA 17:3)

1. Rudoupravleniye im. Ordzhonikidze trosta Nikopol'-Marganets.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

L 31849-66 EWT(m)

ACC NR: AP6021318 (N) SOURCE CODE: UR/0390/65/028/005/0558/0561

AUTHOR: Strelkov, R. B.; Topchiyan, L. M.

ORG: Laboratory of Radiology /headed by L. F. Semenov/, Institute of Experimental Pathology and Therapy, AMN SSSR, Sukhumi (Laboratoriya radiologii Instituta eksperimental'noy patologii i terapii, AMN SSSR)

TITLE: Certain properties of animal blood protected by cysteinamine from ionizing radiation

SOURCE: Farmakologiya i toksikologiya, v. 28, no. 5, 1965, 558-561

TOPIC TAGS: blood, radiation biologic effect, experiment animal

ABSTRACT: Data produced in the study of the histamine-like properties of the blood of animals to which was added cysteinamine disulfide (2-aminoethanethiol) in a dose to protect from the action of penetrating radiation are presented. They indicate that there is no difference in the action of the blood of control and protected animals on isolated guinea pig intestine.
It was concluded that Bacq's hypothesis on the mechanism of action of cysteinamine disulfide as a stimulator for the introduction into the blood of histamine-like substances finds no experimental confirmation. Following administration of cysteinamine disulfide no changes occur in the histamine and histamine-like substances blood concentration. Orig. art. has: 3 tables. [JPRS]

SUB CODE: 06 / SUBM DATE: 04Dec64 / ORIG REF: 003 / OTH REF: 009

Card 1/1 JS UDC: 617.001.28-085.777.8-07:516.154+612.129.014.482-06:615.777.8

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

SEMENOV, L.F.; AVDZHIAN, M.V.; BOCHKOV, N.P.; TOPCHIYAN, L.H.

State of cell division and nucleic acid metabolism in the mucosa of the small intestine during the action of radioprotective substances on the organism. Radiobiologiia 1 no.6:953-957 '61. (MIRA 15:2)

1. Institut eksperimental'noy patologii i terapii AMN SSSR, Sukhumi.
(RADIATION PROTECTION) (KAROKINESIS)
(NUCLEIC ACID METABOLISM)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

STRELKOV, R.B.; TOPCHIYAN, L.M.

Some properties of the blood in animals protected against ionizing radiation by cystamine. Farm. i tokx. 28 no.5:558-561 S-O '65. (MIRA 18:12)

1. Laboratoriya radiologii (zav. L.F.Semenov) Instituta eksperimental'noy patologii i terapii AMN SSSR, Sukhumi. Submitted December 4, 1964.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

32761
S/205/61/001/006/021/022
D243/D305

27.2400 also 2209

AUTHORS: Semenov, L.F., Avdzhian, M.V., Bochkov, N.P., and Topchiyan, L.N.

TITLE: Cell division and nucleic acid metabolism in the mucosa of the small intestine after treating animals with radio-protective substances

PERIODICAL: Radiobiologiya, v. 1, no. 6, 1961, 953 - 957

TEXT: The authors wished to study the effects of the most efficient radio-protective substances (β-mercaptoethylamine, adrenaline, acetylcholine and combinations of these) on cell division and nucleic acid metabolism in the mucosa of the small intestine in normal animals. Data in this field are few and contradictory. Optimally protective doses of the named substances were given to 198 white rats, of 200 - 230 g weight, and 179 guinea-pigs of 300-450 g weight, of both sexes. The animals were killed 10 - 15 mins., and 1 and 3 hours later. To study nucleic acid metabolism, 16 - 20 microcuries of ^{32}P in sodium phosphate, in 0.2 - 0.3 ml of aqueous solution, were given subcutaneously immediately after the protecti-

Card 1/3

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

ve substances and the animals were killed three hours later. Sections of intestinal mucosa were treated with 10 % trichloroacetic acid and separation of the nucleic fraction and fractionation of DNA was carried out by a modified Schmidt-Tangauzer method. Radiophosphorus uptake, measured with a -2 (B-2) counting apparatus, indicated the rate of nucleic compound synthesis. In studying cell division, the control and experimental animals were killed at the same time. Mitosis was estimated on fixed and stained diodenal sections, the results being assessed statistically by Fisher-Styudent-'s method. β-mercaptoethylamine and acetylcholine had no effect on the metabolism of nucleic acids and the DNA fraction. Adrenaline caused marked depression (60 - 88 %) in both animals, as did adrenaline plus acetylcholine (72 - 92 %). 75 rats and 79 guinea-pigs were used for mitosis estimation. β-mercaptoethylamine and acetylcholine caused a transient depression of mitotic activity which developed rapidly (15 mins) and was greater in rats (24 - 31 %). Adrenaline caused a gradual depression in guinea-pigs (28 %) and rats (29 %)maximal in three hours. Adrenaline plus acetylcholine caused rapid, prolonged depression. The actions of acetylcholine were confirmed by supplementary experiments. It seems that acetylcholine

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

32761
S/205/61/001/006/021/022
D243/D305

Cell division and nucleic acid...

and β-mercaptoethylamine shorten the prophase and metaphase by almost 50 % and thus speed up the mitotic process. Adrenaline only depresses cell division. No correlation could be established between the radioprotective effect of these substances and their effect on nucleic acid metabolism and cell division. There are 5 tables and 11 references: 5 Soviet-bloc and 6 non-Soviet-bloc. The references to the English-language publications read as follows: C. Van der Meer and D. van Bekkum, Inter. J. Radiat. Biol., 1, 5, 1959; R. Conard, Radiation res., 1, 492, 1954, 1959; J. Maisin, J. Moutschen, J. Novelli and D. Doherty, Radiation res., 11, 3, 453, 1959.

ASSOCIATION: Institut eksperimental'noy patologii i terapii AMN SSSR, Sukhumi (Institute of Experimental Pathology and Therapy, AMS USSR, Sukhumi)

SUBMITTED: June 22, 1961

Card 3/3

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

VOYTSEKHOVSKIY, B.V.; KOTOV, B.Ye.; MITROFANOV, V.V.; TOPCHIYAN, M.Ye.

Optical investigation of transverse detonation waves. Izv.Sib. otd. AN SSSR no.9:44-51 '58. (MIRA 11:11)

1. Sibirskoye otdeleniye AN SSSR.
(Explosions)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

10(1)

AUTHORS: Soloukhin, R. I., Topchiyan, M. Ye. SOV/20-127-4-11/60

TITLE: Investigation of the Spin Detonation Trail

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 127, Nr 4, pp 772-773 (USSR)

ABSTRACT: The cause of the appearance of an intensely shining area in the inflammation of gases has not yet been fully clarified. For further clarification of this problem, the present paper investigates the area behind the front of the spin detonation. In this area, there is a luminescent disturbance, a trail spreading around the tube at a velocity higher than sonic velocity. Thus, the disturbance cannot be regarded as a sound wave or shock wave. To clarify the behavior of the trail, the change in velocity and frequency was measured in various parts along the trail. A mixture of CO and O_2 was used for the investigation.

The velocity of the trail observed was 1,735 m/sec. It was propagated over a few hundreds of cm. The velocity of the trail and the frequency of the trail rotation became much smaller when a cylinder with a smaller diameter was introduced into the interior of the tube. The variations of the above values found

Card 1/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

Investigation of the Spin Detonation Trail SOV/20-127-4-11/60

in many experiments are illustrated in the table. The analysis of the data obtained shows that the acoustic natural vibrations of the burning gas must be considered in the clarification of the peculiarities of the spin detonation. There are 1 figure, 1 table, and 7 references, 3 of which are Soviet.

ASSOCIATION: Moskovskiy fiziko-tekhnicheskiy institut (Moscow Institute of Physics and Technology)

PRESENTED: April 15, 1959, by M. A. Lavrent'yev, Academician

SUBMITTED: April 1, 1959

Card 2/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

28337 S/124/61/000/006/010/027
A005/A130

11.8200

AUTHORS: Soloukhin, R.I.; Topchiyan, M.Ye.

TITLE: Acoustic effects in spin detonations

PERIODICAL: Referativnyy zhurnal. Mekhanika, no. 6, 1961, 15, abstract 6 B 77. (V sb.: 3-ye Vses. Soveshchaniye po teorii goreniya. T. 1. Moscow, 1960, 169 - 174)

TEXT: The present article repeats in simplified form the theoretical analysis of the spin detonation effect from the acoustic point of view that was more fully considered by Manson and Fay (Manson, N., Propagation des détonations et des déflagrations dans les mélanges gaseux. ONERA, Paris, 1947; Fay, J.A., J. Chem. Phys., 1952, v. 20, no. 6). The authors present the results of Toepler instantaneous and compensating photographing and recording by piezo-transmitter of the fluctuations in density and pressure of a burning gas in spin and pulsation detonations that can be excited in a shock pipe of rectangular cross section. Different conditions of initiating the detonation were realized by choosing initial conditions in the diaphragm of the high-pressure section in the shock pipe. The Toepler photographs showed regularly alternating excitations of the density of

Card 1/3

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

28337 S/124/61/000/006/010/027
A005/A130

Acoustic effects in spin detonations

the gas behind the head front of the detonation as well as a "considerable deformation of the shock front of the detonation". This latter observation is somewhat contradicted by the authors' assertion in discussing the experimental results that "considerable fractures of front as assumed in the Zel'dovich - Shchelkin theory were not observed in testing". From analysis of the experimental data the authors conclude that the excitation of oscillations proceeds immediately behind the front and is connected with the combustion of the gas, the oscillations of which participate in the burning process behind the wave front of the detonation and form together with the combustion zone a self-oscillating system. Measuring the frequencies revealed that, for instance, for a $2H_2 + O_2$ mixture with 0.1 atm initial pressure two types of frequency, 32 and 51.5 kc, are excited, which agrees with theoretical calculations. For obtaining quantitative data on the spin of the detonation loop in annular pipes, the authors experimentally measured the annular velocity and frequency of rotation of the excitation at various sections along the length of the detonation loop in a mixture of carbon monoxide and oxygen. The natural luminescence of the detonation was recorded by evolving the process through a slit perpendicular to the axis of the detonation pipe onto film moving in the direction of detonation wave propagation. This test showed that the annular velocity of the loop for a $2CO + O_2$ mixture does not de-

Card 2/3

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

2'337 S/124/61/000/006/010/027
A005/A130

Acoustic effects in spin detonations

pend on the diameter of the pipe (for diameter of 15 - 25 mm) and equals 1,735 m/sec. This velocity and the frequency of loop spin decrease of a coaxial inset of smaller diameter is introduced into the interior of the detonation pipe. There are 6 references.

Yu. Denisov

[Abstracter's note: Complete translation.]

Card 3/3

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

39224

S/207/62/000/003/005/016
I028/I228

11.9100

AUTHOR: Voytzekhovskiy, B. V., Mitrofanov, V. V. and Topchiyan, M. Ye. (Novosibirsk)

TITLE: On the flow structure in a spinning-detonation wave

PERIODICAL: Zhurnal prikladnpoy mekhaniki i tekhnicheskoy fiziki, no. 3, 1962, 27–30

TEXT: Experiments on the detection of the leading front of a detonation wave on a Töpler installation were designed in order to ascertain experimentally which of the patterns of flow in the region of the front fracture proposed by Voitzekhovskiy (according to which the compression of the main mass of gas occurs behind the shock front in the transversal detonation wave) and Denisov-Troshin (according to which the most luminous region represents the "fracture" of the leading front of the detonation wave) is correct. A photographic record of the detonation was taken by the method of total compensation through a slit in the detonation tube, and a diagram of the disposition of the fronts drawn on the basis of comparison of the Töpler and self-luminosity photographs of the detonation. This established the existence of a shock wave, in which the preliminary compression of the gas taken place, before the zone of maximum luminosity. The experimental results obtained agree with the theoretical pattern of flow proposed by Voitzekhovskiy. The authors thank L. V. Ovsyannikov and R. I. Soloukhin for their comments. There are 3 figures and 1 table. The most important English-language reference reads as follows: R. E. Duff "Investigation of Spinning Detonation and Detonation Stability", The Physics of Fluids, 1961, no. 11, p. 1427.

SUBMITTED: January 26, 1962

Card 1/1

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIYAN, M.Ye.(Novosibirsk)

Experimental study of spinning detonation by means of a pressure pickup. PMTF no.4:94-99 Jl-Ag '62. (MIRA 16:1)
(Detonation)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

VOYTSEKHOVSKIY, B.V.; MITROFANOV, V.V.; TOPCHIYAN, M.Ye.; NAZARYANTS, T.M., red.; OVCHINNIKOVA, T.K., tekhn. red.

[Structure of the detonation front in gases] Struktura fronta detonatsii v gazakh. Novosibirsk, Izd-vo Sibirskogo otdniia AN SSSR, 1963. 167 p. (MIRA 17:3)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

L 15566-63 EPR/EPA(b)/BDS AFFTC/ASD Ps-4/Pd-4 EM/WW

ACCESSION NR: AP3002804 S/0207/63/000/003/0045/0048

AUTHORS: Mitrofanov, V. V.; Subbotin, V. A.; Topchiyan, M. E. (Novosibirsk) 65 64

TITLE: Measurement of pressure in a spinning transverse wave

SOURCE: Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki, no. 3, 1963, 45-48

TOPIC TAGS: detonation, gas dynamics, pressure, experiment

ABSTRACT: As is known, detonation mixtures near the ends of ducts go into a spin mechanism. At the front a transverse wave is formed which turns in a neighborhood along the wall of the duct. Computations show that (in the transverse wave) the maximal pressure is 170-180 times greater than the initial pressure of the mixture, i.e., 10 times greater than at the Chepmen-Zhuge point for detonation waves on the whole. V. V. Mitrofanov (Struktura detonatsionnoy volny* v ploskom kanale. PMTF, 1962, No. 4) gave results of measuring the field of pressure in a spinning wave (using small piezo-transmitters) which agreed well with the computational measurements. However, because of the lack of tare of the transmitters in absolute value of the pressures and the extreme pressure of the oscillograms along the time axis, these measurements could not be considered sufficiently reliable. The authors repeated the tests more carefully and state the results

Card 1/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

L 15566-63

ACCESSION NR: AP3002804

obtained. All of the oscillograms in the tests described in the article were repeated many times. Therefore, the flow scheme in the spinning wave given by the authors listed in the bibliography can be considered definitely confirmed. "The authors are grateful to S. V. Voytsekhovskiy for his attention to this work." Orig. art. has: 4 figures.

ASSOCIATION: none

SUBMITTED: 01Feb63 DATE ACQ: 16Jul63 ENCL: 00

SUB CODE: PH, FL NO REF SOV: 008 OTHER: 000

Card 2/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

VOYTSEKHOVSKY, B. V.; MITROFANOV, V. V.; SOLOUKHIN, R. I.; TOPCHIYAN, M. Ye. (Novosibirsk)

"Some results of investigations on gas detonation"

report presented at the 2nd All-Union Congress on Theoretical and Applied Mechanics, Moscow, 29 Jan - 5 Feb 1964.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

L 22813-66 EWT(1)/EWP(m)/EWT(m)/EWA(d)/T/EWA(h) WW/JW/WE

ACC NR: AP6011500 SOURCE CODE: UR/0414/65/000/004/0020/0023

47
B

AUTHOR: Mikhaylov, V. V. (Novosibirsk); Topchiyan, M. Ye. (Novosibirsk)

ORG: none

TITLE: Study of continuous detonation in an annular duct

SOURCE: Fizika goreniya i vzryva, no. 4, 1965, 20-23

TOPIC TAGS: combustion, detonation, gas combustion, supersonic conductor

ABSTRACT: Previous studies by Voytsekhovskiy showed that combustible gas mixtures can be burned by a continuous detonation process in an annular duct at velocities 50 times greater than normal burning velocities. To study this phenomenon in greater detail, the present invesitgation was made in two ducts with inner diameters of 250 and 170 mm, which were equipped for Toepler photography. The velocity of the flame propagation was measured by time-resolved photography of the detonation "heads." It was found that as the number of heads decreases, the velocity increases. Thus, a six head detonation had a velocity of 749 m/sec while a three head detonation had a speed of 918 m/sec. In all cases studied, a triangular luminous zone was observed in the vicinity of the outer duct wall. Pressure measurements with piezoelectric pickups showed that at the outer wall pressure jumps of 3—4 mm Hg occur, while at the inner wall the pressure distribution is continuous. Theoretically, this pressure jump

UDC: 534.222.2

Card 1/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

L 22813-66

ACC NR: AP6011500

would correspond to an angle of 30—35° between the shock front and the flow direction, however, experimental observations showed an angle of about 20—30°. Orig. art. has: 7 figures. [PV]

SUB CODE: 21/ SUBM DATE: 18Jun65/ ORIG REF: 007/ ATD PRESS: 4229

Card 2/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

L 09325-67 EWP(m)/EWT(1) WW

ACC NR: AP6030936 (N) SOURCE CODE: UR/0207/66/000/004/0172/0174

37

AUTHOR: Gavrilenko, T. P. (Novosibirsk); Topchiyan, M. Ye. (Novosibirsk)

ORG: Institute of Hydrodynamics, Siberian Department, AN SSSR (Institut gidrodinamiki Sibirskogo otdeleniya AN SSSR)

TITLE: Investigation of the dynamic rupture strength of water

SOURCE: Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki, no. 4, 1966, 172-174

TOPIC TAGS: water, rupture strength, cavitation

ABSTRACT: The authors present the results of experimental investigations of the rupture strength of water under dynamic loading in the absence of a free surface, for which there are practically no published data. The measurement procedure was based on the assumption that the effect of discontinuities on the medium and on objects placed in it, as well as on the profile of the passing wave itself, is manifest primarily in a change in pressure. An important role is played here by the frequency of the pressure pulsations. The occurrence of cavitation was therefore determined by measuring the pressure, which unlike the optical measurment does not involve determination of the critical dimension of the bubbles. In addition, this method makes it possible to measure directly the negative pressure at which cavitation arises, and the time at which it is reached. The apparatus (Fig. 1) is based on first producing a high pressure in the water, and then stretching the water at high speed until the rarefaction wave produces rupture of the water. The instant when this occurs the

Card 1/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

L 09325-67

ACC NR: AP6030936

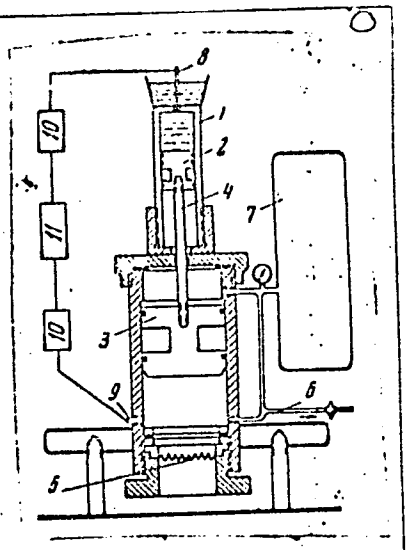

Fig. 1. Diagram of test setup. 1 - Upper cylinder, 2,3 - postons, 4 - rod, 5 - membrane, 6 - pipe, 7 - receiver, 8,9 - pickups, 10,11 - electronic equipment and oscilloscope.

previously decreasing water pressure begins to rise and this is noted on an oscilloscope. The results show that ordinary water, without degassing and distillation, can withstand negative pressure on the order of 2.5 atm for a time on the order of 20 - 30 μsec. With increasing time of force application, the strength decreases, reaching 0.5 atm at 150 μsec. The ultimate static limit is reached at times on the order of 300 - 500 μsec. Orig. art. has: 3 figures and 1 formula.

SUB CODE: 20/ SUBM DATE: 17Jan66/ ORIG REF: 001/ OTH REF: 002

Card 2/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIYAN, S. Z.

Topchiyan, S. Z. "Knovrinskiy hospital [Moscow Oblast Health Department]," Trudy Khovrin. Obl. Klinich. bol8nitsy, Khovrino (Moscow Oblast), 1948, p. 7-26

So: U-3566, 15 March 53, (Letopis 'Zhurnal 'nykh Statey, No. 13, 1949)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIYASHVILI, Z. A., kand. med. nauk (Moskva)

Internal enterobiliary fistulae. Klin. med. no.11:114-119 '61. (MIRA 14:12)

1. Iz khirurgicheskoy kliniki (zav. - zasluzhennyy deyatel' nauki prof. B. S. Rozanov) Bol'nitsy imeni S. P. Botkina (glavnyy vrach - dotsent Yu. G. Antonov)

(FISTULA) (BILIARY TRACT—ULCERS)
(DIGESTIVE ORGANS—ULCERS)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0

TOPCHIYEV, A., akademik

Some future problems in scientific development. NOT 3 no.6:3-7 Je '61. (MIRA 14:6)

1. Vitse-prezident Akademii nauk SSSR.
(Research)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001756310008-0"