"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

ACCESSION NR: AP4031139

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A. F. Ioffe AN SSSR (Physicotechnical Institute AN SSSR)

SUBMITTED: 18Oct63 DATE ACQ: 07May64 ENCL: 00

SUB CODE: NP, GP NR REF SOV: 005 OTHER: 006

Card 3/3

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

L 13651-65 EWT(1)/EWG(k)/EPA(sp)-2/EPA(w)-2/EEC(t)/T/EEC(b)-2/EWA(m)-2
Pi-4/Po-4/Pz-6/Pab-10 IJP(c)/ESD(t) AT
ACCESSION NR: AP4047890 S/0056/64/047/004/1235/1242

AUTHORS: Il'in, R. N.; Kikiani, B. I.; Oparin, V. A.; Solov'yev, Ye. S.; Fedorenko, N. V.

TITLE: Formation of highly excited hydrogen atoms in proton charge exchange in gases

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 47, no. 4, 1964, 1235-1242

TOPIC TAGS: hydrogen, charge exchange, excited state, proton interaction

ABSTRACT: The purpose of the work was to study the efficiency of proton charge exchange in highly excited states of H in molecular gases, for which there are practically no data. The hydrogen atoms had principal quantum numbers $n \geq 8$, the proton energies were 16--180 keV, and the molecular gases investigated were H_2, N_2, and CO_2.

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L 13651-65
ACCESSION NR: AP4047890

The method used to measure the relative number of highly excited atoms in an atomic beam, using dissociating electric fields, was suggested by A. C. Riviere and D. R. Sweetman (Nucl. Fusion Suppl. 1962, Part 1, p. 279; Phys. Rev. Lett. v. 5, 560, 1960). The experimental setup is shown in Fig. 1 of the enclosure. The integral dependence of the proton current I(E) was measured under single-collision conditions, and was found to be the same, within 15%, for all gases except molecular hydrogen, which gave values of I about 30% higher than nitrogen and carbon dioxide. The differential dependence dI/dE was also measured, and the results used to determine the relative population of the states. To determine the number of highly excited hydrogen atoms compared with the primary proton beam, the variation of the relative yield with the thickness of the gas target was also studied and was found to increase with increasing target thickness up to 0.1 torr-cm, at which a charge equilibrium was established in the beam. The relative yield of highly excited atoms was determined by ionizing them in a strong electric field (the

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L 13651-65
ACCESSION NR: AP4047890

6

Lorentz ionization). An estimate of the cross sections for the capture into the state with n = 10 gave values of 10^{-19}--10^{-20} cm^2 for the investigated cases. Some depletion of the highly excited states was observed with increase of target thickness in the yield of highly excited atoms relative to the atomic beam. "The authors thank N. N. Lebedev and I. P. Skal'skaya for calculating the fields in the gap, and I. F. Kalinkevich, I. T. Serenkov, and V. V. Bagayev for development of the electronic equipment." Orig. art. has: 5 figures, 3 formulas, and 2 tables.

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A. F. Ioffe Akademii nauk SSSR (Physicotechnical Institute, Academy of Sciences SSSR)

SUBMITTED: 07May64 ENCL: 01

SUB CODE: NP NR REF SOV: 007 OTHER: 007

Card 3/4

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

L 13651-65

ACCESSION NR: AP4047890

ENCLOSURE: 01

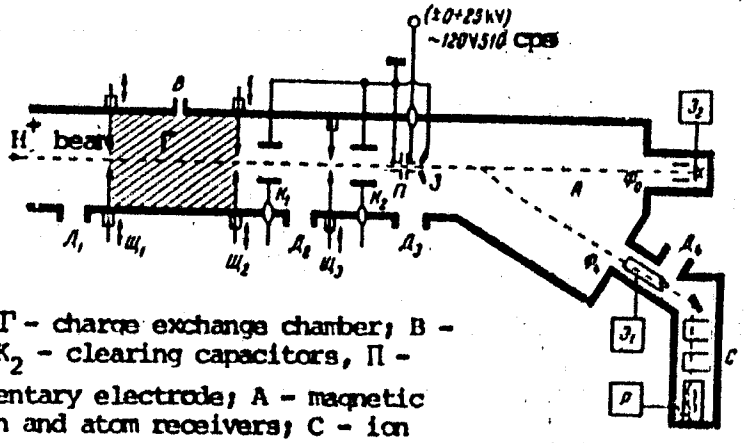

Fig. 1. Diagram of setup: Г - charge exchange chamber; B - gas inlet to chamber; K_1, K_2 - clearing capacitors, П - breakdown gap; З - supplementary electrode; A - magnetic analyzer; Φ_+, Φ_0 - proton and atom receivers; C - ion counters; $Э_1$, $Э_2$ - electrometers; P - phase sensitive recording circuit; Ш - collimating slits; Д - vacuum pumps

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

L 9813-66 EWT(m)/T/EWP(t)/EWP(b)/EWA(m)-2 LJP(c) JD/JG

ACC NR: AP5027990 SOURCE CODE: UR/0386/65/002/007/0310/0314

AUTHOR: Il'in, R. N.; Oparin, V. A.; Solov'yev, Ye. S.; Fedorenko, N. V.

ORG: Physicotechnical Institute im. A. F. Ioffe Academy of Sciences SSSR (Fiziko-tekhnicheskiy institut Akademii nauk SSSR)

TITLE: Charge exchange of protons in alkaline metal vapor with formation of highly excited hydrogen atoms

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. (Prilozheniye), v. 2, no. 7, 1965, 310-314

TOPIC TAGS: proton, charge exchange, alkali metal, hydrogen, excited state

ABSTRACT: The charge exchange of 10--180 kev protons in vapor of Li, Na, K, Cs, and Mg was investigated with an aim at using this process to obtain highly excited hydrogen atoms. An atomic beam, obtained by charge exchange of the protons in the vapor of these metals and purified to eliminate the charged particles, was fed into a region with strong electric field, of intensity $E < 160$ kv/cm. The ratio of the current of the secondary protons, produced upon ionization of the highly excited atoms in the field E, to the total current of the atoms I(E) was measured. This ratio characterizes the relative charge-exchange yield of the highly excited atoms. The total cross section for proton charge exchange and the ratio of the total number of atoms produced by charge exchange to the number of protons in the primary beam were also measured in individual experiments. These made it possible in turn to determine the cross section for the charge exchange accompanied by production of highly excited

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L 9813-66

ACC NR: AP5027990

atoms. Plots of the cross sections against proton energy are presented both for metallic targets and (for comparison) for He, Ne, Ar, and H_2. The plots show that the cross sections for alkaline metals and for magnesium above 15 kev decrease with increasing energy. A characteristic kink was observed for both cross sections in the region 30--70 kev, beyond which the decrease of the cross sections slows down. The presence of the kink on the curves can be attributed to the fact that at low energies the outer weakly-bound electron of the metal atom takes part in the charge exchange, while at high energies a greater role is played by charge exchange with participation of the electrons from the filled shell, analogous to the outer shell of an inert gas. The latter is confirmed by the similarity of the plots for the alkaline metals and magnesium and the similar plots for inert gases at high energies. The main conclusion of the investigation is that vapors of alkaline and alkali-earth metals are more suitable targets for the production of highly excited atoms of hydrogen at energies below 50 kev, and that molecular hydrogen and inert gases are preferable at higher energies. Orig. art. has: 3 figures.

SUB CODE: 20/ SUBM DATE: 26Jul65/ ORIG REF: 002/ OTH REF: 002

Card 2/2

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

L 02273-67 EWT(1)/EWT(m)/EWP(t)/ETI IJP(c) JD/WW/JG/AT

ACC NR: AP6025252 SOURCE CODE: UR/0057/66/036/007/1241/1250

36
85
B

AUTHOR: Il'in, R.N.; Oparin, V.A.; Solov'yev, Ye.S.; Fedorenko, N.V.

ORG: Physicotechnical Institute im. A.F. Ioffe, AN SSSR, Leningrad (Fiziko-tekhnicheskiy institut)

TITLE: Electron attachment to protons in alkali mekal vapors with the formation of highly excited hydrogen atoms

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 7, 1241-1250

TOPIC TAGS: proton, charge exchange, gas target, atom, excited state, alkali metal, inert gas, hydrogen, carbon dioxide, plasma injection,

ABSTRACT: The authors have measured the cross sections of Li, Na, K, Cs, He, Ne, Ar, and H_2 for the electron attachment reaction of 10 to 180 keV protons with particular attention to the cross sections for production of highly excited hydrogen atoms. The measurements were undertaken because of their interest in connection with injection of plasma into magnetic traps. The beam, initially of protons, successively traversed the 12 cm long heated target chamber, a weak transverse electric field which removed the charged particles, a strong (up to 160 kV/cm) electric field which ionized the highly excited atoms, and a magnetic field which separated the ions from the remaining neutral atoms. The neutral atoms were recorded with a secondary emission detector

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APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4"

L 02273-67

ACC NR: AP6025252

which was calibrated against a calorimeter. The alkali metals were introduced directly into the target chamber, and the pressure of the vapor target was determined from the temperature of the chamber. Thin target data were obtained for all the target materials, and thick target (up to 0.4 cm torr) data were obtained for Na and Ne and, at some values of the incident proton energy, for K, Cs, and CO_2. The results are presented graphically and in tabular form; they are discussed at some length and are compared with theoretical calculations and with data of other investigators. It is concluded that at incident proton energies up to 30 keV the alkali metal vapors are efficient targets for producing both highly excited and moderately or unexcited hydrogen atoms, but that at higher proton energies the inert gas and H_2 targets are more effective for producing highly excited atoms. The authors thank Yu.N. Demkov for discussing the results. Orig. art. has: 7 formulas, 7 figures, and 3 tables.

SUB CODE: 20 SUBM DATE: 05Aug65 ORIG. REF: 006 OTH REF: 013

Card 2/2 vmb

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

LEVIN, L.Ya.; SOLOV'YEV, Yo.T.; KAYLOV, V.D.

Achievement of high indices in blast furnace smelting.
Stal' 22 no.7:587-592 Jl '62. (MIRA 15:7)
(Blast furnaces)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

L 13616-66 EWT(m)/EWP(v)/EWP(j)/T/ETC(m) WW/RM

ACC NR: AP6000959 (A) SOURCE CODE: UR/0286/65/000/022/0042/0042

AUTHORS: Gul', V. Ye.; Snezhko, A. G.; Solov'yev, Ye. V.

ORG: none

55
B

TITLE: A method for fixing saturated polyolefins to nonmetallic materials. Class 22, No. 176347

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 22, 1965, 42

TOPIC TAGS: olefin, adhesive bonding, adhesion, chemical bonding

ABSTRACT: This Author Certificate presents a method for fixing saturated polyolefins to nonmetallic materials, such as cellophane or polyethyleneterephthalate. To increase the strength of the joint, the surface of a nonmetallic material is coated with a thin layer of saturated polyolefin dispersed in water and then with polyolefin at the temperature of its melting.

SUB CODE: 13/ SUBM DATE: 09Dec63

Card 1/1 NW UDC: 678.029.42:668.395

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

GUL', V.Ye.; [illegible], A.G.; SOLOV'YEV, Ye.V.; [illegible], B.A.

Aqueous dispersions of polypropylene with polyvinyl alcohol as emulsifier. Koll.zhur. 27 no.3:346-348 My-Je '65. (MIRA 18:12)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni Lomonosova i Moskovskiy tekhnologicheskiy institut myasnoy i moloshnoy promyshlennosti. Submitted Dec. 28, 1963.

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

SOLOV'YEV, Ye.Ye., prof.

Sprinkler-mounted fertilizer distributors. Gidr.i mel. 12 no.7:26-30 Jl '60. (MIRA 13:7)
(Sprinklers)
(Fertilizer spreaders)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

[illegible], Yu.

Results of the work in the field of industrial design and ways to improve it. Tekh. est. 2 no.8:1-7 Ag '65. (MIRA 18:9)

1. Direktor Vsesoyuznogo nauchno-issledovatel'skogo instituta tekhnicheskoy estetiki.

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

SOLOV'YEV, Yu.

More metal for our country. NTO 4 no.12:20 D '62. (MIRA 16:1)

1. Predsedatel' byuro ekonomicheskogo analiza Kuznetskogo metallurgicheskogo kombinata.
(Kuznetsk Basin--Iron and steel plants)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

SOLOV'YEV, Yu.

A law for assembly-line production. Nauka i zhizn' 30 no.5:38-41 My '63. (MIRA 16:10)

1. Direktor Vsesoyuznogo nauchno-issledovatel'skogo instituta tekhnicheskoy estetiki.

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

BUKANOV, A.A.; SOLOV'YEV, Yu.A.

The PD-2 disk transfer device. Stek. i ker. 22 no.6:31-32 Je '65. (MIRA 18:6)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

S/122/60/000/010/007/015
A161/A030

AUTHORS: Krivchenko, G.I., Candidate of Technical Sciences, Lecturer; Solov'yev, Yu.A., Engineer

TITLE: New Hydraulic Amplifier for Servo Systems and Automatic Control

PERIODICAL: Vestnik mashinostroyeniya, 1960, No.10, pp.36-38

TEXT: The subject amplifier is an invention of the authors (Author's Certificate No.119490 of 10 Apr. 1958), designed as a servo device having no lever transmission and permitting an infinite variation of the travel amplification factor between the control valve and the work element. The system principle, with the input and output elements moving at an angle to each other, is illustrated (Fig. 1). The amplifier joins the controlling input element (a flat slide valve) and the output element (a differential piston) into a single unit. The flat slide valve may be connected to a measuring device, or a transducer of speed, pressure, displacement, shape and dimensions, or temperature of work, etc. The flat valve (1 in Fig.1) is a ground steel plate with two windows separated by a partition (2) (having

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

S/122/60/000/010/007/015
A161/A030

New Hydraulic Amplifier for Servo Systems and Automatic Control

parallel edges in this case). The partition edges have to be curved if nonlinear displacement is wanted. The two windows form two separate cavities (I and II), the first communicating with the pressure line of the hydraulic system through ducts in the differential piston, and from the other (II), oil is ejected into the drain. The pressure in the control cavity can be varied between maximum and zero by the position of the partition in relation to the windows, with corresponding displacement of the piston. Detailed operation information is given. The static and dynamic properties of the system have been tested in an amplifier manufactured at Vsesoyuznyy nauchno-issledovatel'skiy institut gidromashinostroyeniya, or VIGM, (All-Union Scientific Research Institute of Hydraulic Machinery). The amplifier had a 50 mm diameter differential piston, 25 mm travel, 6 mm diameter distribution windows and 15-20 kg/cm^2 work pressure; the work fluid was "Л" ("L") grade turbine oil. The hysteresis loop in the forward and back strokes on the output did not exceed 0.01-0.02 mm. The variation of the travel amplification factor K is determined by formula

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

S/122/60/000/010/007/015
A161/A030

New Hydraulic Amplifier for Servo Systems and Automatic Control

$$K = \frac{1}{tg\,\alpha},$$

where α is the angle of incline of the cutoff edges of the flat slide valve to the axis of the work piston (See Fig.1). The action speed of the amplifier at large deviations meets the input conditions, and without any lag even at high recording speed during oscillographing. There are 2 figures.

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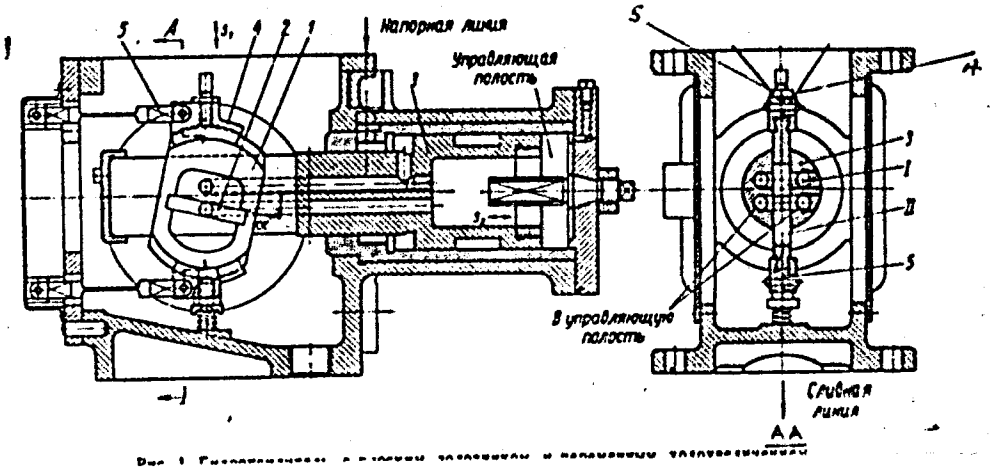
"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

S/122/60/000/010/007/015
A161/A030

New Hydraulic Amplifier for Servo Systems and Automatic Control

Fig. 1: New hydraulic amplifier for servo systems and automatic control



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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

YUDOVICH, V.G.; KHLEB[illegible]ODOV, A.D.; SOLOMEVICH, Ye.A.; [illegible], [illegible]; PANOV, F.S.; BELYAYEV, A.N.; ALA[illegible]IN, C.I., [illegible]; VOROB'YEV, A.I.; PROKOF'YEV, Yu.V.; SO[illegible], Yu.A.; KUZ'MIN, A.V.; ZHIDONIS, V.Yu., ZOLIN, A.V.; YAT[illegible], Ye.[illegible]; DOBROSLAVSKIY, V.L.; TROFIMOV, Ye.N.; DRYAGIN, Ye.R.; KOROLEV, V.F.; KERIMOV, N.B.; KRAVCHENKO, A.S.; RYVLIN, V.A.; GURCHENKO, A.P.; KRUGLIKOV, T.P.; CHERNYAKOV, F.A.; A[illegible], N.K.

Authors' certificates and patents. Machinostroenie no.1[illegible] 1[illegible] Ja-F '65. (MIRA [illegible])

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

SEMENOV, S.S.; KOBYL'SKAYA, M.V.; KUZNETSOVA, O.A.; SOLOV'YEV, Yu.A.; ZAV"YALOV, V.G.; MASHIN, V.N.; VELITSKAYA, O.Ya.; PETRUNIN, M.M.; RIF, L.L.

Starting a pyrolysis unit for chamber gasoline in the V.I. Lenin Oil Shale Processing Combine. Trudy VNIIT no.12:64-68 '63. (MIRA 18:11)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

STRUNNIKOV, Nikolay Fedorovich; SOKOLEV, Leonid Nikolayevich; SOLOV'YEV, Yuriy Alekseyevich; MAGRANOVA, N., red.

[Tractors; a concise manual] Traktory; kratkii spravochnik. Kostroma, Kostromskoe knizhnoe izd-vo, 1963. 434 p. (MIRA 18:9)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

SEMENOV, S.S.; ZAV'YALOV, V.G.; SOLOV'YEV, Yu.A.

Pyrolysis of petroleum fractions in a laboratory pipestill. Trudy VNIIT no.13:38-44 '64. (MIRA 18:2)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

[illegible]

Standardization and industrial aesthetics. Standartizatsiia 28 no.10:46 O '64. (MIRA 17:12)

1. Direktor Vsesoyuznogo nauchno-issledovatel'skogo instituta [illegible]cheskoy estetiki.

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

SOLOV'YEV, Yu.B.

Combination furniture. Der.i lesokhim.prom. 3 no.8:5-9 Ap '54. (MLRA 7:8)

1. Arkhitekturno-khudozhestvennoye byuro Ministerstva sudostroitel'-noy promyshlennosti SSSR.
(Furniture)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

SOLOV'YEV, Yu.F., inzh.; BOROVIKOV, V.A., inzh.

Non-dispersal method of breaking boulders by blasting. Transp. stroi. 14 no.9:22-23 S '64 (MIRA 18:1)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

SOLOV'YEV, Yu.F.; BELOLIKOV, V.N.

Construction of subway stations with lining made of precast reinforced concrete. Transp.stroi. 12 no.7:22-25 Jl '62. (MIRA 16:2)

1. Glavnyy inzh. Stroitel'nogo upravleniya Leningradskogo metropolitena (for Solov'yev). 2. Zamestitel' glavnogo inzhenera Stroitel'nogo upravleniya Leningradskogo metropolitena (for Belolikov).
(Leningrad—Subways—Stations) (Tunnel lining)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

SOLOV'YEV, Yu.F., inzh.

Construction of a new section of the Leningrad subway. Transp. stroi. 13 no.10:19-22 O '63. (MIRA 17:8)

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

GALYATIN, V.M.; KALINSKIY, D.N.; Prinimali uchastiye: KUROCHKIN, I.F.; DUVANOV, A.I.; SOLOV'YEV, Yu.F.; GERASIMOV, Yu.V.; GROSVAL'D, V.G.; SHASHKOV, V.N.; VOLKOV, A.A.; ZHILKO, E.I.; MITROPOL'SKIY, Yu.I.; FEDOSEYEV, S.V.; GONCHAROV, F.I., rabotnik; SHEMETOV, P.Ye., rabotnik; CHUPRINA, I.A., rabotnik; DEMIN, P.Ye., rabotnik; GONCHARENKO, P.V., rabotnik; SIMANYUK, G.N., rabotnik

Investigating power and technological parameters of rolling on the 2350 medium sheet mill. [Sbor. trud.] TSNIICHM no.29:138-148 '63. (MIRA 17:4)

1. Sotrudniki TSentral'nogo nauchno-issledovatel'skogo instituta chernoy metallurgii (for Gerasimov, Grosval'd, Shashkov, Volkov, Zhilko, Mitropol'skiy, Fedoseyev). 2. Listoprokatnyy tsekh Magnitogorskogo metallurgicheskogo kombinata (for Goncharov, Shemetov, Demin, Chuprina, Goncharenko, Simanyuk).

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

POMIGHEV, I.A.; TROFIMOVICH, A.I.; SOLOV'YEV, Yu.F.

Testing laminated and pressed wood plastics and their use in rolling mills. Stal' 24 no.7:668-670 Jl '64. (MIRA 18:1)

1. Dnepropetrovskiy khimiko-tekhnologicheskiy institut.

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

S/123/61/000/007/010/026
A004/A104

AUTHORS: Rulla, N.V., Solov'yev, Yu.O.

TITLE: Fluidity and radiation coefficient of some high-alloyed carbon steels

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 7, 1961, 4, abstract 7G37 ("Tr. Ukr. n.-i. trubn. in-ta", 1959, no. 1, 162 - 176)

TEXT: The authors have carried out investigations of the fluidity of some carbon and high-alloyed steel grades (used for the central casting of pipes) to find out an expedient pouring temperature and crystallization rate. They have found the radiation coefficient to determine the end of the crystallization process which is being established by the variation of the radiation coefficient at different states of aggregation. The assay was poured into a green sand mold. The metal temperature was measured by a platinum-platino-rhodium thermocouple with rapid-action potentiometer and optical pyrometer of partial radiation. The authors present the results of determining the fluidity of 12 steel grades depending on the pouring temperature and the temperature of overheating exceeding the rated liquidus temperature. A linear dependence of the fluidity on the overheating temperature was found for two steel groups: chrome-nickel steels without Ti, Al and

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S/123/61/000/004/015/027
A004/A104

AUTHORS: Rulla, N. V., Chizh, V. A., and Solov'yev, Yu. G.

TITLE: Some problems of metal motion and the distribution of elements during the casting of hollow tube blanks by the centrifugal method

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 4, 1961, 19, abstract 4G147. ("Byul. nauchno-tekhn. inform. Ukr. n.-i. trubn. in-t, 1959, no. 8, 53-56)

TEXT: Investigations showed that phosphorus and sulfur, at a crystallization rate which is lower than the liquation rate, are distributed at the grain boundaries in the form of a lattice and separate globules which are connected among each other by fine webs. However, at high crystallization rates a relatively uniform distribution of the elements over the wall cross section can be observed. Calculations proved that the molecular diffusion does not affect the balancing of phosphorus and sulfur concentrations. The crystallization rate of the outer layers of tubular blanks was determined experimentally: when superheating of the metal was increased, the crystallization rate decreased. There are 2 figures.

S. Zhukovskiy

[Abstractor's note: Complete translation]

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L 54704-65 EPA(s)-2/EWT(m)/EPF(n)-2/EWA(d)/EWP(t)/EWP(z)/EWP(b) Pt-7/Pu-4
MJW/JD/GW/JG
ACCESSION NR: AP5014243 UR/0383/65/000/002/0044/0048 37
621.774.1 36

AUTHOR: Rulla, N. V. (Candidate of technical sciences); Solov'yev, Yu. G.; Chizh, V. A.

TITLE: The effect which physical and mechanical factors in the centrifugal casting process have on quality in hollow steel pipe billets

SOURCE: Metallurgicheskaya i gornorudnaya promyshlennost', no. 2, 1965, 44-48

TOPIC TAGS: pipe manufacture, centrifugal casting, steel pipe, metal mechanical property

ABSTRACT: The authors show the advantages of centrifugal casting over stationary casting of pipe billets with a parallel series using 35 carbon steel and Kh18N9T stainless steel. The speed of solidification, (determined by the pouring rate), and the speed of mold rotation (1000-1500 RPM for the centrifugal case) were the main variables while the presence or absence of vibration during solidification was also studied. Mechanical properties were studied. The authors found macroetching of the billets to be unreliable and studied the surface by including the isotope

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S^{35} in the melt and taking autoradiographs of the solidified billet. During centrifugal casting the interaction between the breaking off of pieces of newly solidified crust and remaining liquid metal is dependent on the vibration, in addition to the solidification rate, in that vibration provides for a much less dendritic and acicular structure giving better mechanical properties. The effect of reheating the metal 40°C above the liquidus gives minimal properties while ductility and impact strength are increased for a 90° reheat above liquidus. Water quenching after holding for 20 minutes at 1150°C gave a 30-40% increase in mechanical properties. Specimens for mechanical tests were taken from both internal and external sections of the billets. Orig. art. has: 2 figures.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: MM, IE

NO REF SOV: 000 OTHER: 000

Card 2/2 MB

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

BULIA, N.V., kand. tekhn. nauk; SOLOV'YEV, Yu.G.; CHIZH, V.A.

Effect of physicomechanical factors of the centrifugal casting process on the quality of the metal of hollow steel pipe billets. Met. i gornorud. prom. no.2:44-48 Mr-Ap '65. (MIRA 18:5)

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L 16027-66 EWT(m)/T/EWP(t)/EWP(k) JD/HW

ACC NR: AT5022785 SOURCE CODE: UR/3164/64/000/014/0063/0068

AUTHOR: Solov'yev, Yu. G. (Engr.)

ORG: none

23
21
B+1

TITLE: Time and the kinetics of hardening of steel hollow ingots cast by centrifugal means

SOURCE: Dnepropetrovsk. Vsesoyuznyy nauchno-issledovatel'skiy i konstruktorsko-tekhnologicheskiy institut trubnoy promyshlennosti. Proizvodstvo trub, no. 14, 1964. Sbornik statey po teorii i praktike trubnogo proizvostva (Collection of articles on the theory and practice of pipe production), 63-68

TOPIC TAGS: crystallization, centrifugal casting, carbon steel

ABSTRACT: The mechanism of the crystallization of carbon and alloyed steel when casting hollow ingots by centrifugal means is investigated. The character of ingot hardening, in addition to the general metallurgical conditions of pouring, depended on the vibrations of the centrifugal machine, the slipping of the liquid

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Overheating 0 - 20C
Overheating 50 - 60C
Overheating 100 - 120C

Time from start of pouring

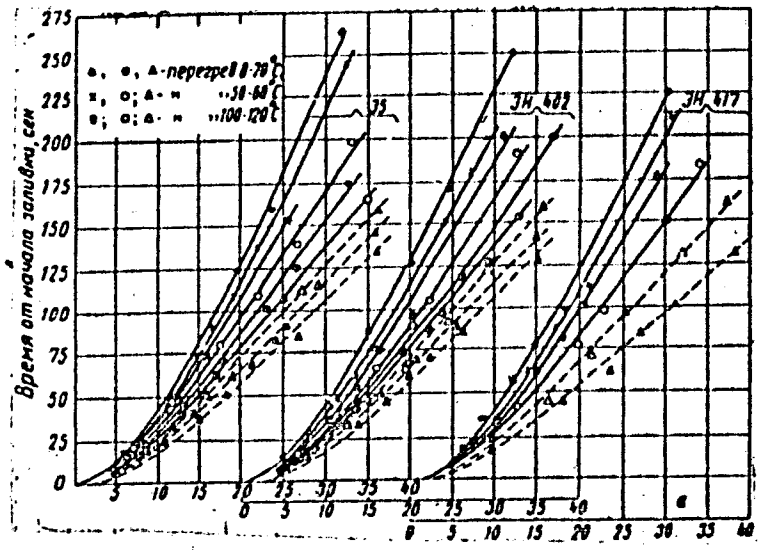

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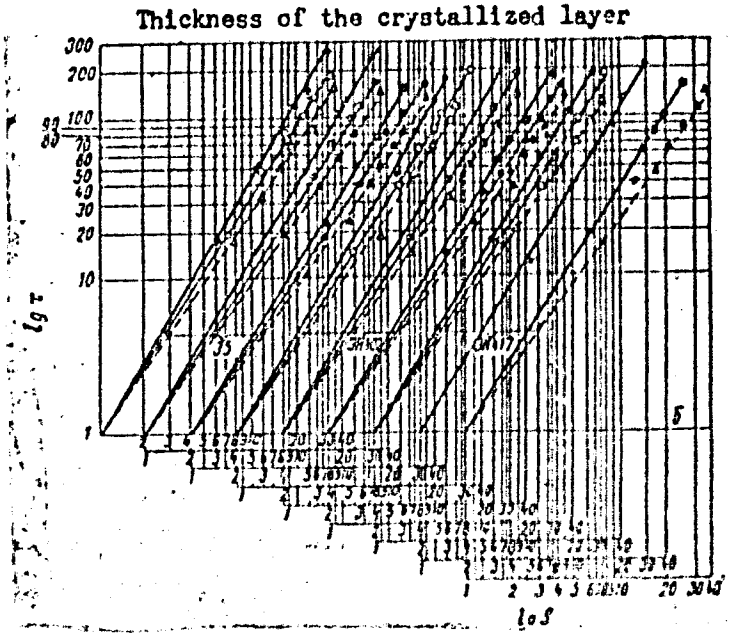
Figure 1. Relationship between the thickness of the crystallized metal layer and time in the normal (a) and logarithmic (b) systems of coordinates. Unbroken thick lines show the use of sand lining, where $\delta = 0.006$m and $\beta = 46$ cal/m^2·h·°C. The broken lines show the use of ceramic dye, where $\delta = 0.0005$m and $\beta = 140$ cal.m^{2}h°C.



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ACC NR: AT5022785

The study showed that it was possible to prove reliably that the factors which determined the hardening speed of steel and alloys of pipes processed by centrifugal means were the degree of overheating above the liquidus and the conditions of heat emission from the ingot mold. Orig. art. has: 2 figures, 5 formulas and 1 table.

SUB CODE: 11, 13 SUBM DATE: none/ ORIG REF: 007/ OTH REF: 001

Card 5/5

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FIGUROVSKIY, N.A., otv. red.; SOLOV'YEV, Yu.I., otv. red.

[Lomonosov; collection of articles and materials] Lomonosov; sbornik statei i materialov. Moskva, Izd-vo AN SSSR. Vol.5. 1961. 398 p. (MIRA 18:7)

1. Akademiya nauk SSSR. Institut istorii yestestvoznaniya i tekhniki.

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

SOLOV'YEV, Yu.I.

2772. Soloviev, Yu. I., Stability of structures against sliding along cylindrical surfaces (in Russian), *Gidrotekh. Stroit.* 23, 8, 34-36, 1954.

The problem of stability of the foundation of a structure or of an unretained earth slope, considering sliding along a circular arc, is usually solved graphically. Author develops an algebraic solution of the same problem. His method, introducing no new principles but evoking some theoretical objections, is laborious and, in the opinion of the reviewer, is inferior to the graphical method. A. Hrennikoff, Canada

Mech

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

SOLOV'YEV, Yu.I., assistent

Plane problem in the elasticity theory as applied to eccentric disks with strengthened edges. Trudy NIIZHT no.14:5-22 '58. (MIRA 12:1)

1. Novosibirskiy institut inzhenerov zheleznodorozhnogo transporta.
(Elastic plates and shells)

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

SOLOV'EV, Yu.I., assistent

Action of concentrated force on eccentric disks with strengthened edges. Trudy NIIZHT no.14:23-38 '58. (MIRA 12:1)

1. Novosibirskiy institut inzhenerov zheleznodorozhnogo transporta.
(Elastic plates and shells)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

SOLOV'YEV, Yu.I., assistent

Stressed state of disk-shaped arches and girders with a curved lower contour. Trudy NIIZHT no.14:39-52 '58. (MIRA 12:1)

1. Novosibirskiy institut inzhenerov zheleznodorozhnogo transporta.
(Arches) (Girders)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

SOLOV'YEV, Yu.I. (Novosibirsk)

Effect of a concentrated force on an excentric ring. Prikl.mat. i mekh. 22 no.5:701-705 S-O '58. (MIRA 11:11)
(Mechanics)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

SOLOV'YEV, Yu.I.

Improving workers' qualifications in production. Trudy LIEI no.24:157-170 '58. (MIRA 12:12)
(Employees, Training of)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

SOLOV'YEV, Yu. I., Cand Tech Sci (diss) -- "Investigation of the stressed state of curved I-beams bounded by eccentric circles". Novosibirsk, 1959. 10 pp (Min Higher and Inter Spec Educ RSFSR, Novosibirsk Construction Engineering Inst im V. V. Kuybyshev), 150 copies (KL, No 10, 1960, 132)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

SOLOV'YEV, Yu.I.

Maximum equilibrium of a loose medium under a hard stamp with no forces operating from other directions. Izv. Sib. otd. AN SSSR no.6:44-49 '59. (MIRA 12:12)

1. Novosibirskiy institut inzhenerov zheleznodorozhnogo transporta.
(Mechanics)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

SOLOV'YEV, Yu.I. (Novosibirsk)

Problem of the plastic state of a material under a rigid rough stamp in the case of eccentric loading. PMTF no.1:110-116 My-Je '60. (MIRA 14:8)

(Plasticity) (Strains and stresses)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

SOLOV'YEV, Yu.I.

Plastic state of material under a hard rough die with symmetric loading. Izv.Sib.otd.AN SSSR no.8:135-138 '60. (MIRA 13:9)

1. Novosibirskiy institut inzhenerov zheleznodorozhnogo transporta.

(Plasticity)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

SOLOV'YEV, Yu. I.

Cand Tech Sci - (diss) "Several problems of the theory of limiting equilibrium of friable medium and their application to the calculation of stability of structural foundations." Novosibirsk, 1961. 20 pp; (Ministry of Higher and Secondary Specialist Education RSFSR, Novosibirsk Construction Engineering Inst imeni V. V. Kuybyshev); 250 copies; free; (KL, 5-61 sup, 193)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

SOLOV'YEV, Yu.I.; PUSKOV, V.I.

Designing foundations anchored in thawed soils taking into account the action of heaving forces. Osn., fund.i mech.grun. 3 no.2: 15-17 '61. (MIRA 14:5)

(Foundations) (Thawing)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

SOLOV'YEV, Yu.I.

Rigid-plastic equilibrium underneath a stamp. Izv. Sib. otd. AN SSSR no.7:13-22 '61. (MIRA 14:8)

1. Novosibirskiy institut inzhenerov zheleznodorozhnogo transporta.
(Deformations (Mechanics)) (Plasticity)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

SOLOV'YEV, Yu.I., inzh.

Calculations for shallow anchor foundations. Trudy NIIZHT no.24: 341-348 '61. (MIRA 16:5)

(Foundations)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

SOLOV'YEV, Yu.I., kand.tekhn.nauk

Stability of slopes of "Hypothetical" solids. Trudy NIIZHT no.28:83-97 '62.

Determination of actual pressure taking into account the compressibility of soils. 99-105 (MIRA 16:11)

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

S/040/62/026/001/015/023
D237/D304

AUTHORS Aleksandrov, A. Ya. and Solov'yev, Yu. I. (Novosibirsk)

TITLE: A method of solving solid, axially symmetrical problems of the theory of elasticity by complex variable functions and a solution of these problems for a sphere

PERIODICAL: Akademiya nauk SSSR. Otdeleniye tekhnicheskikh nauk. Prikladnaya matematika i mekhanika, v. 26, no. 1, 1962, 138-145

TEXT: In the case of axially symmetrical deformation of the body of revolution, components of elastic deformation w, u are given by Eq.(1.1)

$$2Gw = 4(1-\nu)B_z - \frac{\partial}{\partial z}(zB_z + rB_r + B_o)$$

$$2Gu = 4(1-\nu)B_r - \frac{\partial}{\partial r}(zB_z + rB_r + B_o)$$

where ν = Poisson's coefficient, G = shear modulus, and Bz, Br, Bo = functions of z, r, satisfying Eq. (1.2)

$$\Delta B_z = 0, \quad \Delta(B_r e^{i\theta}) = 0, \quad \Delta B_o = 0$$

$$\left(\Delta = \frac{\partial^2}{\partial z^2} + \frac{\partial^2}{\partial r^2} + \frac{1}{r}\frac{\partial}{\partial r} + \frac{1}{r^2}\frac{\partial^2}{\partial \theta^2}\right).$$

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z, v, θ are cylindrical coordinates and z = the axis of rotation. Functions of the complex variable are then introduced, namely $\varphi_n(\zeta)$, (n = 1, 2, 3) in the zr-plane. If they are holomorphic within the region in question, then equations are obtained which can be integrated for the given displacements W_o and u_o on the boundary. The expressions for stresses are similarly obtained. The above arguments can also be applied to the elastic space with an axially symmetrical cavity with only slight changes in definitions. The problems of the elastic sphere and of the elastic space with a spherical cavity are then solved and the solutions illustrated by three examples. There are 3 figures and 4 Soviet-bloc references.

SUBMITTED: July 5, 1961

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

ALEKSANDROV, A.Ya.; SOLOV'YEV, Yu.I.

Method of solving axially symmetric problems in the theory of elasticity with the aid of analytic functions extended to three-dimensional problems without axial symmetry. Dokl. AN SSSR 154 no.2:294-297 Ja'64. (MIRA 17:2)

1. Novosibirskiy institut inzhenerov zheleznodorozhnogo transporta. Predstavleno akademikom Yu. N. Rabotnovym.

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

SOLOV'YEV, Yu.I., assistant

Studying the effect of eccentricity on the carrying capacity of zero gravity foundations. Trudy NIIZHT no. 22:141-149 '61 (MIRA 19:1)

Approximative discontinuous solution of the problem concerning the stability of structure foundations. Ibid.:151-155

Determining the coefficient of resistance in structural foundations. Ibid.:157-163

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

L 30962-66 EWT(d)/EWT(m)/EWP(w) IJP(c) EM

ACC NR: AP6002324 SOURCE CODE: UR/0373/65/000/006/0094/0099

AUTHORS: Aleksandrov, A. Ya. (Novosibirsk); Solov'yev, Yu. I. (Novosibirsk)

ORG: none

TITLE: Application of analytic functions of a complex variable to the solution of three-dimensional nonaxisymmetric problems in the theory of elasticity for a body of revolution

SOURCE: AN SSSR. Izvestiya. Mekhanika, no. 6, 1965, 94-99

TOPIC TAGS: elasticity theory, analytic function, complex function, stress analysis, body of revolution

ABSTRACT: The method of complex variables is used to solve three-dimensional problems in elasticity theory for a body of revolution. The body is assumed to be continuous and isotropic, with a contour as shown in Fig. 1. The analysis is based on the auxiliary-state displacement theory given by

$$2Gw_1 = \mathrm{Re}\left[\varkappa\varphi(\zeta; \alpha) - (2z - \zeta)\frac{\partial\varphi}{\partial\zeta} - \psi(\zeta; \alpha)\right], \quad 2Gv_1 = \mathrm{Im}\left[i\Phi(\zeta; \alpha)\right]$$

$$2Gu_1 = \mathrm{Im}\left[\varkappa\varphi(\zeta; \alpha) + (2z - \zeta)\frac{\partial\varphi}{\partial\zeta} + \psi(\zeta; \alpha)\right].$$

where the functions ϕ, Φ and ψ are analytic and can be expressed in trigonometric series. This leads to expressions for the displacements u, v, and w given by

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$$2Gw = \sum_{n=-\infty}^{\infty} \frac{e^{in\theta}}{\pi i} \int_{\bar{t}}^{t} [\varkappa\varphi_n(\zeta) - (2z - \zeta)\varphi_n'(\zeta) - \psi_n(\zeta)]\, T_n\left(\frac{\zeta - z}{ri}\right) \frac{d\zeta}{\sqrt{(\zeta - t)(\zeta - \bar{t})}}$$

$$2G(u + iv) = \sum_{n=-\infty}^{\infty} \frac{e^{in\theta}}{\pi} \int_{\bar{t}}^{t} [\varkappa\varphi_n(\zeta) + (2z - \zeta)\varphi_n'(\zeta) + \psi_n(\zeta) +$$

$$+ i\Phi_n(\zeta)]\, T_{n+1}\left(\frac{\zeta - z}{ri}\right) \frac{d\zeta}{\sqrt{(\zeta - t)(\zeta - \bar{t})}} \qquad \left(\begin{array}{l} t = z + ir, \\ \bar{t} = z - ir, \end{array} \; T_n\left(\frac{\zeta - z}{ri}\right) = \cos n\beta\right)$$

where T_n is a Chebyshev polynomial of the first kind. The above expressions for the displacement are then used to obtain formulae for the stresses σ_z, σ_r, σ_θ, $\sigma_{r\theta}$, $\sigma_{z\theta}$, σ_{rz}.

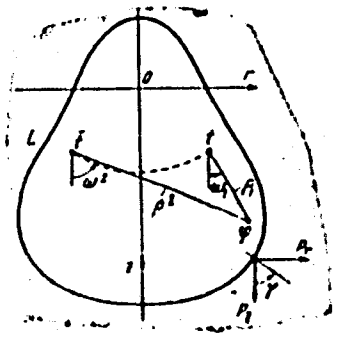

Fig. 1.

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The analytic functions are then represented in terms of Cauchy integrals

$$\varphi_n(\zeta) = \frac{1}{2\pi i}\int_{\gamma} \frac{f_n(\sigma)\,d\sigma}{\sigma-\zeta}, \quad \psi_n(\zeta) = \frac{1}{2\pi i}\int_{\gamma} \frac{g_n(\sigma)\,d\sigma}{\sigma-\zeta}, \quad \Phi_n(\zeta) = \frac{1}{2\pi i}\int_{\gamma} \frac{F_n(\sigma)\,d\sigma}{\sigma-\zeta},$$

For the asymmetric sphere, the analytic complex functions are given by

$$\varphi_n(\zeta) = \sum_{m=0}^{\infty} \alpha_{nm}\zeta^m, \quad \psi_n(\zeta) = \sum_{m=0}^{\infty} \beta_{nm}\zeta^m, \quad \Phi_n(\zeta) = \sum_{m=0}^{\infty} \gamma_{nm}\zeta^m$$

with the following conditions

$$\alpha_{nm} = (-1)^n \alpha_{-n,m}, \quad \beta_{nm} = (-1)^n \beta_{-n,m}, \quad \gamma_{nm} = (-1)^n \gamma_{-n,m}.$$

The resulting expressions for the stresses are shown to be given in Legendre polynomials. Orig. art. has: 24 equations and 1 figure.

SUB CODE: 20/ SUBM DATE: 05Aug63/ ORIG REF: 004

Card 3/3

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

SOLOVYEV, V.I.

Mikhail Vasil'evich Lomonosov; 1711-1765; price of Russian natural science. Radiobiologiia 2 no.1:3-8 Ja '62 (MIRA 18:1)

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

CA

2

The work of A. P. Borodin on the condensation of aldehydes. Yu. I. Salonikov. *Uspekhi Khim.* 18, 736-9(1949). A portrait of Borodin is included. N. Thon

1907

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

CA

Treatment of the problems of utilizing the gases of chemical processes by Russian chemists. Yu. I. Solov'ev. J. Applied Chem. U.S.S.R. 23, 351-3(1950)(Engl. translation).—See C.A. 44, 10271b. B. L. M.

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

CA

18

Solutions, by Russian chemists, of the problems of utilization of gases from chemical processes. Yu. I. Solov'ev. *Zhur. Prikl. Khim.* (J. Applied Chem.) 23, 331-6(1950).—Review with references, dealing with the early expts. of S. P. Vlasov (1789-1821) on utilization of by-product N oxides from the wet recovery of Au and Ag from mineral deposits so as to recover and reclaim much of the HNO_3 used in the original process. G. M. K.

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[illegible], [illegible]. -- "History of the Origin and Development of Physico-chemical Analysis." Sub 13 Feb 52, Inst of General and Inorganic Chemistry imeni N. S. Kurnakov, Acad Sci USSR. (Dissertation for the Degree of Candidate in Chemical Sciences).

SO: Vechernaya Moskva January-December 1952

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125th anniversary of A.M.Butlerov's birth celebrated in the Institute of History of Natural Science and Technology. Vest.AN SSSR 23 no.11:110-111 N '53. (MLRA 6:12)

(Butlerov, Aleksandr Mikhailovich, 1828-1886)

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USHAKOVA, N.N.; SOLOV'YEV, Yu.I.

A.A.Iovskii, outstanding professor of Moscow University. Trudy Inst. ist. est. i tekh. no.2:3-18 '54. (MLRA 8:9)
(Iovskii, Aleksandr Alekseevich, 1796-1857)

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FIGUROVSKIY, N.A.; SOLOV'YEV, Yu.I.

Aleksei Ivanovich Khodnev. Trudy Inst. ist. est. i tekh. no.2: 19-45 '54. (MLRA 8:9)
(Khodnev, Aleksei Ivanovich, 1818-1883)

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[Sketches of the history of physico-chemical analysis] Ocherki istorii fiziko-khimicheskogo analiza. Moskva, Izd-vo Akademii nauk SSSR, 1955. 220 p. (MLRA 8:7)
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G.I.Gess's work in thermochemistry and its influence on Russian thermochemists in the second half of the 19th century. Trudy Inst.ist.est.i tekh. vol.6:214-228 '55. (MLRA 9:5)
(Gess, German Ivanovich, 1802-1850) (Thermochemistry)

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SOLOVYEV, YU. I.

USSR/Physics - Theory of electrolysis

Card 1/1 Pub. 147 - 20/22

Authors : Solovyev, Yu. I.

Title : T. Grotthuss and his theory of electrolysis

Periodical : Zhur. fiz. khim. 29/11, 2097-2104, Nov 1955

Abstract : Celebrating the 150-th anniversary of the first electrolysis theory the author refers to numerous manuscripts and statements of Christian Johann Dietrich von Grotthuss (1785-1822) who introduced this theory. The life history of Grotthuss is presented. Thirty-two references: 16 Germ., 15 Russ. and USSR, and 1 Lithuanian (1805-1955). Illustration; drawings.

Institution : Acad. of Sc., USSR, Inst. of History, Natural Science and Technique, Moscow

Submitted : .....

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SOLOV'YEV, Yu.I.

Letters from Svante Arrhenius to P.I. Val'den. Vop.ist.est. i tekh. no.2:259-263 '56. (MIRA 10:1)
(Arrhenius, Svante August, 1859-1927)
(Val'den, Pavel Ivanovich, 1863-)

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SOLOV'YEV, YU. I.

USSR/General Problems. A-

Abs Jour : Ref Zhur - Khimiya, No 10, 1957, 33387

Author : Solov'yev, Yu.I.
Inst :
Title : Unpublished Letters of A.L. Potylitayn.

Orig Pub : Tr. in-ta istoriyi yestestvozn. i tekhn. AN SSSR, 1956, 12, 365-370.

Abstract : Excerpts from letters of A.L. Potylitsyn (1845-1905) to Ye.Ye. Wagner (from France, 1876-1878 years, Archive AN SSSR) are given.

See also RZhKhim, 1956, 21546.

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The unpublished work of V.A. Kistiakovskii "Planck - Arrhenius hypothesis". Zhur.fiz. khim. 30 no.8:1910-1915 Ag '56.
(Ionization) (Hydration) (MLRA 10:1)

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SOLOV'YEV, Yuriy Ivanovich; KABLUKOVA, Mariya Ivanovna; KOLESNIKOV, Yevgeniy Venediktovich; VOL'FKOVICH, S.I., akademik, otvetstvennyy redaktor; KANTOR, I.A., redaktor izdatel'stva; POLEMITSKAYA, S.N., tekhnicheskiy redaktor

Ivan Alekseevich Kablukov. Moskva, Izd-vo Akad.nauk SSSR, 1957. 208 p. (MLRA 10:10)

(Kablukov, Ivan Alekseevich, 1857-1942)

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FIGUROVSKIY, Nikolay Aleksandrovich; SOLOV'YEV, Yuriy Ivanovich; ARBUZOV, A.Ye., akademik, otvetstvennyy red.; TSUKERMAN, A.M., red. izd-va; SIMKINA, Ye.N., tekhn.red.

[Nikolai Nikolaevich Zinin; a biography] Nikolai Nikolaevich Zinin; biograficheskii ocherk. Moskva, Izd-vo Akad.nauk SSSR, 1957. 215 p. (MIRA 11:2)

(Zinin, Nikolai Nikolaevich, 1812-1880)

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Ivan Alekseevich Kablukov (1857-1942). Yu. I. Solov'ev. Khim. Nauka i Prom. 2, 246-7(1957).--A biographical sketch with portrait. I. Benezwitz

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SOLOVYEV, Yu. I.; USHAKOVA, N.N.

History of the development of the oxygen theory in Russia. Vop. ist. est. i tekh. no.3:74-81 '57. (MIRA 11:1)
(Chemistry--History)

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SOLOV'YEV, Yu.I.

Ivan Alekseevich Kablukov (on his 100th birthday). Vop.ist.est. i tekh. no.5:169-172 '57. (MIRA 11:2)
(Kablukov, Ivan Alekseevich, 1857-1942)

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SOL'V'YEV, Yu. I., Doc Chem Sci —(diss) " ~~The~~ History of the teaching of solutions." Mos, 1958. 25 p. (Acad Sci USSR. Inst of General and Inorganic Chemistry im N.S.Kurnakov). 150 copies List of author's works, ~~with~~ 25 p. (14 titles) (KL, 20-58, 93)

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SOLOV'YEV, Yu.I.

History of the study of nonaqueous solutions. Trudy inst. ist. est. i tekh. 18:104-164 '58. (MIRA 11:10)
(Solution (Chemistry))

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SOLOV'YEV, Yu.I.

Unpublished letters of S.Arrhenius, M. Le Blanc, and G.Bredig to V.A. Kistiakovskii. Trudy inst. ist. est. i tekh. 18:412-417 '58. (MIRA 11:10)

(Arrhenius, Svante 1859-1927) (Le Blanc, Max 1965-1943)
(Bredig, Georg 1868-1944)

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SOLOV'YEV, Yuriy Ivanovich; FIGUROVSKIY, Nikolay Aleksandrovich; SEMENOV, N.N., akademik, otv.red.; ETKHMAN, A.I., red.izd-va; MAKOGONOVA, I.A., tekhn.red.

[Svante Arrhenius; 1859-1959] Svante Arrenius, 1859-1959. Moskva, Izd-vo Akad.nauk SSSR, 1959. 177 p. (MIRA 12:12)
(Arrhenius, Svante August, 1859-1927)

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652320017-4

5(0); 5(4) PHASE I BOOK EXPLOITATION SOV/2106

Solov'yev, Yuriy Ivanovich

Istoriya ucheniya o rastvorakh (History of the Theory of Solutions) Moscow, Izd-vo AN SSSR, 1959. 580 p. 2,500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut istorii yestestvoznaniya i tekhniki.

Resp. Ed.: N.A. Figurovskiy; Ed. of Publishing House: A.I. Eterman; Tech. Ed.: I.F. Kuz'min.

PURPOSE: The book is intended for chemists, physicists and science historians.

COVERAGE: The book covers the development of the theory of solutions from the 18th century to the 1930's. Not only published works but also unpublished materials from the Soviet archives and from the Stockholm archives were used by the author. The theory of ionic hydration, development of the chemical theory of solutions and the

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Van't-Hoff's theory are given a new interpretation. The author thanks A.F. Kapustinskiy, Corresponding Member of the Academy of Sciences, USSR, Professor K.P. Mishchenko, Professor N.A. Figurovskiy, Professor S.A. Pogodin, and Professor M.I. Shakhparonov. He also thanks Dr. A. Holmberg, Library Director of the Swedish Academy of Sciences, for a microfilm of A.Arrhenius' works. There are 1346 references: 845 Soviet, 102 English, 19 French, 366 German, 4 Polish, 9 Italian, and 1 Dutch.

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SOLOV'YEV, Yu.I.

Scientific relations between G.I. Gess and J. Berzelius. Vop. ist. est. i tekh. no.6:166-175 '59. (MIRA 12:6)
(Gess, German Ivanovich, 1802-1850)
(Berzelius, Jöns Jakob, 1779-1848)

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POLAK, L.S.; SOLOV'YEV, Yu.I.

Max Planck as a physical chemist. Trudy Inst. ist. est. i tekh. 22:13-32 '59. (MIRA 12:12)

(Planck, Max, 1858-1947)

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SOLOV'YEV, Yuriy Ivanovich; ZVYAGINTSEV, Orest Yevgen'yevich; GRIGOR'YEV, A.T., prof., otv.red.; BANKVITSER, A.L., red.izd-va; MAKUNI, Ye.V., tekhn.red.

[Nikolai Semenovich Kurnakov; his life and works] Nikolai Semenovich Kurnakov; zhizn' i deiatel'nost'. Moskva, Izd-vo Akad. nauk SSSR, 1960. 205 p. (MIRA 13:4)
(Kurnakov, Nikolai Semenovich, 1860-1941)

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N.S.Kurnakov; on the 100th anniversary of his birth. Zhur. strukt. khim. 1 no.4:395-398 N-D '60. (MIRA 14:2)
(Kurnakov, Nikolai Semenovich, 1860-1944)

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MAKAREMYA, A.A.; SOLOV'YEV, Yu.I.

From the history of the development of physical chemistry at the University of St. Petersburg (on the fiftieth anniversary of the foundation of the physical chemistry laboratory [with summary in English]. Vest. LGU 15 no.22:82-88 '60. (MIRA 13:11)

(Leningrad--Chemistry, Physical and theoretical)

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History of the chemical theory of solutions. Trudy Inst.ist.est.i tekh.30:29-47 '60. (MIRA 13:8)
(Solution (Chemistry))

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(Solution (Chemistry))

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(Gorbov, Aleksandr Ivanovich, 1859-1939)

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From the history of physical chemistry (Hornet and his work). Trudy Inst.ist.est.i tekh. 35:3-38 '61. (MIRA 14:9)
(Chemistry, Physical and theoretical)

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