"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

~~CHIKIN, L.A.~~ CHIKIN, L.A.

SUBJECT USSR/MATHEMATICS/Theory of functions CARD 1/2 PG - 607
AUTHOR ČIKIN L.A.
TITLE On the stability of the boundary value problem of Riemann.
PERIODICAL Doklady Akad.Nauk 111, 44-46 (1956)
reviewed 2/1957

In the complex plane let be given a contour L_o and on it the functions $G(t)$ and $g(t)$. A piecewise analytic function $\phi(z)$ can be determined either from the boundary condition

$$\phi^+(t) = G(t)\,\phi^-(t)g(t) \text{ on } L_o \qquad \text{(inhomogeneous case)}$$

or from the boundary condition

$$\phi^+(t) = G(t)\,\phi^-(t) \text{ on } L_o \qquad \text{(homogeneous case).}$$

The author assumes that L_o is an ordinary, smooth, closed curve which devides the plane into the inner part S_o^+ and the outer part S_o^-, and investigates the stability of the homogeneous case at deformations of L_o. Here a deformation of L_o means a contour sequence $\{L_n\}$ which converges to L_o (i.e. that the sequence of the surfaces S_n^+ which are limited by the L_n converge to S_o^+ as a kernel). Further it is assumed that all contours of the deformations $\{L_n\}$

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Doklady Akad.Nauk 111, 44-46 (1956) CARD 2/2 PG - 607

independent of n satisfy the conditions of Warchavski (Math.Z. 35, 322, 447, (1932)). The deformation $\{\lambda_n\}$ is called an inner one if $\lambda_n \in S_0^+$ and an outer one if $\Lambda_n \in S_0^-$. Then the boundary value problem is considered for every inner contour λ_n and every outer contour Λ_n:

$$\psi_n^+(t) = G(t)\psi_n^-(t) \quad \text{on } \lambda_n \qquad n=1,2,\ldots$$

$$\Psi_n^+(t) = G(t)\Psi_n^-(t) \quad \text{on } \Lambda_n \qquad n=1,2,\ldots .$$

The homogeneous problem is called stable if the sequences $\{\psi_n(z)\}$ and $\{\Psi_n(z)\}$ in S_0^+ and S_0^- converge uniformly to the common limit function which satisfies the homogeneous boundary value condition and which does not depend on the choice of the deformations $\{\lambda_n\}$ and $\{\Lambda_n\}$ and of the kind of continuation of G(t) in the plane. It is stated that under the given assumptions on L the homogeneous problem is stable in the above sense if G(t) vanishes nowhere and satisfies the Hölder condition.

INSTITUTION: Molotov University, Rostow-Don.

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S/044/60/000/009/008/021
C111/C222

16.3000

AUTHOR: Chikin, L.A.

TITLE: The Stability of the Riemannian Boundary Value Problem

PERIODICAL: Referativnyy zhurnal. Matematika, 1960, No.9, p.60, Abstract No.10222. Uch.zap.Fiz.-matem.fak.Rostovsk.-n/D.un-t, 1959, Vol.43, No.6, pp.119-126

TEXT: In the plane of the complex variable z let be given a simple closed curve L which divides the plane into the inner region S^+ and the outer region S^-. The homogeneous Riemannian boundary value problem consists in the determination of a piecewise analytic function $\Phi(z)$ the limit values of which satisfy the condition $\Phi^+(t) = G(t)\Phi^-(t)$ on the curve L, where G(t) is a function given on L. The author investigates the stability of this problem with respect to the variations of the curve L. The curve L is approximated by the sequence of curves $\{L_n\}$ which converges to L, where the sequence of the regions $\{S_n^+\}$ bounded by these curves converges to S^+ as a kernel. Here, according to the author, only such deformations $\{L_n\}$ of the considered smooth curve L are admissible which consist of curves L_n which for all n satisfy the following conditions of Warschawski (Math.

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C111/C222

The Stability of the Riemannian Boundary Value Problem

Z., 1932, 35): 1) The ratio of the length a of every secant of L_n to the length σ of the least arc corresponding to this secant is $\geq c$, where $c > 0$ is a constant. 2) L_n has a continuously rotating tangent, where the angle $\theta_n(S)$ formed by the tangent and the axis OX satisfies the Hölder condition: $|\theta_n(S'') - \theta_n(S')| \leq A|S'' - S'|^{\alpha}$, where A and α are constants, $0 < \alpha < 1$.

The author uses the result of Warschawski on the convergence of a sequence of conformal mappings for obtaining the following theorem. 1. Let L be a smooth curve and let G(t) satisfy the Hölder condition and be different from zero on L. Let G(t) be continued in the whole complex z-plane so that the obtained function G(z) inside S^+ and S^- (i.e. on every closed subset of these regions) satisfies the Hölder condition and on L it goes over continuously in G(t). Now any admissible deformation $\{L_n\}$ of the curve L is considered; on the curves L_n the homogeneous Riemannian problem with the boundary coefficient G(z) is

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C111/C222

The Stability of the Riemannian Boundary Value Problem

solved. Let $X_n(z)$ be the canonical functions of the solution of the Riemannian problem for the curve L_n. Then: Inside the regions S^+ and S^- the $X_n(z)$ converge uniformly to the canonical function of the homogeneous Riemannian problem for the curve L.
Finally the stability of the inhomogeneous Riemannian problem is treated briefly.

[Abstracter's note: The above text is a full translation of the original Soviet abstract.]

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

CHIKIN, L. A.

Fedor Dmitrievich Gakhov; on his 50th birthday. Uch. zap. RGU 43 No.6:3-6 '59. (MIRA 13:10)

(Gakhov, Fedor Dmitrievich, 1906-)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

L 08989-67

ACC NR: AR6027481 SOURCE CODE: UR/0044/66/000/005/V046/V046

AUTHOR: Chikin, L. A. 28

TITLE: A universal assembly program for the "Minsk 12" computer and its utilization in the automatization of certain programming processes

SOURCE: Ref. zh. Matematika, Abs. 5V326

REF SOURCE: Sb. Vopr. vychisl. matem. i vychisl. tekhn. Rostov-na-Donu, Rostovsk. un-t, 1965, 89-96

TOPIC TAGS: computer programming, computer program, automatic computer programming

ABSTRACT: A universal assembly program for the "Minsk-12" computer is described. This program contains a number of capabilities in addition to the usual assembly program functions. These capabilities make it possible to introduce modifications into the programs undergoing execution by deleting or including individual codes and groups, by rearranging the program blocks, and by shifting the whole program or its parts in the memory. The universal assembly program makes it possible to process a long program by parts or to process a similar program repeatedly. The form of information required for the universal assembly program operation is described. [Translation of abstract] I. Zusman

SUB CODE: 09

Card 1/1 net UDC: 518.5:681.142

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

GOLDOVT, Yu.D.; URVANTSEV, I.F.; CHIKIN, O.I.; ZAYTSEVA, T., red. izd-va; VOLOKHANOVICH, I., tekhn. red.

[Medicinal preparations; brief annotations] Lekarstvennye preparaty; kratkie annotatsii. Izd.2., perer. i dop. Pod red.I.F.Urvantseva. Minsk, Izd-vo Akad. nauk BSSR, 1961. 442 p. (MIRA 14:11)

1. White Russia. Ministerstvo zdravookhraneniia.
(PHARMACOPOEIAS)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

CHIKIN, Lev Aleksandrovich; LITVER, Ye.L., dots., otv. red.; KOVALENKO, Yu.V., red.; PAVLICHENKO, M.I., tekhn. red.

[Programming for electronic digital computers] Programmirovanie dlia elektronnykh tsifrovykh vychislitel'nykh mashin; spravochno-metodicheskoe posobie. Rostov-na-Donu, Izd-vo Rostovskogo univ., 1963. 64 p. (MIRA 16:11)

(Programming (Electronic computers))

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

BELYAKOV, V.D.; KIROV, S.K.; GORELIKOV, I.A.; DEGTYAREV, A.A.; CHIKIN, M.N.

Dependence of the immunological effectiveness of typhoid and paratyphoid complete antigens on their quality and dosage. Zhur. mikrobiol., epid. i immun. 43 no. 1:37-41 Ja '66 (MIRA 19:1)

1. Submitted April 5, 1965.

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

GOLDOVT, Yu.D.; URVANTSEV, I.F.; CHIKIN, O.I.; ZAYTSEVA, T., red. izd-va; VOLOKHANOVICH, I., tekhn. red.

[Drugs] Lekarstvennye preparaty. Izd.3., perer. i dop. Pod red. I.F.Urvantseva. Minsk, Izd-vo AN BSSR, 1963. 548 p. (MIRA 17:1)

1. White Russia. Ministerstvo zdravookhraneniya.

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

ABROSIMOV, A.T.; ZATSEPIN, V.I.; SOLOV'YEVA, V.I.; KRISTIANSEN, G.B.; CHIKIN, P.S.

Structure of extensive air showers at sea level. Izv.AN SSSR. Ser. fiz.19 no.6:677-680 N-D '55. (MLRA 9:4)

1.Fizicheskiy institut imeni P.N.Lebedeva Akademii nauk SSSR i Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.
(Cosmic rays) (Nuclear physics)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

AUTHOR: CHIKIN,P.S. 56-7-9/66

TITLE: Inconsistency between the Theoretical and Experimental δ-Shower Frequencies at High Energies. (O nesootvetstvii mezhdu teoretioheskoy chastotoy δ-livney i eksperimentom pri vysokikh energiyakh, Russian)

PERIODICAL: Zhurnal Eksperim. i Teoret.Fiziki, 1957, Vol 33, Nr 7, pp 56-58 (U.S.S.R.)

ABSTRACT: A comparison between the experimentally found frequencies of δ-electrons with those computed theoretically reveals a marked discrepancy (of up to 50%). This is all the more the case if the energy is $\geqslant 5.10^8$ eV. Further experimental data would have to be available and theoretical investigations would have to be carried out in order to be able to clear up this discrepancy. (With 2 tables and 3 Slavic References).

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

CHIKIN, P. S.

AUTHORS: Ivanovskaya, I. A., Sarycheva, L. I., Chikin, P. S. 56-1-8/36

TITLE: Cloud Chamber Investigation of the Nuclear-Active Component of Wide Atmospheric Showers (Izucheniye yaderno-aktivnoy komponenty shirokikh atmosfernykh livney pri pomoshchi kamery Vil'sona).

PERIODICAL: Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki, 1958, Vol. 34, Nr 1, pp. 45-52 (USSR).

ABSTRACT: By means of a cloud chamber with seven lead plates the authors investigated the nuclear interactions which are caused by the particles of wide atmospheric showers. In this context a particle is defined as nuclear-active if it is creates in the lead plates of the cloud chamber a shower satisfying certain conditions specified here. At the beginning the spatial distribution of the nuclear-active particles is investigated. The authors determined the current density $\rho_{\text{nuclear-active}}(r)$ of the nuclear-active particles in a wide nuclear-active shower in different center distances by using a well-known formula. A diagram shows the results for wide showers with an average number of 2.10^5 particles. As a result of the great

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statistical errors it is impossible to describe the exact form of the spatial distribution of the nuclear-active particles. But the distribution received here is not contradictory to a distribution of the typ r^{-n}, with the value of n close to 1. Two main groups of nuclear electron showers can be distinguished: showers with narrow electron cascades, and those with no electron cascades of high energy. A characteristic feature of the first group of showers is the narrow angular distribution of the particles and the high energy of the neutral pions which form the beginning of the electron-photon cascades. The showers of the second group have a wide angular distribution of the particles and a comparatively low energy of the neutral pions. Besides these two main groups of nuclear electron showers two small groups were found. The next passage deals with the determination of the energy of nuclear-active particles by means of the different methods suited to each of these groups. About one half of the nuclear-active particles are charged, the rest is neutral. He can be concluded from this that the nuclear-active component of wide showers at sea level with the energy of

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Cloud Chamber Investigation of the Nuclear-Active Component of Wide Atmospheric Showers. 56-1-8/56

10^9-10^{10} eV chiefly consists of nucleons. There are 6 figures, 4 tables, and 8 references, 5 of which are Slavic.

ASSOCIATION: Moscow State University . Physical Institute imeni P.N. Lebedev of the AN USSR (Moskovskiy gosudarstvennyy universitet. Fizicheskiy institut imeni P.N. Lebedeva Akademii nauk SSSR).

SUBMITTED: July 25, 1957

AVAILABLE: Library of Congress

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APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

BLINOV, P.I.; ZAKATOV, L.P.; PLAKHOV, A.G.; CHIKIN, R.V.; SHAPKIN, V.V.

Effect of the mirror ratio on the heating of a plasma by an electron beam in a magnetic trap. Pis'. v red. Zhur. eksper. i teoret. fiz. 2 no.9:426-430 N '65. (MIRA 18:12)

1. Submitted September 9, 1965.

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

AKHMATOV, A.P.; BLINOV, P.I.; BOLOTIN, V.F.; BORODIN, A.V.; GAVRIN, P.P.; ZAVOYSKIY, Ye.K.; KOVAN, I.A.; OGANOV, M.N.; PATRUSHEV, B.I.; PISKAREV, Ye.V.; RUSANOV, V.D.; SMOLKIN, G.Ye.; STRIGANOV, A.R.; FRANK-KAMENETSKIY, D.A.; CHEREMNYKH, P.A.; CHIKIN, R.V.

[Magnetoacoustic resonance in a plasma] Magnito-zvukovoi rezonans v plazme. Moskva, In-t atomnoi energii, 1960. 23 p. (MIRA 17:2)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

L 21556-66 EWT(1)/EWG(m)/EPF(n)-2 IJP(c) AT

ACC NR: AP6008752 SOURCE CODE: UR/0386/66/003/006/0255/0258

AUTHOR: Blinov, P. I.; Zakatov, L. P.; Plakhov, A. G.; Chikin, R. V.; Shapkin, V. V.

ORG: Institute of Atomic Energy im. I. V. Kurchatov (Institut atomnoy energii)

TITLE: Influence of magnetic-field configuration on the heating and containment of a plasma in a mirror trap (Probkotron)

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 3, no. 6, 1966, 255-258

TOPIC TAGS: magnetic mirror, plasma containment, plasma heating, magnetic trap, plasma radiation, ~~Probkotron~~ electron beam

ABSTRACT: This is a continuation of earlier experiments on heating of a plasma by an electron beam in a mirror trap (ZhETF Pis'ma v. 2, 426, 1965), aimed at showing that heating and containment of the plasma depend strongly on the distribution of the magnetic field along the trap axis. The experiment was carried out with the earlier installation, which made it possible to operate with two different configurations of the magnetic field (Fig. 1). The mirror ratio and the field in the center remained unchanged in both cases. The plasma initial density was 10^{12} cm^{-3}. A pulsed beam of electrons with current strength 1 a, energy 10 kv, and duration 500 μsec was injected into this plasma. The heating and decay of the plasma were investigated by measuring the time variation of the energy content (nT) and of the density n. On going over from a field configuration with local mirrors (a) to a configuration with extended mirrors (b) the maximum value of nT increases by a factor 1.5. The value of nT of the

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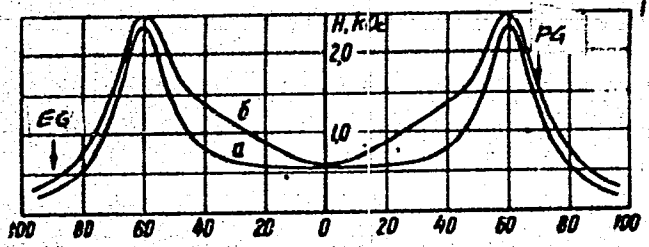

Fig. 1. Distribution of the magnetic field of the trap. The arrows indicate the locations of the guns: electron (EG) and plasma (PG).

hot electrons was three times larger in the field configuration with extended mirrors than in the configuration with the local mirrors, and the decay time was 20 and 2 μsec in the two cases, respectively. The time variation of the electron density was similar to that of nT. The prolonged containment of hot electrons in a trap with extended mirrors was evidenced also by the x-ray bremsstrahlung, which is observed for 100 msec. It is therefore concluded that the heating and containment of the plasma by a pulsed electron beam increase on going from a mirror trap with local mirrors to a mirror trap with extended mirrors. This may be due not only to the more effective transfer of energy from the beam to the plasma, but also to improvement in the containment of the hot electrons in the field with extended mirrors. Authors are sincerely grateful to A. V. Gordayev and G. V. Sholin for useful discussion, and also to G. A. Kudintseva and G. M. Kuznetsova for furnishing the cathodes. Orig. art. has: 3 figures.

SUB CODE: 20/ SUBM DATE: 06 Feb66/ ORIG REF: 001

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

L 21211-66 EWT(1) GW

ACC NR: AP6011945 SOURCE CODE: UR/0213/65/005/006/1038/1042

AUTHOR: Chindonova, Yu. G.; Shulepov, V. A.

ORG: Acoustics Institute AN SSSR(Akusticheskiy institut AN SSSR)

TITLE: Sound-scattering layers as indicators of internal waves in the ocean

SOURCE: Okeanologiya, v. 5, no. 6, 1965, 1038-1042

TOPIC TAGS: acoustic echo, ocean acoustics, biologic ecology, acoustic scattering, oceanography, sonar, oceanographic expedition

ABSTRACT: During the voyages of the "Petr Lebedev" in the winter-spring seasons of 1962-1964 the depth of the ocean floor was measured by an echo sounder; it also was possible to obtain records of sound-scattering layers. This paper discusses the collected data on these layers to determine their relationship to internal waves. The observations were made in the open ocean, and therefore the results differ from earlier studies made in coastal and shallow waters; the variations of the sound-scattering layers have greater amplitudes and the layers are at greater depths. It is shown that data on the distribution of these layers can yield important information on the amplitudes of the internal waves and the depths to which they penetrate. In addition, the results give additional information on the ecology of pelagic animals populating the ocean. A table gives data on the location, time, amplitudes, wave lengths and depths of sound-scattering layers whose distribution is related to internal waves. Orig. art. has: 2 figures and 1 table. [JPRS]

SUB CODE: 08, 06, 20, 17 / SUBM DATE: 19Jul65 / ORIG REF: 003 / OTH REF: 005

Card 1/1 FW UDC: 577.472(26)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

L 11950-66 EWT(1)/ETC(F)/EPF(n)-2/EWG(m) IJP(c) AT
ACC NR: AP6000740 SOURCE CODE: UR/0386/65/002/009/0426/0430

AUTHOR: Blinov, P. I.; Zakatov, L. P.; Plakhov, A. G.; Chikin, R. V.; Shapkin, V. V.

ORG: none

TITLE: Influence of the mirror ratio on plasma heating by an electron beam in a "probkotron"

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 2, no. 9, 1965, 426-430

TOPIC TAGS: magnetic mirror machine, plasma interaction, plasma heating, ionized plasma, plasma electron temperature, electron gun, plasma injection

ABSTRACT: The authors investigated the interaction between an electron beam and a ready-made highly ionized plasma. The apparatus (Fig. 1) comprises a trap with magnetic mirrors. The electron gun is located on the trap axis behind the mirrors on one end, and the plasma injector is located on the other end. The electron gun operates in a pulsed mode. The square-wave voltage pulse is of 450 μsec duration and 9 kv amplitude, the pulse current being 5 a. The plasma and the electron beam are injected into the trap simultaneously. The residual pressure in the chamber is 10^{-6} mm Hg. The electron density was measured with a microwave interferometer (λ = 3 cm). The quantity nT (T = plasma temperature) was determined from the diamagnetic effect. The bremsstrahlung was registered by photomultiplier with NaI(Tl) crystal. When the plasma and the electron beam are simultaneously injected in the plasma, the concentration does not rise, but the energy released by the plasma increases strongly. The presence of

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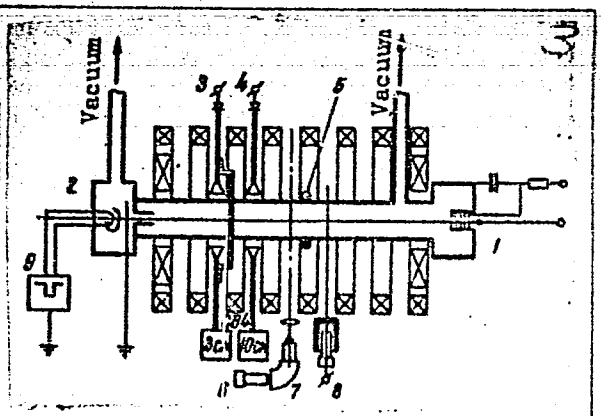

Fig. 1. Diagram of setup. 1 - Plasma injector, 2 - electron gun, 3, 4 - microwave source, 5 - diamagnetic probe, 6, 7 - electron-optical and spectral apparatus, 8 - bremsstrahlung recorder, 9 - low-voltage pulsed source.

"hot" electrons in the trap is evidenced by the prolonged, intense, and hard bremsstrahlung. The efficiency with which the plasma electrons are heated by the beam depends on the mirror ratio. As the mirror ratio is varied from 1.8 to 4, the plasma pressure increases tenfold. The plasma lifetime in the trap increases. A group of "hot" electrons, with a prolonged confinement time and with density close to 10^{10} cm^{-3} appears. Accordingly, the energy lost by the electron beam to plasma heating increases from fractions of one percent to 3.5%, and during the initial stage of the heating (the first 90 μsec) the loss reaches 10%. The influence of the mirror ratio on the heating of plasma with direct current was observed also in experiments of M. V.

21, 44, 55

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L 11950-66
ACC NR: AP6000740

3.

Babykin et al. Authors are grateful to Ye. K. Zavoiskiy for continuous interest and valuable advice. Orig. art. has: 3 figures.

SUB CODE: 20/ SUBM DATE: 09Sep65/ ORIG REF: 005/ OTH REF: 002

Card 3/3

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

CHIKIN, S. Ya. (Moskva)

New program of the party on the public health and physical well-being of man. Zdrav. Ros. Feder. 6 no.5:3-7 My '62.
(MIRA 15:7)

(PUBLIC HEALTH)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

CHIKIN, S.Ya.; UDINTSOV, Ye.I. (Moskva)

Let's give more attention to attracting the public to health protection for the nation. Zdrav.Ros.Feder. 6 no.9:6-10 S '62. (MIRA 15:10)

(PUBLIC HEALTH)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

CHIKIN, S.Ya. (Moskva)

Our main task is the realization of party and government decisions on public health development. Sov.med. 26 no.1:3-5 Ja '63. (MIRA 16:4)

(PUBLIC HEALTH)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

CHIKIN, S.Ya.

Elevating the role of medical workers in the control of religious prejudices. Zdrav.Ros.Feder. 7 no.2:3-6 F '63. (MIRA 16:4)

1. Zamestitel' ministra zdravookhraneniya RSFSR.
(ATHEISM)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

CHIKIN, S.Ya. (Moskva)

Health problems of the population in caputalistic countries and their social basis. Zdrav. Ros.Feder. 7 no.5:24-30 My'63 (MIRA 16:6)

(LABOR AND [redacted] --MEDICAL CARE)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

CHIKIN, S.Ya. (Moskva)

June Plenum of the Central Committee of the CPSU and the role of medical workers in the implementation of tis decisions. Zdrav. Ros. Feder. 7 no.8:3-6 Ag'63. (MIRA 16:10)
(MEDICAL PERSONNEL)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

CHIKIN, [redacted] Ya. (Moskva)

November Plenum of the Central Committee of the KPSU and the goals of public health institutions. Med. sestra 22, no.4:3-7 Ap '62. (MIRA 16:7)

1. Zamestitel' ministra zdravookhraneniya; iz Ministerstva zdravookhraneniya RSFSR.

(PUBLIC HEALTH)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

CHIKIN, S.Ya. (Moskva)

History of theories on the physical development and physical education of man. Sov.zdrav. 22 no.4:12-18 '63. (MIRA 16:4)
(PHYSICAL EDUCATION AND TRAINING)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

CHIKIN, S. Ya. (Moskva)

Automation of industry and deterioration of the health of workers in capitalistic countries. Sov. med. 26 no.11: 98-103 N'62 (MIRA 17:3)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

CHIKIN, S.Ya.

Continuous improvement of the medical service for the population. Sovet. zdravookhr. 12 no. 1:3-9 '63. (MIRA 17:2)

1. Zamestitel' ministra zdravookhraneniya RSFSR.

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

CHIKIN, S.Ya. (Moskva)

What is said in the second review of the World Health Organization.
Sov. med. 27 no.6:135-140 Je '64.

(MIRA 18:1)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

CHIKIN, S.Ya.; CHEKNEV, B.M. (Moskva)

Care of the Soviet state for the nationalities of the Far North.
Sov. med. 28 no.1:137-141 Ja '65. (MIRA 18:5)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

CHIKIN, S.Ya. (Moskva)

M.V. Lomonosov as the founder of modern natural science. Sov. med. 28 no.6:151-153 Je '65. (MIRA 18:8)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

CHIKIN, S.Ya. (Moskva)

Existentialism as a philosophical movement alien to the interests of people's health. Sov.med. 28 no.12:119-120 D '65.
(MIRA 18:12)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

OGANOV, G.; CHIKIN, V.; GRADOV, R., red.; SUROVTSEVA, S., tekhn. red.

[How do we get to Mars?] Na Mars - s chem? Moskva, Izd-vo "Pravda," 1963. 79 p. (Biblioteka "Komsomol'skoi pravdy," no.12)
(MIRA 17:2)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6"

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SOV/124-57-5-5175

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 5, p 11 (USSR)

AUTHOR: Chikin, V. A.

TITLE: The Stability of the Permanent Semisymmetrical Axes of a Ponderable Solid Body Having a Fixed Point (Ustoychivost' permanentnykh polusimmetrichnykh osey tyazhelogo tverdogo tela, imeyushchego nepodvizhnuyu tochku)

PERIODICAL: Tr. Ryazansk. radiotekhn. in-ta, 1956, Vol I, pp 222-232

ABSTRACT: The author makes use of Grammel's indispensable conditions for the stability of the permanent rotations of a ponderable solid body having one fixed point for the purpose of investigating the stability of such rotations in the specific case when the center of gravity of the body is located on a principal axis of inertia. For the general case the sufficient conditions of stability of permanent rotations of a ponderable solid body were previously given by V. V. Rumyantsev (RZhMekh, 1956, abstract 8040).

G. K. Pozharitskiy

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

29643
S/146/61/004/004/007/015
D201/D306

13.2520

AUTHOR: Chikin, V.A.

TITLE: Center of percussion of heavy gyroscopes

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Priborostroyeniye, v. 4, no. 4, 1961, 48 - 52

TEXT: The author introduces the idea of percussion center into the theory of gyroscopes. The gyro is considered to be a solid body revolving without friction about the fixed point, as the main vector and the main moment of the system of momentum. The kinetic center of the gyro (denoted by A_1) is defined as the point of intersection of the central axis of the system of vectors of momenta of separate particles with the plane α_ω passing through the vector of the instantaneous angular velocity ω and the center of gravity of the gyro. A special class of gyroscopes is considered which is found to comprise five different cases listed below. The center of rotational forces of inertial of the gyro (denoted by A_2) is defined as the point of intersection of the central axis of the system of vec-

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Center of percussion of heavy ...

tors of rotational intertial forces, with the plane passing through the vector of angular acceleration and the center of gravity. It is shown that for the class of gyros considered, the point A_2 is the percussion center of the gyro. The conditions are then analyzed for 5 types of gyros under which the impact reaction pulse R does not exist, i.e. is not transmitted to the suspension point: 1) The Lagrange gyroscopic movement: Equations are obtained which show that $\bar{R} = 0$ if the impact pulse is perpendicular to the symmetry of the gyro and applied to the center of rotating inertia-forces. The results obtained are recommended for the design of supports in gyroscopes with the center of gravity displaced along the symmetry axis. 2) Gyro with full kinetic symmetry. The results of (1) are applicable in full. 3) The Steklov-Bobylev gyro (Ref. 1: Gostekhizdat, 1946, str. 638, 636, 581, 576). In this case there is a locus of percussion center along a straight parallel line passing through the center of rotating forces of inertia. 4) Hess gyro. This is again case 1, except that the impact pulse must now lie in the plane passing through A_2 in parallel to the cross-section of the ellipsoid of gyration. 5) Permanent rotation about vertical axis, In

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

Center of percussion of heavy ...

this case the percussion center does not exist. This article was recommended by the Orgkomitet III mezhvuzovskoy konferentsii po problemam sovremennoy giroskopicheskoy tekhniki (Organizational Committee of the III Interuniversity Conference on Problems of Modern Gyroscopic Techniques). There are 2 references: 1 Soviet-bloc and 1 non-Soviet-bloc.

ASSOCIATION: Ryazanskiy radiotekhnicheskiy institut (Ryazan Radiotechnical Institute)

SUBMITTED: December 28, 1960

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

S/549/61/000/104/001/018
D237/D304

AUTHORS: Tikhmenev, S.S., Tronina, V.P., Chikin, V.A., Knyazev, G. N., Gulyayev, M.P., Zakharov, Yu.Ye., Chikina, I.S., Lyamin, V.I., Bocharov, V.K., Shigin, Ye.K., and Krotov, V.F.

TITLE: Scientific, pedagogical and general activities of Professor V.V. Dobronravov

SOURCE: Moscow, Vyssheye tekhnicheskoye uchilishche [Trudy], no. 104, 1961. Mekhanika, 7 - 18

TEXT: On the occasion of his 60th birthday and the 35th anniversary of the scientific and pedagogical activity of Professor, Doctor of Physical and Mathematical Sciences, Vladimir Vasilyevich Dobronravov who is at present Professor of Theoretical Mechanics at MVTU im. N.E. Baumana (MVTU im. N.E. Bauman), eleven of his students present this appreciation. V.V. Dobronravov was born on March 17th, 1901. In 1924 he obtained his degree in mathematics at the Saratovskiy Gosudarstvennyy universitet im. N.G. Chernyshevskiy (Saratov State University im. N.G. Chernyshevskiy). In 1927 he accepted the

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Scientific, pedagogical and ...

post of Assistant to the Professor of Physics at the Astrakhan State Medical Institute, where in subsequent years he published a paper in neuro-biophysics. During 1929-31, he was Professor of Mathematics at the Saratov Agricultural Institute and lectured at Saratov University. From 1931 he worked in a number of higher educational establishments in Moscow and was associated with Moscow University from 1931 to 1952. In 1946 he was awarded a doctorate at Moscow State University and in 1951 he was elected to the Department of Theoretical Mechanics at MVTU im. N.E. Bauman, where in subsequent years, under his guidance, courses in specialized branches such as stability of motion, gyroscopy, oscillation, variational method etc. were developed. During his career the main contributions made were in the field of mechanics of non-holonomic systems. After 1950 he published papers on kinetics of motion of rigid body (Trudy MIKhM, no. 2, (10), 1950), stability of linear systems of diff. equations with constant coefficients in (Avtomatika i Telemekhanika, v. 17, no. 3, 1956) etc. In the 1950's he also became interested in astronautics. He has been a member of the Moscow Mathematical Society since 1944, and is an active member of the Methodological Commis-

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sion on the Theoretical Mechanics of the Ministry of the Secondary and Higher Education of USSR. At present he is engaged in preparing a monograph on non-holonomic systems.

ASSOCIATION: Moskovskoye ordena Lenina i ordena trudovogo krasnogo znameni vyssheye tekhnicheskoye uchilishche im. Baumana (Moscow Order of Lenin and Order of the Red Banner of Labor Higher Technical School im. Bauman)

Card 3/3

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

24.4100

S/549/61/000/104/011/018
D237/D304

AUTHOR: Chikin, V.A.

TITLE: Classification of the motions of a heavy rigid body having a fixed point

SOURCE: Moscow. Vysshiye tekhnicheskoye uchilishche. [Trudy], no. 104, 1961. Mekhanika, 101 - 108

TEXT: The author continues the work of A. Signorini and derives a number of properties of various motions of a rigid body about a stationary point using vector notation. Four theorems are stated and proved and all known types of motion are grouped in three classes depending on whether the vectorial system of motion reduces to a single resultant vector, a couple or a screw. There are 1 figure and 4 references: 2 Soviet-bloc and 2 non-Soviet-bloc.

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24.4100 13.2521

S/549/61/000/104/012/018
D237/D304

AUTHOR: Chikin, V.A.

TITLE: Geometrical properties of 'anti-poles' during the motion of a heavy asymmetric body about a fixed point in the Grioli case

SOURCE: Moscow. Vyssheye tekhnicheskoye uchilishche. [Trudy], no. 104, 1961. Mekhanika, 109 - 114

TEXT: The author studies the regular precession of a heavy asymmetrical body first described by G. Grioli. Starting with the solution of Euler-Poisson equations, the author defines and describes the behavior of two anti-poles using the results of the preceding paper, and formulates the following theorem: If a heavy rigid body moves about a stationary point O, and circular cross-sections of its central ellipsoid of inertia are not orthogonal with respect to each other, and if the body satisfies Grioli conditions, then the moving axoid given by

$$x^2 + y^2 - z^2 = 0 \qquad (4)$$

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D237/D304

Geometrical properties of ...

where x, y, z are cartesian coordinates with the origin at O and the corresponding cone

$$x_1^2 + y_1^2 - \left[z_1 - \frac{1}{Mz_G}(A - C)\right]^2 = 0 \qquad (10)$$

(where A and C are axial moments of inertia, M - mass, z_G - coordinate of the center of gravity) which contains the first anti-pole, coincide. There are 4 references: 2 Soviet-bloc and 2 non-Soviet-bloc.

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

S/145/62/000/002/002/009
D259/D308

AUTHOR: Chikin, V.A., Senior Lecturer

TITLE: The anti-pole of a straight line with respect to an ellipse and its use in investigating problems of motion of a heavy solid body around a fixed point

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Mashinostroyeniye. Vestnik, no. 2, 1962, 14 - 22

TEXT: Signorini's concept of the reciprocal pole is verified from first principles and applied to a system of points having a center of gravity G and an instantaneous axis of rotation a_o, which does not pass through G. Parameters are established for the relative positions of a_o, G, and a point A which is the reciprocal pole of a_o and the central ellipse of inertia of the system. These parameters are used to investigate a solid body having a fixed point O on its instantaneous axis of rotation. The system of displacement vectors and kinetic moments resolves into the general form of a spiral, the axis of which passes through the reciprocal pole of a_o relative to the central ellipse of inertia of the body. In the particular case

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when the instantaneous axis a_o is also the permanent axis the vector system has a resultant Q applied at the reciprocal pole A, perpendicular to the plane of the central ellipse of inertia. When a_o passes through the center of gravity G, the vector system becomes a couple applied in a plane which passes through G perpendicular to a_o. The author concludes at all known cases of motion of a solid body around a static point can be divided into three classes in which the displacement vectors can be resolved into (1) a resultant, (2) a couple or (3) a spiral. Cases of Lagrange complete kinetic symmetry, permanent rotation of Mlodziyevskiy-Staude, Hess and of Steklov-Bobylev belong to the 1st class, Euler's case to the 2nd class, and all others to the 3rd class. There are 2 figures.

ASSOCIATION: Ryazanskiy radiotekhnicheskiy institut (Institute of Radio Engineering, Ryazan')

SUBMITTED: March 18, 1961

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

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24.4100

S/145/62/000/006/001/005
D262/D308

AUTHOR: Chikin, V.A. Senior Lecturer

TITLE: Geometrical properties of reciprocal poles at the movement of a heavy asymmetrical body around a fixed point, in the Hess case

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Mashinostroyeniye, no. 6, 1962, 55-63

TEXT: Using the concept of the reciprocal pole of a straight line with respect to an ellipse, the author simplifies Zhupovskiy's geometrical interpretation of the Hess (Gess) case and obtains some new results. The following theorems are established: 1) In the Hess case, the heavy solid body moves about a fixed point in such a way that the vectors of instantaneous angular velocity and acceleration belong to the plane of permanent axes of rotation. Their reciprocal poles coincide with a point situated on a perpendicular to the circular section of gyration ellipsoid together with the center of gravity. 2) The kinetic moment and the moment of weight with

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Geometrical properties ...

respect to the fixed point O, the force function and the kinetic energy are proportional respectively to the same quantities of the reciprocal pole, assuming that all the mass is concentrated in the latter. 3) The motion can be considered as consisting of the motion of reciprocal pole as a spherical pendulum having a mass equal to that of the body and a rotation about the line passing through O, the center of gravity and the reciprocal pole of the instantaneous axis of rotation with respect to the central ellipse of inertia A_1. A formula is given for the angular velocity of this rotation. 4) If O is transferred to A_1, the motion of the body will not be changed if initial conditions are the same. Several relations are deduced from Theorem 1.

ASSOCIATION: Ryazanskiy radiotekhnicheskiy institut (Ryazan' Radiotechnical Institute)

SUBMITTED: March 18, 1961

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

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B104/B102

13.2540

AUTHOR: Chikin, V. A.

TITLE: Generalization of one of the Huygens principles

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 142, no. 5, 1962, 1058-1060

TEXT: The author generalizes the Huygens principle of the reciprocity of the point of suspension and center of oscillation of a physical pendulum: If the point of suspension of a heavy rigid body fulfilling the Hess condition

$$I_z^{(G)}(I_x^{(G)} - I_y^{(G)}) - I_{zx}^{(G)2} = 0 \qquad (4),$$

is shifted into the kinetic center of the body, the kinetic center is also shifted into its point of suspension. The motion of the body remains unchanged under equal initial conditions. The intersection of the kinetic axis with the vector of the instantaneous angular velocity is called the kinetic center of the body. The central axis of the screw formed by the vector system $m_\nu\vec{v}_\nu$ is the kinetic axis of the body. $I_x^{(G)}$, $I_y^{(G)}$, and $I_z^{(G)}$ are the axial moments of inertia of the body, and

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Generalization of one of ...

$I_{zx}^{(G)}$ is the centrifugal one. There are 3 Soviet references.

ASSOCIATION: Ryazanskiy radiotekhnicheskiy institut (Ryazan' Radiotechnical Institute)

PRESENTED: October 20, 1961, by A. Yu. Ishlinskiy, Academician

SUBMITTED: May 23, 1960

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APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

CHIKIN, V.A., starshiy prepodavatel'

Geometrical characteristics of antipoles during the motion of a heavy nonsymmetrical body around a fixed point according to Gess' principle. Izv.vys.uchseb.zav.; mashinostr. no.6:55-63 '62. (MIRA 15:11)

1. Ryazanskiy radiotekhnicheskiy institut.
(Motion)

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L 37701-66 EWP(k)/EWT(m)/T/EWP(t)/ETI IJP(c) JH/JD

ACC NR: AP6017299 (A) SOURCE CODE: UR/0136/66/000/005/0083/0085

AUTHORS: Danilkin, V. A.; Grigor'yeva, A. A.; Pimenov, Yu. P.; Chikin, V. K.; Pavlov, Ye. S.

ORG: none

60
59
B

TITLE: Influence of evacuation on the hydrogen and aluminum oxide content in aluminum and its alloys

18 27 27

SOURCE: Tsvetnyye metally, no. 5, 1966, 83-85

TOPIC TAGS: aluminum alloy, aluminum, vacuum degassing, hydrogen, aluminum oxide / AK6 aluminum alloy, D1 aluminum alloy

ABSTRACT: The effect of degassing on the hydrogen and aluminum oxide content in aluminum and aluminum alloys AK6 and D1 was determined. The investigation supplements the results of M. B. Al'tman i dr. (Liteynyye alyuminevyye splavy, Oborongiz, 1961, s. 150). The hydrogen content was determined after V. A. Danilkin i dr. (Zavodskaya laboratoriya, 1961, No. 3) and the aluminum oxide content after the method of O. Z. Werner (Anal. Chem., 1941, 121, S. 259). The experimental results are presented graphically (see Fig. 1). A brief discussion of the necessary and sufficient conditions of the formation of hydrogen bubbles in the melt is presented. The discussion is based on the work of N. M. Chuyko (Gazy v litom metalle. Izd. Nauka, 1964, s. 14). It is concluded that yacuum degassing of aluminum and its

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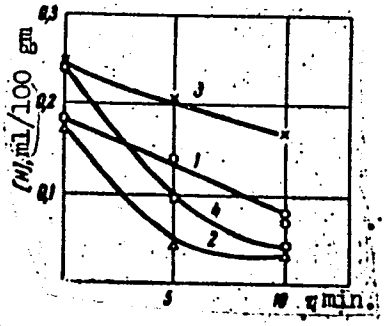

Fig. 1. Dependence of the hydrogen content on the duration of argon purging under vacuum. ($P_{residual}$ = 4 mmHg). 1 - Al, upper layer; 2 - Al, lower layer; 3 - AK6, upper layer; 4 - AK6, lower layer.

alloys, particularly when combined with argon purging, results in a considerable decrease of the hydrogen content of the melt. The vacuum chamber was designed by I. L. Teytel. Orig. art. has: 3 graphs and 2 equations.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 005/ OTH REF: 005

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

KLIMOV, Yu.M.; CHIKIN, V.V.; ANISIMOV, N.I.; BARSKOV, I.M.; VINOGRADOV, Yu.V.; GAVRILOV, A.N.; GAUKHMAN, L.A.; GOLOV, A.P.; GOL'DMAN, L.S.; GRIGORENNIKOV, G.I.; YEFIMOV, A.N.; ZALUTSKIY, M.S.; ZAYTSEVA, A.V.; OIYRYSH, A.I.; KANDARITSKIY, V.S.; KAPRANOV, I.A.; KOVALEV, N.I.; KOVALEVSKIY, K.A.; KOLOSOV, A.F.; KRIVOV, A.S.; KRYLOV, R.M.; LEVITAS, A.G.; MALYGIN, M.A.; MORALEVICH, Yu.A.; MOTYLEV, A.S.; NESTEROV, M.V.; NIKOL'SKIY, A.V.; ORLOV, G.M.; ORLOV, Ya.L.; PARENSKIY, V.M.; POLYAKOV, A.S.; RUBIN, V.I.; SVANIDZE, K.N.; STRIGIN, I.A.; TAKOYEV, K.F.; TRUBNIKOV, S.V.; CHERNYSHEVA, L.N.; CHESNOKOV, N.Ye.; SHAMBERG, V.M.; STRUMILIN, S.G., akademik, red.; ANTOSENKOVA, L., red.; MIKAELYAN, E., red.; MUKHIN, Yu., tekhn.red.

[Dictionary of the seven-year plan from A to Z] Slovar' semiletki ot A do IA. Moskva, Gos.izd-vo polit.lit-ry, 1960. 397 p. (MIRA 13:7)

(Russia--Economic policy)

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CHIKIN, YU. A.

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S/190/60/002/006/009/012
B015/B064

15.8101 also 2205

AUTHORS: Medvedev, S. S., Abkin, A. D., Khomikovskiy, P. M., Gerasimov, G. N., Gromov, V. F., Chikin, Yu. A., Zeingister, V. A., Auer, A. L., Yakovleva, M. K., Mezhirova, L. P., Matveyeva, A. V., Bezzubik, E. G.

TITLE: Polymerization of Ethylene Under the Influence of γ-Radiation 19

PERIODICAL: Vysokomolekulyarnyye soyedineniya, 1960, Vol. 2, No. 6, pp. 904-915

X

TEXT: The radiation-chemical polymerization of ethylene in the gaseous phase and in organic substances was investigated at different pressure and radiation dose as well as some properties of the polymers formed. Co^{60} γ-radiation sources of the institut im. Karpova (Institute imeni Karpov) (1400, 1800, and 20000 gram equiv. Ra) and pressures of 50-300 atm, radiation dose of 17 to 165 r/sec, and 25°C (some experiments were made at 50°C) were the conditions. The experiments were carried out in a corresponding device (Fig. 1). The ethylene used was mass-

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spectroscopically analyzed by M. V. Tikhomirov and M. V. Gur'yev. The molecular weight of the polyethylene obtained was determined by the method of light scattering by I. G. Soboleva and N. V. Makletsova; particular data on this will be given in a separate paper. The experiments of polymerization in heptane, cyclohexane, methanol, and acetone (50 atm, 25°C, ~100 r/sec) showed (Table 1) that reaction proceeds ten times more rapidly than in the gaseous phase. The polymers formed have a molecular weight of 20000-40000. Polymers of the structure $Cl_3C(C_2H_4)_2Cl$ (60%) and $Cl_3C(C_2H_4)_3Cl$ (20%) form in good yield in carbon tetrachloride. Polymerization in the gaseous phase was investigated at constant pressure (100-300 atm, 72 r/sec) and decreasing pressure (100 and 150 atm, 17-165 r/sec, 25° and 50°C). The polymer yield increases rapidly if experiments are made in the presence of polyethylene (Table 2). To begin with, the polymerization rate increases with time and reaches then a constant value. The mean molecular weight and the characteristic viscosity of the polymers increases with proceeding transformation (Table 3). The mean reaction rate amounts to 16.9 g/l.hour at 300 atm, 25°C, a duration of 24 hours and radiation dose of 72 r/sec, and the maximum rate

X

Card 2/4

20.5 g/l.hour (Table 4). The mean molecular weight and viscosity of polyethylene (Table 5) rise with pressure (i.e. the ethylene concentration). The maximum rate of polymerization increases somewhat with the radiation dose with a proportionality factor of 0.3, while the radiation-chemical yield decreases with an increase in the radiation dose with a factor of 0.7. The molecular weight of polyethylene increases with a reduction of the radiation dose with a factor of 0.7. The molecular weight of polyethylene increases with decreasing radiation dose (Table 6). A temperature increase from 25°C to 50°C at constant ethylene concentration (330 g/l) causes a lesser increase in the polymerization rate and the molecular weight (Table 7). Investigations carried out by Yu. M. Malinskiy and B. I. Zverev in the laboratory of radiochemistry of the authors' institute showed that the polyethylene obtained has a higher density (0.945-0.975 g/cm³) and degree of crystallization than high-pressure polyethylene, differs, however, only slightly from the latter with respect to the tensile strength. In conclusion, the authors thank A. Kh. Breger, V. B. Osipov, and V. A. Gol'din for assisting in carrying out the experiments with the gamma emitters. There are 8 figures, 7 tables, and 11 references: 5 Soviet, 4 US, 1 British, and 1 Belgian.

X

Card 3/4

ASSOCIATION: Fiziko-khimicheskiy institut im. L. Ya. Karpova (Physico-chemical Institute imeni L. Ya. Karpov)

SUBMITTED: February 24, 1960

X

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

ACCESSION NR: AP4012181 S/0191/64/000/002/0003/0006

AUTHORS: Abkin, A. D.; Auer, A. L.; Breger, A. Kh.; Vaynshteyn, B. I.; Voropayev, Yu. V.; Gol'din, V. A.; Gromov, V. P.; Osipov, V. B.; Sy*rkus, N. P.; Ushakov, V. D.; Khomikovskiy, P. M.; Tsingister, V. A.; Chikin, Yu. A.

TITLE: Radiation polymerization of ethylene in enlarged laboratory apparatus.

SOURCE: Plasticheskiye massy*, no. 2, 1964, 3-6

TOPIC TAGS: ethylene, radiation polymerization, reactor design, reactor surface area, reaction rate, polymer yield, reactor temperature field

ABSTRACT: Radiation polymerization of ethylene was conducted in laboratory reactors of 1-2 liter capacity (fig. 1 & 2). Based on tolerances admitted in this work, it was found that the temperature field can be calculated with sufficient accuracy. Comparison of reaction rates and yield of ethylene polymer shows that these factors are independent of the specific surface of the reaction space. Thus

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ACCESSION NR: AP4012181

commercial scale apparatus can be designed by estimating the process rate and yield dependence on pressure, temperature and dosage rate without concern for specific surface area of the reactor. Orig. art. has: 1 Table and 5 Figures

ASSOCIATION: None

SUBMITTED: 00 DATE ACQ: 26Feb64 ENCL: 02

SUB CODE: MA NR REF SOV: 005 OTHER: 003

Card 2/2

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

LUKHOVITSKIY, V.I.; CHIKIN, Yu.A.

Some electric phenomena observed during crystallization. Elektrokhimiia 1 no.9:1110-1113 S '65. (MIRA 18:10)

1. Filial Fiziko-khimicheskogo instituta imeni L.Ya. Karpova, Obninsk.

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

POGODAYEV, V.N.; CHIKIN, Yu.M.

Rutile recovery during the dressing of Khiakhta deposit sillimanite ores. TSvet. met. 33 no.6:10-13 Je '60. (MIRA 14:4)
(Kiakhta—Ore deposits) (Rutile)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

S/136/60/000/06/003/026
E071/E435

AUTHORS: Pogodayev, V.N. and Chikin, Yu.M.

TITLE: Extraction of Rutile During Concentration of Sillimanite Ores from the Kyakhta Deposits

PERIODICAL: Tsvetnyye metally, 1960, Nr 6, pp 10-13 (USSR)

ABSTRACT: The process of beneficiation of sillimanite ores from the above deposits with simultaneous isolation of rutile was investigated. The beneficiation was carried out according to two schemes: a) separation of rutile from the ore in centrifugal separators at the beginning of the process and b) the separation of rutile during the process of beneficiation of sillimanite by gravitational methods using jigs and concentration of the classified material on tables. The experimental results obtained by both methods are given in the Table. The scheme (a) was found to be more suitable. The finally proposed scheme for preliminary separation of coarse rutile concentrates and their subsequent treatment (using concentration, flotation of sulphides, electric and magnetic separation) are shown in Fig 1 and 2 respectively. Resulting sillimanite concentrates containing about 1% of titanium

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S/136/60/000/06/003/026
E071/E435

Extraction of Rutile During Concentration of Sillimanite Ores from the Kyakhta Deposits

dioxide and rutile concentrates containing about 91% of titanium dioxide can be obtained. There are 2 figures and 1 table.

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

S/137/62/000/008/006/065
A006/A101

AUTHORS: Chikin, Yu. M., Pavlova, Ye. M.

TITLE: On the problem of increasing molybdenum extraction from sulfide ores

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 8, 1962, 11, abstract 8G79 ("Nauchn. tr. Irkutskiy. n.-i. in-t redk. met", 1961, no. 10, 216 - 223)

TEXT: Results are presented of laboratory and industrial investigations which had been carried out to reveal methods of increasing Mo extraction from ores. The experiments were made with ore containing 0.065% Mo sulfide and 0.016% Mo oxide. Molybdenite was the basic mineral. It was established that Mo losses during the process of basic flotation occurred mainly because of the incomplete disclosure of MoS_2 grains in the coarse class (+2 mm) whose yield by crushing is $\geqslant$ 20%. The authors show the main possibility of increasing Mo extraction by 2 - 3% on account of additional flotation concentration of refined products in a separate cycle with separation of 10 - 15% Mo products, suitable for hydrometallurgical conversion.
[Abstracter's note: Complete translation] A. Shmeleva

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

S/137/62/000/006/023/163
A006/A101

AUTHORS: Pogodayev, V. N., Chikin, Yu. M.

TITLE: Concentration of copper-molybdenum sulfide ores of the Kiyalykh-Uzen' deposit

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 6, 1962, 7, abstract 6G56 ("Sb. nauchn. tr. Irkutskiy n.-i. in-t redk. met.", 1961, no. 9, 100 - 107)

TEXT: To concentrate Cu-Mo ore of the Kiyalykh-Uzen' deposit, a collective system is used with subsequent Cu- and Mo-selection. To obtain conditional Mo-concentrates, experiments were carried out with a Mo-product from the factory. A system is proposed taking into account the mineralogical peculiarities (the size of free MoS_2 is 0.03 - 0.05 mm and of MoS_2 in concretion with SiO_2 is 0.01 - 0.03 mm), the operational parameters of different minerals, and conditions of their discovery and separation. The conditions and system developed made it possible to obtain conditional Cu and Mo concentrates at 90 - 91% Cu and 56 - 57% Mo extraction from their content in the collective concentrate.

[Abstracter's note: Complete translation] A. Shmeleva

Card 1/1

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

PLAKSIN, I.N.; CHIKIN, Yu.M.

Investigation of the effect of oxidized recycle and its sulfonation product in ilmenite and magnetite flotation. Izv. vys. ucheb. zav., tsvet. met. 7 no.5:23-28 '64 (MIRA 18:1)

1. Institut gornogo dela AN SSSR.

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

PLAKSIN, I.N.; CHIKIN, Yu.M.inzh.; LEVINSKIY, B.V., inzh.

Depressant action of humate ions on the flotation of magnetite by means of cation collectors. Izv. vys. ucheb. zav.; gor. zhur. no.8:152-157 '64 (MIRA 18:1)

1. Chlen-korrespondent AN SSSR, Institut gornogo dela imeni A.A. Skochinskogo (for Plaksin). 2. Irkutskiy gosudarstvennyy nauchno-issledovatel'skiy institut redkikh metallov (for Chikin, Levinskiy). Rekomendovana otdelom obogashcheniya poleznykh iskopayemykh Instituta gornogo dela imeni A.A. Skochinskogo.

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

S/124/60/000/006/013/039
A005/A001

26.1220

Translation from: Referativnyy zhurnal, Mekhanika, 1960, No. 6, p. 78, # 7361

AUTHOR: Chikina, I.S.

TITLE: The Motion of an Ideal Liquid Within the Cavity of a Solid Moving Horizontally

PERIODICAL: Sb. nauchn. rabot. Ryazansk. s.-kh. in-t, 1958, No. 7, pp. 173-181

TEXT: The author considers the vibration of a liquid within a cylindric vessel, which moves horizontally with a constant acceleration. The problem is solved in linear formulation. Some simplifying assumptions are made: the motion is considered as two-dimensional, the vertical acceleration of the liquid is neglected, etc. In this case, the problem is reduced to an equation of the hyperbolic type with respect to the horizontal shifts of particles of the liquid, which are at the free surface. The general solution of this equation is derived. Reviewer's note: In the introduction, the author considers in detail the complication of this problem and assumes that his work presents the first step in the investigation of the simultaneous motion of a body and a liquid. Actually however (that apparently is unknown to the author), the problem studied in the

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S/124/60/000/006/013/039
A005/A001

The Motion of an Ideal Liquid Within the Cavity of a Solid Moving Horizontally

article was the topic of a great number of investigations both in the USSR (Sretenskiy, Moiseyev, Okhotsimskiy and others) and abroad, in which similar problems were solved in rigorous formulation. The author solves his problem in an approximate formulation. In this way, the author succeeds in considering the case when the average level of the liquid varies in time. The author considers only that case, when the average depth depends on the time linearly.

N.N. Moiseyev

Translator's note: This is the full translation of the original Russian abstract.

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S/549/61/000/104/014/018
D237/D304

AUTHOR: Chikina, I.S.

TITLE: Oscillations of viscous fluid in a cylindrical cavity in horizontal motion

SOURCE: Moscow. Vyssheye tekhnicheskoye uchilishche. [Trudy], no. 104, 1961. Mekhanika, 137 - 142

TEXT: The author considers a cylinder with a horizontal axis, filled with a viscous incompressible fluid with a free surface, and it is assumed that the center of gravity of the cylinder moves horizontally with a constant acceleration a. Making a series of simplifying assumptions, the author solves the equations of motion of the system and obtains the expression for the free surface of the fluid which is more general than the one obtained by P.I. Gor'kov (Ref. 1: Izv. AN SSSR, OTN, 1954, no. 2) and which goes over into the latter on equating the coefficient of viscosity to zero. There are 2 Soviet-bloc references.

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35634

24.4100 10.5200

S/549/61/000/104/013/018
D237/D304

AUTHOR: Chikina, I.S.

TITLE: General equations of motion of a rigid body with fluid-filled cavities and a generalization of a N.Ye. Zhukovskiy theorem

SOURCE: Moscow. Vyssheye tekhnicheskoye uchilishche. [Trudy], no. 104, 1961. Mekhanika, 115 - 136

TEXT: The author proposes using tensor calculus and lists all the algebraic and analytical operations used in this work. Then, using the above relations, she derives general equations of motion of a rigid body with fluid-filled cavities about a fixed point without restricting the shape of the inner cavities and the extent to which they are filled with fluid. The method of derivation is based on the general theorems of the dynamics of material point systems. This is followed by the case of a body with cavities completely filled with a viscous fluid; additional boundary conditions are derived which, together with the Navier-Stokes and continuity equations

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give complete description of the case. Considerations of kinetic energy of the system lead to a simpler, and at the same time more general expression for N.Ye. Zhukovskiy's theorem on the change in kinetic energy of the whole mechanical system during its motion. The limiting motion, defined as the motion during which the kinetic energy T = const. is considered and the conditions necessary for this motion to take place are derived. In conclusion, the author notes that the results can be utilized in ballistics, when dealing with projectiles filled with fluid. There is 1 Soviet-bloc reference.

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

CHIKINA, I.S.

BM 7

S/549/61/000/104/001/018
D237/D304

AUTHORS: Tikhmenev, S.S., Tronina, V.P., Chikin, V.A., Knyazev, G. N., Gulyayev, M.P., Zakharov, Yu.Ye., Chikina, I.S., Lyamin, V.I., Bocharov, V.K., Shigin, Ye.K., and Krotov, V.P.

TITLE: Scientific, pedagogical and general activities of Professor V.V. Dobronravov

SOURCE: Moscow, Vyssheye tekhnicheskoye uchilishche [Trudy], no. 104, 1961. Mekhanika, 7 - 18

TEXT: On the occasion of his 60th birthday and the 35th anniversary of the scientific and pedagogical activity of Professor, Doctor of Physical and Mathematical Sciences, Vladimir Vasilyevich Dobronravov who is at present Professor of Theoretical Mechanics at MVTU im. N.E. Baumana (MVTU im. N.E. Bauman), eleven of his students present this appreciation. V.V. Dobronravov was born on March 17th, 1901. In 1924 he obtained his degree in mathematics at the Saratovskiy Gosudarstvennyy universitet im. N.G. Chernyshevskiy (Saratov State University im. N.G. Chernyshevskiy). In 1927 he accepted the

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D237/D304

Scientific, pedagogical and ...

post of Assistant to the Professor of Physics at the Astrakhan State Medical Institute, where in subsequent years he published a paper in neuro-biophysics. During 1929-31, he was Professor of Mathematics at the Saratov Agricultural Institute and lectured at Saratov University. From 1931 he worked in a number of higher educational establishments in Moscow and was associated with Moscow University from 1931 to 1952. In 1946 he was awarded a doctorate at Moscow State University and in 1951 he was elected to the Department of Theoretical Mechanics at MVTU im. N.E. Bauman, where in subsequent years, under his guidance, courses in specialized branches such as stability of motion, gyroscopy, oscillation, variational method etc. were developed. During his career the main contributions made were in the field of mechanics of non-holonomic systems. After 1950 he published papers on kinetics of motion of rigid body (Trudy MIKhM, no. 2, (10), 1950), stability of linear systems of diff. equations with constant coefficients in (Avtomatika i Telemekhanika, v. 17, no. 3, 1956) etc. In the 1950's he also became interested in astronautics. He has been a member of the Moscow Mathematical Society since 1944, and is an active member of the Methodological Commis-

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Scientific, pedagogical and ...

sion on the Theoretical Mechanics of the Ministry of the Secondary and Higher Education of USSR. At present he is engaged in preparing a monograph on non-holonomic systems.

ASSOCIATION: Moskovskoye ordena Lenina i ordena trudovogo krasnogo znameni vysshoye tekhnicheskoye uchilishche im. Baumana (Moscow Order of Lenin and Order of the Red Banner of Labor Higher Technical School im. Bauman)

Card 3/3

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

ISMAYLOV, Kh.M.; OSIPOV, O.A.; GARNOVSKIY, A.D.; KASHIRENINOV, O.Ye.; CHIKINA, N.L.

Complex compounds of metals of group IV with dialkylaminomethylphenols and their sulfides. Dokl. AN Azerb. SSR 21 no.3:34-38 '65. (MIRA 18:7)

1. Institut neftekhimicheskikh protsessov im. Yu.G.Mamedaliyeva AN AzerSSR i Rostovskiy gosudarstvennyy universitet.

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

CHIKINA, N. S.:

CHIKINA, N. S.: "The use of antibiotics with delayed results to treat protracted septic endocarditis." Second Moscow State Medical Inst imeni I. V. Stalin. Moscow, 1956. (DISSERTATION FOR THE DEGREE OF CANDIDATE IN MEDICAL SCIENCE).

Knizhnaya letopis'
No. 35, 1956. Moscow.

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

USSR / Pharmacology. Toxicology. Chemicotherapeutic Preparations. Anti-Biotics. V

Abs Jour : Ref. Zhur - Biologiya, No. 3, 1959, 14061

Author : Chikina, N. S.
Inst : Given below.
Title : Treatment of Prolonged Septic Endocarditis With Antibiotics and Its Long-Range Results.

Orig Pub : Terapevt. arkhiv, 1958, 30, No. 5, 42-47

Abstract : No abstract

INST. : Iz kafedry fakul'tetskoy terapii (zav.- prof. M.I. Zolotova-Kostomarova) lechebnogo fakul'teta II Moskovskogo meditsinskogo instituta imeni N.I. Pirogova.

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

CHIKINA, N.S., kand.med.nauk

Clinical and physiological observations on the action of tauremisin. Trudy KGMI no.10:238-241 '63. (MIRA 18:1)

1. Iz kafedry gospital'noy terapii (zav. kafedroy - prof. I.B. Shulutko) Kalininskogo gosudarstvennogo meditsinskogo instituta.

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

S/130/61/000/004/004/005
A006/A001

AUTHORS: Khasin, G.A., Chikina, V.G.

TITLE: Production of Calibrated Ball Bearing Steel

PERIODICAL: Metallurg, 1961, No. 4, pp. 23 - 26

TEXT: At the Zlatoust Metallurgical Plant calibrated ball bearing ШХ 9 (ShKh9), ШХ 15 (ShKh15) and ШХ15СГ (ShKh15SG) steels of 10 - 53 mm size are produced. For 48 mm shapes, 85 mm square blanks are employed, and 120 mm squares for shapes of over 48 mm. Prior to rolling the blanks are etched, cleaned with abrasive disks, and preheated in continuous furnaces up to 1,080°C. During the rolling process the quality of the rolled stock surface is inspected. Cooling of the rods after rolling, down to 900 - 700°C eliminates overannealing of the carbide network. Black annealing of ball-bearing steel is made in chamber type furnaces with extensible floors and in furnaces with external mechanization. The sprayers are one-side arranged; pressure and temperature are automatically controlled. Conditions of black annealing in furnaces with extensible floors are: heating to holding temperature at a rate of 10° per minute; holding at 760°C for 1 hour; at 770°C for 2 hours; at 780°C for 4 hours and at 790°C: 4 hours for

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A006/A001

Production of Calibrated Ball Bearing Steel

ShKh9 steel; 6 hours for ShKh15 and 8 hours for ShKh15SG steel. Stepped annealing assures satisfactory and uniform heating of the metal and good operation of the sprayers. The metal is cooled at a rate of 40° per hour down to 700-720°C with isothermal holding and subsequent cooling to 600-550°C (Figure 1). Prior to drawing the metal is immersed to remove the scale from the surface. The remaining scale is eliminated in rotating drums and by etching. The rods are then coated with a sodium nitrite aqueous solution heated to 60 - 70°C for 15 - 20 minutes. Cold drawing is made with 1 - 2 mm reduction depending on the diameter of the initial blank. Savings in metal and higher efficiency are obtained by mechanical pressing of the rods into draw plates (Figure 2). The rod is clamped in a carriage, whose reciprocating motion is produced by levers which are driven by a crosshead and pull rods. The use of this device yields savings of metal attaining 60 - 70 mm per length of each rod. Bright annealing is made in rectangular electric cupola furnaces of the OKB-426 (OKB-426) type using commercial nitrogen as shielding atmosphere. The furnace operation was unsatisfactory although some improvements were tried. Therefore it has been decided to replace these furnaces by induction furnaces. Actually, bright annealing of calibrated steel is performed in pipes at 720°C for 12 hours, and with air cooling. About 1 ton of calibrated rods are placed in the pipes which are sealed at one end. The shielding

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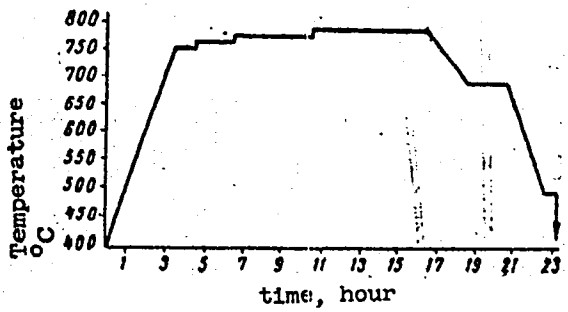
Production of Calibrated Ball Bearing Steel

atmosphere inside the pipe is produced with a mixture of fresh cast-iron chips and charcoal. After the rods have been placed in the pipes the open ends are sealed too. The quality of annealed metal is checked. Exceedingly decarbonized metal is subjected to repeated oxidizing annealing at 750 - 770°C with air excess in the furnace at the expense of negative pressure and by opening the air slit of the sprayers. This heat treatment assures the correction of 97% of metal rejected due to unsatisfactory decarbonization. The technology described in producing ball bearing steel yields 92.3% ShKh9 and ShKh15, and 91.3% ShKh15SG steel out of the given amount of rolled stock.

Figure 1

Graph showing black annealing of ShKh15 steel



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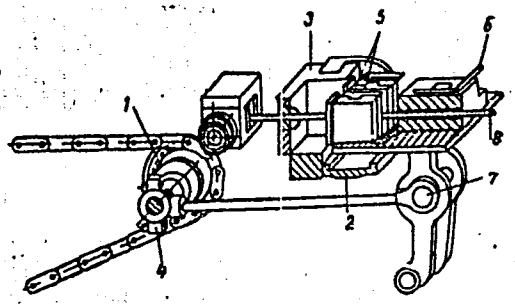
Production of Calibrated Ball Bearing Steel

Figure 2

Schematic drawing of pushing the rods into the draw plate: 1 - dented sprocket wheel 2 - welded support; 3 - frame of pushing carriage; 4 - crosshead; 5 - pushing jaws; 6 - handle and levers for the compression of jaws; 7 - connecting rod of link; 8 - rod to be calibrated.



There are 3 figures.

ASSOCIATION: Zlatoustovskiy metallurgicheskiy zavod (Zlatoust Metallurgical Plant)

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S/130/62/000/002/005/005
A006/A101

AUTHORS: Khasin, G. A., Chikina, V. G., Bogdashkin, A. I., Rannev, G. G., Bruns, G. L., Vashchenko, Yu. I.

TITLE: A unit for the hot drawing of hard-to-deform steels

PERIODICAL: Metallurg, no. 2, 1962, 33 - 35

TEXT: At the Zlatoust Metallurgical Plant a unit for the hot drawing of hard-to-deform steels was developed and put into operation. It consists of a drawing mill, type I/750M, a tubular furnace to preheat the wire and a device for measuring the wire temperature during drawing. The wire is preheated in the tubular furnace by passage through molten lead and a charcoal layer. The capacity of the furnace is 75 kw, feed voltage 380 v, and the amount of lead 2,000 kg. The lead level remained almost unchanged after the calibration of over 100 tons high-speed steel; the wear of the draw plates is about 0.01 mm per 1 ton of wire. The wire temperature when leaving the draw plate is controlled by an infrared photo-electric pyrometer developed by NIIM, being able to measure temperatures within a range of 200 - 500°C. The pyrometer is combined with an electronic potentiometer ЭПП -120 (EPP-12). The least wire diameter during the measurement

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A unit for the hot drawing of hard-to-deform steels

is 2 mm. The distance from the sensitive head to the wire surface is 5 - 10 mm. The device is power-supplied from a 220 v 50 cycle circuit through a ferro-resonance voltage stabilizer. The device operates on the principle of measuring the intensity of infrared radiation of the heated metal. Its block-circuit is given. The draw plate temperature is controlled and regulated by an induction power-frequency heater which is mounted on the draw-plate holder, in whose body a manometric thermometer is mounted. The introduction of the hot drawing method at the Zlatoust Plant yielded the following results: reduction of heat treatment and preparatory operations by a factor of 3 -4; reduction of technological production time; increase of the drawing-drum efficiency; reduction of annealing time by about 35.5 hours per one ton of steel; reliable operation of the unit and the possibility of using it in other plants. There are 3 figures.

ASSOCIATIONS: Zlatoustovskiy metallurgicheskiy zavod (Zlatoust Metallurgical Plant); Chelyabinskiy NIIM (Chelyabinsk NIIM)

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KHASIN, [illegible].A.; CHIKINA, V.G.; BOGDASHKIN, A.I.; RANNEV, G.G.; BRUNS, G.L.; VASHCHENKO, Yu.I.

Equipment for the hot drawing of deformation-resistant steel. Metallurg 7 no.2:33-35 F '62. (MIRA 15:3)

1. Zlatoustovskiy metallurgicheskiy zavod i Chelyabinskiy NIIM. (Drawing (Metalwork)--Equipment and supplies)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

S/133/63/000/003/007/007
A054/A126

AUTHORS: Khasin, G.A., Chikina, V.G., Kashin, Yu.A.

TITLE: Hot drawing of bundle steel

PERIODICAL: Stal', no. 3, 1963, 271 - 273

TEXT: In the cold drawing process of P 18 (R18), P 9 (R9) and 9 X 18 (9Kh18) high-alloy, low-ductility grades the wire rods have to be subjected to intermittent heat treatment. To eliminate this cumbersome procedure, the Zlatoustovskiy metallurgicheskiy zavod (Zlatoust Metallurgical Plant) draws these steels in heated condition (since 1952). The first method of heating (by electric contact) produced sometimes local overheating of the wire, which resulted in ruptures. Therefore, another method was established by which the metal is heated prior to drawing in a lead bath (5,860 mm long, containing 2 t molten lead, heated by a 75 kw current). The bath temperature is 350 - 370°C, the metal is heated to 290 - 330°C, while just before the calibration its temperature is 300°C. The R18 wire rods are drawn by 34, 62, 76.5 and 81.5%, the 9Kh18 ones by 66.5% in total. The optimum drawing rates ensuring the required heating of

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Hot drawing of bundle steel

the metal are given. Prior to the intercalated lead-bath heating process, the wire rods are subjected to the conventional heat treatment. The wires produced by hot drawing have a bright surface, the same microstructure as cold-drawn ones, the aquadag coat applied to the metal surface before it is passed through the lead bath prevents it from being decarburized and oxidized. The mechanical characteristics of the hot-drawn steel wires are satisfactory, both grades maintain their ductility even at high deformation rates. The new method raised the output of the drawing equipment by a factor of 2; the elimination of intermediate annealing processes saves 315 kwh/t, while the primary costs for drawing 1 ton of steel decreased by 177.63 rubles. According to an Editorial Note the drawback of this method is that it requires much lead and a very good ventilation to remove the noxious lead vapors. It seems to be preferable to heat the wire rods by induction, as introduced in the Zavod Proletarskiy Trup (Proletarian Work Plant) and now under investigation at the ZMZ. The lead-bath method was developed in cooperation with S.P. Petukhov (Deceased), R.I. Valentova, G.G. Rannev, et al. The X-ray analysis of lead-bath heated wires was carried out by I.A. Brazgin. There are 2 figures.

ASSOCIATION: Zlatoustovskiy metallurgicheskiy zavod (Zlatoust Metallurgical Plant) and NIIMETIZ

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L 57011-65 EWT(m)/EWA(d)/T/EWP(z)/EWP(b)/EWA(c)/EWP(t) JD

ACCESSION NR: AP5016010 UR/0193/65/000/005/0007/0010
621.365.5:669.14

AUTHOR: Chikina, V. G.; Khasin, G. A.; Chernenko, N. P. 23 B

TITLE: Introducing a high-frequency current heating installation for the recrystallization of cold-drawn steel (at the Zlatoust Metallurgical Plant)

SOURCE: Byulleten' tekhniko-ekonomicheskoy informatsii, no. 5, 1965, 7-10

TOPIC TAGS: high frequency heating, induction hardening, rod steel, ball bearing steel, tool steel, carbon steel, recrystallization annealing, cold drawn steel, surface decarburization, annealing furnace

ABSTRACT: In order to dispense with the use of special furnaces with a controllable atmosphere for the rapid heating and recrystallization annealing of readily oxidized and decarburized steels, the Zlatoust Metallurgical Plant has been experimenting with an installation for the high-frequency current induction heating. The high-frequency installation is powered from a 500-kw generator (current frequency 2500 cps). Bundles of rods from the drawing and

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L 57014-65

straightening machines are placed by a crane on a chain conveyer [illegible] arranged in a row by altering the tilt angles of the conveyer links. The rods [illegible] through the inductors. Specimens of cold-drawn ball-

drop between the [illegible] 50°C. The hardness of the heated specimens both over their [illegible] cross section was found to be uniform and meeting the requirements. Investigation of the microstructure and decarburization of the specimens showed that these characteristics depend on the initial condition of the steel [illegible] the results of its black annealing; owing to the extremely short duration of heating in the new device, any marked additional surface decarburization is precluded. The maximum power requirement for the high-frequency-current recrystallization of ball-bearing steel rods was 180-240 kw. Therefore, since [illegible] generator was underutilized, a second similar installation was built to be powered from the same generator.

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ACCESSION NR: AP5016010

simultaneously heated in pairs. The maximum power requirement for the operation [illegible] kw. The introduction of the [illegible] has made it possible to mechanize the process and virtually eliminate manual labor. In addition, it has resulted in improving the quality of metal, reducing the expenditures on recrystallization per output unit, shortening the production cycle (thus relieving two annealing furnaces accommodating as much as 40 tons of metal at a time), and producing 79,400 rubles in annual savings. Orig. art. has: 1 photograph.

ASSOCIATION: Zlatoustovskiy metallurgicheskiy zavod (Zlatoust Metallurgical Plant)

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

NO REF SOV: 000 OTHER: 000

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

CHIKINA, Ye.I., pomoshchnik epidemiologa (Moskva)

Role of sanitation feldshers in foci of intestinal infection.
Fel'd. i akush. 22 no.5:22-24 My '57. (MLRA 10:6)
(DYSENTERY)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

BELYAKOV, F.Ye.; BABIN, B.N.; BAL', V.; BOROVKOV, P.N.; VOYEVODIN, I.N.; GUREVICH, G.M.; GORBUNOVA, P.I.; KOUNOV, A.S.; KALANTAROVA, M.V.; KASHIRSKIY, A.Ya.; KAZANCHEYEV, Ye.N.; LEKSUTKIN, A.F.; LETICHEVSKIY, M.A.; LOPATIN, S.Z.; MIRSKIY, V.N.; PODSEVALOV, V.N.; SUBBOTINA, V.P.; TANASIYCHUK, N.P.; FEDOTOV, S.D.; FISENKO, K.N.; EL'KIND, I.G.; BOVIN, S.S.; VASIL'YEV, L.T.; DRINKOV, V.D.; DALECHIN, N.I.; DADAGOV, I.A.; YERMOSHINA, V.I.; ZHUKOV, I.V.; ZIMIN, D.A.; IVANNIKOV, A.Ya.; KOVALEV, M.K.; LUGAKOVSKIY, N.L.; NALEVSKIY, A.F.; SEREZHNIKOV, V.K.; SEMIGLASOV, M.D.; SOKOLOV, A.V.; STEPANOV, V.I.; SAKHARIN, G.S.; SAVENKO, P.A.; SOLODOV, V.P.; UMEROV, Sh.Kh.; CHIKINDAS, G.S.; SHCHERBUKHINA, S.N.; DYNKIN, G.Z.; LYSOV, V.S.; OSHEROVICH, A.N.; ROKITSINSKIY, E.V.; BRASLAVSKIY, M.S.; RUDENKO, I.A.; ZHUKOBORSKIY, M.S.; ZHDANOV, I.Ye.; SUSLIN, V.A.; BRUS, A.Ye.; VOLYNSKIY, S.A.; KLYUYEV, V.A.; ISTRATOV, A.G.; TIKHOMIROV, I.F.; BUTYRIN, Ya.N.; VOLYNSKIY, S.A.; MINEYEV, M.F.; MAL'TSEV, V.I.; VIDETSKIY, A.F., kand.tekhn.nauk, glavnyy red.; DEMIDOV, A.N., red.; KRAVETS, A.L., red.; KLIMOVA, Z.I., tekhn.red.

[Industrial Astrakhan] Promyshlennaia Astrakhan'. Astrakhan', Izd-vo gazety "Volga," 1959. 318 p. (MIRA 12:11)

1. Astrakhan (Province) Ekonomicheskiy administrativnyy rayon. (Astrakhan Province--Economic conditions)

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USSR/Diseases of Farm Animals. Non-Contagious Diseases. R-2

Abs Jour : Ref Zhur-Biol., No 18, 1958 83568

Author : Sirotkin, V. A., Chikirda, I. V.
Institute : Leningrad Veterinary Institute
Title : Certain Hepatic Diseases of Alimentary Origin in Cows, and Applied Prophylactic Measures.

Orig Pub : Sb. rabot Leningr. vet. in-t, 1957, vyp. 16, 16-19

Abstract : It is shown that prolonged feedings of large quantities of concentrates to cows which obtain too little roughage in their diets, quite often causes development of hepatic diseases (such as amyloidosis, fatty and parenchymatous degeneration). The clinical symptoms of the disease are: poor state of general health, loss of appetite, apathy, decreased milk yields. The animals' hair becomes dull and rumpled. Sometimes, increase of body temperature occurrs, and hyperemia and jaundice of the conjunctiva are present.

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USSR/Diseases of Farm Animals. Non-Contagious Diseases. R-2

Abs Jour : Ref Zhur-Biol., No 18, 1958, 83568

Abstract : Rumination is lethargic, slow, and of short duration; gastric peristalsis is weakened. The area of pepatic dullness is enlarged. Autopsy reveals that the liver is enlarged, clay-colored and flabby. Biochemical examinations of the blood show a sharp decrease of carotene and of organic phosphorus contents. Among prophylactic measures correct combinations of roughage and concentrated feeds are of great importance. Also important are sufficient quantities of vitamins and mineral salts in the animals' diet.--I. Ya. Panchenko

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

CHIKIRDIN, E. G.

Calculation of X-ray screening grids. (Stroboscopic effect in grids with movable rasters). Nov. med. tekh. no.2:15-24 '61. (MIRA 14:12)

1. Gosudarstvenyy nauchno-issledovatel'skiy rentgeno-radiologicheskiy institut.

(X-RAYS—EQUIPMENT AND SUPPLIES)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308810014-6

SARIKOV, A.A.; CHIKIRDIN, E.G.

Clinical and physical comparison of large-photograph fluorography and roentgenography of the thoracic organs and kidneys. Vest. rent. i rad. 39 no.5:47-52 S-O '64. (MIRA 18:3)

1. 2-ya kafedra rentgenologii i meditsinskoy radiologii (zav. - prof. Yu.N. Sokolov) TSentral'nogo instituta usovershenstvovaniya vrachey i Gosudarstvennyy nauchno-issledovatel'skiy rentgeno-radiologicheskiy institut Ministerstva zdravookhraneniya RSFSR, Moskva.

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