

27163

S/057/61/031/009/003/019

B109/B138

24.6714

AUTHORS: Chechkin, V. V., Vasil'yev, M. P., Grigor'yeva, L. I.,  
Smerdov, B. I.

TITLE: Absorption of cyclotron oscillations in a heterogeneous  
plasma

PERIODICAL: Zhurnal tekhnicheskoy fiziki, v. 31, no. 9, 1961, 1033-1035

TEXT: Apparatus and results of measurement are described for the absorption of high-frequency energy in a hydrogen plasma produced in a quartz tube (5.5 cm diameter, 100 cm length) by a Penning discharge. Capacitor 2 microfarads, charged to 5 kv, maximum discharge time did not exceed a few microseconds. The plasma was under the action of a longitudinal magnetic field, also produced by a capacitor discharge to a solenoid

(18 milliseconds quasisteady,  $10^4 - 1.6 \cdot 10^4$  gauss). Measurements were made in the time interval of 300 - 1,000 microseconds after ignition of the plasma discharge. The plasma oscillations were excited by a 10.7 Mcps, 300-w coil (axial period  $\lambda = 11$  cm) as described by G. N. Stix (Phys.

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Absorption of cyclotron ...

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S/057/61/031/009/003/019  
B109/B138

Fluids, 1, 308, 1958); the coil was pushed onto the quartz tube. Fig. 1 shows the results of measurement: dependence of the high-frequency power absorbed in the plasma on the magnetic field strength at various moments after discharge ignition, i.e., at different ion densities (hydrogen pressure  $6 \cdot 10^{-3}$  mm Hg). The authors interpret the course of the curve stating that the cyclotron oscillations with high densities are excited in the peripheral plasma layer and, moving to the axis, meet a layer with critical ion density, where they are absorbed. Fig. 2 shows this dependence for  $1.3 \cdot 10^{-3}$  mm Hg; here, the ion density in the discharge is considerably lower, and cyclotron oscillations can be excited in the region of  $H = H_0$  only. In all experiments, the ion temperature in the plasma hardly exceeded 1 ev. Under such conditions the cyclotron damping with  $H$  values where absorption occurs, is no longer important cf. R. Z. Sagdeyev, V. D. Shafranov (Fizika plazmy i problema upravlyayemykh termoyadernykh reaktsiy, IV, 430, 1958). But the absorption caused by collisions between unequal particles should still be very considerable. The authors thank K. D. Sinel'nikov, Academician AS UkrSSR, V. T. Tolok, and K. N. Stepanov

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B109/B138

Absorption of cyclotron ...

for discussing the work. There are 2 figures and 5 references: 2 Soviet-bloc and 3 non-Soviet-bloc.

ASSOCIATION: Fiziko-tekhnicheskiy institut AN USSR Khar'kov  
(Physicotechnical Institute AS UkrSSR, Khar'kov)

SUBMITTED: September 10, 1960

Fig. 1. Dependence of the absorbed power on the magnetic field strength. 4

Legend: The scale on the ordinate is given in relative units. The broken line denotes the magnetic field strength corresponding to the cyclotron resonance of an individual ion. 1 - 300  $\mu$ sec after the beginning of discharge; 2 - 400; 3 - 500; 4 - 600; 5 - 700; 6 - 800; 7 - 900; 8 - 1,000  $\mu$ sec.

Fig. 2. The same as in Fig. 1 for  $1.3 \cdot 10^{-3}$  mm Hg. 1 - 300; 2 - 400; 3 - 500; 4 - 600; 5 - 700  $\mu$ sec.

Card 3/4

SHTEYNBERG, M.M., doktor tekhn. nauk; MIRMEL'SHTEYN, V.A., inzh.; KODES, Ye.S.;  
CHECHULIN, I.P.

Effect of lanthanum on the temper brittleness of structural steel.  
Sbor. st. NITIAZHMaSHA Uralmashzavoda no.5:38-47 '64.

(MIRA 17:11)

VASIL'YEV, M.P.; GRIGOR'YEVA, L.I.; DOLGOPOLOV, V.V.; SMERDOV, B.I.;  
STEPANOV, K.N.; CHECHKIN, V.V.

Absorption of high-frequency energy by a plasma near the  
frequency of ion cyclotron resonance. Pt.1. Zhur. tekhn.  
fiz. 34 no.6:974-983 Je '64.

Experimental study of the absorption of high-frequency  
energy by a plasma near the frequency of ion cyclotron  
resonance. Part 2. Ibid.:984-992 (MIRA 17:9)

VASIL'YEV, M.P.; GRIGOR'YEVA, L.I.; DOLGOPOLOV, V.V.; SMERDOV, B.I.;  
STEPANOV, K.N.; CHECHKIN, V.V.

Cyclotron resonance in an inhomogeneous plasma cylinder.  
Zhur. tekh. fiz. 34 no.7:1231-1236 J1 '64 (MIRA 17:8)

ACCESSION NR: AP4042945

S/0057/64/034/000/1531/1533

AUTHOR: Vasil'yev, M.P.; Grigor'yeva, L.I.; Smerdov, B.I.; Chechkin, V.V.

TITLE: Increase in the diffusion rate of a plasma at the ion cyclotron resonance

SOURCE: Zhurnal tekhnicheskoy fiziki, v.34, no.8, 1964, 1531-1533

TOPIC TAGS: plasma diffusion, cyclotron resonance, hydrogen plasma

ABSTRACT: The effect of a high-frequency azimuthal electric field on the decay rate of hydrogen plasmas in a magnetic field was investigated experimentally. V.V. Dolgoplov, K.N. Stepanov and the present authors have described the apparatus in detail elsewhere (ZhTF 34, No. 6, 1964). The plasmas were produced in a 6 cm diameter glass tube by a Penning discharge between cathodes separated by 83 cm. Thirty microseconds after the discharge, the plasma temperature had dropped below 1 eV but the charged particle density was still  $1.7 \times 10^{13} \text{ cm}^{-3}$ . The subsequent rate of decay of the plasma was independent of the strength of the longitudinal magnetic field provided this was not less than 1.5 kOe. This is ascribed to predominance in the decay mechanism of recombination over diffusion to the walls. A 7.45 Mc field with negligible

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ACCESSION NR: AP4042945

longitudinal electric field component was applied to the decaying plasma by means of a section of an artificial helical LC line. When this high-frequency field was sufficiently strong, its application increased the decay rate of the plasma at all values of the static longitudinal magnetic field strength; the increase was particularly marked, however, at a magnetic field strength of 5.6 kOe, at which the ion Larmor frequency is some 15% greater than the frequency of the applied field. Weak high-frequency fields were found to decrease the plasma decay rate, but the decay rate was increased by fields exceeding a certain critical amplitude that increased with increasing pressure. The decrease of the decay rate in weak high-frequency fields is ascribed to heating of the plasma, and the increase in strong fields to enhancement of the plasma diffusion rate. The diffusion enhancement mechanism is not understood, but it is suggested that a drift instability due to nonuniform heating may be involved. The authors briefly discuss the effect of the observed phenomena on heating of plasmas at the ion cyclotron resonance under such conditions that the longitudinal electric field component is significant. "We tender our gratitude to V.T.Tolok for discussing the work and for valuable remarks." Orig.art.has: 3 figures.

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Card



ACCESSION NR: AP4042945

ASSOCIATION: none

SUBMITTED: 29Aug63

SUB CODE: ME, NP

NR REF SOV: 004

ENCL: 00

OTHER: 001

Card  
3/3

ACC NR: AP6000738  
EWT(I)/ETC/EPE(n)-2/ENG(m) LJP(c) WV/GG/AT  
SOURCE CODE: UR/0386/65/002/009/0418/0422

AUTHOR: <sup>44,55</sup> Chechkin, V. V.; <sup>44,55</sup> Vasil'yev, M. P.; <sup>44,55</sup> Grigor'yeva, L. I.; <sup>44,55</sup> Longinov, A. V.;  
Smerdov, B. I.

<sup>44,55</sup>  
ORG: none

<sup>21, 44, 55</sup>  
TITLE: Resonance heating of plasma by means of a strong high-frequency field 81  
03

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 2, no. 9, 1965, 418-422

<sup>21, 44, 55</sup>  
TOPIC TAGS: plasma heating, dense plasma, magnetic energy absorption, acoustic wave, *h f field, electric field, magnetic field*

ABSTRACT: An investigation was made of the heating of a dense plasma by powerful short high-frequency pulses when in plasma a fast magnetoacoustic wave ( $\Omega_e \gg \omega_e$ ,  $\omega_i \ll \omega_e$ , where  $\Omega_e$  is the plasma electron frequency,  $\omega_i$ ,  $\omega_e$  are cyclotron frequencies of ions and electrons, respectively, and  $\omega$  is the operating frequency) is generated by means of resonance. The investigations were carried out on a disintegrating plasma present in a quasi-constant longitudinal magnetic field with an intensity reaching 6000 Oe. The plasma was generated by a pulse discharge with oscillating electrons in hydrogen and helium at a pressure of  $10^{-3}$  mm Hg. The coefficient of energy transfer (the ratio of the energy absorbed by the plasma to the total energy stored in the circuit) of an h-f field from the circuit to the plasma was measured. The dependence of the coefficient on the intensity of a  
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L 9283-66

ACC NR: AP6000738

quasi-magnetic field for different values of the initial electron density shows that the absorption of energy of an h-f field by the plasma has a resonance character, its maximum corresponding to a frequency  $\omega$ , which is in the range  $\omega_i < \omega < \sqrt{\omega_i \omega_e} \ll \omega_e$ . A similar dependence was obtained for a helium plasma. The dependence of the transfer coefficient, the electron temperature, and the increase of electron density on the intensity of the magnetic field shows that the electron temperature  $T_e$  rises when the energy absorbed by the plasma increases, reaching approximately 60 ev. At the same time, the density of electrons also increases and the degree of ionization approaches 100%. The temperature of ions  $T_i$  is approximately 30 ev. The heating of the plasma takes a short time: at maximum absorption the amplitudes of h-f oscillations in the circuit decrease by 2.7 times per  $\sim 0.5$   $\mu$ sec, i. e., during 2-3 oscillation periods; without plasma this decrease takes approximately 11 periods. The calculated damping decrement  $\gamma_{exp} \sim 6.5 \times 10^{-2} \omega$  (from the rate of the decrease in the amplitude oscillation in the circuit) exceeds the damping decrement of the magnetoacoustic waves, which is subjected to Coulomb losses, by more than two orders. The temperature, calculated from the energy balance under the assumption that the entire energy absorbed by the plasma is spent on its heating, is equal to  $\sim 90$  ev, which is in agreement with experimental data. Orig. art. has: 2 figures. [JA]

SUB CODE: 20/ SUBM DATE: 07Sep65/ ORIG REF: 009/ OTH REF: 001/ ATD PRESS:

4153

PC  
Card 2/2

L 02302-67 EWT(m)/T WW/WE/GD

ACC NR: AT6015195 (A,N) SOURCE CODE: UR/0000/66/000/000/0050/0055

AUTHOR: Tararyshkin, M. Ye.; Chechkina, O. M.

ORG: none

TITLE: Determination of the pressure of saturated hydrocarbon fuel  
vapor <sup>am</sup>

SOURCE: Metody otsenki ekspluatatsionnykh svoystv reaktivnykh topliv i smazochnykh materialov (Methods for the performance evaluation of jet propellants and lubricants). Moscow, Izd-vo Mashinostroyeniye, 1966, 50-55

TOPIC TAGS: petroleum fuel, vapor pressure

ABSTRACT: A tensimeter was adapted for use in determining vapor pressure of saturated hydrocarbon fuels (see Fig. 2). This modified tensimetric method was found to be sufficiently accurate at maximum vapor pressures not exceeding 2 kg/sq cm. The deviation among determinations also exceeds 2% when the vapor pressures are very low (at temperatures below 20°C). Orig. art. has: 3 tables, 2 figures and 1 equation.

Card 1/2

UDC: 662.753.22:629.13.001.4

L 02302-67

ACC NR: AT6015195

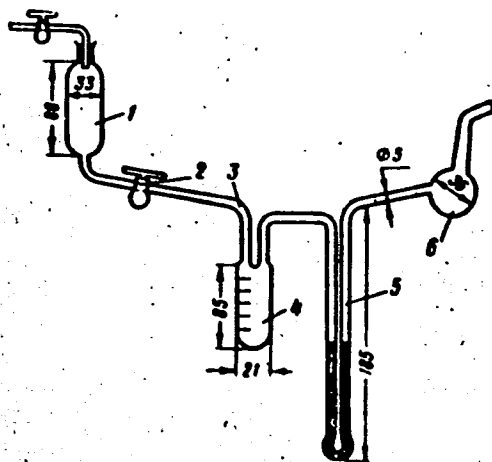


Fig. 2. Diagram of glass apparatus (tensimeter) for determining pressure of saturated fuel vapors: 1--funnel for pouring fuel into the working container, 2--2-way stopcock, 3--place for sealing, 4--working container, 5--monometer tube, 6--spherical container for mercury.

SUB CODE: 21, 14/ SUBM DATE: 10Dec65/ ORIG REF: 003

Card 2/2 vmb

L 02300-67 EWT(m)/T EDN/WW/WE/GD

ACC NR: AT6015197 (A,N) SOURCE CODE: UR/0000/66/000/000/0061/0068

AUTHOR: Tararyshkin, M. Ye.; Chechkina, O. M.

42  
41  
B+1

ORG: none

TITLE: Determining the pressure of saturated fuel vapors on a membrane apparatus <sup>9m</sup>

SOURCE: Metody otsenki ekspluatatsionnykh svoystv reaktivnykh topliv i smazochnykh materialov (Methods for the performance evaluation of jet propellants and lubricants). Moscow, Izd-vo Mashinostroyeniye, 1966, 6i-68

TOPIC TAGS: petroleum fuel, vapor pressure, *FUEL TEST*

ABSTRACT: A steel apparatus with a metallic membrane for measuring pressure was adapted for use with hydrocarbon fuels of complex chemical composition (see Fig. 1). It was found that the membrane apparatus is sufficiently accurate for determining the pressure of saturated fuel vapors in the wide temperature range from 20 to 350-400°C. Reproducibility of results was satisfactory. Pressure of vapors of degassed and of non-degassed fuel samples can be measured. The pressure of the saturated fuel vapor increased when air was dissolved in the fuel.

Card 1/3

UDC: 662.753.22:629.13.001.4

L 02300-67

ACC NR:  
AT6015197

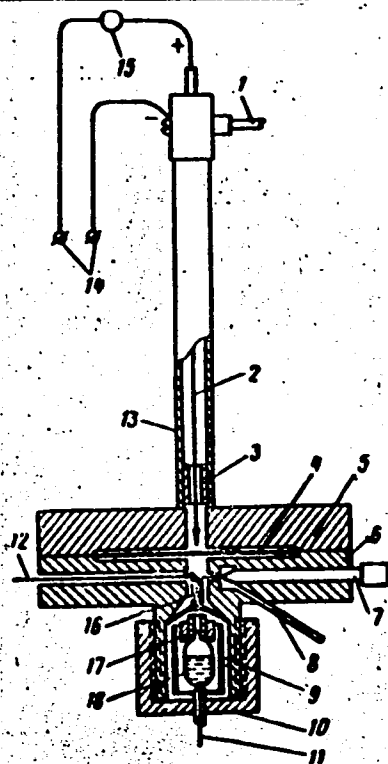


Fig. 1. Diagram of reactor:  
1--pipe connecting op section of reactor with nitrogen tank and vacuum pump, 2--contact needle, 3--quartz insulator, 4--steel membrane, 5--top section of vessel, 6--lower section of vessel, 7--shut-off needle with thread, 8--pipe for evacuating air from lower reactor cavity, 9--steel container, 10--lock nut, 11,12--thermocouples, 13--steel pipe, 14--6 v power supply, 15-- 6 v electric signal bulb, 16,17--device for breaking ampoule, 18--ampoule.

Card 2/3

L 02300.67

ACC NR: AT6015197

The authors thank A. M. Maslennikov for consultation (on the construction of the membrane apparatus). Orig. art. has: 3 tables and 3 figures.

SUB CODE: 21, 14/ SUBM DATE: 10Dec65/ ORIG REF: 002/

Card 3/3 vmb



MAKLETSOVA, M.M.; BELOGORTSEV, I.D.; VARAKSIN, V.M.; YELISEYEV, I.K.;  
ZYSMAN, A.I.; VOINOV, A.P., prof., retsentsent; CHECHKO, E.I.,  
red.; KUZ'MENOK, P.T., tekhn.red.

[Principles of designing apartment houses] Osnovy proektirovaniia  
zhilykh zdani. Minsk, Red.-izdat.otdel, Belorusskogo politekhn.  
in-ta im. I.V.Stalina, 1960. 194 p. (MIRA 13:8)

1. Minsk. Belorusskiy politekhnicheskii institut. 2. Deyatvitel'-  
nyy chlen Akademii stroitel'stva i arkhitektury SSSR i chlen-  
korrespondent Akademii nauk BSSR (for Voinov).

(Apartment houses)

(Architecture--Designs and plans)

CHECHKO, F. Ye.

"Growing Pine Seedlings by Planting Thickly and Using Fertilizer," Les. i step',  
4, No 7, 1952

1. CHECHKO, F. YE.
2. USSR (600)
4. Afforestation
7. Some mistakes in growing forests. Les i step' 4 no. 12, 1952.

9. Monthly List of Russian Accessions, Library of Congress, March 1953. Unclassified.

CHECHKO, F.Ye. inzh.

Improve technological processes and equipment used in lumbering. Izobr.v  
SSSR 2 no.2:33 F '57. (MIRA 12:3)  
(Lumbering)

POKROVSKIY, N.M., prof., doktor tekhn.nauk; TRUPAK, N.G., prof.,  
doktor tekhn. nauk, retsenzent; CHECHKOV, L.V., red.  
izd-va; ZHIVRINA, G.V., tekhn. red.; LAVRENT'YEVA, L.G.,  
tekhn. red.

[Building and modernization of mines] Sooruzhenie i rekon-  
struktsiia gornyykh vyrabotok. Izd.5. Moskva, Gosgortekh-  
izdat. Pt.3. [Special methods of building and modernizing  
mines] Spetsial'nye sposoby sooruzhenia i rekonstruktsiia  
vyrabotok. 1963. 313 p. (MIRA 16:12)  
(Mine engineering)

SHAFRANOV, Nikolay Konstantinovich; SOSENOVSKIY, M.V., kand. tekhn.  
nauk, retsenzent; CHECHKOV, L.V., ved. red.

[Improving mine shaft bottoms] Sovershenstvovanie okolo-  
stvol'nykh dvorov shakht. Moskva, Nedra, 1964. 133 p.  
(MIRA 18:1)

KAPUSTIN, Nikolay Georgiyevich; KVON, Sergey Syn-Guvich; BERLIN, A.Ye., inzh., retsenzent; KOVSH, B.I., inzh., retsenzent; BRODSKIY, I.A., inzh, retsenzent; CHECHKOV, L.V., ved. red.; BIRYUKOV, R.A., prof., otv. red.

[Principles of designing coal mines] Osnovy proektirovaniia ugol'nykh shakht. Moskva, Nedra, 1964. 267 p.

(MIRA 18:2)

1. Vsesoyuznyy tsentral'nyy gosudarstvennyy institut po proyektirovaniyu i tekhniko-ekonomicheskim obosnovaniyam razvitiya ugol'noy promyshlennosti (for Berlin, Kovsh, Brodskiy).

CHECHLOWSKI, W.

J. Hoffmeister's classification in biometeorology according to his  
"Applied meteorology." Przegł geofiz 6 no.4:292-293 '61.



GORENSHTEYN, Mikhail Moiseyevich, kand. tekhn. nauk, dots.;  
TSILEVICH, Il'ya Zalmovich, inzh.; MEZHAUROV, Marat  
Mikhaylovich, inzh.; CHECHNEV, A.A., inzh., retsenzent

[Lightweight rolled sections] Oblegchenye profili pro-  
kata. Kiev, Gostekhizdat, USSR, 1963. 137 p.  
(MIRA 18:6)

SOV/137-58-7-14756

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 7, p 117 (USSR)

AUTHORS: Starchenko, D.I., Chechnev, A.V.

TITLE: High-reduction Rolling of Symmetrical and Asymmetrical  
Angles (Prokatka ravnobokikh i neravnobokikh uglovykh profiley  
s vysokimi obzhatiyami)

PERIODICAL: Sbornik nauchnykh' trudov Zhdanovskiy metallurgicheskiy in-t,  
1957, Nr 4, pp 101-125

ABSTRACT: A study is made of the nature of metal flow and the stability  
of Pb billets in rolling (R) with very high reduction to angular  
shapes. Experiments were run on a laboratory reversing two-  
high rolling mill with a nominal roll diameter of 125 mm and a  
peripheral velocity of 26 mm/sec. The roll bodies were 300  
mm long. The R of symmetrical angles was performed in 4  
open symmetrical angle grooves (G) with straight webs and  
angles of progressive closure of 20, 32, 40, and 45°, of which  
the first 3 G are roughing, and the 4th is the leader and the  
finishing G. Rods of the following dimensions were used: 22x8  
- 28x18 mm, diamond-shaped with 24 and 28 mm diagonals and  
depths of 20 and 23.5 mm, squares of 12 to 18 mm, rounds of

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SOV/137-58-7-14756

High-reduction Rolling of Symmetrical and Asymmetrical Angles

12 and 16 mm diameter, octagonals of 14 and 18 mm diameter. Passes ranged from 12 to 5, and the draft per pass from 1.2 to 3.65. The dimensions of the angles (A) rolled were 19x19x2.5 and 20x20x2.5 mm. Laboratory tests determined that R of equilateral A at very high reduction and a smaller number of passes is quite possible from both square and diamond-shaped bars resting on the diagonal and from round and octagonal bars delivered into the rolls in any position. Analogous experiments were run in the R of nonequilateral A measuring 24x16x2.5 mm. It is established that very high reduction R of nonequilateral A of consistent shape and size from rectangular bars resting on their diagonals may be performed by the employment of closed, developed nonequilateral angular roughing and intermediate G with limitation of spread. The finishing G should logically be oblique, with free spreading of the legs of the piece. Owing to the markedly uneven deformation in height, spread in angle G is not large even at very high drafts and is only 30-40% of the normal spread of square strip of equal size in smooth rolls. To verify the results obtained under laboratory conditions, very high reduction R of equilateral 40x40, 45x45, 50x50, and 65x65 mm A was performed on a 450 merchant mill. The bars were of Nr 3 and 5 steel of 40x40 to 66x66 mm cross section. The R was performed in 1, 2, and 3 passes. It was found that diagonal passes of square bars to the first G  
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SOV/137-58-7-14756

High-reduction Rolling of Symmetrical and Asymmetrical Angles

afforded a stable position in the G. The outside angle at the joint of the A legs filled out satisfactorily by this process. Carbon steels of standard qualities possess high ductile properties permitting very high reduction in angle G. No signs of failure were seen even when the reduction ratio per pass was 3.16. In order to ensure good G life and accuracy of the finished shape, R should be done in 3 passes with normal drafts in the finishing pass.

S.G.

1. Metal--Deformation
  2. Lead--Processing
  3. Lead--Stability
  4. Rolling mills
- Performance

Card 3/3

STAFCHENKO, D.I., prof., doktor tekhn.nauk; CHECHNEV, A.V., inzh.; PETIN,  
A.G., inzh.; SAVCHENKO, A.M., inzh.

Accelerating the process of rolling on the cogging stand of a  
shape mill. Sbor.nauch.trud.zhdan.met.inst. no.4:143-152 '57.  
(Rolling (Metalwork)) (MIRA 11:11)

CHEKMAREV, Aleksandr Petrovich, akademik; CHECHNEV, A.V., inzh.,  
retsenzent; CHUMACHENKO, T.I., red.izd-va; BEREZOVYY,  
V.N., tekhn.red.

[Rolling of economical shapes] Prokatka ekonomichnykh pro-  
filei. Kiev, Gostekhizdat USSR, 1963. 267 p.

(MIRA 17:1)

1. Akademiya nauk Ukr.SSR (for Chekmarev).

CHECHNEVA, A.N.

Chechneva, A.N.,--"Discovery and Determination of Small Amounts of Gold by Using Sulfide of Mercury." Cand Chem Sci, Ural Polytechnic Inst, Sverdlovsk 1953.  
(REFERATIVNIY ZHURNAL--KHIMIYA, No 1, Jan 54)

Source: SUM 168,22 July 1954

CHECHNEVA, N.N.

6

*Clear*

*3*

2003. Detection of gold, platinum and palladium.  
 N. A. Tananay and A. N. Chechneva. *Trudy  
 Komissii Anal. Khim. SSSR*, 1954,  
 5 (8), 101-105; *Ref. Zhur., Khim.*, 1955, Abstr. No.  
 26,470.—To detect Pt in a soln. containing any  
 other ions the soln. is saturated with solid  $\text{NH}_4\text{Cl}$ ,  
 shaken energetically for 1 min., filtered and washed  
 with half-saturated  $\text{NH}_4\text{Cl}$ . The filter is then  
 treated with a few drops of  $\text{SnCl}_2$  soln. Mere traces  
 of  $(\text{NH}_4)_2\text{PtCl}_6$  give a yellow or orange colour. To  
 detect Au, Pt and Pd in a soln. free from non-noble  
 metals, 5 ml are saturated with  $\text{NH}_4\text{Cl}$  and shaken  
 for 1 to 2 min. A yellow ppt. or cloudiness of  
 $(\text{NH}_4)_2\text{PtCl}_6$  appears. A small amount of dry  
 dimethylglyoxime is then added and the mixture is  
 shaken and set aside for 2 to 3 min. Palladium  
 gives a yellow amorphous ppt. A few drops of  
 benzidine are added; a blue colour indicates the  
 presence of Au. To detect Au and Pt in the  
 absence of Pd in a soln. strongly coloured because  
 of the presence of metals such as Fe, Cr, Ni, Co and  
 Cu, the two metals are first pptd. together and then  
 detected separately in the solution of the ppt. To  
 separate Au and Pt, the solution is boiled with  $\text{HgS}$   
 for 2 to 3 min., the excess of  $\text{HgS}$  is destroyed by  
 addition of saturated  $\text{KI}$  soln. containing 3 to 4  
 drops of conc.  $\text{HCl}$  per 10 ml, and the ppt. is  
 washed first with half-saturated  $\text{KI}$  soln. to remove  
 $\text{HgI}_2$ , and then with hot water to remove  $\text{I}^-$ . The  
 ppt. is dissolved in aqua regia and evaporated three  
 times with conc.  $\text{HCl}$ . The residue is dissolved in  
 2 to 3 ml of water. Part of the soln. is mixed with  
 saturated ferrous ammonium sulphate soln. to  
 precipitate Au, and the other part is treated with  
 $\text{NH}_4\text{Cl}$  to precipitate Pt as  $(\text{NH}_4)_2\text{PtCl}_6$ .

G. S. SMITH

*PM*



Chechneva, A.N.

USSR/Inorganic Chemistry. Complex Compounds.

C

Abs Jour : Ref Zhur - Khimiya, No. 8, 1957, 26442.

Author : Chechneva, A.N.

Inst : Uralsk Polytechnical Institute.

Title : Gold Sulfide and Its Solubility Product.

Orig Pub : Tr. Ural'skogo politekhn. in-ta, 1956, No. 57, 162-170.

Abstract : If  $H_2S$  was let through an acidified solution of  $AuCl_3$  (concentration of Au  $10^{-2}$  g per mlit), a precipitate falls out, the analysis showing that the formula of the precipitate is  $Au_2S_3$ . If the concentration of Au was  $10^{-4}$  g per mlit,  $Au_2S_2$  falls out. The sulfide  $Au_2S_2$  is forming at the action of CdS on a solution of  $AuCl_3$ ; no compound of a determined composition was separated at the

Card 1/2

USSR/Inorganic Chemistry. Complex Compounds.

C

Abs Jour : Ref Zhur - Khimiya, No. 8, 1957, 26442.

interaction of HgS with AuCl<sub>3</sub>. The author notes the extreme instability of Au<sub>2</sub>S<sub>3</sub>. The approximate value of the solution product of Au<sub>2</sub>S<sub>3</sub> is 10<sup>-199.7</sup>.

Card 2/2

✓ 578. Determination of gold in refined platinum.  
A. N. Chesnov; *Trudy Ural'sk. Politekhn. Inst.*  
1958, 57, 178-183; *Ref. Zhur., Khim.*, 1957, Abstr.  
No. 34,985.—Tervalent Au is practically completely  
pptd. by H<sub>2</sub>S. No interference to the pptn. is  
caused by the presence of Pt, Pd or other elements.  
A method is evolved for the determination of small  
quantities of Au in refined platinum in which the  
time for the determination is reduced by more than  
three times, and only a fifth of the weight of metal  
is used.  
C. D. Korzin

4  
1-4E3d  
1-4E2C

N7 1/1

CHECHNEVA, A.N.

Reaction of trivalent gold with p-anisidine. Trudy Ural.politekh.  
inst. no.96:134-137 '60. (MIRA 14:3)  
(Gold—Analysis) (Anisidine)

CHECHNEVA, A.N.; PODCHAYNOVA, V.N.

Study of the reaction of platinum with 1,4-diphenylthiosemicarbazide. Qualitative detection reaction for platinum. Izv. vys. ucheb. zav., khim i khim tekhn. 7 no.5:731-735 '64  
(MIRA 18:1)

1. Kafedra analiticheskoy khimii Ural'skogo politekhnicheskogo instituta imeni S.M. Kirova.

PODCHAYNOVA, V.N.; CHECHNEVA, A.N.; KRYLOV, Ye.I.

Compounds of platinum with phenyl substituted thiosemicarbazides. Zhur. neorg. khim. 10 no.2:535-537 F '65.

(MIRA 18:11)

1. Ural'skiy politekhnicheskii institut. Submitted May 5, 1964.

1. CHECHNEVA, M.
2. USSR (600)
4. Women in Aeronautics
7. Aviation sportswomen in the land of the Soviet. Kryl. rod. 4, No. 3, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953. Unclassified.

CHECHNEVA, Marina, geroy Sovetskogo Soyusa, zaslushenny master sporta.

High-altitude flight in a sport plane. Kryl.rod. 4 no.11:6 N '53.

(MLRA 6:11)

(Airplanes--Piloting)



CHECHNEVA, M.

Subject : USSR/Aeronautics - Sports AID P - 5517  
Card 1/1 Pub. 58 - 8/17  
Authors : Mikhalenkov, E., Hero of the Soviet Union, M. Chechneva,  
Hero of the Soviet Union, A. Vinokurov, Sen. Pilot-  
Instructor, Aeroclub of the City of Moscow.  
Title : The lagging of the aviation sports must not be tolerated  
Periodical : Kryl. rod., 2, 16, F 1957  
Abstract : The authors discuss the withering of the interest of the  
Soviet people in aviation sports, and suggest a series  
of measures aimed at stimulating the activity of the  
DOSSAF organizations in this field.  
Institution : None  
Submitted : No date

SOV/85-58-10-7/34

**AUTHOR:** Chachneva, M., Honorary Master of Sports, Hero of the Soviet Union

**TITLE:** Towards A Great Life! (V bol'shuyu zhizn')

**PERIODICAL:** Kryl'ya rodiny, 1958, Nr 10, pp 5-6 (USSR)

**ABSTRACT:** The author tells how as a Komsomol member she was accepted at the age of 16 [1938] as a student of aviation at the Moskovskiy aeroklub (Moscow Aeroclub). During the war she joined the Communist Party, fought at the front, and in 1946 was awarded the title of Hero of the Soviet Union. After the war she trained students at the Tsentral'nyy aeroklub SSSR imeni V.P. Chkalova (USSR Central Aeroclub imeni V.P. Chkalov), led the group of women-pilots during air parades, participated many times in All-Union aviation competitions, winning first prizes and awards. She established 2 records in altitude flying in Yak-11 and Yak-18 aircraft on closed 500-km. triangular routes. In 1951, she was awarded the title of Honorary Master of Sports. In 1956, when retired from active service because of poor health, she continued working as a member of the Sovetskiy Komitet veteranov voyny (Soviet War Veterans' Committee) as acting president of the Obshchestvo bolgarno-sovetakoy družby (Society of Bulgarian-Soviet Friendship), and as a member of the Presidium of the DOSAAF Central Committee.

Card 1/2

SOV/65-58-10-7/34

**Towards a Great Life!**

Personalities mentioned include Marina Raskova, instructor Mikhail Pavlovich Duzhnov, unit commander Ivan Ivanovich Sheherbakov, Hero of the Soviet Union, and flying instructors Valeriya Khomyakova, Ol'ga Shakhova, and Mariya Kuznetsova. There is 1 photograph of the author.

Card 2/2

CHECHNEVA, M., geroy Sovetskogo Soyusa

Planes take off into the night. Kryl.rod. 11 no.3:16-18 №  
'60. (MIRA 13:5)

(Women in aeronautics)

GHECHNEVA, M., Geroy Sovetskogo Soyuz.

Planes take off into the night. (to be continued). Kryl.rod. 11  
no.4:20-21 Ap '60. (MIRA 13:6)  
(World War, 1939-1945--Aerial operations)  
(Women in Aeronautics)

CHECHNEVA, M., Geroy Sovetskogo Soyuzo

Airplanes take off into the night... (continuation)  
Kryl.rod. 11 no.5:23-25 My '60. (MIRA 13:7)  
(Women in aeronautics)  
(World War, 1939-1945--Aerial operations)

CHECHNEVA, M., Geroy Sovetskogo Soyuza

Airplanes take off into the night...(to be continued). Kryl.rud.  
11 no.6:21-22 Je '60. (MIRA 13:7)  
(World War, 1939-1945--Aerial operations)  
(Women in aeronautics)

CHERNEVA, M., Geroy Sovetskogo Soyusa

Planes take off into the nights; (to be continued). Kryn.rod. 11  
no.7:22-23 JI '60. (MIRA 13:7)

(World War, 1939-1945—Aerial operations)

(Women in aeronautics)



CHECHNEVA, M., Geroy Sovetskogo Soyuzo.

Planes take off into the night... Kryl.rod. 11 no.8:23-25 Ag  
'60. (MIRA 13:8)

(World War, 1939-1945--Aerial operations)  
(Women in aeronautics)

CHECHNEVA, M., Geroy Sovetskogo Soyuz.

Airplanes take off into the night (conclusion). Kryl.rod. 11  
no.9:26-28 S '60. (MIRA 13:9)  
(Women in aeronautics)

CHECHNEVA, Marina Pavlovna, Geroy Sovetskogo Soyuz; ARISTOV, V.I., red.;  
SLEPTSOVA, Ye.N., tekhn. red.

[Airplanes take off into the night] Samolety ukhodiat v noch'. Moskva, Voen. izd-vo M-va obor. SSSR, 1961. 156 p. (MIRA 14:7)

1. Chlen Prezidiuma Tsentral'nogo Komiteta Vsesoyuznogo dobrovol'nogo obshchestva sodeystviya armii, aviatsii i flotu, Chlen Sovetskogo Komiteta veteranov voyny, zamestitel' predsedatelya Obshchestva sovetsko-bolgarskoy druzhby (for Chechneva)  
(World War, 1939-1945—Aerial operations)  
(Women in aeronautics)

CHECHNEVA, Marina, Geroy Sovetskogo Soyuza

Aerial hero Vadim Fadeev. Kryl. rod. 15 no.8:13 Ag '64  
(MIRA 18:1)

CHECHNEVA, M., Geroy Sovetskogo Soyuza

A heart full of fire. Kryl. rod. 16 no.3:4-5 Mr '65.

(MIRA 18:5)

CHECHNEVA, Marina, Geroy Sovetskogo Soyuza

Battle over a city. Kryl. red. 16 no.12:4-6 D '65.  
(MIRA 18:12)

CHECHOTKIN, O.V.

Age variations of some biochemical indices in the liver of hens of different production types. [with summary in English]. Ukr.biokhim. zhur. 30 no.4:494-505 '58 (MIRA 11:9)

1. Kafedra biokhimii Khar'kovskogo veterinarnogo instituta.  
(POULTRY)  
(LIVER)  
(METABOLISM)

L 22836-66 EWT(d)/EWT(l)/EWT(m)/EPF(n)-2/T/EWP(t) IJP(c) JD/WW/JG/GG  
 ACC NR: AP6003752 SOURCE CODE: UR/0181/66/008/001/0009/0012

AUTHOR: Chekhovskoy, V. Ya.; Zhukova, I. A.  
 ORG: Scientific Research Institute of High Temperatures, Moscow (Nauchno-  
issledovatel'skiy institut vysokikh temperatur)

TITLE: Energy of formation and concentration of vacancies in niobium, measured by  
 the mixing method

SOURCE: Fizika tverdogo tela, v. 8, no. 1, 1966, 9-12

TOPIC TAGS: niobium, crystal vacancy, enthalpy, specific heat, crystal impurity,  
 temperature dependence

ABSTRACT: In view of the fact that earlier data on niobium were obtained by the  
 modulation method, whereas the mixing method is most widely used at present, the  
 authors have obtained experimental data on the enthalpy of niobium in the tempera-  
 ture interval 600--2600K and determined from these data the energy of vacancy pro-  
 duction and the vacancy concentrations in niobium at high temperatures. The en-  
 thalpy was measured with a bulk calorimeter with isothermal shell. The samples  
 used were 99.81 and 99.47% pure at lower temperatures, and even purer at higher  
 temperatures. The procedures used for the tests and for the data reduction are  
 briefly described. The temperature dependence of the specific heat at constant



L 22836-66

ACC NR: AP6003752

pressure was found to satisfy the formula  $C_p = 5.672 + 6.328 \times 10^{-4} T$  (cal-g-at-deg) +  $[136 \times 10^4 / (T - 273.15)] \exp(-19.6 \times 10^3 / T)$ . The energy of vacancy production was found to be 39 kcal/g-at, and the vacancy concentration was found to be  $C = \exp(S/R) \exp(-U/RT) = 35 \exp(-3900/RT)$ , with accuracy  $\pm(15--20\%)$ . The differences from results obtained by the modulation method are attributed to the influence of impurities. Orig. art. has: 3 figures and 6 formulas.

SUB CODE: 20,11/ SUBM DATE: 27May65/ ORIG REF: 009/ OTH REF: 004

Card 2/2 *TV*

CHECHIKIN, ALEKSANDR VASIL'YEVICH  
VYSOKOTEMPERATURNIYE TEPLONOSITELI  
(HIGH TEMPERATURE HEAT TRANSFER AGENTS)

MOSKVA, GOSENERGICZDAT, 1957.

167 (1) P. DIAGRS., GRAPHS, TABLES

"LITERATURA": P. 164-(168)

CHECHUGA, B.G.

Some physiological and ecological characteristics of the habitat of  
the larvae of *Tendipes* f. l. plumosus L. Vop. ekol. 5:242-243 '62.  
(MIRA 16:6)

1. Belostokskiy meditsinskiy institut.  
(Rajgrad, Lake--Chironomidae)

CHECHUKOV, V.

Something new comes into our life. IUn. nat. no.9:11, 13 S '62.  
(MIRA 16:5)

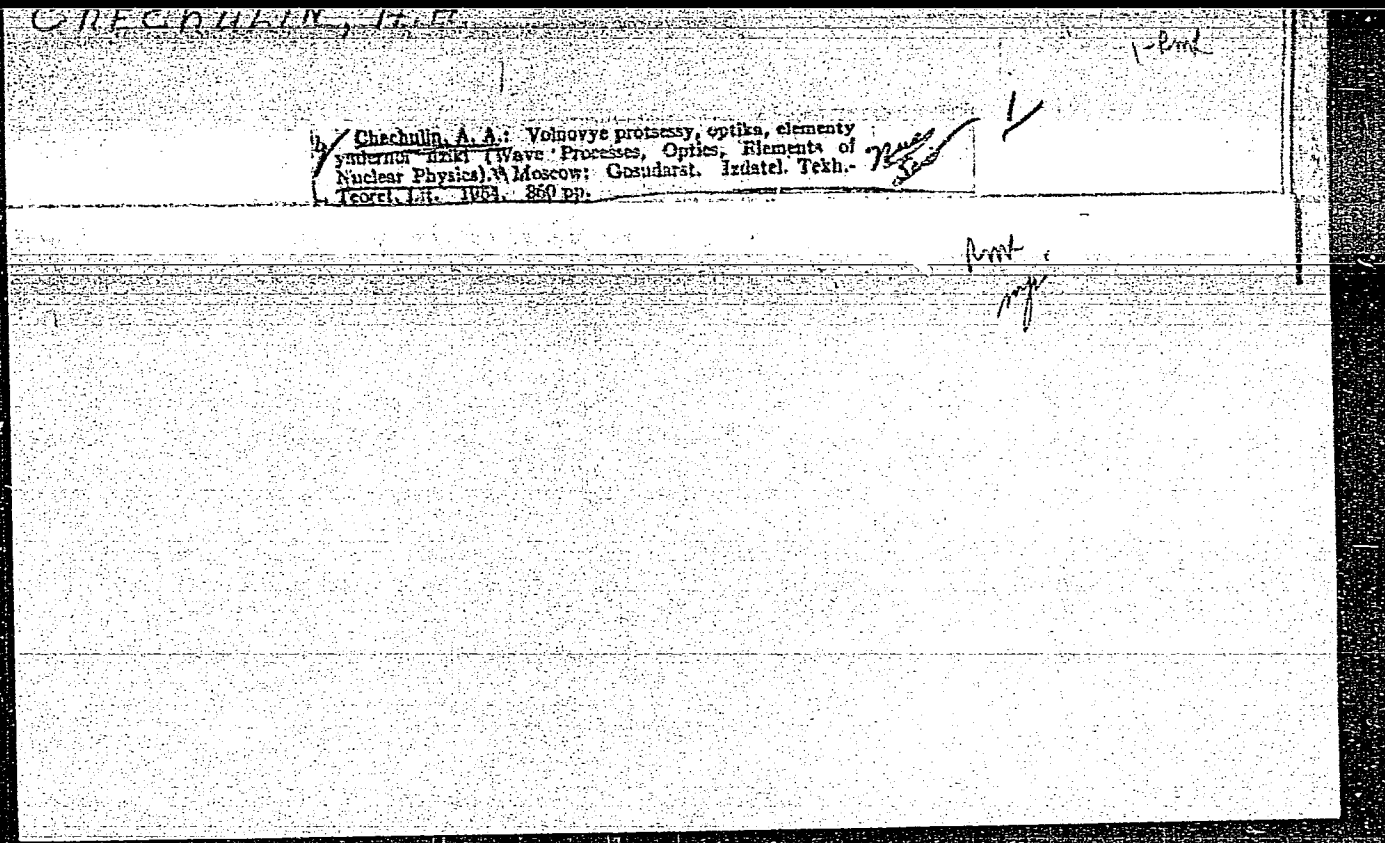
1. Sekretar' partiynoy organizatsii kolkhosa imeni XXI s"yezda  
Kommunisticheskoy partii Sovetskogo Soyusa.  
(Beresovka District (Odessa Province)--Collective farms)

6.  
13

CHECHULIN, A. A.

Chechulin, A. A. "On a physics course in higher technical schools,"  
Vestnik vyssh. shkoly, 1949, No. 1, p. 16-19

SO: U-3264, 10 April 53, (Letopis 'Zhurnal 'nyk' Statey, No. 4, 1949).



24(4,5)

PHASE I BOOK EXPLOITATION SOV/3293

Chechulin, Anatoliy Arkad'yevich

Volnovyye protsessy. Optika. Elementy atomnoy i yadernoy fiziki  
(Wave Mechanics. Optics. Elements of Atomic and Nuclear Physics)  
2d ed., rev. and enl. Moscow, Fizmatgiz, 1959. 396 p. 45,000  
copies printed.

Ed.: V.A. Grigorova; Tech. Ed.: K.F. Brudno.

**PURPOSE:** This textbook is intended for students of physics at schools of higher technical education.

**COVERAGE:** The textbook treats the fundamental laws and principles of wave mechanics, optics, atomic structure, nuclear physics. Part One of this work contains definitions of harmonic, forced, and damped vibrations and an explanation of the Huygens, Fermat and Doppler principles. Acoustics, sound intensity and pressure, ultrasonics, electromagnetic wave propagation and the fundamentals of television are also discussed. Part Two deals with principles in optics;

Ca:

Card 1/12

CHECHULIN, A.A., dotsent, kand. tekhn. nauk; PAVLOV, V.G., inzh.

Aerodynamic resistance of the layer of blast furnace burden  
materials. Izv. vys. ucheb. zav.; chern. met. 2 no.4:23-29 Ap  
'59.  
(MIRA 12:8)

1. Ural'skiy lesotekhnicheskiy institut. Rekomendovano  
kafedroy energetiki Ural'skogo lesotekhnicheskogo instituta.  
(Blast furnaces)



PHASE I BOOK EXPLOITATION SOV/5784

Chechulin, Anatoliy Arkad'yevich

Fizika atoma, atomnogo yadra i elementarnykh chastits; uchebnoye posobiye po obshchemu kursu fiziki (Physics of the Atom, Atomic Nucleus, and Elementary Particles; Textbook for a General Course in Physics) Leningrad, 1960. 152 p. Errata slip inserted. 7000 copies printed.

Sponsoring Agency: Ministerstvo vysshego i srednego spetsial'nogo obrazovaniya RSFSR. Severo-zapadnyy zaachnyy politekhnicheskiiy institut.

Ed.: L. Vol'pe.

PURPOSE : This book is intended for high school and university students.

COVERAGE: Basic concepts of the physics of the atom, the nucleus, and of the elementary particles including such topics as line

Card 1/6

Physics of the Atom (Cont.)

SOV/5784

spectra, the origin and sources of the various types of radiation, luminescence and fluorescence, radioactivity and nuclear transmutations, cosmic rays and the wave properties of elementary particles are discussed. No personalities are mentioned. There are no references.

TABLE OF CONTENTS:

Ch. I. Line Spectra and the Rutherford - Bohr Model of the Atom	
1. Origin of line spectra and theory of the hydrogen atom	3
2. Structure of atoms and D. I. Mendeleev's periodic system of elements	14
Review problems	20
Ch. 2. Isotopes	
3. Discovery of isotopes and methods of isotopic analysis	21

Card 2/6

CHECHULIN, A. S.

"The N. N. Petrov Operation for Malignant Tumors of the Face and the Oral Cavity Responsible for Severe Pains," *Mhirur.*, No.8, 1949.

Lecturer, 1st Chair Surgery, State Order Lenin Inst. for Advanced Training for Physicians in. Kirov.

**CHECHULIN, A.S.**

**Fifty years of scientific activities of Nikolai Nikolaevich  
Petrov. Vest.khir. 70 no.2:3-6 F '50. (CIML 19:3)**

**1. Leningrad.**

1. CHECHULIN, A. S.
2. USSR (600)
4. Mediastinum - Tumors
7. Case of simultaneous removal of a neurofibroma of the posteriro mediastinum and of the thoracic portion of the esophagus due to cancer of the latter. Vest.khir. 72 no. 6, 1952.

9. Monthly Lists of Russian Accessions, Library of Congress, March 1953, Unclassified.

CHECHULIN, A.S., dotsent (adres: Leningrad, Nevskiy pr., d. 22/24,  
~~kv. 1017~~; NEPENINA T.Ye.

Surgical treatment of tumor of the thyroid. Vest.khir. 74.  
no.3:71-73 Ap-My '54. (MLRA 7:6)

1. Iz 1-y khirurgicheskoy kliniki (sav.prof. N.N.Petrov) Gosudarstvennogo ordena Lenina instituta usovershenstvovaniya vrachey im. S.M.Kirova.  
(THYROID GLAND, neoplasms,  
\*surg.)

CHECHULIN, A.S., dotsent (adress: Leningrad, Nevskiy pr. 22/24 kv. 161)

Professor N.N.Petrov as the head of the Department of Surgery at the S.M.Kirov State Institute for Advanced Medical Study. Vest. khir. 74 no.3:83-85 Ap-My '54. (MLRA 7:6)

1. Is 1-y kafedry khirurgii (sav. prof. N.N.Petrov) Gosudarstvennogo ordena Lenina instituta usoverashenstvovaniya vrachey in. S.M.Kirova.

(PETROV, NIKOLAI NIKOLANVICH, 1875- )

*CHECHULIN*  
KOGAN, A.Kh; CHECHULIN, A.S.; ALIYEV, M.A. (Moskva)

Blastomogenic effect of cellophane in experimental renal hypertension in rats. Arkh.pat. 17 no.2:65-66 Ap-Je '55. (MLRA 8:10)

1. Iz Tsentral'noy nauchno-issledovatel'skoy laboratorii imeni prof. S.I.Chechulina i Moskovskogo ordena Lenina meditsinskogo instituta (nauchnyy rukovoditel'--prof. S.M.Pavlenko)

(HYPERTENSION, experimental, renal, carcinogenic eff. of cellophane used for compression of kidney in rats)

(CARCINOGENS, cellophane, in compression of kidneys for prod. of exper. renal hypertension in rats)

(CELLOPHANE, effects, carcinogenic, in prof.of exper. renal hypert. by cellophane compression of kidneys)



CHECHULIN, A.S., dotsent

Bleeding from the mucous membrane of the gall bladder in  
calculous cholecystitis. Vest.khir.76 no.10:129-131 N 155.  
(MLRA 9:1)

1. Iz 1-y kafedry khirurgii (sav.--prof. N.N.Petrov) Gosu-  
darstvennogo ordena Lenina instituta usovershenstvovaniya  
vrachey in. S.M.Kirova.

(CHOLECYSTITIS

calculous, causing hemorrh. of gallbladder mucous  
membrane)

(GALL BLADDER, hemorrh.

caused by calculous cholecystitis)

(HEMORRHAGE

gall bladder mucous membrane, caused by calculous  
cholecystitis)

KOGAN, A.Kh.; CHECHULIN, A.S.; Prinimali uchastiye: VEDROVA, N.N., student;  
FILIMOVA, M.V., student (Moskva)

Analysis of the importance of the mechanical factor in the blasto-  
mogenic action of compressive cellophane capsules applied to the  
kidneys. Arkh.pat. 20 no.1:44-49 '58. (MIRA 13:12)

1. Iz kafedry patofiziologii (zav. - prof. S.M.Pavlenko) i iz  
TSentral'noy nauchno-issledovatel'skoy laboratorii imeni prof.  
S.I. Chechulina (zav. A.S.Chechulin) i Moskovskogo ordena Lenina  
meditsinskogo instituta imeni I.M. Sechenova.  
(KIDNEYS--TUMORS) (CELLOPHANE--PHYSIOLOGICAL EFFECT)

EXCERPTA MEDICA Sec 16 Voľ 7/6 Cancer June 59

2039. **A new strain of transplantable rat sarcoma obtained by application of a cellophane capsule to the kidney (Russian text)** KOGAN A. Ku. and CHECHULIN A. S. First Sechenov Med. Inst. Moscow *Patol. Fiziol. i Eksper. Terap.* 1957, 1/3 (39-44) Illus. 4

The authors applied compressing cellophane capsules to the kidneys and obtained development of polymorphocellular sarcoma of the size of a small hen's egg in the vicinity of the capsule. This tumour was successfully transferred to 16 generations made up of 239 rats and a new strain of transplantable rat sarcoma was created; it was called 'KCh' (Kogan-Chechulin). Successful transfer in all generations beginning with the second amounted to 80-100% in young rats and 50-84% in old ones. Period of survival after inoculation of the tumour varied in young and mature rats from 25 days to 10 weeks, old rats surviving for longer periods with a maximum of 3.5-4 months. In 50% of cases the tumour reached the animals' body weight and not infrequently exceeded the latter. It was hard to palpation, and sometimes invaded surrounding tissues; on section it had the appearance of white flesh of fish with areas of necrosis. No metastases developed. Growth of the tumour was associated with development of cachexia; sometimes, when inoculation was made intraperitoneally, ascites was observed. In the first generation, as distinct from the parent polymorphocellular sarcoma, the tumour resembled spindle-cell sarcoma in its structure, and in the fifth and thirteenth generations it again acquired the structure of polymorphocellular sarcoma.

Davydova - Moscow

USSR/Human and Animal Physiology. Digestion.

V

Abs Jour: Ref. Zhur.-Biol., No 6, 1958, 26988.

Author : A.S. Cechulin.

Inst : ~~XXXXXXXXXXXXXXXXXXXXXXXXXXXX~~

Title : The Effect of Partial and Complete Extirpation of the Cerebral Cortex on the "Mechanical Secretion" of Gastric Juice.

Orig Pub: Patol. fiziologiya i eksperim. terapiya, 1957, 1, No 4, 53-54.

Abstract: Bilateral extirpation of the cerebral cortex in 19 cats and 5 dogs augmented the secretion of gastric juice in response to a mechanical stimulus (shortened latent period, increased quantity of gastric juice, acidity and digestive activity) without its subsequent normalization within a period of six months.

Card : 1/2

*Lab of Cortico-Visceral Pathology  
Inst. Physiology in I. P. Pavlov AS USSR*

CHECHULIN, A.S.

CHECHULIN, A. S., *Card Med Sci* -- (Russ) <sup>Effect</sup> "Effect of partial and complete  
 extirpation of the <sup>(cortex of the large cerebral hemispheres)</sup> ~~cerebral cortex~~ <sup>u/som</sup> on the  
 mechanical secretion of ~~the~~ gastric juice." *Izv*, 1956. 16: 11. (Int Res Order  
 of Acad Sci USSR I. S. Sechenov), 250 copies (75, 25-50, 10)

POLYAKOVA, K.K.; CHECHULIN, A.S. (Moskva)

Morphological changes in the organs and tissues of experimental animals caused by the mercurial diuretics mercusal and mersalin. Arkh.pat. 20 no.11:48-53 '58. (MIRA 12:8)

1. Iz kafedry patologicheskoy anatomii (zav. - chlen-korrespondent ANU SSSR prof.A.I.Strukov) i Tsentral'noy nauchno-issledovatel'skoy laboratorii imeni prof.S.I.Chechulina I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.Sechenova.  
(MERCURY COMPOUNDS--PHYSIOLOGICAL EFFECT)  
(DIURETICS AND DIURESIS)

CHECHULIN, A.S.

Effect of partial and total extirpation of the cerebral cortex on mechanical secretion of gastric juice. [with summary in English]  
Biol. eksp. biol. i med. 45 no. 6:44-49 Je '58 (MIRA 11:8)

1. Iz laboratorii kortiko-vistseral'noy patologii (sav. - prof. I.T. Kurtsin) Instituta fiziologii imeni I.P. Pavlova (dir. - akad. K.M. Bykov) AN SSSR i Tsentral'noy nauchno-issledovatel'skoy laboratorii im. prof. S.I. Chechulina (sav. A.S. Chechulin) i Moskovskogo ordena Lenina meditsinskogo instituta im. I.M. Sechenova. Predstavlena akademikom K.M. Bykovym.

(CEREBRAL CORTEX, physiology

eff. of decortication on gastric secretion (Rus))

(GASTRIC JUICE,

secretion, eff. of cerebral decortication (Rus))

EXCERPTA MEDICA Sec 9 Vol 13/1 Surgery Jan 59

596. PANCREATIC NECROSIS AFTER SPLENECTOMY (Russian text) -  
Chechulin A. S., Sazonov A. M. and Maslov S. I. - VESTN.  
KHIR. 1958, 80/2 (72-77) illus. 10

This complication prompted the authors to undertake a detailed study of the pancreatic blood supply. Thirty cadavers were used. The pancreatic vessels were filled with a 10% solution of gelatin with red lead followed by roentgenography and anatomical dissection. It is contended that in cases of plexiform, and especially in the segmental type of pancreatic blood supply, the ligation of the splenic artery in its course to the spleen independently from the indication for this intervention may result in arterial ischaemia of the body and tail of pancreas.



**GALKIN, V.A.; CHECHULIN, A.S. (Moskva)**

**Experimental production of cholecystitis. Pat.fiziol. i eksp.  
terap. 3 no.1:78-79 Ja-F '59. (MIRA 12:2)**

**1. Iz Tsentral'noy nauchno-issledovatel'skoy laboratorii im.  
S.I. Chechulina i Moskovskogo ordena Lenina meditsinskogo insti-  
tuta I.N. Sechenova.  
(CHOLECYSTITIS, experimental  
induction (Rus))**

EXCERPTA MEDICA Sec 16 Vol 7/11 Cancer November 59

4992. **Some clinical and surgical aspects of tumours of the thymus gland**  
(Russian text) CHECHULIN A. S. and ZHOLOBOV L. K. Post Grad. Sch. of Med.  
and Ped. Inst., Leningrad *Vopr. Onkol.* 1959, 5/2 (183-188) Illus. 4

During the last 6 yr., 7 cases were observed. Four patients were operated on. Radical operation could be performed in 3. Out of the patients operated on, 1 died soon after operation, while 3 have been under observation from 1 to 6 yr. The results of examination of the thymus in 116 cadavers are given. The authors point out that tumours of the thymus develop at the age of 25 or later and are often malignant. One has to distinguish lymphocytic, epithelial, and combined forms. The clinical features usually resemble those of other tumours of the mediastinum. Roentgenological examination is considered to be one of the most important methods of diagnosis. Pneumomediastinography, tomography, diagnostic pneumothorax, kymography and cardioangiography help to clarify the roentgenological data.

CHECHULIN, A.S., dotsent

Use of hemostatic biological preparations in surgery. Akt.vop.perel.  
krovi no.7:159-160 '59. (MIRA 13:1)

1. Leningradskiy Gosudarstvennyy ordena Lenina institut usovershenst-  
vovaniya vrachey im. S.M. Kirova.  
(HEMOSTATICS) (CHEST--SURGERY)

DOMBROVSKAYA, Yu.F., prof.; VAL'TER, Ye.M., kand.med.nauk; CHECHULIN, A.S.,  
kand.med.nauk; DOMBROVSKIY, A.N., kand.med.nauk; ROGOV, A.A., kand.  
med.nauk

Age factor in the reactivity of the organism to hypoxemic states;  
parallel clinical and experimental findings. Vest.AMN SSSR 14 no.3:  
18-29 '59. (MIRA 12:3)

(ANOXIA, effects.  
age factor in animal & human reactions (Rus))  
(AGING, effects.  
on animal & human reactions to anoxia (Rus))

ARKHANGEL'SKAYA, L.N.; LEVTOVA, K.Z.; CHICHULIN, A.S.

Some data on the employment of medical graduates of sanitary-hygiene faculties. Gig.i san. 24 no.11:48-49 N '59. (MIRA 13:4)

1. Iz I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M. Sechenova.  
(HYGIENE education)

ARKHANGEL'SKAYA, L.N.; GALKIN, V.A.; GRIGORENKO, R.V.; LEVTOVA, K.Z.;  
CHECHULIN, A.S.; GARVEY, H.N., red.; RAYKO, H.M., tekhn.red.

[They serve the motherland; tenth anniversary of the graduation  
of physicians at the I.M.Sechenov First Moscow Medical Institute  
in 1949] Oni sluzhat Rodine; k 10-letiu vypuska vrachei 1-go  
MOLMI imeni I.M.Sechenova 1949 g. Moskva, 1960. 81 p.  
(MIRA 14:6)

(MOSCOW--MEDICAL COLLEGES)

DOMBROVSKAYA, Yu. F.; VAL'TER, .M.; CHECHULIN, A.S.; DOMBROVSKIY, A.N.; ROGOV, A.A.

Role of the age factor in hypoxemic states. (Clinico-experimental studies). Acta med. hun. 15 no.1:99-115 '60.

1. Klinika detskikh bolezney i Tsentral'naya Nauchno-issledovatel'skaya laboratoriya imeni S. I. Chechulina i Moskovskogo Ordena Lenina Meditsinskogo Instituta imeni I.M.Sechenova.

(ANOKIA)

(AGING)

DOMBROVSKAYA, Yuliya Fominichna. Prinsipialni uchastiye: CHECHULIN, A.S.,  
kand. med. nauk; DOMBROVSKIY, A.N., nauchnyy sotr.; ROGOV, A.A.,  
nauchnyy sotr.; DMITRIYEVA, N.M., red.; MIRONOVA, A.M., tekhn.  
red.

[Clinical aspects and pathogenesis of hypoxemia in the growing  
body; clinical experimental observations] Klinika i patogenez  
gipoksemii rastushchego organizma; kliniko-eksperimental'nye  
nabliudeniia. Pri uchastii A.S.Chechulina, A.N.Dombrovskogo i  
A.A.Rogova. Moskva, Medgiz, 1961. 254 p. (MIRA 15:4)

1. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR  
(for Dombrovskaya).

(ANOXEMIA)



CHECHULIN, A.S. (Leningrad, D-88, Nevskiy prosp., 22/24, kv. 161);

~~LOBZIN, V.S.; DOGEL', L.V.~~

Surgical treatment of myasthenia (thymectomy). Grud. khir.  
2 no. 3:92-99 My-Je '60. (MIRA 15:3)

1. Iz kafedry torakal'noy khirurgii i anesteziologii (ispolnya-  
yushchiy obyazannosti zaveduyushchego - prof. V.V. Ornatskiy),  
kafedry nervnykh bolezney (zav. - deystvitel'nyy chlen AMN SSSR  
prof. S.N. Davidenkov) Gosudarstvennogo ordena Lenina Instituta  
usovershenstvovaniya vrachey imeni S.M. Kirova i kliniki nervnykh  
bolezney No.2 (zav. - prof. A.G. Fanov) Voenno-meditsinskoy  
ordena Lenina akademii imeni S.M. Kirova.

(MYASTHENIA GRAVIS)

(THYMUS GLAND SURGERY)

IVANOVA, A.I.; CHECHULIN, A.S.

Comparative evaluation of chemotherapeutic preparations based on their effect on the transplantable Kagan-Chechulin sarcoma in rats. Trudy 1-MMI) 16:278-285 '62. (MIRA 17:4)

1. Iz Tsentral'noy nauchno-issledovatel'skoy laboratorii imeni S.I.Chechulina (zav. - kand.med.nauk A.S.Chechulin).

BABCHIN, I.S., prof.; BABANOVA, A.G., doktor med. nauk; BLOKHIN, N.N., prof.; BONDARCHUK, A.V., prof.; GAL'PERIN, M.D., prof.; GOL'DSHTEYN, L.M., prof.[deceased]; DYMARSKIY, L.Yu., kand. med. nauk; KARPOV, N.A., prof.; KOYRO, M.A., nauchn. sotr.; LARIONOV, L.F., prof.; LITVINOVA, Ye.V., kand. med. nauk; MEL'NIKOV, R.A., kand. med. nauk; NECHAYEVA, I.D., doktor med. nauk; PETROV, Nikolay Nikolayevich, prof.; PETROV, Yu.V., kand. med.nauk; RAKOV, A.I., prof.; ROGOVENKO, S.S., kand. med. nauk; SENDUL'SKIY, I.Ye., prof.; SEREBROV, A.I., prof.; SMIRNOVA, I.N., kand. med. nauk; TAL'MAN, I.M., prof.; TOBILEVICH, V.P., prof.; TRUKHALEV, A.I., kand. med. nauk; Kholdin, Semen Abramovich, prof.; CHEKHARINA, Ye.A., kand. med. nauk; CHECHULIN, A.S., kand. med. nauk; SHAAK, V.A., prof.[deceased]; SHANIN, A.P., prof.; SHAPIRO, I.N., prof.[deceased]; SHEMYAKINA, T.V., kand. med. nauk; SHERMAN, S.I., prof.; ABRAKOV, L.V., red.; LEBEDEVA, Z.V., tekhn. red.

[Malignant tumors]Zlokachestvennyye opukholi; klinicheskoe rukovodstvo. Leningrad, Medgiz. Vol.3. Pts.1-2. 1962. (MIRA 16:5)

1. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR (for Blokhin, Petrov, Serebrov). 2. Chlen-korrespondent Akademii meditsinskikh nauk SSSR (for Kholdin).

(CANCER)

GRIGORENKO, Remir Vladimirovich; KOSHAYEVA, Vera Georgiyevna;  
SHAVERD'YAN, El'vina Georgiyevna; CHECHULIN, A.S., red.;  
BASHMAKOV, G.M., tekhn. red.

[Reader on medicine for foreign students] Kniga dlia chte-  
niia po meditsine dlia studentov inostrantsev; uchebnoe po-  
sobie. Moskva, Medgis, 1963. 303 p. (MIRA 16:10)  
(MEDICINE--STUDY AND TEACHING)

DOGEL', L.V.; CHECHULIN, A.S.

Treatment of myasthenia by thymectomy. Zhur. nevr. i psikh. 63  
no.8:1139-1146 '63. (MIRA 17:10)

1. Klinika nervnykh bolezney (zav. - prof. S.N. Davidenkov [deceased])  
i klinika torakal'noy khirurgii (zav. - prof. S.A. Gadzhiyev) Instituta  
usovershenstvovaniya vrachey imeni Kirova, Leningrad.

USSR / Diseases of Farm Animals. Toxicoses.

R

Abs Jour: Ref Zhur-Biol., No 8, 1958, 35878.

Author : ~~Chechulin, A. V.~~  
Inst : ~~Stavropol~~ Institute of Agriculture.  
Title : Sheep Poisoning by Taurus Sagebrush.

Orig Pub: Sb. nauchno-issled. rabot stud. Stavropol'sk.  
in-ta, 1956, vyp. 4, 131-133.

Abstract: No abstract.

Card 1/1

CHECHULIN, B. B.

USSR/Physics - Structural Strength

FD-603

Card 1/1 : Pub. 153-15/22

Author : Chechulin, B. B.

Title : ~~Statistical theory of fragile strength~~  
Statistical theory of fragile strength

Periodical : Zhur. tekhn. fiz., 24, 292-298, Feb 1954

Abstract : Presents a critical analysis of the basic assumptions in the theory of statistics proposed by W. Weibull (Proc. Roy. Swedish Inst. Eng. Res. No 151, (1939)) and by T. A. Kontorova and Ya. I Frenkiel (ZhTF, 11, No 3, 173 (1941)). Demonstrates that the failure of these theories is due to the theoretically incorrect assumption as to the distribution function of defect hazards, which are statistically distributed through the body and responsible for its destruction under load. Indebted to Prof. O. V. Sarmanov. 8 references, including 2 foreign.

Institution :

Submitted : May 22, 1953

CHECHULIN, B. B.

FD-1014

USSR/Metallurgy - Rupture of steel

Card 1/1 : Pub. 153 - 18/24

Author : Chechulin, B. B.

Title : Influence of the size of specimens upon mechanical characteristics during plastic destruction.  
I. Scale effect during static test on the rupture of steel of various brands.

Periodical : Zhur. tekhn. fiz., 24, 1093-1100, Jun 1954

Abstract : Shows that in the case of a plastic character the rupture in the test for influence of specimen size on fracture depends only on the so-called limiting mechanical characteristics. Concludes that a variation in diameter of specimens from 1.5 to 20 mm has practically no influence on the mechanical characteristics which are not directly connected with rupture. For most steels tested an increase in diameter leads to lessening of necking and of true resistance to rupture, in which the scale effect mainly appears. Ten references, 5 USSR (e.g. P. O. Pashkov, 1953).

Institution : -

Submitted : June 9, 1953



CHECHULIN, B. B.

FD-1015

USSR/Metallurgy - Rupture of steel

Card 1/1 : Pub. 153 - 19/24

Author : Chechulin, B. B.

Title : Influence of the size of specimens upon mechanical characteristics during plastic destruction. 11. Physical nature of influence of scale factor during plastic destruction

Periodical : Zhur. tekhn. fiz., 24, 1101-1110, Jun 1954

Abstract : Analyzes the possible causes of observed scale effect and attempts to explain the scale effect in plastic destruction from the viewpoint of the static theory of destruction. Does not consider problems connected with scale effect in cyclic tests. Thanks L. S. Chuyeva for her assistance in forming steels. Twelve references, 9 USSR (e.g. F. S. Savitskiy, N. F. Lashko, etc.)

Institution : -

Submitted : June 9, 1953

CHECHULIN, B. B.

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Microscopic nonuniformity of plastic deformation of steel.  
 B. B. Chechulin. *Tr. Akad. Nauk SSSR, Ser. Fiz.-Mat. Nauki*, 1955, 1, 251-60 (1955).  
 Two aspects come here to the fore, nonuniformity in the state of deformation of individual grains and nonuniformity of the metal flow in them. The 1st characterizes the results of nonuniform plastic deformation and is defined by the av. difference of deformations of individual grain within a given extent of av. deformation, the 2nd reflects the rate of nonuniformity increase during the plastic flow. The former is best presented by the frequency curve of true deformation in grains, the latter by the scattering of the values on this curve. The subject is treated mathematically. Comparing in this manner deformations of 0.04-0.05, 0.15, 0.20% C and of 18Cr-8Ni steels showed that in the austenitic steel plastic deformation is uniform; the degree of uniformity of ferritic steels grows with the deformation; max. nonuniformity is observed when pearlite and ferrite are present together. In most cases the max. nonuniformity is observed in the first stages of deformation. Frequency curves showing the difference in axial dimensions before and after deformation permit the detn. of the true local deformation.  
 J. D. Slat

of VAK LTH

Tsentral'nyy Nauchno-Issledovatel'skiy Inst. Ministerstva  
Sudostroitel'noy Promyshlennosti SSSR.

CHECHULIN, B. B.  
USSR/Metallurgy - Brittleness

FD-2412

Card 1/2 Pub. 153-16/21

Author : Chechulin, B. B.

Title : ~~Brittleness of metals and the scale effect~~  
Brittleness of metals and the scale effect

Periodical : Zhur. tekhn. fiz. 25, 125-134, Jan 1955

Abstract : The author establishes a formula for the dependence of critical temperature of brittleness (temperature of appearance in a fracture of crystalline regions) upon size for similar notched samples, which formula has the form  $1/T_{cr} = K \cdot \log M \cdot B$ , where M is any similar dimension of samples and K, B are constants of the material. He gives the theoretical reasons for the formula on the basis of a generalized scheme of A. F. Ioffe and statistical nature of brittle strength. He proposes a new characteristic reflecting the tendency of steel to the scale effect, which he calls the scale coefficient of critical temperature of brittleness. He shows that the physicom metallurgical nature of brittleness, individual peculiarities of smelting and make are reflected but slightly in the magnitude of the scale coefficient, although the influence of the make or quality of steel requires further testing. He notes that considerable influence is exerted upon the scale coefficient of temperature of annealing of steel

Card 2/2

after cooling; here it is established that the higher the temperature of annealing the greater the absolute scale coefficient of temperature of brittleness. He thanks A. L. Nemchinskiy, candidate of technical sciences. Nine references.

Institution: --

Submitted : March 8, 1954