KONDRASHEV, D.

SHER, Isaak Dmitriyevich; KONDRASHEV, D., otvetstvennyy red.; TOLYPINA, O.,
    red.izd-va; DZHATIYEV, S., tekhn.red.

[Financing capital investments in state industry in the U.S.S.R.]
Finansirovanie kapital'nykh vlozhenii v gosudarstvennuiu pro-
myshlennost' SSSR. Moskva, Gosfinizdat, 1958. 240 p. (MIRA 11:7)
        (Capital investments)

KONDRASHEV, D.

Book on the amortization of fixed assets ("Obsolescence and amorti-
zation of fixed assets" by P. Pavlov. Reviewed by D. Kondrashev).
Vop. ekon. no.1:128-132 Ja '58.   (MIRA 11:3)
                              (Amortization)
                              (Pavlov, P.)

KONDRASHEV, D.

Price formation is an important factor in the development of the
national economy and the strengthening of monetary circulation.
Den. i kred. 16 no.9:19-27 S '58.   (MIRA 11:10)
                        (Prices)

TARNOVSKIY, O.I.; PEVZNER, M.I., retsenzent; KONDRASHEV, D.D., kand.
ekonom.nauk, nauchnyy red.; PLEMYANNIKOV, M.N., red.; SHAPEN-
KOVA, T.A., tekhn.red.

[Establishing prices for shoes] Obrazovanie tsen na obuv'.
Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po legkoi promyshl.,
1959. 176 p.   (MIRA 12:11)
            (Boots and shoes--Prices)

KONDRASHEV, D.

"Commodity production and law of value under socialism" by
M.F.Makarova. Reviewed by D.Kondrashev. Den.i kred. 17
no.10:87-91 O '59.   (MIRA 12:12)
          (Value) (Makarova, M.F.)

KONDRASHEV, D.

"Principal economic task of the U.S.S.R."; methodological
problems by I.A.Tikhonov. Reviewed by D.Kondrashev). Vop.
ekon. no.7:127-129 Jl '60.   (MIRA 13:5)
            (Russia--Economic policy) (Tikhonov, I.A.)

KONDRASHEV, D., doktor ekon. nauk

Economic basis of prices. Fin. SSSR 21 no.1:44-54 Ja '60.

(MIRA 13:1)

(Prices)

KONDRASHEV, Denis Dmitriyevich, doktor ekonom.nauk; PROKOF'YEV, S., red.;
    MOSKVINA, R., tekhn.red.

[Preices and business accounting] TSena i khoziaistvennyi raschet.
Moskva, Izd-vo sotsial'no-ekon.lit-ry, 1961. 110 p.
                           (MIRA 14:3)

   (Economics)   (Prices)

KONDRASHEV, D., doktor ekonom.nauk

Problems of prices, costs, and profit. Den. i kred. 19 ',o.9:
15-23 S '61.   (MJRA 14:9)

(Prices)

KONDRASHEV, D., doktor ekonomicheskikh nauk

Development of the wholesale price system in industry. Den. i
kred. 20 no.6:23-33 Je '62.   (MIRA 15:6)
                              (Wholesale trade--Prices)

AKOPOV, R.Ya., kand. ekon. nauk, dots.; BASYUK, T.L., doktor
ekon. nauk, prof.; BIRMAN, A.M., doktor ekon. nauk, prof.;
GRIGOR'YEV, A.Ye., doktor ekon. nauk, prof.; DOKUKIN, V.I.,
prof.; IKONNIKOV, V.V., prof.; KONDRASHEV, D.D., doktor
ekon. nauk; KURSKIY, A.D., doktor ekon. nauk; LOKSHIN, E.Yu.,
doktor ekon. nauk, prof.; MALYY, I.G., kand. ekon. nauk,
dots.; PERVUSHIN, S.P., kand. ekon. nauk; PLOTNIKOV, K.N.,
TYAPKIN, N.K., kand. ekon. nauk; FILIMONOV, N.P., kand. ekon.
nauk; SHAFIYEV, K.N., doktor ekon. nauk; prof.; BAKOVETSKIY,0.,
red.; KOKOSHKINA, I., mladshiy red.; MOSKVINA, R., tekhn. red.

[Economics; communist means of production]Politicheskaia ekono-
miia; kommunisticheskii sposob proizvodstva. Uchebnik 2., pe-
rer. i dop. izd. Moskva, Sotsekgiz, 1963.   599 p.
(MIRA 16:5)

1. Chleh-korrespondent Akademii nauk SSSR (for Plotnikov).
(Economics)   (Communism)

KONDRASHEV, Denis Dmitriyevich, doktor ekon. nauk; LEPNIKOVA, Ye.,
red.; KIRSANOVA, I., mlad. red.; MOSKVINA, R., tekhn. red.

[Price and value in the socialist economy] Tsena i stoimost'
v sotsialisticheskom khoziaistve. Moskva, Sotsekgiz, 1963.
391 p.   (MIRA 16:12)
                    (Prices)   (Value)

KONDRASHEV, D., doktor ekonom.nauk

Price is an important means for creating a communist economy.
Fin.SSSR 37 no.4:34-43 Ap '63.   (MIRA 16:4)
                        (Prices)

KONDRASHEV, D. M.

KONDRASHEV, D. M. -- "Author's Abstract of a Dissertation Presented in
    Competition for the Academic Degree of Candidate in Technical
    Sciences on the Subject "The Mechanical Stepless Friction Chain
    Drive of Metal Cutting Machine Tools and Other Adjustable
    Machines." Min Higher Education USSR, Odessa Polytechnic Inst,
    Odessa, 1955. (Dissertation for the Degree of Candidate in
    Technical Sciences)

SO; Knizhnaya Letopis: No. 39, 24 Sept 55

Kondrashev, D.S.

FILATOV, A.A., insh.; KONDRASHEV, D.S., insh.

Log-loading conveyer. Transp.stroi. 7 no.5:31 My '57. (MIRA 10:11)
(Lumber--Transportation)   (Conveying machinery)
(Loading and unloading)

KONDRASHEV, F.S., inzh.; LYAPIN, D.P., inzh.; PRIVALOV, V.P., inzh.

Stoping without miners. Bezop.truda v prom. 4 no.1:12
Ja '60.   (MIRA 13:5)
        (Coal mines and mining)

LYAPIN, D.P., inzh.; KONDRASHEV, F.S., inzh.; SKAFA, B.F., inzh.

New techniques in coal mining in steep seams. Bezop.truda v prom.
5 no.1:10-11 Ja '61.   (MIRA 14:2)

1. Donetskiy nauchno-issledovatel'skiy ugol'nyy institut.
        (Coal mines and mining—Technological innovations)

LYAPIN, D.P., inzh.; KONDRASHEV, F.S.; MOGIL'NIKOV, F.S.; RUDENKO, P.F.

    Results of industrial tests in the Donets Basin of the new
technology of mining steeply dipping seams with the drilling
and blasting method without the presence of men in the stope.
Sbor.DonUGI no.20:39-58 '61.   (MIRA 15:6)
        (Donets Basin—Coal mines and mining) (Blasting)

KONDRASHEV, F.S.; VINARSKIY, I.S.; GET'MAN, P.V., inzhener-ekonomist

Criticism and bibliography. Ugol' Ukr. 7 no.10:51-52 O '63.
(MIRA 17:4)

1. Donetskiy nauchno-issledovatel'skiy ugol'nyy institut
(for Kondrashev, Vinarskiy).

GELYUKH, I.D., inzh.; KONDRASHEV, F.S., inzh.

Mining with caving or filling depends on local conditions.
Ugol' 38 no.9:4-8 S '63.   (MIRA 16:11)

1. Donetskiy nauchno-issledovatel'skiy gornyy institut.

STARODUBTSEV, V.L., inzh.; KONDRASHEV, F.S., inzh.; LYAPIN, D.P., inzh.;
    OPREDELENNOV, B.Ye., inzh.

    Effect of the worked-out level on the gas conditions of the
    underlying block. Sbor.DonUGI no.20:59-76 '61.   (MIRA 15:6)
                                (Mine gases)

KONDRASHEV, F.V.; POPIL'SKIY, R.Ya.

Methods for measuring the pressure of the air content in and the elastic expansion of ceramic raw materials. Stek.i ker. 17 no.3: 29-33 Mr '60.   (MIRA 13:6)

(Ceramics)

31562
S/081/61/000/022/043/076
B110/B101

15.2610

AUTHOR: Kondrashev, F. V.

TITLE: Experiments of cleaving for determining the tensile strength
            of ceramics

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 22, 1961, 298, abstract
            22K177 (Stroit. keramika. Inform.-tekhn. sb., no. 2(6),
            1960, 36-42)

TEXT: The author studied the possibility of determining the tensile
strength by cleaving the samples with a concentrated compression load.
Two 40-50 mm long bars were sawn out of cylindrical samples. One was
cleft in the direction of pressure, the other one in transverse direction.
Unburnt samples were cleft by means of special frames, the working parts
of which were two 1 mm thick knives lying in one plane. When examining
the unburnt samples, the cleaving stress on the frame was transmitted by
filling shot into the bucket of the lever. When testing burnt samples,
the cleaving stress was transmitted by the УМ-5 (UM-5) testing machine used
for compressing and stretching various samples. This method permits a

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B110/B101

Experiments of cleaving for ...

direct determination of tensile strength in any part of the semifinished
or finished product in nearly any form. Results of strength determination
are tabulated. [Abstracter's note: Complete translation.]

Card 2/2

/. /600

AUTHORS: . Kondrashev, F. V., Popil'skiy, R. Ya.

TITLE: Some factors determining the elastic expansion and lamination in pressing ceramic powders

TEXT: The authors investigated the elastic expansion process in pressing fine-grained powders of various types on high-speed mechanical and low-speed hydraulic presses at different degrees of humidity, without and with vacuum. They established the dependence of the magnitude of elastic expansion and the properties of the pressed items on the volume of the pressed-in air and its pressure in the pores. Cylindrical specimens 60 mm in diameter and approx. 20 mm in height from two powders (these powders are used for the manufacture of floor tiles and faience facing tiles) are pressed in a specially designed press mold. Analyzing the dependence of the volume and pressure of the pressed-in air on the humidity, pressing pressure and pressing rate of the specimens from Nikiforov clay, the authors draw the conclusion that the volume of the pressed-in air during the pressing of

Card 1/2

Some factors determining the elastic expansion and...

fine-grained clay powders varies from 0.370 to 0.715 relative to the total air volume in the filled-in charge. This dimensionless magnitude was called the coefficient of pressed-in air (K_p). The air displacement up to 85 - 95% during the pressing of fine-grained clay powders stops at a pressure in the range of 5 - 20 kg/cm^2. With an increased humidity of the press powder the necessary pressing pressure is reduced, while the volume of displaced air is increased. As a result of the investigations it was found that, with good surface conditions and sufficient rigidity of the press mold at the moment of ejection, cracks do not originate, while the evacuation of air from the powder is of practical interest in solving problems connected with an improvement in quality of ceramic articles and raising the efficiency of the equipment.

T. Kislyakova

[Abstracter's note: Complete translation]

Card 2/2

KONDRASHEV, F.V.

Use of a vacuum when pressing ceramic powders. Stek.i ker.
19 no.5:19-21 My '62.   (MIRA 15:5)
                        (Ceramics)
                        (Vacuum apparatus)

KONDRASHEV, F. V., inzh.; POPIL'SKIY, R. Ya.,kand tekhn nauk

Pressing in air and elastic expansion during the compression of
lean coarse-grained ceramic bodies. Trudy NIIStroikeramiki
no. 19:54-65 '62.   (MIRA 17:5)

KONDRASHEV, B.V., inzh.; POPIL'SKIY, R.Ya., kand. tekhn. nauk

Elastic expansion, pressing of air, and effectiveness of deaeration during molding of ceramic wares. Stek. i ker. 21 no.1:17-22 Ja '64.

(MIRA 17:8)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut stroitel'noy keramiki (for Kondrashev). 2. Moskovskiy khimiko-tekhnologicheskiy institut imeni D.I. Mendeleyeva (for Popil'skiy).

KONDRASHEV, G.F.

Council of Innovators of Leningrad Enterprises. Izobr.i rats. no.9:
33-35 S '60.   (MIRA 13:10)

1. Sekretar' Leningradskogo gorkoma Kommunisticheskoy partii Sovetskogo
Soyuza.
          (Leningrad—Technological innovations)

VAL'DMAN, Edgar Karlovich; KONDRASHEV, I.F., red.; BIRYUZOVA,
    Ye.I., red.; FAYNSHMIDT, F.Ya., tekhn. red.

[Amusing problems in naval art and science] Zanimatel'nye
zadachi po voenno-morskomu delu. Moskva, Izd-vo DOSAAF, 1963.
142 p.   (MIRA 16:6)
    (Naval art and science--Problems, exercises, etc.)

KAPUSTA, A.S., inzh.; KONDRASHEV, I.V., inzh.; BARSKIY, S.M., inzh.

The Fu-62 adapter. Avtom., telem. i sviaz' 8 no.7:4-6
Jl '64.   (MIRA 17:12)

"The Fixed Focusing 1.5 Meter Cyclotron,"
by L. M. Nemenov, S. P. Kalinin, L. F. Kondrashov,
Ye. S. Mironov, A. A. Naumov, V. S. Panasyuk,
N. D. Fedorov, N. N. Khaldin and A. A. Chubakov,
Atomnaya Energiya, Vol 2, No 1, Jan 57, pp 36-41

Describes a 1.5-meter fixed frequency cyclotron. Construction on
the cyclotron was completed in 1946. The first deuteron beam was ob-
tained in 1947.

The following energies have been attained on the cyclotron: protons
to 12.2 Mev, deuterons and hydrogen ions to 19.6 Mev, alpha-particles to
39.2 Mev, and nitrogen ions to 120 Mev.

The electromagnet is of rectangular cross section and weighs 330 tons.
The core is made of "Armco" steel and has a 1,500-mm diameter. The magnet
can develop a field strength up to 18,000 oersted.

Sum. 1322

KONDRASHOV L. F.

The resonance system, high-frequency generator, slit sources for introducing ions, corrections to the magnetic field, the acceleration chamber, resonance lines, and the dees are described. Also discussed are the vacuum system and the deflector and focusing system. Modifications made in some of these components since original construction are noted.

At the present time, "research continues on developing a deflector with focusing properties. Methods for making a beam of charged particles monochromatic and for correcting the magnetic field to permit variable ion energy are also being developed."

The following members of the Scientific Research Institute of Electrophysical Equipment, Ministry of the Electrical Engineering Industry, are participating in the project: D. V. Yefremov, Ye. G. Komar, I. F. Malyshev, N. A. Monoszon, M. A. Gashev, and N. S. Strel'tsov. (U)

Sum. 1322

Kond R RS HEY. L. F.

1 - -5/40

AUTHORS: Kondrashev, L.F., Nemenov, L.M., Novikov, G.M., Pustovoyt, Yu.M., Khaldin, N.N. and Chubakov, A.A.

TITLE: A Gas Supply Bench for the Ion Source of a Cyclotron. (Stend gazovogo pitaniya ionnogo istochnika tsiklotrona)

PERIODICAL: Pribory i Tekhnika Eksperimenta, 1957, Nr 3, pp.23-25, (USSR)

ABSTRACT: A description is given of a working gas supply bench for the ion source of a cyclotron. The gas supply bench is shown diagramatically in Fig.1. It consists of a system of gas holders, an electrolyser for obtaining deuterium, a manometer, a device for measuring gas flow, and various valves for adjusting this flow. The gas in the gas holders is always at atmospheric pressure. A special admission valve is described and is shown in Fig.3. The system admits a constant amount of gas and is simple to service. The admission can be regulated in the range 0-300 cm^2/hour. There are 3 diagrams, no tables and 1 Russian reference.

SUBMITTED: January 16, 1957.

AVAILABLE: Library of Congress.

Card 1/1   1. Ions   2. Cyclotrons   3. Gas-Instrumentation

Kondrashev, L.F.

AUTHORS: Kondrashev, L.F., and Panasyuk, V.S.   120-6-18/36

TITLE: Measurement of the Absolute Magnitude of the Magnetic Field
           of a Cyclotron without Releasing the Vacuum (Izmereniye
           absolyutnoy velichiny magnitnogo polya tsiklotrona bez
           narusheniya vakuuma)

PERIODICAL: Pribory i Tekhnika Eksperimenta, 1957, No.6,
                            pp. 79 - 80 (USSR)

ABSTRACT: A magnetometer using the principle of nuclear resonance
        absorption (Ref.1) is described. The instrument was constructed
        in 1951 and was used on the 1.5 m cyclotron. Measurements were
        carried out in the range 11 to 12 kOe. The instrument is very
        small in size (30 mm in diameter and 1 200 mm long) and could
        therefore be introduced in the form of a probe into the
        accelerating chamber of the cyclotron. The accuracy of the
        method can be of the order of 10^{-4}%; the accuracy actually
        used was 10^{-1}%. The following persons collaborated: L.M.
        Nemenov, A.A. Naumov, P.I. Vasil'yev and L.I. Yudin.
        There is 1 Slavic reference.

SUBMITTED: September 24, 1956.

AVAILABLE: Library of Congress.
Card 1/1

AUTHORS: Kondrashev, L.F., Kurashov, A.A., Linev, A.F., Sidorov, V.A.,
Sokolov, N.I. and Khaldin, N.N.

TITLE: A Spectrometer for Fast Neutrons (Spektrometr bystrykh
neytronov)

ABSTRACT: The measurement of the fast neutron spectrum is one of
the most difficult problems of experimental nuclear physics.
The most common method employed in neutron spectroscopy in
the energy region of a few MeV is the method of proton recoil.
The measurement of the neutron spectrum is reduced to the
measurement of the spectrum of the recoil protons which are
produced by the neutron beam in a specimen containing hydro-
gen. There are a number of methods of measuring the proton
spectrum. One of these is the nuclear emulsion method but
this is very time-consuming and therefore not always conven-
ient. The other methods employ coincidence circuits. Such
a system is usually called a "telescope". These telescopes
can be used in two ways. In the first method one measures
the range of the protons in special absorbers between the
counters and in the second method one measures the amplitudes
of the pulses from a scintillation counter which is the last

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A Spectrometer for Fast Neutrons.   SOV-120-58-1-2/43

counter of a telescope. The first of these was used in the
present work. The telescope (Fig.1) consists of 4 proportion-
al counters. A polyethylene "radiator" is placed in front
of the first counter and two sets of aluminium absorbers are
used to measure the range of recoil protons in aluminium. The
first and main set of absorbers is placed in front and the
third counter and the second set of filters in front of the
fourth one. The first, second and third counters are in
coincidence and the fourth in anti-coincidence. Thus one
records recoil protons formed in the radiator and whose path
ends before the fourth counter. An estimate of the proton
loss due to multiple scattering was made, using the curves
of Dickinson and Dodder (Ref.2). The figure obtained for
this loss was less than 5% of the recoil protons. A photo-
graph of the telescope is shown in Figs.2 and 3. The tele-
scope can be used in studying not only neutrons but also
charged particles. The spectrometer was used to study the
reaction T(p, n) He^3 for proton energies between 7 and
12 MeV. The neutrons were obtained at a target of a 1.5 m

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A Spectrometer for Fast Neutrons.   SOV-120-58-1-2/43

cyclotron. The derived neutron spectrum at zero angle for
the above reaction is shown in Fig.5. The following persons
are thanked for their cooperation: N. A. Vlasov, S. P. Kali-
nin, A. A. Shubin and L. N. Samoylov. There are 5 figures,
no tables and 6 references, of which 2 are English and 4
Soviet.

SUBMITTED: June 19, 1957.

        1. Neutron spectrum analyzers--Equipment   2. Neutron spectrum
        analyzers--Performance   3. Neutron spectroscopy

Card 3/3

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S/120/60/000/004/012/028
E032/E414

21.2200

AUTHORS: Kondrashev, L.F., Rybin, S.N., Sokolov, N.I. and
              Khaldin, N.N.

TITLE: Thin Vacuum-Tight Windows

PERIODICAL: Pribory i tekhnika eksperimenta, 1960, No.4, pp.102-105

TEXT: In nuclear reaction studies it is frequently necessary to
have thin vacuum-tight windows.   The present paper describes some
of the designs of such windows which were used in experiments on a
1.5 m cyclotron in which these windows were used for gas targets,
vacuum chambers and other devices.   The simplest solution of this
problem which ensures that the thin window is in a vacuum-tight
contact with the body of the apparatus is to solder the window to
the body or to attach it with a suitable adhesive.   However, this
leads to a certain amount of contamination of the evacuated region
during the soldering process and the contamination is difficult to
remove.   In the case of soldering, a further difficulty is
encountered since it is difficult to attach the window uniformly
over the perimeter.   As a result, the thin window is nonuniformly
loaded when the apparatus is evacuated.   The heating of the
material of the window during soldering may lead to nonuniform

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Thin Vacuum-Tight Windows

changes in its mechanical properties which are also undesirable,
and non-demountable designs present difficulties when it is desired
to replace the windows. Fig.1 (1 - window, 3 - thin foil,
4,5 - rubber packing) shows a demountable form of a window in which
the thin foil has a cylindrical form and vacuum tightness is
ensured by rubber packing.   With a gas target of 5 cm in diameter,
window height of 1.2 cm and window length along the circular
periphery of 9 cm, an 8 μ thick iron foil withstood pressures in
excess of 2.5 atm.   With a gas target 10.6 cm in diameter and two
windows of 1.7 cm x 5 cm and three windows 2 to 3 cm in diameter,
a 30 μ copper foil withstood pressures up to 1.5 to 2 atm.   This
type of window was used by Bogdanov et al (Ref.1) in their studies
of the proton spectra of the reaction $He^4 + d$ at 30°.
Fig.2 (1 - mica plate 10 μ thick, 4 - rubber packing) shows
another type of target in which the window is plain and consists of
a 10 μ thick mica plate maintained in position by brass grids on
either side.   The transparency of this arrangement was about 65%.
The window is made vacuum-tight by rubber packing.   A plane window

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Thin Vacuum-Tight Windows

designed for working pressures up to 10 atm is shown in Fig.3. Here again, the foil 3 forming the wall of the window is supported on a brass grid 4 having a transparency of 70%. Rubber packing ensures vacuum tightness and 30 μ copper foils and 10 μ iron foils were used with this design. This type of window was used by Bogdanov et al (Ref.3) in their studies of the polarization of neutrons produced in the T(p,n)He³ reaction. Fig.4 shows a similar window in which the foil 1 is supported by a tungsten grid 2 made of 0.2 mm diameter wire. Fig.5 shows a design of a thin window used with a β-spectrometer. The cylindrical wall of the window 3 was made from aluminium ribbon 0.5 mm thick; rubber packing ensures vacuum tightness. This window was used by Vlasov and Rudakov (Ref.4) in their studies of the angular β-γ correlation in the case of Ba139. Finally, Fig.6 shows the design of a gas target with a plane, thin wall 3 which was used by Bogdanov et al (Ref.5) in their studies of the spectrum of fast neutrons produced in the bombardment of deuterium by deuterons. Here a platinum foil 30 μ thick is soldered to the body. The foil is separated by a grid of tungsten

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Thin Vacuum-Tight Windows

wires 3. The window was found to withstand pressures up to
4 atm. The above devices were assembled and prepared for
experiments by A.A.Shubin. There are 6 figures and 5 Soviet
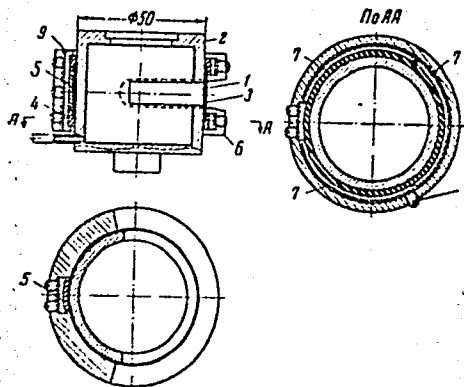references.

SUBMITTED: May 27, 1959

Fig.1.

Рис. 1. Газовая мишень с тонкой цилиндри-
ческой стенкой

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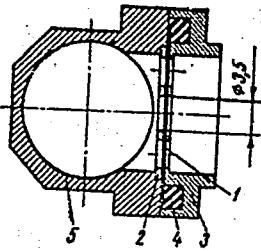E032/E414

Thin Vacuum-Tight Windows

Рис. 2. Тонкая стенка счет-
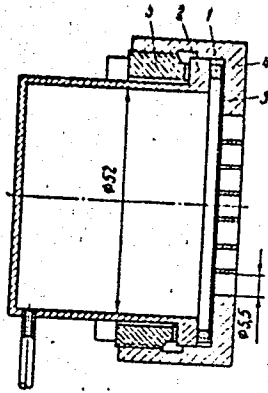чика с двумя поддержива-
ющими решетками

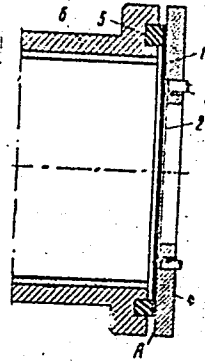Fig.2.

Рис. 3

Fig.3.

Рис. 4

Fig.4.

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Card 6/6

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PHASE I BOOK EXPLOITATION   SOV/5881

Kondrashev, Lev Fedorovich, and Nikolay Nikolayevich Khaldin

Oborudovaniye dlya yadernykh issledovaniy (Equipment for Nuclear Research) Moscow, Gosatomizdat, 1961. 146 p. 3700 copies printed.

Ed. (Title page): L. M. Nemenov, Doctor of Technical Sciences; Ed.: A. F. Alyab'yev; Tech. Ed.: N. A. Vlasov.

PURPOSE: The book is intended for physicists, design engineers, personnel working with particle accelerators, and teachers and students in related specialities at schools of higher education.

COVERAGE: The book deals with the problems of the designing, constructing, and adjusting of special equipment for operating cyclotrons and for conducting nuclear experiments. A description is given of the Cyclotron Laboratory of the Institut atomnoy energii im. I. V. Kurchatova AN SSSR (Institute of

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Equipment for Nuclear Research

SOV/5881

Atomic Energy im. I. V. Kurchatov, Academy of Sciences USSR). The operation of this installation was checked extensively and proved to be reliable. Some design elements discussed in the book can also be applied in other laboratories. The authors thank S. P. Kalinin, N. D. Fedorov, N. A. Vlasov, D. V. Timoshuk, and the staff members of the Cyclotron Laboratory. References accompany each chapter.

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Card 2/6   7

GUDKOV, A.S.; KIYEVLENKO, Ye.Ya.; KONDRASHEV, S.N.; YERMAKOV,
N.P., retsenzent; LAZ'KO, Ye.M., retsenzent; PETROV,
V.P., retsenzent; TATARINOV, P.M., retsenzent;
KHOTENK, M.M., retsenzent; MAKSIMOV, A.A., nauchn. red.;
FEDYUK, V.I., nauchn. red.

[Fundamentals of prospecting for piezo-optic mineral de-
posits] Osnovy poiskov i razvedki mestorozhdenii p'ezo-
opticheskikh mineralov; metodicheskoe rukovodstvo. Mo-
skva, Gosgeoltekhizdat, 1963. 217 p.   (MIRA 17:6)

KONDRASHEV, S.N.

Subsurface geology, origin and development of the Chelyabinsk
graben. Izv. vys. 'uchev. zav.; geol. i razv. no.3:20-35 Mr '58.
(MIRA 11:10)

1.Vsesoyuznyy nauchno-issledovatel'skiy ugol'nyy institut.
(Chelyabinsk Province--Coal geology)

AUTHOR: Kondrashev, S. N.

TITLE: SOV/132-58-12-5/14

Some Problems in Forming Polar Graphs of Apparent Specific
Resistance (Nekotoryye voprosy formirovaniya polyarnykh dia-
gramm kazhushchegosya soprotivleniya)

PERIODICAL: Razvedka i okhrana nedr, 1958, Nr 12, pp 32-39 (USSR)

ABSTRACT: The author describes some problems connected with the compil-
ing of polar graphs of apparent specific resistance, to ob-
tain the most characteristic curves for a definite type of
geo-electric cross-section by means of a three-cathode di-
simetric installation. The obtained polar graphs permit one
to classify the surveyed media as anisotropic or horizontally
non-homogeneous.
There are 3 charts, 1 set of graphs and 6 Soviet references.

ASSOCIATION: VNIIP

Card 1/1

KONDRASHEV, S.N.; ANUFRIYEV, Yu.N.

General problems relative to the use of geophysical methods in prospecting for piezooptic quarts deposits. Trudy VNIIP [MS] 3 no.2: 51-60 '60.

(Quarts)   (Prospecting—Geophysical methods)

(MIRA 14:4)

USSR-Mil

369-E.1   6 Apr 61

KONDRASHEV, V.   , Col, author of the article "This Is More
     Than History," a foreign political commentary on Greece.

Krasnaya Zvezda, 6 Apr 61

                                    26
                                    (1)
                                    tg

BARMIN, S.F.; KONDRASHEV, V.A.; KHALATIN, V.I.

Cutting in on a gas line with the use of rubber balls. Gas.
prom. 4 no.7:49-50 Jl '59.
            (Gas, Natural--Piplines)   (MIRA 12:10)

BARMIN, S.F.; KONDRASHEV, V.A.; KHALATIN, V.I.

Emergency repair service of gas pipelines. Gaz. prom. 4 no.12:41-42
D '59.
(Gas pipes--Maintenance and repair)
(MIRA 13:3)

KHALATIN, V.I., KONDRASHEV, V.A., BARMIN, S.P., MAGAZANIK, Ya. M.

Interconnecting gas mains. Gaz.prom. 5 no.2:40-41 F '60.
(Gas, Natural—Pipelines)

BARMIN, S.F.; KONDRASHEV, V.A.; KHALATIN, V.I.

Ball cocks on main pipelines. Gaz.prom. 5 no.9:40-43 S '60.
(MIRA 13:9)

(Gas, Natural--Pipelines)

Kondrashev, U. F.

KLIMCHENKO,I.Z.; AKOPUAN,M.M.; MIRONOV,N.P.; KONDRASHEV,V.F.; LOSHITSKIY, M.N.

Comparative rating of the reliability of various methods of calcu-
lating the suslik population. Trudy probl. i tem.sov. no.5:29-38 '55.
(MIRA 8:12)

1. Rostovskiy protivochumnyy institut
                              (Susliks)

Kondrashev, V. F.
KLIMCHENKO,I.Z.; KOLESNIKOV,I.M.; KONDRASHEV,V.

Mechanical method of controlling the lesser suslik. Trudy probl. i
tem.sov. no.5:48-60 '55.   (MIRA 8:12)

1. Rostovskiy protivochumnyy institut
                              (Susliks)

KONDRASHOV, Yu. D.

PA 64/49T16

Chemistry - Crystals
Chemistry - Crystal Lattices

The Crystalline Structure of 4-Methyl-5-phenyl-1, 2-dithiol-3-thione," A. I. Zaslavskiy, Yu. D. Kondrashov, X-Ray Lab, Chem Inst; Lenin-grad U, 7 3/4 pp

"Zhur Obsch Khim" Vol III, No 6-p.1144

This crystal belongs to the disphenoidal class of rhombic syngony $D_2(V)$ - 222. Laue class D_{2h}. Ratio of axes 1.6202:1 : 0.8610. Periods of identity of the elementary nucleus: $a = 14.64 \pm 0.04$ Å, $b = 9.05 \pm 0.02$ Å, $c = 7.69 \pm 0.02$ Å. Four molecules are in the nucleus. Space group $D_2^4 P 2_1 2_1 2_1$ (D_2^4). In the molecule, facets of benzene and thiolic rings incline perpendicularly to each other. Crystal lattice is composed of layers, containing in the facet of the nucleus two molecules. In the layer of the molecule is found so, the linear axis of the molecule in-clines at an angle of 38° to the axis. The facet of the thiolic ring is found in the facet so.

Submitted 10 Feb 48.

64/49T16

c A

New modification of lead dioxide and the texture of anodic deposits. A. I. Zaslavskii, Yu. D. Kondrashov, and S. S. Tolkachev. Doklady Akad. Nauk S.S.S.R. 75, 559-61 (1950).—The common tetragonal rutile-cassiterite-type form of PbO_2 (henceforth to be designated as β-PbO_2, in analogy with pyrolusite β-MnO_2) was obtained by chem. methods of prepn., such as decompn. of Pb_3O_4 with HNO_3 or oxidation of $PbCO_3$ in alk. soln. with Cl_2, and by electrolysis of acid soln. of $Pb(NO_3)_2$ from $1/4$ N to 2 N at c.d. 0.0001–0.1 amp./sq. cm.   Deposits with x-ray patterns markedly different with respect to the relative intensities of the lines were obtained from neutral solns. of $Pb(NO_3)_2$ $1/4$ N at c.d. 0.0001–0.008 amp./sq. cm.   Electrolysis of $1/4$ N soln. of $Pb(OAc)_2$ at c.d. 0.001, and of soln. of $Pb(ONa)_2$ in NaOH in a wide range of concns. and c.d., gave PbO_2 deposits with a very small no. of x-ray lines and a high degree of orientation.   Fine powders of these deposits proved, in x-ray diffraction, to be a new form of PbO_2, designated as α-PbO_2, orthorhombic, 4 mols. in the elementary cell, $a = 4.938$, $b = 5.939$, $c = 5.486$ A., space group $D_{2h}^{16} = Pbcn$.   The pattern is an alternation in one layer of zigzag-shaped chains of populated and of empty octahedrons with a link length of 3 octahedrons.   The packing is two-layer, hexagonal.   Each O octahedron has 2 common edges with its neighbors.   The cell contains 4 Pb atoms 0, y, $1/4$, with $y = 0.178$, and 8 O atoms with the coördinates $x_0 = 0.26$, $y_0 = 0.42$, $z_0 = 0.44$.   The distance $Pb - O = 2.16$–2.22 A.; the length of the common edge of the octahedrons = 2.88 A.   This structure of α-PbO_2 is close to that of the orthorhombic modification of columbite (Fe-Cb_2O_6) with the octahedrons populated with one kind of atom.   — N. Thon

KONDRASHEV, YU. D.

PA 187T91

USSR/Physics - X-ray Analysis   Mar/Apr 51

"The Structure of the Modifications of Manganese Dioxide," Yu. D. Kondrashev, A. I. Zaslavskiy, State Inst of Applied Chem

"Iz Ak Nauk SSSR, Ser Fiz" Vol XV, No 2, pp 179-186

This lecture is devoted to study of the structure of modifications of MnO2 obtained in pure form by synthetic means and identical to natural modifications. The following are studied: beta-modification of MnO2 (pyrolusite), alpha-MnO2 (cryptomelan), gamma-modification of MnO2 (Ramsdellite),

LC   187T91

USSR/Physics - X-ray Analysis (Contd)   Mar/Apr 51

and bemi-amorphous modification of MnO2. Give tables and figures of the intra-ionic distances between Mn and O and between O and O; also steric diagrams. The lecture was delivered at 3d All-Union Conference on Use of X-rays in Study of Materials held 19 - 24 Jun 50 in Leningrad.

LC   187T91

KONDRASHEV, Yu. D.

164T89

USSR/Metals - X-Ray Analysis   1 Jun 51

"X-Ray Study of the Dispersed Electrolytic Deposits
of Ni-Pd," Yu. D. Kondrashev, I. P. Tverdovskiy,
Zh. L. Vert, State Inst of Applied Chem

"Dok Ak Nauk SSSR" Vol LXXVIII, No 4, pp 729-731

Expts for studying syst Ni-Pd alloys, obtained in
dispersed form by joint electrolytic deposition,
dealt with detn of dimensions of structure cell, deg
of dispersion (size of monocrystal) and lattice dis-
tortion. All 3 detns were based on principle of X-
raying with std. KCl was used as std in part of
syst rich with Ni and latter served as std in part

184T89

USSR/Metals - X-Ray Analysis (Contd)   1 Jun 51

rich with Pd. Results graphed. Submitted by Acad
A. N. Frumkin 9 Apr 51.

184T89

Crystal structure of CoHO.

... the powder diagram is given, ... corrected for the absorption factor. The elementary cell is described with characteristics ...

... 0.005 kX. The rhombohedral cell has the edge $a_{rh} = 4.678 \pm 0.003$ kX, parameter $\alpha = 35° 28' 30'$ ... $90°$; $Z = 3$. The structure type is that of NaHF₂. There is a certain relation for the O^{2-} anions to the layer structure of $Co(OH)_2$, but the octahedral layers are slightly displaced; the empty octahedral spaces in $Co(OH)_2$ are deformed to empty trigonal prisms in $CoO(OH)$, with hydrogen bonds between O^{2-} and OH^- forming nearly symmetrical groups O_2H^{3-} on the vertical edges of these prisms. The octahedron formed by the O^{2-} and OH^- around the Co^{3+} have the interoxygen distances of 2.82 and 2.63 A. The nearest approach of the Co^{3+} to the oxygen is 1.91 A. The oxygens involved in the hydrogen-bond formation are 2.26 A. apart. This distance corresponds to the low mol. vol. of $CoO(OH)$ of 30.8 cu. A., as compared to 34 cu. A. in $MnO(OH)$ and 33 cu. A. in $FeO(OH)$.

W. Eitel

KONDRASHEV YE. D.

USSR

The parameter of boron in the structure of CaB_6. Yu. D. Kondrashev. *Doklady Akad. Nauk S.S.S.R.* 94, 471-3 (1954); cf. Stackelberg and Neumann, C.A. 27, 882; Laves, C.A. 27, 4458.—By use of data published earlier, the linear sections of the three-dimensional F and F² series were constructed. The parameter of the B from the F series was detd. to be 0.22 but from the F² series its value was 0.145. The value of the parameter was detd. from data of x-ray diagrams and found to be in close agreement for both the F series (0.217) and the F² series (0.208).

I. Boytar Leach

Evaluation B-81595

KONDRASHEV, Yu. D.

USSR/Chemistry - Physical chemistry

Card 1/1   Pub. 22 - 29/47

Authors   : Kondrashev, Yu. D., and Tverdovskiy, I. P.

Title   : X-ray analysis of dispersion Ag - Pd and Cu - Pd depositions obtained by electrolysis.

Periodical   : Dok. AN SSSR 99/1, 109-111, Nov 1, 1954

Abstract   : The real crystalline structure - size of nucleus, dispersion and deformation - of lattice of binary solid Ag-Pd and Cu-Pd solutions, obtained through combined electrolytic deposition, was investigated. The derivation of the electrolytic dispersion depositions is described. The average displacement of atoms, characterizing lattice deformation and its maximum value at a silver content of 12%, were established. The formation of a continuous series of solid solutions, symbiosis between dispersion and deformity of the lattice and the external form of the monocrystals, were found to be the general characteristics of electrolytic dispersion depositions. Seven references: 5-USSR; 1-USA and 1-German (1933-1951). Graphs.

Institution : Ministry of Chemical Industry, USSR, State Institute of Applied Chemistry

Presented by: Academician A. N. Frumkin, June 22, 1954

KONDRASHEV, YU. D.

Category: USSR

Abs Jour: RZh-Kh, No 3, 1957, 7767

Author : Markovskiy, L. Ya., Kondrashev, Yu. D., and Kaputovskaya, G. V.
Inst   : Not given
Title   : On the Composition and Chemical Properties of Magnesium Borides

Orig Pub: Zh. Obshch. Khimii, 1955, Vol 25, No 3, 433-444

Abstract: It has been established by x-ray and chemical analysis that Mg and B begin to react at $720 \pm 20°$. At temperatures up to 800°, MgB_2 (I) is formed regardless of the Mg/B ratio. At higher temperatures I decomposes, forming one of three other boride compounds, depending on the temperature; the same compounds are also formed in Mg-B mixtures of varying composition at the same temperatures. I is a dark brown powder which is slowly decomposed by water and more vigorously by acids. When I is treated with hot concentrated HCl, boranes are evolved (0.8-1.1% of the total B content) as well as 2.11-2.12 moles H_2 per mole I. The boride I crystallizes in a hexagonal lattice (of the AlB_2 type); the space-group is D_{6h}^1, a 3.085, c 3.519 A.U.

Card   : 1/2

-8-

KONDRASHEV, Yu. D.

USSR/Chemistry - Applied chemistry

Card 1/1   Pub. 22 - 17/47

Authors   :   Markovskiy, L. Ya.; Kondrashev, Yu. D.; and Kaputovskaya, G. V.

Title   :   Composition and structure of magnesium borides

Periodical :   Dok. AN SSSR 100/6, 1095-1098, Feb 21, 1955

Abstract   :   Data are presented regarding magnesium borides synthesized from elements
               in an atmosphere of purified electrolytic hydrogen. Magnesium borides
               appear in the form of a dark-brown powder which decomposes (partially)
               during continuous heating with HCl. H_2O_2, slowly and gradually oxidizes
               the powder but to a lesser extent than nitric acid. The physico-chemical
               properties of magnesium borides and described. Six references: 1 USSR,
               1 English, 1 French, 2 USA, and 1 Scandinavian (1906-1952). Tables;
               diagram.

Institution: Ministry of Chemical Industry SSSR, State Institute of Applied Chem.

Presented by: Academician I. I. Chernyaev, November 25, 1954

KONDRASHEV, Yu. D.

USSR/ Chemistry - Applied chemistry

Card 1/1   Pub. 22.- 25/51

Authors   : Morkovskiy, L. Ya.; Kondrashev, Yu. D.; and Goryacheva, I. A.

Title   : About the composition of beryllium borides

Periodical : Dok. AN SSSR 101/1, 97-98, Mar 1, 1955

Abstract   : Preliminary data are presented on the composition of beryllium borides.
Samples of Be-borides were synthesized from elements the pulverulent
mixtures of which were briquetted at a fixed component ratio and
temperature in an H_2 atmosphere. Chemical and x-ray analyses show the
presence of at least two phases in the products prepared with a
component ratio of Be : B = 2:1; 3:2 and 1;1. The physico-chemical
properties of the soluble and insoluble Be-borides are listed. Three
references: 1 French, 1 USA and 1 German (1896-1933). Tables; graph.

Institution : Ministry of Chemical Industry USSR, Institute of Applied Chemistry

Presented by : Academician I. I. Chernyaev, November 25, 1954

Composition and the properties of the borides
and H of the periodic system. L. Ya. Markovskiy,
Yu. D. Kondrashev. Zhur. Neorg. Khim.
Experimental data are given on the
properties of the alkali metal borides
of the lithium boride
of lithium borate

KONDRASHEV, Yu.D.

Reciprocal transitions of manganese dioxide varieties. Zhur. neorg.
khim. 2 no.12:2694-2699 D '57.   (MIRA 11:2)

1. Gosudarstvennyy institut prikladnoy khimii.
                            (Manganese oxides)

5.2400(A)

68925

SOV/81-60-1-644

Translation from: Referativnyy zhurnal. Khimiya, 1960, Nr 1, p 91 (USSR)

AUTHORS: Markovskiy, L.Ya., L'vova, V.I., Kondrashev, Yu.D.

TITLE: On the Production of Elemental Boron in an Electric Glow Discharge

PERIODICAL: V sb.: Tr. Konferentsii po khimii bora i yego soyedineniy. Moscow,
Goskhimizdat, 1958, pp 36 - 45

ABSTRACT: It is expedient to carry out the process of BCl_3 reduction by hydrogen
in an electrical glow discharge at a pressure of 30 - 200 mm Hg. The
formation of elemental boron in the highly-dispersed state as well as in
the form of a growth on the electrodes depends on the kinetic and electrical
conditions of the process. The laboratory production of highly-dispersed
boron in the glow discharge with a purity of up to 99.9% with a yield of up
to 50% from BCl_3 is possible at a single passing of the gas mixture through
the discharge. According to the data of comparative roentgenographic
investigations of elemental boron obtained by various methods, electrodis-
charge boron is the purest and the most typical sample of microcrystalline
boron.

Card 1/1   Authors' summary

70-3-2-17/26

AUTHOR: Kondrashev, Yu.D.

TITLE: The Crystal Structures of Halogen Derivatives of Diazo-
           aminobenzene (Kristallicheskaya struktura galogenproizvod-
           nykh diazoaminobenzola)

PERIODICAL: Kristallografiya, 1958, Vol 3, Nr 2, pp 229 - 231
                                                (USSR).

ABSTRACT: The structures of the compounds $X-C_6H_4-NH-N=N-C_6H_4-X$
           have been established. X represented Br or Cl. The unit
           cells are monoclinic with dimensions:

           Cl derivative: a=16.94 ± 0.01 A, b=4.68 ± 0.01, c=22.00 ± 0.02
                     β=136°23' ± 10'. $d_{obs.}$=1.42. Z=4. Space group $P2_1/c$.

           Br derivative: a=16.75 ± 0.01 A, b=4.73 ± 0.01, c=21.96 ± 0.02,
                     β=134°18' ± 10'. Space group $P2_1/c$.

           They were found to be isomorphous. The x and z atomic
           co-ordinates were found to be the following+- (for Cl derivative
           first, followed by corresponding values for Br derivative)

The Crystal Structures of Halogen Derivatives of Diazoaminobenzene.

Cl_1, Br_1	(0.017, 0.336)	(0.021, 0.336)
Cl_2, Br_2	(0.300, 0.402)	(0.298, 0.405)
N_1	(0.346, 0.658)	(0.350, 0.662)
N_2	(0.675, 0.817)	(0.672, 0.817)
N_3	(0.590, 0.746)	(0.595, 0.752)
C_1	(0.116, 0.436)	(0.130, 0.445)
C_2	(0.090, 0.471)	(0.090, 0.467)
C_3	(0.145, 0.528)	(0.170, 0.547)
C_4	(0.272, 0.585)	(0.278, 0.593)
C_5	(0.296, 0.552)	(0.317, 0.575)
C_6	(0.239, 0.490)	(0.237, 0.499)
C_7	(0.670, 0.639)	(0.673, 0.645)
C_8	(0.564, 0.611)	(0.559, 0.600)
C_9	(0.547, 0.640)	(0.534, 0.637)

Card 2/3

The Crystal Structures of Halogen Derivatives of Diazoaminobenzene

$$C_{10} \quad (0.629, 0.720) \quad (0.630, 0.714)$$
$$C_{11} \quad (0.740, 0.750) \quad (0.741, 0.762)$$
$$C_{12} \quad (0.760, 0.719) \quad (0.761, 0.728)$$

There are 1 figure, 1 table and 3 English references

ASSOCIATION: Gosudarstvennyy institut prikladnoy khimii
(State Institute for Applied Chemistry)

SUBMITTED: April 20, 1956

Card 3/3

AUTHOR: Kondrashev, Yu. D.

TITLE: On Certain Peculiarities in X-ray Diffraction Pictures of Diazoaminobenzene (O nekotorykh osobennostyakh rentgenogramm diazoaminobenzola)

PERIODICAL: Kristallografiya, 1958, Vol 3, Nr 5, pp 617-618 (USSR)

ABSTRACT: Diazoaminobenzene, $C_6H_5NH-N = N-C_6H_5$, usually crystallises in monoclinic crystals with $a = 11.37 \pm 0.02$, $b = 5.07 \pm 0.02$, $c = 18.41 \pm 0.03$ A, $\beta = 81°08' \pm 10'$, $d_{obs} = 1.2451$ g/cm^3 and $Z = 4$. Anomalous extinctions and variations in intensity are, however, sometimes observed. Besides the reflections 0k0 with odd k, the reflections $2h,0,2l + 1$ are also absent. Piezo-electricity is observed so that the space group appears to be $P2_1$.

Two different modifications I and II were obtained by crystallisation from benzene and from a mixture of octane and ether, respectively.
I has: $a = 11.36 \pm 0.02$, $b = 5.07 \pm 0.02$, $c = 18.41 \pm 0.03$ A, $\beta = 80°40' \pm 10'$. hkl reflections are present only when $h + l$ is even. A halved cell with

Card1/2

SOV/70-3-5-14/24

On Certain Peculiarities in X-ray Diffraction Pictures of Diazo-
aminobenzene

space group $P2_1$ could be chosen.

II has: a = 11.39 $\pm$ 0.02, b = 5.07 $\pm$ 0.02,
c = 18.42 $\pm$ 0.03 A, β = 81°08' $\pm$ 10'. This had the
space group $P2_1/c$. Usual pictures represent a sum of
the two forms. The form I consists of identical
layers (in the xy0 plane) displaced by 1/2a with respect
to each other. Form II has successive plane connected
by a centre of symmetry and by glide planes. There are
3 figures and 7 references, 2 of which are Soviet,
4 English and 1 German.

ASSOCIATION: Gosudarstvennyy institut prikladnoy khimii
               (State Institute for Applied Chemistry)

SUBMITTED: July 2, 1957

Card 2/2

AUTHOR: Kondrashev, Yu. D.   SOV/70-3-6-6/25

TITLE: On the Crystal Structure and Composition of Crednerite,
            $CuMnO_2$ (O kristallicheskoy strukture i sostave

            krednerita $CuMnO_2$)

PERIODICAL: Kristallografiya, 1958, Vol 3, Nr 6, pp 696-699 (USSR)

ABSTRACT: If copper and manganese oxides are heated at above
            1 000 $^\circ$C the beta non-spinel phase can be formed. The
            cell dimensions were found by McAndrew (Am.Min., 1956,
            Vol 41, p 276) as a = 5.58, b = 2.88, c = 5.87 $\overset{\circ}{A}$,
            β = 104° and the space group was determined as C2/m ,
            C2 or Cm . He identified the material with crednerite
            but gave the composition as $Cu_2Mn_2O_5$. Materials of

            varying composition were prepared and examined by X-ray
            powder photography, the Cu/Mn ratio of 1:1 giving the
            purest specimens which had a density of 5.39 (compared
            with McAndrew's 5.03). The powder diffractometer records
            gave the improved dimensional measurements of
            a = 5.530 $\pm$ 0.005, b = 2.884 $\pm$ 0.002, c = 5.898 $\pm$ 0.005 $\overset{\bullet}{A}$,
            β = 104.6° $\pm$ 0.1°. Experimental and observed spacings
            and intensities are tabulated. The new cell size and

Card 1/3

State Inst. of Applied Chemistry

SOV/70-3-6-6/25

On the Crystal Structure and Composition of Crednerite, $CuMnO_2$

density give $Z = 2$ if the formula is $CuMnO_2$. ($Z_{obs.}$=1.98)
The structure resembles that of $CuFeO_2$ (rather than that
of low-temperature $NaNiO_2$). With the space group C2/m
the atomic co-ordinates are 2Mn in 2(a) 000; 2Cu in
2(d) (0,1/2,1/2) and 4 O in 4(i) (x,0,z) with
x = 0.416 ,   z = 0.143 .   The co-ordination round the
Mn^{3+} atom is ocathedral with 4 oxygens at 1.92 and two
at 2.28 Å .   The Cu^+ atoms lie between layers of MnO_6
ocathedral linked by edges with Cu^+-O distances of
1.80 Å (two co-ordinated).
There are 2 figures, 1 table and 12 references, 3 of which
are Soviet, 5 English, 1 French and 3 German.

Card 2/3

5 (2)
AUTHORS: Markovskiy, L. Ya., Kaputovskaya, G. V., SOV/78-4-8-3/43
                 Kondrashev, Yu. D.

TITLE: On the Problem of the Existence of a Magnesium Boride of the
                 Composition Mg_3B_2 (K voprosu o sushchestvovanii borida magniya
                 sostava Mg_3B_2)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 8,
                 pp 1710 - 1714 (USSR)

ABSTRACT: In his classical paper on boron H. Moissan pointed to the fact
                 (Ref 1) that boron forms several compounds with magnesium,
                 among them one with the formula Mg_3B_2. This opinion is maintain-
                 ed also in the papers of other research workers (Refs 2-5). In
                 earlier papers of the authors (Refs 6,7) simult---eously with
                 American scientists (Refs 8,9), however, no su   apound
                 Mg_3B_2 was found. Table 1 shows the new experim t . results.
                 Figure 1 shows the formation of tetraborane in dependence on
                 the composition of the sinter. The yield in tetraborane in-
                 creases with the magnesium content of the sinter. By means of
                 infrared spectroscopy it was found that tetraborane is formed

Card 1/2

On the Problem of the Existence of a Magnesium   SOV/78-4-8-3/43
Boride of the Composition Mg_3B_2

as final product in the hydrolysis of MgB_2. Table 3 shows the interplanar spacings for the various compounds of magnesium with boron. It may be seen from it that magnesium boride with the formula Mg_3B_2 does not exist. There are 1 figure, 3 tables, and 14 references, 7 of which are Soviet.

ASSOCIATION: Gosudarstvennyy institut prikladnoy khimii (State Institute of Applied Chemistry)

SUBMITTED: October 11, 1957

Card 2/2

5(4)
AUTHORS: Tvordovskiy, I. P., Vert, Zh.L., Kondrashev, Yu. D.

TITLE: Determination of the Dimensions of an Elementary Cell of Cathode-polarized Dispersion Alloys Pd-Au and Pd-Cu

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 127, Nr 4, pp 835-837 (USSR)

ABSTRACT: In the present paper, the lattice parameters of an electrode were determined during its polarization. These investigations permit checking of some assumptions concerning the dependence of the overvoltage of the hydrogen deposition on the inter-atomic distances in the alloys. Investigations were carried out by means of the binary dispersed alloys mentioned in the title. These alloys dissolve hydrogen in a sufficiently wide composi-tion interval. The dissolved hydrogen was eliminated by anodic polarization of the alloy until the deposition of the first hydrogen bubbles. For the recordings, a special Plexiglas cell was used (Fig 1). The recording was made by means of a URS-50-I diffractometer. The lattice periods could be determined up to an accuracy of $\pm$ 0.001 kX. The experiments were made in 1N H_2SO_4- solution at room temperature. The data obtained for the

Card 1/2

Determination of the Dimensions of an Elementary Cell of   SOV/20-127-4-30/60
Cathode-polarized Dispersion Alloys Pd-Au and Pd-Cu

> lattice periods is compiled in table 1. The values obtained
> showed an error of only ~ ±0.001 kX. The values for the electro-
> lytically deposited alloy could not be obtained with the same
> accuracy. The lattice periods for the alloys after polarization
> are shown by figure 2 for the various systems with different
> Au- and Cu-content, and also in the process of hydrogen deposi-
> tion. There was good agreement with the results obtained by
> Kuznetsov (Ref 10). The strongest enlargement of the parameters
> of the elementary cell resulted in pure palladium. By the intro-
> duction of gold or Cu it decreases, and disappears completely at
> a content of 65% Au or 50% Cu, respectively. At a low palladium
> content, the solubility of hydrogen in the alloy also decreases
> down to zero. A change in the current intensity during the exper-
> iments had nearly no effect on the lattice parameters. There are
> 3 figures, 1 table, and 15 references, 7 of which are Soviet.

ASSOCIATION: Gosudarstvennyy institut prikladnoy khimii
              (State Institute of Applied Chemistry)

PRESENTED: April 13, 1959, by A. N. Frumkin, Academician

SUBMITTED: April 13, 1959
Card 2/2

15816o

AUTHOR: Kondrashev, Yu. D.

TITLE: X-ray study of polytrifluoro chloro ethylene

TEXT: Polytrifluoro chloro ethylene may exist at temperatures $<$ 200ºC
both in crystalline and amorphous state. The amorphous state is charac-
teristic of polymer powders and products pressed therefrom. The crystal-
line state is characterized by a ring with a distance of 5.3 Å. A diffuse
ring corresponding to a distance of 13.5 Å is characteristic of the
amorphous state. In the temperature range of 200º - 210ºC, the amorphous
phase (ring 5.97 Å) appears besides the crystalline one. At more than
210ºC, the polymer is completely transformed to the liquid state which
differs from the crystalline one by position and character of the
principal maximum on the X-ray picture. The liquid phase crystallizes in
cooling. Dimensions of crystals and their growth rate are strongly

Card 1/2

26885
S/081/61/000/013/025/028
B117/B203

X-ray study of...

dependent on cooling conditions. Below melting point, crystallization
of the amorphous phase is practically not observed. Addition of a
plasticizer facilitates crystallization. [Abstracter's note: Complete
translation.]

Card 2/2

26886
S/081/61/000/013/025/028
B117/B203

15.8160

AUTHOR: Kondrashev, Yu. D.

TITLE: X-ray study of polydifluoro vinylidene

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 13, 1961, 703 - 704,
              abstract 13P45 (Sb. tr. Gos. in-ta prikl. khimii, no. 46,
              1960, 166 - 168)

TEXT: A study of the crystal structure of polydifluoro vinylidene shows
that there are two molecular types with different identity periods: 4.66
and 2.55 A. The first period corresponds to a zig-zag chain, the link
of which consists of two carbon atoms. The second period corresponds to
an ordinary zig-zag distribution of carbon atoms in a plane chain. When
heating the polymer, its crystallinity decreases, and the transition to
a completely amorphous state occurs at $\sim$ 190°C. This temperature was
assumed to be the melting point. [Abstracter's note: Complete trans-
lation.]

Card 1/1

24451

S/081/61/000/007/004/010
B107/B207

5.1190

AUTHORS: Kondrashev, Yu. D., Gladkova, V. F.

TITLE: The nature of the nickel boride catalyst

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 7, 1961, 68, abstract
             7B512 (7B512) (Sb. tr. Gos. in-ta prikl. khimii, no. 46,
             1960, 268 - 273)

TEXT: A nickel boride catalyst was subjected to X-ray, electron diffrac-
tion, and electron-microscopic studies. The catalyst was produced by
reducing nickel salts in solution with boron hydrides of alkali metals.
The catalyst was found to consist of nickel in extremely fine distribution;
the size of crystallites is between the crystalline and amorphous state.
[Abstracter's note: Complete translation.]

Card 1/1

Kondrashev, Yu. D.

5.2400A
15.2220

S/078/60/005/008/005/018
B004/B052   82325

AUTHORS: Markevich, G. S., Kondrashev, Yu. D., Markovskiy, L. Ya.

TITLE: A New Boride Phase in the System Beryllium - Boron

PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol. 5, No. 8, pp. 1783-1787

TEXT: In 1955 the authors published data on the phase composition of beryllium borides (Refs. 1, 2). Besides the cubic α-phase (Be_2B), β-phase BeB_2, and γ-phase BeB_6,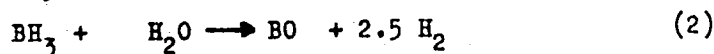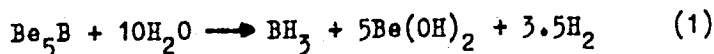 they had also determined a new δ-phase richer in Be which develops at $1000°C$ during the sintering of a mixture of pulverized boron and pulverized beryllium containing more than 70 atom% of Be. The present paper reports on the investigation of composition and properties of this δ-phase. Mixtures of B- and Be powder were produced in the following ratios: Be : B ranging from 9 : 1 to 2 : 1, and they were radiographically examined (Table 1). Single crystals of the δ-phase (Fig.) were obtained after 100 h of continuous heating in evacuated quartz ampuls. Data of the radiographic investigation of these crystals are given

Card 1/3

A New Boride Phase in the System
Beryllium - Boron

in Table 2. The new boride corresponds to the formula Be_5B, and its crystals are tetragons with the lattice constants a = 3.362 ± 0.002 kX, c = 7.036 ± 0.005 kX, c/a = 2.093. The specific gravity d_{20}^4, pycnometrically determined, is 2.06 - 2.14 g/cm^3. The specific electric resistance does not differ from that of the α-phase. The hydrolytic decomposition of Be_5B into 8 N of HCl was investigated, and the liberated hydrogen, the developing boranes, and the dissolving boron suboxides BO were determined (Tables 3, 4). On the basis of these data, the following reaction equations are given:

$$Be_5B + 10H_2O \longrightarrow BH_3 + 5Be(OH)_2 + 3.5H_2 \qquad (1)$$

$$BH_3 + H_2O \longrightarrow BO + 2.5 H_2 \qquad (2)$$

$$Be_5B + 11H_2O \longrightarrow BO + 5Be(OH)_2 + 6H_2 \quad .$$
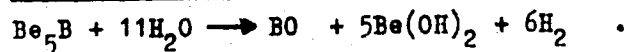
It is assumed that primary BH_3 develops, and the formation of di- and

Card 2/3

A New Boride Phase in the System
Beryllium - Boron

tetraboranes is only caused by the polymerization of BH_3. Since the reaction between BH_3 and water is intensive, no more than 8% of borane develop, calculated with respect to the total amount of boron. Be_5B still is the boride yielding the maximum amounts of borane, since Be_2B only develops 2% of boranes. There are 4 figures, 1 table, and 6 Soviet references.

ASSOCIATION: Gosudarstvennyy institut prikladnoy khimii
               (State Institute of Applied Chemistry)

SUBMITTED: May 4, 1959

Card 3/3

KONDRASHEV, Yu.D.

Crystalline and molecular structure of p-dihalogen derivatives
of diazoaminobenzene. Kristallografiia 6 no.4:515-523 Jl-Ag '61.
                                                    (MIRA 14:8)

1. Gosudarstvennyy institut prikladnoy khimii.
        (Triazene)   (Halogen compounds)

29532
S/078/61/006/011/010/013
B101/B147

S 4500

AUTHORS: Sapozhnikov, Yu. P., Kondrashev, Yu. D., Markovskiy, L. Ya.,
           Omel'chenko, Yu. A.

TITLE: Study of phase composition and luminescence properties of
           the system ZnO - MgO, activated by chromium

PERIODICAL: Zhurnal neorganicheskoy khimii, v. 6, no. 11, 1961, 2550-2557

TEXT: On the basis of a paper by A. L. Smith (see below) who studied
the luminescence of nonactivated MgO and ZnO mixtures, the authors
examined the system MgO - ZnO activated with 0.5 % of Cr (added as
ammonium bichromate). The mineralizer added was 3 % LiCl. Samples were
produced at 1100 and 1300°C. Powder patterns were taken by a YRC-50-И
(URS-50-I) apparatus. Two limited solid solutions were found: Zn(Mg)0
and Mg(Zn)0 with the structure of the initial components. The unity cell
volume of the solid solution Mg(Zn)0 increases continuously. The
incorporation of Mg ions into the hexagonal structure of ZnO causes a
slight increase of parameter a and a considerable decrease of parameter c;
thus, the unit cell volume is reduced. The upper limits of existence of

Card 1/3

29532
S/078/61/006/011/010/013
B101/B147

Study of phase composition and...

activator of ZnO and of solid Zn(Mg)O solutions. A paper by
G. S. Zhdanov, V. A. Pospelov (Dokl. AN SSSR, 93, 97 (1953)) is mentioned.
There are 4 figures, 2 tables, and 10 references: 4 Soviet and 6 non-
Soviet. The two most recent references to English-language publications
read as follows: A. L. Smith, J. Electrochem. Soc., 55, 155 (1952);
W. A. Runciman. US Patent no. 2736712, February 28, 1956.

ASSOCIATION: Gosudarstvennyy institut prikladnoy khimii (State Institute
            of Applied Chemistry)

SUBMITTED: September 30, 1960

Card 3/3

S/080/61/034/009/009/016
D204/D305

AUTHORS: Gladkova, V.F., Antonovskaya, E.I., and
              Kondrashev, Yu.D.

TITLE: Electronographic and X-ray investigations of the
              surface of passivated iron and a few steels

PERIODICAL: Zhurnal prikladnoy khimii, v. 34, no. 9, 1961,
              2028 - 2031

TEXT: This study was carried out owing to the absence of a general-
ly accepted theory on the nature of the passivity of chromium and
chromium-nickel steels. The nature of films forming on the surface
of Armco iron and the steels 1Kh13 and 1Kh25 after being passiva-
ted in liquid oxidizers, and also after anodic polarization of
these steels and of the chromium-nickel steel 1Kh18N9T was studied
electronographically. In addition, an attempt was made to determi-
ne by X-rays the lattice dimensions of all the above steels in or-
der to find the change in chemical composition of their surface af-
ter anodic polarization. It was found that the passive film on
Card 1/2

S/080/61/034/009/009/016
D204/D305

Electronographic and X-ray ...

chromium steels, produced under the action of concentrated nitric
acid, does not appear in the electronograph in the form of a se-
parate phase, in contrast with an analogous film on iron. This
evidently indicates that it is exceptionally thin. Under the ac-
tion of stronger oxidizers (70 % HNO_3 + $K_2Cr_2O_7$) well defined

Fe_3O_4 or γ-Fe_2O_3 phases appear on the surface of chromium steels.
As the result of anodic polarization of the steel 1Kh18N9T, the
NiO phase appears to form on its surface at the repassivation po-
tential. There are 2 tables, and 18 references: 8 Soviet-bloc and
10 non-Soviet-bloc. The references to the 4 most recent English-
language publications read as follows: T.N. Rhodin, Corrosion,
12, 3, 41, 1956; H.I. Jearian, H.E. Boren, R.E. Warr, Corrosion,
12, 11, 1956; R.T. phelps, A. Gulbransen, J.W. Hickman, Ind. Eng.
Ch., Analyt. Edit., 18, 391, 1946; A. Gulbransen, R.T. Phelps, J.
W. Hickman, Ind. Eng. Ch., Analyt. Edit., 18, 640, 1946.

SUBMITTED: October 31, 1960

Card 2/2

GLADKOVA, V. F.; KONDRASHEV, Yu. D.

"The crystal structure of $ZnSeO_3 \cdot 2H_2O$."

report submitted for 6th Gen Assembly, Intl Union of Crystallography, Rome, 9 Sep 63.

Inst of Applied Chemistry, Vatnyi o. 2, Leningrad.

GLADKOVA, V.F.; KONDRASHEV, Yu.D.

Crystalline structure of $ZnSeO_3 \cdot 2H_2O$. Kristallografiia 9
no.2:190-196 Mr-Ap'64.   (MIRA 17:5)

KONDRASHEV, Yu.D.

Crystalline structure of paradimethyldiasoaminobenzene.
Kristallografiia 9 no.3:403-405 My-Je '64.   (MIRA 17:6)

1. Gosudarstvennyy institut prikladnoy khimii.

EWP(j)/EPF(c)/EWT(m)/BDS--ASD--Pc-4/Pr-4--RM/WW

L 11217-63

ACCESSION NR: AP3001631   S/0192/63/004/003/0454/0455

AUTHOR: Kondrashev, Yu. D.; Andreyeva, N. A.

TITLE: New modification of selenium carbamide

SOURCE: Zhurnal strukturnoy khimii, v. 4, no. 3, 1963, 454-455

TOPIC TAGS: selenium carbamide structure, thiourea

ABSTRACT: An X-ray investigation of selenium carbamide structure has been completed. The large and almost colorless crystals obtained from an aqueous solution were subjected to a number of physical measurements. The refractive coefficients were found to be N sub $y = 1.84$, N sub $p = 1.79$, molecular refraction 25.6 cubic cm, the density determined by the two methods was 2.09 g/cubic cm and 2.06/ cubic cm. The periods of hexagonal lattice established by X-ray rotations are: $a = 15.37$ + or - 0.07, $c = 13.08$ + or - 0.05 Angstrom. The number of molecules in the lattic is close to 27. The pure compounds of thiourea and urea do not have hexagonal structures, and it is characteristic for the molecules containing selenium. The obtained periods agree with the rhomic lattices, including that of thiourea where a approximately equals 15.8 and c approximately equals 12.5 Angstrom. According to

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L 11217-63
ACCESSION NR: AP3001631

the analogy of thiourea compounds, an assumption can be made about the existence of selenium carbamide type chains, or molecular spirals stretched alongside the axis c and containing three molecules of selenium carbamide per period, and their compactness forms hexagonal channels in the structure. Thus, the preliminary data shows that the investigating crystals are a modification of the selenium carbamide. "The authors are deeply indebted to L. Ya. Markovskiy for his supply of selenium carbamide samples."

ASSOCIATION: Institut vysokomolekulyarnykh soyedineniy AN SSSR (Institute of High Molecular Compounds, AN SSSR)

SUBMITTED: 25Jan63   DATE ACQ: 01Jul63   ENCL: 00

SUB CODE: 00   NO REF SOV: 001   OTHER: 001

Card 2/2

KONDRASHEV, Yu.D.; OMEL'CHENKO, Yu.A.

X-ray diffraction study of some oxide and sulfide systems.
Zhur.neorg.khim. 9 no.4:937-943 Ap '64.   (MIRA 17:4)

L 16051-66   EWP(e)/EWT(m)/EWP(t)   IJP(c)   JD/JG

ACC NR: AP6005515

SOURCE CODE: UR/0080/66/039/001/0013/0020

AUTHOR: Markovskiy, L. Ya.; Vekshina, N. V.; Kondrashev, Yu. D.; Stroganova, I. M.

ORG: none

TITLE: Ternary compounds in the beryllium-boron-carbon system

SOURCE: Zhurnal prikladnoy khimii, v. 39, no. 1, 1965, 13-20

TOPIC TAGS: beryllium compound, boron compound, carbide, crystal structure

ABSTRACT: To study the reaction of beryllium with boron and carbon, powder mixtures of the components were sintered at 1200-2000°C, and the products were subjected to x-ray and chemical phase analysis. The data showed the existence of two beryllium borocarbides, BeC_2B_2 and BeC_2B_{12}. The structure of BeC_2B_2, (studied by the single crystal method) is characterized by a hexagonal system, Laue class $\frac{6}{m}mm$, and lattice constants a = 10.84 and c = 6.18. The structure of BeC_2B_{12}, (studied by the powder method) belongs to the $B_4C(B_{12}C_3)$ structural type. The lattice constants are a = 5.615, c = 12.28 Å, c/a = 2.187. It is shown that in contrast to alkaline earth and rare earth borocarbides, beryllium borocarbides are chemically stable compounds and

UDC: 546.45'27'26

Card 1/2

L 04733-67   EWT(m)/EWP(t)/ETI   IJP(c)   JD

ACC NR: AP6027008   SOURCE CODE: UR/0080/66/039/005/0973/0977

AUTHOR: Markovskiy, L. Ya.; Vekshina, N. V.; Kondrashev, Yu. D.   32

ORG: none   B

TITLE: Chromium borocarbide

SOURCE: Zhurnal prikladnoy khimii, v. 39, no. 5, 1966, 973-977

TOPIC TAGS: chromium compound, chromium carbide, boron compound, carbon compound, phase composition, X ray diffraction pattern

ABSTRACT: The phase compositions of the reaction products of chromium with boron and carbon in the Cr-B-C system were studied. The existence of the ternary compound, chromium borocarbide, Cr_7BC_4 was established: rhombic, $a = 2.86\text{Å}$, $b = 9.22\text{Å}$, $c = 6.95\text{Å}$. Powder pattern data is given. When the molar ratio of Cr in Cr:B:C is small, CrB and CrB_2 are formed; as Cr content is increased the carbides Cr_3C_2 and Cr_7C_3 are formed. It was established that all chromium carbides react with boron and with borides forming either solid solutions based on Cr_7C_3 or Cr_3C_2 or the borocarbide Cr_7BC_4. Chromium mono- and diborides are characterized by high stability with respect to carbon. The lower borides, Cr_2B in particular, are converted in the presence of carbon at

Card 1/2   UDC: 546.271

ACC NR: AP6027008

high temperatures to carbides containing up to 10 at.% boron and the boride CrB. Orig. art. has: 4 tables.

SUB CODE: 07/   SUBM DATE: 17May65/   ORIG REF: 004/   OTH REF: 004

Card 2/2   egh

KONDRASHEVA, A.L., mladshiy nauchnyy sotrudnik

Determining the content in ferrous oxide of chromite and chrome-magnesite refractories. Trudy Inst. ogneup. no.34:210-218 '63.
(MIRA 17:10)

KONDRASHEVA, A.L.

Methods of quantitative determination of ferrous oxide in
raw materials. Ogneupory 28 no.10:475-478 '63.
(MIRA 16:11)

1. Vsesoyuznyy institut ogneuporov.

BEDER, N.M.; KONDRASHEVA, I.A.

Ways for preventing clogging of spinnerets during the manufacture
of viscose cord fiber. Khim. volok. no.2:70-72 '59.
(MIRA 12:9)

1.Kalininskiy filial Vsesoyuznogo nauchno-issledovatel'skogo
instituta iskusstvennogo volokna.
(Rayon spinning)

PHASE I BOOK EXPLOITATION   1236

Okhotsimskiy, D. Ye., Kondrasheva, I.L., Vlasova, Z.I., Kazakova, R.K.

Raschet tochechnogo vzryva s uchetom protivodavleniya (Calculation of
   Point-source Blast Taking Counterpressure into Consideration) Moscow,
   Izd-vo AN SSSR, 1957. 65 p. (Series: Akademiya nauk SSSR.
   Matematicheskiy institut. Trudy, t. 50) 2,500 copies printed.
   Resp. Ed.: Petrovskiy, I.G., Academician; Deputy Resp. Ed.:
   Nikol'skiy, S.M., Professor; Ed. of Publishing House: Gurov, K.P.;
   Tech. Eds.: Vanyushenkova, V.V., Makuni, Ye. V.

PURPOSE: This volume of the Works of the Mathematics Institute,
   Academy of Sciences, is written for the specialists working in the
   field of blast waves.

COVERAGE: This work consists of an introduction and four sections. In
   the introduction, the authors describe certain Soviet and American
   studies in this field and outline briefly the methods of solution,
   the characteristics of the results, and the computation techniques.
   In section one the statement of the problem is given. Assumed is
   a gas which satisfies Clapeyron's equation. Density ρ., pressure

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Calculation of Point-source Blast (Cont.)   1236

$$\frac{\partial \varphi}{\partial \tau} + \mu \frac{\partial \varphi}{\partial \sigma} + \lambda + \nu \frac{\partial \Theta}{\partial \sigma} = 0$$

$$\frac{\partial \psi}{\partial \tau} - \mu \frac{\partial \psi}{\partial \sigma} + \lambda + \nu \frac{\partial \Theta}{\partial \sigma} = 0$$

(2)

$$\frac{\partial \xi}{\partial \sigma} = \frac{\sigma^2 \Theta^2}{\xi^2}\left[\frac{\delta-1}{4\sqrt{\delta}}(\varphi+\psi)\right]^{\frac{2}{1-\delta}}$$

$$\frac{\partial \Theta}{\partial \tau} = 0$$

where λ, μ, ν are known functions of Θ, φ, ψ, ξ, σ. The basic functions to be determined are now φ, ψ, Θ, ξ. To solve the problem, the boundary conditions are set at the origin and front of the blast wave in the form of the equations:

$$\varphi = \psi$$

$$\varphi - \psi = \frac{1}{\delta+1}\frac{c^2 - \delta}{c \varphi}$$

(3)

$$\Theta = \left(\frac{2}{\delta+1}\right)^{\frac{1}{2\delta}}\left(\frac{\delta-1}{\delta+1}\right)^{\frac{1}{2}}\left(c^2 - \frac{\delta-1}{2}\right)^{\frac{1}{2\delta}}\left(1 + \frac{2\delta}{(\delta-1)c^2}\right)^{\frac{1}{2}};$$

$$\frac{\delta-1}{4\sqrt{\delta}}(\varphi+\psi)^{\frac{2\delta}{\delta-1}} = \frac{2}{\delta+1}\left(c^2 - \frac{\delta-1}{2}\right);$$

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Calculation of Point-source Blast (Cont.)   1236

Where C is the velocity of the blast wave. To integrate system (2) at the given boundary conditions, as initial conditions are used the solution of the automodel problem (for $\tau = \tau_0$, where t is sufficiently small) obtained by L.I Sedov [Ref. 1]. Before integrating system (2), the behavior of   unknown functions in the neighborhood of the blast origin ($\sigma \to 0$) is investigated. Considering the order of change of unknown functions in the neighborhood of the blast origin and conditions on the outer boundary of certain intervals close to the origin, asymptotic formulas are derived by which it is possible to calculate the values of functions in the central interval using the values of functions on the outer boundary. Section three deals with the numerical solution of the system of partial differential equations (2) by the method of finite differences. The computational net is constructed taking $\sigma = $ constant, $\tau = $ constant, and a mesh size $\Delta \tau = \Delta \sigma$. Such a mesh size selection is convenient, because the wave always will pass through the lattice point of a calculation net. The system of differential equations (2) is reduced to a system of difference equations by subsitituting for partial derivatives the finite differences according to the scheme.

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Calculations of Point-source Blast (Cont.)   1236

In the second stage 46 calculation intervals were taken. The
initial mesh size was taken $\sigma = .0008162$7 . Calculations
were carried out to
$T = 17.829 (t = 6147 sec); \xi = 21.866 (z = 21660 m); \bar{p} = \frac{p}{p_0} = 1.0078 (p = 1.040 atm. ab.)$
The results of the second stage are represented in 23 graphs and 9
tables. The authors express their gratitude to M.V. Keldysh for
his scientific supervision of the present study. They also thank
their coworkers of the Mathematics Institute, K.I. Babenko and
V.V. Rusanov, for their help in the investigation of the stability
of computing schemes and the selection of a new wave-computing
version. The authors also thank laboratory workers T.A. Loboda,
Yu. S. Userdova, Ye. I. Dolgova and N.P. Baranova for their
calculations on the high speed electronic computer of the Academy
of Sciences of the U.S.S.R. and for processing computational
results in the form of graphs and tables. There are 7 references,
of which 2 are Soviet and 5 English.

Card 7/9

Calculations of Point-source Blast (Cont.)   1236

TABLE OF CONTENTS:

Card 8/9

KONDRASHEVA, L.D

KONDRASHEVA, L.D.; PODMOSHENSKIY, I.V.; PROKOF'YEV, V.K.

Photoelectric methods in emission spectroscopy. Zav.lab.21 no.12:
1446-1455 '55.   (MLRA 9:4)
        (Spectrum analysis)

L. D. ~~PR~~ KONDRASHEVA.

24(7)

PHASE I BOOK EXPLOITATION

SOV/1700

Lvov. Universitet

Materialy X Vsesoyuznogo soveshchaniya po spektroskopii, 1956.
t. II: Atomnaya spektroskopiya. (Materials of the 10th All-Union
Conference on Spectroscopy, 1956. Vol 2: Atomic Spectroscopy)
[Lvov] Izd-vo L'vovskogo univ. 1958. 558 p. (Series: Its
Naukovyi zbornik, v77.k(9)) 3,000 copies printed.

Additional Sponsoring Agency: Akademiya nauk SSSR. Komissiya po
spektroskopii.

Editorial Board: S.L. Landberg, Academician. (Resp. Ed.));
B.S. Neporent, Doctor of Physical and Mathematical Sciences;
L.L. Pokolinsky, Doctor of Physical and Mathematical Sciences;
V.A. Fabrikant, Doctor of Physical and Mathematical Sciences;
V.G. Koritsky, Candidate of Technical Sciences; S.M. Rayski,
Candidate of Physical and Technical Sciences; L.K. Klinovskaya,
Candidate of Physical and Mathematical Sciences; V.S. Miliyanchuk;
(Deceased), Doctor of Physical and Mathematical Sciences; A.Ye.
Zimmerman, Doctor of Physical and Mathematical Sciences;
M.: S.L. Geuer; Tech. Ed.: T.V. Saranyuk.

PURPOSE: This book is intended for scientists and researchers in
the field of spectroscopy, as well as for technical personnel
using spectrum analysis in various industries.

COVERAGE: This volume contains 177 scientific and technical studies
of atomic spectroscopy presented at the 10th All-Union Confer-
ence on Spectroscopy in 1956. The studies were carried out by
number of scientific and technical institutes and include
extensive bibliographies of Soviet and other sources. The
studies cover many phases of spectroscopy; spectra of rare earths,
electromagnetic radiation, physicochemical methods for controlling
uranium production, physics and technology of gas discharge,
optics and spectroscopy, abnormal dispersion in metal vapors,
spectroscopy and the combustion theory, spectrum analysis of ores
and minerals, photographic methods for quantitative determination of the
hydrogen content of metal, spark spectrographic analysis,
statistical study of variation in the parameters of calibration
curves, determination of traces of metals, spectrum analysis in
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