"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3

Glazkov, Yu. V.

AUTHOR: Glazkov, Yu. V.

TITLE: Infrared Reflection Spectra of Crystallization Products of Certain Glasses of the Na_2O-SiO_2 System.

(Infrakrasnyye spektry otrazheniya produktov kristallizatsii nekotorykh stekol sistemy Na_2O-SiO_2)

PERIODICAL: Optika i Spektroskopiya, 1958 Vol.IV, Nr.3, pp.400-402 (USSR)

ABSTRACT: The present paper reports details of measurements of the reflection spectra of compounds $Na_2Si_2O_5$ and Na_2SiO_3 in the 7-24 μ region and the reflection spectra of crystallization products of glasses of the Na_2O-SiO_2 system. The reflection spectra were measured using an IKS-11 spectrometer with NaCl and KBr prisms in non-polarized light at an angle of incidence of about 25°. Crystallization of glasses was carried out by heating for 5 hours in a platinum [illegible]. Fig.1 shows the reflection spectra of glasses crystallized at temperatures [illegible] the liquidus. Curve 1 represents the reflection spectrum of [illegible] containing

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Infrared Reflection Spectra of Crystallization Products of Certain Glasses of the Na_2O-SiO_2 System.

50 mol.% of Na_2O and 50 mol.% of SiO_2, which is the composition of sodium metasilicate) crystallized at 105°-106°C. [illegible] Spectrum of a crystallized glass containing 33.3 mol.% of Na_2O and 66.6 mol.% of SiO_2 (sodium disilicate composition). Fig.2 shows the spectra of a series of glasses crystallized at 620°C (curves 3-7). Thermal treatment of the samples represented by curves 3-7 in Fig.2 is given in the table on p.400. Fig.2 contains also the reflection spectra of quartz (curve 1) and cristobalite (curve 2) drawn using the data given in Ref.3. The results obtained until the [illegible] crystallization of glasses whose composition is the same as composition of chemical compounds, the crystallization products is the corresponding compound. On crystallization of glasses with a non-stoichiometric composition separation out of silicates with a higher content of silicon from the vitreous basis will probably

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Infrared Reflection Spectra of Crystallized Products of Certain Glasses of the Na_2O-TiO_2 System.

[illegible] Chem. Papers. [illegible] Conference. of which 5 are Soviet and 1 Amer[illegible]

ASSOCIATION: State Optics Institute (Gos. opticheskiy institut im. S.I. Vavilova.) (Gos. daat. [illegible] Optical Institute im. S.I. Vavilova.)

SUBMITTED: June 5, 1957.

1. Glass--Crystallization 2. Furnaces--Applications
3. Glass--Properties--Reflection spectra

Card 5/5

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3"

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GLAZKOV, Yu.V.

Applying infrared spectroscopy in studying the crystallization of Na_2O-SiO_2-system glass [with summary in English]. Inzh.-fiz. zhur. no.1:96-100 Ja '59. (MIRA 12:1)

1. Institut fiziki i matematiki AN BSSR, Minsk.
(Glass--Spectra) (Crystallization)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3

SOV/[illegible]

AUTHOR: Glazkov, Yu.V.

TITLE: The Application of Infrared Spectroscopy to the Study of Crystallization of Glasses of the Na_2O-SiO_2 System (Primeneniye infrakrasnoy spektroskopii k issucheniyu kristallizatsii stekol sistemy Na_2O-SiO_2)

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, 1959, Nr 5, pp [illegible] (USSR)

ABSTRACT: Results of crystallization study of a glass whose composition is equivalent to the eutectic one are described in the article. A peculiarity of such compounds consists in that the chemical compounds comprising the eutectic structure appear simultaneously in crystallization of an alloy of two-component systems. The author investigated the glass containing 25.5 mol. per cent Na_2O, and the chemical compounds expected to appear in crystallization should be sodium disilicate and silica. The spectra of these compounds are known, and this provides a possibility to study the process of crystallization of the glass of eutectic structure. The investigation was carried out by studying infrared reflection spectra of partially and fully crystallized glasses in the range from 7 to 15 microns. The spectra obtained, however, differ from those expected and therefore cannot be interpreted as those of a eutectic silicate-silica alloy.

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The Application of Infrared Spectroscopy to the Study of Crystallization of Glasses of the Na_2O-SiO_2 System

Because of the lack of spectroscopic data on crystallization of two-component systems, the number and type of crystals obtained cannot be precisely identified, although there are indications as to the presence of cristobalite and some other silicates distinctive from the soliton disilicate. This investigation was performed under the guidance of V.A. Florinskaya. There are 3 graphs and 6 Soviet references.

ASSOCIATION: Institut fiziki i matematiki AN BSSR (Institute of Physics and Mathematics of the AS of the Belorussian SSR), Minsk.

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"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3

5274
SOV/179-59-1-5/28

24(2,7)

AUTHOR: Glazkov, Yu. V.

TITLE: The Application of Infrared Spectroscopy to the Study of Crystallization of Glass of the Na_2O - SiO_2 System

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, 1959, Nr 1, pp 29 - 34 (USSR)

ABSTRACT: The author studied the crystallization process of glass of the Na_2O - SiO_2 system containing 20 and 30 mol.% of Na_2O under conditions of high overcooling. The identification of crystallization products was made by infrared reflection spectra in the region of 7 to 15 microns. Figure 1 presents spectra of glass crystallization products heated during 22 hours up to different temperatures including 1,000°C. The changes in spectra are described and analyzed. The changes can be interpreted with the aid of the equilibrium diagram. For crystallization at temperatures of 600 - 1,000°C a characteristic feature is formation of very small crystals scattered over the entire volume of glass. On the surface of the specimens a thin, but sufficiently monolithic film was formed. A comparison of the spectrum of these crystals with that obtained by Sevchenko [Ref 7] shows that it agrees with the spectrum of tridymite. Figure 2 shows reflection spectra of glass heated to 625°C, i.e., below

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The Application of Infrared Spectroscopy to the Study of Crystallization of Glass of the $Na_2O - SiO_2$ System

eutectic temperature. In this case, crystallization can not be described with the aid of the equilibrium diagram. A crystallo-optical investigation of its products, carried out by Mukhin, has shown that the main mass of crystallization products is a substance with refraction index differing considerably from those of sodium bisilicate and silica (table 1). It can be assumed that the surface of glass contains small crystals of cristobalite. There is a difference between the spectra of crystallization products formed on the surface of the specimens and inside of them. Figure 3 shows crystallization spectra of glass containing 3% of Na_2O. It was found that during the process of lengthy crystallization, the silicates formed are subject to considerable changes the nature of which has not as yet been clarified. Crystallization products formed on the surface of the specimens were also studied, and the results of the earlier studies on the

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The Application of Infrared Spectroscopy to the Study of Crystallization of Glass of the Na_2O - SiO_2 System

surface crystallization were confirmed. In conclusion the author thanks V.A. Florinskaya for the guidance and assistance in this investigation. There are: 3 graphs, 1 table and 8 Soviet references.

ASSOCIATION: Institut fiziki i matematiki AN BSSR (Institute of Physics and Mathematics of the AS Belorussian SSR), Minsk.

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Glazkov, Yu. Yu.

[illegible]-8/15

AUTHORS: Klein, I. K., Dmitriyevskiy, V. I., Grigor'yev, ... [illegible] Kornienskiy, I. V., Glazkov, ... [illegible], Popovskiy, B. V.

TITLE: [illegible] Reactor With Gaseous Moderating Material (UF_6) Intended for a Gaseous-Uranium Moderated Thermonuclear Reactor (UF_6)

PERIODICAL: Atomnaya energiya, 1958, Vol. ... No. 1, pp. [illegible] (USSR)

ABSTRACT: The reactor is of the heterogeneous type, the material of which consists of metallic beryllium [illegible] kg/l, and graphite is used as a reflector. The beryllium was available in form of cubes the edges of which had a length of 40 mm. The active zone is a cylinder of 1160 mm diameter and 1080 mm height. The gaseous (not enriched) uranium hexafluoride fills 128 channels which were arranged in form of a quadratic lattice with a spacing of 80 mm. The channels consisted of aluminum tubes of 40 / 40 / 1 mm. 4, 8, 10, 12, and 14 channels were arranged in a row, one beside the other. The working volume of a channel within the domain of the active zone is [illegible] cm^3. The total volume of the active zone is [illegible] l. The [illegible] reflector has a thickness of 200 mm, while [illegible] of the

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upper and lower reflector is [illegible] mm. [illegible]
22 mm diameter pass through the upper reflector [illegible]
possible to [illegible]
vertical channels are provided for regulation and [illegible] ch
off. The reactor can be heated from the outside to [illegible]
electrical generator [illegible]. During the reactor [illegible]
temperature of 90 [illegible] taken [illegible] hours. [illegible]
located in a steel casing of [illegible] mm diameter. [illegible]
hermetically sealed. Rubber gaskets are used for [illegible]
system for the aluminum and cast iron [illegible]
for uranium-hexafluoride, emergency cistern, [illegible]
apparatus, and remote-controlled valves. Reactor [illegible]
carried out by hand. The regulating rods are [illegible]
a diameter of 22 and 9 mm, which are filled with [illegible]
is pulled up, the reactor becomes critical for the [illegible]
the quantity of gas emerging is [illegible], the [illegible]
power output [illegible] attained [illegible] the [illegible]
[illegible] kW, [illegible] this [illegible]
[illegible] was measured at the output [illegible]
[illegible] boiler [illegible] the [illegible]

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plotted. For the reactivity ϱ the value

$$\varrho = 1,35.10^{-4} \Delta m \, g$$

was found. The dependence $\varrho(\tau)$ is plotted (τ denotes the time within which the neutron flux increases up to e-fold its amount). The temperature coefficient was measured and shown in form of a graph. The dissociation rate of the molecules UF_6 was determined as amounting to 0,32 mol/kWh. The addition of chlorotrifluoride shows that working conditions can be found in which stability of radiation of the uranium-hexafluoride in the reactor can be attained. A. M. Susova assisted in assembling the apparatus in collaboration with A. A. Krasin. There are 12 figures and 3 references, 1 of which is Soviet.

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S/089/61/010/004/015/027
B102/B205

AUTHORS: Glazkov, Yu. Yu., Dubovskiy, B. G., Kuznetsov, F. M., Semenov, V. A., Pen Fan

TITLE: Study of thermal-neutron spectra in physical reactors by means of monochromators

PERIODICAL: Atomnaya energiya, v. 10, no. 4, 1961, 381-383

TEXT: The experiments described in this "Letter to the Editor" were carried out in a uranium-graphite reactor, in the center of which a sub-critical assembly was installed. In order to determine the optimum diameter of the sub-critical assembly, the experiments were made at different diameters of the assembly. The monochromators used for the purpose were designed for measuring thermal-neutron spectra in physical low-power reactors (cf. A. P. Senchenkov, F. M. Kuznetsov, Atomnaya energiya, 5, vyp. 2, 124 (1958)). The number of neutrons recorded by the detector per second was calculated from the relation

$$N = \frac{n(v_0)v_0}{4}\,\frac{1}{2\pi}\,Sdh\,\frac{d}{H}\,\frac{S}{L}\,\frac{h}{L}\,\frac{v_0^2\eta\delta}{(\omega r_{cp})^2}\,\nu\,\frac{n}{60}\,,$$

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Study of... S/089/61/010/004/015/027
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where N is the number of counts of the detector per second, $n(v_o)v_o$ the neutron flux in the center of the reactor per unit interval of velocity, n the speed of the rotor per minute; S, L, and h are the width, length, and height of the collimator; d is the width of the rotor gap, H the length of the rotor, r_{cp} the distance between the axis and the center of the rotor gap, ν the number of rotor gaps, $v_o = \omega r_{cp}/\alpha_o$ the velocity of fission neutrons for a given angle of rotation α_o and a given angular velocity ω of the rotor, η the efficiency of the detector for neutrons of velocity v_o, and δ a coefficient accounting for the absorption of neutrons of velocity v_o in air. The resolution of the monochromator is given by

$$\frac{\Delta v}{v_o} = \frac{v_o}{\omega r_{cp}}\left[\frac{S}{L}+\frac{1}{3}\frac{d}{H}+\frac{1}{4}\frac{h}{r_{cp}}\left(1+\frac{H}{L}\right)\frac{\omega r_{cp}}{v_o}\right],$$

where Δv is the half-width of the resolution curve and $S/L + d/3H$ the half-width of the statistical transmission curve. The resolutions of the

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Study of...

monochromator for ω = 5000 rpm are compiled in a table. The medium column gives the neutron energy. Uranium enriched to 1.2 % was used in the sub-critical assembly, whereas the uranium used in the outer zones of the reactor was enriched to 2 % (see Fig. 1). The neutron spectrum was taken for three different sizes of the central sub-critical assembly. These spectra, as well as the neutron distribution in a lattice consisting entirely of working channels with uranium enriched to 2 %, vary only slightly. All of them attain a maximum at v_0 = 3 km/sec and drop to zero at 7 - 9 km/sec. Fig. 3 shows the temperature of the neutron gas versus the number of working channels with uranium enriched to 1.2 % in the sub-critical assembly. It is seen that the spectrum of the assembly having 37 cells is equal to that of a critical assembly consisting of 37 cells. The assembly having 37 cells had an equivalent radius of 68 cm, the moderation length was 17 cm, and the diffusion length was 14 cm. Such a monochromator can therefore be used to determine thermal-neutron spectra in low-power reactors. The effective temperature of the neutron gas can be calculated with an error of ± 4 %, provided the spectrum

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Study of...

deviates only slightly from the Maxwellian spectrum. There are 3 figures, 1 table, and 1 Soviet-bloc reference.

SUBMITTED: December 7, 1960

Legend to Fig. 1: I - cell; II - channel with uranium enriched to 2 %; III - channel with uranium enriched to 1.2 %; 1) steel.

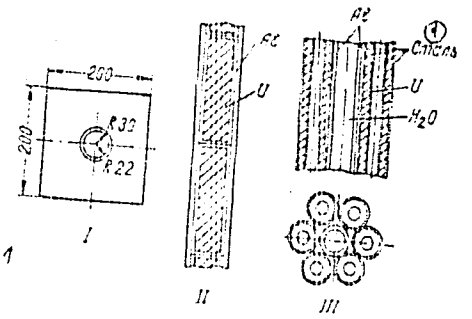

Fig. 1

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GLAZKOV, Yu. Yu.

21(4)

PHASE I BOOK EXPLOITATION SOV/2583

International Conference on the Peaceful Uses of Atomic Energy. 2nd, Geneva, 1958.

Doklady sovetskikh uchenykh; Yadernyye reaktory i yadernaya energetika. (Reports of Soviet Scientists: Nuclear Reactors and Nuclear Power) Moscow, Atomizdat, 1959. 707 p. (Series: Its: Trudy, vol. 2) Errata slip inserted. 8,000 copies printed.

General Eds.: N.A. Dollezhal', Corresponding Member, USSR Academy of Sciences, A.I. Leypunskiy, Doctor of Physical and Mathematical Sciences, Ye.K. Zavoyskiy, Member, Ukrainian SSR Academy of Sciences, M.D. Millionshchikov, Corresponding Member, USSR Academy of Sciences, I.I. Pursey, Doctor of Physical and Mathematical Sciences, and V.S. Ilyrabayev; Tech. Ed.: Ye. I. Mazel'.

PURPOSE: This book is intended for scientists and engineers engaged in reactor designing, as well as for professors and students of higher technical schools where reactor design is taught.

COVERAGE: This late second volume of a six-volume collection on the peaceful uses of atomic energy presented by Soviet scientists at the Second International Conference on Peaceful Uses of Atomic Energy, held from September 1 to 13, 1958 in Geneva. Volume 2 consists of three parts. The first is devoted to atomic power plants under construction in the Soviet Union; the second to experimental and research reactors; and the third, which is predominantly theoretical, to problems of nuclear reactor physics and engineering. The articles in Part III are arranged alphabetically by author. See also Part I and II of this volume. See SOV/2582 and 2584 for titles of all volumes of the set. References appear at the end of the articles.

Kostovoy, V.I., V.S. Dikarev, M.B. Yegiazarov, and Yu. S. Saltykov. Measuring Neutron Spectra in Uranium Water Lattices (Report No. 2152) 546

Krasin, A.K., B.G. Dobrokhotov, M.M. Zaritskiy, Yu.Yu. Glazkov, N.K. Goncharov, A.V. Khakhayev, G.A. Gerasev, V.V. Yakovlev, Ye. I. Inyutin, and A.P. Senchenkov. Studying the Physical Characteristics of a Beryllium-Moderator Reactor (Report No. 2146) 555

Galanin, A.D., S.A. Kozlovskaya, A.F. Rudik, Yu. G. Abov, V.P. Belkin, and P.A. Krupchitskiy. Critical Experiment on an Experimental Heavy-Water Reactor (Report No. 2036) 570

Marchuk, G.I., V. Ya. Pupko, Ye. I. Pogudalina, V.S. Savkin, I.P. Tyuterev, S.T. Platonova, and G.Z. Dmitriyev. Certain Problems in Nuclear Reactor Physics and Methods of Calculating Them (Report No. 2151) 588

Sinyutin, O.V. and V.N. Sosenov. Determination of Control Rod Effectiveness in a Cylindrical Reactor (Report No. 2147) 613

Gel'fand, I.M., S.M. Permiter, A.S. Penlov, and N.P. Chentsov. Using the Monte Carlo Method of Monte Sampling for Solving the Kinetic Equation (Report No. 2141) 628

Laletin, N.I. Neutron Distribution in a Heterogeneous Medium (Report No. 2189) 634

Kazanovskiy, M.V., A.F. Stepanov, and P.L. Shapiro. Neutron Thermalization and Diffusion in Heavy Media (Report No. 2143) 651

Yarmik, A.I., V.S. Yermakov, and A.V. Lykov. Using the Gonzoff Theory for Studying Neutron Diffusion in the Absorbing Media of Nuclear Reactors (Report No. 2224) 668

Broder, D.L., S.A. Burkin, A.A. Klimov, V.V. Levin, and V.V. Orlov. Studying the Spatial and Energy Distribution of Neutrons in Different Media (Report No. 2147) 674

Dmitriyev, A.B. Boron Ionization Chambers for Work in Nuclear Reactors (Report No. 2084) 690

Kirillin, V.A., and G.A. Tribelin. Experimental Determination of Specific Volumes of Heavy Water in a Wide Temperature and Pressure Range (Report No. 2171) 696

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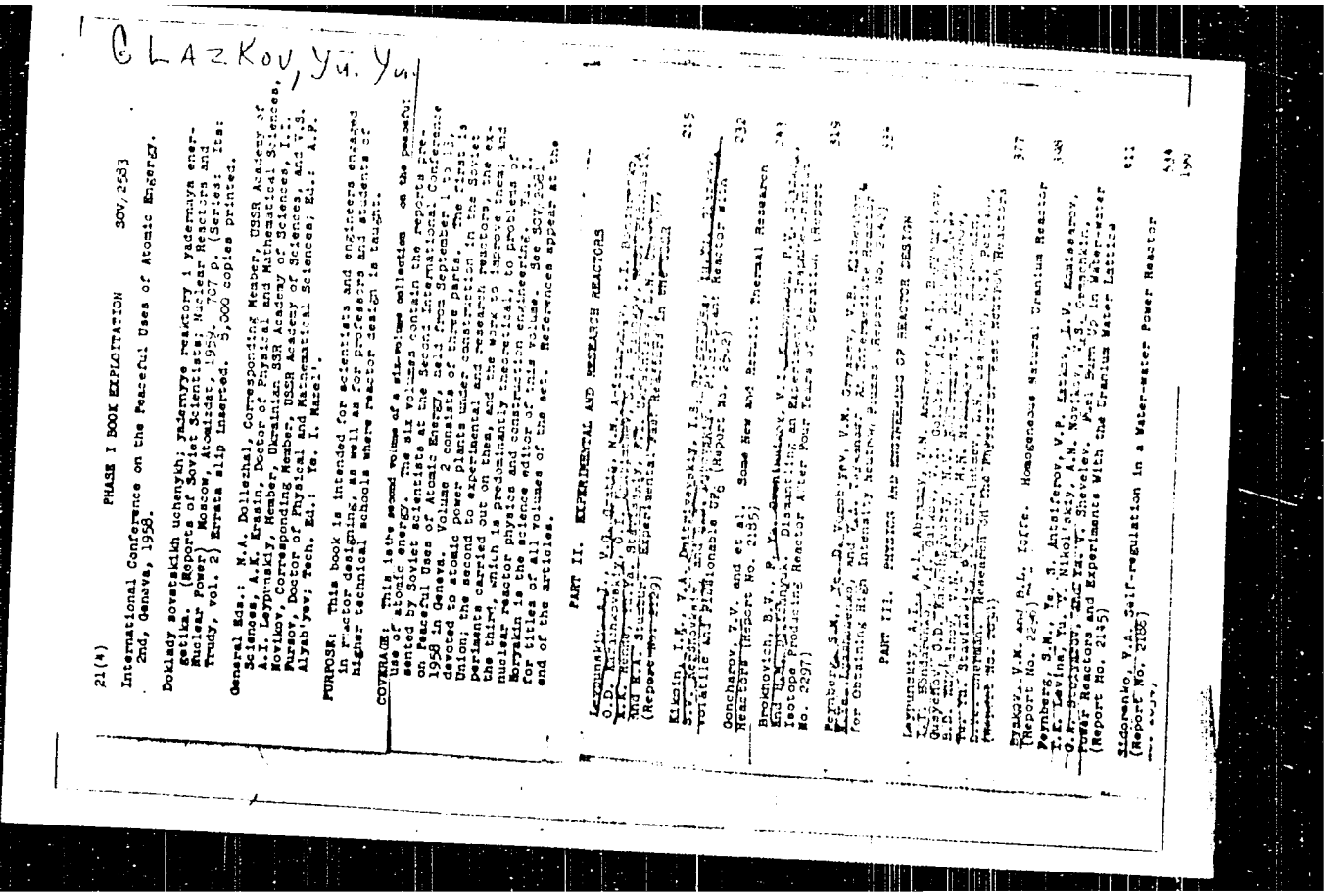

Glazkov, Yu. Yu.

21(4) PHASE I BOOK EXPLOITATION SOV/2583

International Conference on the Peaceful Uses of Atomic Energy.
2nd, Geneva, 1958.

Doklady sovetskikh uchenykh; fizicheskiye reaktory i radiatsiya energetika. (Reports of Soviet Scientists: Nuclear Reactors and Nuclear Power) Moscow, Atomizdat, 1959. 707 p. (Series: Its: Trudy, vol. 2) Errata slip inserted. 5,000 copies printed.

General Eds.: N.A. Dollezhal, Corresponding Member, USSR Academy of Sciences, A.K. Krasin, Doctor of Physical and Mathematical Sciences, A.I. Leypunskiy, Member, Ukrainian SSR Academy of Sciences, I.I. Novikov, Corresponding Member, USSR Academy of Sciences, and V.S. Fursov, Doctor of Physical and Mathematical Sciences; Ed. of V.I. Alyab'yev; Tech. Ed.: Ye. I. Mazel'.

PURPOSE: This book is intended for scientists and engineers engaged in reactor designing, as well as for professors and students of higher technical schools where reactor design is taught.

COVERAGE: This is the second volume of a six-volume collection on the peaceful uses of atomic energy. The six volumes contain the reports presented by Soviet scientists at the Second International Conference on Peaceful Uses of Atomic Energy, held in Geneva from September 1 to 13, 1958. Volume 2 consists of 41 articles and is devoted to atomic power plants under construction in the Soviet Union; the second to experimental and research reactors; the third, carried out on them, and the research reactors; the experiments carried out on them, and the methods to improve them; and nuclear reactor physics and construction materials; to problems of reactor physics and construction engineering. For titles of all volumes of the set, see SOV/2581. References appear at the end of the articles.

PART II. EXPERIMENTAL AND RESEARCH REACTORS

Lazarenko, A.I., V.D. Dmitriyev, N.M. Artem'yeva, I.I. Bondarenko, I.I. Novikov, O.D. Kazachkovskiy, and Yu.Ye. Kuz'minov. Experimental Fast Reactor (Report No. 2239) 215

Klein, I.E., V.A. Dmitriyevskiy, I.S. [illegible] Volatile Uranium Plutonium Fluorides as Reactor Fuels (Report No. 2542) 232

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Fedorov, S.M., Ye.D. Yurenev, V.N. Grigor'yev, V.B. Filimonov, and Yu.N. Yefremov. A Heterogeneous Reactor for Obtaining High Intensity Neutron Fluxes (Report No. 2147) 259

PART III. PHYSICS AND ENGINEERING OF REACTOR DESIGN

Leypunskiy, A.I., A.I. Abramov, V.N. Andreyev, A.I. Baranovskiy, V.I. Bondarenko, V.I. Galanin, V.V. Gavrilov, A.D. Gulko, A.D. Kazachkovskiy, O.D. Kazachkovskiy, A.G. Kolesov, G.Ya. Kolyadin, V.N. Kononov, N.N. Ponomarev-Stepnoy, Yu.M. Semenov, G.N. Smirenkin, and A.S. Shtan'. Research on the Physics of Fast Neutron Reactors (Report No. 2031) 277

Blokhin, A.I., Ye. S. Glushkov, V.V. Denisov, A.A. Kalashnikov, and V.I. Shevchenko. Measurement of Neutron Cross Sections of Fissionable Isotopes (Report No. 2228) 293

Pavlenko, S.M., Ye. S. Antsiferov, V.P. Bakhir, I.V. Kapitonov, G.F. Lavlina, Yu. V. Nikolayevskiy, A.N. Nosikov, V.S. Panchekin, O.A. Sergiyevskiy, and Ya. V. Shevelev. Fast Sodium-Cooled Power Reactors and Experiments With the Uranium Water Lattice (Report No. 2145) 311

Sidorenko, V.A. Self-regulation in a Water-water Power Reactor (Report No. 2186) 334

[illegible] 349

[illegible] 357

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21,1000

AUTHORS:

TITLE:

PERIODICAL:

TEXT: This paper gives a description of the experimental [illegible] the beginning of [illegible] to investigate the physical [illegible] lattice of a [illegible] graphite [illegible] A quadratic lattice (period 100 mu, was [illegible] high and had a [illegible] depending on the [illegible] thick; the [illegible] the [illegible]

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Investigation of the [illegible]

were different. The [illegible]
and the other [illegible]
reactor still. [illegible]
uranium [illegible]
the type Bel [illegible] IRLS [illegible]
ring-shaped [illegible]
enriched uranium [illegible]
insert. Each fuel [illegible]
round a central [illegible]
steam-superheating channels; [illegible]
tube filled with water [illegible]
latter. The [illegible]

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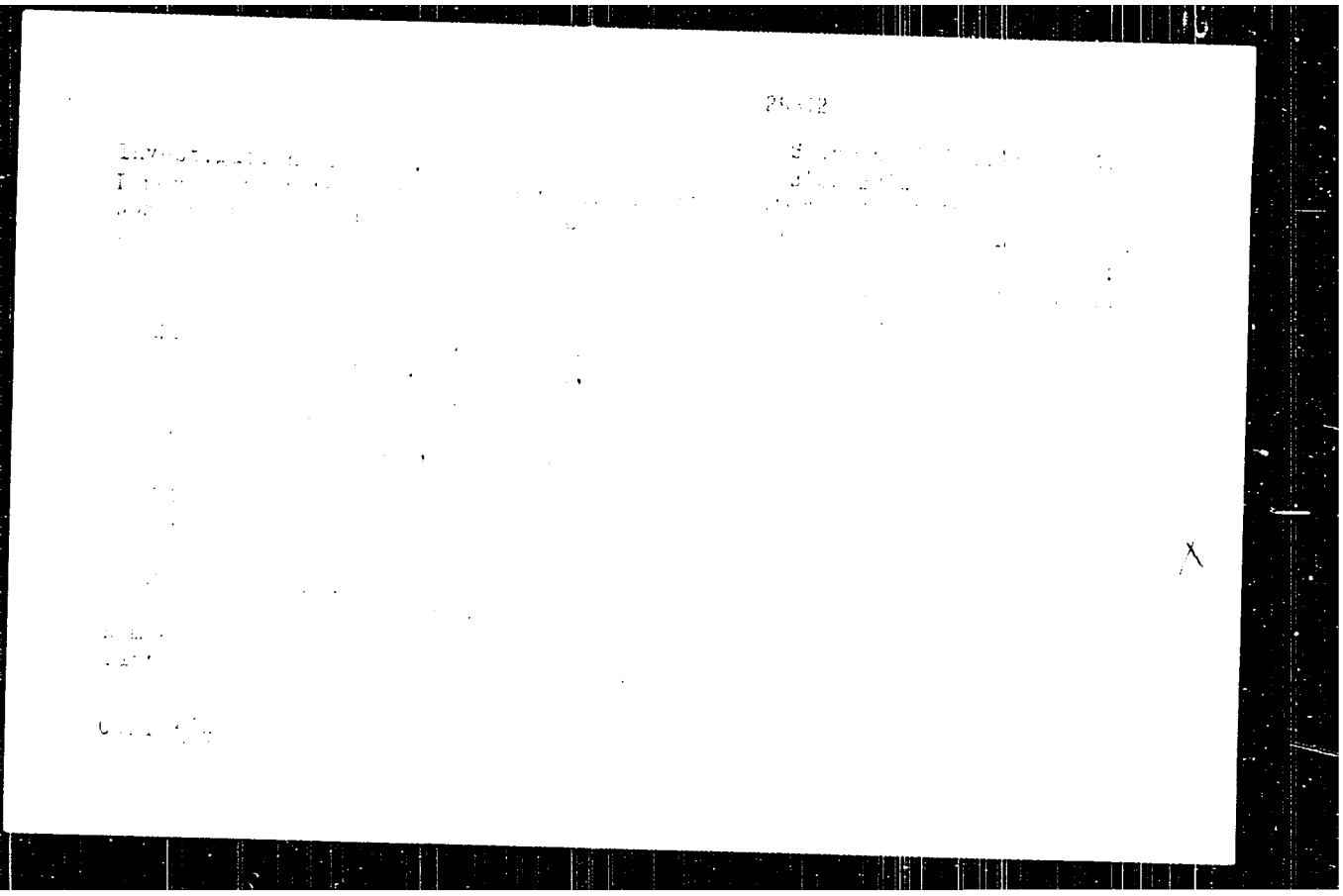

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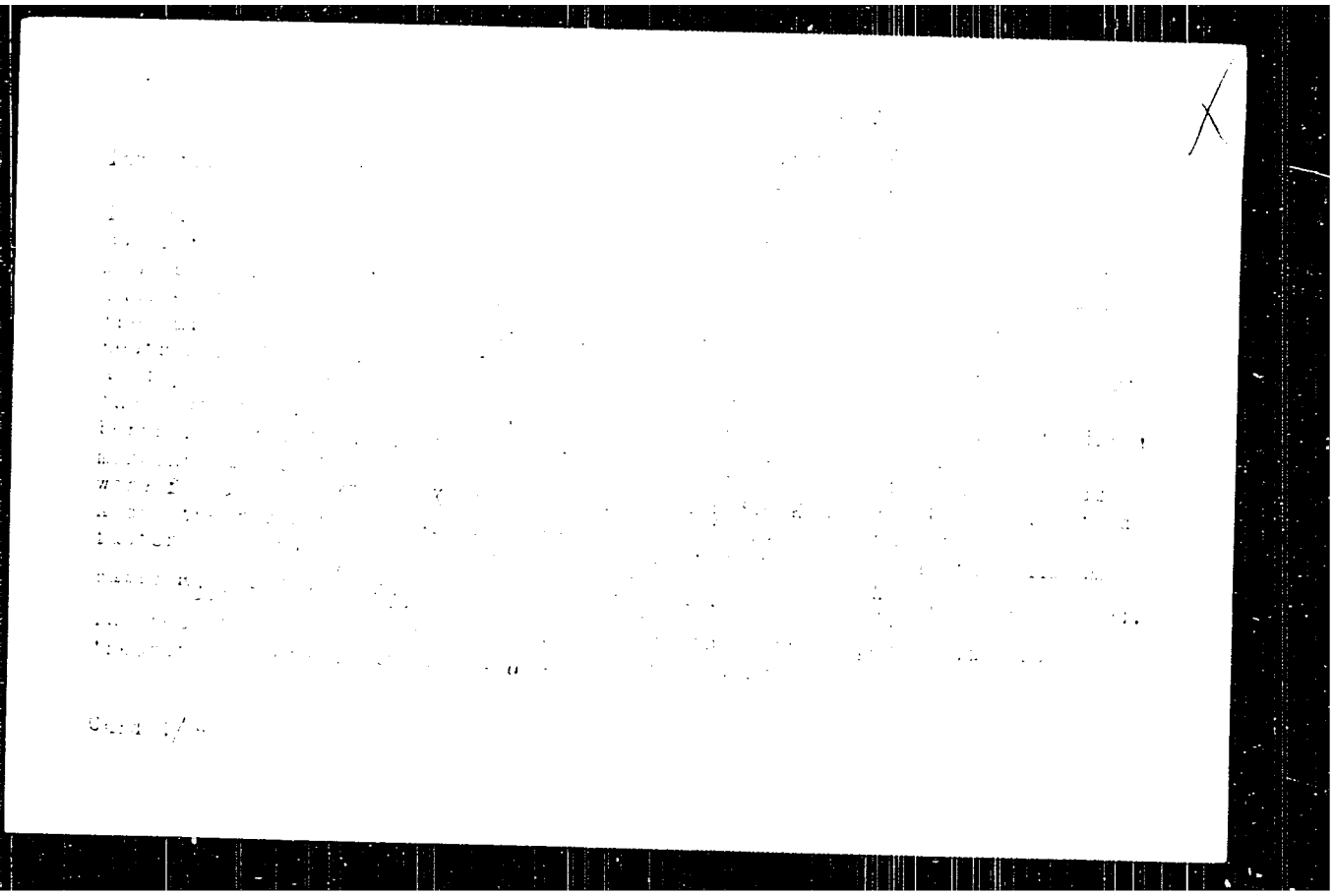

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Investigation of the ...

Position of the channel	Value of μ experimental	theoretical
Central channel of an insert of 21 channels with water	1.040±0.006	1.033
One channel with water in the center of a thermal graphite column of 70 cm diameter	1.036±0.005	1.030
Central channel of an insert of 21 channels without water	1.044±0.006	1.035

θ for the GRES type reactor was found to be 0.64 (for channel with water) and 0.65 (without water). It was found that, in order to adjust the neutron spectrum in the center of the subcritical insert so that it is characteristic of the given uranium - graphite lattice, it is necessary at to choose the dimensions of the insert so that its equivalent radius is $\sim 3(\sqrt{\tau}+L^2)$ cm ($\sqrt{\tau}$ is the slowing down length in the moderator and L the diffusion length). To measure μ it is sufficient to arrange one cell of the lattice under study in the center of the reactor with 4% enriched uranium. The authors thank Ye. F. Makarov, I. M. Vinitskiy, I. I. Gurevich,

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S/089/61/010/001/013/016
B102/B214

V. N. Fofanov, V. V. Vavilov, V. A. Semenov, A. ... Salamatin, M. V. Sakutina, M. K. Timonina, A. T. Anfilatov, ... S. Biryukin, Yu. I. Starykh and A. P. Dolgolenko for collaboration; and A. V. Kamayev, M. ... Minashin, G. Ya. Rumyantsev and I. ... Morozov for their interest and discussions. There are 3 figures, 4 tables, and 12 references: 8 Soviet-bloc and 4 non-Soviet-bloc. The three references to English-language publications read as follows: M. Kuche. Nucl. Sci. Engng. 2, No. 1, 46 (1957); D. Klein et al. Nucl. Sci. Engng. 2, No. 4, 433 (1957); J. Volpe et al. Nucl. Sci. Engng. 2, No. 6, 350 (1959).

SUBMITTED: December 12, 1960

Legend to Table 3: 1) number of the cells in the insert, 2) homogeneous lattice, 3) construction of the elements and enrichment of the uranium, 4) ring-shaped elements with water, 1.2%, 5) idem, 6) the same without water, 7) 35 cm thick rods of natural uranium, 8) 35 mm thick rods of 2% enriched uranium, 9) experimental, 10) calculated, 11) in the fuel element (according to fragment accumulation), 12) in the graphite of the central cell, 13) in the fuel element. *calculated according to V.V. Orlov; **in agreement with the measurements of M.B. Yegiazarov.

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KISIL, I. M.; DUBOVSKIY, V. G.; KAYAYEV, A. F.; GERASI'A, L. A.; GLAZKOV, Yu. Yu.

"The Role of Critical Experiments in Designing the First Atomic Power Station and the Beloyarsk Atomic Power Station."

Report presented at the IAEA Symposium on Exponential and Critical Experiments, Amsterdam, Netherlands, 2-6 Sep 63.

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3

GLAZKOV, Yu.Yu.; DUBOVSKIY, B.G.; ILYASOVA, G.A.; KOZLOV, V.I.; SMELOV, V.V.; SHARAPOV, V.N.

Measurement of slow neutron spectra on the physical test stand of the reactor of the I.V. Kurchatov Atomic Power Plant at Beloyarskoye. Atom. energ. 15 no.6:481-485 D '63. (MIRA 17:1)

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"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3

BOIL'NITSYN, Ye. Ya.; NOVIKOV, A. G.; GLAZKOV, Y. Ye.

"The study of neutron thermalization in water in irregular-lattice reactor lattices."

report submitted for 3rd Intl Conf, Peaceful Uses of Atomic Energy, Geneva, 31 Aug-9 Sep 64.

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S/[illegible]
A052/A101

AUTHORS: Blyum, I. A., Glazkova, A. F.

TITLE: The methods of determining selenium and tellurium in ores

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 3, 1963, 3, abstract 3B37 (V sb. "Khim., fiz.-khim. i spektr. metody issled. rud i rudn. i rassoyan. elementov". Moscow, Gosgeoltekhizdat, 1961, 177-187)

TEXT: At a separated quantitative determination of Se and Fe the weighed portion of ore is decomposed with HNO_3. To oxidize S, KIO$_3$ is used. 5 - 6 ml of HNO_3 is left, the volume is brought by adding water to 4-8% of hydrazine chloride is added and the whole is left overnight. The Se residue is filtered off, dissolved and the Se content is determined by the photocolorimetric method. Fe is precipitated in the filtrate by Sn chloride, the residue is filtered off and the Fe content is determined by the photocolorimetric method.

L. Vorob'yeva

[Abstracter's notes: 1) Complete translation.
2) The paper is supposed to deal with the determination of tellurium (Te) but the reviewer is talking throughout about iron (Fe), which is probably a misprint.]

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"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3

ANDREYEV, K.K.; GLAZKOVA, A.P.

Theory of anti-firedamp action. Doklady Akad. Nauk S.S.S.R. 86, 801-3 '52.
(CA 47 no.19:10229 '53) (MLRA 5:11)

1. D.I.Mendeleyev Chem.-Technol. Inst., Moscow.

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"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3

Category: USSR B-9

Abs Jour: Zh-Kh, No 3, 1957, 7557

Author : Andreyev, K. K. and Glazkova, A. P.
Inst : Academy of Sciences USSR
Title : On the Effect of the Decomposition Products and Some Impurities on the Thermal Decomposition of Nitroglycerine

Orig Pub: Dokl AN SSSR, 1955, No 2, 286-289

Abstract: It has been shown by means of a membrane-type glass manometer that the decomposition of nitroglycerine (I) which has been purified of volatile impurities (water, etc.) is not accelerated by the presence of large amounts of decomposition products. When I contains water, a sharp acceleration of the decomposition is observed after a certain induction period (IP). The authors explain this acceleration by the hydrolysis of nitrocellulose, which is cata-

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Category: USSR B 9

Abs Jour. Zh Kh, No 3, 1957, 7557

lyzed by the acid decomposition products of I, and the subsequent oxidation reactions. The addition of acids to I markedly decreases the IP. Partly decomposed I, after washing with water, reacts at the same rate as fresh I. The water which is formed also catalyzes the decomposition. The removal of the decomposition products by the application of suction does not completely supress the catalyzing action. The addition of HNO_3 and of glyceryldinitrate to I catalyzes the decomposition; in the latter cases, however, the reaction rate increases only after a considerable IP. The effect of water and acids described above is also observed in the case of nitroglycol and (under certain conditions) in the case of nitrocellulose.

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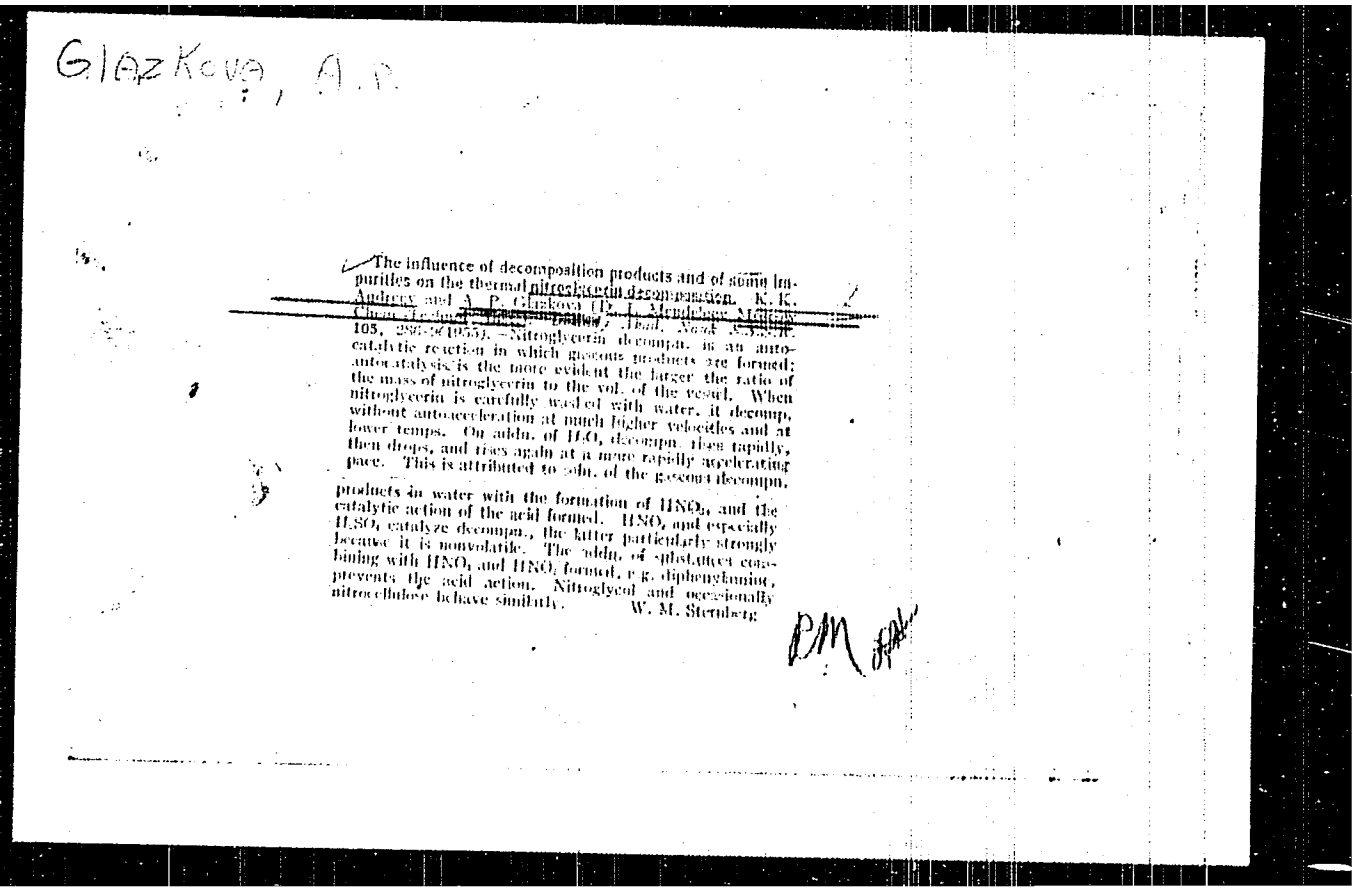

Glazkova, A. P.

The influence of decomposition products and of some impurities on the thermal nitroglycerin decomposition. K. K. Andreev and A. P. Glazkova (Dept. Explosives, Mendeleev Inst. Chem. Technol., Moscow). *Zhur. Fiz. Khim.* 29, 2076–105, 280–9(1955). —Nitroglycerin decomposn. is an autocatalytic reaction in which gaseous products are formed; autocatalysis is the more evident the larger the ratio of the mass of nitroglycerin to the vol. of the vessel. When nitroglycerin is carefully washed with water, it decomp. without autoacceleration at much higher velocities and at lower temps. On addn. of H_2O, decomp. then rapidly, then drops, and rises again at a more rapidly accelerating pace. This is attributed to addn. of the gaseous decomposn. products in water with the formation of HNO_2, and the catalytic action of the acid formed. HNO_2 and especially H_2SO_4 catalyze decomposn., the latter particularly strongly because it is nonvolatile. The addn. of substances combining with HNO_2 and HNO_3 formed, e.g. diphenylamine, prevents the acid action. Nitroglycol and occasionally nitrocellulose behave similarly. W. M. Sternberg

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"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3

AUTHORS: Andreyev, K. K., Glazkova, A. P., Maurina, E. L., Svetlov, B. S. SOV/76-32-8-3/37

TITLE: The Thermal Decomposition of Nitro Esters (Termicheskiy raspad nitroefirov) I. Investigation of the Kinetics of the Decomposition of Nitroglycerin and Nitroglycol according to the Manometric Method (I. Issledovaniye kinetiki raspada nitroglitserina i nitroglikolya manometricheskim metodom)

PERIODICAL: Zhurnal Fizicheskoy Khimii, 1958, Vol. 32, Nr 8, pp. 1726-1730 (USSR)

ABSTRACT: In the introduction the authors mention the investigations already carried out in this field and explain them; the papers by Robertson (Ref 1), Hill (Vill) (Ref 3), E. E. Nefinskiy et al. (Ref 4), and A. Ya. Apin, O. M. Todes and Yu. B. Khariton (Ref 7) are mentioned. As the high temperature-coefficient of the decomposition rate of nitroglycerin could not depend on a high resistance of its molecule but on the heterogeneity of the course of decomposition a further investigation of this thermal decomposition material under simple conditions seems not to be interesting. A glass manometer with a thin-walled crescent-shaped glass membrane was used for the present experiments. The

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The Thermal Decomposition of Nitro [illegible] I. Investigation of the Kinetics of the Decomposition of Nitroglycerin and Nitro[illegible] by the Manometric Method

[illegible] investigations in the vapor phase were carried out at 160°, 170°, and 180° and the minimum limit values of m/v were calculated according to the data by Brinkner (ref '1). It is assumed that in the thermal decomposition of nitroglycerin at least two macroscopic reaction stages exist, one of which is observed; also a reduction of the nitrogen dioxide to the oxide may take place. Thus, the rate of gas formation does not vary with time in strict accordance with an equation of a first order reaction. In the case of nitroglycol a similar result was obtained, with the difference that this process proceeded more quickly in the beginning. Experiments carried out in the liquid phase at small m/v and at temperatures of from 80 to 165° yielded values agreeing with those obtained by Robertson, although the intermediates were not removed. The decomposition in the liquid phase differs from that in the gas phase by the character of the p = f (τ) curves and the absolute value of the initial rate of gas formation. The effect of the decomposition products on the decomposition was investigated. Those with nitrogen dioxide were carried out by L. Ye. Tsebuknovskaya, and those with water by

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SOV/76-32-8-5/37

The Thermal Decomposition of Nitro Esters. I Investigation of the Kinetics of the Decomposition of Nitroglycerin and Nitroglycol According to the Manometric Method

G. N Bespalov, student Thesis the author thanks N. M Emanuel'. There are 10 figures, 2 tables, and 13 references, 6 of which are Soviet.

ASSOCIATION: Khimiko-tekhnologicheskiy institut im. D. I. Mendeleyeva, Moskva (Institute of Chemical Technology imeni D. I. Mendeleyev, Moscow)

SUBMITTED: January 23, 1957

Card 3/3

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"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3

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B107/B220

11.5100

AUTHORS: Andreyev, K. K., Glazkova, A. P., and Tereshkin, I. A. (Moscow)

TITLE: The influence of pressure on the burning of liquid explosives

PERIODICAL: Zhurnal fizicheskoy khimii, v. 35, no. 2, 1961, 426-430

TEXT: The study concerns the combustion of nitroglycol in a glass tube of 3-4 mm diameter at pressures of up to 150 atm. The rate of combustion increases slowly up to about 20 atm pressure in proportional to the pressure: $u_M = 0.048\ p$; then it rises much quicker: $u_M = -7.5 + 0.518\ p$ (u_M in g/cm^2 sec; p in kg/cm^2) (Fig. 1). This higher rate is due to turbulent intermittent burning. The aim of the present investigation was to study the zone of transition to intermittent burning. The fact that the higher rate of combustion depends on the turbulence of the combustion front and not only on the increased amount of heat was proved by tests with gelatinous nitroglycol: Throughout the pressure range investigated, a mixture of 97% nitroglycol and 3% Kolloxoline showed a uniform and slow increase of the combus-

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tion rate with pressure: $u_M = 0.075 + 0.0315$ (Fig. 2). The combustion products of nitroglycol are NO, CO, CO_2 (approximate ratio 7:1), slight amounts of methane, and possibly formaldehyde. Above a certain pressure - about 10 atm - a secondary flame appears due to the final combustion of NO. The distance between the secondary and primary flames is 18 mm for pure nitroglycol, p = 12 atm, and an internal tube diameter of 5 mm - 18 mm. This distance decreases rapidly with increasing pressure: $l = l_0 p^{-1.05}$ (Fig. 6)

For gelatinous nitroglycol, the distance is shorter. For pure nitroglycol, however, this distance begins to vary already at 16-20 atm pressure. Photographs taken with a high-speed camera and a photorecorder have shown that these variations may be regular or irregular. Finally, it is stated that the behavior of the secondary flame does not follow the theory of Ya. B. Zel'dovich and is, thus not decisive for the burning of the liquid. The tendency of the products of combustion to create a secondary flame is attributed not only to thermal but also to more complicated phenomena. According to studies made by I. I. Polyakov, a secondary flame will appear even at lower pressures when tubes of larger diameters are used. The au-

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thors thank S. V. Chuyko for making available some illustrations of his diploma thesis. A paper of A. F. Belyayev and L. D. Komkova is mentioned. There are 13 figures and 1 Soviet-bloc reference.

ASSOCIATION: Akademiya nauk SSSR Institut khimicheskoy fiziki (Academy of Sciences USSR, Institute of Chemical Physics)

SUBMITTED: June 25, 1959

Legend to Fig. 1: (x) p in kg/cm^2; (y) u_M in cm. Pressure dependence of the rate of combustion of liquid nitroglycol.
Legend to Fig. 2: (x) p in kg/cm^2; (y) u_M in cm; (1) liquid nitroglycol; (2) gelatinous nitroglycol.
Legend to Fig. 6: (x) p in kg/cm^2; (y) l in mm; variation of the distance between primary and secondary flames as dependent on pressure: (1) liquid nitroglycol; (2) gelatinous nitroglycol. The zone of intermittent burning is indicated by a broken line.

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B132/B220

11.6300

AUTHORS: Glazkova, A. P., and Tereshkin, I. A.

TITLE: Pressure dependence of the combustion rate of explosives

PERIODICAL: Zhurnal fizicheskoy khimii, v. 35, no. 7, 1961, 1620-1628

TEXT: The pressure dependence of the combustion rate was studied in a wide pressure range. Trotyl, picric acid, tetryl, Hexogen, Ten, and some mixtures such as Amatol 80:20, nitro-glycerin powder and black powder, and mixtures of ammonium perchlorate with several fuels were tested. Combustion was studied in bombs at constant pressures of 350 and 1000 atm. These bombs were designed by the Institut khimicheskoy fiziki AN SSSR (Institute of Chemical Physics AS USSR). The explosive was pressed into columns of organic glass of 7 mm diameter. Ignition was effected by means of a nichrome coil in nitrogen atmosphere. The combustion process was photographed on the moving film of a photographic recorder. The combustion rate was calculated from the equation $u_m = L\omega\sin\alpha/k$, where u_m is the mass velocity during combustion, L the circumference of the

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recording drum, n the speed of the drum, α the inclination of the combustion front to the horizontal, δ the specific density of the specimen, and k the reduction of the specimen on the film. Accuracy was ±5%. With trotyl and picric acid, the combustion rate increased linearly with pressure from minimum up to 1000 atm. With tetryl, $u_m=0.04+0.0^{3}14p$ holds in the range of 250-1000 atm, whereas $u_m=0.663p^{0.695}$ holds below 250 atm. The combustion rate of Hexogen is much lower, and shows considerable variation above 200 atm. The combustion rate of Ten increases linearly in the range of 16-750 atm. In the case of Dyna, the combustion rate above 1000 atm increases faster than linearly with pressure. The combustion rate of nitro-glycerin (28%) powder increases with pressure according to the relation $u_m=0.12+0.158p^{0.95}$ up to 50 atm. From 50-1000 atm, $u_m=0.62+0.00926p$. For Amatol 80:20, the increase was a little slower than linear in the range of 150-300 atm. $u_m=-0.58+0.00554p$ holds as from 40 atm. Gunpowder no. 1 was used in tests with black powder. The equation $u_m=Bp^{\nu}$ was derived for pressures between 10 and 1000 atm. The

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values of coefficients A, B, and ν are tabulated for all substances tested; moreover, the combustion rates at 100 atm, and the combustion temperatures calculated. Professor K. K. Andreyev is thanked for his interest and assistance. A. P. Bakeyev is mentioned. There are 14 figures, 1 table, and 4 references: 3 Soviet-bloc and 1 non-Soviet-bloc.

ASSOCIATION: Akademiya nauk SSSR, Institut khimicheskoy fiziki AN SSSR (Academy of Sciences USSR, Institute of Chemical Physics AS USSR)

SUBMITTED: December 25, 1959

Table. Values of coefficients A, B, and ν for a number of explosives. Legend: (A) Explosive; (B) pressure range for which the equation holds, atm; (C) combustion rate at 100 atm; (D) combustion temperature T, ^{o}K; (E) trotyl; (F) picric acid; (G) tetryl; (H) Hexogen; (J) Ten; (K) Dyna; (L) nitro-glycerin 28% powder; (M) black powder; (N) Amatol 80:20.

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"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3

ANDREYEV, K.K.; GLAZKOVA, A.P.; TERESHKIN, I.A.

Effect of pressure on the burning of liquid explosives. Zhur. fiz. khim. 35 no.2:426-430 F '61. (MIRA 16:7)

1. Institut khimicheskoy fiziki AN SSSR.
(Explosives) (Combustion)

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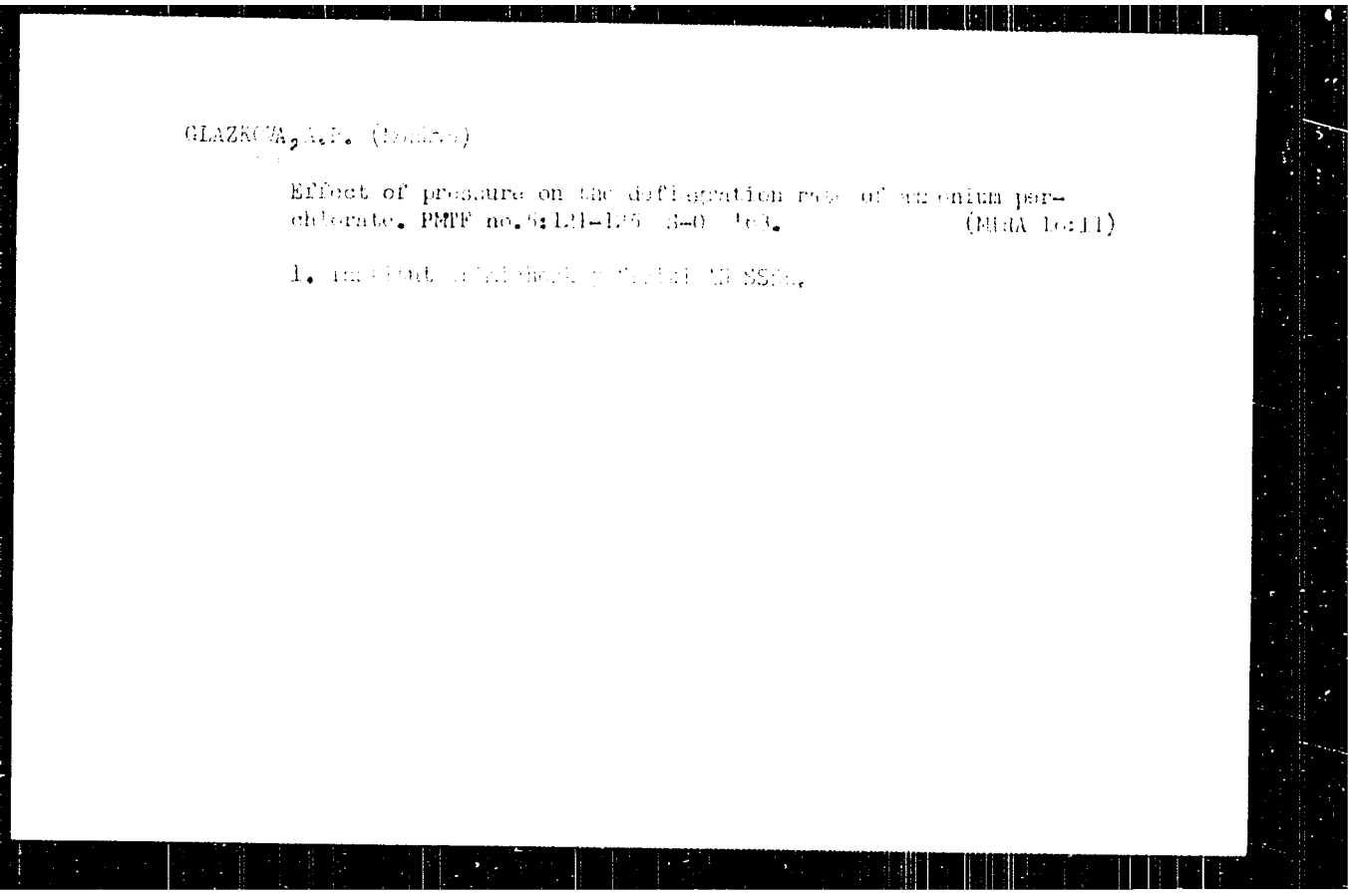

GLAZKOVA, L.P. (Leningrad)

Effect of pressure on the deflagration rate of ammonium perchlorate. PMTF no.6:121-126 '58. (MIRA 11:11)

1. [illegible]

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L 10533-63 EPR/EPF(c)/EWT(m)/BDS--AFFTC/RPL--Ps-4/Pr-4--Pi-2/
RM/WW/JW/JWD/H
ACCESSION NR: AP3000421 S/0076/63/037/005/1119/1123

AUTHOR: Glazkova, A. P. 78 72

TITLE: The effect of a liquid layer in the combustion of composite systems

SOURCE: AN SSSR. Zhurnal fizicheskoy khimii, v. 37, no. 5, 1963, 1119-1123

TOPIC TAGS: combustion of composite explosives, burning rate, pressure, ammonium perchlorate, potassium perchlorate, paraffin wax, triethylene glycol dimethacrylate

ABSTRACT: The role of a molten oxidizer and combustible layers formed in the combustion of composite explosives has been studied. Ammonium perchlorate or potassium perchlorate was mixed in stoichiometric proportions with low-melting or with nonmelting combustibles (monomeric triethylene glycol dimethacrylate, paraffin wax) point combustibles (polymerized triethylene glycol dimethacrylate, coke, cellulose, naphthalene, urotropine). Mixtures with a particle size of less than 250μ were compacted in plexiglass tubes 7 mm in diameter, and the burning rates at pressures ranging from atmospheric to 350 atm were determined photographically in a nitrogen-filled constant-pressure bomb. The burning-rate versus pressure

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ACCESSION NR: AP3000421

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curves showed that mixtures of ammonium perchlorate with liquid or low-melting combustibles burn faster and mixtures with nonmelting combustibles burn slower than the perchlorate alone. Mixtures of potassium perchlorate, which forms a molten layer, with nonmelting and melting combustibles burned at about identical rates. In other tests, mixtures of ammonium nitrate with monomeric and polymeric methacrylate burned at the same rate at 350-1000 atm. The experimental results are explained on the basis of the following mechanism: In the presence of a molten combustible layer the oxidizer particles are covered with the melt, which increases their reactivity and therefore the combustion rate. The presence of the combustible melt eliminates the buffer flame which is formed by decomposition of the oxidizer, and therefore the zone of maximal temperature is shifted to the surface of the condensed phase. Further experiments with ammonium nitrate of less than 250μ and 1--10μ in particle size showed that in the presence of a melting combustible the grain size has little effect on the combustion rate, but does affect it in the presence of nonmelting combustibles. Previous studies are also discussed which showed that in the combustion of mixtures of ammonium perchlorate and paraffin wax, the burning rate increased exponentially with pressure up to 300 atm and linearly at more than 300 atm. "The author considers it her pleasant duty to express thanks to K. K. Andreyev and V. K. Boboley, in whose laboratory the experiments were set up, and also to her coworkers L. G. Bolkhovitinov and A. D. Margolin for their observations."

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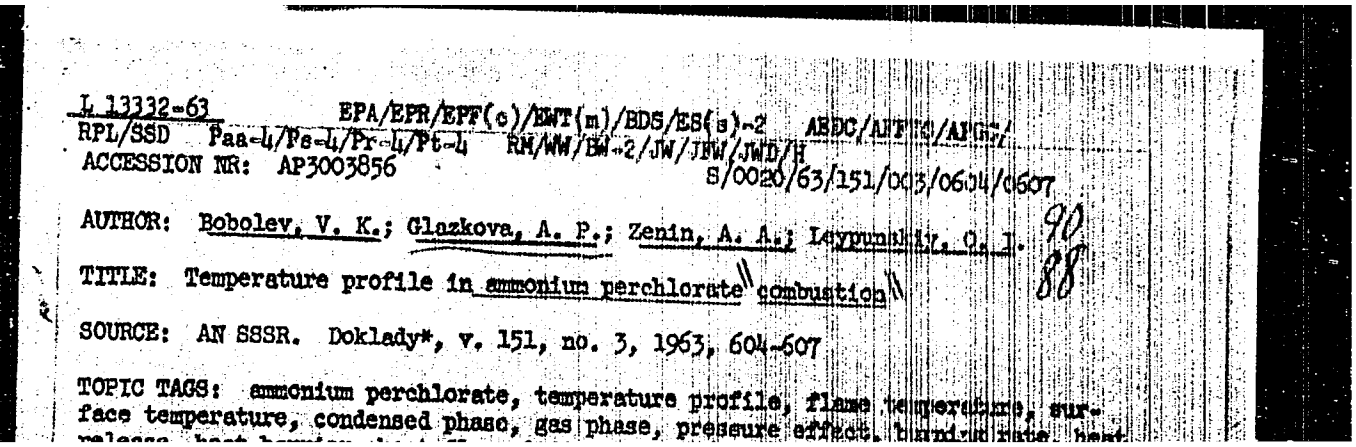

L 13332-63 EPA/EPR/EPF(c)/EWT(m)/BDS/ES(s)-2 AEDC/AFTR/AFWL/
RPL/SSD Paa-4/Pe-4/Pr-4/Pt-4 RM/WW/BW-2/JW/JFW/JWD/H
ACCESSION NR: AP3003856 S/0020/63/151/003/0604/0607

AUTHOR: Bobolev, V. K.; Glazkova, A. P.; Zenin, A. A.; Lapynnik, O. I. 90 88

TITLE: Temperature profile in ammonium perchlorate combustion

SOURCE: AN SSSR. Doklady*, v. 151, no. 3, 1963, 604-607

TOPIC TAGS: ammonium perchlorate, temperature profile, flame temperature, surface temperature, condensed phase, gas phase, pressure effect, burning rate, heat

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perchlorate combustion

ABSTRACT: The anomalous combustion pattern of ammonium perchlorate at pressures above 150 atm has prompted a study of the temperature profile of the condensed and gas phases in the combustion process. Flame-temperature measurements were carried out by the method of thin thermocouples developed by A. M. Zenin. Compacted samples of ammonium perchlorate were held at a constant pressure within the 30—350-atm range in a nitrogen atmosphere. Simultaneous photorecording of the burning rate and combustion pattern and oscillographic recording of temperature were provided. The recorded oscillograms and derived temperature profiles

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showed two distinct combustion patterns: a stable one within 40--150 atm and an unstable one within the 160--350 atm. The region of unstable combustion was characterized by temperature fluctuations with a high (up to 500C) amplitude in the gas phase, followed by a leveling off of temperature at about 2700C, which was assumed to be also the temperature at the surface. The surface temperature (T_s) was determined either indirectly from the maximum heat release in the condensed phase or directly by a method proposed by P. F. Pokhil (Sborn. Fizika vzryv*va, no. 4, 1955 and no. 2, 1956). The increase in overall heat release with increasing pressure observed within the region of stable combustion was attributed in part to a simultaneous increase in heat release in the gas phase and in part to a change in the mechanism of chemical reactions. The heat release in the condensed phase, and hence T_s, decreased with increasing pressure and approached the temperature of phase transition within the range of unstable combustion. The existence of a heat barrier (80 cal/g) between the two combustion regions was determined from the identity of the experimental heat release at 150 atm in the condensed phase and the calculated amount of heat required to bring the condensed phase to 270C. Heat absorption in the phase transition might be responsible for the decrease in burning rate which leads to flame extinction. The surface temperature in the 50--150 atm pressure range was found

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ACCESSION NR: AP3003856

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to be relatively low (300—430°), which indicates a heat flow and hence diffusion of molecules and free radicals from the flame zone towards the surface. Activated combustion products are assumed to act as catalysts of thermal decomposition on the perchlorate surface. The assumption is extended to the combustion of any condensed system in which heat flows from the gaseous reaction zone toward the surface. The article was presented by Academician Ya. B. Zel'dovich on 9 April 1963. Orig. art. has: 4 figures.

ASSOCIATION: Institut khimicheskoy fiziki Akademii nauk SSSR (Institute of Chemical Physics, Academy of Sciences SSSR)

SUBMITTED: 31Mar63 DATE ACQ: 15Aug63 ENCL: 00

SUB CODE: CH NO REF SOV: 006 OTHER: 004

Card 3/3

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3

ACCESSION NR: AP4041206 S/0207/64/000/003/0153/0158

AUTHORS: Bobolev, V. K. (Moscow); Glazkova, A. P. (Moscow); Zenin, A. A. (Moscow); Loypunskiy, O. I. (Moscow)

TITLE: A study of the temperature distribution in the combustion of ammonium perchlorate

SOURCE: Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki, no. 3, 1964, 153-158

TOPIC TAGS: temperature distribution, combustion rate, pressure effect, flame temperature, grain effect, phase change, decomposition, point thermocouple, sublimation, condensation, combustion stability, heat liberation, oscillograph N 700

ABSTRACT: Studies of the combustion of preheated ammonium perchlorate at below-atmospheric pressure show that the combustion rate is limited by the equilibrium endothermic decomposition of NH_4ClO_4 to NH_3, and $HClO_4$. A zone combustion treatment of burning indicated, however, that the decomposition was exothermic. The point thermocouple method, developed by A. A. Zenin (Izucheniye raspredeleniya temperatury* pri goronii kondensirovanny*kh veshchestv. Dissertatsiya, Moscow, 1962) was used in this paper to study the temperature distribution of

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ACCESSION NR: AP4041206

ammonium perchlorate combustion. Two p-type thermocouples, W+Re (5 and 20%Re) with diameters of 15 and 30 μ and a thickness of 3.5 and 7 μ respectively, were used. The 7-mm samples of unfiltered perchlorate (pressed to a density of 1.93-1.94g/cm^3) were treated over the pressure range 40-350 atmos of nitrogen. The thermocouples were impressed in the samples at a pressure of 3000-3500 kg/cm^2. Maintaining the pressure for 15-20 minutes produced transparent samples. The temperature distribution was recorded on a loop oscillograph H-700, and the speed and character of combustion were photographed. It was discovered that at the end of combustion there was a temperature fluctuation (50 msec and 500-1000C). The flame temperature fluctuation and plateau agreed well with the decreased brightness in the photographs, but complete examination of the oscillogram for unstable burning was not possible. This would require more precise recording of the fluctuation of the burning rate (perhaps with high-speed motion pictures). In some cases the burning was extinguished. Temperature profiles were obtained from 40-350 atm, which showed the presence of 2 combustion schemes for ammonium perchlorate, stable (40-150 atm) and unstable (160-350 atm). Abnormalities were discovered in the relation of the surface temperature and heat liberation (in the condensation phase) to the pressure. Assumptions were made concerning; 1)the variation of the ammonium perchlorate combustion mechanism with the growth of pressure; 2) the qualitative effect of the products passing from the reaction

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ACCESSION NR: AP4041206

zone in the gas phase to the surface by gasification of the condensation phase. An hypothesis was proposed concerning the reason for the decrease in the ammonium perchlorate combustion rate with an increase in pressure above 150 atm. An important discrepancy was established between the kinetic thermal decomposition and the kinetic gasification of perchlorate with combustion. Orig. art. has: 6 figures.

ASSOCIATION: none

SUBMITTED: 15Apr63

SUB CODE: GC ENCL: 00

NO REF SOV: 004 OTHER: 005

Card 3/3

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3"

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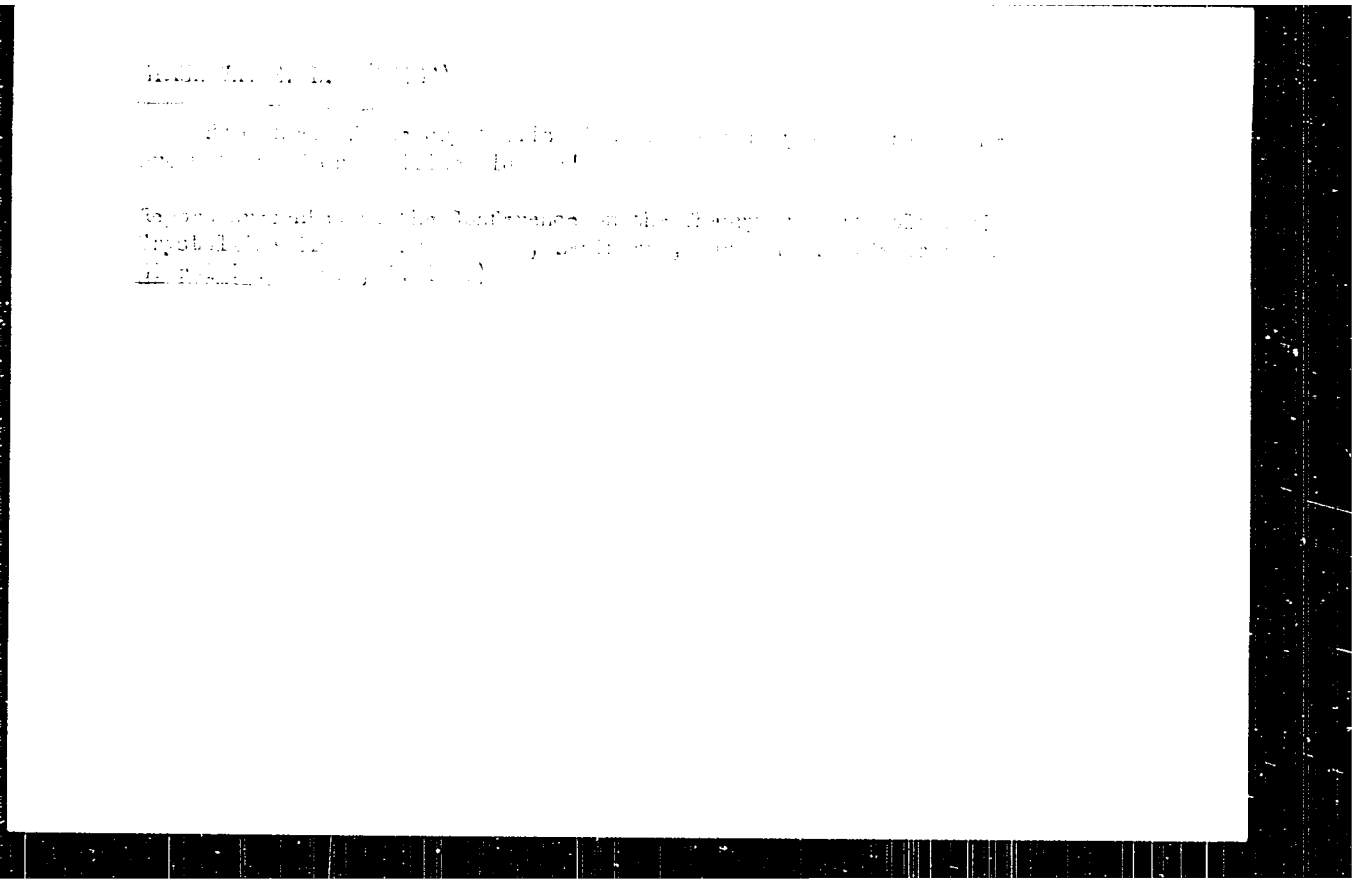

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"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3

GLAZKOVA, E.L.

Crystallization of glucose and sodium chloride binary compounds from hydrochloric wood hydrolyzates. Gor. prom. 39 (2) 165-171 '64. (MIRA 18:3)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3

GLAZKOVA, G.

Balancing income and expenditures by districts. Den. i kred. 17 no.8:59-60 Ag '59. (MIRA 12:11)

1. Starshiy kreditnyy inspektor Sverdlovskoy oblastnoy kontory Gosbanka.
(Sverdlovsk Province—Banks and banking—Accounting)

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5.4500(3)

S/020/60/132/03/43/066
B004/B007

AUTHORS: Spitsyn, Vikt. I., Academician, Torchenkova, Ye. A., Glazkova, I. N.

TITLE: The Influence of the Radioactive Radiation of a Solid on the Processes of Its Dissolution

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 132, No. 3, pp. 643-645

TEXT: The authors investigated the solubility of $BaSO_4$ which was traced with S^{35}. They describe the production of $BaSO_4$, the specific surface of which was determined by means of a microscope and an electron microscope. The particles had a size of 2.7-8.1 μ. Furthermore, the activity of precipitate and solution was measured in intervals of time. Fig. 1 shows the kinetics of $BaSO_4$ dissolution of different activities at 20°C. $BaSO_4$ was obtained by mixing equivalent quantities of 0.1 N solutions of $BaCl_2$ and Na_2SO_4. With a specific radioactivity of the preparation of 0.7-1.0 milli-

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curie/g considerable oversaturation was observed, which decreased after 25 h. In the case of preparations with 9-20 millicuries/g the concentration of the dissolved $BaSO_4$ increased proportionally with time. The solubility of $BaSO_4$ is increased by an excess of Na_2SO_4, but especially by an excess of $BaCl_2$ (Fig. 2). If instead of Na_2SO_4 a 0.1 N H_2SO_4 is used for the production of $BaSO_4$, solubility decreases (Figs. 3,4), but the kinetics of solubility shows the same phenomena as represented in Fig. 1. The authors explain this phenomena as being due to β-radiation, by which the electric double layer at the interface is influenced. This influence acts in a similar way on the dissolution as the ion strength of the solution. The occurrence of a maximum is ascribed to a change in the interaction between β-particles and the substance with an increased number of β-particles. There are 4 figures and 14 references: 9 Soviet, 1 Austrian, 1 French, 1 German, and 1 Dutch.

ASSOCIATION: Institut fizicheskoy khimii Akademii nauk SSSR (Institute of Physical Chemistry of the Academy of Sciences, USSR)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3

The Influence of the Radioactive Radiation of a Solid on the Processes of Its Dissolution

S/020/60/132/03/43/066
B004/B007

SUBMITTED: February 24, 1960

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APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3

SPITSYN, Vist.I., akademik; TORCHENKOVA, Ye.A.; GLAZKOVA, I.N.

Process of solution of barium sulfate tagged with two radioactive indicators. Dokl.AN SSSR 133 no.5:1111-1112 Ag '60. (MIRA 13:8)

1. Institut fizicheskoy khimii Akademii nauk SSSR.
(Barium sulfate) (Barium--Isotopes) (Sulfur--Isotopes)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3

ACCESSION NR: AT4013959 S/2659/63/010/000/0239/0246

AUTHOR: Arkharov, V. I.; Konev, V. N.; Nesterov, A. F.; Andrianovskiy, B. P.; Glazkova, I. P.

TITLE: Investigation of metal oxidation in sulfur-saturated air

SOURCE: AN SSSR. Institut metallurgii. Issledovaniya po zharoprochnym splavam, v. 10, 1963, 239-246

TOPIC TAGS: oxidation, sulfur, titanium chromium, maganese, cobalt iron, nickel, metal oxidation, transition element

ABSTRACT: The presence of sulfur in the air frequently leads to acceleration of the oxidation rate, and sometimes to dangerous accidents. The present paper describes the results of investigating the oxidation of Ti, Cr, Mn, Co, Fe and Ni in air containing two chemically active components: oxygen and sulfur. For this group of metals the importance of sulfur in oxidation increases from titanium to nickel. This is explained by the fact that the sulfur activity rises and the oxygen activity drops. The percentage of sulfur in the oxidation scale increases from 0.004% for titanium to complete sulfuration of all the nickel under the layer of NiO. This explains the brittleness of nickel during heat treatment in sulfur-containing media. The process of metal oxidation in sulfur-oxygen media corrobo-

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ACCESSION NR: AT4013959

rates the previously published opinions of the authors. Orig. art. has: 2 figures and 2 tables.

ASSOCIATION: Institut metallurgii AN SSSR (Institute of Metallurgy AN SSSR)

SUBMITTED: 00	DATE ACQ: 27Feb64	ENCL: 00
SUB CODE: MM	NO REF SOV: 011	OTHER: 002

Card 2/2

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"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3

L 18102-63 EWP(q)/EWT(m)/BDS AFFTC/ASD JD/JG 61
ACCESSION NR: AP3004596 S/0126/63/016/001/0086/0090 60

AUTHORS: Konev, V. N.; Nesterov, A. F.; Glazkova, I. P.

TITLE: Study of the reaction diffusion in the systems "metal-gas mixture." 7. Molybdenum - Silicon - Boron

SOURCE: Fizika metallov i metallovedeniye, v. 16, no. 1, 1963, 86-90

TOPIC TAGS: diffusion, ternary system, Mo-Si-B

ABSTRACT: Experimental results obtained in the investigation of the reaction diffusion in the system Mo-Si-B are discussed. The experiments were made at temperatures 800-1200C following the procedure described by A. F. Gerasimov, V. N. Konev, and N. P. Timofeyeva (FMM, 1961, 11, 596). It was established that a diffusive layer is formed in the system Mo-(B + Si) in the atmosphere BCl_3 + $SiCl_4$ + H_2. The layer consisted of phases with the structure Mo_2B_5 (to 1000C), and Mo_2B_5 with α -MoB (above 1000C). Apparently silicon participated in this process (the diffusion of boron was slow and the activation energy of boron diffusion had a greater value than it would have in the absence of Si). It was

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ACCESSION NR: AP3004596

assumed that the diffusion in the systems Mo-B, Mo-Si, and Mo-B-Si proceeds due to the inward penetration of the component gas atoms through the space lattice of the layers formed. The basic reaction-front in such systems is the intra-phasal boundary "case-metal." The comparison of the radii of Mo, B, and Si (r_{Mo} = 1.40; r_B = 0.87; r_{Si} = 1.17 Å correspondingly) indicates the correctness of this hypothesis. Orig. art. has: 3 figures.

ASSOCIATION: Ural'skiy gosudarstvenny*y universitet im. A. M. Gor'kogo (Ural State University)

SUBMITTED: 12Sep62 DATE ACQ: 27Aug63 ENCL: 00

SUB CODE: ML, PH NO REF SOV: 022 OTHER: 009

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APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3

DANILOV, P.M.; KRAMAROV, A.D.; YEREMENKO, S.N.; GLAZKOVA, L.V.

Oxygen content and nonmetallic inclusions in steel with its deoxidation by aluminum. Izv. vys. ucheb. zav.; chern. met. 4 no.8:48-55 '61. (MIRA 14:9)

1. Kuznetskiy metallurgicheskiy kombinat i Sibirskiy metallurgicheskiy institut.
(Steel--Oxygen content) (Aluminum)

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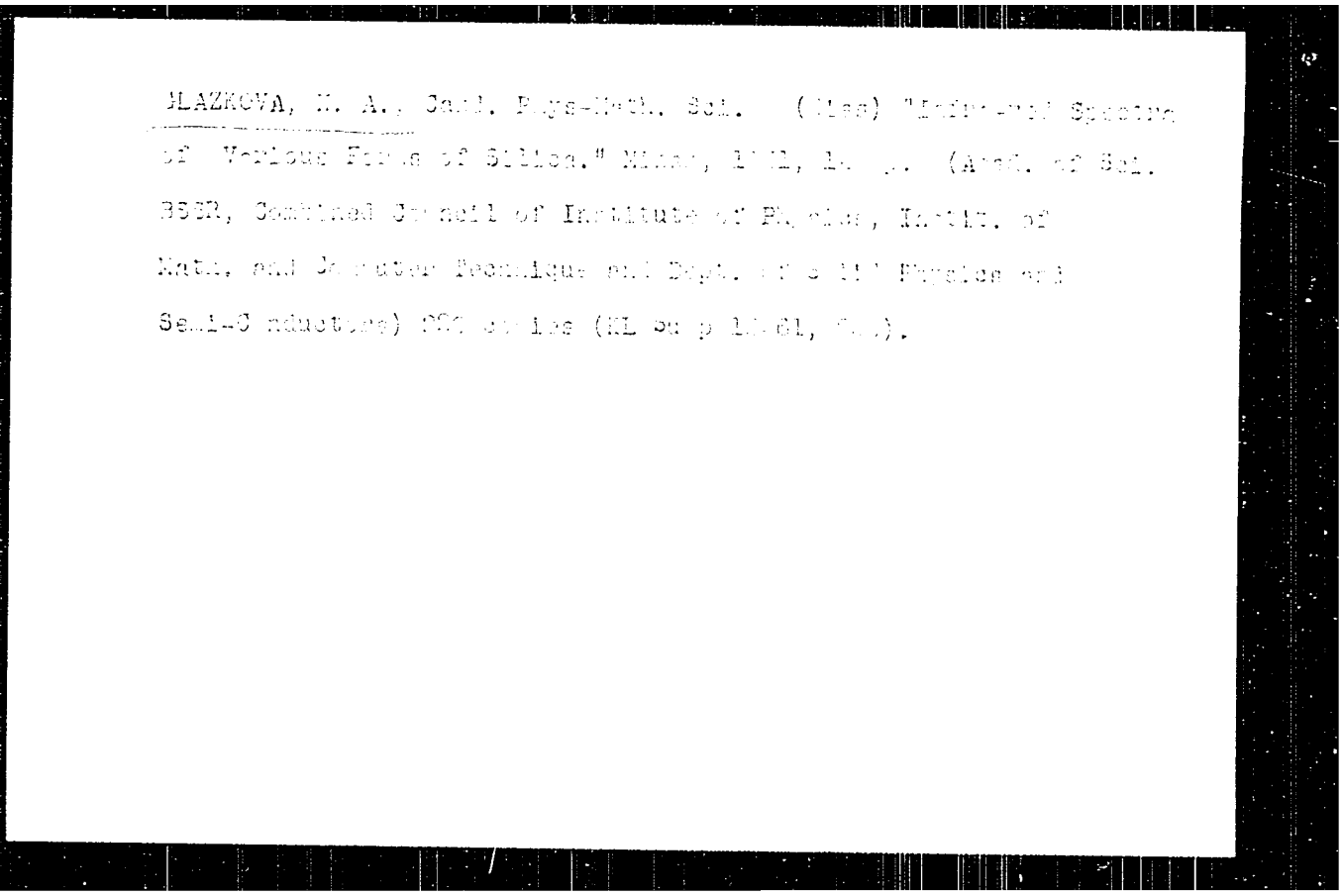

BLAZKOVA, M. A., Cand. Phys-Math. Sci. (diss) "Infrared Spectra of Various Forms of Silica." Minsk, 1962, 14 pp. (Acad. of Sci. BSSR, Combined Council of Institutes of Physics, Instit. of Math. and Computer Technique and Dept. of Solid State Physics and Semiconductors) 200 copies (KL Sup 10-62, 101).

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L 38707-66 EWT(m)/T/EWP(t)/ETI LJP(c) JD/WW/JG/JWD/GD
ACC NR: AT6016861 (A) SOURCE CODE: UR/0000/65/000/000/0086/0092

AUTHOR: Pavlyuchenko, M. M.; Glazkova, N. I.

ORG: none

TITLE: Zinc carbonate decomposition in vacuo and in melts of alkali metal nitrates

SOURCE: Geterogennyye khimicheskiye reaktsii (Heterogenous chemical reactions). Minsk, Nauka i Tekhnika, 1965, 86-92

TOPIC TAGS: nonferrous metal, zinc compound, reaction rate, thermochemistry, heat of decomposition, carbonate, activation energy, alkali metal, nitrate

ABSTRACT: The kinetics of thermal decomposition of $ZnCO_3$ was studied in vacuo and in a 58% KNO_3+42% $LiNO_3$ melt in the 250°-280°C range. The object of the work was to verify the pertinent information in the literature. It was found that $ZnCO_3$ decomposition is a self-accelerating reaction and that its rate increases with increasing temperature. It was also found that at 280°C and at 250°C, the $ZnCO_3$ decomposition in the KNO+$LiNO_3$ melt and in vacuo was 129 and 178 times greater respectively than in vacuo in the absence of the melt. The dependence of the

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BASHENINA, Natal'ya Viktorovna; GLAZKOVA, N.M., red.; LAZAREVA, L.V., tekhn. red.

[Ecology of the common vole (Microtus arvalis) and some characteristics of its geographical variability] Ekologiia obyknovennoi polevki i nekotorye cherty ee geograficheskoi izmenchivosti. Moskva, Izd-vo Mosk. univ., 1962. 308 p. (MIRA 15:7)

(Field mice)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3

KIRISANOVA, Yelena Nikolayevna; GLAZKOVA, N.N., red.; LAZAREVA, L.V., tekhn. red.

[Theoretical problems in the variability of the human spine and chest] Teoreticheskie voprosy izmenchivosti pozvonochnika i grudnoi kletki cheloveka. Moskva, Izd-vo Mosk. univ., 1962. 52 p. (MIRA 15:7)

(SPINE) (CHEST)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3

SHOSTAKOVSKIY, M.F.; SKVORTSOVA, G.G.; DOMNINA, Yu.S.; GLAZKOVA, N.I.

Some features of vinylindole chlorination in halogenation reactions.
Izv. AN SSSR.Ser. khim. no.3:529-531 '65. (MIRA 18:5)

1. Irkutskiy institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR.

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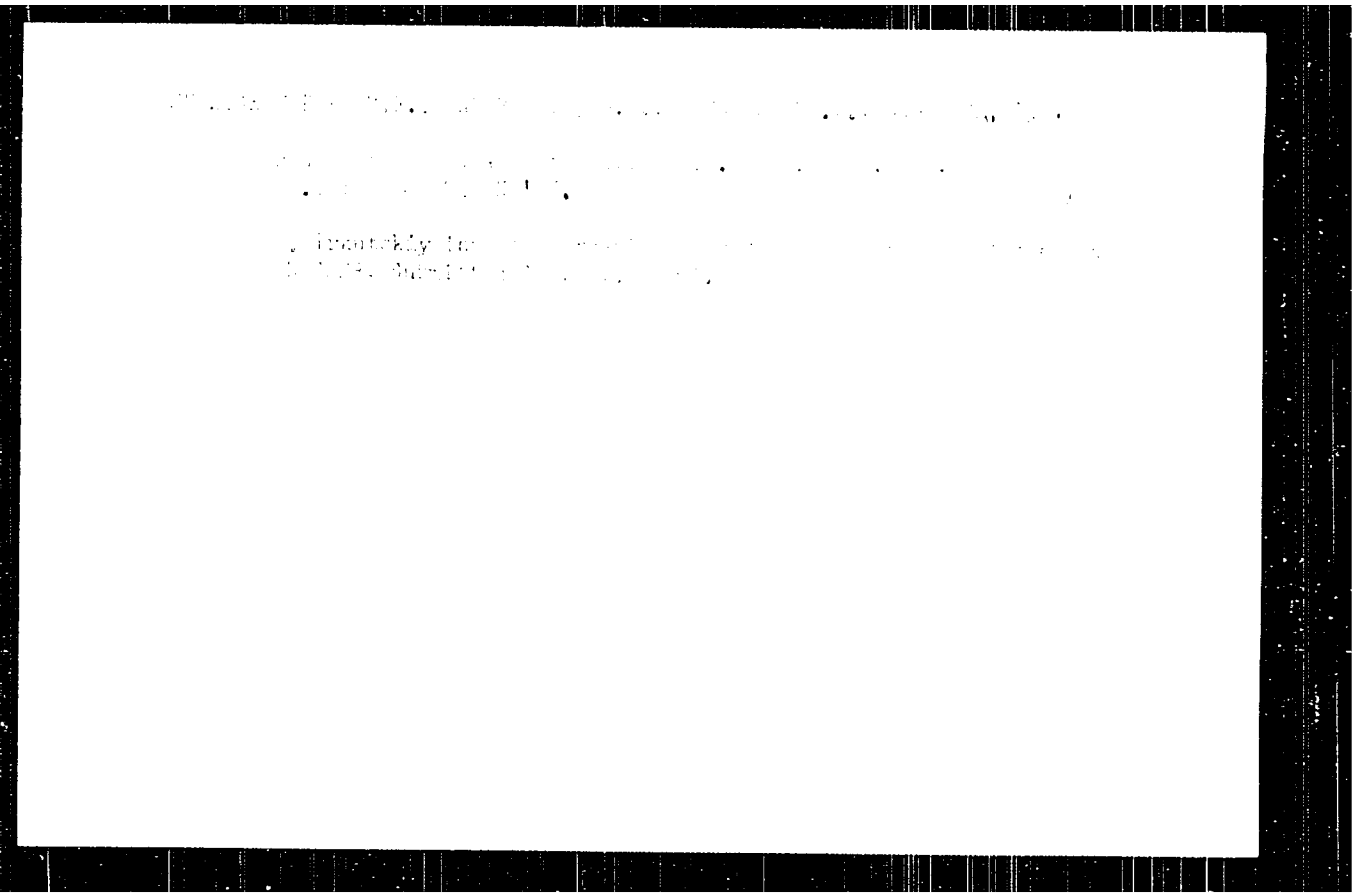

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"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3

KUZYAKINA, O., kand.tekhn.nauk; GLAZKOVA, S., inzh.

Partial replacement of the cement in concrete and reinforced concrete elements with fly ash from burning brown coal at the Aleksandrovskaya Thermal Electric Plant. Bud.mat.i konstr. 4 no.6:30-33 N-D '62. (MIRA 15:12)
(Ukraine—Fly ash) (Lightweight concrete)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3

GLAZKOVA, T.A., kandidat meditsinskikh nauk

Treatment of cholecystitis and cholangitis with antibiotics as related to the microflora of the duodenum. Sov.med.20 no.10:60-64 O '56. (MLRA 10:1)

1. Iz kafedry gospital'noy terapii (nauchnyy rukovoditel' prof. V.M.Karatygin) Sverdlovskogo meditsinskogo instituta.

(CHOLECYSTITIS, ther.
antibiotics, eff. of duodenal microflora on indic.)
(ANTIBIOTICS, ther. use
cholecystitis and cholangitis, eff. of duodenal microflora on indic.)
(CHOLANGITIS, ther.
antibiotics, eff. of duodenal microflora on indic.)
(DUODENUM, microbiol.
eff. on indic. for antibiotic ther. in cholecystitis & cholangitis)

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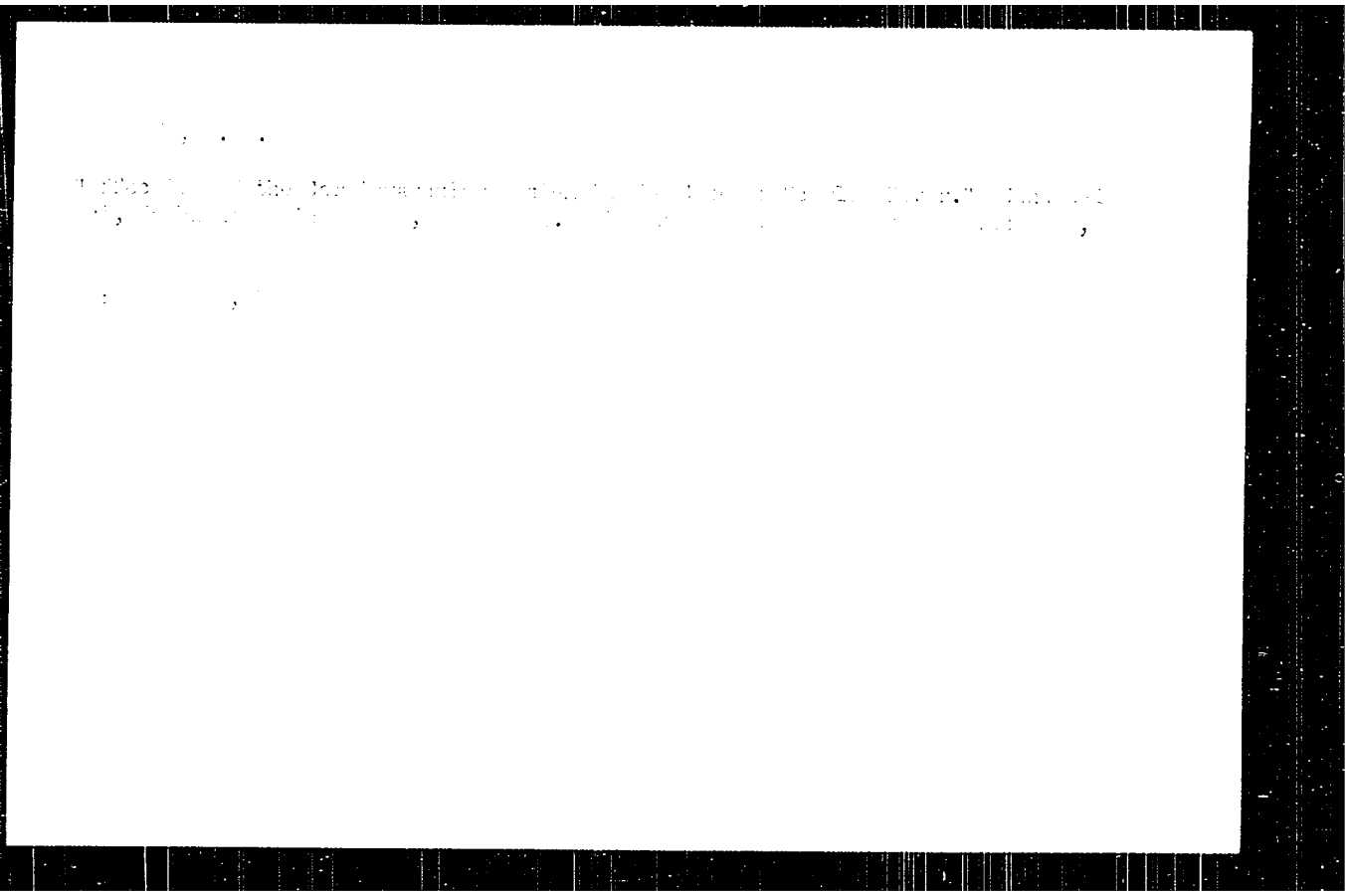

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"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3

GLAZKOVA, T.S.

Comparative evaluation of the effect of biomycin and of other drugs in the treatment of patients with dysentery. Trudy LSGMI 46:153-161 '59. (MIRA 13:11)

1. Kafedra infektsionnykh bolezney Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta (zav. kafedroy - prof. V.V.Kosmachevskiy).
(AUREOMYCIN) (DYSENTERY)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3

SOKOLOVSKAYA, Ya.I.; KOZLOVA, A.A.; SMIRNOVA, S.A.; KRYLOVA, O.M.; GLAZKOVA, T.S.; ALEKSANDROVA, V.E.; KAPETANAKI, K.G.

Viacheslav Viktorovich Kosmachevskii; on his 75th birthday. Zhur. mikrobiol., epid.i immun. 33 no.4:154-155 Ap '62. (MIRA 15:10)
(KOSMACHEVSKII, VIACHESLAV VIKTOROVICH, 1887-)

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"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3

L 11307-67 EWT(1) SCTB DD/GD

ACC NR: AT6036511 SOURCE CODE: UR/0000/66/000/000/0085/0086

AUTHOR: Vakar, M. I.; Chernyakov, N. I.; Maksimov, I. V.; Glazkova, V. A.; Ashovskiy, P. Ya.

ORG: none

TITLE: Moisture loss in the human organism at high altitudes [Paper presented at the Conference on Problems of Space Medicine held in Moscow from 24 to 27 May 1966]

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966, 85-86

TOPIC TAGS: high altitude physiology, alpine acclimatization, hypoxia, human physiology, perspiration

ABSTRACT: Moisture loss in man during exposures of several hours to high altitudes (30,000 m and above) during pressure oxygen breathing was studied.

The subjects wore altitude compensating suits which did not prevent contact between the skin and the high vacuum and did not impede evaporation of moisture from the surface of the body and from underclothing. Water loss was calculated by weighing the subjects before and after the experiment. Decrease in temperature of the skin and underclothing was recorded with a thermocouple and served as an indirect index of evaporation intensity.

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L 11367-67

ACC NR: AT6036511

The subjects were at rest in some experiments and performed physical work of medium difficulty in others.

It was found that during prolonged resting exposure to high altitudes moisture loss increases by 1.5 to 2 times (from 40-50g/hr to 70-120g/hr). This increase is due to increased evaporation from the skin in a rarefied atmosphere. Increased perspiration due to emotional tension was also sometimes seen.

Step test exercises caused still greater water loss (120 to 225 g/hr). Increased moisture loss at high altitudes was primarily due to the wearing of altitude equipment which hindered movement, as well as to rarefied atmosphere and emotional tension.

Skin temperature dynamics confirmed the intensification of evaporation from the body and underclothing at high altitudes. [W.A. No. 22; ATD Report 66-116]

SUB CODE: 06 / SUBM DATE: 00May66

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"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3

ACC NR: AT6036531 SOURCE CODE: UR/0000/66/000/000/0122/0123

AUTHOR: Glazkova, V. A.; Maksimov, I. V.; Chernyakov, I. N.

ORG: none

TITLE: Dynamics of blood oxygen saturation in man during excess pressure breathing at high altitudes /Paper presented at the Conference on Problems of Space Medicine held in Moscow from 24 to 27 May 1966./

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966, 122-123

TOPIC TAGS: high altitude physiology, blood chemistry, human physiology, hypoxia, oxyhemography, blood oxygen saturation

ABSTRACT: Blood oxygen saturation during excess pressure breathing (150 and 180 mm Hg) at altitudes of 30000 m and higher with counterpressure altitude compensation was studied in man by the oxyhemograph method. Saturation level obtained during pure oxygen breathing on the ground was taken as 98 to 100%.

Above 12000 m, blood oxygenation depends on absolute intrapulmonary pressure which in turn determines alveolar pO_2. At an intrapulmonary pressure $\simeq$ 150 mm Hg (alveolar $pO_2 \simeq 60$ mm Hg), blood oxygen satura-

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tion varied between 84% and 88% at all altitudes from 12000--36000 m. At a higher intrapulmonary pressure of 180 mm Hg (alveolar $pO_2 \simeq$ 90 mm Hg), oxyhemoglobin rose to 90% -- 95%.

Breathing air at 3000 m gives an alveolar pO_2 about equal to that obtained by breathing oxygen without excess pressure at 12000 m with an absolute intrapulmonary pressure of 150 mm Hg at altitudes above 12000 m. Nonetheless, blood oxygen saturation was lower (76% to 78%) while breathing air at 3000 m than while breathing oxygen at 12000 m and above (84% and 86%, respectively). It is suggested that the exclusion of nitrogen from the alveoli during oxygen breathing at 12000 m and above improves oxygenation of the blood.

Conversation or counting aloud produced a 3% to 5% increase in blood oxygen saturation provided speech activity did not interfere with respiration rhythm and provided the subject did not speak too softly and slowly. This increase is due to hyperventilation accompanying active speech and not to enhanced cerebral blood circulation due to mental effort.

During light physical exercise, saturation plunged to 74% to 78%, the rate of decrease depending on intensity of the exercise and impairment of external respiration.

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On longer exposure to the maximum altitude, oxyhemoglobin gradually decreased by 4% to 6% though the absolute intrapulmonary pressure did not change. This decrease is not yet explained.

In two cases in which presyncope states developed, oxyhemoglobin fell gradually to 70% or 60%, then increased sharply to 95% or 96%. These disturbances were evidently due not to hypoxic hypoxia, but to circulatory hypoxia.

Recordings of linear blood flow velocity and the endurance of voluntary apnea showed these indices also to depend on oxyhemoglobin percents. [N. A. No. 22; ATD Report 66-116]

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GLAZKOVA, V.L., mladshiy nauchnyy sotrudnik

Simplified methods for the analysis of the physicomechanical properties of twisted yarn. Tekst. prom. 23 no.6:32-34 Je '63. (MIRA 16:7)

1. Tsentral'nyy nauchno-issledovatel'skiy institut khlopchatobumazhnoy promyshlennosti (TsNIKhBI).
(Yarn--Testing)

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"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3

GLAZKOVA, V.N., akusherka

Prevention of toxicoseptic diseases in the newborn. Fel'd. i akush. 21 no.9:29-32 S '56. (MLRA 9:10)

1. Rodil'noye otdeleniye zheleznodorozhnoy bol'nitsy, stantsiya Smolensk.

(INFANTS (NEWBORN)--DISEASES)

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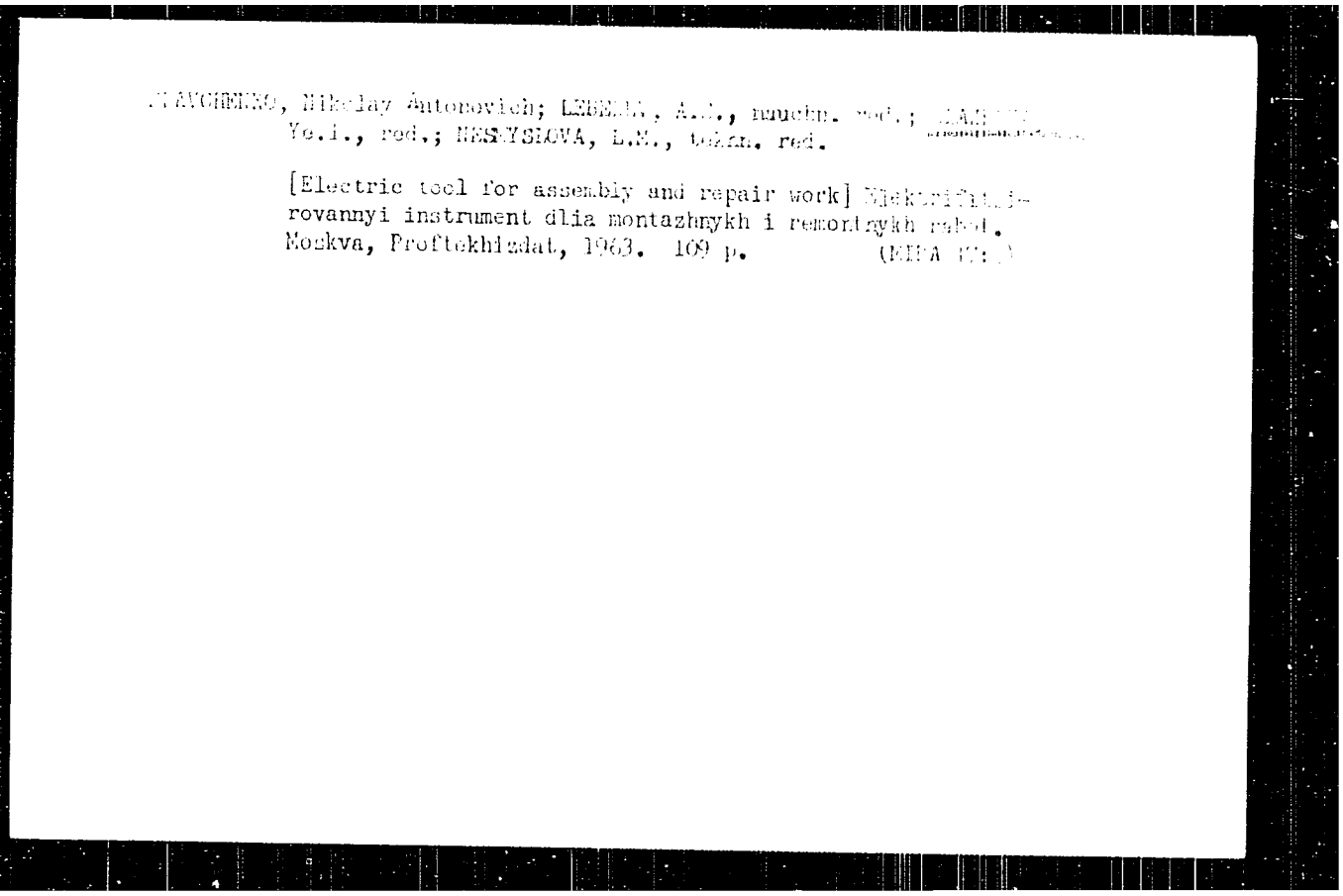

TAVGHENKO, Nikolay Antonovich; LEBEDEV, A.I., nauchn. red.; [illegible] Ye.I., red.; NESMYSHOVA, L.M., tekhn. red.

[Electric tool for assembly and repair work] Mekhanizirovannyi instrument dlia montazhnykh i remontnykh rabot. Moskva, Profizdat, 1963. 109 p. (MIRA 17:)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3

GLAZOVA, V.V.; KURNAKOV, N.N.; LYASHCHENKO, A.B.

Investigating atomic interaction in titanium-zirconium-tin solid solutions. Fiz. met. i metalloved. 12 no.5:656-659 N '61. (MIRA 14:12)

1. Institut metallurgii AN SSSR imeni A.A.Baykova i Institut metallokeramiki i spetsial'nykh splavov AN USSR.
(Titanium-zirconium-tin alloys--Testing)
(Crystal lattices)

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"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3

GLAZOVA, V.V. (Moskva); KURNAKOV, N.N. (Moskva) [deceased]
Creep of titanium-zirconium-tin alloys. Izv. AN SSSR. Otd. tekh. nauk. Met. i gor. delo no.1:161-167 Ja-F '63. (MIRA 16:3)
(Creep of metals) (Titanium-zirconium-tin alloys--Testing)

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"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3

USSR / General and Specialized Zoology. Insects. Pests of Food Stuffs. P

Abs Jour : Ref Zhur - Biologiya, No 16, 1958, No. 73649

Author : Glazkova, Ye. B.
Inst : North Ossetian State Agricultural Experimentation Station
Title : Aerosol Method for Disinfecting Granaries From Pests

Orig Pub : Byul. nauchno-tekhn. inform. Sev.-Osetinsk. gos. s.-kh. opytn. st., 1957, No 1, 43-45

Abstract : No abstract given

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"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3

ZHEBIN, Moisey Isaakovich; SHAMIRGON, S.A., nauchnyy red.; IONOV, V.N., red.; GLAZKOVA, Ye.I., red.; DORODNOVA, L.A., tekhn. red.

[Molder employed in manual molding]Formovshchik ruchnoi formovki. Moskva, Proftekhizdat, 1962. 294 p. (MIRA 16:1)
(Molding (Founding))

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SIL'CHENKO, Serafim Semenovich; ZUBOV, V.T., inzh., nauchnyy red.; GLAZKOVA, Ye.I., red.; NESMYSLOVA, L.M., tekhn. red.

[Mechanization and automation of fitting and assembling work] Mekhanizatsiia i avtomatizatsiia slesarno-sborochnykh operatsii. Moskva, Proftekhizdat, 1962. 147 p. (MIRA 16:4)
(Machine-shop practice) (Automation)

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"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3

GLAVCHENKO, Nikolay Antonovich; LEBEDEV, A.S., [illegible]
GLAZKOVA, Ye.I., red.; NESMEYANOVA, L.M., [illegible]

[Electric tools for assembly and repair work] Elektrifi-
rovannyi instrument dlia montazhnykh i [illegible]. Moskva, Proftekhizdat, 1963. 109 p. [illegible]
(Power tools)

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"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3

GLAZOVSKAYA, M. A.

Geochemical principles in the classification of natural landforms. Vop. geog. no.59:6-52 '62. (MIRA 16:1)

(Landforms—Ural Mountains—Classification)
(Geochemical prospecting)

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"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3

IVANOV, K.I., red.; BELOTSERKOVSKIY, M.Yu., red.; BOLYSHEV, N.N., red.; GERYMIN, A.V., red.; GLAZOVSKAYA, M.A., red.; GOLOVENKO, S.V., red.; ZVORYKIN, K.V., red.; IGNAT'YEV, G.M., red.; KUZNETSOV, G.A., red.; LEBEDEV, N.P., red.; LEBEDEV, P.N., red.; RAKITNIKOV, A.N., red.; SHEYNIN, L.B., red.; GREBTSOV, P.P., red.; YERM'AKOV, M.S., tekhn. red.

[Accounting for and the evaluation of agricultural land] Uchet i otsenka sel'skokhozialstvennykh zemel'. Pod red. K.I. Ivanova. Moskva, Izd-vo Mosk. univ., 1963. 385 p. (MIRA 16:7)

(Farm--Valuation) (Soils--Classification) (Cadastera)

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VITOSHINSKAYA, M.I., bibliograf; GEKKER, I.F., bibliograf; SHNEYDER, R.A., bibliograf; GLAZKOVSKAYA, Ye.A.; KLYASHTORNYY, S.G.; SOLOV'YEV, S.P., doktor geologo-mineral.nauk, red.; KULIKOV, M.V., kand. biolog.nauk, red.; PERLIN, S.S., red.izd-va; GUROVA, O.A., tekhn.red.

[Geological literature of the U.S.S.R.; a bibliographical yearbook for 1954] Geologicheskaia literatura SSSR; bibliograficheskii ezhegodnik za 1954 g. Moskva, Gos. nauchno-tekhn.izd-vo lit-ry po geol. i okhrane nedr, 1957. 185 p. (MIRA 12:1)

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(Bibliography--Geology)

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VITOSHINSKAYA, M.I., bibliograf; GEKKER, I.F., bibliograf; SHNEYDER, R.A., bibliograf; GLAZKOVSKAYA, Ye.A., bibliograf; KLYASHTORNYY, S.G., bibliograf; SOLOV'YEV, S.P., doktor geologo-mineralog. nauk, red.; KULIKOV, M.V., kand.biolog.nauk, red.; IVANOVA, A.G., tekhn. red.

[Geological literature in the U.S.S.R.; bibliographical year-book for 1955] Geologicheskaia literatura SSSR; bibliograficheskii ezhegodnik za 1955 g. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geologii i okhrane nedr, 1959. 333 p. (MIRA 12:11)

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(Bibliography--Geology)

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"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3

BEREGOVSKIY, V.Ye.; VASILENKO, M.I.; VELLER, R.L.; VERBLOVSKIY, A.M.; VERNER, B.F.; VOYDALOVSKAYA, Ye.N.; VOL'SKIY, A.N.; GLAZKOVSKIY, A.A.; GRANOVSKIY, B.L.; GREYVER, N.S.; GUDIMA, N.V.; DOLGOPOLOVA, V.I.; KARCHEVSKIY, V.A.; KOVACHEVA, Ye.B.; KUDRYAVTSEV, P.S.; LEBEDEV, A.K.; LISOVSKIY, D.I.; LIKHNITSKAYA, Z.P.; MATVEYEV, N.I.; MEL'NITSKIY, A.N.; MIRONOV, A.A.; MIKHEYEVA, A.A.; MURACH, N.N.; OKUN', A.B.; OL'KHOV, N.P.; OSIPOVA, T.B.; PAVLOV, V.P.; ROTINYAN, A.L.; SAZHIN, N.P.; SEVRYUKOV, N.N.; SIDOROV, P.M.; SOBOL', S.I.; KHEYFETS, V.L.; TSEYNER, V.M.; SHAKHNAZAROV, A.K.; SHEYN, Ya.P.; SHEREMET'YEV, S.D.; SHERMAN, B.P.; SHISHKIN, N.N.; SHLOPOV, A.P.

Georgii Ivanovich Blinov. TSvet.met. 28 no.6:62 N-D '55.
(MIRA 10:11)

(Blinov, Georgii Ivanovich, 1911-1955)

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"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3

SOV/137-58-7-14515

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 7, p 83 (USSR)

AUTHOR: Glazkovskiy, A.A.

TITLE: The Current State and Outlook of Ore Supply in the Nickel and Cobalt Industry (Sostoyaniye i perspektivy rudnoy bazy nikelevoy i kobal'tovoy promyshlennosti)

PERIODICAL: Materialy Soveshchaniya po vopr. intensifik. i usoversh. dobychi i tekhnol. pererabotki medno-nikelevykh i nikelevykh rud. 1956 g. Moscow, Profizdat, 1957, pp 18-28

ABSTRACT: The USSR has the world's greatest total prospected Ni resources. Sulfide Cu-Ni ores represent 81% of the total reserves; silicates constitute the remaining 18.9%. The pure Co ores are negligible; 90% of the Co is obtained as a by-product of Ni recovery. Among the large sulfide ore occurrences, those of Noril'sk, Pechenga, and Monchegorsk are described. New major occurrences with high Cu, Ni, and platinoid contents have been discovered in recent years in the vicinity of Pechenga and Monchegorsk. Major new discoveries of oxidized Ni and Co ores have been made in the Southern Urals and the vicinity of Ufaley. An Ni deposit has been found in

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The Current State and Outlook of Ore Supply (cont.)

Kirovograd Oblast' in the Ukraine, and another near Nikopol'.

L.P.

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"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000500010020-3

GLAZKOVSKIY, A.A.; KRUTOV, G.A., nauchnyy red.; ZVEREV, L.V., nauchnyy red.; MATIS, T.I., red. izd-va; BYKOVA, V.V., tekhn. red.

[Industry's requirements as to the quality of mineral raw materials] Trebovaniia promyshlennosti k kachestvu mineral'nogo syr'ia; spravochnik dlia geologov. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po geol. i okhrane nedr. No.55.[Cobalt] Kobal't. Nauch. red. G.A.Krutov i L.V.Zverev. Izd.2., perer. 1961. 49 p. (MIRA 15:2)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya.

(Cobalt)

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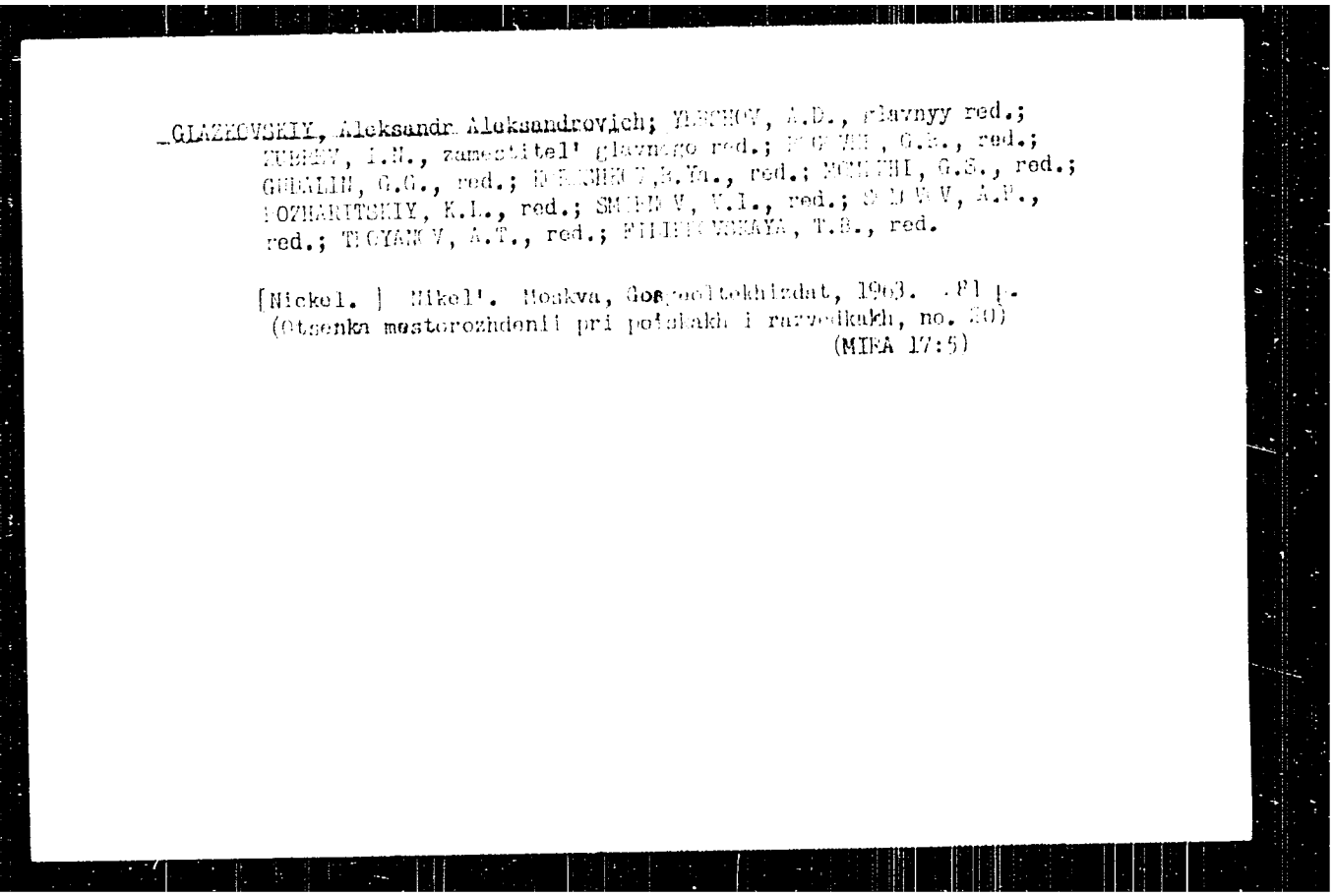

_GLAZKOVSKIY, Aleksandr Aleksandrovich; YLESHOV, A.B., glavnyy red.; TUBBEV, I.N., zamestitel' glavnogo red.; [illegible], G.S., red.; GUSALIN, G.G., red.; [illegible], A.Ya., red.; MOSKVICHI, G.S., red.; KOZHARITSKIY, K.L., red.; SMIRNOV, V.I., red.; SOLOV'EV, A.P., red.; TOCYANOV, A.T., red.; [illegible], T.B., red.

[Nickel.] Nikel'. Moskva, Gos.geol.tekhizdat, 1963. 181 p. (Otsenka mestorozhdenii pri poiskakh i razvedkakh, no. 30) (MIRA 17:5)

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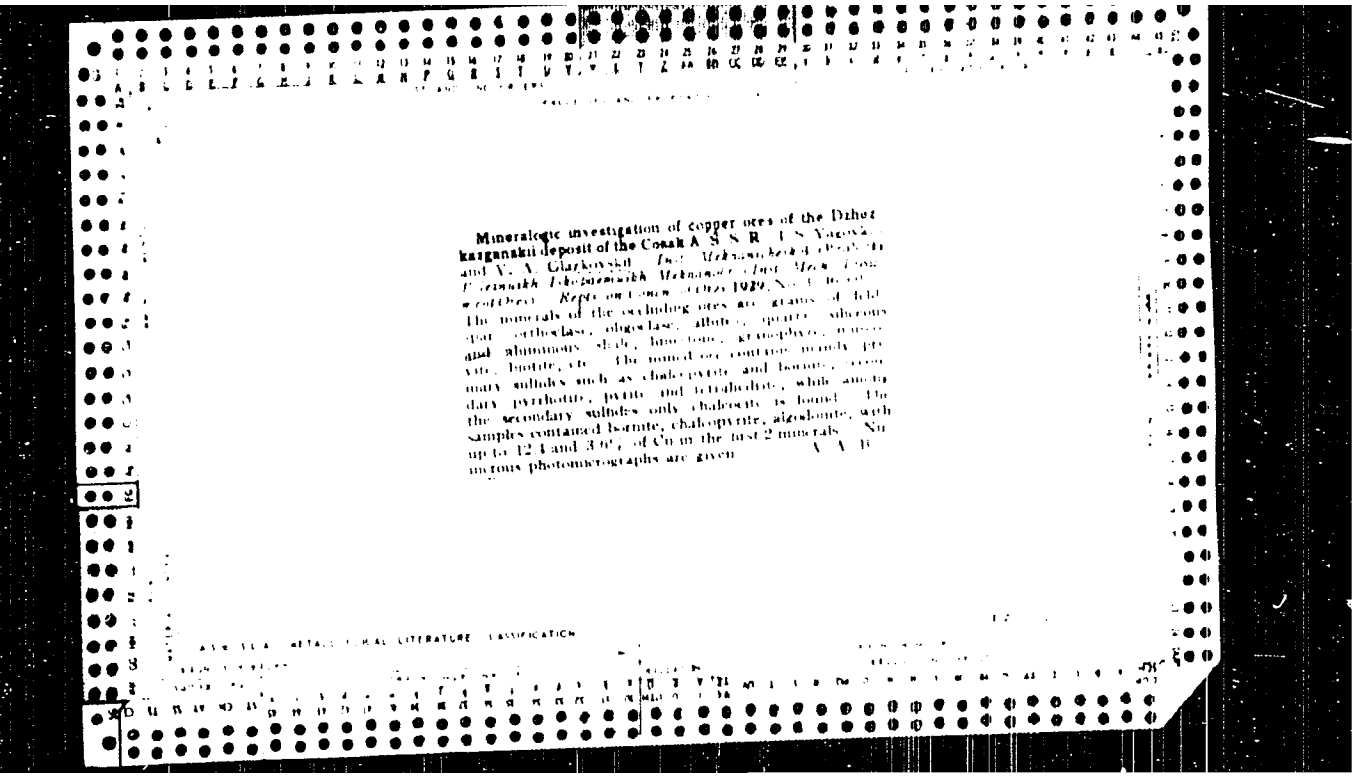

Mineralogic investigation of copper ores of the Dzhezkazganskii deposit of the Cosak A S S R I S Yagovkina and V. A. Glazkovskii *Trud. Mekhanobrad Obrabotki Tsvetnykh Iskopaemykh Mekhanobr Inst Mech Treatment Nonferrous Minerals* 1939, No 1 in Russian with English abstract) Report on ores from the Dzhezkazgan deposit The mineralogy of the enclosing ores and granites of feld spar orthoclase, oligoclase, albite, quartz, siliceous and aluminous shale, limestone, kaolinized granite, mica, biotite, etc The mineral ore contains mainly primary sulfides such as chalcopyrite and bornite, secondary pyrrhotite, pyrite and tetrahedrite, while among the secondary sulfides only chalcocite is found The samples contained bornite, chalcopyrite, algodonite, with up to 12 4 and 3 0% of Cu in the first 2 minerals Numerous photomicrographs are given V V B

USSR METALLURGICAL LITERATURE CLASSIFICATION

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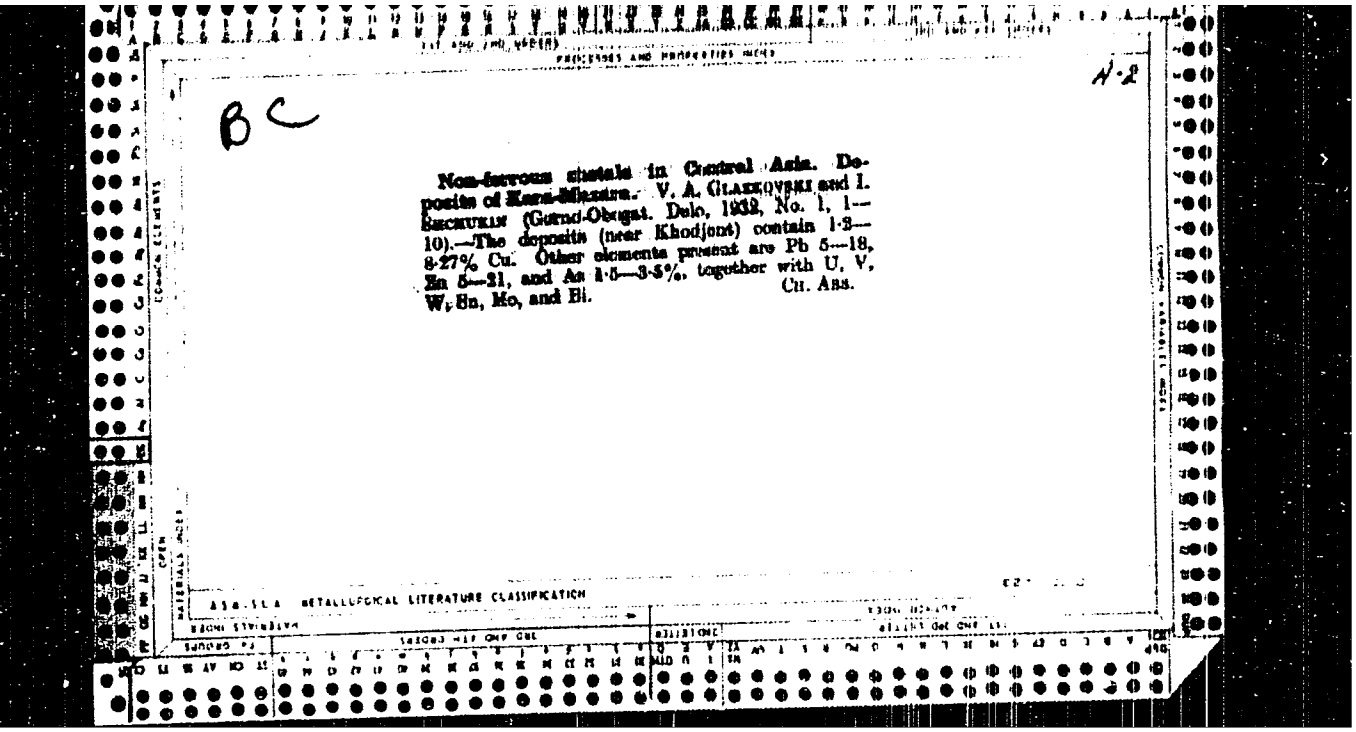

B C

N-2

Non-ferrous metals in Central Asia. Deposits of Kara-Shaitan. V. A. GLAZKOVSKI and I. SACHUKLIN (Gornol-Obogat. Delo, 1932, No. 1, 1—10).—The deposits (near Khodjent) contain 1·3—8·27% Cu. Other elements present are Pb 5—18, Zn 5—21, and As 1·5—3·5%, together with U, V, W, Sn, Mo, and Bi. Cu. Abs.

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