KRASOVITSKAYA, B.M.; OSTROVSKAYA, B.I.; SMELYAKOVA, V.B.

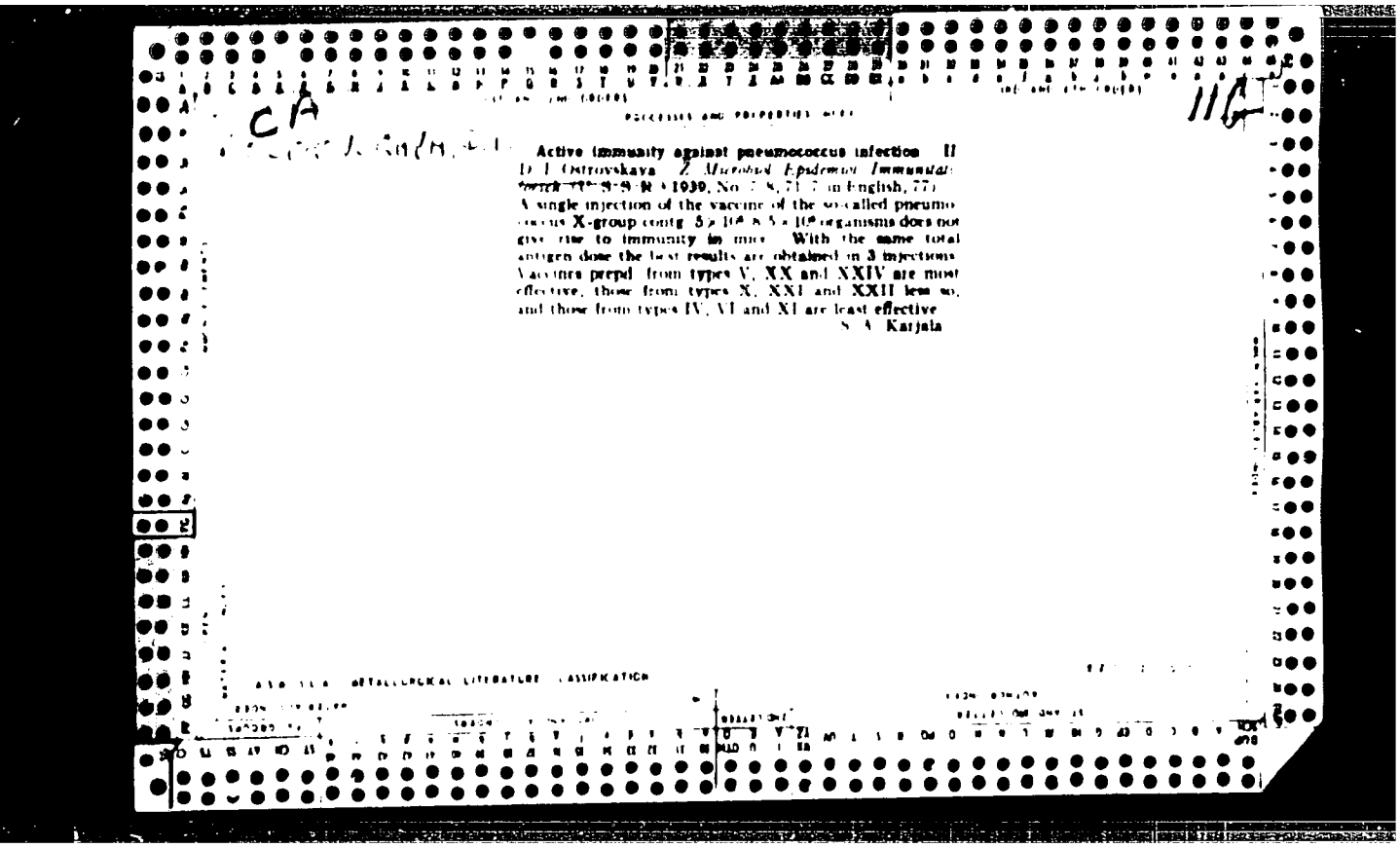
Effect of space factors on properties of dyes containing a biphenyl nucleus. Part 8: Bisazodyes from meta- and para-aminobenzoyl derivatives of benzidine and 2,2 -dimethylbenzidine. Ukr.khim.zhur. 23 no.4:496-500 '57. (MIRA 10:10)

1.Khar'kovskiy gosudarstvennyy universitet im. A.M. Gor'kogo.
(Stereochemistry) (Azo dyes) (Benzidine)

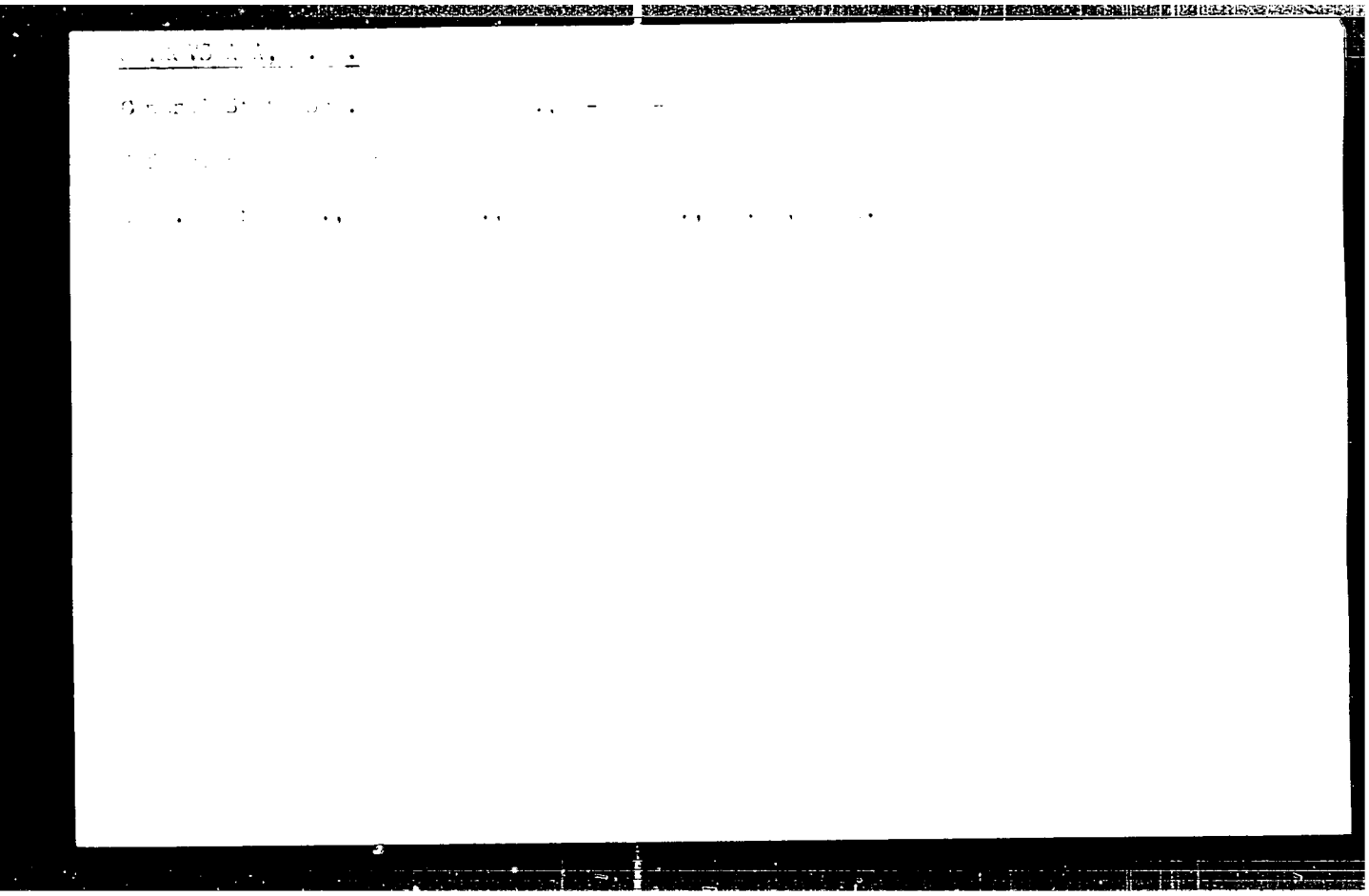
OSTROVSKAYA, D.I.

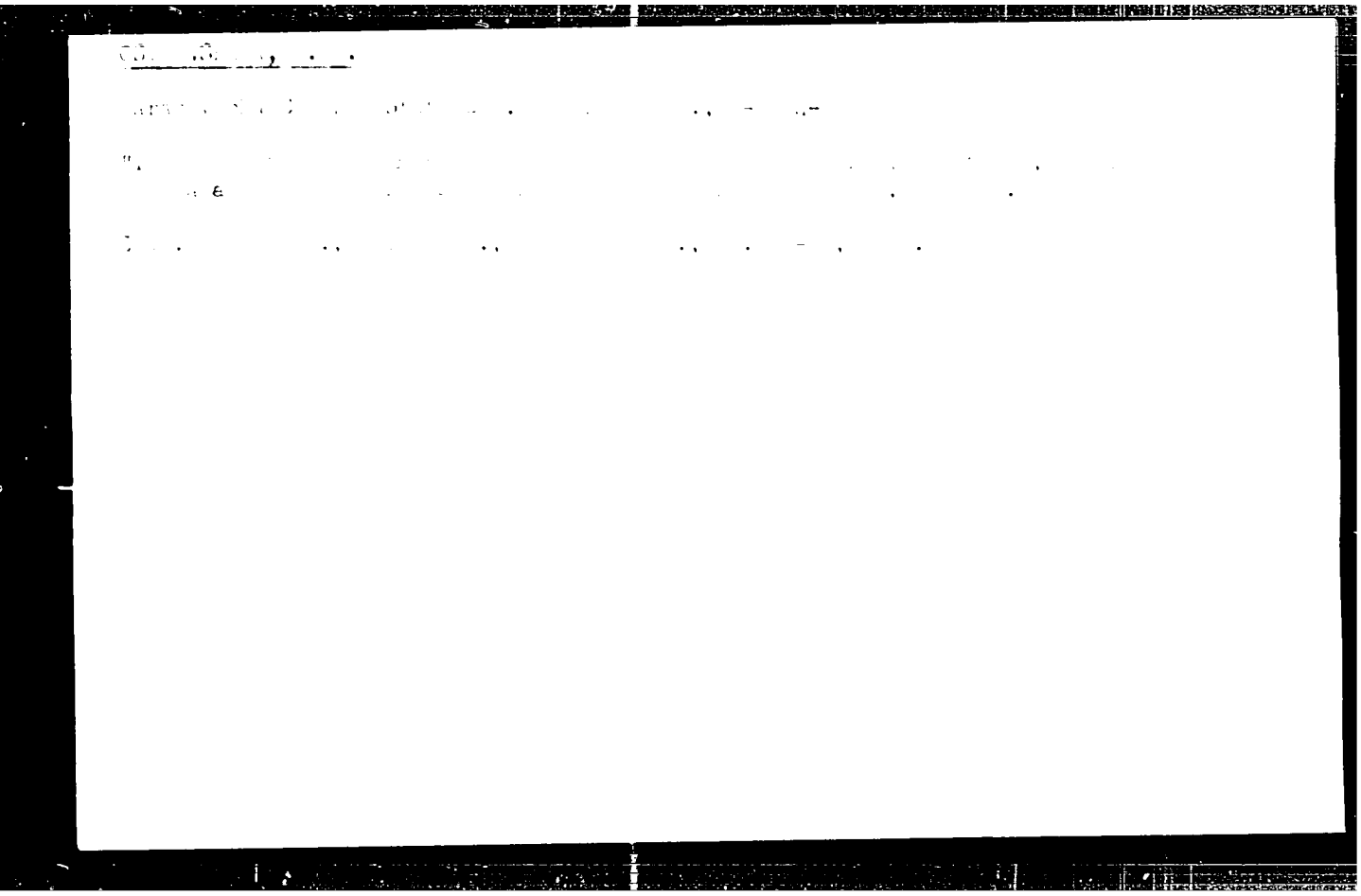
The bacteriology of pneumonia in children III Biological characteristics of pneumococci of group X with respect to their type, and observations on their variability L. K. Viktorov, D. I. Ostrovskaya and L. A. Levchenko *Z. Mikrobiol. Epidemiol. Immunitätsforsch. U. S. S. R.* 17, No. 42 in German 541 2 1936. A study of the virulence of 152 strains and of the biological characteristics of 115 strains. S. A. Karjala

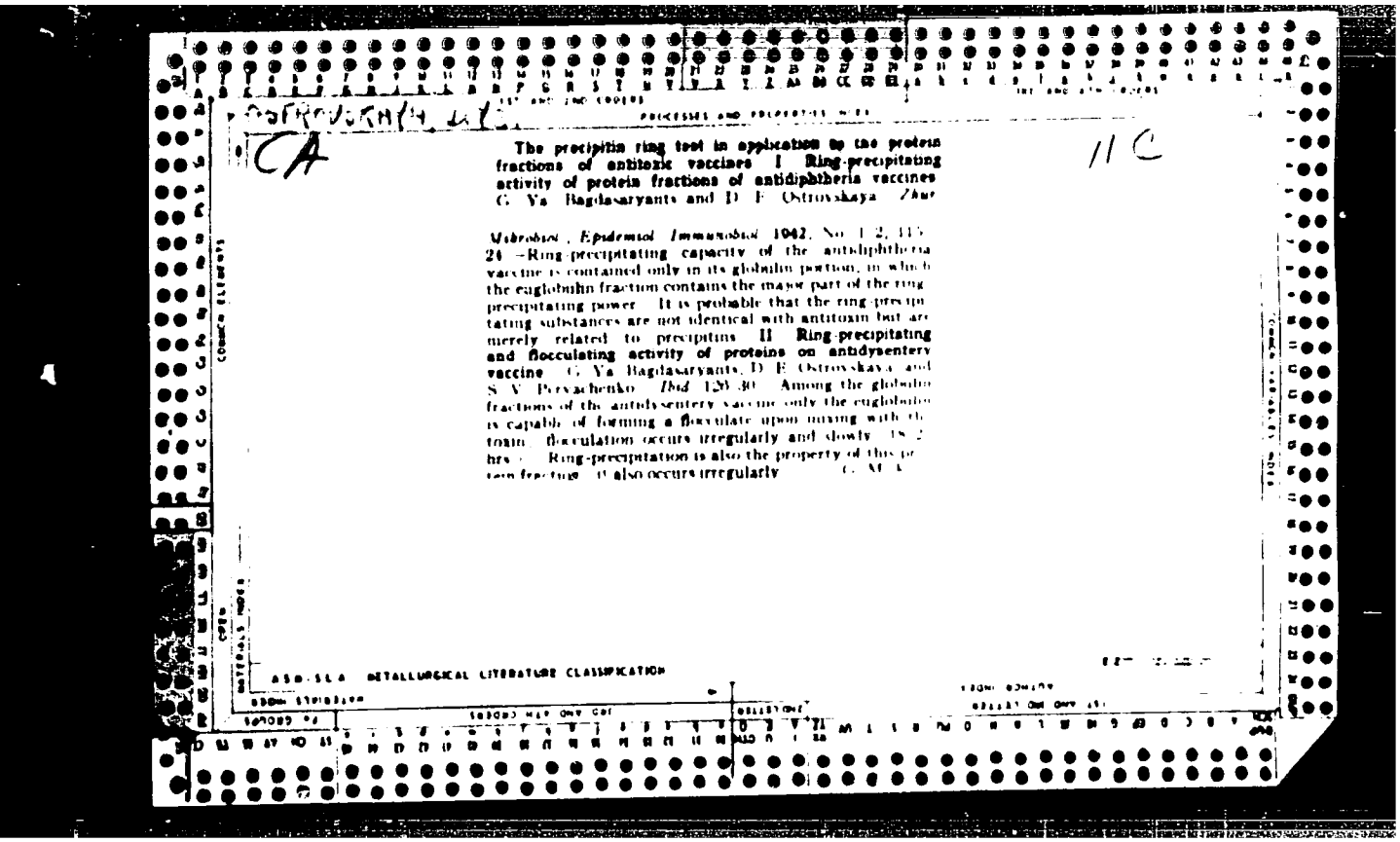
METALLURGICAL LITERATURE CLASSIFICATION



Active immunity against pneumococcus infection II
D. I. Ostrovskaya *Z. Mikrobiol. Epidemiol. Immunobiol.* [illegible] 1939, No. [illegible] in English, 77)
A single injection of the vaccine of the so-called pneumococcus X-group contg 5×10^8 to 5×10^9 organisms does not give rise to immunity in mice. With the same total antigen dose the best results are obtained in 3 injections. Vaccines prepd. from types V, XX and XXIV are most effective, those from types X, XXI and XXII less so, and those from types IV, VI and XI are least effective.
S. A. Karjala







CA

11 C

The precipitin ring test in application to the protein fractions of antitoxic vaccines I Ring-precipitating activity of protein fractions of antidiphtheria vaccines
G. Ya Bagdasaryants and D. F. Ostrovskaya *Zhur*

Mikrobiol., Epidemiol. Immunobiol. 1942, No. 1-2, 115-20.—Ring-precipitating capacity of the antidiphtheria vaccine is contained only in its globulin portion, in which the euglobulin fraction contains the major part of the ring precipitating power. It is probable that the ring-precipitating substances are not identical with antitoxin but are merely related to precipitins. **II Ring-precipitating and flocculating activity of proteins on antidysentery vaccine** G. Ya Bagdasaryants, D. F. Ostrovskaya and S. V. Pevzchenko. *Ibid.* 120-30. Among the globulin fractions of the antidysentery vaccine only the euglobulin is capable of forming a flocculate upon mixing with the toxin; flocculation occurs irregularly and slowly (8-24 hrs.). Ring-precipitation is also the property of this protein fraction; it also occurs irregularly. C. M. K.

VASILENKO, V.D.; OSTROVSKAYA, E.B.; FOMENKO [illegible].S.

Amperometric titration of thorium salts with cupferron. Zhur. anal. khim. 16 no. 4:433-437 Jl-Ag '61. (MIRA 14:7)

1. Dnepropetrovsk State University.
(Thorium--Analysis) (Cupferron)

MONAKHOV, N.I., inzh., glavnyy red.; TURIANSKIY, M.A., inzh., zamestitel' glavnogo red.; OSTROVSKAYA, E.A., inzh., red.sbornika; KHAVIN, B.N., red.izd-va; SOLNTSEVA, L.M., tekhn.red.

[Collection no.19 of consolidated cost indexes of structures of various branches of the national economy to be used in revaluating capital assets] Sbornik no.19 ukrupnennykh pokazatelei stoimosti sooruzhenii, imeiushchikhsia vo mnogikh otrasliakh narodnogo khoziaistva, dlia pereotsenki osnovnykh fondov. Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit. materialam, 1959. 46 p. (MIRA 13:1)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po delam stroitel'stva.
(Transportation--Buildings and structures) (Pipelines)

KAGAN, Ya.I.; OSTROVSKAYA, E.L.; ZAIONCHKOVSKAYA, T.A.; [illegible], L.I.

Errors in the thermal control of soldering. Izm. tekh. no.11: 18-21 N '65. (MIRA 18:12)

OSTROVSKAYA, E. Ye.

"Consolidated Railroad Transport in Industrial Centers." Sub 3 Apr 51, Moscow Order of the Labor Red Banner Construction Engineering Inst imeni V. V. Kuybyshev

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 460, 9 May 55

24(7)
AUTHORS: Zaydel', A. N., Ostrovskaya, G. V. SOV/51-7-1-7/21

TITLE: Spectroscopic Determination of a Small Deuterium Content in Hydrogen

PERIODICAL: Vestnik Leningradskogo Universiteta. Seriya fiziki i khimii, 1959, Nr 1, pp 39-43 (USSR)

ABSTRACT: S. E. Frish and V. I. Chernyayeva had developed a method of determining quantitatively D_2 in H_2 already in 1931 (Ref 1).

In further papers (Refs 2, 3, 4) by Frish and his collaborators they used a high-frequency discharge tube without electrodes for the elimination of the disturbing influence of the metal of the electrodes. The authors of the present paper analysed in the same way as mentioned in reference 5 the isotopic mixtures $H_2 : D_2$ and found at a ratio of no less than 10 : 90 of the two isotopic portions an equal ratio of the intensities of the corresponding terms of Balmer's series. The afore-mentioned method is used in the present paper for determining the deuterium content as it is found in natural water sources. Determinations are rendered difficult by the low intensity of the D-lines and by the overlapping of the D-lines by the H-lines. For this

Card 1/3

Spectroscopic Determination of a Small Deuterium Content in Hydrogen

SOV/51-5-1-7/21

purpose the interference polarization filter was used for the H_β -line through which only [illegible] of the intensity of this line penetrated. The intensity of the D_β -line was, hereby, measured in its relation to the weakened H_β -line. Figure 1 shows data of the recording of the isotope structure for various D_2 contents depending upon the pressure. Herefrom it was concluded that in the transition to lower pressures the separate observation of the D_β -lines is possible, however, only to pressures of 1-2 torr since the line intensity strongly decreases at still lower pressures. At a content of 10 - 1 % D_2 no standard is necessary for working at a pressure of 15 torr. At a pressure of 6 torr the separation of the H_β - and D_β -lines can be observed until a pressure of ~1 torr by taking the separation coefficient into account. In a further reduction of the D_2 -content to 0.1 % the error of analysis strongly increases; in still stronger dilutions standards must be used. By increasing the width of the slit an additional

Card 2/3

intensification of the D_β -line could be achieved. (Fig 4).

For setting up the calibration curve the **ratio** of the line intensity $I_D : I_H$, (H' = standard) was represented as depending on the concentration ratio $C_D : C_H$. There are 2 figures, 5 tables, and 3 references, 6 of which are Soviet.

SUBMITTED: April 15, 1957

Card 3/3

S/051/60/009/002/001/008
E201/E691

AUTHORS: Zaydel', A.N. and Ostrovskaya, G.V.

TITLE: A Spectroscopic Determination of the Isotopic Composition of Carbon

PERIODICAL: Optika i spektroskopiya, 1960, Vol 9, No , pp

TEXT: The isotopic composition of carbon was determined using a spectroscopic apparatus employed earlier for the isotopic analysis of hydrogen (Refs 3 and 4). The carbon spectra were excited in an electrodeless high-frequency discharge and recorded with a diffraction monochromator and a photomultiplier. The isotopic composition was deduced from the ratio of the intensities of $C^{13}O$ and $C^{12}O$ bands at 4131.8 and 4123.6 Å respectively. Typical recordings of the CO bands at C^{13} concentrations of 58 and 22% are shown in Figs. 1a and 1b respectively. Figs. 2 and 3 illustrate corrections of the intensity readings. The dependence of the I_{13}/I_{12} intensity ratio on the gas pressure in the discharge tube is shown in Fig. 4. The band intensity--isotopic composition calibration graph is given in Fig. 5. The range of C^{13} concentrations was varied from 1.1 to 58%. At low C^{13} concentrations (1.1%)

Card 1/2

S/051/60/009/001/001/00[illegible]
E201/E691

A Spectroscopic Determination of the Isotopic Composition of Carbon

the scatter of the results corresponded to a coefficient of variation equal to 5-7%. At C^{13} contents amounting to 5-50% the coefficient of variation was 2-3%. One isotopic analysis required 0.1 0.2 cm^3 of gas and it took 10-15 min. Acknowledgment is made to I.D. Gvartsiteli for supplying methane enriched with C^{13}. There are 5 figures, 1 table and 5 references: 3 Soviet and 2 English

SUBMITTED: November 18, 1959

Card 2/2

OSTROVSKAYA, G. V., Cand Phys-Math Sci -- "Spectral analysis of the isotope composition of hydrogen, carbon, nitrogen, and copper." /L/, 1961. (State Order of Len n Opt Inst im S. I. Vavilov) (KL, 8-61, 227)

ZAYDEL', A.N.; OSTROVSKAYA, G.V.; PETROV, A.A.

Spectroscopic method for determining the isotopic composition of nitrogen. Opt.i spektr. 10 no.5:673-676 My '61. (MIRA 14:8)
(Spectrum analysis) (Nitrogen--Isotopes)

24.3500 (1137, 1138, 1144)

AUTHORS: Zaydel', A N., Lazeyeva, G S., Ostrovskaya, [illegible] Yakimova, P P

TITLE: Luminescence of gadolinium salts

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya, v. 26, no. [illegible], 1962, 74-80

TEXT: The luminescence spectrum of the Gd^{3+} ion has been [illegible] investigated on $GdCl_3 \cdot 6H_2O$ and on a [illegible]-1% aqueous solution of $GdCl_3$; $Gd_2(SO_4)_3 \cdot 8H_2O$; $Gd_2(SO_4)_3$; $Gd_2(SO_4)_3$; and $Gd(C_2H_5SO_4)_3$. The [illegible] obtained from a synchronous spark phosphoroscope were recorded [illegible] high-power ISP-51 (Ye-51) quartz spectrograph at room and liquid-nitrogen temperatures. Irradiation with the light of the iron spark sharply reduces the intensity of luminescence of the $GdCl_3$ solution [illegible] tion ~0.1-1%) in neutral and weakly acid solutions, while [illegible] decreased in acid solutions with HCl excess. The decrease differs [illegible]

Card 1/4

S/[illegible]/62/[illegible]/[illegible]/[illegible]
B125/B104

Luminescence of [illegible] salts

different solutions. The lumines[illegible] of solid [illegible] boiling, addition of HCl or H_2C_2, or by precipitat[illegible]

Solutions of normal luminescence are obtained from the pre[illegible] hydroxide after an appropriate treatment and dissolution in HCl. It was not possible to clarify the mechanism underlying the quenching of luminescence of the solutions. The two principal lumines[illegible] (3110 and 3060 Å) of the gadolinium salts are very [illegible] temperature, and are split up into several components. The spe[illegible] of $GdCl_3 \cdot 6H_2O$ and $Gd_2(SO_4)_3 \cdot 8H_2O$ crystals exposed for a [illegible] exhibit a narrow [illegible] of 3002 and 3005 Å and a few weak diffuse [illegible] Apart from the principal bands which are more blurred, the [illegible] solutions of gadolinium chlorides and sulfates are [illegible] crystals. Although the spectra of the individual salts [illegible] bands, they differ in many respects. The significance of the [illegible] parts of the spectrum is known. At liquid air temperature, the [illegible] of some diffuse bands becomes more distinct. According [illegible] Kondrat'yeva and G. S. Lazeyeva, Optika i spektroskopiya [illegible]

Card 2/[illegible]

33431
S/048/62/026/ [illegible]
B125/B104

Luminescence of gadolinium salts

the photoluminescence of gadolinium salts has a lifetime τ [illegible] is damped exponentially. The exact lifetime for the [illegible] Å [illegible] $2 \cdot 10^{-3}$ sec, and that for the 3060 Å line has previously been [illegible] 10^{-3} to 10^{-4} sec. The latest measurements of the authors [illegible] synchronous spark phosphoroscope have shown that for the two [illegible] mentioned before, the lifetimes are consistent with an error [illegible] The band intensity ratio for [illegible] and 3060 Å is nearly equal [illegible] room temperature. The damping times of the bands at [illegible] and 3145 Å do not considerably diverge from that of the [illegible] electron transition, which indicates that the bands are [illegible] superposition of vibration frequencies over the frequency of the principal electron transition. There are 7 figures and [illegible] references: 6 Soviet and 6 non-Soviet. The reference to English-language publications reads as follows: Dieke G. H., Hall L. A. [illegible] Phys., 27, 465 (1957).

Card 3/4

38431
S/[illegible]
B[illegible]

Luminescence of gadolinium salts

ASSOCIATION: Fizicheskiy institut Leningradskogo [illegible] A. A. Zhdanova (Physics Institute of Leningrad [illegible] University imeni A. A. Zhdanov); Fiziko-[illegible] institut im. A. F. Ioffe Akademii [illegible] SSSR (P[illegible] Institute imeni A. F. Ioffe [illegible] A[illegible] USSR)

Card [illegible]

S/051/63/014/001/026/031
E039/E120

AUTHORS: Ostrovskaya, G.V., and Ostrovskiy, Yu.I.

TITLE: Determination of the oscillator strengths of absorption bands of gadolinium ions

PERIODICAL: Optika i spektroskopiya, v.14, no.1, 1963, 101-103

TEXT: Oscillator strengths of the Gd^{+++} ion absorption bands are determined in an aqueous solution of $GdCl_3$ and in phosphate glass with Gd_2O_3 impurity. The oscillator strength is determined from the formula

$$f = \frac{1}{N} \frac{c\,m}{\pi e^2} \int k_\nu \, d\nu \qquad (1)$$

where: N - number of Gd^{+++} ions in one cm^3; k_ν - coefficient of absorption; c - velocity of light; m and e - mass and charge of the electron. A ДФС-8 (DFS-8) spectrograph was used with a ДКСШ-100 (DKSSh-100) lamp as a light source. The absorption band in the region 2720 - 2760 Å for the solution has a distinct structure and the bands at 2757 and 2729 Å consist of 4 and the band at 2739 Å of 2 components with half widths of ~2 Å.

Card 1/3

In the glass the bands are significantly broadened and structure is absent. The half width of the above bands in the glass is ~10 Å. In order to eliminate scattering effects a monochromator is used together with a liquid filter. The concentration of $GdCl_3$ was 0.55 to 0.5 mole/litre with a cell thickness 10 to 72 mm, and the concentration of Gd^{+++} in the glass was 0.4 to 1.3 mole/litre with sample thicknesses of 6 to 88 mm. Strong lines were measured to an accuracy of ~10% and weak lines to ~20%. For the majority of bands the ratio of the oscillator strengths f glass/f sol. varies from 0.64 to 1.8 except for the 2524, 2459 and 2438 Å bands, for which this ratio is about one order higher. The continuous absorption in the region 2400 to 3000 Å is also investigated and gives oscillator strengths in the solution ~4×10^{-4} which is about two orders higher than for the sharp bands. The oscillator strengths of the Gd^{+++} absorption bands in aqueous solution and in glass are given in the table.
There are 1 figure and 1 table.

SUBMITTED: June 29, 1962

L 20197-66 FBD/EWT(1)/EEC(k)-2/T/EWP(k)/EWA(h) IJP(c) WG
ACC NR: AP6007027 SOURCE CODE: UR/0051/66/020/002/0374/0375

AUTHOR: Malyshev, G. M.; Ostrovskaya, G. V.; Chelidze, T. Ya.

ORG: none

TITLE: Shadow projections of an air spark generated by focusing a laser beam

SOURCE: Optika i spektroskopiya, v. 20, no. 2, 1966, 374-375

TOPIC TAGS: shadowgraph photography, laser photography, laser R and D, spark camera

ABSTRACT: The authors use the method of shadow projections for photographing a spark produced by focusing a laser beam in air. The shadow projections were photographed in the light emitted by the laser which produced the spark. A delay line was used for taking photographs at various times. A diagram of the experimental setup is shown in Fig. 1. A beam of light 1 from a pulsed ruby laser (energy 0.5 joules, duration 50 nsec) was passed through plane-parallel plate 2 and focused by lens 3 (f = 25 mm). The part of the beam reflected from the front surface of plate 2 was used for producing the shadow photographs. Iris 4 with a diameter of 10 mm was us-

UDC: 621.375.9 : 535.004.14

Card 1/3

L 20197-66
ACC NR: AP6007027

ed for blocking out the light from the back surface of the plate. After reflection from mirrors *5*, *6*, and *7* the light passed through the spark and exposed photographic plate *8*, which was protected from daylight fogging by red filter *9*. Time delay of the light beam was adjusted by moving mirror *6*. The photographs show clearly defined bands surrounding the shadow from the spark plasma. Since the laser emission is nearly totally absorbed by the spark plasma, these bands may be considered a diffraction pattern and the distance between maxima may be used for determining the dimensions of the plasma. Tabulated measurements show that the plasma expands at a rate of about 10^6 cm/sec in the first 100 nsec. "The authors are sincerely grateful to V. V. Semenov and T. P. Yevtushenko who helped in setting up the giant pulse equipment, as well as to A. N. Zaydel' for assistance in the work and discussion of the results." Orig. art. has: 2 figures, 1 table. [14]

SUB CODE: 14, 20 SUBM DATE: 14Jul65/ ORIG REF: 002/ OTH REF: 001/ ATD PRESS: 4214

Card 3/3

L 32635-66 EPD/EWT(1)/EWP(e)/EWT(m)/EEC(k)-2/T/EWP(k) IJP(c) WH/WG

ACC NR: AP6018740 SOURCE CODE: UR/0057/66/036/006/1115/1117

AUTHOR: Yevtushenko, T.P.; Malyshev, G.M.; Ostrovskaya, G.V.; Semenov, V.V.

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

TITLE: Investigation of a spark in air with the aid of two synchronized lasers

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 6, 1966, 1115-1117

TOPIC TAGS: ruby laser, laser application, spark shock wave, shadowgraph photography

ABSTRACT: The spark produced in air by focusing the 0.5 J giant pulse from a ruby laser was investigated by casting its shadow with the synchronized giant pulse from a second similar laser. Synchronization of the giant pulses from the two lasers was accomplished by employing the same rotating prism to modulate the regeneration of both lasers. The two lasers were mounted approximately at right angles; one laser viewed the rotating prism directly and the other laser viewed it through a 90° reflecting prism which was mounted above the axis of the first laser. The delay between the two laser pulses was varied from about 30 nanosec to 3-4 microsec by adjusting the angle between the axes of the two lasers. The scatter of the delay times was 20 to 100 nanosec and is ascribed mainly to instability of the 25,000 rpm angular velocity of the rotating prism. It is suggested that this technique for synchroniz-

UDC: 537.523.4

Card 1/2

L 29364-66 EWT(1)/ETC(f) IJP(c) AT

ACC NR: AP6018053 SOURCE CODE: UR/0020/66/168/00[illegible]

AUTHOR: [illegible], G. M., Ostrovskaya, G. V., Razdobarin, G. T., [illegible]

ORG: [illegible] Institute im. A. F. Ioffe, Academy of Sciences [illegible] tekhnicheskiy institut Akademii nauk SSSR)

TITLE: Determination of temperature and electron concentration [illegible] by scattering of laser radiation

SOURCE: AN SSSR. Doklady, v. [illegible]

TOPIC TAGS: laser, electron density, plasma [illegible], [illegible]

ABSTRACT: [illegible] arrangement [illegible]

Fig. 1. Experimental arrangement

[illegible] wind ws; [illegible] monochromator; [illegible] graph.

UDC: [illegible]

Card 1/2

L 29364-66
ACC NR: [illegible]

[illegible] field was parallel [illegible] axis. The laser radiation [illegible] from the incident [illegible] radiation [illegible] discharge tube had a 50-mm [illegible] plasma a solid angle [illegible] discharge tube, [illegible] under investigation [illegible] of the discharge, the [illegible] The laser pulse [illegible] of the helium flow in the [illegible] was several [illegible] calibrate the system. The slit [illegible] Rayleigh scattering was [illegible] chromator was [illegible] The experimental results are shown in [illegible]

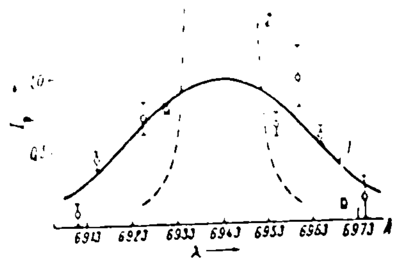


Fig. 2. The curve of the laser radiation scattered by electrons [illegible] the curve of parasitically scattered light [illegible]

The electron temperature determined from the halfwidth of the curve of Fig. 2 was T_e = 1.8 ev. The electron concentration was determined to be 2.5 x 10^{13} cm^{-3}.

Card 2/3

L 29364-66
ACC NR: AM6018093

Since the parameter a (The Physics of Fluids, no. 8, 1965, p. 208) was [illegible] to be much smaller than 1, the scattering of laser radiation by electrons was attributed to Thompson scattering. Orig. art. has: 2 figures.

SUB CODE: 20/ SUBM DATE: 13Jul65/ ORIG REF: 003/ OTH REF: 006/ ATD PRESS: 5:08

Card 3/3

ACC NR: AP6028628 SOURCE CODE: UR/0057/66/036/008/1506/15[illegible]

AUTHOR: Yevtushenko, T. P.; Zaydel', A. N.; Ostrovskaya, G. V.; Chelidze, T. Ya.

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

TITLE: [illegible]

SOURCE: Zhurnal tekhnicheskoy fiziki, [illegible]

TOPIC TAGS: [illegible], laser [illegible], hydrogen, air breakdown, laser beam, spectroscopy, laser radiation spectrum, spectrum analysis

ABSTRACT: [illegible] hydrogen-doped helium under [illegible] from [illegible] atm [illegible] mixtures was investigated [illegible] giant pulse [illegible]. The laser "spark" was [illegible] rotating prism. The laser [illegible] ruby laser which was Q-switched by means of a rotating prism. The [illegible] was focused by means of an [illegible] mm lens into a metal chamber equipped with quartz windows which could be filled with gases at pressures up to [illegible] atm. The spark [illegible] observed in the direction perpendicular to the laser beam. The magnified [illegible] spark image was focused onto the slit of an [illegible] spectrograph by means of a Jupiter-3 objective. Spectra obtained in this manner indicate the spatial [illegible] tion of the spark emission. The temporal distribution of the spark was [illegible] means of an SFR photorecorder. A spectral analysis of the laser-induced spark [illegible]

Card 1/3

ACC NR: AP6028078

$He-H_2$ mixture was made and photographs with the time resolution of various stages of the spark development were analyzed. The dependence of the H_β line halfwidth on the distance from the spark axis was shown. Tabulated data indicate the effect of pressure and the corresponding electron concentrations on linewidth broadening (see Table 1). The relative error of tabulated data was 20—30%. The preliminary results

Table 1. Linewidths in a laser spark spectrum in pure and hydrogen-doped helium at a pressure of 2 atm

Line, Å			Line, Å		
He I 6678	12	2	He I 4471	25	0.5
He I 5876	10	4	He II 4686	90	60
He I 5016	9	1.6	H_γ	10	1.8
He I 4713	5	0.5	H_β	60	1.2

indicate that the spark plasma goes through two stages. During the first stage (≈100 nanosec), the plasma has a high electron temperature and density ($\approx 10^{19}$ cm^{-3}), during which an intensive continuous spectrum is emitted and a considerable line broadening of the neutral and ionized atom occurs. The second stage, which lasts tens of μsec, corresponds to a gradual cooling of the plasma, during which only the neutral atoms radiate. The electron concentration in the initial development stage of a spark in He was found to be similar to that obtained for air breakdown elsewhere

Card 2/3

L [illegible]

ACC NR: AP60[illegible]

(S. A. Ramsden and W. [illegible] Davis, Phys. Rev. Lett., 13, 227, 1964 [illegible], and S. L. Mandel'shtam, [illegible] Pashinin, A. V. Prokhindeyev, A. M. Pr[illegible], and [illegible] Sukhodrev, ZhETF, 47, [illegible], 1964). A refined treatment of the present work will appear shortly. Orig. art. has [illegible] figures and 2 tables.

SUB CODE: 20/ SUBM DATE: [illegible]Mar[illegible]/ ORIG REF: 00[illegible]/ OTH REF: 003/ ATD PRESS: 5057

Card 3/3

L 45321-66
ACC NR:

AUTHOR: Ostrovskaya, ...

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

TITLE: Holographic investigation of a laser spark

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 4, no. 4, 1966, ...

TOPIC TAGS: holography, laser application, Schlieren photography, electron density

ABSTRACT: The authors have used holography to investigate the spark plasma produced by focusing radiation from a ruby laser operating in the giant pulse mode (Δt ≈ 40 nsec, E ≈ 0.6 J, lens focus .5 cm). The holograms were obtained by using the unabsorbed part of the laser beam that produced the spark, and photographed by a Schlieren technique. Apparatus with an optical delay line made it possible to obtain during one flash of the spark three holograms, corresponding to different phases of the process (40, 80, and 1.. sec after the instant of spark occurrence). The spark images were reconstructed in the parallel beam of an He-Ne laser (λ = 6328 Å) (Fig. 1). Formulas are derived for the focal distance and refractive index of the equivalent optical systems, and are used to calculate the electron density in the spark plasma. The measurements gave for Ne a value (...) x 10[19] cm[-3] for all the investigated phases of spark development, this being in agreement with the previously determined electron

Card 1/2

L 45821-66
ACC NR: AP6031580

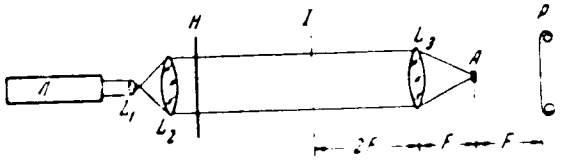


Fig. 1. Scheme for obtaining holographic Schlieren photographs. L - laser, L_1, L_2 - telescopic system to broaden the beam, H - hologram, I - plane of real image, L_3 - lens with focal distance F, A - point screen, P - photographic film.

concentration ((3-5) x 10^{19} cm^{-3}). The authors thank A. N. Zaydel' for valuable advice and a discussion of the results and T. Ya. Chelidze for participating in the experiments. Orig. art. has: 4 figures and 2 formulas.

SUB CODE: 20/ SUBM DATE: 30May66/ ORIG REF: 002/ OTH REF: 003/ ATD PRESS: 5083

Card 2/2

ACC NR: AP7001321 SOURCE CODE: UR/0057/66/036/012/2208/2210

AUTHOR: Zaydel', A. N.; Ostrovskaya, G. V.; Ostrovskiy, Yu. I.; Chelidze, T. Ya.

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

TITLE: Holography of a laser spark with a temporal resolution

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 12, 1966, 2208-2210

TOPIC TAGS: holography, laser photography, plasma photography, Schlieren photography

ABSTRACT: Shadowgraphs of laser-induced air breakdown were taken by means of the 3-beam setup shown in Fig. 1, using a method of spatial-temporal separation of light pulses employing a system of semitransparent mirrors patented by one of the authors in 1963. Shadowgraphs can be made of various stages in the development of a single discharge. The shadowgraphs can be considered Gabor holograms of a laser spark. Image reconstruction was carried out by means of the system shown in Fig. 2. This system is actually a Schlieren setup in which the image is formed by rays deflected by the phase inhomogeneities of the object. The electron concentration N_e in a plasma was determined experimentally for different stages in the development of a plasma during two discharges. The average N_e for the first 120 nanosec (accuracy 30—50%) was 2.4×10^{19} cm^{-3}, which agrees favorably with results obtained from 1) displacement of the interference bands (A. Alcock, E. Panarella, S. Ramsden, 7th Intern. Conf.

Card 1/3 UDC: 533.9.07

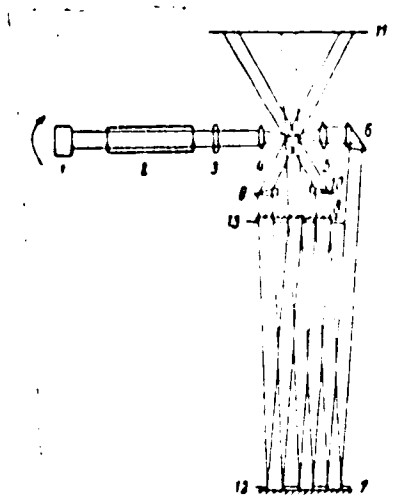


Fig. 1. Setup for obtaining shadowgraphs

1 - Rotating prism Q-switch; 2 - ruby crystal; 3 - glass plate; 4,5 - lenses; 6 - prism; 7 - mirror (99% reflective at 6943 A); 8 - mirror (50% reflective); 9, 10 - optical glass wedges; 11 - film; 12, 13 - diaphragms.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001238510011-9"

ACC NR: AP7001321

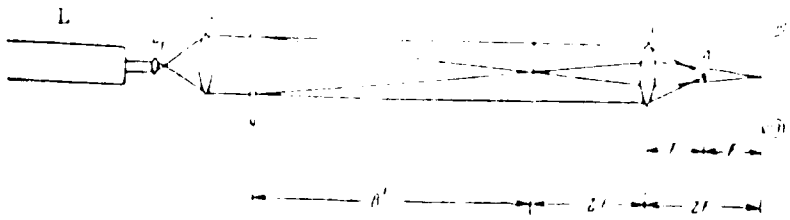


Fig. 2. Schematic for hologram reconstruction

H - hologram; L_1, L_2 - diverging lenses; L - He-Ne laser (6328 A); I - image (real); L_3 - converging lens; P - film.

on Phenomena in Ionized Cases, 1965) and 2) a scattered laser beam (S. Ramsden, W. Davies, Phys. Rev. Letts., 13, 227, 1964). Orig. art. has: 2 formulas and 4 figures.

[YK]

SUB CODE: 20/ SUBM DATE: 18May66/ ORIG REF: 003/ OTH REF: 006/ ATD PRESS: 5110

Card 3/3

ACCESSION NR: AT4025290 S/0000/63/000/000/0031/0035

AUTHORS: Zaydel', A. N.; Maly*shev, G. M.; Ostrovskaya, G. V.

TITLE: Use of laser for quantum diagnostics

SOURCE: Diagnostika plazmy* (Plasma diagnostics); sb. statey. Moscow, Gosatomizdat, 1963, 31-35

TOPIC TAGS: plasma, plasma diagnostics, plasma diagnostics with laser, laser, plasma electron density, plasma electron velocity distribution, plasma noise, ruby laser, light energy threshold, plasma free electron scattering

ABSTRACT: The range of electron densities and temperatures in which the scattering of light from a ruby laser by the plasma electrons can be used to determine the electron density and the electron velocity distribution function is evaluated. The expressions obtained under some simplifying assumptions are

Card 1/3

ACCESSION NR: AT4025290

$$n_e = 10^9 \frac{m^2 c^3 h d\alpha^2}{e^4 \lambda \Delta\lambda \eta L E_0} \quad \text{and} \quad n_{e\,max} = \frac{130}{16\sqrt{2\pi \ln 2}} \cdot \frac{W_0}{e^2 v l d} \cdot \frac{1}{k_0\left(\frac{h\nu}{2kT_e}\right)} \exp\left(\frac{h\nu}{2kT_e}\right).$$

for the minimum and maximum measurable electron density, respectively. It is assumed that the threshold of measured light energy is determined by the fluctuations in the number of photoelectrons produced upon scattering, and that the main sources of noise are the plasma intrinsic radiation and the light scattered by the various parts of the apparatus. While the latter cannot be evaluated in general form, an estimate made for a specially constructed small discharge tube shows that the proposed method can yield new data even with currently available equipment. Orig. art. has: 1 figure and 8 formulas.

ASSOCIATION: None

SUBMITTED: 19Oct63 DATE ACQ: 16Apr64 ENCL: 01

SUB CODE: PH NO REF SOV: 002 OTHER: 004

Card 2/3

OSTROVSKAYA, G.Ya.

Making glass with a lowered boric acid content. Stek. i ker. 18 no.7:41 Jl '61. (MIRA 14:7)
(Boric acid) (Glass manufacture)

24723

S/072/...

5/02/B2...

...2120

AUTHOR: Ostrovskaya, G. Ya.

TITLE: Melting of glass with reduced content of boric acid

PERIODICAL: Steklo i keramika, no. 7, 196., 4.

TEXT: The problem of producing glass with low boron content is dealt with here, boric acid being expensive and in short supply. Glass of the type 3C-5K (ZS-5K) consists of: 65.9-67 % SiO_2; 3-4% Al_2O_3; 19.3-20.8% B_2O_3; 3.7-4.1% Na_2O; and 5-5.8% K_2O. With this composition, it has the following physicochemical properties: linear expansion coefficient ... in the temperature range from 20 to ...°C 48·10^{-7} - 50·10^{-7}, softening temperature 565-585°C, thermal stability at least ...°C, specific gravity 2.2... g/cm^3, the temperature at which the electric volume resistivity of the glass amounts to ... megohms cm ... TK-... at least ...°C. A volatilization of borate and alkali takes place during the melting of

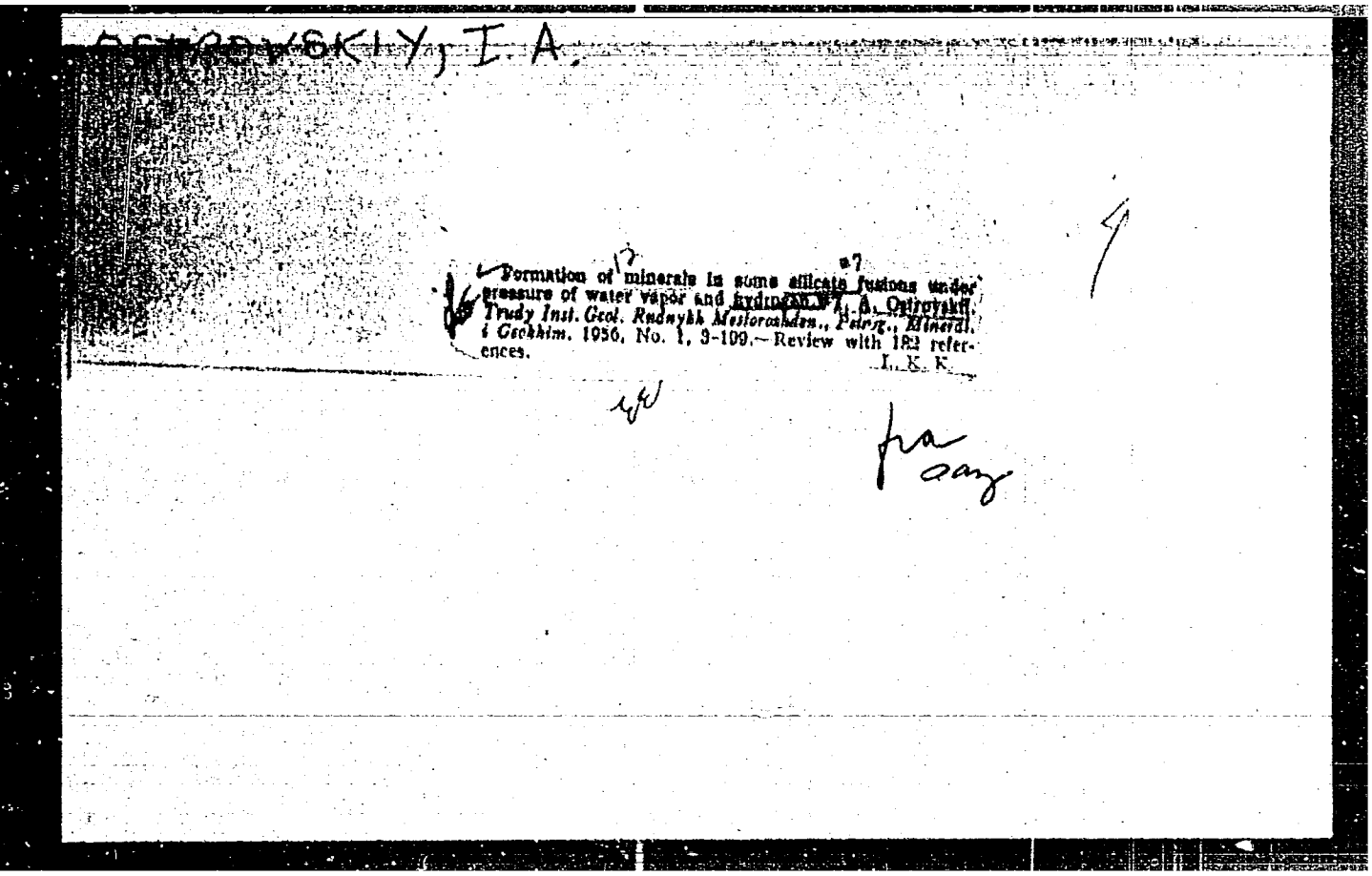
Card 1/3

S/072/61/000/007/002/002
B105/B206

Melting of glass with

glass. Even with considerable increase in the amount of boric acid in the charge (by 20-30%), its content in the molten glass never exceeds 19-19.5% Experiments under working conditions showed that as much alkali and borate remain in the glass as can be chemically bound during melting. The rest volatilizes, irrespective of the amount introduced in the charge. Charging of the furnace at a temperature exceeding 1430 ± 10°C and strong draft is inadmissible. Considering all factors, a special glass meeting all requirements was molten, the charge of which contained per 100 kg sand only 53.9 kg boric acid instead of 63.2 kg. Due to the use of charges with reduced content of boric acid for melting glass of the type 23 SK, the volatilization of the borates was reduced, which improved the quality of the glass and increased the service life of the checkers. The manufacturing cost of products from this glass was also reduced. This glass contained: 68.72% SiO_2; 3.09% Al_2O_3; 19.21% B_2O_3; 3.87% Na_2O; 4.47% K_2O and had the following physicochemical properties: α = 46.[illegible], softening temperature 585°C, thermal stability 240°C, specific gravity 2.3 g/cm³, TK-100 at 295°C.

Card 2/3



OSTROVSKIY, I. A.

Formation of minerals in some silicate fusions under pressure of water vapor and hydrogen. I. A. Ostrovskiy. *Trudy Inst. Geol. Rudnykh Mestorozhden., Petrog., Mineral. i Geokhim.* 1956, No. 1, 3-109.—Review with 182 references.

L. K. K.

USSR/Cosmochemistry Geochemistry Hydrogeochemistry. D

Abst Journal: Referat Zhur - Khimiya, No [illegible]

Author: Ostrovskiy I. A.

Institution: Academy of Sciences USSR

Title: Investigation of Mineral Formation in Certain Silicate Melts Under an Atmosphere of Water Vapor and Hydrogen

Original Periodical: Tr. Inst. geol. rud. mestorozhd., petrogr., mineralogii i geokhimii AN SSSR, 1956, Vyp. 1, str.

Abstract: None

Card 1/1

OSTROVSKAYA, V. A.

USSR,

Determination of aliphatic alcohols colorimetrically in the ultraviolet range of the spectrum. S. A. Shchukarev, S. N. Andreev, and I. A. Ostrovskaya (A. A. Zhdanov State Univ., Leningrad). Zhur. Anal. Khim. 9, 354-8(1954); cf. C.A. 47, 4733f.—The method utilizes ultraviolet absorption of alkyl nitrites. The latter are formed by the action of HNO_2 on alcs. according to: $ROH + HNO_2 = RNO_2 + H_2O$. The nature of R has an insignificant effect on the absorption. Alkyl nitrites have a wide absorption band in the range 400-320 mμ with 3 peaks at 380, 355, and 345 mμ. The detn. is carried out with a filter which screens out the 2 end peaks transmitting only in the range around 360 mμ. For the analysis take 20 ml. of H_2SO_4-washed petr. ether (35-100° fraction), 20 ml. of the soln. to be analyzed, and 1 ml. 5*N* HCl in a separatory funnel. To it add 2 ml. of 25% aq. $NaNO_2$ and shake the mixt. for 5 min. Transfer the petr. ether layer to another separatory funnel contg. 20 ml. of 10% $NaHCO_3$ or 0.1*N* NaOH. Shake the mixt. to remove N oxides, transfer the petr. ether layer to a cylindrical cell with quarts windows, and compare with a similar cell filled with pure petr. ether. Read the results on a calibration curve. Individual alcs. can be detd. with a relative error of 1-20%; the sum of alcs. can be detd. with a calibration curve prepd. with BuOH, with a relative error of 11-21%. MeOH excepted. M. Hosch

OSTROVSKAYA, I.A.

USSR

√Determination of aliphatic alcohols colorimetrically in the ultraviolet range of the spectrum. S. A. Shchukarev, S. N. Andreev, and I. A. Ostrovskaya. *Zh. Anal. Khim.* 9, 393-7(1954)(Engl. translation).—See *C.A.* 49, 4459h. H, L. H, 1 ②

ARKHANGEL'SKIY, Boris Aleksandrovich, zasluzhennyy deyatel' nauki;
SPERANSKIY, Georgiy Nesterovich, zasluzhennyy deyatel' nauki;
GRANAT, B.Ye., red.; OSTROVSKAYA, I.M., red.; ZUYEVA, N.K.,
tekhn.red.

[Mother and child; school for the young mother] Mat' i ditia;
shkola molodoi materi. Moskva, Gos.izd-vo med.lit-ry, 1959.
155 p. (MIRA 12:12)

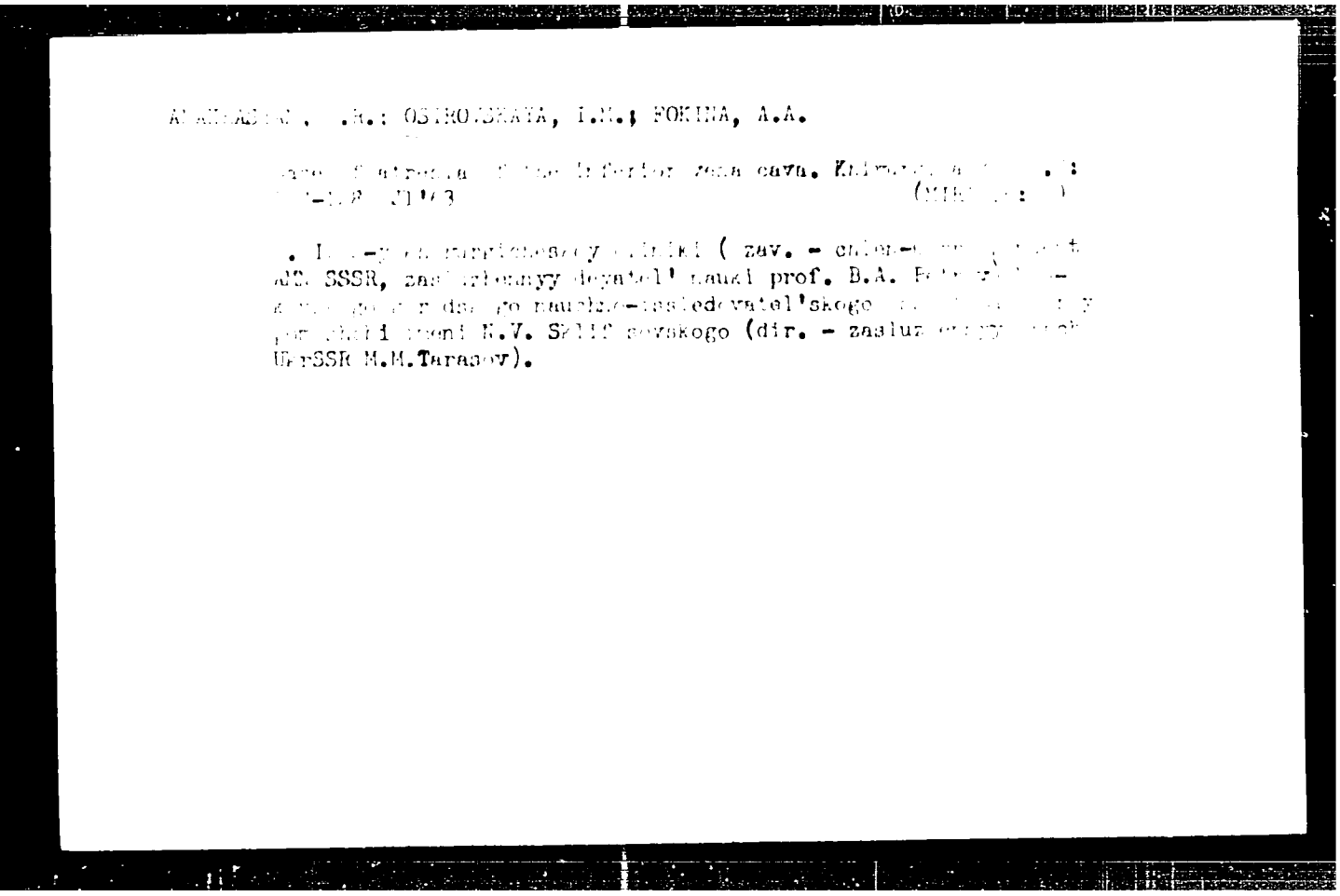
1. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR (for
Arkhangel'skiy, Speranskiy).
(PREGNANCY) (INFANTS--CARE AND HYGIENE)

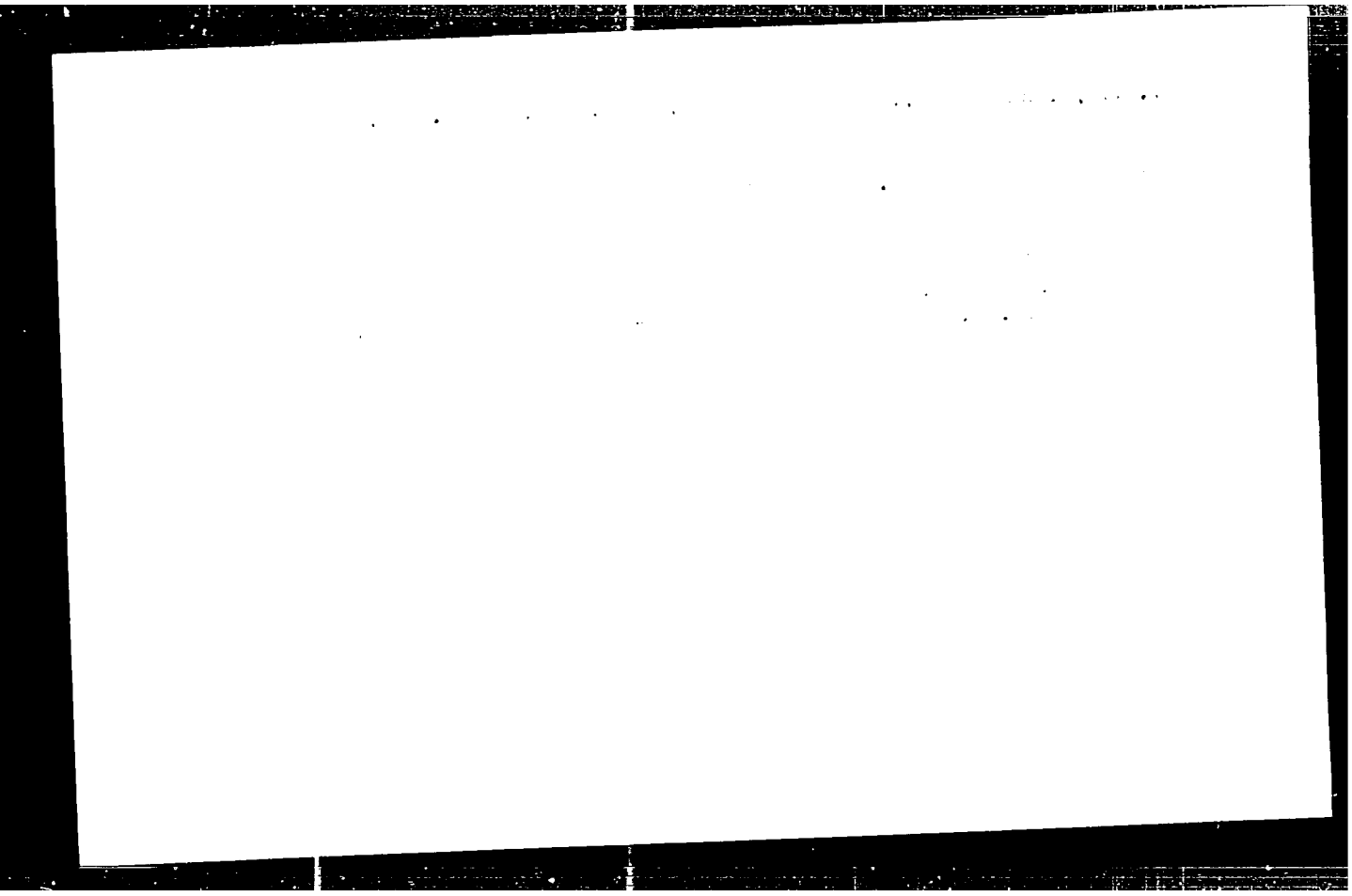
GAL'PERIN, Eduard Izrailevich; USTINSKAYA, Inna Mironovna; PISAREVSKIY, A.A., red.

[Contrast examination in surgery of the biliary tract] Kontrastnoe issledovanie v khirurgii zhelchnykh putei. Moskva, Meditsina, 1964. 163 p. (MIRA 17:12)

GAL'PERIN, Eduard Izrailovich; OSTROVSKAYA, Inna Mironovna; PISAREVSKIY, A.A., red.

[Contrast examination in surgery on the biliary tract] Kontrastnoe issledovanie v khirurgii zhelchnykh putei. Moskva, Meditsina, 1964. 163 p. (MIRA 17:4)





APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001238510011-9"

(STRUVSKA'A, Ida Markovna, kand. med.nauk; FRIDMAN, R.A., red.; BEL'CHIKOVA, Yu.S., tekhn. red.

[Anatomicophysiological characteristics of children, organization of the care and nutrition of children] Anatomo-fiziologicheskie osobennosti detskogo vozrasta, organizatsiia ukhoda za det'mi i ikh pitaniia. Izd. 3., ispr. i dop. Moskva, Medgiz, 1963. 231 p. (MIRA 16:7)
(CHILDREN--CARE AND HYGIENE)

OSTROVSKAYA, I.M., kandidat meditsinskikh nauk.

Cod liver oil. Zdorov'e 1 no.10:29 O '55 (MLRA 9:5)

(COD-LIVER OIL)

PETROV, P.N., kand.med.nauk; OSTROVSKAYA, I.M.

Subtotal resection of the stomach in cancer with substitution of segment of jejunum. Khirurgiia 36 no.8:54-56 Ag '60. (MKRA 13:11)

1. Iz Moskovskogo gorodskogo nauchno-issledovatel'skogo instituta skoroy pomoshchi imeni N.V. Sklifosovskogo (dir. - zasluzhennyy vrach USSR M.M. Tarasov, glavnyy khirurg - prof. B.A. Petrov).
(STOMACH—CANCER) (JEJUNUM—SURGERY)

SHIMANKO, I. I.; OSTROVSKAYA, I. M. (Moskva)

Emergency x-ray diagnosis of intracranial hematomas in closed cerebrocranial injuries. Klin. med. no.9:34-37 '61. (MIRA 15:6)

1. Iz III khirurgicheskoy kliniki (zav. - chlen-korrespondent AMN SSSR zasluzhennyy deyatel' nauki prof. D. A. Arapov) Moskovskogo nauchno-issledovatel'skogo instituta skoroy pomoshchi imeni N. V. Sklifosovskogo (dir. - zasluzhennyy vrach UkrSSR M. M. Tarasov, glavnyy khirurg - zasluzhennyy deyatel' nauki prof. B. A. Petrov)

(HEMATOMA) (BRAIN--RADIOGRAPHY)
(BRAIN--WOUNDS AND INJURIES)

OSTROVSKAYA, I.M.

Emergency carotid angiography in closed craniocerebral trauma.
Trudy Inst. im. N.V. Sklif. 8:110-112 '63.
(MIRA 18:6)

1. Institut skoroy pomoshchi imeni Sklifosovskogo, Moskva.

ALEKSEYEVA, T.T.; KRYUCHKOVA, A.P.; OSTROVSKAYA, I.M.

Characteristics of conditioned reflex activity in conjoined twins. Zhur.vys.nerv.deiat. 6 no.1:113-120 Ja-F' 56. (MLRA 9:7)

1. Institut normal'noy i patologicheskoy fiziologii i Institut pediatrii AMN SSSR.

(TWINS,
conjoined, conditioned reflex action in (Rus))
(REFLEX, CONDITIONED,
in conjoined twins (Rus))

OSTROVSKAYA, I.M., kandidat meditsinskikh nauk.

The child's nutrition. Zdorov'e 1 no.7:9-11 Jl '55 (MLRA 9:5)

(CHILDREN--NUTRITION)

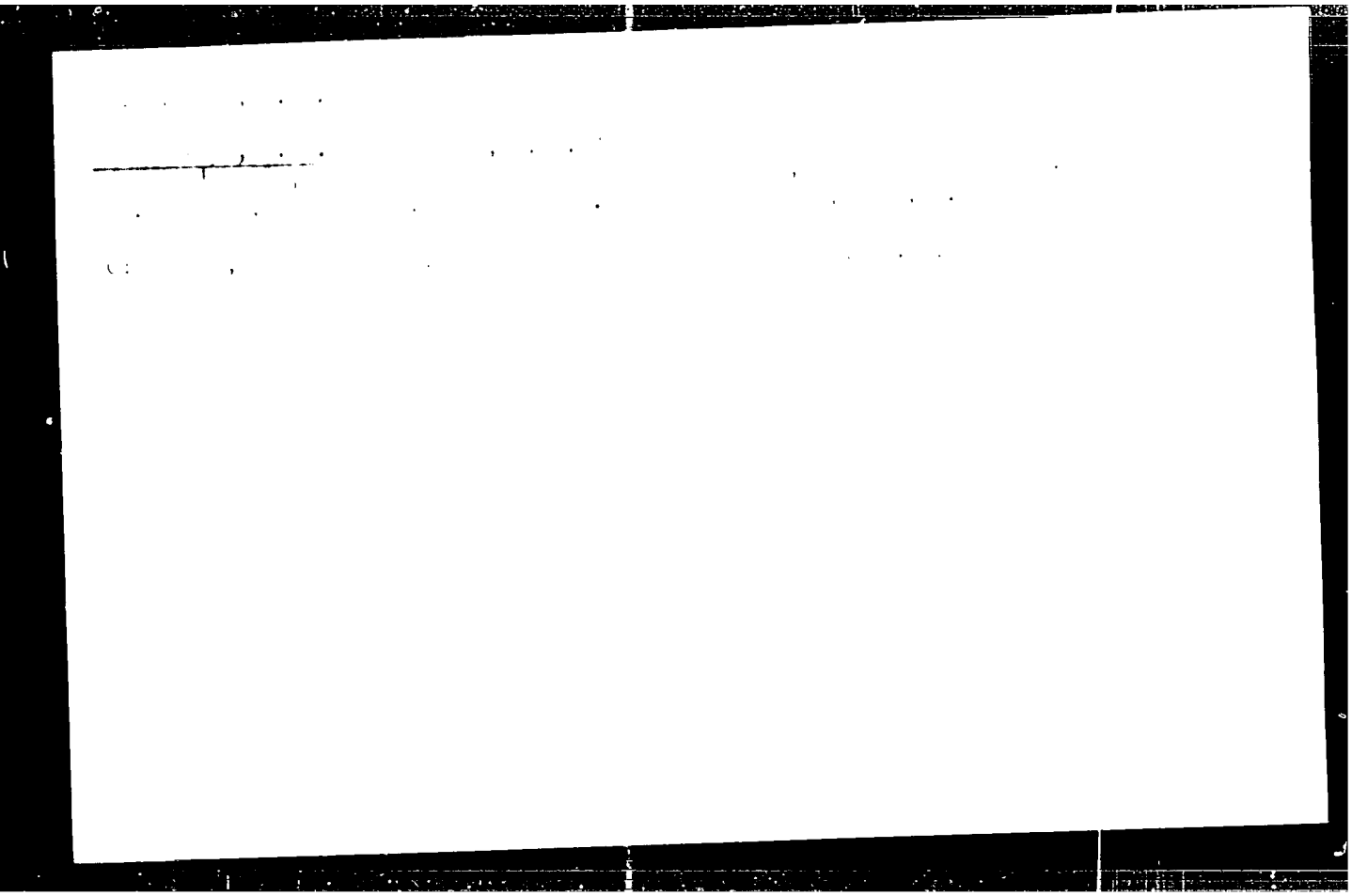
OSTR[illegible]VSKAYA, I. [illegible]

Cand. Medical Sci.

Mbr., Dept of Physiology, Inst. of Pediatrics, -c19 9-.

"Care and Diet for [illegible] at State Institutions" Sov. Med., No. [illegible], 1949.

"On the Increase of Efficiency in the Care of Newborn," [illegible] i A[illegible], No. 5, 1949.



APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001238510011-9"

OSTROVSKAYA, I.N., kandidat meditsinskikh nauk.

[Anatomic and physiological pecularities of childhood; child care and nutrition] Anatomo-fiziologicheskie osobennosti detskogo vozrasta. Izd.2., ispr.i dop. Moskva, Medgiz, 1953. 235 p. (MLRA 6:11)
(Children--Care and hygiene) (Pediatrics)

KRYUCHKOVA, A.P.; OSTROVSKAYA, I.M.

Age dependent and individual characteristics of the higher nervous activity in children during their first year of life [with summary in English]. Zhur.vys.nerv.deiat. 7 no.1:63-74 Ja-F '57.
(MIRA 10:10)

1. Laboratoriya ontogeneza nervnoy sistemy Instituta normal'noy patologicheskoy fiziologii i Klinika detey rannego vozrasta Instituta pediatrii AMN SSSR.
(REFLEX, CONDITIONED,
age factor & individual variations in inf. during determ. of higher nervous activity (Rus))

OSTROVSKHYH, L.M.

1012 The Time for Supplementing Breast Feeding.
(О сроках прикорма при грудном вскармливании)
L. M. Ostrovskaya. Педиатрия [*Pediatrija*] No. 1,
17-25, Jan.-Feb., 1950. 13 refs.

It was definitely proved that breast-fed children gained weight more regularly than those who were given mixed or artificial feeds. The highest morbidity was observed in children who were fed artificially during the first month of their lives, and the morbidity in this group of artificially-fed children remained high even during the second and third years of their lives. The incidence of gastro-intestinal diseases and pneumonia during the first year shows the same increase above normal. There were twice as many cases of pneumonia in children who were fed artificially as in those breast-fed, with a corresponding increase in mortality from pneumonia. In conclusion the author states that if the mother has enough breast milk there is no need to start artificial feeding before the baby is 5 months old. If feeding is supplemented before that time, there is a tendency to change over to artificial feeding very soon, with the result that morbidity and mortality rise. *H. W. Swann*

Abstracts of World Medicine
Vol 8 1950

OSTROVSKAYA, I.M.

Roentgenological aspects of advantages of resection of the stomach with its replacement by an intestinal transplant under radiological illumination. Khirurgiia no.10:84-87 '61. (MIRA 14:10)

1. Iz Moskovskogo gorodskogo nauchno-issledovatel'skogo instituta skoroy pomoshchi imeni N.V. Sklifosovskogo (dir. - zasluzhennyy vrach USSR M.M. Tarasov, zam. dir. po nauchnoy chasti - chlen-korrespondent AMN SSSR zasluzhennyy deyatel' nauki prof. B.A. Petrov).

(STOMACH--SURGERY) (INTESTINES--TRANSPLANTATION)

OSTROVSKAYA, I.M.

Technique of examining patients with intracranial hemorrhages by angiography. Eksper. khir. i anest. no.1:19-21'63.
(MIRA 16:10)

1. Iz Moskovskogo gorodskogo nauchno-issledovatel'skogo instituta skoroy pomoshchi imeni N.V.Sklifosovskogo (dir. M.M. Tarasov, nauchnyy rukovoditel' - chlen-korrespondent AMN SSSR prof. D.A.Arapov).
(BRAIN—HEMORRHAGE) (ANGIOGRAPHY)
(BRAIN—TUMORS)

IOFFE, Yu.S.; OSTROVSKAYA, I.M.

Diagnostic significance of cerebral angiography in the clinical aspects of emergency surgery. Khirurgiia 40 no.11:103-107 N '65. (MIRA 18:7)

1. Neyrokhirurgicheskoye otdeleniye (zav. - kand. med. nauk V.V. Lebedev) I Travmatologicheskoy kliniki (zav. - prof. I.I.Sokolov) i rentgenologicheskoye otdeleniye (zav. - prof. nauk M.K.Shcherbatenko) Nauchno-issledovatel'skogo instituta skoroy pomoshchi imeni Sklifosovskogo (glavnyy khirurg - prof. B.A.Petrov), Moskva.

OSTROUMOVA, M. N.

USSR / Human and Animal Physiology. The Nervous System. T

Abs Jour: Ref Zhur-Biol., No 9, 1958, 41730.

Author : Kryuchkova, A. P.; Ostrovskaya, I. M.
Inst : Not Given.
Title : On the Individual and Age Particularities of the Nervous Activity in Children During the First Year of Life.

Orig Pub: Zh. vyssh. nervn. deyat-sti, 1957, 7, No 1, 63-74.

Abstract: The blinking and motor-alimentary conditioned reflexes upon sound stimuli were elaborated with difficulty and lacked stability during the first 3-4 months of life. Weakness of the processes of excitation and inhibition was noted. During the second half year, the reflexes were formed more rapidly and were of greater stability. The intensity of nervous processes increased, individual

Card 1/2

126

Card 2/2

OSTROVSKAYA, I. M.

Anatomic and physiological peculiarities of childhood; child care and nutrition
Izd. 2., ispr. i dop. Rekomendovano dlia shkol med. sester detskikh uchrezhdenii.
Moskva, Medgiz, 1953. 235 p. (54-35368)

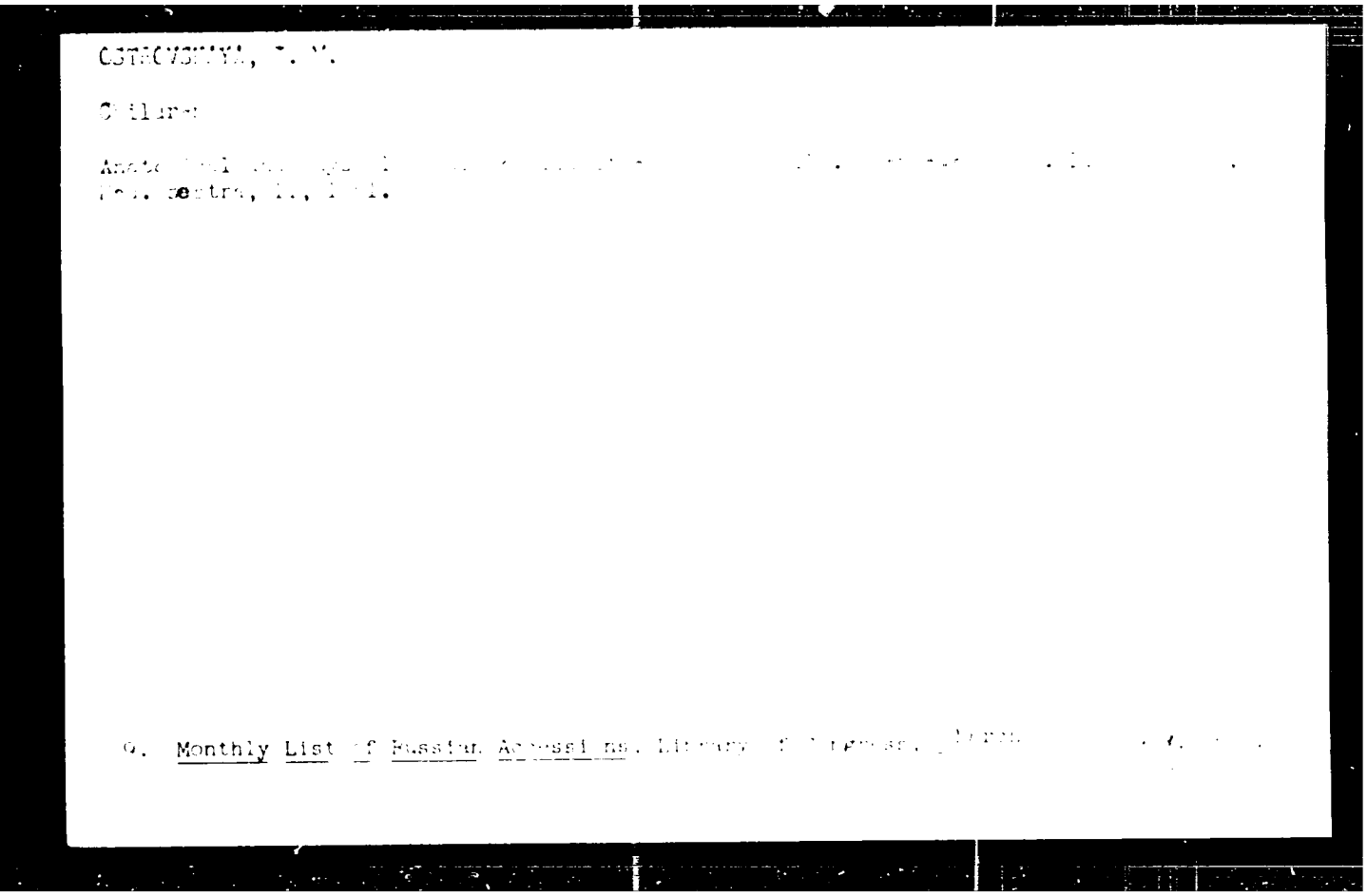
RJ125.08 1953

OSTROVSKAYA, I.M.

OSTROVSKAIA I. M.

Primenenie kefira pri smeshannom i iskusstvennom vskarmlivanii detei rannego vozrasta. [Use of kefir in combined and artificial feeding of infants] Fel'dsher & akush. No. 10 Oct 50 p. 49-51.

1. MAI



OSTROVSK'YA, T. M.

Anatomy, Human

Anatomical [illegible]

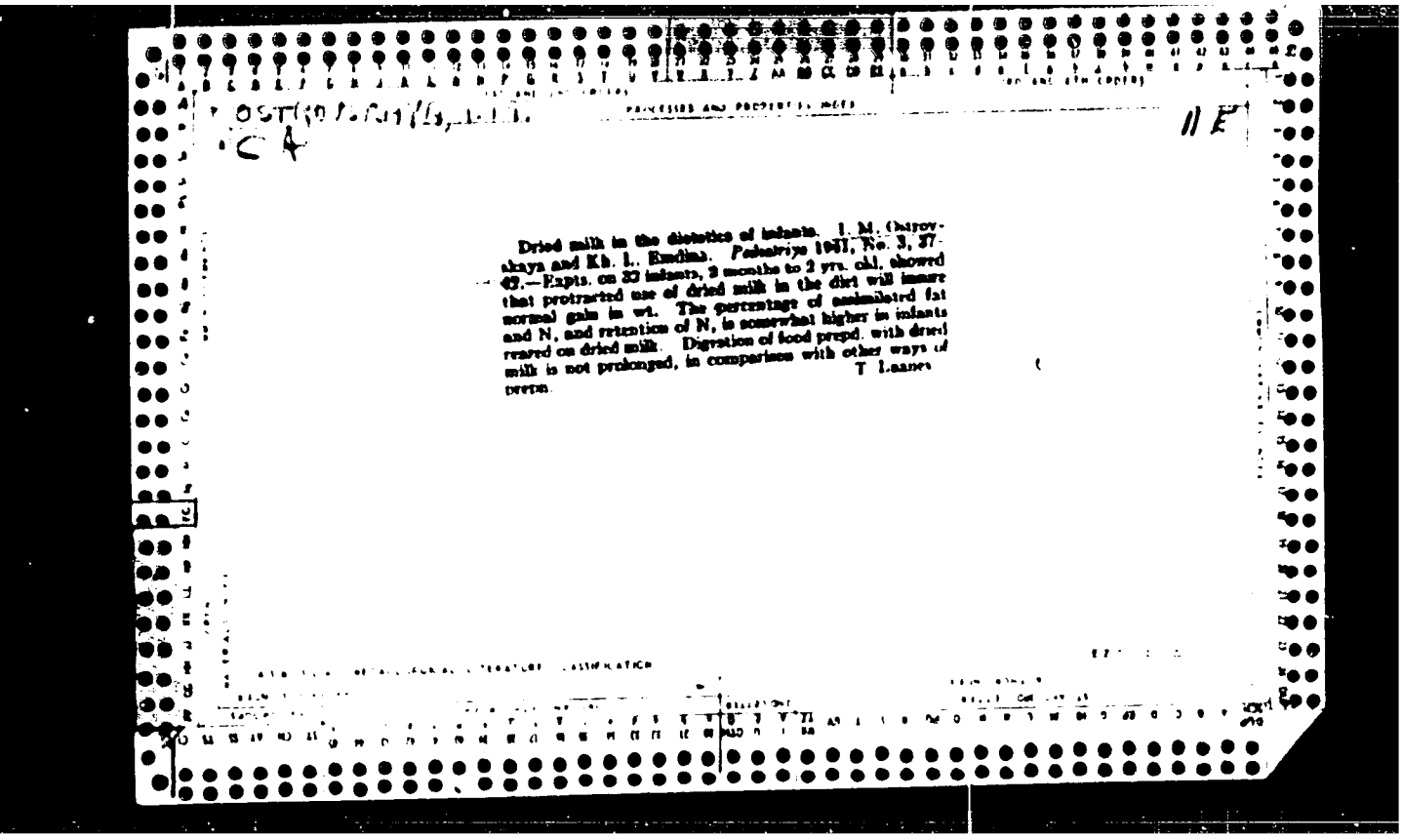
9. Monthly List of Russian Accessions, Library of Congress, [illegible]

OSTROVSKIY, [illegible]

Physiology

Anatomical [illegible]
sestra., 11, 1 [illegible]

9. Monthly List of Russian Accessions, Library of Congress, [illegible]



Dried milk in the dietetics of infants. I. M. Chirovskaya and Kh. L. Rindina. *Pediatriya* 1941, No. 3, 37-42.—Expts. on 32 infants, 2 months to 2 yrs. old, showed that protracted use of dried milk in the diet will insure normal gain in wt. The percentage of assimilated fat and N, and retention of N, is somewhat higher in infants reared on dried milk. Digestion of food prepd. with dried milk is not prolonged, in comparison with other ways of prepn. T Leaner

OSTROVSKAYA, I.M.; SHIMANKO, I.I.

Cerebral angiography in fresh closed cerebrocranial trauma. (MIRA 13:12)
Khirurgiia 36 no.6:80-84 Je '60.
(BRAIN--WOUNDS AND INJURY)

PISKUNOVA, V.G., kand.med.nauk; OSTROVSKAYA, I.S., kand.med.nauk
(Khar'kov)

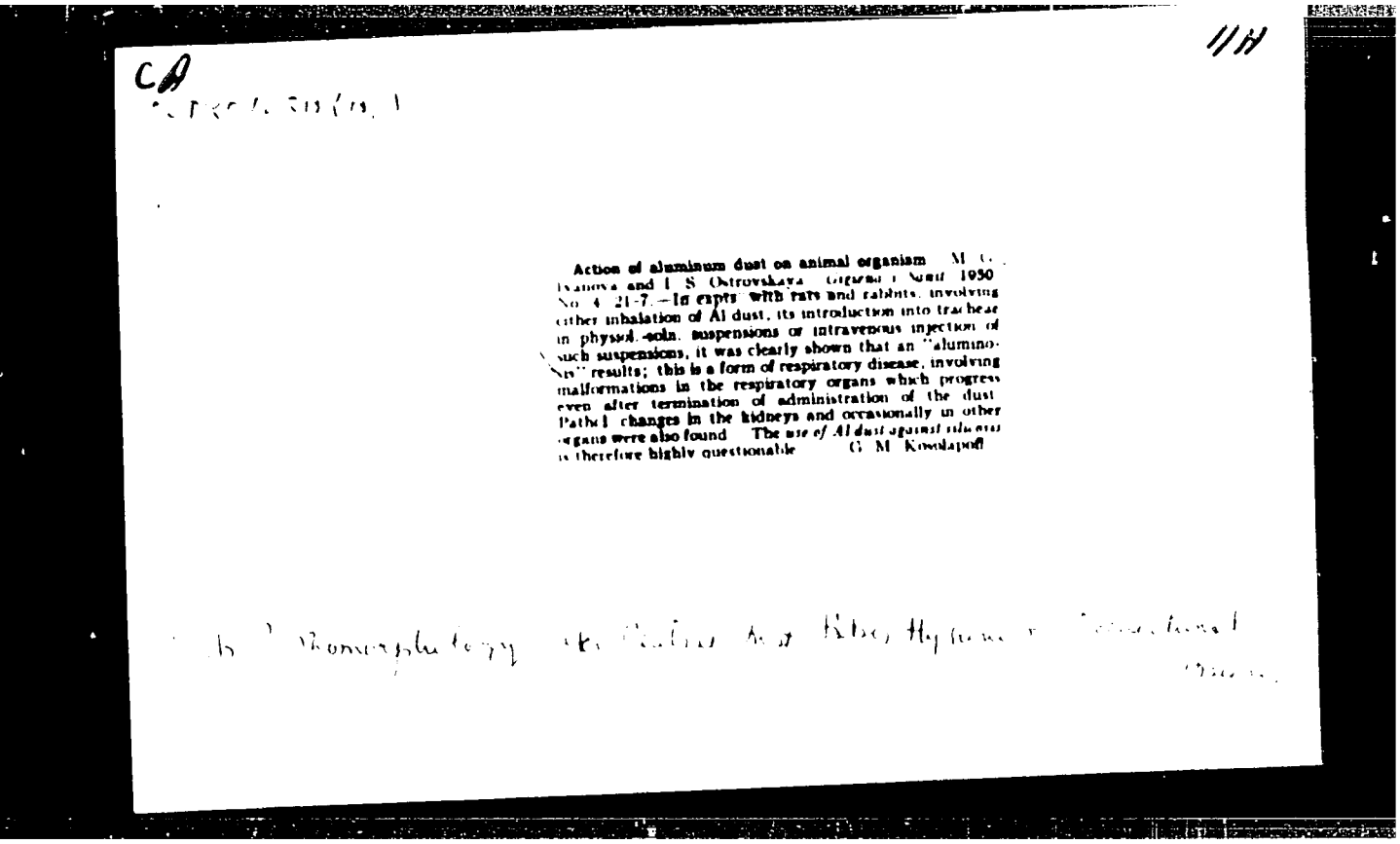
Case of beryllium pneumosclerosis. Vrach.delo no.7:97-99 Jl '60.
(MIRA 13:7)

1. Ukrainskiy nauchno-issledovatel'skiy institut gigiyeny truda i professional'nykh zabolevaniy.
(LUNGS--DUST DISEASES) (BERYLLIUM--TOXICOLOGY)

OSTROVSKAYA, I.S. (Khar'kov)

Fibrinogenous effect of mixed dusts. Gig. truda i prof. zab. 4 no.1:19-21 Ja '60. (MIRA 15:3)

1. Ukrainskiy nauchno-issledovatel'skiy institut gigiyeny truda i professional'nykh zabolevaniy.
(LUNGS--DUST DISEASES)



11H

CA

Action of aluminum dust on animal organism M. G. Ivanova and I. S. Ostrovskaya. *Gigiena i Sanit.* 1950 No. 4 21-7.—In expts. with rats and rabbits, involving either inhalation of Al dust, its introduction into trachea in physiol. soln. suspensions or intravenous injection of such suspensions, it was clearly shown that an "alumino-sis" results; this is a form of respiratory disease, involving malformations in the respiratory organs which progress even after termination of administration of the dust. Pathol. changes in the kidneys and occasionally in other organs were also found. The *use of Al dust against silicosis* is therefore highly questionable. G. M. Kosolapoff

KHAZAN, G.L., kandidat meditsinskikh nauk; KUTEPOV, V.N., kandidat meditsinskikh nauk; KNIZHNYAKOVA, L.N., kandidat meditsinskikh nauk; OSTROVSKAYA, I.S., kandidat meditsinskikh nauk.

Improving industrial sanitation and hygiene conditions at the Kamysh-Burun mines. Gor.zhur.no.10:57-58 O '56. (MLRA 9:12)

1. Ukrainskiy institut gigiyeny truda i profzabolevaniy.
(Kerch Peninsula--Mine sanitation)

IVANOVA, M.G., kand.med.nauk; OSTROVSKAYA, I.S., kand.med.nauk

Study of the development of experimental silicosis during changed reactivity of the body. Bor'ba s sil. 4:103-108 '59. (MIRA 12:11)

1. Ukrainskiy nauchno-issledovatel'skiy institut gigiyeny truda i profzabolevaniy.
(LUNGS--DUST DISEASES) (NERVOUS SYSTEM)

CA

114

Pathomorphology of poisoning with arsine I. S. Ostrovskaya (Novosibirsk Med. Inst.). *Arkh. Patol.* 11, No. 5, 78-80(1949). Intoxication with AsH_3 leads to severe damage of kidneys and other internal organs and severe anemia as a result of hemolysis. The changes in the organs and the nervous system are caused by the direct action of neural cells and by anoxemia caused by hemolysis. The changes are manifested within 7-14 days. G. M. Kosolapoff

YAKHONTOVA, L.K.; OSTROVSKAYA, I.V.; BUKINA, A.N.

Solubility of smaltite in sulfuric acid. Trudy Min. muz. no.8:122-127 '57. (MIRA 11:3)

(Smaltite)

[illegible]ERT[illegible]EV, [illegible]; [illegible]; [illegible]ITINA, I.B.

New mineral "[illegible]." Zap. Vses. min. ob-va 94 no.2:[illegible]. [illegible]

MIRA [illegible]

1. Institut [illegible] mestorozhdeniy, petrografi[illegible], mineralogi[illegible] AN SSSR, Moskva.

MINIOVICH, P.A.; OSTROVSKAYA, K.A.

Proserine therapy of organic diseases of the nervous system. Klin. med.,Moskva 29 no.4:68-69 Apr 1951. (CLML 20:9)

1. Of the Clinic for Nervous Diseases, Stalino Medical Institute, Stalino.

MESHCHERSKAYA, K.A.; BORODINA, G.P.; KOROLEVA, N.P.; LITVAK, F.I.; OSTROVSKAYA, L.A.

Effect of β-sitosterol on the course of experimentally induced atherosclerosis in rats and rabbits. Farm.i tokс. 22 no.5:434-440 S-O '59. (MIRA 13:3)

1. Kafedra farmakologii, biokhimii, patanatomii i fakul'tetskoy terapii Blagoveshchenskogo meditsinskogo instituta.
(STEROLS pharmacol.)
(ARTERIOSCLEROSIS exper.)

L 29185-66

ACC NR: AP6018848 SOURCE CODE: UR/0020/65/163/002/0483/0485

AUTHOR: Emanuel', N. M. (Corresponding member AN SSSR); Vermel', Ye. M.; Rapoport, I. A.; Kruglyak, S. A.; Dronova, L. M.; Ostrovskaya, L. A.

ORG: Institute of Chemical Physics, AN SSSR (Institut khimicheskoy fiziki AN SSSR)

TITLE: Antitumor properties of powerful chemical mutagens (nitrosourea derivatives)

SOURCE: AN SSSR. Doklady, v. 163, no. 2, 1965, 483-485

TOPIC TAGS: mouse, tumor, chemotherapy, aromatic hydrocarbon

ABSTRACT: The authors studied the effect of methyl-, ethyl-, and propyl-nitrosoureas (MNU, ENU, and PNU, respectively) on ascitic strains of mouse tumors (Ehrlich's carcinoma, sarcoma 37, and sarcoma 180) in leukemic mice (C57BL strain) and on solid rat tumors (sarcoma 45, Walker's carcinosarcoma, and sarcoma SSK). Two criteria were used to evaluate the compounds: (1) coefficient of inhibition k, which shows how much more slowly the tumor process develops in experimental animals as compared with the control; (2) percentage of inhibition of tumor growth. The results of the experiments showed that up to 100% inhibition was achieved by all three compounds, but the k values differed. Moreover, MNU and ENU increased the survival time of the animals by 4 days; PNU, by 9 days. Like the polycyclic hydrocarbons, the nitrosourea derivates tested are highly carcinogenic as well as carcinostatic. Orig. art. has: 2 figures. [JPRS]

SUB CODE: 06, 07 / SUBM DATE: 02Mar65 / ORIG REF: 005 / OTH REF: 014

Card 1/1 BLG

SEL'NG, Yu. Ye.; PYSHNYY, A.M.; OSTROVSKAYA, L.I.

Use of benzene hexachloride in exterminating black wolf spiders (Latrodectus tredecimguttatus Rossi). Med.paraz.i paraz.bol. 27 no.1:105-106 Ja-F '58. (MIRA 11:4)

1. Iz sanitarno-epidemiologicheskoy stantsii Odesskoy zheleznoy dorogi.
(SPIDERS) (BENZENE HEXACHLORIDE)

L 45715-65 EWT(1)/EPA(s)-2/EEC(b)-2/EWA(h) Pt-7/Peb/Pl-4 IJP(c) 03/03

ACCESSION NR: AT5011632 UR/0000/64/000/000/0590/0603

AUTHOR: Lyasko, A. B.; Ostrovskaya, L. I.; Kats, Ye. M.; Lyasko, M. V.

TITLE: Parametric oscillations in second order circuits incorporating ferromagnetic elements. Theory of a parametron operating in the third subharmonic

SOURCE: Vsesoyuznoye soveshchaniye po magnitnym elementam avtomatiki, telemekhaniki izmeritel'noy i vychislitel'noy tekhniki. Lvov, 1962. Magnitnyye elementy avtomatiki, telemekhaniki, izmeritel'noy i vychislitel'noy tekhniki (Magnetic elements of automatic control, remote control, measurement and computer engineering); trudy soveshchaniya. Kiev, Naukova dumka, 1964, 590-603

TOPIC TAGS: parametric regeneration, subharmonic oscillation, third subharmonic parametron, second order circuit, parametric oscillation, ferromagnetic element

ABSTRACT: After discussing the necessary condition of paramagnetic regeneration as a function of the number of the subharmonic (the elementary theory of the feasibility of parametric regeneration), the authors derive the basic equation for subharmonic oscillations of second order ferromagnetic-containing circuits, apply the Bogolyubov-Mitropol'skiy method to the resonant case of the equations of

Card 1/2

L 45715-65

ACCESSION NR: AT5011632

type $$\ddot{X} + \omega^2 X = \varepsilon \cdot f(X, \dot{X}, \ddot{X}, \nu t).$$ (1)

develop the third subharmonic parametron theory, and present a brief summary of the procedure to be followed during the use of the developed theory for design purposes. The results show that the third subharmonic parametron oscillations are the most convenient from the energy point of view; that a parametron operating on its third subharmonic exhibits stable generation properties with three possible oscillation phases (30, 150, and 270°) depending on the phase of the triggering signal; and that the third subharmonic parametron permits the simplest design of logical elements and of computers using a ternary system of computation, which turns out to be the optimum approach in the sense of requiring the least number of elements for the processing of information (B. V. Gnedenko, V. S. Korolyuk, Ye. L. Yushchenko, Elementy programmirovaniya, Fizmatgiz, M., 1961). Orig. art. has: 85 formulas and 4 figures.

ASSOCIATION: None

SUBMITTED: 29Sep64 ENCL: 00 SUB CODE: DP

NO REF SOV: 003 OTHER: 001

Card 2/2

L 45721-65 EWT(l)/EWA(h) Peb GS

ACCESSION NR: AT5011633 UR/0000/64/000/000/0604/0615

AUTHOR: Lyasko, A. B.; Ostrovskaya, L. I.; Matafonova, E. P. 11 B+1

TITLE: Parametric effects in first-order circuits with concentrated parameters

SOURCE: Vsesoyuznoye soveshchaniye po magnitnym elementam avtomatiki, telemekhaniki izmeritel'noy i vychislitel'noy tekhniki. Lvov, 1962. Magnitnyye elementy avtomatiki, telemekhaniki, izmeritel'noy i vychislitel'noy tekhniki (Magnetic elements of automatic control, remote control, measurement and computer engineering); trudy soveshchaniya. Kiev, Naukova dumka, 1964, 604-615

TOPIC TAGS: parametric effect, first order circuit, concentrated parameter circuit, parametric detector, parametric frequency multiplier 25

ABSTRACT: Several papers have recently investigated, in considerable detail, parametric frequency multiplication and detection in the UHF range in ferrite-containing circuits with distributed parameters. The present paper analyzes the same effects in circuits with concentration parameters as shown in Fig. 1 of the Enclosure. The results of theoretical and experimental investigations show that 1) the parametric detector (PD) and the parametric frequency doubler (PFD) of AM HF-cir-

Card 1/4

L 45721-65

ACCESSION NR: AT5011633

cuit oscillations as a special case of synchronous detectors (frequency multipliers) in which it is the inductance which changes parametrically and not the active resistance (the control parameter is the detecting (multiplication frequency) signal instead of the special signal from the local heterodyne); 2) the PD (PFD) is a quadratic detector (multiplier) since the transfer current coefficient of the PD and PFD depends on the amplitude of the transferred current (this means that one can attain significant magnitudes of the respective coefficients); 3) in contradistinction to the quadratic detection in devices with nonlinear volt-ampere characteristics, quadratic parametric detection occurs at higher levels of the input signal, and the nonlinear distortion coefficient can be reduced to zero; 4) the PFD frequency characteristics are similar to the characteristics of a low frequency filter; 5) during the parametric doubling of the AM frequency of HF current oscillations the circuit acts as a parametric amplifier of the modulation depth; 6) the PFD may be used in practice as a selector of current harmonics; 7) the PD may be used in remote control systems for detection at high levels of power and for the absolute power measurements of HF current oscillation sources; and 8) the basic calculational equations obtained by means of the "small Poincare parameter"

Card 2/4

L 45721-65

ACCESSION NR: AT5011633

proved to be quite accurate: errors during PFD design did not exceed 10%, while in the case of the PD it was below 30%. This is fully satisfactory since the ferrite toruses alone exhibit parameter spread up to 50%. Orig. art. has: 52 formulas, 6 figures, and 1 table.

ASSOCIATION: None

SUBMITTED: 29Sep64 ENCL: 01 SUB CODE: EC, DP

NO REF SOV: 007 OTHER: 000

Card 3/4

L 45721-65 ENCLOSURE: 01

ACCESSION NR: AT5011633

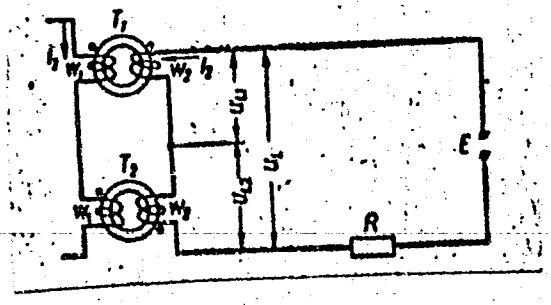
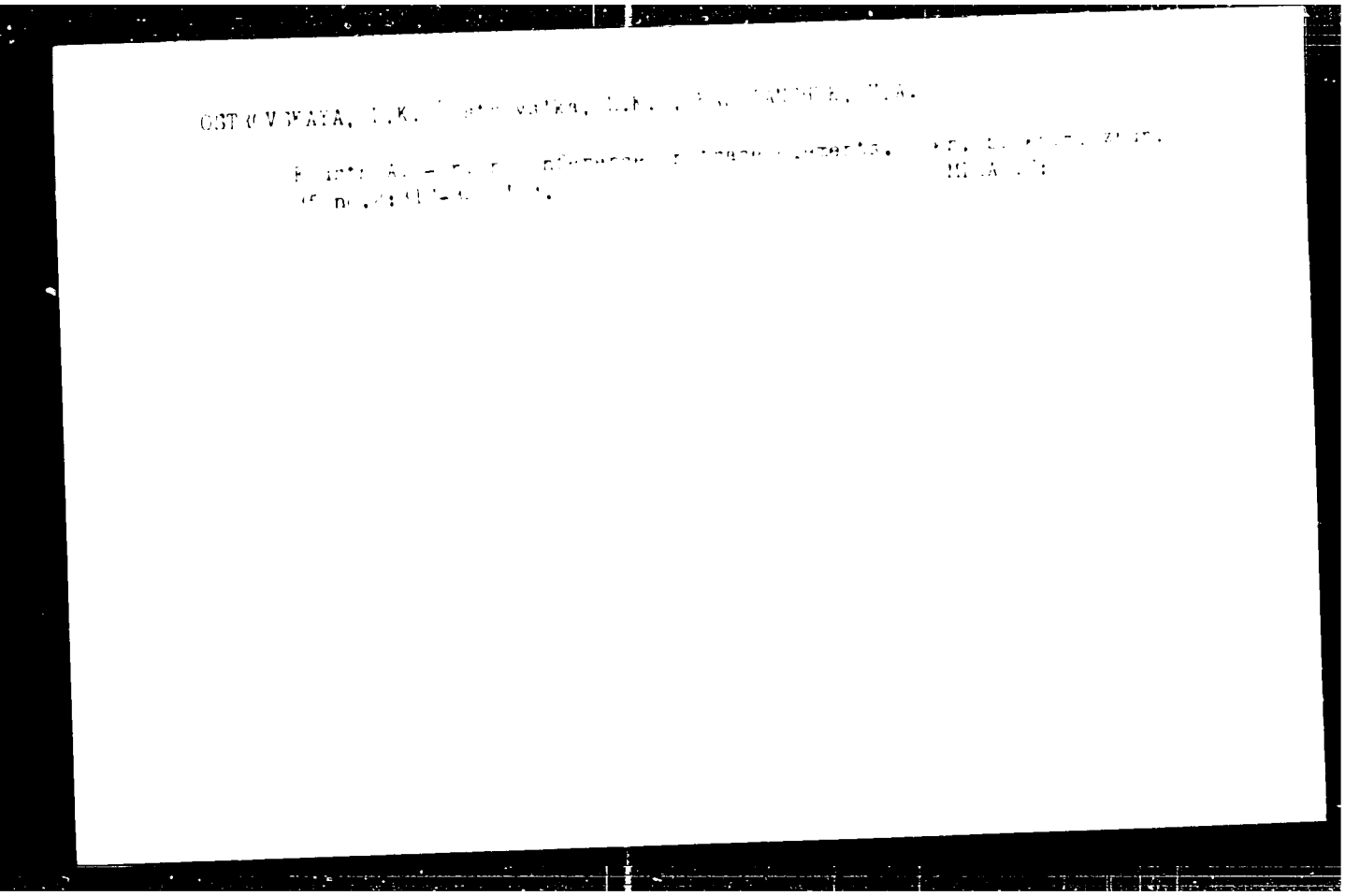
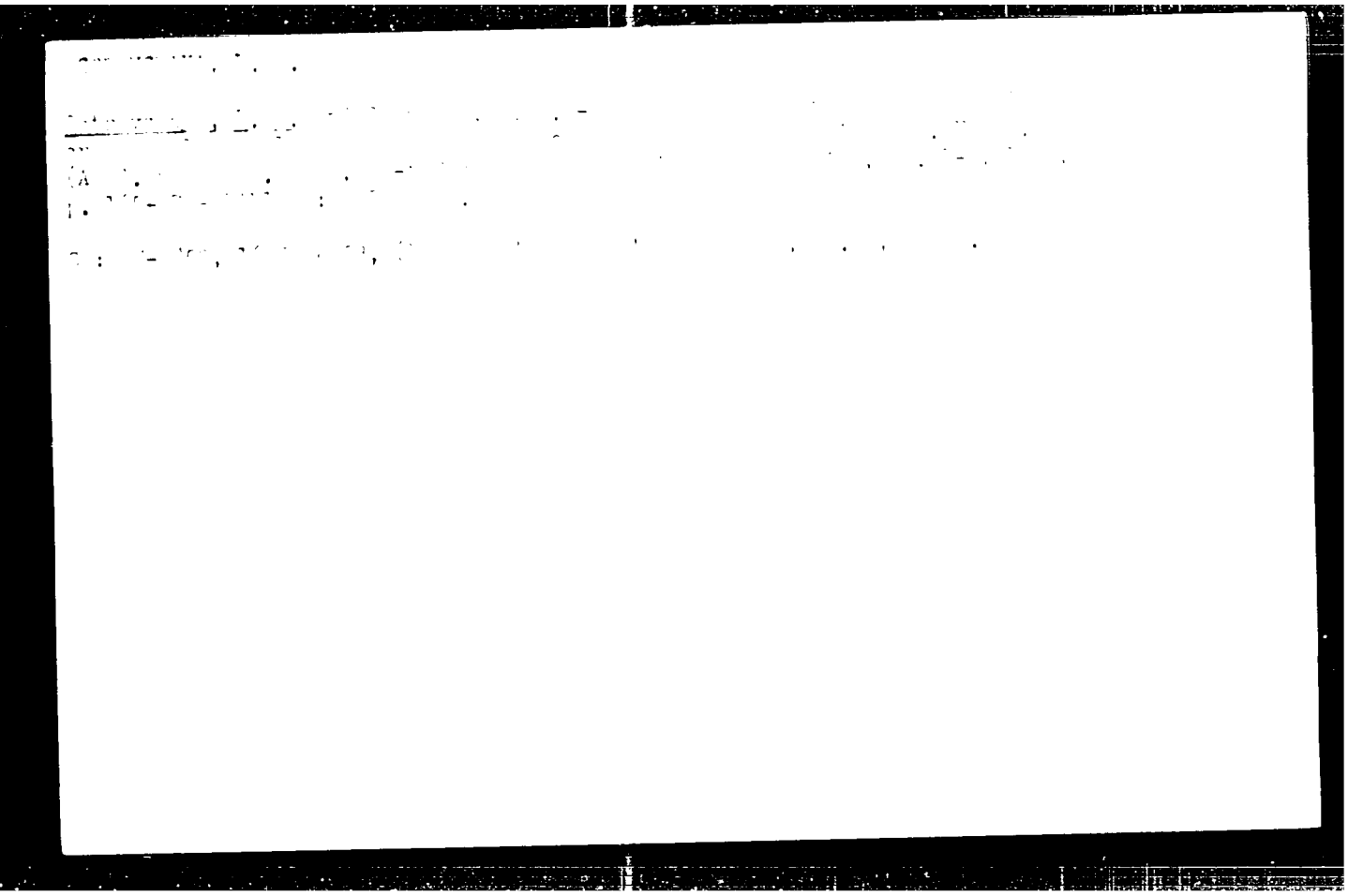
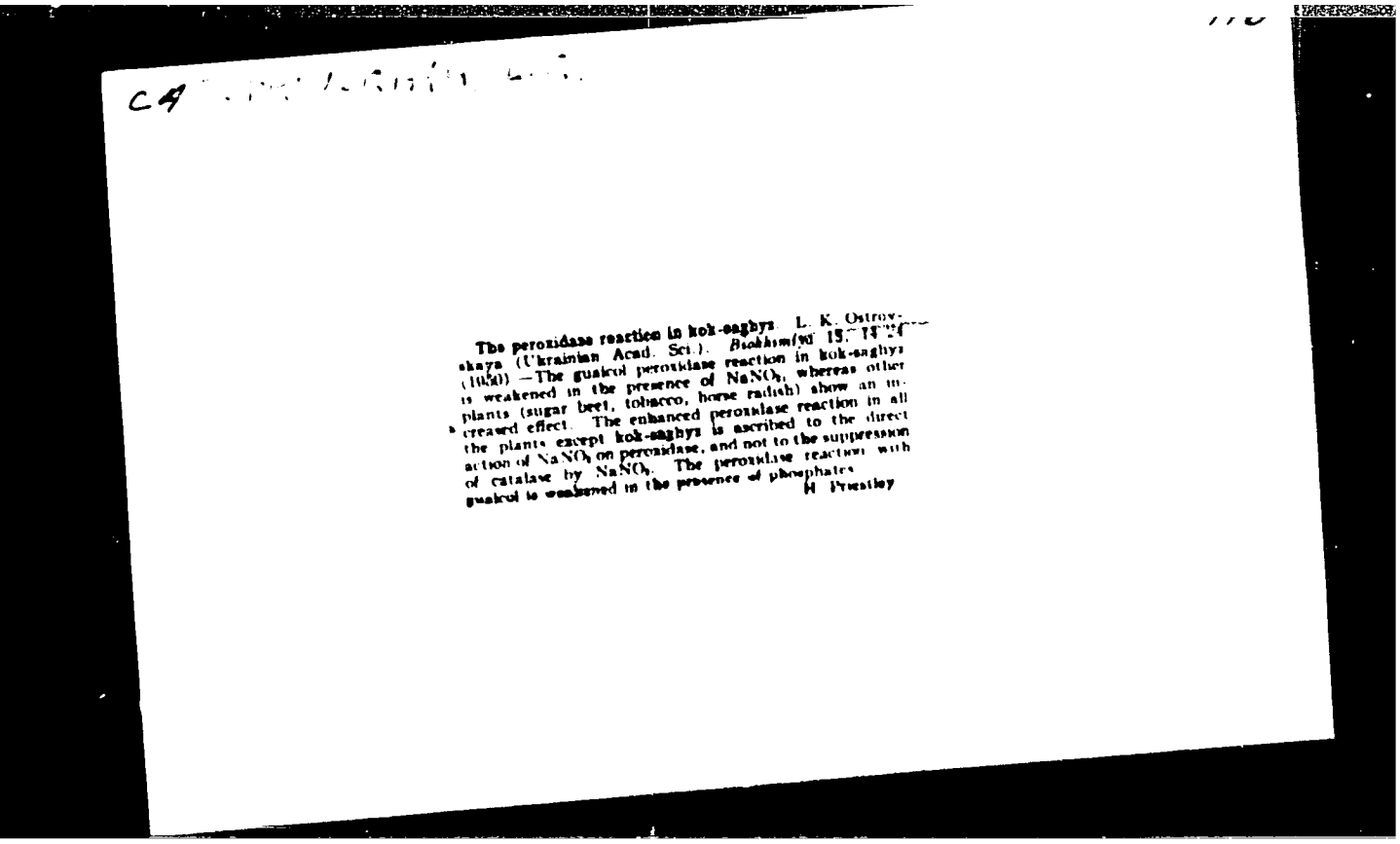


Figure 1. First-order system with concentrated parameters.

Card 1/1







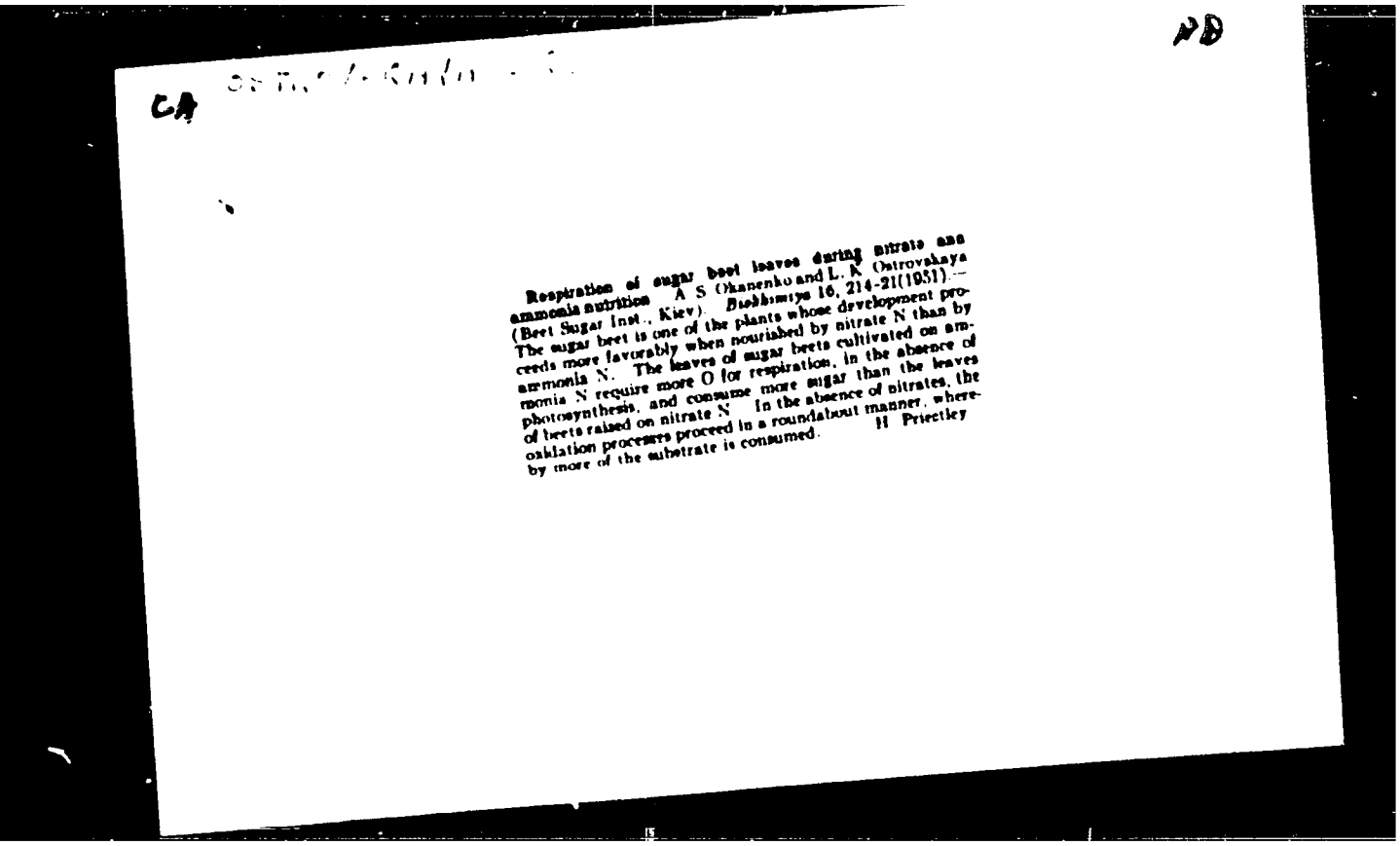
C4

The peroxidase reaction in kok-saghyz. L. K. Ostrovshaya (Ukrainian Acad. Sci.). *Biokhimiya* 15, 14[illegible] (1950).—The guaicol peroxidase reaction in kok-saghyz is weakened in the presence of $NaNO_3$, whereas other plants (sugar beet, tobacco, horse radish) show an increased effect. The enhanced peroxidase reaction in all the plants except kok-saghyz is ascribed to the direct action of $NaNO_3$ on peroxidase, and not to the suppression of catalase by $NaNO_3$. The peroxidase reaction with guaicol is weakened in the presence of phosphates.
H. Priestley

30

CA

Oxidative reductive properties of kok-saghyz tissues
A. S. Okanenko and L. K. Ostrovskaya (Plant Physiol. Inst., Kiev). *Izvest. Akad. Nauk S.S.S.R., Ser. Biol.* 1951, No. 5, 91-105. The oxidation reduction properties of kok-saghyz were investigated by interaction with pre-
ung polarized Pt electrodes (anodic polarization with 5-
10% CuSO₄, cathodic polarization with either Pt electrode
and 15-20% K stannate or Fe wire with 5% FeSO₄). An
anodically polarized electrode is depolarized rapidly within a
few min., but cathodic polarization disappears slowly in a
ground mass of the plant root. Nonrubber-bearing dande-
lions show oxidation-reduction properties analogous to kok-
saghyz. The limiting potential of kok-saghyz root mass is
high in early stages of vegetation, drops in the summer, and
reaches a min. in August, which corresponds to the max.
increase of rubber content in it. Conditions causing inten-
sive rubber latex accumulation lower the limiting oxidation
reduction potential of the root matter. The strong re-
ductive action of the root mass appears to be important in
the formation of the rubber precursors in the roots.
G. M. Kosolapoff



CA

Respiration of sugar beet leaves during nitrate and ammonia nutrition. A. S. Chanenko and L. K. Ostrovskaya (Beet Sugar Inst., Kiev). *Biokhimiya* 16, 214-21(1951).—The sugar beet is one of the plants whose development proceeds more favorably when nourished by nitrate N than by ammonia N. The leaves of sugar beets cultivated on ammonia N require more O for respiration, in the absence of photosynthesis, and consume more sugar than the leaves of beets raised on nitrate N. In the absence of nitrates, the oxidation processes proceed in a roundabout manner, whereby more of the substrate is consumed. H. Priestley

OSTROVSKAYA, L. [illegible] : [illegible]

Rubber plants

Soviet rubber plants, [illegible]

9. Monthly List of Russian Accessions, Library of Congress, [illegible]

OSTROVSKAYA, L. K.

Physiological role of copper in plants and the application of copper fertilizers in peat soils. A. S. Okanenko and L. K. Ostrovskaya. *Voprosy Biokhim. Azot. i Mineral. Pitaniya Rastenii, Akad. Nauk Ukr. S.S.R.* 1953, 5–27; cf. *C.A.* 49, 4415.—Continued work on effects of Cu on plant growth in peat soils showed the following: Yield of rubber later from kok-saghyz grown without Cu supply is but 26% of that obtained with added Cu. Lack of Cu gave very low polyphenoloxidase activity and severely lowered peroxidase activity in kok-saghyz leaves. Catalase was more active in plants without added Cu. Respiration of plants without added Cu was higher than that of those supplied with Cu. Sugars and carbohydrates tend to be low in the absence of Cu; total N and protein N in the roots is highest in plants without Cu supply. N fertilization has but a small effect on the yield of rubber from kok-saghyz in peat soils. Soils with but a thin peat layer respond weakly to added Cu insofar as growth and development of kok-saghyz cultures are concerned.
G. M. Kosolapoff

ML

(1)

OSTROVSKAYA, L.K.

Influence of nitrates and ammonia fertilizers on biochemical processes of kok-saghyz and of sugar beets. A. S. Okanenko and L. K. Ostrovskaya. *Voprosy Biokhim. Azot i Mineral. Pitaniya Rastenii. Akad. Nauk Ukr. S.S.R.* 1939, 28–31.—Kok-saghyz roots (I) are characterized biochemically by a high oxidation-reduction activity, active catalyses and active peroxides, and by a high respiratory rate. I retain their high capacity for reducing permanganate, even during dormancy. Tissues of sugar-beet roots (II) lose their reductive capacity at this time as measured by their ability to reduce permanganate and to reverse the charge on electrodes. The rubber content of I increases somewhat during storage. Requirements for N fertilizer differ according to the age of the plant. In the early stages of vegetative growth very small amts. of fertilizer are needed in good soils, and these can be given either in the form of nitrates or of NH_4. Later stages of growth require higher amts. of N. The rubber content of I is greater when NH_4 is used than when nitrates are used. The org. acid content of sugar-beet leaves (III) was always higher than that of the kok-saghyz leaves (IV), regardless of the fertilizer used. IV had 2–3 times as much org. acid as I, III 5–9 times as much as II. These values were calcd. on dry wt. Although the org. acid content varied, there was no significant difference between I and II. Detailed expts. were made in