

DYMSHITS, L. A., prof.; BELEVSKIY, A. G., kand. med. nauk

Orbital lesions in acute neoplastic leucoses in children (chloroma, sarcoleukemia of the orbit). Vest. oft. no.5:35-45 '61.

(MIRA 14:12)

1. Gosptal'naya pediatricheskaya klinika (zav. - deystvitel'nyy chlen AMN SSSR prof. A. F. Tur) i kafedra glaznykh bolezney (zav. - prof. V. I. Grigor'yeva) Leningradskogo pediatricheskogo meditsinskogo instituta.

(ORBIT(EYE)—TUMORS) (LEUKEMIA) (CHLOROMA)

DYMSHITS, L. A., prof.; DROZDOVA, M. V., dotsent; BELEVSKIY, A. G.,
kand. med. nauk; TITOV, A. I.

Lesion of the eyes in marble disease (Albers-Schonberg disease).
Vest. oft. no.2:52-55 '62. (MIRA 15:4)

1. Gosptal'naya pediatricheskaya klinika (zav. - deystvitel'nyy
chlen AMN SSSR prof. A. F. Tur) i kafedra glaznykh bolezney
(zav. - prof. V. I. Grigor'yeva) Leningradskogo pediatricheskogo
meditsinskogo instituta.

(BONES—DISEASES) (EYE—DISEASES AND DEFECTS)

Distr: 4Edj

Relation between the spectrum and the electrochemical characteristics in the reduction of nitro compounds / S. V. Gorbachev and S. E. Belevskii (D. I. Mendeleev Chem. Technol. Inst., Moscow, U.S.S.R.; Fiz. Khim. 31, 1832-8 (1957)).--The reduction potentials (ϵ) of PhNO_2 , p - $\text{MeC}_6\text{H}_4\text{NO}_2$, m - $\text{MeC}_6\text{H}_4\text{NO}_2$, o -nitrophenol, m -nitroaniline, p -nitroaniline, and MeNO_2 were measured on a Si cathode with a c.d. 1.0 ma./sq. cm. in a 0.025N HCl aq. water soln. in the presence of 0.1M depolarizer concn., and the absorption spectra (E) in the boundary region of the long-wave range were detd. A definite connection was observed between ϵ and E : the larger the energy gap, the larger the boundary of the continuous absorption band. The curves were also the values of ϵ . MeNO_2 and m -nitroaniline failed to follow the rule. A similar relation was also found with a Cu cathode at c.d. \approx 6.0 ma./sq. cm. W. M. Stephens

AUTHORS: Gorbachev, S. V., Belevskiy, S. P. SOV/ 76-32-6-18/46

TITLE: The Polarization During the Cathodic Reduction of Nitro Compounds in Connection With the Problem Concerning the Ratio Between the Electrochemical and Photochemical Processes (Polyarizatsiya pri katodnom vosstanovlenii nitrosoyedineniy v svyazi s problemoy sootnosheniya mezhdu elektrokhimicheskimi i fotokhimicheskimi protsessami)

PERIODICAL: Zhurnal fizicheskoy khimii, 1958, Vol. 32, Nr 6, pp. 1304-1312 (USSR)

ABSTRACT: Proceeding from a general consideration of electrochemical processes, in which the fact is stressed that the activation energy represents the degree of excitation of the electron shell, an analogy is expected to exist between the results of electrochemical and spectroscopic investigations of systems. The transition of the electron by an external action is said to be the common elementary act of both processes, the specific aspects of both processes, however, having to be taken into account. N. N. Beketov (Ref 1), Baur (Ref 3), N. Ye. Khomutov (Ref 4), Maccol (Ref 7) and Lyons (Ref 8), as well as A. Pullman, B. Pullman and G. Berthier (Ref 11),

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SOV/ 76-32-6-18/46

The Polarization During the Cathodic Reduction of Nitro Compounds in Connection With the Problem Concerning the Ratio Between the Electrochemical and Photochemical Processes

Watson and Matsen (Ref 12), Bergman (Ref 13) and Hoijtink and van Schooten (Ref 14) dealt with an analogy between electrochemical and photochemical processes. In the present investigation mainly aromatic nitro compounds are reduced on solid cathodes in order to study the influence of the cathode material on the course taken by the process and to approach real conditions in the electrolysis. Views adopted by A. N. Terenin (Ref 15), by N. A. Izgaryshev and A. A. Petrova (Ref 17) and data by S. A. Voytkovich (Ref 18) are mentioned and discussed. Investigations were conducted with the below mentioned compounds at copper and tin electrodes at various temperatures. The experimental technique is described. The fact is mentioned that according to A. A. Petrova (Ref 21) the reduction product of nitromethane of a reduction at 25° on tin cathodes in an hydrochloric acid medium contains β -methylhydroxylamine as a basic product. According to the experimental results the depolarizing effect of the nitrocompounds on a tin cathode is increased in the

Card 2/4

SOV/ 76-32-6-18/46

The Polarization During the Cathodic Reduction of Nitro Compounds in Connection With the Problem Concerning the Ratio Between the Electrochemical and Photochemical Processes

following order: n-nitroaniline-o-nitrophenol-m-nitrophenol-n-nitrotoluene-m-nitroaniline-nitrobenzene-nitromethane. For the copper cathode the order: n-nitroaniline-m-nitroaniline-m-nitrophenol-n-nitrotoluene-o-nitrophenol-nitrobenzene-nitromethane is given. A complicated influence of temperature upon the velocity of the electrode reaction was found. This results in the fact that no definite conclusions can be drawn as to the nature of polarization. The activation energy, which was determined independently of the potential is given to be 4500 cal, which corresponds to the effective activation energy of a diffusion process. From the evidence obtained it is concluded that in the case under consideration the concentration polarization is the decisive factor in the electrode process. There are 6 figures, 2 tables, and 21 references, 6 of which are Soviet.

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SOV/76-32-6-18/46

The Polarization During the Cathodic Reduction of Nitro Compounds in Connection With the Problem Concerning the Ratio Between the Electrochemical and Photochemical Processes

ASSOCIATION: Khimiko-tekhnologicheskii institut im. D. I. Mendeleeva,
Moskva
(Moscow, Chemical and Technological Institute imeni D. I.
Mendeleev)

SUBMITTED: January 31, 1957

1. Nitro compounds--Reduction
2. Cathodes--Performance
3. Nitro compounds--Polarization
4. Electrochemistry
5. Photochemistry

Card 4/4

BELEVSKIY, S. F., Candidate of Chem Sci (diss) -- "On the interrelationship between spectral and electrochemical characteristics in investigating the processes of reducing certain nitro compounds". Moscow, 1959. 11 pp (Min Higher Educ USSR, Moscow Order of Lenin Chem-Tech Inst im D. I. Mendeleev), 150 copies (KL, No 20, 1959, 109)

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5.4500

83488
S/081/60/000/013(I)/002/014
A006/A001

Translation from: Referativnyy zhurnal, Khimiya, 1960, No. 13(I), p. 74,
51262

AUTHORS: Gorbachev, S. V., Belevskiy, S. F.

TITLE: Light Absorption Potentials of Some Organic Nitrocompounds Reduction

PERIODICAL: Tr. Mosk. khim.-tekhnol. in-ta im. D. I. Mendeleeva, 1959, No. 26,
pp. 180-190

TEXT: For the purpose of establishing a correlation between electrochemical and photochemical processes, the authors compare the results of measuring the reduction potentials E (determined from polarization reduction curves on Sn, Cu or Hg cathode) and the ultraviolet spectra of nitromethane (I), nitrobenzene (II), n-nitrotoluene (III), m- and o-nitrophenol (IV and V) α -nitronaphthalene (VI), m and n-nitroaniline (VII and VIII) in aqueous or aqueous-alcohol solutions. The linear dependence between the potential E and the quantum energy (hv) at the longwave absorption edge was revealed; both quantities varied "antibathetically" (antibatno). The quantum energy hv dropped in the I - VIII series. The authors believe that the correlation obtained may be explained on the basis of the

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83488

S/081/60/000/013(I)/002/014
A006/A001

Light Absorption and Potentials of Some Organic Nitrocompounds Reduction

photoreduction mechanism in the presence of an electron donor. Polarization measurements of I at 25 - 55°C yield an effective activation energy value of 4,500 cal. Consequently the concentration polarization is, under the given conditions, the determining factor of the electrode process of reduction of I.

G. Korolev

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

Card 2/2

5(4)

AUTHORS:

Gorbachev, S. V., Belevskiy, S. F.

SOV/76-33-5-31/33

TITLE:

On the Interrelation Between the Energy of Electron Excitation and the Energy of the Electroreduction of Aromatic Molecules (O sootnosheniyakh mezhdru energiyey elektronogo vozbuzhdeniya i energiyey elektrovosstanovleniya aromaticheskikh molekul)

PERIODICAL:

Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 5, p 1154 (USSR)

ABSTRACT:

In their investigation (Ref 2) the authors tried to find a relation between the spectral and the electrochemical characteristics of the reduction of substituted nitrobenzenes, the reduction potential and the energy of the quantum at the adsorption limit: $E_{red} = \text{const} - kh\nu$. This assumption is attacked by Z. R. Grabovskiy (Ref 1). The authors admit that the assumption of comparable processes in electroreduction and light absorption of nitro compounds is a hypothesis. But the formula set up is empirically guaranteed and is not disproved by Grabovskiy. There are 2 Soviet references.

Card 1/2

On the Interrelation Between the Energy of Electron SOV/76-33-5-31/33
Excitation and the Energy of the Electroreduction of Aromatic Molecules

SUBMITTED: September 13, 1958

Card 2/2

BELEVSKIY, S.F.; GORBACHEV, S.V.

Electrochemical oxidation and absorption spectra of halogen ions. Zhur. fiz. khim. 36 no.4:742-746 Ap '62. (MIRA 15:6)

1. Moskovskiy khimiko-tekhnologicheskii institut imeni Mendeleyeva.
(Halogens--Spectra) (Oxidation, Electrolytic)

ACC NR: AP7000008

SOURCE CODE: UR/0076/66/040/011/2764/2770

AUTHOR: Van Ven-sin'; Bugayenko, L. T.; Belevskiy, V. N.

ORG: none

TITLE: Radiation chemistry of chlorine-oxygen compounds. VI. Radiolysis of solid perchlorates

SOURCE: Zhurnal fizicheskoy khimii, v. 40, no. 11, 1966, 2764-2770

TOPIC TAGS: solid perchlorate, radiolysis, gamma irradiation, perchlorate ion, radiolysis product, ~~radiation-induced chemical reaction~~
chlorine compound

ABSTRACT: A study has been made of radiation-induced chemical reactions in solid NaClO_4 and $\text{NaClO}_4 \cdot \text{H}_2\text{O}$ at -196 — 20°C , and in solid $\text{Ba}(\text{ClO}_4)_2 \cdot 3\text{H}_2\text{O}$ and $\text{Mg}(\text{ClO}_4)_2$ at room temperature. Purified polycrystalline perchlorate specimens were γ -irradiated from a Co^{60} source (dose rate, $\sim 3 \cdot 10^{16}$ ev/g.sec). The irradiated specimens were dissolved in water and analyzed for ClO_2 , for Cl^- , ClO^- , and ClO_2^- ions, and for the sum of the reduction products of the ClO_4^- ion by methods described earlier by the authors (Zh. fiz. khimii, 40, 2094, 1965). The concentration of ClO_3^- ions was determined from the balance. The results of the study, given in graphical and tabular form, indicate that: 1) the main radiolysis product of the ClO_4^- ion is the ClO_3^- ion.

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UDC: 541.15

ACC NR: AP7000008

In addition to the ClO_3^- ion, ClO_2 and Cl^- , ClO^- , and ClO_2^- ions are formed; and 2) the yield in Cl^- ions is proportional to the electron share of the cation, as a result of the transfer of energy from the cation to the anion. A mechanism of the radiolysis of perchlorate ions in solid salts is proposed. This mechanism involves ionization and excitation of the perchlorate ion as a first step, and redox conversions of compounds of intermediate valence chlorine as subsequent steps. The study was reviewed by Professor N. A. Bakh. Orig. art. has: 6 figures and 3 tables.

[W. A. 77]

[BO]

SUB CODE: 07/ SUBM DATE: 07Jun65/ ORIG REF: 007/ OTH REF: 010

Card 2/2

BUGAYENKO, L.T.; BELEVSKIY, V.N.

Reaction of thermalized electron in frozen aqueous solutions.
Dokl. AN SSSR 164 no.1:127-130 S '65. (MIRA 18:9)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.
Submitted February 26, 1965.

1 10520-66 EWT(1)/EWT(m)/T/EWP(t)/EWP(b) LJP(c) RPL JD/WW/JW/JWD/QG/WE

ACC NR: AP5027186 SOURCE CODE: UR/0076/65/039/010/2589/2591

AUTHOR: Belevskiy, V. N.; Bugayenko, L. T. 55 44 55 44 72 B

ORG: Moscow State University im. M. V. Lomonosova (Moskovskiy gosudarstvennyy uni-versitet) 55 44

TITLE: Formation and stabilization of hydrogen atoms in frozen acidic aqueous solutions 17

SOURCE: Zhurnal fizicheskoy khimii, v. 39, no. 10, 1965, 2589-2591

TOPIC TAGS: hydrogen, irradiation effect, gamma irradiation, hydrogen ion, electron paramagnetic resonance, aqueous solution, hydrogen atom reaction, electron spin resonance 44

ABSTRACT: Experimental data obtained by electron spin resonance 21, 44, 55 are reported on the formation of hydrogen atoms in solutions of NaClO₄, HClO₄ and a series of other acids irradiated with Co⁶⁰ gamma rays at 77K. The yield of H atoms was found to depend primarily on the concentration of hydrogen ions, not ClO₄⁻ ions. Apparently, in acid solutions H atoms are formed chiefly by the reaction

$$e^- + H_3O^+ \rightarrow H + H_2O.$$

Thus, the main condition of the formation and subsequent stabilization of H atoms in aqueous solutions is the presence of a sufficiently high hydrogen ion concentration. The second condition of the stabilization of H atoms is the stability of the anion of the acid toward the H atom. Another condition of stabilization of H atoms is the presence of a complex anion whose geometrical configuration permits their trapping.

Card 1/2 UDC: 541.15 2

L 10520-66

ACC NR: AP5027186

Orig. art. has: 2 figures and 1 table.

SUB CODE: 074/ SUBM DATE: 09Jul64 / ORIG REF: 001 / OTH REF: 006

Card 2/4

L 35849-66 EWP(j)/EWT(m)/T RM/WW/JWD
 ACC NR: AP6014894 SOURCE CODE: UR/0076/65/039/012/2958/2961
 AUTHOR: Belevskiy, V. N.; Bugayenko, L. T. 49
 ORG: Moscow State University im. M. V. Lomonosov (Moskovskiy gosudarstvennyy universitet) B
 TITLE: Stabilization of a solvated electron in frozen neutral aqueous solutions
 SOURCE: Zhurnal fizicheskoy khimii, v. 39, no. 12, 1965, 2958-2961
 TOPIC TAGS: electron, aqueous solution, absorption spectrum, perchlorate, sodium compound, x ray irradiation, gamma irradiation
 ABSTRACT: The article reports the results of an investigation of the absorption spectra in the visible and ultraviolet regions, in frozen concentrated aqueous solutions of sodium perchlorate and other salts, irradiated with x rays and gamma rays. The solutions to be irradiated were frozen with liquid nitrogen in flat quartz cells with a thickness of 3 mm. The resulting glasses were transparent in the region from 250 to 1200 m μ . During measurement of the spectra with a type SF-4 spectrophotometer the cells were placed in a quartz Dewar vessel filled with liquid nitrogen. All irradiations and measurements were done at 77°K. In individual cases, the electron paramagnetic resonance spectrum

Card 1/2 UDC: 541.515

. L 35849-66

ACC NR: AP6014894

was taken with a type EPR-2 radiospectrometer. Experimental results are shown graphically. Observations were made of solvated electrons, stabilized under these conditions. Orig. art. has: 2 figures.

SUB CODE: 20/ SUBM DATE: 06Aug64/ ORIG REF: 003/ OTH REF: 009

ms
Card 2/2

L 36504-66 EWT(m)/EWP(j)/T RM/WH/JWD

ACC NR: AP6015092

SOURCE CODE: UR/0020/66/168/001/0122/0125

AUTHORS: Belevskiy, V. N.; Bugayenko, L. T.; Golubev, V. B.

ORG: Moscow State University im. M. V. Lomonosov (Moskovskiy gosudarstvennyy universitet)

TITLE: Kinetics of the decomposition of radicals in frozen aqueous solutions of NaClO_4 and HClO_4

SOURCE: AN SSSR. Doklady, v. 168, no. 1, 1966, 122-125

TOPIC TAGS: free radical, chemical kinetics, electron spin resonance

ABSTRACT: Kinetics of the disappearance of the hydrogen atoms (I) and hydroxyl (II) and chlorine trioxide (III) radicals in a frozen aqueous solution of NaClO_4 and HClO_4 irradiated with Co^{60} γ -rays were investigated by means of ESR. Such a study should clarify the mechanism by which the molecular products of radiolysis are formed. Solutions were frozen in glass ampules 2--2.5 mm thick and irradiated with γ -rays in doses of $\sim 3 \times 10^{16}$ ev/ml/sec at -196C. Modification of the continuous method described by V. B. Golubev (ZhFKh, 38, 2320, 1964) was employed in following the reaction kinetics. A typical decomposition curve is shown in Fig. 1. For short reaction times the process was strictly of second order for I and III, but of mixed order for II.

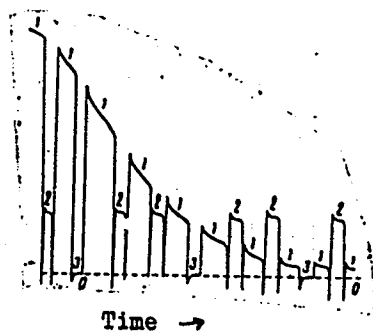
UDC: 541.15+541.515+541.127

Card 1/2

L 36504-66

ACC NR: AP6015092

Fig. 1. Typical disappearance curves for radicals at -140°C in 5 M HCIO_4 : 1 - signal from test sample; 2 - signal from standard; 3 - calibration line.



For an extended reaction time the process was of the first order for all investigated radicals. Activation energies for the disappearance of I and III were determined, and it was found that the activation energy of the disappearance of H in HCIO_4 is twice that in NaClO_4 . This paper was presented by Academician A. N. Frumkin on 12 August 1965. Orig. art. has: 4 figures, 1 table, and 3 equations.

SUB CODE: 07/ SUBM DATE: 23Jul65/ ORIG REF: 006/ OTH REF: 003

Card 2/2/11LP

L 04475-67 EWT(m)/T/EWP(t)/ETI IJP(c) JD/WW/JG/JWD

ACC NR: AP6020376

(A)

SOURCE CODE: UR/0078/66/011/003/0673/0675

AUTHOR: Wang, Wen-hsing; Bugayenko, L. T.; Belevskiy, V. N. 18
B

ORG: Chemistry Department, Moscow State University (Khimicheskoy fakul'tet, Moskovskiy gosudarstvennyy universitet) 11 11

TITLE: Thermographic analysis of sodium perchlorate solutions

SOURCE: Zhurnal neorganicheskoy khimii, v. 11, no. 3, 1966, 673-675

TOPIC TAGS: phase diagram, perchlorate, sodium compound, thermographic analysis 16

ABSTRACT: The thermographic method was used to study the phase transformations in concentrated aqueous solutions of sodium perchlorate at low temperatures. The thermograms were recorded in temperature vs. time coordinates. Both polycrystalline samples (obtained by slow freezing) and vitreous samples were studied. In polycrystalline samples, the heating curves in the range of -196 to 0°C (77-273°K) showed only one endothermic transition at -38°C (235°K) (curve 1, Fig. 1). In vitreous samples, the heating curves showed two main transitions: an exothermic one (with a sharp temperature rise) at -78°C (195°K) and an endothermic one (with a distinct plateau) at 38°C (235°K) (curve 2, Fig. 1). The first transition corresponds to the devitrification of the solution, and the second is thought to be associated with the fusion of a eutectic mixture of the hypothetical composition $\text{NaClO}_4 \cdot 4\text{H}_2\text{O}$. A phase diagram of the aqueous sodium perchlorate solutions is shown in Fig. 2. Orig. art. has: 2 figures.

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UDC: 546.33.137

L 04475-67

ACC NR: AP6020376

Fig. 1. Heating curves of frozen 8 M NaClO_4 solutions
1, 2 - integral thermograms of polycrystalline
and vitreous samples; 3 - differential thermo-
gram of vitreous sample

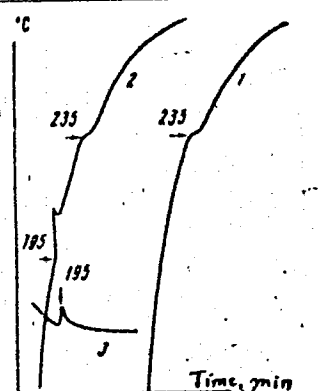
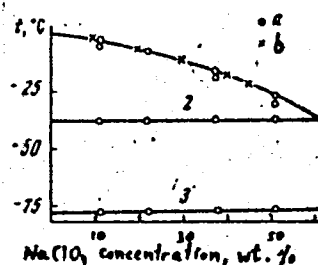


Fig. 2. Phase diagram of aqueous sodium perchlorate
solutions.
a - our data; b - data of P. Freeth (Rec.
Trav. chim. 43, 477, 1924). 1 - temperature
of start of crystallization; 2 - temperature
of start of fusion; 3 - temperature of tran-
sition from vitreous to polycrystalline state



SUB CODE: 07/ SUBM DATE: 30Jun64/ ORIG REF: 001/ OTH REF: 001

Card

2/2 *egh*

28077

S/181/61/003/009/009/039
B102/B104

9,3120 (1138)

AUTHORS: Bazhanova, N. P., Belevskiy, V. P., and Fridrikhov, S. A.

TITLE: Secondary electron emission of barium- and yttrium oxide at low energies of primary electrons (1 - 100 ev)

PERIODICAL: Fizika tverdogo tela, v. 3, no. 9, 1961, 2610 - 2619

TEXT: The mechanism of secondary electron emission has hitherto been insufficiently studied, particularly in the range of low primary energies E_p . The authors studied the secondary electron emission (s.e.e.) of thick BaO- and Y_2O_3 layers due to 1 - 100-ev electron bombardment at temperatures of up to 500°C. The purpose of the present study was to obtain data on the s.e.e. threshold and on the type of E_p -dependence of the s.e.e.-coefficient σ , of the elastic reflection factor R, and of the coefficient δ of the emission of slow electrons, as well as data on the primary emission due to primary electron reflection from the emitter. The s.e.e. threshold is designated as being that primary electron energy E_p^* , at which

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B102/B104

Secondary electron emission...

the secondary electron energy distribution begins to display a maximum due to true secondary emission, and at which δ begins to rise rapidly. Measurements were made in pulsed operation at $t < 300^\circ\text{C}$ (BaO) and $t < 500^\circ\text{C}$ (Y_2O_3) with single pulses, and at $t > \sim 300^\circ\text{C}$ (BaO) and $t > \sim 500^\circ\text{C}$ (Y_2O_3) with periodic pulses. BaO and Y_2O_3 were deposited on a nickel and a tungsten backing, respectively, both ranging between 50 and 100μ . High-purity conditions were maintained throughout the work. Once the targets were completed, they were subjected to heat treatment for several hours. The measuring chamber was evacuated for 3 - 4 days with diffusion pumps until the residual gas pressure dropped to $3 - 5 \cdot 10^{-9}$ mm Hg. The $\sigma(E_p)$ curves of BaO layers displayed a low maximum at $E_p = 3$ ev, a minimum at 5 ev, and, subsequently, a steep but not monotonic rise to 50 ev. The work function was found to be (1.6 ± 0.1) ev. $\delta(E_p)$ and $R(E_p)$ were determined from the delay curves of the secondary current. As may be seen, the slow-electron spectrum begins at $E_p = 5 - 6$ ev. σ , R , and δ as functions of E_p (Fig. 4) practically displayed no temperature dependence between 20 and

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Secondary electron emission...

350°C. Similar results were obtained for Y_2O_3 layers. Regarding these, $\sigma(E_p)$ was recorded for E_p being between 1 and 90 ev. The maximum was found at ~ 4 ev, and the minimum at ~ 7.5 ev, whereupon a nonuniform rise took place again. The work function was (3 ± 0.1) ev. σ did not change between 20 and 1000°C. Here, E_p^* is 6.5 ev. For Y_2O_3 , Fig. 8 shows σ , R , and δ as functions of E_p . In a detailed discussion, results are compared with those obtained for other dielectrics, and, above all, a qualitative agreement is found. A study of the energy spectra of elastically and inelastically reflected electrons yielded relatively high values ($R_{\max} \sim 0.5$) for the reflection factors, compared with those relative to metals. They cannot be explained by the sole assumption of a quantum-mechanical reflection of primary electrons from the potential barrier of the vacuum-dielectric interface. It is necessary also to assume electron scattering within the lattice (e.g., also by phonons). The singularities shown by the curves (e.g., $\sigma(E_p)$ for BaO at $E_p \sim 10, 15, 20$, and 35 ev, for Y_2O_3 at $\sim 15, 25$, and 35 ev; the singularities of curves $R(E_p)$ and $\delta(E_p)$ may

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Secondary electron emission...

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B102/B104

be seen in the figures) are associated with the energetic structure of the substances. Professor A. R. Shul'man, whose laboratory was used for the investigation, is thanked for advice and discussions. D. A. Gorodetskiy is mentioned. There are 8 figures, 1 table, and 28 references: 10 Soviet and 18 non-Soviet. The three most recent references to English-language publications read as follows: E. Taft et al. Phys. Rev. 113, 156, 1959; A. Lempicki. Proc. Phys. Soc. B66, 278, 1953; D. Wright, J. Woods. Proc. Phys. Soc. 66, 1073, 1953.

ASSOCIATION: Leningradskiy politekhnicheskii institut imeni M. I. Kalinina
(Leningrad Polytechnic Institute imeni M. I. Kalinin)

SUBMITTED: March 27, 1961

Card 4/5

LUR'YE, Yu.Yu., prof.; ANTIPOVA, P.S.; BELEVTSSEV, A.N.

Purification of waste waters from fluorides. TSvet, met. 34 no.2:
43-47 F '61. (MIRA 14:6)
(Industrial wastes) (Water—Purification)

MILOVANOV, L.V.; BELEVTSSEV, A.N.; SHCHUKINA, G.A.

Purification of plating plants' waste water containing cyanide.
Ochis. stoch. vod. no.3:4-16 '62. (MIRA 16:5)
(Cyanides) (Industrial wastes--Purification)

BELEVTSSEV, A.N.; MILOVANOV, L.V.; SHCHUKINA, G.A.

Purification of plating plants' waste water containing chromium.
Ochis. stoch. vod. no.3:17-38 '62. (MIRA 16:5)
(Chromium) (Industrial wastes—Purification)

L 3015-66 EWT(d)/EWT(m)/EWP(i)/EWP(f)/EWP(c)/EWP(v)/T/EWP(t)/EWP(k)/EWP(b)/
EWP(l)/ETC(m) JD/WW 59
AM404427 BOOK EXPLOITATION 56
UR/ 8+1
621.396.6.002
B44

Belevtsev, Artem Tikhonovich 44,5

Radio equipment manufacturing technology (Tekhnologiya proizvodstva radioapparatury) Moscow, Izd-vo "Energiya", 1964, 639 p. illus., biblio. Textbook for power and radio engineering faculties and institutes of higher learning. 12,000 copies printed.

TOPIC TAGS: radio equipment, electronic equipment, magnetic circuit, electronic industry, ceramic product electronic component, synthetic material, printed circuit, protective coating, hermetic seal, metal coating

PURPOSE AND COVERAGE: The book examines the basic engineering problems of manufacturing radio equipment. Under special consideration are the engineering problems of designing, the economic aspects, the organization of assembly processes, the analysis of technical processes and the problems of increasing the quality and reliability of radio equipment. A considerable part of the book deals with the manufacturing technology of the most characteristic and

Card 1/3

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common parts and units, magnetic circuits, windings and other articles made from plastics and ceramics. The methods for obtaining permanent connections and printed circuits are considered. The material in this book is based on the achievements of Soviet and foreign technology in the field of radio equipment manufacturing. The book is intended for power and radio engineering higher technical schools. It may be of use to engineers-specialists, designers and technologists in radio engineering industry.

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Ch. XIII. Printed circuits technology -- 512
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SUB CODE: EC, MT

SUBMITTED: 23Mar64

NO REF SOV: 102

OTHER: 002

Card 3/3 *md*

BELEVTSHEV, A.T.

Using electrolysis procedures for automatic calibration of wire.
Priboreshteniye no.1:19-21 Ja ' 57. (MLRA 10:4)
(Electric wire) (Electrolysis)

9(2)

PHASE I BOOK EXPLOITATION 1250

Belevtsev, Artem Tikhonovich

Tekhnologiya proizvodstva potentsiometrov (Technology of Producing Potentiometers) Moscow, Oborongiz, 1958. 215 p. 4,000 copies printed.

Reviewer: Kiselev, V.M., Candidate of Technical Sciences; Ed.: Polyakov, G.F., Engineer; Ed. of Publishing House: Kuznetsova, A.G.; Tech. Ed.: Rozhin, V.P.; Managing Ed.: Sokolov, A.I., Engineer.

PURPOSE: The book is intended for production engineers and designers and for personnel of scientific-research institutes concerned with the design and techniques of producing electric components. It may also be useful to students of instrument-making vuzes and tekhnikums.

Card 1/7

Technology of Producing Potentiometers

1250

COVERAGE: The author describes the manufacture of wire potentiometers and their component parts. He discusses problems of assembly, inspection and use and analyzes primary errors of wire potentiometers. He also gives kinematic diagrams and descriptions of modern winding machines. According to the author, the Soviet and foreign literature on potentiometers during the last 8 to 10 years has dealt mainly with problems of design and application. Very little has been said about production techniques. In the present work the author attempts to give a systematic descriptions of the production methods employed by Soviet industry in the manufacture of wire potentiometers for use in aircraft instruments and automatic devices. He includes data obtained from recent scientific-research and design work conducted by a number of research organizations. Future trends in improving the production of heavy-current potentiometers are briefly discussed.. The author thanks Engineer I.A. Buyanov, who helped to write Chapter V, and Engineer V.Kh. Kurnyavko, who wrote Section 7 of Chapter VIII and helped to write

Card 2/7

Technology of Producing Potentiometers

1250

Section 5 of Chapter VI. There are 35 references, of which 19 are Soviet, 14 English, 1 French, and 1 German.

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JP/ksv
3-18-59

Card 7/7

BELEVTSY, A. I.

TABLE I BOOK EXAMINATION 607/537

Measurement technology obshchego prikladnogo i spetsialnogo prikladnogo
prikladnogo i spetsialnogo prikladnogo (Instrument Technology and
Measurement Technology) Moscow, Nauka, 1960. 662 p. 5,000 copies printed.

Author: A. I. Belevtsy, Doctor of Technical Sciences, Professor, Tech. Sci.
Candidate (Moscow) S. V. Polonskiy, Engineer.

REMARKS: This collection of articles is intended for scientific and technical
personnel in the instrument industry.

CONTENTS: The 23 articles deal with the present state and the outlook for the
development of instrument manufacture and measurement technology. The problems
of design, construction, and manufacture of instruments are discussed in the first
two sections. Emphasis is given to problems of automation and mechanization of
production and to the application of new techniques in process control, ultra-
sonics, and electron working of metals. The third section deals with the
instrument technology involving the use of ultrasonics and radio isotopes. Some
theoretical aspects of metrology and measurement techniques are also discussed
in this section. No personalities are mentioned. References accompany several
of the articles.

Author: A. I. Belevtsy, Candidate of Technical Sciences. Automation and
Mechanization of Manufacturing Processes in the Production of
Variable Value Standard Instruments 205

MEASUREMENT OF METROLOGY AND MEASUREMENT TECHNOLOGY

Author: A. I. Belevtsy, Doctor of Technical Sciences, Professor, and
S. V. Polonskiy, Candidate of Technical Sciences. Use of Nuclear
Radiation in Measurement Technology 315

Author: D. G. Gaidukov, Doctor of Technical Sciences. Present State
and Problems of the Development of Flow-Direction Methods 332

Author: V. A. Begunov, Basic Trends in the Development of
Instruments for the Analysis of the Composition of Materials 368

Author: V. A. Begunov, Optical-Mechanical Projection-Type Measuring
Instruments for Checking Dimensions 377

Author: M. I. Doctor of Technical Sciences, Professor. Modern
Methods of Vibration Measurement 396

Author: A. I. Belevtsy, Doctor of Technical Sciences. Oscillographic Methods of Frequency
Measurement 409

Author: I. G. Begunov, Dynamic Method for Determining the Moduli
of Elasticity Under High-Temperature Conditions 449

Author: D. G. Gaidukov, Candidate of Technical Sciences. Metrological
Base in the Selection of Methods for Checking Dimensions 455

AVAILABILITY: Library of Congress

Card 6/6

10/10/60
10-24-60

EELEVTSSEV, Artem Tikhonovich

[Technology of the manufacture of electrical instruments]
Tekhnologiya elektropriborostroeniia. Moskva, MEI. Pt.2.
[Technology of electrical components] Tekhnologiya elektro-
elementov. 1961. 158 p. (MIRA 16:8)
(Electric apparatus and appliances)

BELEVTSSEV, A.T., kand.tekhn.nauk

Improving the manufacture of high-precision potentiometers.
Priborostroenie no.6:17-19 Je '61. (MIRA 14:6)
(Potentiometer)

BELEVITSEV, Artem Tikhonovich; LANERDIN, V.I., inzh., retsenzent;
ODEROV, I.A., inzh., red.; ANTONOVA, S.D., red. izd-va;
ROZHIN, V.P., tekhn. red.

[Potentiometers] Potentsiometry. Moskva, Oborongiz, 1962. 354 p.
(MIRA 15:6)

(Potentiometer)

BELEVTSSEV, A.T., kand. tekhn. nauk; GOLIKOV, V.I., kand. tekhn. nauk;
GOTSERIDZE, R.M., inzh.; YEFIMOV, V.P., kand. tekhn. nauk
[deceased]; KOPANEVICH, Ye.G., kand. tekhn. nauk; MALOV, A.N.,
prof.; PARFENOV, O.D., kand. tekhn. nauk; ROZENBERG, A.G.,
tekhn.; SEMIBRATOV, M.N., kand. tekhn. nauk; SKURATOV, A.Ye.,
kand. tekhn. nauk; SOKOLOVSKIY, I.A., kand. tekhn. nauk;
SYROVATCHENKO, P.V., kand. tekhn. nauk; TISHCHENKO, O.F., doktor
tekhn. nauk; USHAKOV, N.N., kand. tekhn. nauk; CHUMAKOV, V.P.,
kand. tekhn. nauk; SHAL'NOV, V.A., kand. tekhn. nauk; SHISHKIN,
V.A., kand. tekhn. nauk; YUZHNYI, I.I., inzh.; BLAGOSKLONOVA,
N.Yu., red. izd-va; SOKOLOVA, T.F., tekhn. red.

[Manual for engineers in the instrument industry] Spravochnik
tekhnologa-priborostroitelia. Pod red. A.N. Malova. Moskva,
Mashgiz, 1962. 988 p. (MIRA 16:2)
(Instrument manufacture)

BELEVTSSEV, A.T., kand. tekhn. nauk

This manual can be recommended for instrument-manufacture specialists with broad educational background. Priborostronienie no.11:32-3 of cover N '63.
(MIRA 16:12)

1. Zamestitel' direktora po nauchnoy rabote Vsesoyuznogo nauchno-issledovatel'skogo tekhnologicheskogo instituta priborostroyeniya.

BELEVTSSEV, Artem Tikhonovich; ODEROV, I.A., red.

[Radio equipment manufacture technology] Tekhnologiya proizvodstva radioapparatury. Moskva, Izd-vo "Energia," 1964. 639 p. (MIRA 17:5)

BELEVTSSEV, Artem Tikhonovich; SHARLOVSKIY, Yu.V., red.

[Microminiaturization of radioelectronic apparatus]
Mikrominiatiurizatsiia radioelektronnoi apparatury.
Moskva, Energiia, 1965. 256 p. (MIRA 18:3)

ACC NR: AP6029786

SOURCE CODE: UR/0119/66/000/008/0005/0007

AUTHOR: Belevtsev, A. T. (Candidate of technical sciences); Voronkov, G. Ya. (Candidate of technical sciences); Lidorenko, N. S. (Corresponding member AN SSSR); Fedorin, V. A. (Engineer)

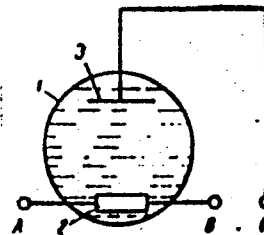
ORG: none

TITLE: Electrochemically-controlled resistor

SOURCE: Priborostroyeniye, no. 8, 1966, 5-7

TOPIC TAGS: resistor, electrochemically controlled resistor, *electrode design, electrolyte*

ABSTRACT: The electrochemically-controlled resistor consists of cell 1 (see figure) filled with an electrolyte and containing resistive electrode 2 and control metal electrode 3. D-c control signal is applied between one end of 2 and 3. Readout a-c signal appears between A and B. An



Card 1/2

UDC: 621.316.87

ACC NR: AP6029786

experimental model had an initial resistance of 150 ohms which could be brought down to 10 ohms in 7 sec. Plots of resistance vs. time and control current and hysteresis vs. control current are shown. The capacitance of the cell was 40 millicoulombs with a current of 2 ma and a resistance of 5-150 ohms. So far, the new device has hardly been practical: it cannot operate as a potentiometer; its hysteresis is too large; the resistance-hysteresis relation is nonlinear; only ac is suitable for readout; resistance variation rate is insufficient; the device survives only about 2000 cycles of operation. Orig. art. has: 7 figures and 1 formula.

SUB CODE: 09 / SUBM DATE: none / ORIG REF: 003 / OTH REF: 003

Cord 2/2

ACC NR: AP7005615

SOURCE CODE: UR/0413/67/000/002/0052/0053

INVENTOR: Bclevtsev, A. T.; Dudkin, L. D.; Yerofeyev, R. S.; Lidorenko, N. S.;
Khanin, M. A.

ORG: none

TITLE: A method for manufacturing thermoelements. Class 21, No. 190448 [announced by
the All-Union Scientific Research Institute of Current Sources (Vsesoyuznyy nauchno-
issledovatel'skiy institut istochnikovtoka)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 2, 1967, 52-53

TOPIC TAGS: thermocouple, temperature sensitive element, *CURRENT CARRIER*

ABSTRACT: A method of making thermocouples with a variable concentration of electric
current carriers along the operating temperature gradient is introduced. To assure
both optimum variable concentration of the carriers and thermodynamic stability of
the elements, the amount of alloying impurities in the carrier concentration is
determined by the specific solubility of the alloying impurities, thus assuring the
desired relationship between the carrier concentration and temperature—i.e.,
 $n = T^{3/4}$.

[JR]

SUB CODE: 09/ SUBM DATE: 29Jul65

Card 1/1

UDC: 621.362.1

L 3545-66 EWT(m)/EPF(c)/T DJ
ACCESSION NR: AP5024424

UR/0286/65/000/015/0128/0128

AUTHORS: Belevtsev, B. A.; Freytag, V. A.

TITLE: A self-sealing device. Class 47, No. 173552

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 15, 1965, 128

TOPIC TAGS: hermetic seal, sealing device

ABSTRACT: This Author Certificate presents a self-sealing device containing rings of elastic material, mounted on an elastic metallic mandrel (see Fig. 1 on the Enclosure). To improve the seal at high pressures and to make the rings operate in conjunction with a lenticular and a packing gasket, the elastic metallic mandrel of the device is made in the form of a collar with external annular belts. The elastic rings are mounted on the terminal recesses of the mandrel. Orig. art. has: 1 figure.

ASSOCIATION: none

SUBMITTED: 13Jan62

ENCL: 01

SUB CODE: IE

NO REF SOV: 000
Card 1/2

OTHER: 000

L 3545-66

ACCESSION NR: AP5024424

ENCLOSURE: 01

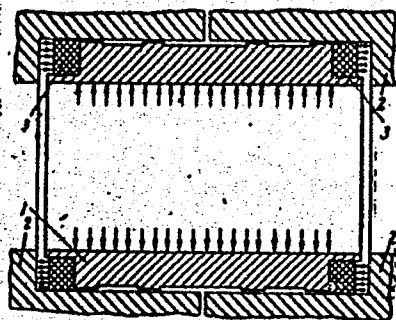


Fig. 1. 1- metallic mandrel; 2- external
annular belts; 3- rings

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Card 2/2

BELEVTSSEV, B.A.; FREYTAG, V.A.

Experimental study of thick-walled cylinders under tension.

Sbor. st. NIIKHIMMASH no.21:21-32 158.

(Cylinders—Testing)

(MIRA 11:7)

BELEVTSSEV, B.A.; FREYTAG, V.A.

Perfecting the method of measuring the deformation of bodies of
high-pressure apparatuses by means of wire resistance strain gauges.
Sbor. st. NIIKHIIMMASH no.21:54-64 '58. (MIRA 11:7)
(Deformations (Mechanics)) (Metals--Testing)

ACC NR: AP6028577 (N) SOURCE CODE: UR/0314/66/000/008/0011/0013

AUTHOR: Belevtsev, B. A. (Engineer); Freytag, V. A. (Candidate of technical sciences)

ORG: None

TITLE: Stationary seals at high pressures

SOURCE: Khimicheskoye i neftyanoye mashinostroyeniye, no. 8, 1966, 11-13

TOPIC TAGS: sealing device, hermetic seal, high pressure

ABSTRACT: The authors describe the basic operating principles of two types of seals used at the Leningrad Scientific Research Institute of Chemical Machinery in hydraulic tests and recommend various modifications for improving seal design. The two types of seals are shown in figures 1 and 2. The viscoelastic type may be used for testing thick-walled cylinders at an internal pressure of up to 6000 atm. The viscoelastic sealing elements are made from various

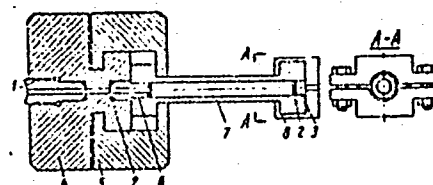


Figure 1. Viscoelastic seal for testing thick-walled cylinders: 1--sleeve; 2--viscoelastic elements; 3--blind stopper; 4--booster head; 5 and 8--yokes with collars; 6--transfer mandrel; 7--thick-walled cylinder.

Card 1/2

UDC: 62-762,4-987

ACC NR: AP6028577

materials depending on the operating conditions. The operation of the seal is explained by treating the viscoelastic material as a viscous liquid. The material is forced into the clearance extremely slowly due to its high viscosity. On the other hand, if the gap is so small that the friction of the flowing viscoelastic material against the wall of the gap balances the pressure of the medium, the material will not be forced into the gap at all. This type of seal works equally well under liquid and gas pressures. Elastoplastic seals (see figure 2) are a combination of a corrugated liner and a viscoelastic seal. The annular mandrel in this type of seal is made from soft

steel. As the internal pressure increases this mandrel is subjected to radial deformation. Expansion of the mandrel under the effect of internal pressure continues until the projections on the outer surface of the mandrel touch the inner surface of the components being sealed. When the internal pressure is reduced or released, radial deformation of the ring keeps the seal airtight. Suggestions are made for improving the reliability and durability of both types of seals. Orig. art. has: 5 figures.

SUB CODE; 13/ SUBM DATE; None

Card 2/2

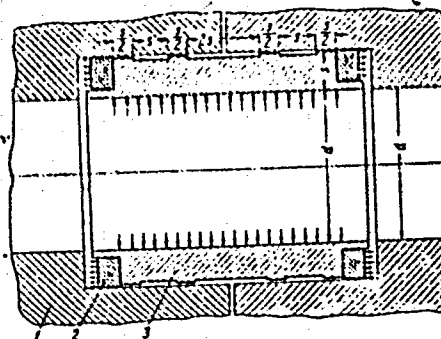


Figure 2. Elastoplastic seal: 1--components being sealed; 2--rings made of viscoelastic material; 3--annular mandrel.

BELEVTSSEV, D.N.

Space arrangement for sunflower in the zone of insufficient moisture
Zemledelie 24 no.3:60-70 Mr '62. (MIRA 15:3)

1. Donskaya opytnaya stantsiya.
(Rostov Province--Sunflowers) (Plants, Space arrangement of)

ALEKSEYEV, A.P., kand. biol. nauk; LUKASHEV, A.I., kand. sel'-
khoz. nauk; BELEVTSSEV, D.N., kand. sel'khoz. nauk;
KALININ, N.I., st. nauchn. sotr.; ZHDANOV, L.A., akademik,
red.; ALEKSEYEVA, R.I., red.

[Sunflowers in the Don Valley] Podsolnechnik na Donu. [By]
A.P.Alekseev i dr. Rostov na Donu, Rostovskoe knizhnoe izd-
vo, 1964. 110 p. (MIRA 17:6)

BELEVITSEV, G.A.; GAVRILENKO, N.G.; GRINENKO, I.M.; KOROSTIK, P.O.;
KOTEL'NIKOV, I.V.; KRASAVTSEV, N.I., kand. tekhn. nauk;
MISHCHENKO, N.M.; POPOV, N.N., kand. tekhn. nauk; SEMIK, I.P.,
kand. tekhn. nauk; TOTSKIY, G.P., kand. tekhn. nauk; SHESTOPALOV,
I.I.; Primali uchastiye: SOLDATKIN, A.I.; SOLOMKO, V.P.;
SOLOMATIN, A.M.; BOLOTSKIY, D.V.; ZAPOROZHETS, N.P.;
BESSCHASTNIY, A.Ye.; SHVETS, N.Kh.; LIKHUNIN, S.D.; SHUMSKIY, L.B.;
VAS'KOVICH, N.A.; YEROKHINA, A.I.; GELYUKH, B.A.

Desulfuration of pig iron in a fast-revolving and continuous
drum. Met. i gornorud. prom. no.4:3-5 JI-Ag '65. (MIRA 18:10)

BELEVTSSEV, I.N.

Increasing the rate of longwall operations. Ugol' Ukr. 6
no.6:27-28 Je '62. (MIRA 15:7)

1. Zamestitel' glavnogo inzhenera shakhty No.54 tresta
Bokovoartratsit.
(Donets Basin--Coal mines and mining)

BELEVTEV, I.N. [~~Belevtsev, I.N.~~]

Structures of iron-ore deposits. Analele geol geogr 16 no.2:
48-67 Ap-Je '62.

BELEVTSSEV, M.N., inzh.

Walls and ceilings of processing sections of meat combines. Prom.
stroil. 37 no.9:32-37 S '59. (MIRA 13:1)
(Walls) (Meat industry)

BELEVTSY. [N. YA ?]

Geochemical methods of prospecting for ore deposits. Geol. zhurn.
16 no.3:94-97 '56. (MLRA 9:11)
(Geochemical prospecting)

AUTHOR BELEVTSSEV N.Ya., TEPLITSKAYA N.V. ~~SECRET~~ 20-2-47/67
 TITLE A Case of Secondary Concentration of Ferriferous Quartzites of the
 Olenegorsk Deposit.
 (Sluchay wtorigchnogo obogashcheniya zhelezistykh kvartistov ny
 Olenegroskom mestorozhdenii .-Russian)
 PERIDOCAL Doklady Akademii Nauk SSSR, 1957, Vol 113, Nr 2, pp 411-413 (U.S.S.R.)
 Received 6/1957 Reviewed 7/1957
 ABSTRACT Ferroferous quartzites which lie among old archaic gneissare wi-
 despread over the U.S.S.^R. (Ukraine, Ural, Aldan and Kola-peninsula).
 By several peculiarities they differ from the ferriferous hornblen-
 des and gesspilites from Krivoy Rog and the KMA (=Kursk magnetical
 Anomaly). Iron-quartzites are used as raw meterial for the production
 of blast furnce agglomeration. So far important deposits of rich iron-
 ores have never been found among them. The iron containing quartzite
 from Olenogorsk (Kola-peninsula) is a streaky rock, consisting of
 ore-containing and ore-free alternating intermediate layers. They
 are not workable, but are interesting from a scientific point of
 view, as they demonstrate the secondary concentration process and
 canthus refer to the possible occurrence of rich workable ores; the
 ore-layers (0.5.-12 mm thick) here mainly consist of magnetite
 with considerable quantites of quartz and smaller quantites of hae-
 matite, amphibolite and pyroxene. The two former form intercrescen-
 ces and idiomorphic crystals. Spaces are filled by non-ore minerals.
 Card 1/3 The ore-free layers (0.3-15 mm) consist of quartz, at times with

A Case of Secondary Concentration of Ferriferous
Quartzites of the Olenegorsk Deposit.

20-2-47/67
~~SECRET~~

subordinate quantities of amphibolite, pyroxene and biotite. Iron content of the quartzites fluctuates between 23 and 27 up to 36%, on the average = 33%. The "vein" of the rich iron-ore (ill.1) lies between amphibolite-magnetite-quartzites with an inclination of 25-36° towards the streakiness of the latter and has a steep incline (60-65°) towards the south. When unearthing them they can be followed for 7-8 m. Their complicated folding which usually ceases in contact with quartzite is characteristic. Ore consists of: magnetite 59%, haematite 12%, amphibolite 18% and quartz 8%. Amphibolite can be classed within the actinolite series. Pyroxene is intermediate between aegirine and augite. In contact with ore, quartzite is concentrated by amphibolite and pyroxene, which here replaces quartz and which mostly deposit in the intermediate layers of quartz as margins along the borders of the intermediate layers of ore. Iron-quartzites here contain: 3.5% haematite, 5.1% amphibolite and 5% pyroxene. A great similarity of the mineralogical and incidentally also of the chemical composition as well as of the constitution of the ore quartzites and iron-ores can be noticed, except for different quantities of iron and silicic acid. Thus the secondary concentration of the iron quartzites consists in the increase of content of ore minerals: Pyroxene and amphibolite, which replace quartz in ore containing and ore-free intermediate layers. Such a mineral-paragenesis could develop in the ore on the occasion of a certain surplus of Fe, Mg, Ca, Na, and Al. The Fe-increase in the

Card 2/3

A Case of Secondary Concentration of Ferriferous
Quartzites of the Olenegorsk Deposit.

~~SECRET~~
20-2-47/67

ore can also be explained by its motion within the quartzite layers. With regard to time the secondary concentration can be placed into the period of the general metamorphism of the sediments and of the formation of the respective rocks. Similar modifications of rock composition are also known at several places of the Ukraine. In Olenegorsk the "veins" can represent a symptom for the presence of workable deposits of rich iron-ores (With 1 schedule, 2 illustrations, 2 citations from Slavic publications).

ASSOCIATION Institute for Geological Sciences of the Academy of Science
PRESENTED BY KORZHINSKIY D.S., Member of the Academy
SUBMITTED 16.3.1956
AVAILABLE Library of Congress
Card 3/3

BELEVTSSEV, R.Ya. [Believtssev, R.IA.]

Division of intrusive rocks as revealed by the studies in the
Uda-Khilok interfluvium of western Transbaikalia. Geol. zhur. 22
no.5:75-80 '62. (MIRA 15:12)

1. Kiyevskiy gosudarstvennyy universitet.
(Transbaikalia--Rocks, Igneous)

KOSHEVIN, V.G., nachal'nik; INOZEMTSEV, P.P., nachal'nik; BELEVTSSEV, T.N., upravlyayushchiy; GARYAZEV, V.V., upravlyayushchiy; GRACHEV, L.I., upravlyayushchiy; KONOVALOV, G.I., upravlyayushchiy; GILLER, A.I., nachal'nik; GUBIN, N.I., glavnyy inzhener.

The Soviet miners honor Miners' Day with new industrial victories.

Ugol' 28 no.8:5-15 Ag '53.

(MLRA 6:7)

1. Kombinat Kuzbassugol' (for Koshevin).
 2. Kombinat Karagandaugol' (for Inozemtsev).
 3. Trest Stalinugol' (for Belevtsev).
 4. Trest Kalininugol' (for Gryazev).
 5. Trest Molotovugol' (for Grachev).
 6. Trest Shchekinugol' (for Konovalov).
 7. Shakhtoupravlenie No.9/12 tresta Shchekinugol' (for Giller).
 8. Shakhta No.34 tresta Krasnoarmeyskugol' (for Gubin).
- (Coal mines and mining)

BELEVITSEV, T. N.

Belevtsev, T. N.

" Investigation of the Problem of Selecting an Effective System of Working the Strata of the Gorlovka C₂ Strata under the Conditions of the 'Stalinugol' Trust." Min Coal Industry Ukrainian SSR. "Stalinugol" Trust. Stalino, 1955. (Dissertations for the Degree of Candidate in Technical Sciences).

SO: Knizhnaya Letopis', No 27, 2 July 1955

BELEVTSSEV, T.N., inzhener, laureat Stalinskoy premii; LIPKOVICH, S.M.,
dotsent.

Experience in working with toll pillars at the mines of the
Stalino Coal Trust. Ugol' 30 no.4:35-38 Ap '55.

(MIRA 8:6)

1. Trest Stalinugol' (for Belevtssev) 2. Donetskiy industrial'nyy
institut (for Lipkovich)

(Donets Basin--Coal mines and mining)

BELEVTSSEV, T. N.

Belevtsev, T. N.

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1.Trest Stalimgol' (for Belevtsev). 2.Donetskiy industrial'nyy institut (for Sapitskiy, Ponomarev).
(Coal mines and mining)

BELEVTSSEV, T.N., kand. tekhn. nauk, Geroy Sotsialisticheskogo Truda.

Schedule of continuous work cycles. Ugol' Ukr. 3 no.11:32-33 N
'59. (MIRA 13:3)

1. Upravlyayushchiy trestom Stalinugol'.
(Donets Basin--Coal mines and mining)

BELEVTSSEV, T.N., kand.tekhn.nauk

Ways of increasing labor productivity and reducing production costs.
Ugol' 36 no.5:5-7 My '61. (MIRA 14:5)

1. Upravlyayushchiy trestom Stalinugol'.
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tekhn. nauk; KOGAN, F.Ya., otv. red.; GRINER, N.S., red. izd-va;
SHKLIYAR, S.Ya., tekhn. red.; BOLDYREVA, Z.A., tekhn. red.

[Profitable mine work] Rentabel'naia rabota shakht. Moskva, Gos-
gortekhnizdat, 1962. 76 p. (MIRA 16:1)
(Donets Basin—Coal mines and mining)

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inzh.; SATS, M.N., inzh.; FADYEYEV, Yu.N., inzh.; VOLCHEK, V.A.,
tekhnik; UTENKOV, V.F., kand.tekhn.nauk; NAUMOV, A.A., tekhnik;
GORDEYEV, P.A., red.; KORNEYEVA, V.N., tekhred.

[Album of drawings of equipment for assembling precast reinforced
concrete construction elements] Al'bom chertezhei oborudovaniia
dlia montazha sbornykh zhelezobetonnykh konstruktii. Moskva, Gos.
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1. Akademiya stroitel'stva i arkhitektury SSSR. Institut organizatsii,
mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu. 2. Nauchnyye
sotrudniki laboratorii betonnykh i zhelezobetonnykh rabot Nauchno-issledo-
vatel'skogo instituta organizatsii, mekhanizatsii i tekhn.pomoshchi stroi-
tel'stvu (for all except Gordeyev, Korneyeva).

(Reinforced concrete construction--Tables, calculations, etc.)

BELEVTSSEV, V.M., inzh.; KAZARINOV, V.M., kand.tekhn.nauk

Traveling detachment for mechanizing small dispersed building
operations. Stroi.i dor.mash. 6 no.7:I3-17 J1 '61.

(MIRA 34:7)

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MAGAK'YAN, I.G.; AKIMENKO, N.M.; BELEVITSEY, Ya.N.; GERSHOYG, Yu.G.;
GRECHISHNIKOV, N.P.; KALYAYEV, G.I.; KARSHENBAUM, A.P.;
KRAVCHENKO, V.M.; KULISHOV, M.P.; MAKSIMOVICH, V.L.; MEL'NIK,
Yu.P.; PITADE, A.A.; SKURIDIN, S.A.; STRIGIN, A.I.; FEDORCHENKO,
V.S.; FOMENKO, V.Yu.

Reviews and bibliography. Geol. rud. mestorozh. 7 no.3:113-
117 My-Je '65. (MIRA 18:7)

BELEVTSSEV, YA. N.

PA 241744

USSR/Geophysics - Faults

Nov/Dec 52

"Problem of Phases Governing Formation of Structures of the Krivoy Rog Metamorphic Zone," Ya. N. Belevtsey

"Iz Ak Nauk BSSR, Ser Geol" No 6, pp 20-35

Analyzes conditions governing formation of linear folding and faulting in the case of laminar flow of materials and the various metamorphisms of rocks in submeridional and sublatitudinal faulting zones. Discusses two types of granite intrusions. Concludes that two tectonic phases of Krivoy Rog structural formation existed. Determines and

241744

observes the continuous course of a folding formation, detecting its retardation and acceleration.

241744

1. RELEVTSSEV, YA. N.
2. SSSR (600)
4. Geology, Structural-Krivoy Rog
7. Phases in the formation of structures of the Krivoy Rog metamorphic belt.
Dokl. AN SSSR 86 No. 5, 1952

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

BELEVTSSEV, Ya.N.; TOKHTUYEV, G.V.

Propriety of the term "cleavage." Izv.AN SSSR. Ser.geol. no.4:133-135 JI-Ag
'53. (MLRA 6:8)
(Rocks--Cleavage)

USSR

Genesis of iron ores in the Saksgan region of Kirov
 Rog. Ya. L. Belevsky, *Geol. Zhur. Akad. Nauk Ukr. G.*
R.S.S.R. 1954, No. 3, 3-14 (1954); Referat.
Zhur., Khim. 1954, No. 34, 010.—The accumulation of Fe
 in the ores is considered to have taken place in 3 stages:
 (1) period of sedimentary accumulation of Fe and SiO_2
 with various silicates coupled with subsequent metamorphic
 transformation of clay-silica-ferruginous sediments into
 ferruginous quartz ores contg. 15-42% Fe; (2) the action
 of plutonic thermal solutions of metamorphic and juvenile
 origin which have penetrated into the ferruginous quartz
 minerals and have converted them into rich ores by leach-
 ing out SiO_2 and some Fe; (3) migration of Fe and forma-
 tion of Fe ore minerals during the period of formation of the
 ancient third weathering crust. M. Hosh

BELEVTSY, Ya. N.

BELEVTSY, Ya. N.; RODIONOV, S. P., redaktor; ZHAMEROVSKIY, M. A., redaktor;
SIVACHENKO, Ye. K., tekhnicheskii redaktor

[Iron ore prospecting in areas influenced by magnetic anomalies]
Poiskovye kriterii zheleznykh rud magnitnykh anomalii. Kiev, Izd-vo Akademii nauk Ukrainsoi SSR, 1954. 42 p. (Akademiia nauk URSR, Kiev. Instytut geologichnykh nauk. Trudy Serii petrografii, mineralogii i geokhimii, no. 4) (MLRA 8:10)

(Prospecting) (Krivoy Rog--Iron ores)

BELEVTSEV, Ya.N.

~~was~~

A.P.Nikol'skii's views on the stratigraphy and structure of
Pre-Cambrian rocks of Krivoy Rog. Izv.AN SSSR. Ser.geol. 19 no.2:
156-161 Mr-Apr '54. (MIRA 7:?)

(Krivoy Rog--Geology, Stratigraphic) (Geology, Stratigraphic--
Krivoy Rog) (Nikol'skii, A.P.)

BELEVTSSEV, YA. N.

USSR/Geology

Card 1/1

Authors : Belevtsev, Ya. N., and Dubinkina, R. P.

Title : Massive martite-hematite ores from the Saksagansk region of Krivoy Rog Ukr-SSR

Periodical : Dokl. AN SSSR, 96, Ed. 2, 355 - 357, May 1954

Abstract : Massive martite-hematite ores form separate strata among "Dzhespilites" (?), but most often they are found in close connection with porous martite ores. The samples described in this report were extracted from hematite-martite ores deposited in "Dzhespilites" (?) of the fifth ferriferous horizon. Formation of massive rich iron ores from the "Dzhespilites" (?) is connected with the deep metasomatic processes accompanied by the addition of iron and proportional loss of silica. Six USSR references. Tables, photo.

Institution : Academy of Sciences Ukr-SSR, Institute of Geological Sciences.

Presented by : Academician D. S. Korzhinskiy, March 13, 1954

BELEVTSSEV, Ya. N.
USSR/ Geology - Iron ore formations

Card : 1/1

Authors : Belevtsev, Ya. N.

Title : Comparison of iron ore formations in pre-Cambrian USSR

Periodical : Dokl. AN SSSR, 97, Ed. 3, 499 - 502, July 21, 1954

Abstract : The characteristics and regions of pre-Cambrian iron ore formations in the USSR are described. It is recommended that these data be considered in any iron ore exploration work and in general evaluation of regions where iron ore formations of the pre-Cambrian era can be found. Table.

Institute : Acad. of Sc. Ukr-SSR, Institute of Geological Sciences

Presented by : Academician, D. S. Korzhinskiy, April 28, 1954

BELEVTSSEV, Ya.N.; AKIMENKO, N.M.; ZHILKINSKIY, S.I.

Scientific activity of N.P.Semenenko. Min.abor.no.9:335-338 '55.
(MIRA 9:9)

1.Kiyev. Institut geologii AN USSR (for Belevtsev). 2.Krivoy Rog.
Upravleniye geologo-rasvedochnogo tresta (for Akimenko). 3.Krivoy
Rog. Gorno-rudnyy institut (for Zhilkinskiy).
(Semenenko, Nikolai Panteleimonovich, 1905-)

BELEVTSSEV, Ya. N.

USSR/ Minerals - Ore deposits

Card 1/1 Pub. 46 - 2/21

Authors : Belevtsev, Ya. N.

Title : ~~Connection between the iron-ore deposits and the transverse folds of the earth in the Saksagan district of the Krivoi Rog region.~~
Connection between the iron-ore deposits and the transverse folds of the earth in the Saksagan district of the Krivoi Rog region.

Periodical : Izv. AN SSSR. Ser. geol. 20/2, 20 - 34, Mar-Apr 1955

Abstract : The study of the ore deposits of the Krivoi Rog region over a period of many years makes it possible to explain the distribution of the ore deposits in the form of veins which correspond to the transverse tectonic deformation of the rocks. These ore veins alternate with less deformed layers containing no ore. Three Soviet references (1946-1952). Illustrations; diagrams; table.

Institution :

Submitted : June 19, 1954

BELEVTSSEV, Ya. N.
USSR/ Geology

Card 1/1 Pub. 22 - 29/49

Authors : Belevtsev, Ya. N.; Sirosttan, R. I.; and Skuridin, S. A.

Title : The granites in the upper sections of the Krivoyrog formations

Periodical : Dok. AN SSSR 100/5. 951-954. Feb 11, 1955

Abstract : The discovery in 1953 of granite pebbles among the conglomerates of the Krivoyrog formations is reported. Geological data of these granite inclusions are included. Tables.

Institution :

Presented by: Academician A. G. Betekgtin, November 14, 1954

BeLeVTseV, Ya. N.

Amphibole asbestos from Krivoi Rog. Ya. N. Belevtsev, L. O. Bernadskaya, and I. S. Usenko. *Doklady Akad. Nauk S.S.S.R.* 104, 470-3 (1966).—Veinlets of cummingtonite-riebeckite fibers of 1 to 2 mm. length are abundantly developed in the amphibole-magnetite rocks of the Krivoi Rog Fe ore deposits. Real asbestos is locally observed in veinlets with fibers of 5-15 mm. rarely up to 25 or even 60 mm. length. The mineral is of silver-gray or somewhat yellowish color, sporadically interspersed with blue riebeckite. The fibrous aggregates show apparently linear extinction. Quartz is often intergrown parallel to the fibers, and also, idiomorphic crystals of magnetite are typical. D. of the amphibole is 3.34; $\gamma = 1.698$ to 1.702 ; $\alpha = 1.674$ to 1.678 ; $\gamma - \alpha = 0.024$; optically neg. The analysis corresponds to the crystallochem. formula $(Na_{0.1}Ca_{0.9})(Mg_{0.4}Fe_{0.6}Fe^{II}_{0.1})_{2}(Al_{1.5}Si_{1.5}Fe^{III}_{0.5})O_{10}(O_{1.5}OH_{1.5})$, i.e. of an Fe-rich cummingtonite. The low content in alkalis (only 0.28%) is in contrast to the high contents in riebeckite, a typical Na-Fe^{III} amphibole. The spectrochem. examn. established as accessory and trace elements: Cu, Zn, Ni, Ga, Sn. The x-ray analysis of powder diagrams of the cummingtonite asbestos is different from that for other cummingtonites from Krivoi Rog and from Uttersvik. The differential-thermal analysis curves show exothermic effects at 620 and 810°. The latter effect is evidently caused by an intense oxidation of the FeO in the silicate. The metasomatic-hydrothermal genesis of the asbestos of Krivoi Rog is evident. W. B.

(2)

~~BYELYEV, Ya. M.~~
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RODIONOV, S.P.; BYELYEV, Ya. M.

Twentieth meeting of the International Geological Congress. Geol.
zhur. 16 no.4:89-92 '56. (MLRA 10:2)
(Mexico (City)--Geology--Congresses)

SEMERENKO, Nikolay Panteleymonovich.; BELEVTSSEV, Ya.N., otv. red.;
ZAVIRYUKHINA, V.N., red. izd-va.; BOGDANOV, S.M., tekhn. red.

[Structural and petrographic map of the Ukrainian crystalline shield]
Strukturno-petrograficheskaya karta ukrainskogo kristallicheskogo
massiva. Kiev, Izd-vo Akad. nauk USSR, 1957. 75 p. (MIRA 11:11)

1. Chlen-korrespondent AN USSR (for Belevtsev).
(Ukraine--Geology, Structural)

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AKIMENKO, N.M.; ~~BELEVTSYEV, Ya.N.~~; GOROSHNIKOV, B.I.; DUBINKINA, R.P.;
ISHCHENKO, D.I.; KARSHENBAUM, A.P.; KULISHOV, M.P.; LYASHCHENKO,
K.P.; MAKSIMOVICH, V.L.; SKURIDIN, S.A.; SIROSHTAN, R.I.; TOKHTULYEV,
G.V.; FOMENKO, V.Yu.; SHCHERBAKOVA, K.F.; SEMENOV, M.V., red.isd-va;
AVERKIYNA, T.A., tekhn.red.

[Geological structure and iron ores of the Krivoy Rog Basin]
Geologicheskoe stroenie i zheleznye rudy Krivorozhskogo basseina.
Moskva, Gos. nauchno-tekhn.isd-vo lit-ry po geologii i okhrane
nedr, 1957. 278 p. (MIRA 11:3)
(Krivoi Rog Basin--Geology)

Beke VTsev, Ya. M.

BELEVTSY, Ya. M.; AKIMENKO, M. M.; ZHILKINS'KIY, S. I.; SHCHERBAKOV, B. D.;
~~POKHUTYEV, G. V.~~; SIROSHAN, P. I.; FOMENKO, V. Yu.

Method for studying structures of the Krivoy Rog Basin. Geol. zhur.
17 no. 2: 80-82 '57. (MLRA 10:11)
(Krivoy Rog Basin--Geology, Structural)

Boleyev, Ya. M.
Distri: 4820

The prospects of occurrence of rich iron ores in the deeper layers of the Kivvol Bog Basin. Ya. N. Bolevirey and N. M. Akimenko. *Razvedka i Otkrytiye Nedr.* 23, No. 11, 1-5 (1967). Tables are presented from which can be seen the changes of the ratio ore/gang for various mines in depths of 800 to 1100 m. It is pointed out how the actual ore compn. changes with depth, e.g. in one shaft at 400 m occurs a siderite layer, followed by magnetite (5), and in greater depth occurs a martinitic mixt. Hypotheses are discussed by various authors on the genesis of the Fe ore in this region, and it is concluded that it is worth while drilling down to 2000 m., where ore could be encountered with as much as 65-8% Fe and only 6.5-8.5% SiO₂.

Werner Jacobson

Inst. Geol. Sci., A S Ukr SSR

BELEVTSSEV, Ya.N.; TEPLITSKAYA, N.V.

A case of secondary concentration of iron-containing quartzites
of the Olenegorsk deposit. Dokl. AN SSSR 113 no.2:411-413 Mr '57.
(MLRA 10:5)

1. Institut geologicheskikh nauk Akademii nauk USSR. Predstavleno
akademikom D.S. Korzhinskim.
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