

BULANOV, M.A.

Use of slags from open-hearth and electrosmelting furnaces for binding and reclaiming sandy land.

Les. khoz. no. 1, 1952

S/089/61/011/006/012/014
B102/B138

AUTHORS: Plaksin, I. N., Belyakov, M. A., Starchik, L. P.

TITLE: Po^{210} - α -induced radioluminescence for analysis of ores and minerals

PERIODICAL: Atomnaya energiya, v. 11, no. 6, 1961, 548 - 549

TEXT: As the usual analyzers based on radio- or cathode-luminescence, as designed as the "Mekhanobor" Institute for instance, are too heavy for field conditions and depend on power supply, a new device has been designed. Pure Po^{210} - α -radiation ($E = 5.3$ Mev, range in air 3.8 cm) was used for luminescence activation. The device is shown in Fig. 1. Powdered or ground ore samples are placed on a plate at the bottom of the vessel and luminescence is observed with the naked eye or through a lens. The α -source used had an activity of 1.8 curies. The minerals are identified according to color, brightness, and afterglow: ✓

Card 1/2

Po²¹⁰- α -induced...

S/089/61/011/006/012/014
B102/B138

Mineral	Color	Brightness	Afterglow
calcite	red	high	weak
dolomite	dull red	very high	weak
fluorite	bluish violet	very high	strong
scheelite	violet	weak	very weak
beryl	light blue	weak	very weak

✓

Intensive radioluminescence is also observed when diamonds undergo α irradiation and for this reason it is used, instead of gamma, for grading Yakutsk diamonds. For quantitative analyses a photocell was used. The photocell, a multiplier of the type $\Phi\gamma$ -1 (FEU-1), was fed via a "Kaktus" radiometer. This experimental setup was tested when determining scheelite with a 70- μ curie Po²¹⁰ source. It was then used to compare the luminescence intensities of scheelite induced by β and α -radiation from emitters of equal activity. α -radiation was found to be about four times more effective for luminescence activation. There are 3 figures, 2 tables, and 5 Soviet references.

Card 2/2

S/020/61/136/005/031/032
B103/B208

AUTHORS: Plaksin, I. N., Corresponding Member AS USSR,
Belyakov, M. A., and Starchik, L. P.

TITLE: Application of radioluminescence caused by α -particles of
polonium-210 for the analysis of ores and minerals

PERIODICAL: Doklady Akademii nauk SSSR, v. 136, no. 5, 1961, 1165-1167

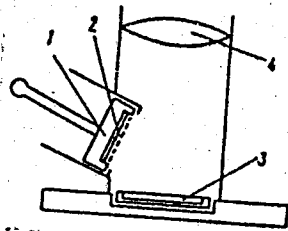
TEXT: The authors suggest the application of radioluminescence in the analysis of ores and minerals, which offers certain advantages. It may replace successfully the cathode luminescence already applied to a large extent (Ref. 2). This latter method requires vacuum and high-frequency. Although the apparatus devised at the "Mekhanobr" Institute (Ref. 3) is a suitable construction, it cannot always expediently be operated owing to its high weight and the necessity of current supply. In the radioluminescence method, however, only a radioactive isotope is required, in this case polonium-210 which serves as α -radiation source. This offers the following advantages: 1) α -radiation gives a much more intense luminescence than the β - or γ -radiation of equal activity; 2) α -radiation

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S/020/61/136/005/031/032
B103/B208

Application of radioluminescence ...

is not accompanied by any other radiation (except one γ -quantum per 10^5 α -particles); 3) for this reason the application of this radiation source is rather simple; 4) the penetrating power of α -radiation is low, which simplifies the required apparatus in spite of the high activity of Po-210 (1.8 curie was applied). Fig. 1 shows such a device.



5) The α -source may be used to determine elements on the basis of nuclear reactions (Refs. 4,5). 6) The luminescence of minerals is observed either by the naked eye or (in the case of finely divided substances)

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S/020/61/136/005/031/032
B103/B208

Application of radioluminescence...

by means of a strong lens (4). The following safety measures are necessary: the Po-210 sources contaminate the surrounding objects by aggregate recoil. To counteract this, the Po-210 layer is screened by a protective film or a thin foil, which does not absorb α -radiation, or such a film may be also mounted on the surface of the α -source. The resultant energy losses reduce the production of luminescence, but may be compensated by increased activity of the α -source. The samples in the form of powders or lumps (up to a size of 20 mm) are irradiated on the plate of the mentioned device (3) by the α -source (2) in a holder (1). The method of analysis resembles that described in Ref. 3. The authors studied the luminescence of the following minerals: calcite, dolomite, scheelite, fluorite, and beryl. The diamonds of Yakutiya show a luminescence visible even at daylight. The luminescence of Tl-204 as β -radiation source (activity 70 millicuries) which was studied for comparison purposes, appeared only slightly in scheelite and in diamonds, while that caused by the α -source of equal activity was visible even at daylight. There are 1 figure, 2 tables, and 5 Soviet-bloc references.

Card 3/4

Application of radioluminescence ...

S/020/61/136/005/031/032
B103/B208

ASSOCIATION: Institut gornogo dela Akademii nauk SSSR
(Mining Institute, Academy of Sciences, USSR)

SUBMITTED: November 15, 1960

Card 4/4

PLAKSIN, I.N.; BELYAKOV, M.A.; RENTYRGIN, V.L.; STARCHIK, L.P.

Use of nuclear reaction (α, n) for the determination of certain elements in solutions. Dokl. AN SSSR 139 no.2:424-426 JI '61.

(MIRA 14:7)

1. Chlen-korrespondent AN SSSR (for Plaksin).
(Nuclear reactions) (Chemistry, Analytical)

S/020/61/141/004/015/019
B101/B110

AUTHORS: Plaksin, I. N., Corresponding Member AS USSR, Belyakov, M. A.,
and Starchik, L. P.

TITLE: Application of gamma quanta produced by interaction of
 α -particles with nuclei of fluorine and boron for determining
these elements in concentration products

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 141, no. 4, 1961, 921 - 924

TEXT: In previous papers (DAN, 127, no. 3, 618 (1959); Atomnaya energiya, 9, no. 5, 361 (1960)) the authors applied the (α ,n) reaction for determining F and B in concentration products (flotation concentrates). Be, B, and Li, however, were interfering with the determination of F. B was also determinable by induced radioactivity (DAN, 128, no. 6, 1208 (1959)). The application of nuclear gamma ray spectroscopy facilitates the determination of B and F in the presence of other elements having a high gamma quantum yield on the basis of the (α ,n) reaction. The following data from publications are cited: In the nonelastic scattering of α -particles on F^{19} nuclei, 0.09 and 0.22-Mev gamma quanta are produced. Ne^{22} produced by the reaction $F^{19}(\alpha,p)Ne^{22}$.
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S/020/61/141/004/015/019
B101/B110

Application of gamma quanta...

emits 1.24 and 1.50-Mev gamma quanta. The reaction $F^{19}(\alpha, n)Na^{22}$ results in Na^{22} emitting 0.62-Mev gamma quanta. The gamma ray spectrum arising from the interaction of α -particles with boron nuclei contains 2.3 and 3.8-Mev gamma quanta. The former are a product of the reactions $B^{10}(\alpha, n)N^{13}$ and $B^{11}(\alpha, n)N^{14}$, while 3.8-Mev gamma quanta result from the reaction: $B^{10}(\alpha, p)C^{13}$. The advantage of gamma ray spectroscopy is that the accuracy of recording of the gamma quanta is by one order of magnitude higher than that of recording of the neutrons. For this reason, α -emitters of low activity may be used. While for determining B and F on the basis of the (α, n) reaction an α -source of 250 mc was required, gamma ray spectroscopy could be performed using a Po^{210} α -source with an activity of only 5 mc. The α -source is oriented directly to the box containing the material to be investigated. For protection against aggregate recoil, the surface of the α -source was coated with a heavy-metal film. Recording was performed by NaI(Tl) crystal, Υ CD-1 (USD-1) attachment, Υ U -2 (USh-2) wideband amplifier discriminator,

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Application of gamma quanta...

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and π (-10,000 (PS-10,000) scaler. On the basis of the intensity of 1.24-Mev gamma quanta calibration curves were plotted for the concentration of fluorite in feldspar. Al was not interfering with the determination. F may be also determined in beryl concentrates due to beryl emitting 3.43 - 4.45-Mev gamma quanta. It was found: $N_{CaF_2} = N_{1.24} - 0.51N_{3.4}$,

where $N_{1.24}$ = intensity of counting of the 1.24-Mev gamma quanta; $N_{3.4}$ = intensity of counting of gamma quanta > 3.4 Mev. In addition, B_2O_3 was also determined by gamma ray spectroscopy in mixtures of ascharite and dolomite by discrimination of gamma quanta < 2 Mev. The relative error is 10-20% for 6% fluorite (or ascharite). The determination takes 30 min. For higher accuracy and reducing the time of analysis, the activity of the α -source must be raised to 0.5 c. In this case, the determination of 0.390 and 0.470-Mev gamma quanta of lithium should be possible. An advantage of the method is its selectivity and the small quantity of sample required (in the order of magnitude of tenths of a gram). The method is also applicable to the quantitative determination of B and F in solutions

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Application of gamma quanta...

S/020/61/141/004/015/019
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and molten material. There are 4 figures and 7 Soviet references.

ASSOCIATION: Institut gornogo dela Akademii nauk SSSR (Mining Institute
of the Academy of Sciences USSR)

SUBMITTED: July 21, 1961

Card 4/4

32322

S/020/61/141/005/017/018
B101/B144

21.4100

AUTHORS: Flaksin, I. N., Corresponding Member AS USSR, Belyakov, M. A.,
Malysheva, N. G., and Starchik, L. P.

TITLE: Use of (γ, n) nuclear reactions for determining beryllium in
solutions and in the solid phase of suspensions

PERIODICAL: Akademiya nauk SSSR. Doklady, v.141, no. 5, 1961, 1158 -
1160

TEXT: The (γ, n) reaction shows high selectivity since Be has a very low
excitation threshold (1.63 Mev). On irradiating samples containing Be with
1.63 - 2.2 Mev gamma quanta, neutrons are only knocked out of Be. The
neutron quantity is proportional to the beryllium content. Basing on this
fact, the authors developed their method of determining Be in flotation
suspensions. Sb¹²⁴ of 1-mcu activity was used as a gamma source placed in
a paraffin block. 400-cm³ bulbs containing solution or suspension were
established into a cylindrical channel located in this block. The neutrons
Card 1/3

32322

S/020/61/141/005/017/018

B101/B144

Use of (γ ,n) nuclear reactions ...

moderated in paraffin were recorded by an CHMO-5 (SNMO-5) counter with an C4-3 (SCh-3) attachment for neutron counting. The calibration curve was plotted by means of aqueous BeSO_4 solutions. For low activity of

Sb^{124} and 30-min counting time, the relative error of measurement was 1.5%.

Li has a disturbing effect due to its large capture cross section. Above 50% Li content, the number of neutrons counted decreases almost linearly with increasing Li content. The error caused by Li can be compensated by reducing the volume of the solution to be analyzed and by a higher activity

of Sb^{124} used. For a high content of elements with large capture cross section, it is better to use the (α ,n) reaction. In Be suspensions, sedimentation has to be prevented by an electrically driven impeller. Determination of Be was carried out in mixtures of $3\text{BeO} \cdot \text{Al}_2\text{O}_3 \cdot 6\text{SiO}_2$ (beryl) and KAlSi_3O_8 (feldspar). The solid/liquid ratio has no effect. Because of the

low Li content (8%), the effect of spodumene is within the error limits. The (γ ,n) reaction permits a continuous determination of Be in flotation suspensions by passing the suspension through the paraffin block, and by

Card 2/3

Use of (γ, n) nuclear reactions ...

³²³²²
S/020/61/141/005/017/018
B101/B144

recording the neutrons counted. A study by B. S. Aydarkin et al. of 1940 (Tr. Radiyevogo inst. AN. SSSR, 5, no. 2 (1957)) is mentioned. There are 4 figures and 4 references: 3 Soviet and 1 non-Soviet. The reference to the English-language publication reads as follows: A. M. Gaudin, J. H. Pannel, Anal. Chem., 23, 1261 (1951).

SUBMITTED: August 12, 1961

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Card 3/3

BELYAKOV, M.A.

Using α -radiation to study conditions affecting the determination
of beryllium, fluorine, and boron in products of ore dressing.
Nauch. soob. IGD 16:104-113 '62. (MIRA 16:8)
(Ore dressing) (Mineralogy, Determinative)

S/089/62/013/004/007/011
B102/B108

AUTHORS: Plaksin, I. N., Belyakov, M. A., Starchik, L. P.

TITLE: Use of γ -spectroscopy for determining beryllium, boron, and fluorine in dressing products from the β -radiation which attends nuclear interaction of these elements with α -radiation

PERIODICAL: Atomnaya energiya, v. 13, no. 4, 1962, 374 - 376

TEXT: As the selectivity of the neutron-spectroscopic determination of certain elements is insufficient it is suggested to use the γ -radiation which attends (α, n) and (α, p) reactions for analysis of elements. The γ -spectroscopic data required for analyzing Be, B, and F are presented and explained by several examples. (1) Be: The excited final nucleus produced in the reaction $\text{Be}^9(\alpha, n)\text{C}^{12}$ emits γ -quanta of 4.45 and 7.65 Mev which are characteristic of this reaction on Be^9 . (2) F: In the reaction $\text{F}^{19}(\alpha, n)\text{Na}^{22}$ the final nucleus emits 0.62-Mev γ -quanta, and in the reaction $\text{F}^{19}(\alpha, p)\text{Ne}^{22}$ the Ne^{22} emits 1.24- and 1.5-Mev γ -quanta. (3) B: The reac-

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S/089/62/013/004/007/011
B102/B108Use of γ -spectroscopy ...

tions $B^{10}(\alpha, n)N^{13}$ and $B^{11}(\alpha, n)N^{14}$ are accompanied by 2.3-Mev γ -radiation, and 3.8-Mev γ -quanta are emitted in the reaction $B^{10}(\alpha, p)C^{13}$. These quanta are always characteristic and make selective determination possible. The 4.45-, 2.3-, and 1.24-Mev peaks were used to analyze Be, B, and F, respectively. The α -source was a plane Po^{210} source of 2 - 5 millicuries. γ -recording was done using a VCA -1 (USD-1) scintillation element with an NaI(Tl) crystal and a broad-band W-2 (Ush-2) discriminating amplifier with a π C-10000 (PS-10000) rate meter. The determination of Be was checked using a mixture of $Be_3Al_2Si_6O_{18}$ and CaF_2 . After correction for the γ -background the mean statistical error involved in determining beryllium oxide in various mixtures of beryllium oxide and fluorites was 15% with 30-min counting. The γ -counting rate in such samples was determined for 1.24 and >3.4 Mev. The ratio C between these count rates opens a way to determine the fluorite content of samples which contain beryl by the formula $\beta CaF_2 = \beta BeOK$, where $K = [CaF_2]/[BeO]$. As $C = C_{Be} = 0.51$ for pure beryl, the γ -counting rate for α, F -reactions is given by $N_{CaF_2} = N_{1.24} \cdot C_{Be} N_{3.4}$, where $N_{1.24}$ and $N_{3.4}$ denote the count rates for $E_\gamma = 1.24$ Mev and $E_\gamma > 3.4$ Mev.

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15

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B102/B108

Use of γ -spectroscopy ...

Mev, respectively. Hence the fluorite content of the sample is given by $\eta = N_{CaF_2} \eta_{st} / \eta_{st}$, where η_{st} is the fluorite content of a standard. The

method of count-rate ratios can also be used for analyzing samples which have more than two components, as is shown here by the determination of BeO, B₂O₃, and CaF₂ in a sample containing ascharite. The boron content is determined from $N_{B_2O_3} = N_{2.2} - C'_B N_{3.4}$, where $C'_B = N_{2.2} / N_{3.4}$ for pure

beryl. Fluorite is determined from $N_{CaF_2} = N_{1.2} - C_B N_{2.2} + K N_{3.4}$, where

$K = C'_B C_B - C''_B$. $C''_B = N_{1.2} / N_{3.4}$ for pure beryl and, $C_B = N_{1.2} / N_{2.2}$ for pure ascharite. There are 4 figures.

SUBMITTED: March 9, 1962

Card 3/3

PLAKSIN, I.N.; BELYAKOV, M.A.; STARCHIK, L.P.

Use of nuclear reaction (α, n, γ) for the determination of beryllium in concentration products. Dokl. AN SSSR 142 no.2:374-376 Ja '62. (MIRA 15:2)

1. Institut gornogo dela im. A.A.Skochinskogo AN SSSR.
2. Chlen-korrespondent AN SSSR (for Plaksin).
(Beryllium--Analysis)
(Nuclear reactions)

PLAKSIN, I.N.; BELYAKOV, M.A.; STARCHIK, L.P.

Use of γ -spectroscopy in determining beryllium, boron, and fluorine
in products enriched by γ -radiation accompanying the interaction
between nuclei of these elements and α -rays. Atom. energ. 13
no.4:374-376 0 '62. (MIRA 15:9)
(Gamma-ray spectrometry) (Nuclear reactions)

PLA ~~IN~~, I.N.; BELYAKOV, M.A.; STARCHIK, L.P.

Measuring the thickness of foils and films with the aid of the
(α, n, γ) nuclear reaction. Prib. 1 tekhn. eksp. 8 no.5:210-211
S-0 63. (MIRA 16:12)

L 12836-63

EWT(m)/BDS AFFTC/ASD

52

ACCESSION NR: AP3003223

S/0020/63/150/006/1270/1273

AUTHOR: Flaksin, I. N. (Corr. member, AN, SSSR); Belyakov, M. A., Starchik, L.P.

TITLE: On the possibility of selective determination of certain light elements by measurement of the yield of nuclear reactions (Alpha, nGamma) and (Alpha, pGamma)

SOURCE: AN SSSR. Doklady*, v. 150, no. 6, 1963, 1270-1273.

TOPIC TAGS: nuclear reaction, radioactive determination, light element, polonium, Alpha-particle

ABSTRACT: The probability for the penetration of the potential barrier of the nucleus by alpha particles increases greatly with the energy of the latter. The potential barrier increases with the atomic number. The authors utilized the low barrier and the high yield of the light elements for their quantitative determination in the presence of heavier elements. Polonium²¹⁰ was the source of alpha particles, which were filtered by thin layers of metals. The energy of filtered particles was in the 3 to 4 Mev range, suitable for the selective reactions derived. For instance, for determination of Be in presence of F, two

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I. 12836-63

ACCESSION NR: AP3003223

determinations - one with, another without filter are needed. Two equations for the yields from both elements are set up, the solution of which gives the quantity of Be present in the specimen. The filters must be calibrated with known concentrations. Orig. art. has: 3 figures and 4 equations.

ASSOCIATION: none

SUBMITTED: 16Jan63

DATE ACQ: 24Jul63

ENCL: 00

SUB CODE: PH, EL

NO REF SOV: 006

OTHER: 002

Card 2/2

BELYAKOV, M.A., inzh.

Filtration of alpha radiation for the selective determination of some elements from the variation in the yield of secondary radiation of nuclear reactions ($\alpha, n\gamma$) and ($\alpha, p\gamma$). Nauch. zapob. IGD 19:58-66 '63. (MIRA 17:2)

PLAKSIN, I.N.; AMCHEVSKIY, E.V.; BELYAKOV, M.A.

"Use of polonium-boron neutron emitter in the analysis of ores and products of dressing for aluminum. Dokl. AN SSSR 163 no.5:1202-1204 Ag '65. (MIRA 18:8)

1. Chlen-korrespondent AN SSSR (for Plaksin).

BELYAKOV, M. F.

PA

Refining of sunflower oil by the method of conjugated hydrogenation with ethyl alcohol. M. F. Belyakov and G. A. Ivanova. *Makholina Zbirnaya* (No. 12, 537 u (1936); cf. C. A. 30, 858P. — The previous method of catalytic conjugated hydrogenation of sunflower oil was modified. A mixt. of 150 parts of oil with 19 parts of EtOH in the presence of 0.4-2% Al-Ni, Cu-Ni and Ni was autoclaved at 240-300° and 2-4 atm. for 5-15 min. By this method the content of linoleic acid in the oil is reduced and that of oleic acids is increased. The filtered oil is similar to edible olive oil in compn. and properties. The solid residue can be used as frying fat or in soap making. The best results were obtained with Cu-Ni catalyst at 270° for 5-15 min., depending on the amt. of catalyst used.

Chas. Blanc

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ASB-55-A METALLURGICAL LITERATURE CLASSIFICATION

130N-137-03194

130N-137-03194

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130N-137-03194

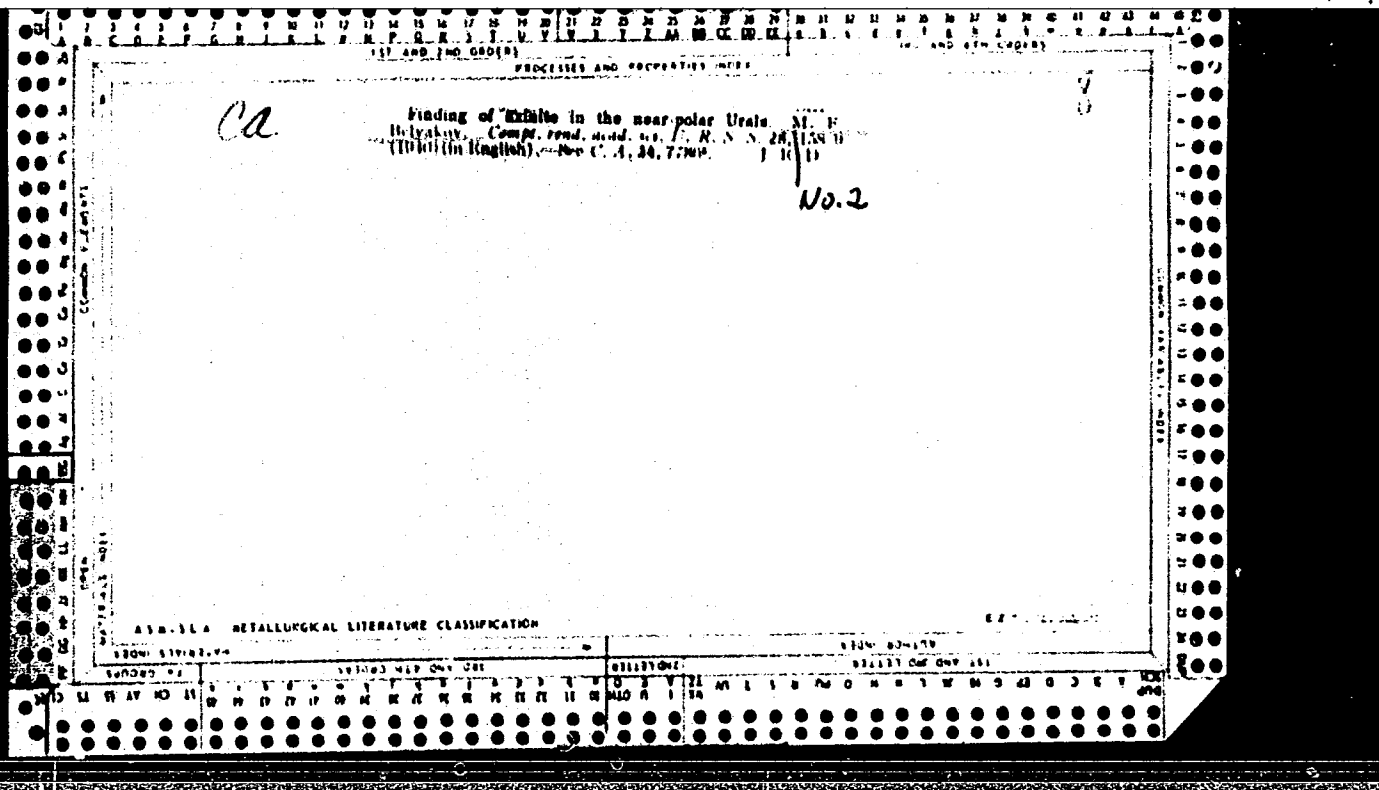
130N-137-03194

CA

7

Deposit of axinite near the polar region of the Ural mountains. M. P. Il'yakov. *Russkaya Nedra* 11, No. 4, 71 (1940).—Considerable accumulations of axinite were found on the eastern slope of the Ural ridge near the mountain Narashnaya. The deposit is found in the lower Paleozoic metamorphic shale. Its refractive indexes are $n_x = 1.680$, $n_y = 1.683$ and $n_z = 1.678$ and its sp. gr. is 3.39-3.35; the individual crystals reach a size of 0.5 cm. The compn. is SiO₂ 42.00, TiO₂ 0.08, Al₂O₃ 17.04, Fe₂O₃ 0.47, FeO 7.50, MnO 3.82, MgO 1.81, CaO 10.28, Na₂O 0.42, H₂O 0.30, B₂O₃ 0.43%. The formula is H(Fe, Mn, Mg)Ca₂Al₂BSi₂O₁₀, where the ratio of Fe Mn Mg = 2 1 1. A. A. Boshinok

ASB 11.1 METALLOGICAL LITERATURE CLASSIFICATION



117 AND 7ND ORDER

180 AND 8TH ORDER

PROCESSES AND PROPERTIES INDEX

CA

Lazulite from a quartz vein in the region of Mount Sura-Iz in the near-polar Urals. M. F. Bolyakov (Leningrad State Univ.). *Compt. rend. acad. sci. U.S.S.R.* 47, 124-6 (in English); *Doklady Akad. Nauk S.S.S.R.* 47, 127-9 (1945).—Lazulite forms irregular masses or arcuate bands in quartz lenses conformably enclosed by sericite-quartzite schists on Mt. Starik, near the Sura-Iz quartz deposit. Assocd. with lazulite are sericite, hematite, rock-crystal and rhombohedral neg. crystals, probably calcite. Optical data and chem. analyses of lazulite are given. The mineral is thought to have been formed in the high-temp. phase of hydrothermal activity (Petersen's group phase II-1) and both the phosphate and assocd. alkalis (in sericite) are considered of magmatic or deep-seated origin. F. Chaves

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C.A. - Vol. 40, No. 13, 10 Jul. 46

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

FROM SUMMARY

117 AND 7ND ORDER

180 AND 8TH ORDER

COMMON ELEMENTS

MATERIALS INDEX

GROUPS

LETTERS

NUMBERS

BELYAKOV, M. F.

PA 27150

USSR/Geology

May 1946

Crystals, Quartz
Quartz

"Rock crystal in the Polar Ural Mountains," M. F.
Belyakov, 1 p

"Priroda" No 5

Discusses the discovery of some rock crystal deposits
in the Ural Mountain Range in the vicinity of the
Kozhim River (the Pechor Basin), and the Tokhlaya
River (Lyapin Basin). Six main lodes were discovered
close to one another.

ID

27150

FA 36T20

BELYAKOV, M. F.

USSR/Geology

Aug 1946

"The Original Case of Weathering," M. F. Belyakov, 1 p

"Priroda" No 8

The best example of this is found in the polar region of the Urals on the slopes of Mt Lapcha, where layers of slate appear to be impaled on quartz outcroppings. This phenomena is due primarily to the erosion effect of wind. Author explains the reason for this and briefly describes the force of the wind, thus showing that the explanation of this phenomena to the action of wind is not entirely far fetched.

ID

36T20

BELYAKOV, M. F.

"History of Geothermic Research in the USSR". Priroda, No 9, 1946 (70-71).
(Meteorologiya i Gidrologiya, No 6 Nov/Dec 1947)

SO: U-3218, 3 Apr 1953

BELYAKOV, M. F.

USSR/Geology
Mineral Deposits
Nov 1947

"Schungite-like Mineral from Northwestern Yakutsk,"
M. F. Belyakov, 24 pp

"Dok Ak Nauk" Vol LVIII, No 5

There is no definitely established theory in regard to the nature of schungite. In 1946 in the alluvial deposits of the Olenek River in northwestern Yakutsk an unidentifiable mineral which possessed many of the properties of schungite was discovered. Author briefly describes the chemical composition of this mineral and discusses some of the remnants of plant and animal life which were discovered in this schungite-like mineral. Submitted by Academician D. V. Malivkin.

30 May 1947. 3844

BELYAKOV, M. F.

USSR/Geology
Maps
Crystals

Dec 1947

"New Data Concerning the Problem of the Boundaries and Geology of the Southeastern Part of the Anabar Crystal Massif," M. F. Belyakov, 2 pp

"Dok Akad Nauk SSSR, Nova Ser" Vol LVIII, No 7

Geologic maps of the USSR, 1937 and 1940 (RF 1:2,500-000), located Anabar crystal massif. All-Union Arctic Institute in 1946 sent an expedition to define more clearly southern and southeastern boundaries. While surveying boundaries, expedition recorded new geological data. Submitted by Academician V. A. Obruchev, 17 Jul 1947.

60T27

BELYAKOV, M. F.

"Contemporary Hydro-Network of the Anabar Crystal Body in Connection with the Peculiarities of Its Geological Formation," Dok AN SSSR, 58, No 8, 1947

BELYAKOV, M. F.

IR 6/49/48

USSR/Geology
Petrology

Jun 48

"The First Findings of Anabar Detritus on the Water Divides of the Cambrian Field of the Central Siberian Plateau," M. F. Belyakov, 1½ pp

"Dok Ak Nauk SSSR" Vol IX, No 9

(55)?

Detritus of pre-Cambrian rocks of Anabar massive have not been found previously on water divides of Cambrian field which surrounds massive. Author discovered such detritus on left bank of Arga-sala river in 1946. Describes location and discusses reasons for their presence. Submitted 27 Mar 48.

6/49/48

BELYAKOV, M. F.

USSR/Geography

Jul 49

Maps
Standards

"The International RF 1:1,000,000 Map and USSR
Nomenclature for Maps," M. F. Belyakov, 62 pp

"Priroda" No 7

USSR has adopted unit system of numeration and
designation of separate sheets of maps based on
the nomenclature of the international metric map
on the scale of 1:1,000,000. Lists the scale of
USSR maps, their dimensions, number of sheets per
RF 1:1,000,000 map, nomenclature (in letters and

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USSR/Geography

(Contd)

Jul 49

figures) for the sheets, etc. New system makes
it easy to select sheets to be pasted together or
to determine the scale, should the map be torn.

63/49133

BELYAKOV, M. F.

USSR/Geology
Petrology
Tectonics

Jan 49

"The Connection of Geological Isothermals With the Pre-Cambrian Contour of the Russian Platform," M. F. Belyakov, All-Union Petroleum Sci Res Geol Prospecting Inst, 4 pp

"Dok Ak Nauk SSSR" Vol LXIV, No 2

Connection between plutonic temperature and thermal coefficient of rocks and the form of subsurface structures is so regular that structural diagrams may be drawn from one set of measurements in shallow excavations. With this, definite connection between geoisothermals and the structure of the Russian platform is established in the Samarskiy Luka and Buguruslan region. Submitted 9 Nov 48

25/4926

BELYALOV, M. F.

PA 52/49196

USSR/Petroleum
Flooding

May 49

"Effect of Artificial Flooding Upon the Thermal
Regime of a Petroleum Site," M. F. Belyakov,
All-Union Petroleum Sci Res Geol Exploratory
Inst, 3 pp

"Dok Ak Nauk SSSR" Vol LXVI, No 3

Present data on results of artificial flooding
are insufficient. Tabulates results of 2-year
study of one of the Emba deposits according to
temperature and depth. There is urgent need
for stationary geothermic observations to achieve

52/49196

...
a rational production petroleum. Submitted by
Acad S. I. Mironov, 28 Mar 49.

52/49196

USSR/Geology - Oil
Geophysical Prospecting
21 Oct 49

"Geothermal Anomalies of the Emba Salt (Domes),"
M. F. Belyakov, All-Union Petroleum Sci Res Geol
Prospecting Inst

"Dok Ak Nauk SSSR" Vol LXVIII, No 6, pp 1079,1080

Used maximum thermometers to measure temp in more than
50 wells of depth up to 1 km. Measurements made for
several points of each well in intervals of 50-100 m.
Analysis of data showed, at equal distance from the
earth's surface, temp was slightly higher (up to 4°

172127

USSR/Geology - Oil (Contd) 21 Oct 49

for wells about 1,000 m apart, measured at depths of
100-200 m) over domes of cupolas than at walls.
Reasons for this anomaly include: different heat con-
ductivity of rocks, subsurface waters, tectonic proc-
esses, surface erosion, etc. Submitted by Acad
S. I. Mironov 17 Aug 49.

BELYAKOV M. F.,
172127

BELIYAKOV, M. F.

USSR/Geophysics - Anomalies, Geothermal (Depression) Nov 51

"Geothermal Anomalies of the Dnepr-Donets Depression," M. F. Belyakov

"Priroda" No 11, pp 52,53

Belyakov presents popular summary of his original article that appeared in "Dok Ak Nauk SSSR, Vol LXXVII, No 2, 1951. Geol structure of a locality turns out to have considerable influence on the distribution of bathic (plutonic) heat in the upper layers of the Earth's crust. This has been confirmed by geothermal investigations conducted

207746

USSR/Geophysics - Anomalies, Geothermal (Depression) (Contd) Nov 51

In various places in the Dnepr-Donets depression. Concludes that increase of temp per descent into the ground varies from 10 m/°C to 200 m/°C, in contrast to the theoretical value of 33 m/°C accepted for the USSR territories.

207746

DEBRACOV, K. P.

Author: Belyakov, K.F.

Title: Anomalous distribution of heat in the Dnieper-Donets depression.

Journal: Doklady Akademii Nauk SSSR, 1951, Vol.77, No.2, p. 325

Subject: Hydrology

From: D.S.I.R. Oct 51

VASSOYEVICH, N.B., prof., doktor geol.-miner.nauk; ANDREYEV, P.F., kand.
khim.nauk; BELYAKOV, M.F., kand.geol.-miner.nauk; BARANOVA, T.E.,
nauchnyy sotrudnik; BUSHINSKIY, G.I., prof.; GEKKER, R.F., prof.,
doktor biolog.nauk; GROSSGEYM, V.A., kand.geol.-miner.nauk;
ITENBERG, S.S., dotsent; KRISHTOFOVICH, A.N.; LYUBOMIROV, B.N.,
kand.geol.-miner.nauk; PORFIR'YEV, G.S., kand.geol.-miner.nauk;
POKROVSKAYA, I.M., prof., doktor geol.-miner.nauk; RADCHENKO, O.A.,
kand.khim.nauk; RUKHIN, L.B., prof., doktor geol.-miner.nauk;
TORGOVANNOVA, V.B., gidrogeolog; USPENSKIY, V.A., kand.khim.nauk;
FROLOV, Ye.F., kand.geol.-miner.nauk; FURSENKO, A.V.; KHAIN, V.Ye.,
prof., doktor geol.-miner.nauk; SHARONOV, V.V., prof., doktor
fiziko-matem.nauk; YASHCHURZHINSKAYA, A.B., vedushchiy red.;
SOKOLOVA, Ye.V., tekhn.red. (Continued on next card)

VASSOYEVICH, N.B.---(continued) Card 2.

[Handbook for field geologists and petroleum prospectors]
Sputnik polevogo geologa - neftianika. Leningrad, Gos.nauchno-
tekh.izd-vo neft. i gorno-toplivnoi lit-ry, Leningr.otd-nie,
1952. 504 p. (MIRA 12:12)

1. Groznenskiy ordena Trudovogo Krasnogo Znameni neftyanoy insti-
tut (for Itenberg). 2. Deystvitel'nyy chlen AN Ukrainskoy SSR
(for Krishtofovich). 3. Chlen-korrespondent AN Belorusskoy SSR
(for Fursenko).

(Petroleum geology--Handbooks, manuals, etc.)

BELYAKOV M.F.

VASSOYEVICH, Nikolay Bronislavovich, professor, doktor geologo-mineralogicheskikh nauk, redaktor; YASHCHURZHINSKAYA, A.B., redaktor; STEPANOV, D.L., doktor geologo-mineralogicheskikh nauk, redaktor; BELYAKOV, M.F., kandidat geologo-mineralogicheskikh nauk, redaktor; MURATOV, V.N., kandidat geologo-mineralogicheskikh nauk, redaktor; SOKOLOVA, Ye. V., tekhnicheskii redaktor.

[Guide for petroleum geologists in the field] Sputnik polevogo geologa-neftianika. Izd.2-e, ispr. i dop. Leningrad, Gos. nauchno-tekhn. izd-vo neftianoi i gornoj-toplivnoi lit-ry. Vol. 1. 1954. 544 p.
(Petroleum geology) (MLRA 7:12)

VASSOYEVICH, Nikolay Bronislavovich, doktor geologo-mineralogicheskikh nauk, obshchiy redaktor; STEPANOV, D.L., doktor geologo-mineralogicheskikh nauk, redaktor; BEJYAKOV, M.F., kandidat geologo-mineralogicheskikh nauk, redaktor; MURATOV, V.N., kandidat geologo-mineralogicheskikh nauk, redaktor; YASHCHURZHINSKAYA, A.B., vedushchiy redaktor; GENNAD'YEVA, I.M., tekhnicheskij redaktor.

[Guidebook for the geologist and petroleum engineer in the field]
Sputnik polevogo geologa-neftianika. Izd. 2-e, ispr. i dop. Leningrad, Gos. nauchno-tekhn. izd-vo neftianoi i gorno-toplivnoi lit-ry. Vol. 2. 1954. 564 p. (MIRA 8:2)
(Petroleum geology)

BELYAKOV, M.F.

AID P - 1135

Subject : USSR/Mining

Card 1/1 Pub. 78 - 13/25

Author : Belyakov, M. F/

Title : ~~Geothermal measurements in Belorussia~~
Geothermal measurements in Belorussia

Periodical : Neft. khoz., v. 32, #11, 50-51, N 1954

Abstract : A study of temperature variation in wells at different depths by the resistance thermometer is presented. Temperature rapidly increases with the well depth. However, mean temperature difference per 100 meters of depth decreases with depth. Two tables and 3 Russian references (1949-1952).

Institution : None

Submitted : No date

SSR

6.7-216 551.526.4
Bellakov, M. P. Geotermicheskie nabliudeniya v Kryme v XIX stoletii. [Geothermal observations in the Crimea during the 19th century.] *Vestnik Gosgeolnauki SSSR*, 86(1):100-102, Jan./Feb. 1954. graph, table, 9 refs. DLC—Geothermal observations began in the Crimea in 1877 in a deep artesian bore about 70 km north of Simferopol. This is known as the Albarsk bore and it reached a depth of 796 m. The temperature measurements are given in a table and their reliability is analyzed. Subject Headings: 1. Well temperatures 2. Geothermal investigations 3. Crimea.—I.L.D. *EL*

BELYAKOV, Mikhail Fedorovich; YARYSHEV, B.P., redaktor; SECHEKOTOV, P.A.,
vsduzhchiy redaktor; GENNAD'YEVA, I.M., tekhnicheskiy redaktor

[Geothermic observations in well boring and their interpretation]
Geotermicheskie nabludeniia v burovnykh skvazhinakh i ikh interpre-
tatsiia. Leningrad, Gos. nauchno-tekhn. izd-vo neftianoi i gorno-
toplivnoi lit-ry, Leningradskoe otd-nie, 1955. 37 p. (MIRA 9:12)
(Oil wells) (Earth temperature)

BELYAKOV, M.F.; GNEDOVETS, P.P., polkovnik, redaktor; SRIBNIS, N.V.,
tekhnicheskii redaktor.

[Orientation without maps; material for instruction] Orientiro-
vanie na mestnosti bez karty; materialy k obucheniiu. [Isd.-3-a
ispr. i dop.] Moskva, Voen.isd-vo Ministerstva obor. SSSR, 1955.
68 p. (MLRA 8:11)

(Orientation(Topography))

BELYAKOV, M.F.; GRIGOR'YEV, D.P.; SHAFRANOVSKIY, I.I.

In memory of B.IA.Osadchev. Zap.Yses.min.ob-va 84 no.4:504-505
'55. (MIRA 9:6)
(Osadchev, Boris IAKevlevich, 1912-1954)

BELYAKOU, M.F.; DZERUZHYNKI, A., redaktor; TRUKHANOVA, A., tekhnicheskii
redaktor

[Orientation without maps. Translated from the Russian] Aryentavanne
na miastsovasti bez karty. Peraklad z ruskaha vydannia. Minsk,
Dziarzh, vyd-va BSSR, 1956. 47 p. (MIRA 9:10)
(Orientation)

BELYAKOV, M.F.

KATCHENKOV, Semen Mikhaylovich; BELYAKOV, M.F., redaktor; GABIS, Ye.N.,
vedushchiy redaktor; GENNAD'IEVA, I.M., tekhnicheskiy redaktor

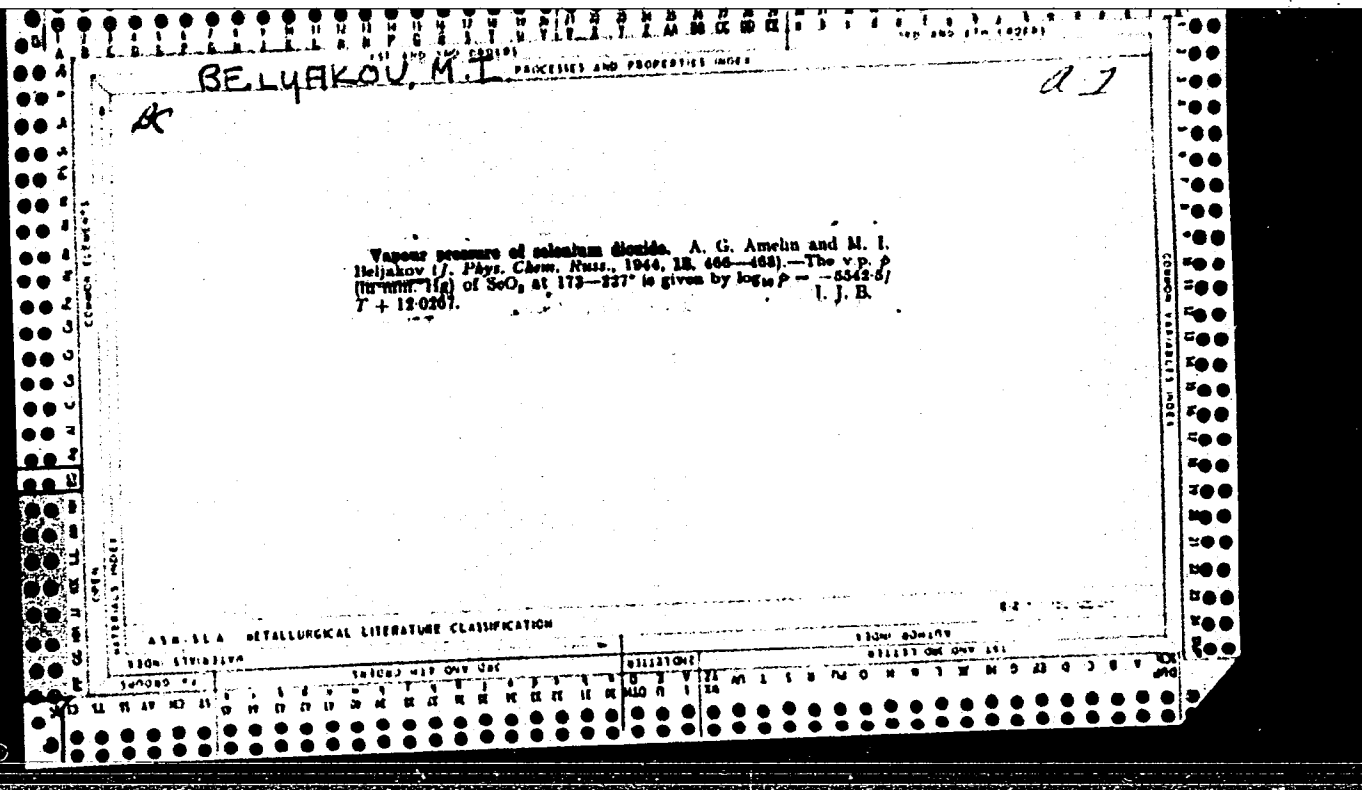
[Spectrum analysis of rock] Spektral'nyi analiz gornyykh porod.
Leningrad, Gos.nauchno-tekhn.isd-vo neft. i gorno-toplivnoi
lit-ry, Leningr.otd-nie, 1957. 214 p. (MIRA 10:7)
(Rocks--Spectra)

KATCHENKOV, Semen Mikhaylovich; PROKOF'YEV, V.K., prof.,
retsenzent; KLER, M.M., dots., retsenzent;
KHOKHLOV, V.V., nauchn. red.; FEDOTOVA, M.I., ved.
red.; BELYAKOV, M.F., dots., red.

[Spectrum analysis of rocks] Spektral'nyi analiz gor-
nykh porod. Izd.2., perer. i dop. Leningrad, Nedra,
1964. 271 p. (MIRA 18:1)

~~BELIAKOV, M.I.~~

Psychogenic depression in the legal psychiatric clinic. Probl.
sud.psikh. 8:167-189 '59. (MIRA 13:6)
(Depression, Mental)



BEL YAKOV, M. S.

U.S.S.R.

Regulation of the dispersity of liquid aerosols prepared by the condensation method. A. G. Anichin and M. I. Belvakov (Ya. V. Smolov, Sci. Inst. Ferrous Metallurgy, Moscow). *Kolloid. Zhur.* 47, 10-17 (1985); cf. *Theor. Basis of Mist Formation in Chem. Indus-try*, 1981. — The temp. distribution in the stream of hot vapor injected in cold air is shown in graphs. Air of 511° satd. with glycerol vapor was forced (at a const. vol. veloc-ity) through a nozzle of diam. d into cold atm. The av. particle size of the glycerol fog thus produced was greater the greater d ; it was, e.g., 1.8 μ for $d = 2.5$ mm. and 10 μ for $d = 60$ mm. The fog was more polydisperse at greater d . At small d , the linear rate of flow was greater and mixing was rapid; hence, the no. of nuclei was great and the droplet diam. small. Thus, the drop dimension in a con-densation fog can be varied at will. J. J. Hickey

Be

Smolov

Belyaev N. L.

BT. DETERMINATION OF DISPERSION OF LIQUID AEROSOLS. *Aselin, A. G.* *4*
St. (12) *HE 2a*

AM *arg*

4
2

Scattering of particles from a stream on obstacles. A. G. Ananin and M. I. Belyakov. Ser. Inst. Ya. V. Smol'kov. Pribl. i teoret. fizika. No. 2. Moscow. 1964. 11 p. 20 cm.

The scattering of particles from a stream on obstacles is investigated. The results of calculations are compared with experimental data. It is shown that the scattering of particles from a stream on obstacles is characterized by a certain regularity. The results of calculations are compared with experimental data. It is shown that the scattering of particles from a stream on obstacles is characterized by a certain regularity. The results of calculations are compared with experimental data. It is shown that the scattering of particles from a stream on obstacles is characterized by a certain regularity.

drops settled on the cylinder. The results of calculations are compared with experimental data. It is shown that the scattering of particles from a stream on obstacles is characterized by a certain regularity. The results of calculations are compared with experimental data. It is shown that the scattering of particles from a stream on obstacles is characterized by a certain regularity.

smaller than the earlier data of Ranz and Wong (Ref. 4). This is because the polydispersity of the fog was disregarded and, consequently, the value of β was too small in earlier papers.

I. Vozhichy Institut do usled. i inzh. i tekhnolog-
 isidam imeni professora Ya. V. Smoylova, Moskva.
 (Precipitation) (Chemistry)

1944
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Nauchnyy Inst. po udobreniyam i insektofungitsidam
imeni ya.V. Samoylova. Predstavleno akademikom
S.I. Vol'fkovichem.
(Fluid mechanics) (Otopsi)

SKORINA, Sergey Aleksandrovich [Skorina, S.O.]; BELYAKOV, M.I. [Bieliakov, M.I.], red.; NEMCHENKO, I.Yu., tekhn.red.

[Knowledge of soil is the basis for its correct use] Znannia
hruntiv - osnova pravyl'noho ikh vykorystannia. Kyiv, Derzh.
vyd-vo sel's'kohospodars'koi lit-ry URSR, 1961. 48 p. (MIRA 15:4)

(Crops and soils)

REPIN, A.M. [Riepin, A.M.], kand. sel'khoz. nauk; NAUMENKO, O.I.,
nauchnyy sotr.; BELYAKOV, M.I. [Biliakov, M.I.], red.;
NEMCHENKO, I.Yu. [Nemchenko, I.IU.], tekhn. red.

[Drying and storing seed and forage corn] Sushimua ta zbe-
rigannia nasinnoi i furazhnoi kukurudzy. Kyiv, Derzh. vyd-vo
sil'kohospodars'koi lit-ry URSR, 1961. 67 p. (MIRA 15:3)
(Corn (Maize))--Drying
(Corn (Maize))--Storage

KOVALYUSHKO, S.P.; BELYAKOV, M.I., red.; TOGOBITSKAYA, N.V.
[Tohobits'ka, N.V.], red.; KOVALENKO, O.I., red.;
DOBROVOL'SKIY, O.A. [Dobrovol's'kyi, O.A.], red.;
NAGORNIY, A.G. [Nahornyj, A.H.], red.; LEVITSKAYA, G.P.
[Levyts'ka, H.P.], red.; CHEREVATSKIY, S.A. [Cherevats'kyi,
S.A.], tekhn. red.

[Manual on production planning and organization on collective
and state farms] Dovidnyk po planuvanniu i organizatsii vy-
robnytstva v kolhospakh i radhospakh. Kyiv, Derzhsil'hosp-
vydav URSR, 1963. 935 p. (MIRA 16:12)
(Ukraine--Farm management--Handbooks, manuals, etc.)

DOLGINOVA, M.Ye.; BELYAKOV, M.I.; LITVINOV, S.N.

Light-weight portable pump with plastic parts for cleaning vessels.
Sbor.nauch.-tekh.inform.Azerb.inst.nauch.-tekh.inform.Ser.Mashinostroi.
prom. no.4:3-8 '62. (MIRA 18:8)

1. BELYAKOV, M. N.
2. USSR (600)
4. Fertilizers and Manures
7. Use of manganese tailings to stimulate growth of trees.
Les. khoz. 5 No. 10, 1952.

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

SERB, Petr Fedorovich; GOLUBEVA, K.A., inzh., retsenzent; MASLIY, K.Ye.,
suborez, retsenzent; ZHUKOV, P.A., kand.ekon.nauk, red.;
BELYAKOV, M.N., red.; MAGNITSKIY, A.V., red.; ROZENBERG, I.A.,
kand.ekon.nauk, red.; SMIRNITSKIY, Ye.K., kand.ekon.nauk, red.;
SUSTAVOV, M.I., inzh., red.; DUGINA, N.A., tkhn.red.

[Organizational and technical plan in the workshop] Orgtekhplan
na rabochem meste. Moskva, Mashgiz, 1960. 30 p. (Seria "Osnovy
konkretnoi ekonomiki," no.5). (MIRA 14:4)
(Sverdlovsk--Machinery industry)

TROYANOV, Andrey Konstantinovich; GOLUBEVA, K.A., inzh., retsenzent;
MASLIY, K.Ya., zuborez, retsenzent; ZHUKOV, M.N., red.; DANILOV,
V.L., red. vypuska; BELYAKOV, M.N., red.; ROZENBERG, I.A., kand.
ekon.nauk, red.; SMIRNITSKIY, Yek., kand.ekon.nauk, red.; SUSTA-
VOV, M.L., inzh., red.; DUGINA, N.A., tekhn.red.

[Organization of the manufacture of machinery] Kak organizovano
proizvodstvo mashin. Moskva, Mashgiz, 1960, 30 p. (Biblioteka
rabocheho mashinostroitel'ia. Seriya: "Osnovy konkretnoi ekono-
miki," no.2) (MIRA 14:5)

(Machinery industry)

BUSHMICH, German Adamovich; GOLUBEVA, K.A., insh., retsenzent; MASLIY, K.Ya., zuborez, retsenzent; ZHUKOV, P.A., kand.ekon.nauk, red.; URYASHOV, A.V., red. vypuska; BELYAKOV, M.N., red.; ROZENBERG, I.A., kand.ekon.nauk, red.; SMIRNITSKIY, Ye.K., kand.ekon.nauk, red.; SUSTAVOV, M.I., insh., red.; DUGINA, N.A., tekhn.red.

[Business accounting is accounting in a business-like manner]
Khozaschet - eto schet po-khoziaiski. Moskva, Mashgiz, 1960.
33 p. (Biblioteka rabochego mashinostroitel's: Seriya "Osnovy
konkretnoi ekonomiki," no.11) (MIRA 14:5)
(Machinery industry--Finance) (Sverdlovsk--Railroads--Cars)

VLASOVA, Antonina Aleksandrovna; DRUGALOVA, Zinaida Samuilovna;
ZHUKOVA, Larisa Mikhaylovna; GOLUBEVA, K.A., inzh., retsen-
zent; MASLIY, K.Ya., suborez, retsenzent; ZHUKOV, P.A., kand.
ekon.nauk, red.; SERAFIMOVICH, B.V., red. vypuska; ~~BELYAKOV,~~
~~M.N., red.;~~ ROZENBERG, I.A., kand.ekon.nauk, red.; SMIRNITS-
KIY, Ye.K., kand.ekon.nauk, red.; SUSTAVOV, M.I., insh., red.;
DUGINA, N.A., tekhn.red.

[How to increase labor productivity] Kak povysit' proizvodi-
tel'nost' truda. Moskva, Mashgiz, 1960. 37 p. (Biblioteka
rabochego mashinostroitelia: Seriya "Osnovy konkretnoi ekono-
miki," no.6) (MIRA 14:5)

(Machinery industry--Labor productivity)

RADUKIN, Viktor Pavlovich; GOLUBEVA, K.A., inzh., retsenzent; MASLIY, K.Ya., zuborez, retsenzent; ZHUKOV, P.A., kand.ekon.nauk, red.; VARAVKA, V.V., red. vypuska; BELYAKOV, M.N., red.; ROZENBERG, I.A., kand.ekon.nauk, red.; SMIRNITSKIY, Ye.K., kand.ekon.nauk, red.; SUSTAVOV, M.I., inzh., red.; DUGINA, N.A., tekhn.red.

[Labor organization in a workshop] Organizatsiia truda na rabochem meste. Moskva, Mashgiz, 1960. 46 p. (Biblioteka raboche-go mashinostroitelia: Seriia "Osnovy konkretnoi ekonomiki," no.4) (MIRA 14:5)

(Machinery industry--Labor productivity)

SMIRNITSKIY, Yevgeniy Konstantinovich; GOLUBEVA, K.A., inzh., retsen-
zent; MASLIY, K.Ya., zuborez, retsensent; ZHUKOV, P.A., kand.
ekon.nauk, red.; SITNIKOV, M.A., red. vypuska; BELYAKOV, M.N.,
red.; ROZENBERG, I.A., kand.ekon.nauk, red.; SMIRNITSKIY, Ye. K.,
kand.ekon.nauk, red.; SUSTAVOV, M.I., inzh., red; DUGINA, N.A.,
tekh.n.red.

[Machinery-industry worker and technological innovations] Ra-
bochii-mashinostroitel' i tekhnicheskii progress. Moskva,
Mashgiz, 1960. 49 p. (Biblioteka rabochego mashinostroitelia.
Seria: "Osnovy konkretnoi ekonomiki," no.1) (MIRA 14:5)
(Machinery industry--Technological innovations)

GLADIL'SHCHIKOV, Yevgeniy Ivanovich; GOLUBEVA, K.A., inzh., retsenzent;
MASLIY, K.Ya., zuborez, retsenzent; SHIROKOV, N.P., red. vypuska;
BELIAKOV, M.N., red.; GERKEN, I.V., dotsent, red.; ZHUKOV, P.A.,
kand. ekon. nauk, red.; ROZENBERG, I.A., kand. ekon. nauk, red.;
SMIRNITSKIY, Ye.K., kand. ekon. nauk, red.; SUSTAVOV, M.I., inzh.,
red.; DUGINA, P.A., tekhn. red.

[Let's economize on electric power] Berech' elektroenergiiu. Mo-
skva, Mashgiz, 1960. 43 p. (Biblioteka rabochego mashinostroitel'ia:
Seriiia "Osnovy konkretnoi ekonomiki," no.10) (MIRA 14:9)
(Electric power)

ROZENBERG, Ivan Aleksandrovich; GOLUBEVA, K.A., inzh., retsenzent; MASLIY, K.Ya., zuborez, retsenzent; ZHUKOV, P.A., kand.ekon.nauk, red.; PROKHOROV, V.F., red. vypuska; BELYAKOV, M.N., red.; ROZENBERG, I.A., kand.ekon.nauk, red.; SMIRNITSKIY, I.S., kand.ekon.nauk, red.; SUSTAVOV, M.I., inzh., red.; DUGINA, N.A., tekhn.red.

[From the shift plan to the national economic plan] Ot amennogo do narodnogo khoziaistvennogo plana. Moskva, Mashgiz, 1960. 45 p. (Biblioteka rabocheho mashinostroitel'ia: Seriya "Osnovy konkretnoi ekonomiki," no.3) (MIRA 14:5)
(Russia--Economic policy) (Industrial management)

GOLIKOV, Aleksandr Arsen'Yevich; POTEKUSHIN, Nikolay Vasil'yevich;
GOLUBEVA, K.A., inzh., retsenzent; MASLIY, K.Ya., zuborez,
retsenzent; ZHUKOV, P.A., kand.ekon.nauk, red.; VOLOSATOV,
A.Ya., red. vypuska; BELYAKOV, M.N., red.; KON'KOV, A.S.,
inzh., red.; ROZENBERG, I.A., kand.ekon.nauk, red.; SMIR-
NITSKIY, Ye.K., kand.ekon.nauk, red.; SUSTAVOV, M.I., inzh.
red.; DUGINA, N.A., tekhn.red.

[How to save metals] Kak luchshe ekonomit' metall. Moskva,
Mashgiz, 1960. 40 p. (Biblioteka rabochego mashinostroitelia.
Seria: "Osnovy konkretnoi ekonomiki," no.9) (MIRA 14:5)
(Metalwork) (Metals, Substitutes for)

SOV/10-58-7-20/21

AUTHOR: Belyakov, M.P., Engineer.

TITLE: Electricity supply sources with gas-turbine drive.
(Istochniki pitaniya s gazoturbinnym privodom)

PERIODICAL: Vestnik Elektromyshlennosti, 1958, Nr 7,
* pp 71-76 (USSR)

ABSTRACT: This is a review of published foreign work describing generators of normal and high frequency, driven by gas-turbines. The advantages of gas-turbines over piston engines for driving small sets are stated. Lists of 12 foreign gas turbines of up to 200 h.p., and of a further 16 in the range 200 - 500 h.p. are given in Tables 1 and 2 respectively. Gas-turbines that were on show at the Aircraft Exhibition at Farnborough in 1954 are described, with special mention of the Rover turbine with BT-H and Rotax generators. The Macfarlane set is also described; it is illustrated in Fig 3. Characteristics of the Rover gas-turbine are given in Fig 4. Airesearch (USA) gas turbines are described, and characteristics of one type are given in Fig 5. In April, 1955, the firm announced

Card 1/2

SOV/110-58-7-20/21

Electricity supply sources with gas-turbine drive.

that it had made 1500 engines that had worked 100,000 hours. The Allen emergency power supply for use on ships is described. Various other French, British, and American sets are mentioned. The list is said to be incomplete. Because of large-scale production, many of these foreign gas-turbines are relatively cheap and their use is often advantageous. There are 5 figures and 2 tables.

Card 2/2

SUBMITTED: July 2, 1957.

1. Gas turbines--Applications
2. Power supplies--Sources

BELIYAKOV, M.P., inzhener.

Foreign low-capacity gas turbines. Vest. mash. 37 no.7:79-89 J1
'57. (MIRA 10:8)

(Gas turbines) (Gas and oil engines)

BELYAKOV, M.P.

Design and experimental investigation of the air-gas flow area of the traction turbine of a gas-turbine engine. Avt.prom. 29 no.2:17-20 F '63. (MIRA 16:2)

1. Gosudarstvennyy soyuznyy ordena Trudovogo Krasnogo Znameni nauchno-issledovatel'skiy avtomobil'nyy avtomotorny institut.
(Gas turbines--Testing)

BELIAKOV, M.S. (gorod Komsomol'sk Ivanovskoy oblasti).

Study of inequalities in the 7th grade. Mat.v shkole no.6:59-64 N-D '53.

(MLBA 6:12)

(Inequalities (Mathematics))

BELYAKOV, M.S.

BELYAKOV, M.S. (Komsomol'sk, Ivanovskaya oblast')

Tests in geometry in grade 6. Mat.v shkole no.6:37-39 N-D '57.
(MIRA 10:11)

(Geometry, Plane--Study and teaching)

BELYAKOV, M. V.

Vliyaniye meteorologicheskikh usloviy na rasprostraneniye ul'trakorotkikh voln (Influence of Meteorological Conditions on the Propagation of Ultra-short waves) Published by Soviet Radio, Moscow, 1948, 108 pages with illustrations

SO: U-3039, 11 Mar 1953

PA 52/49T1

BELYAKOV, M. V.

USSR/Academy of Sciences

May/June 49

"New Books" 1 p

"Radiotekh" Vol IV, No 3

Lists five books: P. V. Shmakov's "Color Television," M. V. Belyakov's "The Influence of Meteorological Conditions on the Propagation of Ultrashort Waves," G. A. Remez's "Radio Testing," G. Khol'man's "Generation and Amplification of Decimeter and Centimeter Waves," and N. P. Bogoroditskiy and I. D. Fridberg's "High-Frequency Inorganic Dielectrics."

52/49T1

BELYAKOV, M. [V.]

"Radar Techniques in Meteorology," Radio, No 1, pp 17-19, 1953

In discussing the use of radar in determining wind motion, claim is made that wind velocity and direction was determined with a pulsed radar for the first time by Soviet specialists at the Cent Aero Obser in 1943. Also discusses radar indication of clouds and precipitation. Examples are given of the use of radar in aviation, in the merchant marine, and in agriculture to obtain warnings of dangerous weather phenomena.

253T70

BELYAKOV, M. V.

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Belyakov, Mikhail Vasil'evich. Atmosfera. [The atmosphere]. Moscow, Izd-vo Tekhnika-Teorret. Litry. 1955. 62 p. 27 figs. Nauchno Popularizatsionnaya Biblioteka. DLC-A popular brochure (150 000 copies) giving the best facts concerning the physical and chemical

properties of the atmosphere (pressure, temperature, water vapor, wind, snow, lightning, storms, structure, composition, outer atmosphere, etc.) and some sketches by accounts of hurricanes, floods, tornadoes, tidal waves and other dramatic features of world weather. Illustrations are mostly schematic drawings. Subject Heading: Popular meteorology pamphlets.

-M.R.

NR MT

3(7)

PHASE I BOOK EXPLOITATION

SOV/2904

Belyakov, Mikhail Vasil'yevich

Pogoda i.yeye predvideniye (Weather Forecasting) Moscow, Gostekhizdat, 1958. 61 p. (Series: Nauchno-prosvetitel'naya biblioteka, vyp. 19) 50,000 copies printed.

Ed.: V.A. Mezentsev; Tech. Ed.: V.N. Kryuchkova.

PURPOSE: This booklet is intended for the general reader interested in the study of the weather.

COVERAGE: This is a popular account of the weather and the methods and techniques used in forecasting. The author outlines the history of meteorology and discusses the basic meteorological elements and instruments. Further, the book treats the possibilities of improving forecasting techniques and controlling weather. No references are given.

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AVAILABLE: Library of Congress (QC995.B388)		

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SHCHUKIN, Viktor Konstantinovich; BELYAKOV, M.V., nauchnyy red.;
MEZENTSEV, V.A., red.; ~~KRYUCHKOVA, V.F., tekhn.red.~~

[Attacking the sky] Shturm neba. Izd.2., perer. Moskva, Gos.
izd-vo fiziko-matem.lit-ry, 1959. 62 p. (Nauchno-populiarnaya
biblioteka, no.59) (MIRA 12:10)
(Atmosphere)

BELYAKOV, Mikhail Vasil'yevich; MEZENTSEV, V.A., red.; BRUDNO, K.F.,
tekhn.red.

[Atmosphere] Atmosfera. Izd.2., dop. Moskva, Gos.izd-vo
fiziko-matem.lit-ry, 1960. 70 p. (Nauchno-populiarnaia
biblioteka, no.78). (MIRA 13:9)
(Atmosphere)

BELYAKOV, M.V.

"Artificial earth satellites and the weather" by V.P.Petrov and
A.A.Sochivko. Reviewed by M.V.Beliakov. Meteor.i gidrol.
no.8:54-56 JI [i.e.Ag.] '62. (MIRA 15:7)
(Artificial satellites in meteorology) (Petrov, V.P.)
(Sochivko, A.A.)

BELYAKOV, Mikhail Vasil'yevich; KADER, Ya.M., red.; ZUDINA, M.P.,
tekhn. red.

[Ocean of air (Atmosphere of the earth)] Vozdushnyi okean
(atmosfera Zemli). Moskva, Voenizdat, 1963. 129 p.
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(Atmosphere)

BELYAKOV, M.V.

Scientific and popular literature on meteorology. Meteor. i
gidrol. no.3:55-57 Mr '63. (MIRA 16:3)
(Bibliography--Meteorology)

BELYAKOV, N., sud'ya vsesoyuznoy kategorii; KUUZ, A., sud'ya respublikanskoy kategorii

Sports competitions: results and conclusions. Voen. znan. 41
no.10:46 0 '65.

(MIRA 18:10)

BELYAKOV, N., sud'ya respublikanskoy kategorii

Sport of the strong and the resolute. Voen. znan. 38 no.10:32
0 '62. (MIRA 15:10)

(Aquatic sports)

BELYAKOV, N.

Boat crew training. Voen.znan.31[i.e.32] no.5:22 My '56.
(Boats and boating) (MLRA 9:9)

BELYAKOV, N., sud'ya respublikanskoy kategorii

Successes of the participants in the combined competition of
sea sports. Voen. znan. 40 no.12:41 D '62 (MIRA 18:1)

1. Zamestitel' glavnogo sud'i pervenstva Sovetskogo Soyuza
po morskomu mnogobor'yu.

BELYAKOV, N.A.

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Geology

See ILC

Беляков Н. А.

YERSHOV, A.V.; PUZYREV, I.V.; BELYAKOV, N.A.

High-capacity carding machine designed by the Ivanovo Scientific
Research Institute of the Textile Industry. Tekst. prom. 18 no.1:
22-23 Ja '58. (MIRA 11:2)

(Carding machines)

BELYAKOV, N.A.; PUZYREV, I.V.; NOSOV, G.I.

Some problems of the improvement of the carding machine developed
by the Ivanovo Scientific Research Institute of Textile Industry .
Nauch.issl.trudy IvNITI 25:42-50 '61. (MIRA 15:10)
(Ivanova—Carding machines)

BELYAKOV, N.A.; FUZYREV, I.V.; NOSOV, G.I.

Shortening the opening and scutching process by the use of
sawlike elements. Nauch.-issl.trudy IvNITI 26:3-23 '63.

(MIRA 18:4)