APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N.; ANCHEVSKIY, S.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).

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

ILLEGIBLE

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N.; SOLNYSHKIN, V.I.; SHRAMER, E.A.

Reaction of struvarite and accompanying minerals with [illegible] acid. (MIRA 18:5)
Dokl. AN SSSR 162 no.4:879-882 Je '65.

1. Institut gornogo dela im. A.A.Skochinskogo, 2. Chlen-korrespondent AN SSSR.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N.; SHRADER, E.A.

Interaction between microlite and certain reagents in flotation. Dokl. AN SSSR 162 no.1:147-149 My '65. (MIRA 18:5)

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

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

KOSTINA, L.V.; NAZAROVA, O.B.; [illegible] N. [illegible]; SOLNYSHKA N. V. [illegible]

Chemica [illegible] silicate on the [illegible] [illegible] 1382-1384 Ap [illegible]

1. Institut [illegible] AN SSSR (for [illegible]).

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, [illegible]N.; [illegible], [illegible].

Use of [illegible] jigging in [illegible] dressing. [illegible] met. 38 no.4:9-14 Ap '65. (MIRA 18:5)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

4

L 65105-65 EWP(e)/EWT(m)/EWP(t)/EWP(k)/EWP(z)/EWP(b) IJP(c) JD
ACCESSION NR: AP5021976 UR/0286/65/000/014/0038/0038
669.167.24

AUTHOR: Dekhanov, N. M.; Boytsov, L. I.; Zel'din, V. S.; Klassen, V. I.; Kurenkov, I. I.; Plaksin, I. N.; Runov, M. A.; Silayev, A. F.; Snezhko, P. F.

TITLE: A method for producing dispersed ferrosilicon powder. Class 18, No. 172853 35 B

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 14, 1965, 38

TOPIC TAGS: powder metal production, silicon alloy, iron alloy

ABSTRACT: This Author's Certificate introduces a method for producing dispersed ferrosilicon powder with a particle size of no more than 100 microns by vaporizing the molten material using hot or cold air. The yield of fine particles is increased and spherical grains are produced by heating the melt in the 1550-1650°C range and passing it through a silicified sleeve with a valibrated opening which guarantees a constant flow of metal. The melt is then sprayed and the particles are separated according to size.

ASSOCIATION: none

SUBMITTED: 19Oct63 ENCL: 00 SUB CODE: MM

NO REF SOV: 000 OTHER: 000

Card 1/1 MEP

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N.; SHAFEYEV, R.Sh.; CHANTURIYA, V.A.

Characteristics of the fixing of oxygen treated oleic acid on the surface of rutile and zircon. Izv. vys. ucheb. zav.; tsvet. met. 8 no.1:18-20 '65. (MIRA 18:6)

1. Institut gornogo dela imeni Skochinskogo.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N., otv. red.; MAKARENKO, M.G., red.

[Flotation properties of rare-metal-containing minerals] Flotatsionnye svoistva mineralov redkikh metallov. Moskva, Nauka, 1965. 78 p. (MIRA 18:4)

1. Moscow. Institut gornogo dela imeni A.A.Skochinskogo.
2. Chlen-korrespondent AN SSSR (for Plaksin).

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, Igor' Nikolayevich; SHAFEYEV, Rafael' Sharifovich; CHANTURIYA, Valentin Alekseyevich; VASIL'YEV, B.K., red.

[Effect of the surface heterogeneity of minerals on their interaction with flotation reagents] Vliianie geterogennosti poverkhnosti mineralov na vzaimodeistvie s flotatsionnymi reagentami. Moskva, Nauka, 1965. 49 p.
(MIRA 18:4)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N.; MALYSHEVA, N.G.; STARCHIK, L.P.

Use of the neutron absorption method in determining mercury in enriched products. Zav. lab. 30 no.7:824-825 '64.
(MIRA 18:3)

1. Institut gornogo delaimeni Skochinskogo.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N.; GOL'DIN, M.L., kand.tekhn.nauk

Theory of the radioisotope method of controlling the total content of iron in the pulp. Izv.vys.ucheb.zav.:gor.zhur. 7 no. 1:189-194 '64. (MIRA 17:5)

1. Institut gornogo dela imeni A.A.Skochinskogo. Rekomendovana seminarom otdela obogashcheniya poleznykh iskopayemykh.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N.; CHIKIN, Yu.M.inzh.; LEVINSKIY, B.V., inzh.

Depressant action of humate ions on the flotation of magnetite by means of cation collectors. Izv. vys. ucheb. zav.; gor. zhur. no.8:152-157 '64 (MIRA 18:1)

1. Chlen-korrespondent AN SSSR, Institut gornogo dela imeni A.A. Skochinskogo (for Plaksin). 2. Irkutskiy gosudarstvennyy nauchno-issledovatel'skiy institut redkikh metallov (for Chikin, Levinskiy). Rekomendovana otdelom obogashcheniya poleznykh iskopayemykh Instituta gornogo dela imeni A.A. Skochinskogo.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N.; CHIKIN, Yu.M.

Investigation of the effect of oxidized resole and its sulfonation product in ilmenite and magnetite flotation. Izv. vys. ucheb. zav., tsvet. met. 7 no.5:23-28 '64 (MIRA 18:1)

1. Institut gornogo dela AN SSSR.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

[illegible] (Moskva), CHANTURI [illegible]

Influence of [illegible] on the state of the [illegible] oleic acid under [illegible] conditions. Izv. AN SSSR. Met. [illegible] (MIRA [illegible]) dele no. [illegible] 164.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N. (Moskva)

Ion exchange and extraction in hydrometallurgy. Izv. Akademii nauk SSSR. Met. i gor. delo no.6:32-40 N-D '64. (MIRA 18:1)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

MIAKSIN, I.N. (Moskva), NAZAROVA, G.N. (Moskva)

Characteristics of the interaction of sodium diosobutyrate with ions during flotation. Izv. AN SSSR. Met. i gor. dela no.4:167-171 Jl-Ag '64. (MIRA 17:9)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

BOBIKOV, P.I. (Moskva); PLAKSIN, I.N. (Moskva)

Theory of the industrial separation of metals by exchange recovery. Izv. AN SSSR Met. i gor. delo no.3:107-115 My-Je'64

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N. (Moskva); ANFIMOVA, Ye.A. (Moskva)

Using a combination of methyl and high molecular xanthates in flotation processes. Izv. AN SSSR. Met. i gor. delo no.1: 184-188 Ja-F '64. (MIRA 17:4)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, Igor' Nikolayevich; [illegible], [illegible]

[Hydrometallurgy with the use of [illegible] lurgila s primeneniem ionitov. [illegible], 1964. 282 p. (MIRA 18:1)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N.; KARMAZIN, V.I.; OLOFINSKIY, N.F.; MORKIN, V.V.; KARAMZIN, V.V.; MAKARENKO, M.G., red.

[New trends in the concentration of disseminated iron ores] Novye napravleniia glubokogo obogashcheniia tonkovkraplennykh zheleznykh rud. Moskva, Izd-vo "Nauka," 1964. 202 p. (MIRA 17:4)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N., otv. red.

[Dressing of fine classes of minerals] Obogashchenie tonkikh klassov poleznykh iskopaemykh. Moskva, Nauka, 1964. 49 p. (MIRA 17:11)

1. Moscow. Institut gornogo dela imeni A.A. Skochinskogo.
2. Chlen-korrespondent AN SSSR.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I. N.; OKOLOVICH, A. M.; NAZAROVA, G. N.

"The use of some of the alkyl aryl sulphonates as foaming agents in the flotation process."

report submitted for 7th Intl Mineral Processing Cong, New York, 20-25 Sep 64.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N.; SHAPIRO, I.S., kand.ekonom.nauk

Review of B.I.Kogan's book "Economic notes on rare earths." Gor. zhur. no.8:79-80 Ag '63. (MIRA 16:9)

1. Chlen-korrespondent AN SSSR (for Plaksin).
(Rare earths) (Kogan, B.I.)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N. (Moskva)

Mineral dressing in the Ukrainian S.S.R. Izv. AN SSSR. Otd. tekh. nauk. Met. i gor. delo no.4:15-21 Jl-Ag '61. (MIRA 14:10)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N.; SHAFEYEV, R.Sh.; CHANTURIYA, V.A.

Electrochemical surface properties of ilmenite, rutile, and ilmenorutile as interrelated with their flotation characteristics. Dokl. AN SSSR 152 no.6:1405-1407 O '63. (MIRA 16:11)

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

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N.; SOLNYSHKIN, V.I.; CHAPLYGINA, Ye.M.

Effect of oxygen on oleic acid. Dokl. AN SSSR 153 no.6: 1350-1352 D '63. (MIRA 17:1)

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

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLA[redacted]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. i tekh. eksp. 8 no.5:210-211 S-O '63. (MIRA 16:12)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N.; OLOFINSKIY, N.F., kand.tekhn.nauk; NOVIKOVA, V.A., inzh.

Triboelectric separation of asbestos materials. Nauch. soob. IGD 19:3-12 '63. (MIRA 17:2)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N.; SHIVRIN, G.N.

Nonequivalent extraction of certain acids and alkaline cyanide by alkyl amines. Dokl. AN SSSR 150 no.5:1104-1106 Je '63. (MIRA 16:8)

1. Moskovskiy institut stali i splavov. 2. Chlen-korrespondent AN SSSR (for Plaksin).
(Acids) (Alkali metal cyanides) (Amines)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

L 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

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

L 12836-63 EWT(m)/BDS AFFTC/ASD 52

ACCESSION NR: AP3003223 S/0020/63/150/006/1270/1273

AUTHOR: Pleksin, 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) 19

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 pressure of heavier elements. Polonium^{210} 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

Card 1/2

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N.; SHIVRIN, G.N.

Mechanism of extraction with amines in an alkaline medium. Dokl. AN SSSR 150 no.4:870-873 Je '63. (MIRA 16:6)

1. Moskovskiy institut stali i splavov. 2. Chlen-korrespondent AN SSSR (for Plaksin).
(Extraction(Chemistry)) (Amines)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N.; TETARU, S.A.

Extracting xanthates from solutions and from the liquid phase of flotation pulps in gold recovery and molybdenum plants. TSvet. met. 36 no.6:19-20 Je '63. (MIRA 16:7)

(Xanthic acid) (Ion exchange)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N.

Complete utilization of mineral resources. Vest.AN SSSR 33 no.2:51-55 F '63. (MIRA 16:2)

1. Chlen-korrespondent AN SSSR.
(Mines and mineral resources)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N. (Moskva); TETARU, S.A. (Moskva)

Effect of the polarization of xanthates on the elutriation with ion-exchange resins. Izv. AN SSSR. Otd. tekh. nauk. Met. i gor. delo no.3:130-131 My-Je '63. (MIRA 16:7)
(Ion exchange) (Xanthic acid)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N. (Moskva)

Full use of raw minerals and the objectives of science in the field of mineral dressing. Izv. AN SSSR. Otd. tekh. nauk. Met. i gor. delo no.3:42-49 My-Je '63. (MIRA 16:7)
(Minerals) (Ore dressing)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N.; OKOLOVICH, A.M.; POPOV, R.L.

Residual concentration of xanthate following the flotation process in ore dressing plants. Izv. AN SSSR. Otd. tekh. nauk. Met. i gor. delo no.1:204-208 Ja-F '63. (MIRA 16:3)

(Flotation—Equipment and supplies)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N., otv. red.; MAKARENKO, M.G., red.; LAUT, V.G., tekhn. red.

[Ore dressing and coal preparation] Obogashchenie rud i uglei. Moskva, Izd-vo AN SSSR, 1963. 210 p. (MIRA 16:11)

1. Akademiya nauk SSSR. Institut gornogo dela. 2. Chlen-korrespondent AN SSSR (for Plaksin).
(Ore dressing) (Coal preparation)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, Igor' Nikolayevich; ZYRYANOV, Mikhail Nikolayevich; CHERNOV, A.N., red.izd-va; LAUT, V.G., tekhn. red.

[Complete treatment of lead-zinc ores] Kompleksnaia pererabotka svintsovo-tsinkovogo syr'ia. Moskva, Izd-vo Akad. nauk SSSR, 1963. 151 p. (MIRA 16:5)
(Nonferrous metals) (Ore dressing)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N.; ZAYTSEVA, S.P.; MYASNIKOVA, G.A.; TYURNIKOVA, V.I.; KHAZHINSKAYA, G.N.; MAKARENKO, M.G., red. izd-va; VOLKOVA, V.V., tekhn. red.

[Use of radiiactive isotopes in studying flotation] Primenenie radioaktivnykh izotopov dlia issledovaniia protsessov flotatsii. Moskva, Izd-vo Akad. nauk SSSR, 1963. 97 p. (MIRA 16:5)

(Flotation) (Radioisotopes)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N.; BARYSHEVA, K.F.; NAZAROVA, G.N.

Stability of monazite depression by the SiF_6^{2-} ion as dependent on the pH of the medium. Dokl. AN SSSR 146 no.5:1139-1140 (MIRA 15:10)

1. Chlen-korrespondent AN SSSR (for Plaksin).
(Monazite) (Sodium fluosilicate) (Flotation)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N.; BEYLIN, A.Yu.

Theory of the sorption of complex cyanide anions on certain anion exchangers. Dokl.AN SSSR 145 no.3:621-623 Jl '62. (MIRA 15:7)

1. Chlen-korrespondent AN SSSR (for Plaksin).
(Cyanides) (Ion exchange)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N.; ZAYTSEVA, S.P.

Microautoradiographic study of the controlling action of oxygen on the adsorption and distribution of (C^{14}-containing) sodium tridecylate on certain minerals of the rare earth group. Dokl. AN SSSR 144 no.4:857-860 Je '62. (MIRA 15:5)

1. Institut gornogo dela im. A.A.Skochinskogo AN SSSR. 2. Chlen-korrespondent AN SSSR (for Plaksin).
(Rare earths) (Tridecanoic acid) (Oxygen) (Adsorption)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N.; SOLNYSHKIN, V.I.

Light absorption by nonsulfide minerals in the 10-micron infrared region. Dokl.AN SSSR 144 no.1:186-188 My '62. (MIRA 15:5)

1. Institut gornogo dela im. A.A.Skochinskogo AN SSSR.
2. Chlen-korrespondent AN SSSR (for Plaksin).
(Minerals--Spectra)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N.; TETARU, S.A.

Sorption of alkali metal xanthates by anion exchangers. Dokl. AN SSSR 143 no.3:653-654 Mr '62. (MIRA 15:3)

1. Krasnoyarskiy institut tsvetnykh metallov im. M.I.Kalinina.
2. Chlen-korrespondent AN SSSR (for Plaksin).
(Xanthic acids)(Ion exchange resins)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

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)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N.; SHAFEYEV, R.Sh.

Influence of the size of galena particles on the fixation of flotation collector reagents. Dokl. AN SSSR 142 no.1:131-133 Ja '62. (MIRA 14:1)

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

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N., prof. dr.; TATARU, S., ing.

Use of ion exchange in some flotation and hydrometallurgical processes. Rev min 13 no.6:233-239 Je '62.

1. Membru corespondent al Academiei de Stiinte din U.R.S.S. (for Plaksin).

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

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, B_2O_3, and CaF_2 in a sample containing ascharite. The boron content is determined from $N_{B_2O_3} = N_{2.2} - C'_{Be}N_{3.4}$, where $C'_{Be} = N_{2.2}/N_{3.4}$ for pure beryl. Fluorite is determined from $N_{CaF_2} = N_{1.2} - C_B N_{2.2} + KN_{3.4}$, where $K = C'_{Be}C_B - C''_{Be}$. $C''_{Be} = N_{1.2}/N_{3.4}$ for pure beryl and $C_B = N_{1.2}/N_{2.2}$ for pure ascharite. There are 4 figures.

SUBMITTED: March 9, 1962

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

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 γ-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 $Be^9(\alpha, n)C^{12}$ emits γ-quanta of 4.45 and 7.65 Mev which are characteristic of this reaction on Be^9. (2) F: In the reaction $F^{19}(\alpha, n)Na^{22}$ the final nucleus emits 0.62-Mev γ-quanta, and in the reaction $F^{19}(\alpha, p)Ne^{22}$ the Ne^{22} emits 1.24- and 1.5-Mev γ-quanta. (3) B: The reac-

Card 1/3

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N.; DEYEV, Yu.S.; STARCHIK, L.P.

Method for preparing polonium alpha emitters of low activity.
Atom. energ. 12 no.4:322-324 Ap '62. (MIRA 15:3)
(Alpha rays)
(Polonium)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N.; TETARU, S.A.

Some quantitative regularities of xanthic acid adsorption by ionites. Izv.vys.ucheb.zav.; tsvet.met. 5 no.3:27-31 '62. (MIRA 15:11)

1. Krasnoyarskiy institut tsvetnykh metallov, kafedra metallurgii blagorodnykh metallov.

(Xanthic acid) (Adsorption)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N.; SHRADER, E.A.

Quantitative determination of dixanthogen by the polarographic method. Izv.vys.ucheb.zav.; tsvet.met. 5 no.1:41-43 '62. (MIRA 15:2)

1. Institut gornogo dela AN SSSR.
(Flotation--Equipment and supplies) (Polarography)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N.; SOLOV'YEVA, L.R.

Study of the interaction of the surface of a sulfide mineral with the xanthate method of measuring electrode potentials. Nauch. soob. IGD 16:3-13 '62. (MIRA 16:3)

1. Chlen-korrespondent AN SSSR (for Plaksin).
(Sulfides--Electric properties)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

LOPATINA, G.I.; PLAKSIN, I.N., nauchnyy rukovoditel'; SUVOROVSKAYA, N.A., doktor tekhn.nauk, nauchnyy rukovoditel'

Use of ion exchange for exchange for extracting minerals. Nauch. soob.IGD 14:142-143 '62. (MIRA 16:1)

1. Chlen-korresponddent AN SSSR (for Plaksin).
(Ion exchange) (Ore dressing)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

S/180/62/000/006/022/022
E193/E383

Recovery of rare-earth ....

SUBMITTED: March 4, 1962

Table 1:

Product	Composition, %						
	TR_2O_3	Fe	CaF_2	CaO	SiO_2	MgO	Mn
Crude fluorite-rare-earth concentrate	11.1	7.9	49.0	6.0	8.0	1.2	0.2
Rare-earth flotation concentrate	19.0	12.0	10.0	6.7	22.0	0.5	0.1
Rare-earth flotation biproduct	18.0	2.3	37.0	10.0	4.9	1.0	0.1

Card 4/5

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

are reproduced in Table 3. Based on these results, a method of extracting rare-earth metals from various starting materials was developed; the flow sheet of the process is given in the paper. Finally, the possibility of using tributyl phosphate to extract rare-earth metals directly from the pulp was studied. A crude, fluorite rare-earth metal concentrate, mixed with 50% HNO_3 solution (liquid/solid ratio = 1:1), was stirred for 15 min after which tributyl phosphate (organic phase/water ratio = 2:1) was added to the pulp. The pulp, heated to 80 °C, was agitated for one hour, cooled to 25 - 200 °C, agitated again for 10 min and then left to settle. Tributyl phosphate was then decanted and the second stage of extraction was carried out with a fresh quantity of tributyl phosphate. After two operations 79% recovery of TR_2O_3 was attained. This value could be increased to 89.4% by adding to the pulp 1% of Al_2O_3 in the form of aluminium nitrate. The difficulties in attaining a higher recovery by this method were apparently associated with losses of tributyl phosphate and this problem requires further study.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

rare-earth metals from nitric-acid solutions with the aid of tributyl phosphate was studied in the second stage. The results of preliminary experiments showed that with increasing concentration of the rare-earth elements in the solution, both the separation coefficient and the recovery increased (in the case of a solution containing TR_2O_3 0.5-3.8%, Ca 0.2-2.5% and Fe 0.2-0.8% the recovery of TR_2O_3 amounted to 57%, the corresponding figure for Fe and Ca being 3-4% only). The addition of NH_4NO_3 to the solution increased the separation coefficient to 1.5-1.7, the recovery attained being 95%. Increasing the organic phase/water ratio increased both the separation coefficient and recovery of TR_2O_3 in tributyl phosphate. The presence of Ca, Fe, Mg, Mn and Al also increased the recovery of TR_2O_3. The preliminary experiments were followed by tests on an industrial solution containing 1.96% TR_2O_3, 2.3% CaO, 0.46% Fe and 18% HNO_3. The organic phase/water ratio was 1:2, mixing time 10 min and settling time 1 hour. The results obtained after six extraction operations

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

S/180/62/000/006/022/022
E193/E383

AUTHORS: Plaksin, I.N., Barysheva, K.F. and Astaf'yeva, A.V. (Moscow)

TITLE: Recovery of rare-earth metals by the extraction method

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye tekhnicheskikh nauk. Metallurgiya i toplivo, no. 6, 1962, 185 - 191

TEXT: The nature and chemical analysis of the experimental materials are given in Table 1. The first stage of the investigation comprised acid (HNO_3 or HCl) leaching tests in which the effect of the following factors on the recovery of rare-earth elements was studied: acid concentration; leaching temperature; solid/liquid ratio and leaching time. Two methods of leaching were tested: agitating the pulp for one hour at 80 - 90 °C and filtering the product; vacuum percolation for one hour at 70 - 80 °C. The best results were obtained with a 50 - 60% nitric-acid solution, a liquid/solid ratio of 2:1 and leaching time and temperature of one hour and 80 - 90 °C, respectively. 84-96% recovery was attained under these conditions. The extraction of

Card 1/5

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

KUZNETSOVA, Yu.S. (Moskva); PLAKSIN, I.N. (Moskva); SUVOROVSKAYA, N.A. (Moskva)

Extraction of rare earths from hydrochloric acid solutions. Izv.AN SSSR. Otd.tekh.nauk. Met.i topl. no.4:59-61 Jl-Ag '62. (MIRA 15:8)

(Rare earths) (Hydrochloric acid)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N.

Prospects of developing new methods of mineral dressing. Izv. AN SSSR. Otd. tekh. nauk. Met. i topl. no.2:9-14 Mr-Ap '62. (MIRA 15:4)

(Ore dressing)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

VASIL'YEV, Mikhail Vasil'yevich; GOLUBKOVA, V.A., red.; PLAKSIN, I.N., nauchnyy red.; KARASIK, N.P., tekhn. red.

[Metals and man] Metally i chelovek. Moskva, Izd-vo "Sovetskaia Rossiia," 1962. 415 p. (MIRA 15:7)

1. Chlen-korrespondent Akademii nauk SSSR (for Plaksin).
(Metals)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

VAL'TER, Anton Karlovich; PLAKSIN, Igor' Nikolayevich; GOL'DIN, Mikhail L'vovich; SAVITSKIY, P.S., inzh., otv. red.; KURILOVA, T.M., red.; TROFIMENKO, A.S., tekhn. red.

[Automatic density control of iron-ore flotation pulps with the help of gamma rays] Avtomaticheskii kontrol' plotnosti zhelezorudnoi pul'py gamma-luchami. Khar'kov, Izd-vo Khar'kovskogo univ., 1962. 243 p. (MIRA 16:6)
(Flotation) (Gamma rays--Industrial applications)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, Igor' Nikolayevich; CHAPLYGINA, Yevgeniya Mikhaylovna; MAKARENKO, M.G., red. izd-va; BOLLAD, A.N., tekhn. red. YEPIFANOVA, L.V., tekhn. red.

[Flotation of nonsulfide minerals using gases]Flotatsionnoe obogashchenie nesul'fidnykh mineralov s primeneniem gazov. Moskva, Izd-vo Akad. nauk SSSR, 1962. 134 p. (MIRA 16:1)
(Flotation)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N.; MELIK-STEPANOV, Yu.G.; SOKHIN, Yu.M.; MAKARENKO, M.G., red. izd-va; TIKHOMIROVA, S.G., tekhn. red.

[Dressing ores in heavy media]Obogashchenie rud v tiazhelykh sredakh. Moskva, Izd-vo Akad. nauk SSSR, 1962. 110 p. (MIRA 15:10)

(Ore dressing)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N., otv. red.; GLEMBOTSKIY, V.A., doktor tekhn. nauk, zam. otv. red.; KLASSEN, V.I., doktor tekhn. nauk, red.; OKOLOVICH, A.M., kand. tekhn.nauk, red.; TRET'YEKOV, O.V., red.; BARSKIY, L.A., kand. tekhn. nauk, red.; MAKOVSKIY, G.K., red. izd-va; GOLUB', S.P., tekhn. red.

[Ore dressing and coal preparation in the Kazakh S.S.R.; transactions of the out-of-town session in Balkhash and Karaganda, of the Section on Mineral Dressing of the Learned Council of the A.A.Skochinskii Mining Institute (November-December 1960)]Zadachi obogashcheniia rud i uglei Kazakhskoi SSR; trudy vyezdnoi sessii sektsii obogashcheniia poleznykh iskopaemykh Uchenogo soveta Instituta i gornogo dela im. A.A.Skochinskogo v gorodakh Balkhashe i Karagande, noiabr'-dekabr' 1960 g. Moskva, Izd-vo Akad. nauk SSSR, 1962. 173 p. (MIRA 15:10)

1. Chlen-korrespondent Akademii nauk SSSR (for Plaksin).
2. Institut gornogo dela im. A.A.Skochinskogo (for Plaksin, Glembotskiy, Okolovich, Klassen).
(Ore dressing) (Coal preparation)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N., KLASSEN, V.I.

"Methods of improving the process of froth flotation."

Report to be submitted for the 4th Intl. Coal Preparation Congress
Harrogate, Yorkshire, Great Britain 28 May-1 June '62.

Inst. of Mining, AS USSR

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

VLASOVA, Nina Sergeyevna; KLASSEN, Villi Ivanovich; FLAKSIN, Igor' Nikolayevich; KHAZHINSKAYA, G.N., otv. red.; MAKARENKO, M.G., red. izd-va; TIKHONIROVA, S.G., tekhn. red.

[Studying the action of reagents in coal flotation] Issledovanie deistviia reagentov pri flotatsii kamennykh uglei. Moskva, Izd-vo Akad. nauk SSSR, 1962. 169 p. (MIRA 15:4)
(Flotation)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

Use of (γ,n) nuclear reactions ... S/020/61/141/005/012/0[illegible]
B101/B144

recording the neutrons counted. A study by B. S. Aydarkin et al. [illegible] (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 [illegible] the English-language publication reads as follows: A. M. Gaudin [illegible] Pannel, Anal. Chem., 23, 1261 (1951).

SUBMITTED: August 12, 1961

Card 3/3

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

S/020/61/141/005/017/0[illegible]
B101/B144

Use of (γ,n) nuclear reactions ...

moderated in paraffin were recorded by an CHMO-5 (SNMO-5) counter with [illegible] CV-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 [illegible]. Li has a disturbing effect due to its large capture cross section. [illegible] 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 [illegible] mentation has to be prevented by an electrically driven impeller. [illegible] mination of Be was carried out in mixtures of $3BeO \cdot Al_2O_3 \cdot 6SiO_2$ [illegible] $KAlSi_3O_8$ (feldspar). The solid/liquid ratio has no effect. [illegible] 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 [illegible]

Card 2/2

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

2332

S/020/61/141/005/017/019
B101/B144

24100

AUTHORS: Plaksin, 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. Sb^{124} of 1-mcu activity was used as a gamma source placed in a paraffin block. 400-cm^3 bulbs containing solution or suspension were established into a cylindrical channel located in this block. The neutron

Card 1/3

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

Application of gamma quanta... S/020/61/141/004/019/019
B101/B110

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

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

and ПС-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

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

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: $B^{10}(\alpha,p)$. 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, УГД-1 (USD-1) attachment, УШ-2 (USh 2) wideband amplifier discriminator.

Card 2/4

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

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

AUTHORS: Pluksin, I. N., Corresponding Member AS USSR, Bolyakov, 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 determined 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 0.72-Mev gamma quanta are produced. Ne^{22} produced by the reaction $F^{19}(\alpha, p)Ne^{22}$

Card 1/4

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

LASKORIN, A.N.; SHIVRIN, G.L.; PLAKSIN, I.N.

Liquid extraction of complex cyanide compounds of gold and silver from alkaline solutions. Dokl. AN SSSR 139 no.5:1170-1172 Ap '61. (MIRA 14:8)

1. Chlen-korrespondent AN SSSR (for Plaksin).
(Gold cyanide) (Silver cyanide) (Complex compounds)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N.; SOLNYSHKIN, V.I.

Effect of sodium hydroxide solution on the absorption band of surface hydroxyl groups of certain silicates. Dokl. AN SSSR 139 no.4:936-937 Ag '61. (MIRA 14:7)

1. Institut gornogo dela im. A.A. Skochinskogo AN SSSR. 2. Chlen-korrespondent AN SSSR (for Plaksin).
(Sodium hydroxide) (Hydroxyl group--Spectra)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N.; TYURNIKOVA, V.I.; BARSKIY, L.A.

Investigating the effect of dispersing agents on the hydrolysis of sodium oleate. Dokl. AN SSSR 139 no.3:669-672 Jl '61. (MIRA 14:7)

1. Chlen-korrespondent AN SSSR (for Plaksin).
(Oleic acid) (Hydrolysis)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

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

Use of nuclear reaction (x,n) for the determination of certain elements in solutions. Dokl. AN SSSR 139 no.2:424-426 Jl '61. (MIRA 14:7)

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

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N.; SINEL'NIKOVA, A.I.; BEYLIN, A.Yu.

Use of anion exchangers for the regeneration of cyanide from complex salts. Dokl.AN SSSR 138 no.6:1399-1401 Je '61. (MIRA 14:6)

1. Chlen-korrespondent AN SSSR (for Plaksin).
(Cyanide process) (Ion exchange resins)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

Legend to Fig. 1:
Count of induced activity as a function of the content of tungstic anhydride in the mixture with scheelite and fluorite. Abscissae: content; ordinates: pulses/min.

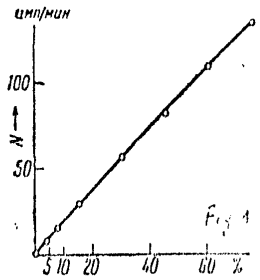


Fig. 1

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

that neutron-activation analysis may be used for determining tungsten in steel, in cermets, and also in cobalt- and titanium-containing hard metals, as the induced activity of cobalt and titanium may be reduced by waiting for 1.5 hr prior to counting. There are 1 figure and 6 references: 4 Soviet-bloc and 2 non-Soviet-bloc.

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

SUBMITTED: November 17, 1960

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

may be eliminated by using absorption filters for β-radiation of low energy (1.33 mev at W^{187}), and counting the activity twice. Fig. 1 presents a calibration diagram of the determination of scheelite mixed with fluorite. The radioactivity count is plotted as a function of the tungsten content. Its linearity permits the determination of scheelite in dressing products. The accuracy of determination may be increased by prolonging the time of counting of the induced radioactivity, as $T_{1/2}$ of W^{187} is comparatively high (24.1 hr). When counting for 30 min, the determination error of scheelite in the concentrate is 1.5%. The tungsten content in manganese-containing minerals (hübnerite) which have a large cross-section on thermal neutron capture may be determined from the γ-radiation by nuclear spectroscopy. Iron in ferberite has an (n, γ) cross-section of 0.001 barn per atom and thus can not be activated by a source of 8 curies (polonium). The molybdenum content in concentrates of molybdenum-scheelite ores is 4.5%. The $T_{1/2}$ of Mo^{101} being 14 min, the increase of the radioactivity count of the specimen as a result of molybdenum activation may be prevented by allowing to pass 1.5 - 2 hr before counting. Finally, the authors state

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

these ores, such as silicon, tin, calcium, iron, sulfur, magnesium, and nickel have a small (n, γ) cross section or appear in quantities which do not interfere with the tungsten determination. These are copper, arsenic, manganese, sodium, and phosphorus. The irradiation with neutrons was performed by a polonium-beryllium source with an activity of 8 curies referred to polonium. This source was placed in the center of a paraffin lump for neutron moderation. Boron-containing paraffin bricks and cadmium sheet protected against the neutrons. Lead was used for protection against the comparatively weak γ-radiation of the paraffin lump. A container with scheelite-containing dressing products was placed in the middle of the paraffin lump in which a channel was made. The induced activity was counted by an end-window counter in the Б-2 (B-2) apparatus on the basis of the β-radiation of the isotope W^{187}. The time of activation was 15 hr, and was sufficient to produce the desired activity of the specimen. The activity of the test specimen was increased by the accompanying elements during this time. In order to reduce the activity of the light elements (aluminum, silicon) in the specimen, 20 min were allowed to pass prior to counting. The authors found that the activity of magnesium, molybdenum, and copper

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

S/020/61/137/004/023/031
B103/B208

AUTHORS: Plaksin, I.N., Corresponding Member AS USSR, Slepchenko, I.F. and Starchik, L.P.

TITLE: Application of neutron-activation analysis for determining the tungsten content in minerals and dressing products

PERIODICAL: Doklady Akademii nauk SSSR, v. 137, no. 4, 1961, 880 - 881

TEXT: The authors used artificial radioactivity caused by neutrons for determining the tungsten content in minerals and dressing products by activation analysis. The difficulty encountered in the chemical separation of accompanying elements may be overcome by determining the principal component by this method. As tungsten has a (n, γ) cross section of 9.9 barns per atom, the radioactive isotope W^{187} ($T_{1/2}$ 24.1 hr) is obtained by artificial radioactivity. This permits tungsten determination by neutron-activation analysis. In the dressing products of tungsten during processing of scheelite ores, the scheelite quantity in the concentrate reaches several dozen per cent. Other elements accompanying tungsten in

Card 1/5

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

Application of radi[illegible]

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, [illegible]

Card 4/4

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

Application of radioluminescence ... S/020/61/136/005/031/032
B103/B208

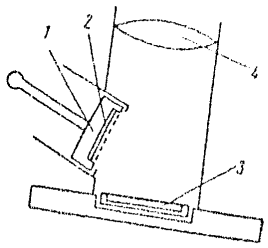
by means of a strong lens (1). The following safety measures are necessary: the Po-210 sources contaminate the surrounding objects by aggregate recoil. To counteract this, the Po-210 layer is screened by a protective film or a thin foil, which does not absorb α-radiation, or such a film may be also mounted 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 3 figures, 2 tables, and 5 Soviet-bloc references.

Card 3/4

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

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)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

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

Card 1/4

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N.; VIASOVA, N.S., kand.tekhn.nauk

Tasks in the development of new techniques for coal preparation. Ugol' 36 no.4:61-62 Ap '61. (MIRA 14:5)

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

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N.

Conference on problems of using radioactive isotopes in mining and mineral dressing. TSvet. met. 34 no.12:88-89 D '61. (MIRA 14:12)
(Radioisotopes--Industrial applications)
(Ore dressing--Congresses)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N.; LASKORIN, B.N., dotor tekhn.nauk; SHIVRIN, G.N., inzh.

Liquid extraction of complex gold and silver cyanides from cyanide solutions. TSvet.met. 34 no.9:20-23 S '61. (MIRA 14:10)

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

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N.

Out of town session, in the city of Balkhash, of the Section of Ore Dressing of the Learned Council, Institut of Mining Engineering of the Academy of Sciences of the U.S.S.R. TSvet. met. 34 no.2:84-86 F '61. (MIRA 14:6)

(Ore dressing--Congresses)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

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 ϕЭУ-1 (FEU-1), was fed via a "Kaktus" radiometer. This experimental setup was tested when determining scheelite with a 70-μcurie Po^{210} 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.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

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

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

TITLE: Po^{210}-α-indiced 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

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

PLAKSIN, I.N.; STARCHIK, L.P.

Using polonium 210 for separating minerals in a flow of ions caused by alpha rays. Izv. vys. ucheb. zav.; gor. zhur. no.11:162-166 '61. (MIRA 15:1)

1. Institut gornogo dela AN SSSR. 2. Chlen-korrespondent AN SSSR (for Plaksin).
(Separators (Machines)) (Alpha rays--Industrial applications)
(Minerals--Electric properties)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

BOCHVAR, A.A.; BELYAYEV, A.I.; PAVLOV, I.M.; PLAKSIN, I.N.; CHIZHIKOV, D.M.; PERLIN, I.L.

Petr Stepanovich Istomin; on his 80th birthday. Izv. vys. ucheb. zav.; tsvet. met. 4 no.4:161-163 '61. (MIRA 14:8)
(Istomin, Petr Stepanovich, 1881-)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6

LOPATIN, G.S.; PLAKSIN, I.N.

Extraction of gold, platinum and palladium by isoamyl alcohol. Izv. vys. ucheb. zav.; tsvet. met. 4 no.4:87-90 '61.(MIRA 14:8)

1. Krasnoyarskiy institut tsvetnykh metallov, kafedra metallurgii blagorodnykh metallov.
(Precious metals--Metallurgy)
(Isopentyl alcohol)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001341200048-6