Development of the Pacific Cod, Trudy Inst. Okeanology, 1957

MUKHACHEVA, V.A.; ZVYAGINA, O.A.

Development of the Pacific cod Gadus morhua macrocephalus Tilesius. Trudy Inst. okean. 31:145-165 '60. (MIRA 14:4)
(Codfish)

ZVYAGINA, O.A.

Materials on the reproduction and development of fishes in the Laptev Sea. Report No.1: East Siberian cod (Arctogadus borisovi, Gadidae). Trudy Inst.okean. 43:320-327 '61. (MIRA 14:6)
(Laptev Sea--Codfish)

ZVIAGINA, O.A.

Distribution of eggs of the Pacific mackerel Pneumatophorus japonicus (Houttuyn) and the mullet Mugil so-iuy Basilewsky in Peter the Great Bay. Trudy Inst.okean. 43:328-336 '61. (MIRA 14:6)
(Peter the Great Bay--Fishes--Eggs)
(Mackerel) (Great mullets)

BOROVIKOV, Ye. M.; ZVYAGINA, O. F.; PUZANOVA, A. A.

Nature of the deformation of frame saw blades in the rolled spots. Der. prom. 12 no.2:16-17 F '63. (MIRA 16:4)

1. Arkhangel'skiy lesotekhnicheskiy institut.

(Saws)

Ca

7

Determination of butyraldehyde. S. V. Alekseev and S. I. Zvyagina. *Sintet. Kauchuk* (U. S. S. R.) 1936, No. 9, 19–20.—A special *app.* was devised. The aldehydes were oxidized to acids with Ag_2O and the soln. made alk. with 1–2 cc. of 2 *N* KOH. Then all alcs., hydrocarbons, etc., were distd. off with steam. The residual soln. was made acid with 10–15 cc. of *N* H_2SO_4 and evapd. to dryness. The condensed acids were oxidized with 3–5 cc. of a mixt. of 1.5 g. $Fe(NH_4)(SO_4)_2.12H_2O$ in 1 l. of *N* H_2SO_4 and 3% H_2O_2. The aldehydes and ketones formed were distd. off into a 3rd flask and the aldehydes were oxidized with the Ag_2O mixt. 10–15 g. Ag_2O in 10–15 cc. of H_2O, 0.4 cc. of 0.1 *N* KOH and 0.5 cc. of *N* $MgSO_4$. Then the mixt. was distd. off, to the distillate was added 5 cc. of 2 *N* KOH, 20–25 cc. of 0.02 *N* I and HCl (1:11) to acidify it and it was titrated with $Na_2S_2O_3$. The accuracy 7–10% abs. Thirteen references. A. Petroff

ZVYAGINA, R.A.

Linear programming problems with partitioned matrices. Optim. plan. no.2:50-61 '64. (MIRA 18:6)

KUSAKIN, N.D.; SIGAREV, A.M.; ZVYAGINA, Ye.V.; Prinimali uchastiye: DOTSENKO, A.M.; KOKOREVA, M.A.; LYUBIMOVA, E.M.; SEMENOVA, L.V.

Investigating the gaseous medium surrounding carbon-graphite blanks during their baking in a multiple compartment ring kiln. TSvet. met. 37 no.10:51-54 O '64. (MIRA 18:7)

ZVYAGINA, Ye.V.

Statistical method for studying dwarf satellites of galaxies. Astron. zhur. 43 no. 1:34-39 Ja-F '66 (MIRA 19:2)

1. Gosudarstvennyy astronomicheskiy institut imeni P.K. Shternberga. Submitted June 1, 1965.

S/137/62/000/005/063/150
A006/A101

AUTHOR: Zvyagintsev, A. F.

TITLE: The relationship between the properties of initial forgings and the macrostructure of press-formed and rolled turbine disks

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 5, 1962, 6, abstract 5D35 (V sb. "Proiz-vo trub", no. 4, Khar'kov, Metallurgizdat, 1961, 163-168)

TEXT: The author analyzes the technique of producing blanks for turbine disks on a wheel-rolling mill, analogous to the production of railroad wheels. Simultaneously, information is given on the micro- and macro-structure of blanks intended for the manufacture of turbine disks. Moreover, characteristic deficiencies occurring in blanks produced by the given method, are dealt with.

A. Leont'yev

[Abstracter's note: Complete translation]

Card 1/1

36580
S/123/62/000/007/013/016
A004/A101

1.1700

AUTHOR: Zvyagintsev, A. F.

TITLE: Connection between the quality of initial forgings and the macrostructure of stamped and rolled turbine disks

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 7, 1962, 6, abstract 7V35 (V sb. "Proiz-vo trub", no. 4, Khar'kov, Metallurgizdat, 1961, 163-168)

TEXT: The author investigated the effect of the initial forging quality on the macrostructure of stamped and rolled turbine disks. The manufacture of the disk includes the forging of the initial cylindrical forging, preliminary upsetting on a 3,000-ton press, upsetting in a calibration ring on a 3,000-ton press, marking with a punch on a 3,000-ton press, die-forging on a 7,000-ton press, expanding on an expanding machine. In the cylindrical initial forgings 420 mm in diameter of alloyed or carbon steel, rods 20 mm in diameter were placed at a distance of 50, 110, 170 mm from the center. After each operation, one of the blanks was cooled and specimens were cut out to investigate, on the basis of the changes of the rods, the nature of metal flow. It was found that the disk hub is formed mainly on account of the forging zone which is limited

Connection between the quality ...

by radius r = 0.25 R_{forg} (R_{forg} - outer radius of forging, in this case 240 mm), and the zone of difficult deformation at the face ends. The disk band is produced from the forging zone which is located as in a tube, limited on one side by r = 0.25 R_{forg} and on the other side by r = 0.5 R_{forg}. The peripheral zone beginning at 0.5 R_{forg} is used to form the rim. If the initial forging possesses nonuniform and porous spots and other metallurgical defects located from the center at a distance of 0.5 R_{forg} and approximately in the central part of its height, the defective metal can be introduced into the rim or to the place of junction between the rim and the band. The flaws remain in the part also after expanding since the metal forming the disk periphery is not subjected to considerable all-sided compressive stresses. There are 6 figures.

V. Pavlyuchenko

[Abstracter's note: Complete translation]

ACCESSION NR: AR4018324 S/0137/64/000/001/D014/D014

SOURCE: RZh. Metallurgiya, Abs. 1D72

AUTHOR: Zvyagintsev, A. F.

TITLE: New method of manufacturing disks using existing equipment of wheel-rolling shops

CITED SOURCE: Sb. Proiz-vo trub. Vy*p. 9. M., Metallurgizdat, 1963, 141-148

TOPIC TAGS: Turbine manufacture, turbine disk, press processing, high alloy steel, high-alloy steel processing, press equipment conversion

TRANSLATION: Under existing manufacturing methods, large turbine disks are made of blanks, which are disk shaped and produced by smith forging. In machining such disks, a large quantity of metal becomes chips. For this reason, it was necessary to find methods of obtaining disks which would not entail substantial loss of metal. One of these methods is the pressing of blanks on press equipment of wheel-rolling shops. In the production of certain types of disks, the savings in metal reach 38%. The existing method of producing disks in wheel-rolling shops is tied to the fact

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ACCESSION NR: AR4018324

that the equipment (7,000-ton press) operates at the maximum rated pressure. This was an impediment in the production of disks of high-alloys on the press equipment of wheel-rolling shops. A new system of deformation of disk blanks was proposed, which would lower significantly the load of a 7,000-ton press. For this purpose, two unlike dies are suspended on the upper sliding plate of the cross-arm of the press. At first, the one of the dies deforms the central part of the blank, and then the other die deforms the peripheral part of it. The lower die remains fixed. Experimental blanks for disks made of EI481 and EI437B alloys were pressed according to the new technological scheme with only one heating, whereas using existing methods, heating on a continuous basis is required. The capacity of the 7,000-ton press was fully satisfactory for the production of blanks, even of such alloys as EI481 and EI437B. The forming of blanks by the new method does not require any basic alterations of existing presses. The new method provided a savings of metal of 30-40%, cuts labor consumption for machining by one-third, and increases equipment productivity to 20 times that of the old method. Schematic diagrams explaining the old and new manufacturing processes are cited; graphs of the change of the average specific pressure of alloys in dependence on the speed of deformation (for shrinkage) is given.

SUB CODE: MM ENCL: 00

ZVYAGINTSEV, A.F., kand. tekhn. nauk

Efficient functional diagram for a wheel-rolling mill. Proizv. trub no.10:122-126 '63. (MIRA 17:10)

L 42033-66 EWT(m)/EWP(w)/EWA(d)/EWP(v)/EWP(t)/EWP(k)/EWP(z)/EWP(b)/EWA(c)/ETC(f)

ACC NR: AT5022787 SOURCE CODE: UR/3164/64/000/014/0133/0137

IJP(c) JD/WW/HW/EM

AUTHOR: Zvyagintsev, A. F. (Candidate of Technical Sciences)

ORG: none

TITLE: Selection of technology for the production of turbine disk blanks with regard to the stress state at the focus of deformation

SOURCE: Dnepropetrovsk. Vsesoyuznyy nauchno-issledovatel'skiy i konstruktorsko-tekhnologicheskiy institut trubnoy promyshlennosti. Proizvodstvo trub, no. 14, 1964. Sbornik statey po teorii i praktike trubnogo proizvodstva (Collection of articles on the theory and practice of pipe production), 133-137.

TOPIC TAGS: turbine disk, tensile stress, metal rolling, production engineering, metal forging, material deformation

ABSTRACT: The authors point out that in the manufacture of turbine-disk blanks a production process causing numerous tensile stresses, especially during the deformation of alloys of low plasticity, favors the development of breaks and cracks, while a process involving compressive stresses favors the healing of cracks

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APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065720008-1"

L 12033-66
ACC NR: AT5022787

and improved quality of the blanks. The authors investigated two processes: 1) press forging followed by rolling on a wheel mill, and 2) repeated press forging without subsequent rolling. The latter gave better results. Orig. art. has: 7 figures.

SUB CODE: 13,11/ SUBM DATE: none/ ORIG. REF: 002

2/2

OC

ZVYAGINTSEV, A.F.; IVANOV, Yu.N.; KAZAKOV, V.E.; STETSENKO, A.M.; SOLOMOVICH, M.Ya.; KORZH, V.I.; DASHKEVICH, A.A.; Prinimali uchastiye: LIPTSEN, S.Kh.; RYZHIKOV, A.P.; STAL'NOKRITSKIY, V.N.; LEVENETS, L.Ye.; MOGILA, V.A.; KOVAL', A.A.; VLASOV, V.F.; ROSHCHIN, A.G.; RAYKO, V.P.; KORNIYENKO, V.G.; PANTYUSHKIN, N.V.

Investigating the possibility of manufacturing all-rolled electric locomotive wheels with existing equipment. Kuz.-shtam. proizv. 5 no.11:11-14 N '63.

(MIRA 17:1)

ACC NR: AP6009911 SOURCE CODE: UR/0413/66/000/004/0108/0108

AUTHOR: Barykin, N. A.; Barykina, S. V.; Zvyagintsev, A. M.; Izovskiy, V. L.

ORG: none

TITLE: An electropneumatic transducer. Class 42, No. 179100 [announced by Scientific Research Institute of Heat and Power Engineering Equipment (Nauchno-issledovatel'skiy institut teploenergeticheskogo priborostroyeniya)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 4, 1966, 108

TOPIC TAGS: pneumatic device, electromechanic converter, pneumatic servomechanism

ABSTRACT: This Author's Certificate introduces an electropneumatic transducer which contains an electromagnetic mechanism, lever, ball type indicator and power nozzles and an amplification relay with pressure amplification factor. The accuracy of the transducer is increased by using a cylindrical power nozzle and making the diameter of the indicator nozzle and its ball smaller than that of the power nozzle and ball.

UDC: 681.142-525

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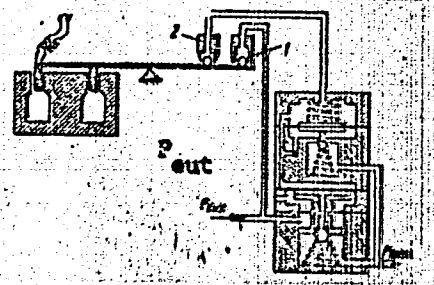
APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065720008-1

ACC NR: AP6009911



1--power nozzle; 2--indicator nozzle

control device

SUB CODE: 13/ SUBM DATE: 27Dec63/ ORIG REF: 000/ OTH REF: 000

Card 2/2

ZVYAGINTSEV, A. M.

Use of structural clamps instead of sunk keys. Geod. i kart no.4:73 Ap '60. (MIRA 13:8)

(Triangulation towers)

ZVYAGINTSEV, A.Ye., dotsent; VOROKHOBOV, L.K.

Intravenous and intraosseous anesthesia with tourniquet in children. Khirurgiia no.3:45-49 Mr '54. (MLRA 7:5)

1. Iz kliniki detskoy khirurgii II Moskovskogo meditsinskogo instituta im. I.V.Stalina (zaveduyushchiy kafedroy - professor S.D. Ternovskiy) na baze detskoy bol'nitsy im. N.F.Filatova (glavnyy vrach M.N.Kalugina)

(ANESTHESIA, LOCAL,
intraosseous with tourniquet in child)
(ANESTHESIA, INTRAVENOUS,
in child., with tourniquet)

ARENDT,A.A., prof.; ARTARYAN,A.A., kand.med.nauk; BAIROV,G.A.,prof.; VOLKOV,M.V., prof.; VARSHAVSKAYA, D.Ya., kand. med. nauk; VOROKHOBOV, L.A.; GENERALOV, A.I., kand. med. nauk; DANIYEL'BEK, K.V., kand. med. nauk; DERZHAVIN, V.M., kand. med. nauk; DOLETSKIY, S.Ya., prof.; YERMOLIN, V.N.; ZATSEPIN, S.T., kand. med. nauk; ZVYAGINTSEV, A.Ye., dots.; ISAKOV,Yu.F., doktor med. nauk; KOZYREV, V.A., kand. med. nauk; KONOVALOV, A.N.; KORNYANSKIY, G.P., prof.; KLIMANSKIY, V.A., kand. med. nauk; KLIMKOVICH, I.G., dots.; KONDRASHIN, N.I., kand. med. nauk LEVINA, O.Ya., kand. med. nauk; LENYUSHKIN, A.I., kand. med. nauk; LEYBZON, N.D., doktor med. nauk; MALININA, L.I., doktor med. nauk; MAREYEVA, T.G., kandidat meditsinskikh nauk; NERSESYANTS, S.I., kand. med. nauk; OVCHINNIKOV, A.A.; OGLEZNEV, K.Ya., kand. med. nauk; ROSTOTSKAYA, V.I., kand, med. nauk; STEPANOV, E.A., kand. med. nauk; EPSHTEYN, P.V.; OSTROVERKHOV, G.Ye., prof., glav. red.; DOMBROVSKAYA, Yu.F., prof., otv. red.

[Multivolume manual on pediatrics]Mnogotomnoe rukovodstvo po pediatrii. Moskva, Meditsina. Vol.9.[Pediatric surgery] Khirurgiia detskogo vozrasta. Red.toma S.IA.Doletskii. 1964. 654 p. (MIRA 17:9)

1. Deystvitel'nyy chlen AMN SSSR (for Dombrovskaya). 2. Chlen-korrespondent AMN SSSR (for Bairov, Volkov).

ZVYAGINTSEV, A.Ye.; VOLKOV, M.V.; DOLETSKIY, S.Ya.

No transl. Khirurgiia 32 no.10:84-85 O '56 (MIRA 12:7)
(BIOGRAPHIES
Ternovskiy, Sergei D.)

ZVYAGINTSEV, A.Ye.; VOLKOV, M.V.; DOLETSKIY, S.Ya.

Sergei Dmitrievich Ternovskii. Ortop., travm. i protez. 18 no.1: 78-79 Ja-F '57. (MLRA 10:6)
(TERNOVSKII, SERGEI DMITRIEVICH, 1896-)

ZVYAGINTSEV, A.Ye., dotsent; ZHELEZNYAKOVA, F.I.; GADZHIMIRZAYEV, G.A.

Surgical treatment of hypospadias in children. Urologiia 29 no.3:3-6 My-Je '64. (MIRA 18:10)

1. Klinika detskoy khirurgii (zav.- prof. I.K. Murashov) II Moskovskogo meditsinskogo instituta imeni Pirogova.

ZVYAGINTSEV, B.N.

Some statistical characteristics of the second derivative of the envelope of a normal random process. Radiotekh. i elektron. 10 no.4:749-754 Ap '65. (MIRA 18:5)

ZVYAGINTSEV, D.F., kapitan, voyenny letchik vtorogo klassa; BELKIN, G.N., kapitan, voyennyy shturman pervogo klassa

How we carry out aerial reconnaissance. Vest.Vozd.Fl. no.8:33-37 Ag '60. (MIRA 13:9)
(Aeronautics, Military--Observations)

ZVYAGINTSEV, D.G.; VINOGRADOVA, K.A.; AGRE, N.S.; PERTSOVSKAYA, A.F.

Natural (primary) fluorescence of actinomycetes. Mikrobiologiia 33 no.4:631-638 Jl-Ag '64. (MIRA 18:3)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

ZVYAGINTSEV, D.G.

Study of attaching micro-organisms with the help of fluorescence microscopy. Nauch.dokl.vys.shkoly; biol.nauki no.3:173-177 '65.
(MIRA 18:8)

1. Rekomendovana kafedroy biologii pochv Moskovskogo gosudarstvennogo universiteta.

MANTROVA, Yelizaveta Zakharovna; ZVYAGINTSEV, D.G., red.

[Fertilizers for ornamental plants] Udobrenie dekorativnykh rastenii. Moskva, Izd-vo Mosk. univ., 1965. 300 p. (MIRA 18:8)

ZVYAGINTSEV, D. G., Candidate of Biol Sci (diss) -- "The adsorption of microorganisms by soil particles". Moscow, 1959. 20 pp (Moscow Order of Lenin and Order of Labor Red Banner State U im M. V. Lomonosov, Soil-Biol Faculty), 120 copies (KL, No 20, 1959, 110)

ZVYAGINTSEV, D.G.

Activity of bacteria adsorbed by soil particles. Mikrobiologiia 28 no.4:527-533 Jl-Ag '59. (MIRA 12:12)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.
(SOIL microbiol.)
(BACTERIA)

ZVYAGINTSEV, D.G.

Fluorescence microscopy in the study of soil micro-organisms. Nauch.dokl.vys.shkoly; biol.nauki no.2:212-216 '59.
(MIRA 12:6)

1. Rekomendovana kafedroy biologii pochv Moskovskogo gosudarstvennogo universiteta im. M.V.Lomonosova.
(Fluorescence microscopy)
(Soil micro-organisms)

ZVYAGINTSEV, D.G.

Adsorption of micro-organisms by soil particles. Pochvovedenie no.2:19-25 F '62. (MIRA 15:3)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.
(Soil micro-organisms)

17(2) SOV/20-123-2-44/50

AUTHORS: Krasil'nikov, N. A., Corresponding Member, Academy of Sciences, USSR, Zvyagintsev, D. G.

TITLE: The Application of Fluorescent Microscopy in Incident Light to Soil Microflora Investigations (Primeneniye fluorestsentnoy mikroskopii v otrazhennom svete dlya izucheniya pochvennoy mikroflory)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 123, Nr 2, pp 366-367 (USSR)

ABSTRACT: The authors suggest a modification of the method of direct microscopic investigation of the soil microflora: instead of observing a soil-suspension in permeating blue light an undestroyed section of fresh soil is lighted by the mercury-quartz lamps SVDSh 250-2 and -3, and studied in the incident light. Thus, it was possible to see the natural normal distribution of microbes in the soil as well as their colonies on soil particles of any size. The staining method remained unchanged (Refs 1,2): fluoro chrome acridine orange. The color microphotographs (Figs 1-3) give an idea of the location of the microbe in the soil and of its main forms. It was possible to

The Application of Fluorescent Microscopy in Incident Light to Soil Microflora Investigations

find out that the soil microorganisms are placed in their natural state on the surface of soil particles. Only a few of them are floating freely in between. Some particles are densely (Fig 1 a), others, however, only weakly populated (Fig 1 b). They form colonies different in size (4-20 up to 100 and more individual microbes). Single cells, and chains occur relatively often. The bulk of the bacterial cells in the soil is in a state of ball- or coccus-like forms; smaller or bigger rods are rare. Mycelial hyphae of actinomycetes and fungi occur. Organic materials, such as peptone, saccharose, starch, and mannitol caused an impetuous development of microorganisms in humus. A lot of freely floating cells occurred. The authors successfully applied the method suggested for investigating the adsorption by the soil of individual species of bacteria (Fig 3). Some species (Pseudomona pyocyanea) are adsorbed in great quantities, some others in a smaller degree (Bacterium coli, B. mycoides), and a third group not at all. As fluorescence device OI-17 was used. There are 3 figures and 2 references, 1 of which is Soviet.

SOV/20-123-2-44/50

The Application of Fluorescent Microscopy in Incident Light to Soil Microflora Investigations

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED: June 27, 1958

Card 3/3

ZVYAGINTSEV, D.G.

Effect of cations on the adsorption of micro-organisms by a glass surface. Nauch. dokl. vys. shkoly; biol.nauki no.2:166-170 '62. (MIRA 15:5)

1. Rekomendovana kafedroy biologii pochv Moskovskogo gosudarstvennogo universiteta im. M.V.Lomonosova.
(CATIONS) (BACTERIA) (ELECTROCHEMISTRY)

KORENEVSKAYA, V. Ye.; KAPLUNOVA, L.S.; ZVYAGINTSEV, D.G.

Agrochemical hydrophysical and microbiological characteristics of turf-Podzolic soils with removed humus horizon. Pochvovedenie no. 2:43-52 D '65 (MIRA 19:1)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.
Submitted July 18, 1962.

ZVYAGINTSEV, D.G.

Study of the microflora of the rhizosphere using reflected light fluorescence microscopy. Mikrobiologiia 31 no.1:111-115 Ja-F '62. (MIRA 15:3)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta imeni Lomonosova.
(RHIZOSPHERE) (MICROBIOLOGY)
(FLUORESCENCE MICROSCOPE)

ZVYAGINTSEV, D.G.

Use of quenchers for the study of soil microorganisms with the help of fluorescence microscopy. Mikrobiologiia 32 no.4:732-736 Jl-Ag '63. (MIRA 17:6)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta imeni M.V. Lomonosova.

ZVYAGINTSEV, D.G.

Studying forms and dimensions of soil micro-organisms by means of fluorescence microscopy. Pochvovedenie no.3:101-105 Mr '64. (MIRA 17:4)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

ZVYAGINTSEV, D.G.

Effect of antibiotics adsorbed by soil particles on the development of free and adsorbed micro-organisms. Nauch. dokl. vys. shkoly; biol. nauki no.1:205-208 '64. (MIRA 17:4)

1. Rekomendovana kafedroy biologii pochv Moskovskogo gosudarstvennogo universiteta im. M.V.Lomonosova.

KORENEVSKAYA, V.Ye; KAPLUNOVA, L.S.; ZVYAGINTSEV, D.G.

Studies on the recultivation of lands pitted with quarries. Nauch. dokl. vys. shkoly; biol. nauki no.4:192-195 '63 (MIRA 16:11)

1. Rekomendovana kafedrami fiziki i melioratsii pochv, agrokhimii i biologii pochv Moskovskogo gosudarstvennogo universiteta im. Lomonosova.

*

KRASIL'NIKOV, N.A., prof., otv. red.; DROBKOV, A.A., doktor biol. nauk, red.; ZVYAGINTSEV, D.G., kand. biol. nauk, red.; CHISTYAKOVA, K.S., tekhn. red.

[Microorganisms in agriculture] Mikroorganizmy v sel'skom khoziaistve; trudy Mezhvuzovskoi nauchnoi konferentsii. Moskva, Izd-vo Mosk. univ., 1963. 207 p. (MIRA 16:7)

1. Chlen-korrespondent AN SSSR (for Krasil'nikov).
(Agricultural microbiology)

ZVYAGINTSEV, D.G.

Adsorption of micro-organisms by a glass surface [with summary in English]. Mikrobiologiia 28 no.1:112-115 Ja-F '59. (MIRA 12:3)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.
(GLASS,
adsorption of micro-organisms by glass surface
(Rus))
(MICRO-ORGANISMS,
same)

KACHINSKIY, Nikodim Antonovich; ZVYAGINTSEV, G.D., red.; MUKHINA, L.V., tekhn. red.

[Soil structure] Struktura pochvy; itogi i perspektivy izucheniia voprosa. Moskva, Izd-vo Mosk. univ., 1963. 98 p. (MIRA 16:10)

(Soil research)

SATAROVA, N.A.; ZVYAGINTSEV, I.V.

Method for the extermination of the tobacco shrips. Zashch.rast. ot vred.i bol. 7 no.5:40-41 My '62. (MIRA 15:11)

1. Krymskaya stantsiya Vsesoyuznogo instituta tabaka i makhorki.
(Crimea--Tobacco thrips--Extermination)

BOK, N.B.; ZVYAGINTSEV, D.K.; ROTIN, Ya.P.; AZHORIN, A.A., red.

[Overall mechanization of livestock farms in virgin regions] Kompleksnaia mekhanizatsiia zhivotnovodcheskikh ferm v tselinnykh raionakh. Moskva, Kolos, 1964. 127 p. (MIRA 18:1)

ZVYAGINTSEV, K.I.

Reorganization of foundries in the Voronezh Economic Council.
Lit. proizv. no.6:16-22 Je '61. (MIRA 14:6)
(Voronezh Province--Foundries)

ZVYAGINTSEV, K.N.; KRAPIVNAYA, V.F.

Igniting the gas producer, and connection limiting in the experimental section of the Dnieper Basin. Trudy VNII Podzemgaza no.13:74-78 '65. (MIRA 18:8)

1. Laboratoriya tekhnologii podzemnoy gazifikatsii ugley Vsesoyuznogo nauchno-issledovatel'skogo instituta podzemnoy gazifikatsii ugley.

ZYBALOVA, G.P.; ZVYAGINTSEV, K.N.

Effect of certain lignite properties on fire drift movements advancing toward the blow. Podzem.gaz.ugl. no.2:46-51 '59. (MIRA 12:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy i proyektnyy institut podzemnoy gazifikatsii ugley.
(Lignite--Testing) (Coal gasification, Underground)

NUSINOV, G.O., doktor tekhn.nauk; ZYBALOVA, G.P., kand.tekhn.nauk;
Prinimali uchastiye: RETINSKAYA, A.N., inzh.;
ZVYAGINTSEV, K.N., inzh.; DUSHANOVA, N.N., inzh.;
KARNASH, E.M., inzh.

First data on the underground coal gasification in the experimental gas producer of the Angren "Podzemgaz" Gas Producer Plant. Nauch. trudy VNII Podzemgaza no.6:3-10 '62. (MIRA 15:11)

1. Laboratoriya gazifikatsii burykh ugley Vsesoyuznogo nauchno-issledovatel'skogo instituta podzemnoy gazifikatsii ugley.

(Angren Basin--Coal gasification, Underground)

ZVYAGINTSEV, L.I.

Symposium on the physicomechanical properties of rocks in the upper part of the earth's crust. Sov. geol. 8 no.3:151-156 '65. (MIRA 18:5)

ZVYAGINTSEV, L.I.

Relationship between volcanism and plutonism as revealed by the studies in the Rudnyy Altai. Biul.MOIP.Otd.geol.38 no.2:151-152 Mr-Ap '63. (MIRA 16:5)

(Altai Mountains--Rocks, Igneous)

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Age of granitoids of the Zmeinogorsk intrusive complex in the Rudnyy Altai. Izv.vys.ucheb.zav.; geol. i razv. 1 no.5:40-49 My '58.
(MIRA 12:2)

1. Moskovskiy geologorazvedochnyy institut imeni S. Ordzhonikidze, kafedra izverzhennykh i metamorficheskikh porod.
(Altai Mountains—Granite)

ZVYAGINTSEV, G.

Automation of production and labor organization in a thermal electric power plant. Sots.trud 5 no.1:108-111 Ja '60. (MIRA 13:6)

1. Nachal'nik Chelyabenergo.
(Chelyabinsk Province--Electric power plants)
(Automation)

ZVYAGINTSEV, I.V.

Centralized freight transportation by truck. Tekst.prom.15 no.8: 6-7 Ag'55. (MLRA 8:11)
(Transportation, Automotive--Freight) (Textile industry)

STRASHNOV, N.M.; ZVYAGINTSEV, I.V.

For efficient organization in the transportation of industrial freight. Tekst.prom.16 no.4:4-5 Ap '56. (MIRA 9:7)
(Textile fabrics--Transportation)(Raw materials--Transportation)

1. ZVIAGINTSEV, K. F.

2. USSR (600)

4. Swine--Feeding and Feeding Stuffs

7. Work practice of the swine breeding section, Dost. sel'khoz., No. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April, 1953, Uncl.

ZVYAGINTSEV, K.N.

Studying the effect of the moisture content of Dnieper Basin brown coals on their gasification with the oxygen blowing method. Nauch. trudy VNIIPodzemgaza no.7:41-47 '62. (MIRA 15:11)

1. Laboratoriya gazifikatsii kamennykh ugley Vsesoyuznogo nauchno-issledovatel'skogo instituta podzemnoy gazifikatsii ugley.
(Coal gasification, Underground) (Dnieper Basin--Lignite)

ZAGREBEL'NAYA, V.S., kand.tekhn.nauk; ZVYAGINTSEV, K.N.

Gasification of Dniepr lignite. Podzem.gaz.ugl. no.4:10-13 '59. (MIRA 13:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut Podzemgaz.
(Dnieper Basin--Coal gasification, Underground)

ZVYAGINTSEV, Leonid Ivanovich; SHIPULIN, F.K., doktor geol.-miner. nauk, otv. red.

[Paleozoic volcanism in the southeastern part of the Rudnyy Altai] Paleozoiskii vulkanizm iugo-vostochnoi chasti Rudnogo Altaia. Moskva, Nauka, 1965. 155 p. (MIRA 18:3)

KOSHKIN, M. L., prof.; GIL'MAN, B. I.; DUDA, M. N.; DUDCHENKO, I. I.; ZVYAGINTSEVA, L. I.; SLASHCHOVA, K. V.

Preventive irradiation of preschool and younger school-age children with small (non-erythematic) doses of ultraviolet irradiation. Vrach. delo no.6:127-132 Je '62. (MIRA 15:7)

1. Kafedra obshchey gigiyeny (zav. - prof. M. L. Koshkin) Khar'kovskogo meditsinskogo instituta.

(ULTRAVIOLET RAYS--THERAPEUTIC USE)
(SCHOOL HYGIENE)

ZVYAGINTSEV, O.Ye., red.; PTITSYN, B.V., red.; SHUL'MAN, V.M., red.; PESHCHEVITSKIY, B.I., red.; ZAYTSEVA, I.P., red.; OVCHINNIKOVA, T.K., tekhn. red.

[Problems in the analysis of noble metals; proceedings of the Fifth All-Union Conference on the Analysis of Noble Metals] Voprosy analiza blagorodnykh metallov; trudy Vsesoiuznogo soveshchaniia po analizu blagorodnykh metallov. 5th. Novosibirsk, Izd-vo Sibirskogo otd-niia AN SSSR, 1963. 100 p. (MIRA 17:4)

1. Vsesoyuznoye soveshchaniye po analizu blagorodnykh metallov. 5th.

ZVYAGINTSEV, O. YE. & SHVINDLYAN, N. M.

"On mutual influence of atoms and groups in complexes of nitrosyl ruthenium."

report submitted for 8th Intl Conf on Coordination Chemistry, Vienna, 7-11 Sep 64.

ZVYAGINTSEV, O.Ye.; FROLOV, Yu.G.; SUDARIKOV, B.N.

Mechanism of the extraction of tetra- and hexavalent uranium sulfates by tri- and di-n-octylamines. Trudy MKHTI no.47:134-139 '64. (MIRA 18:9)

ZVYAGINTSEV, O.Ye.; FROLOV, Yu.G.; PUSHKOV, A.A.; DUSHEK, B.

Extraction of inorganic acids by aniline derivatives. Zhur. neorg. khim. 10 no.2:512-517 F '65. (MIRA 18:11)

1. Submitted Sept. 16, 1963.

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EWT(m)/EPF(c)/EWP(j)/T/EWP(t)/EWP(b) L/P(c) JD/RM

ACC NR: AP5027210 SOURCE CODE: UR/0078/65/010/011/2571/2573

AUTHOR: Sinitsyn, N. M.; Zvyagintsev, O. Ye.

ORG: None

50
B

TITLE: The thermal stability of complex compounds of ruthenium containing an NO group

SOURCE: Zhurnal neorganicheskiy khimii, v. 10, no. 11, 1965, 2571-2573

TOPIC TAGS: ruthenium compound, thermal stability, nitrogen compound

ABSTRACT: A thermographic study was made of a series of nitroso compounds of ruthenium in a vertical pyrometer with simultaneous automatic recording of the change in weight during heating in air. Temperature measurements were made with a platinum-platinum rhodium thermocouple with a diameter of 0.3 mm. A table shows the formulas of the nitroso ruthenium compounds, the temperature of the start of the endothermic effect, and the temperatures of the initial and maximum exothermic effects. For all the compounds, the dissociation of the RuNO

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groups is accompanied by a strong exothermic effect; in most cases, this is preceded by an endothermic effect, which goes over suddenly to the exothermic effect. The first endothermic effect at 300 C reflects the elimination of two molecules of NH_4Cl (calculated weight loss 31.10%, found experimentally 32.00%). For all compounds investigated, the final dissociation product was ruthenium dioxide. The final products of thermal dissociation were analyzed for ruthenium content, which varied from 74.8 to 76.7%; no nitrogen or chlorine was found. To confirm the conclusion that the RuNO group exists up to the temperature of the following endothermic effect, the products obtained by heating the salts to a point somewhat lower than this temperature (by 20-30C) were analyzed for nitrogen. Nitrogen was found in all the products. The data indicates that the dissociation temperature of the RuNO group varies over a wide interval, from 220 to 410 C. Orig. art. has: 1 figure and 1 table

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PROCESSES AND PROPERTIES INDEX

Ca

6

Ternary compounds of rhodium. II. O. E. Zvyagintsev, E. A. Vorob'eva and S. I. Khorunzhenkov. *Ann. inst. platine* (U.S.S.R.) No. 7, 113-[illegible] (1929). The salt of Wilm has the formula $(NH_4)_3[RhCl_3(NH_2Cl)]NO_2$. Cond. measurements prove the presence of 2 anions and 3 cations. It crystallizes in the hexagonal system and has the following elements of symmetry: $CL_6(A_6)3L_23P$.

RAE MATZKE

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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PROCESSES AND PROPERTIES INDEX

2

The action of hydrogen on the solutions of ruthenium salts at high pressures and temperatures. V. N. Ipat'ev and O. R. Zvyagintsev. *J. Russ. Phys.-Chem. Soc.* **61**, 823-5(1929).—See C. A. 23, 2085.

V. Veselovsky

Zhur. Fiz. Khim.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

Soviet platinum. Moskva, Gosl nauch.-tekhn. izd-vo, 1931. 55 p.
(50-41592)

TN799.P7Z93

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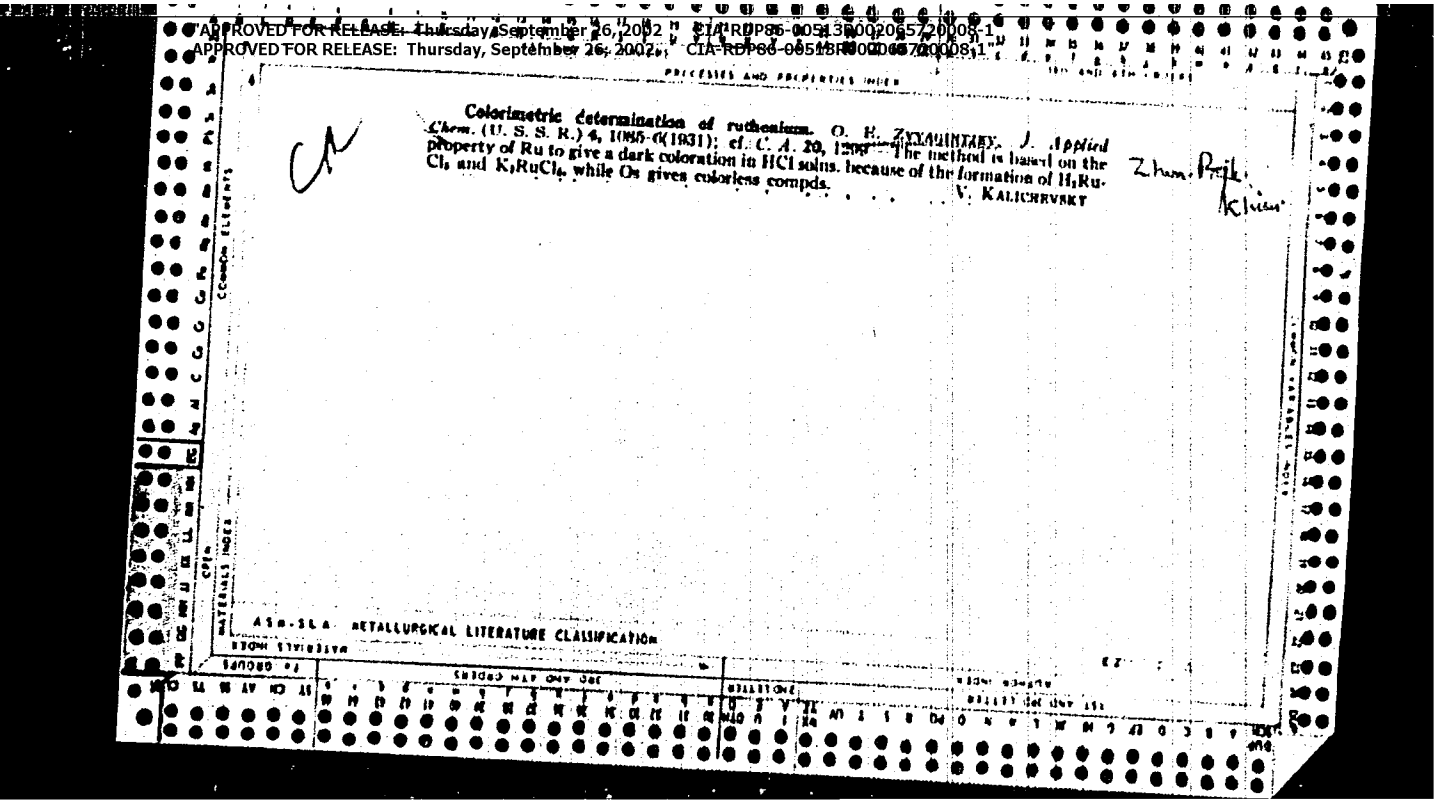

PROCESSES AND PROPERTIES INDEX

Colorimetric determination of ruthenium. O. E. ZVYAGINTSEV. *J. Applied Chem.* (U. S. S. R.) 4, 1085-6(1931); cf. *C. A.* 20, 1209.—The method is based on the property of Ru to give a dark coloration in HCl solns. because of the formation of H_2RuCl_5 and K_2RuCl_5 while Os gives colorless compds. . . . . V. KALICHEVSKY

Zhur. Prik. Khim.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

Forms of occurrence of platinum-group metals. O. E. Zvyagintsev. *Tsvet. Metal.* 1932, No. 7-8, 140-5.—The content of the Pt metals in the lithosphere is probably somewhat higher than that given by I. and W. Noddack (C. A. 25, 3280). This correction is suggested by the work of V. A. Obruchev who reported that Pt occurs frequently in Siberian traps. The Pt content is far too low for com. extn., but the occurrence of the Pt-bearing traps is very widespread.

B. N. Dankoff

Tsvet. Met.

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PROCESSES AND PROPERTIES INDEX

Analytical separation of copper from rhodium. O. E. Zvyagintsev. *J. Applied Chem. (U. S. S. R.)* **15**, 217-18(1942); cf. C. A. **26**, 1151.—Sepn. of Rh from Cu is never complete. Rh should be detd. first if its content is over 50%, but with lower concns. Cu is pptd. before Rh. V. Kalichevsky

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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M

2

*Os Osmiridium.—L. O. E. Zviagintsev (*Izvestia Platinogo Instituta* (*Annales de l'Institut de Platine*), 1932, (8), 31–48).—[In Russian.] See abstract from German source, *J. Inst. Metals*, 1933, 52, 352.—N. A.

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3

*Os Osmiridium. II.—X-Ray Analysis. O. E. Zvyagintsev and B. K. Brunovskiy (*Izvestia Platinago Instituta* (*Annales de l'Institut de Platine*), 1932, (9), 49–53).—[In Russian.] Cf. *J. Inst. Metals*, 1933, **52**, 352. Osmiridium of various origins and compositions has a close-packed hexagonal lattice, like osmium; $a = 2{\cdot}720$–$2{\cdot}90$ A., $c = 4{\cdot}235$–$4{\cdot}60$ A., $c/a = 1{\cdot}581$–$1{\cdot}617$. Some of the atoms in the osmium lattice can be replaced by up to 51% of iridium and platinum without altering its character. Osmiridium must therefore be regarded as a solid solution of iridium (and platinum) in osmium.—N. A.

The metallurgy and technology of platinum and the platinum group. Moskva, TSvet-metizdat, 1933. 111 p. (50-40631)

TN799.P7Z9

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BC

A-2

Forms under which platinum and allied metals occur in nature. O. E. Zvyagintsev. (Ann. Inst. Platine, 1932, No. 10, 14—33).—A discussion.

R. T.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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PROCESSES AND PROPERTIES INDEX

Ca

9

The presence of platinum in sulfur ores. O. E. Zvyagintsev, V. V. Lebedinskiĭ and A. N. Filippov. *Compt. rend. acad. sci.* (U. R. S. S.) [N. S.], 1938, 165-9.—Pt was detected in various ores and final products by spectroscopic means. Up to 50 mg. per kg. was found in ores from Ridder, Allaverdui, Buron and Karabash contg. Cu, Pb, Zn, Fe, SiO_2, Se, As, S, Al_2O_3, CaO, MgO, Au and Ag. Electrolytic mud, waste from concentrates, etc., contained Pt.

A. A. Boehtlingk

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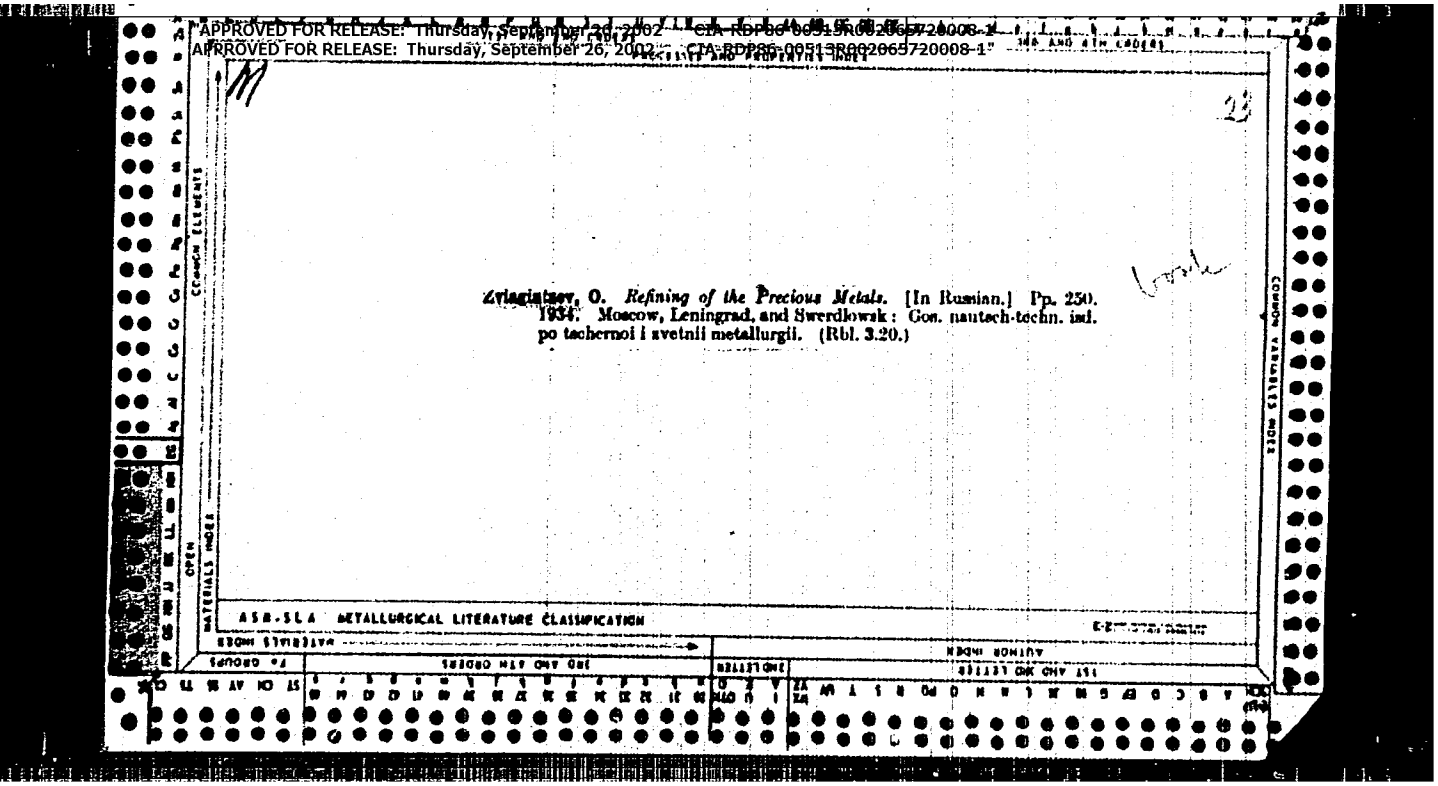
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



Zviagintsev, O. *Refining of the Precious Metals.* [In Russian.] Pp. 250. 1934. Moscow, Leningrad, and Swerdlowsk: Gos. nautech-techn. ind. po tschernoi i svetnii metallurgii. (Rbl. 3.20.)

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065720008-1"

Osmiridium in northern Caucasus and in Kuznetsk-Altau. O. E. Zvyagintzev. *Sovet. Zolotoprom.* 1934, No. 1, 37-9.—Analysis gave 31.3-43.0% Os, 33-55% Ir and some Rh, Ru, Pt and Au. The specimens evidently represent variable solid solns. of Ir, etc., in Os, which retains its cryst. structure. S. L. Madorsky

A new mineral containing metals of the platinum group. O. E. Zvyagintsev. *Compt. rend. acad. sci. U. R. S. S.* 4, 170-8 (in German 178-9) (1934); cf. *C. A.* 28, 2240[5].—The mineral was obtained in bright silvery grains by treating concentrates from the Sverdlovsk mines with aqua regia to remove Pt. Its hardness is 6-7, sp. gr. 20 and it has no cleavage (unlike iridosmine). X-ray study showed that the structure is face-centered cubic, with a_0 = 3.810 A. (for pure Ir, a_0 = 3.822). Analysis gave Ir 51.7, Os 25.5, Ru 3.5, Au 10.3% and Fe trace. It is a solid soln. of Au, Os and Ru in Ir. The name *aurosmirid* is proposed for the cubic mineral, iridosmine being used for solid solns. having the hexagonal Os structure. M. F.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

CR

9

The occurrence of platinum in sulfide ores. A. [illegible] Zvyagintzev and A. N. Filippov. *Compt. rend. acad. sci. U. R. S. S.* 1, No. 2-3, 130-2(in German 133-5)(1935); cf. *C. A.* **28**, 1635[9].—The av. Pt content of 17 ore deposits varied from 0.02 to 11 g./ton. The processes now used do not permit economical recovery. Pt appears to be concd. in ores assocd. with acid magmas. **The platinum content of minerals of sulfide ores.** *Ibid.* 130-7(in German 138-9).—The Pt was found to be largely concd. in the galena. Sphalerite carried some Pt; pyrite and chalcopyrite, very little or none.

Michael Fleischer

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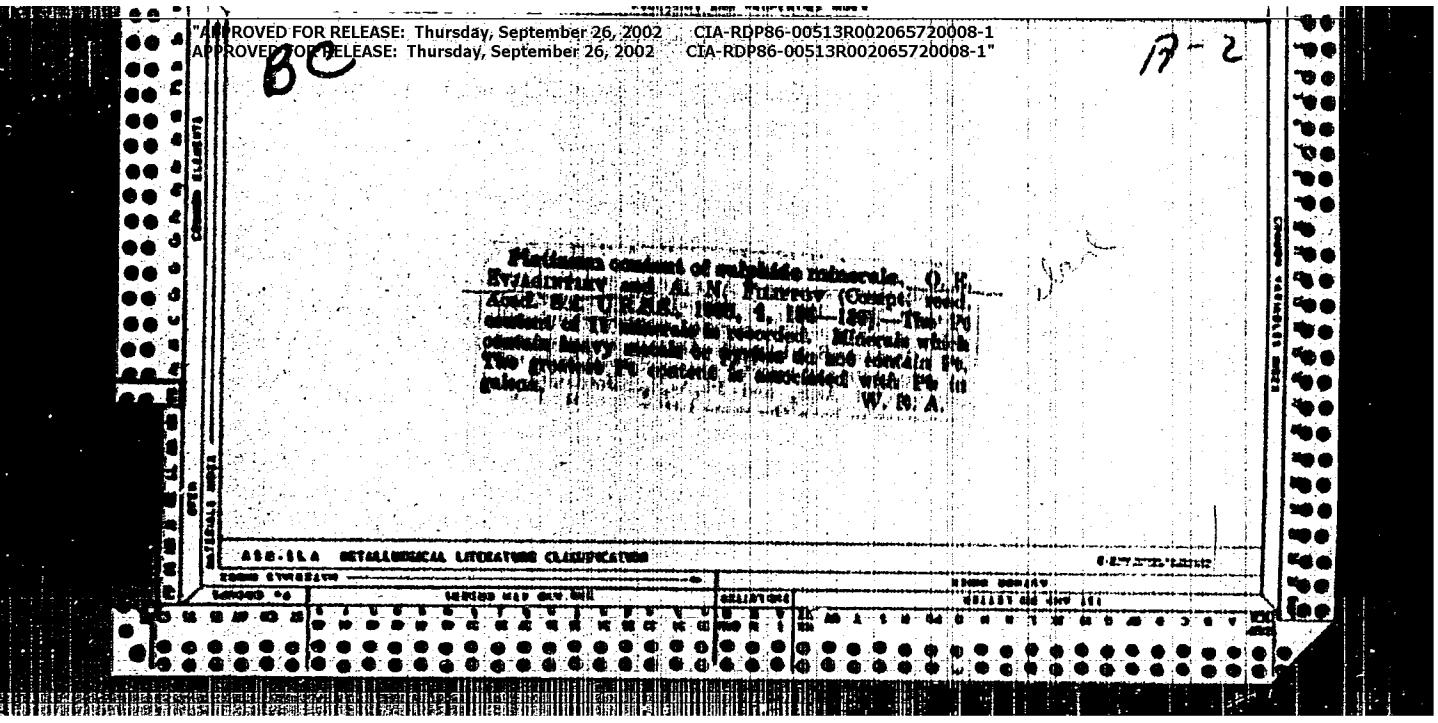

PROCESSES AND PROPERTIES INDEX

/ **Aurosmiridium.** O. Zvyagintsev. *Sotsialist. Rekonstruktsiya i Nauka* **1935**, No. 3, 176.—A new mineral has been found composed of Ir 52, Os 25, Au 19 and Ru 3.5%; it represents a natural alloy in the form of grains 0.2-2 mm. in diam. B. V. Shvartsberg

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

m

3

*Os Osmiridium. O. E. Zvyagintsev and B. K. Brunovskiy (*Izvestia Platinovo Instituta* (*Ann. Inst. Platine*), 1935, (13), 5–15).—[In Russian.] X-ray analysis of native osmiridium has shown it to possess a definite phase structure, and in some varieties have been found signs of incipient recrystallisation; the probable causes of these phenomena are discussed. Laue photograms of a single-crystal specimen of the mineral revealed the presence of constituents with an orientation differing by 10° from that of the crystal itself.—N. A.

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M

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*On Rhodium-Copper Alloys. O. E. Zvigintsev and B. K. Rumovskiy (*Izvestia Platinovo Instituta* (*Ann. Inst. Platine*), 1935, (13), 37–66).—(In Russian.) The system has been investigated by hardness measurements on, and micrographic examination of, quenched and annealed alloys. The hardness curve for the quenched alloys is characteristic of a continuous series of solid solutions, whereas that for annealed alloys has minima at 50 and 75 atomic-% rhodium. The microstructure of quenched alloys is homogeneous between 0 and 20, and between 90 and 100 atomic-% rhodium as well as at 50 and at 75–80 atomic-% rhodium; other alloys have a duplex structure. Owing to the rapidity with which alloys with 25–50 atomic-% rhodium oxidize in the air, they could not be obtained in a homogeneous state, and therefore a complete equilibrium diagram could not be obtained by thermal analysis. The cooling curve of the 1 : 1 (atomic) alloy showed an arrest at 1015° C., indicative of the formation of the compound CuRh. X-ray examination showed that quenched alloys with 0–20 atomic-% rhodium have the face-centred cubic lattice of copper, a increasing regularly with the rhodium content. Similarly, alloys with 90–100 atomic-% rhodium have the rhodium lattice; all other alloys have a structure containing both these phases ($\alpha + \beta$). On annealing, alloys with about 50 atomic-% rhodium are converted into pure β_1; and those with about 75 atomic-% rhodium into β'', whereas those with 25 atomic-% rhodium do not become homogeneous. These results and the presence of superstructure lines in photograms of alloys with an atomic ratio of 1 : 1, 3 : 1, and 1 : 3, indicate the existence of the compounds RhCu, $RhCu_3$, and Rh_3Cu. The latters of all the compounds are similar to that of the β-phase, and resemble each other in parameter.—N. A.

CA

8

Iridosmine from the river B. Laba (north Caucasus).
O. E. Zvyagintsev. *Akad. V. I. Vernadskomu k Pyatides-yatiletiyu Nauch. Deyatelnosti* 2, 807-11(1936); *Chem. Zentr.* 1938, I, 2519.—In its chem. compn. (Os 43, Pt 7, (Ir + Rh) 33, Ru 13 and Fe 4.6%) and cryst. structure the irodosmine found in the north Caucasus is very similar to that found in the Ural and the East Siberia Region.
M. G. Moore

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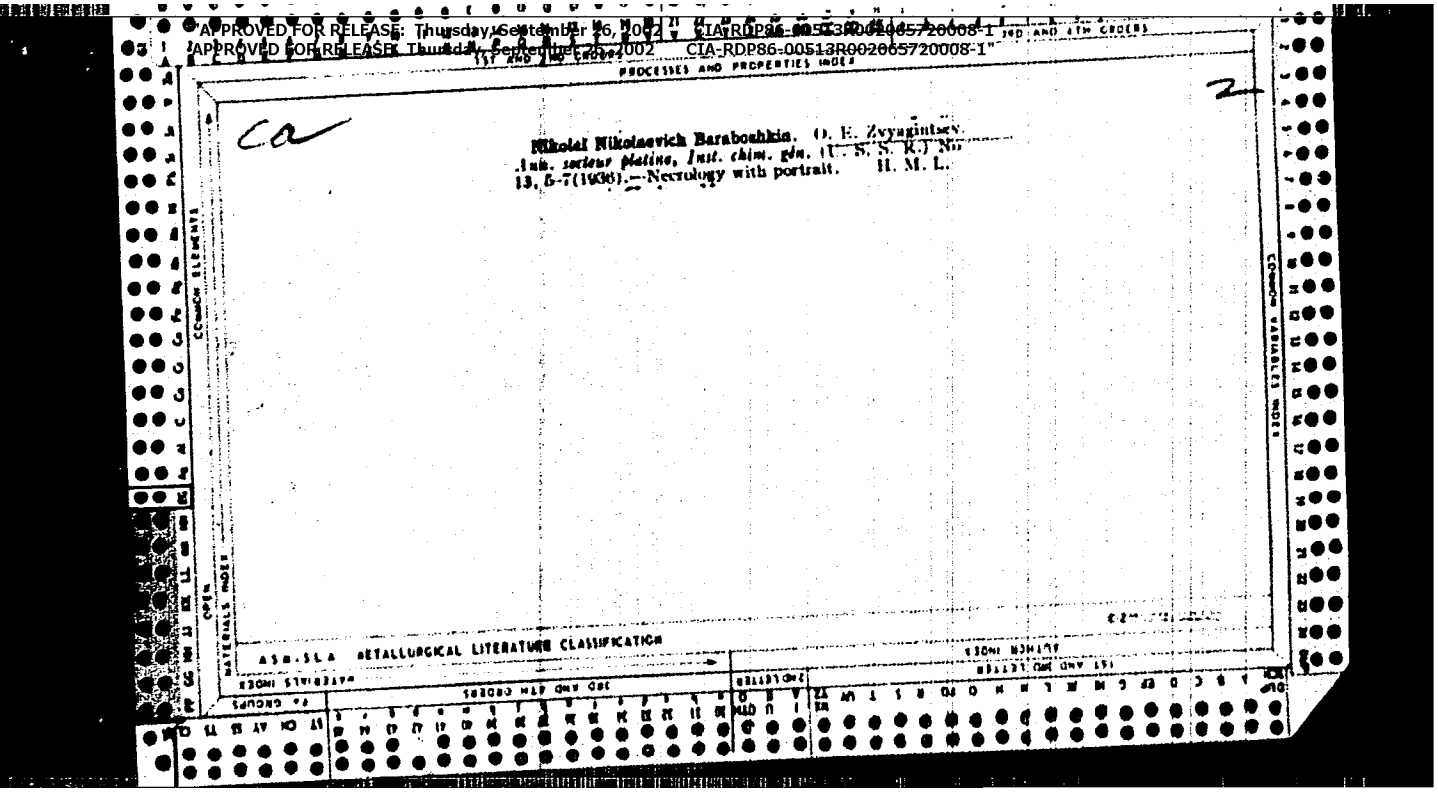

Nikolai Nikolaevich Baraboshkin. O. E. Zvyagintsev.
Ann. secteur platine, Inst. chim. gén. (U. S. S. R.) No
13, 5-7(1936).—Necrology with portrait. H. M. L.

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18C

a-1

Dokl. AN SSSR

Action of sulphide minerals on solutions of gold and platinum salts. O. E. ZVIAGINTSEV and E. L. PEARSHEVSKAJA (Compt. rend. Acad. Sci. U.R.S.S., 1936, 4, 73—74).—The actions of powdered galenite, sphalerite, pyrite, and chalcopyrite on solutions of Na_2PtCl_6 and H_2PtCl_6 have been investigated. After 1—1·5 months the galenite contained about 20% Pt as PtS_2. Reaction with the other minerals is slow.

O. D. S.

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PROCESSES AND PROPERTIES INDEX

Osmiridium. IV. Osmiridium from the Kuznets Alatau and the northern Caucasus. O. E. Zvyagintsev. *Ann. secteur platine, Inst. chim. gén.* (U. S. S. R.) No. 13, 133-7(1936); cf. *C. A.* 30, 6479[5].—Analyses are reported for several samples. H. M. Leicester

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

Copper nuggets from Allaverda deposits. O. R. Zyrin-gintsev and E. L. Pisarzhevskaya. *Bull. acad. sci. U. R. S. S., Classe sci. math. nat. Sér. chim.* 1937, 675-9 (in German 680).—A study was made of chem. compn., microstructure and hardness of Shamlugsk copper nuggets in the Allaverda District (Armenia). The nuggets are of high-purity Cu and contain small amts. of Fe, Ag and V, i. e., metals having an at. radius less than 1.45 A., but contain no metals of at. radius greater than this. In hardness the nuggets compare with electrolytic Cu. Sixteen references. S. L. Madorsky

Iz. Ak. Nauk SSSR, Ser. Khim.,

CA

9

World platinum industry. O. E. Zvyagintsev. Sovet. *Zolotoprom.* 1937, No. 1, 76 p. Statistical for the period 1913-36.

S. L. Mudorsky

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PROCESSES AND PROPERTIES INDEX

Ca

Complex manganese compounds. I. Compounds of manganese salts with pyridine. O. E. Zvyagintsev, D. Yu. Mamulaishvili and M. Chkoniya. *Bull. acad. sci. U. R. S. S., Classe sci. math., Sér. chim.* 1937, No. 5, 1235-0.—Improved procedures for the prepn. of the compds. of Mn with C_5H_5N (I), free from the contaminating $Mn(OH)_2$, are described. $MnCl_2.2$ I (Reitzenstein, *Z. anorg. Chem.* 18, 200(1898)), green needles, was prepd. by filtering quickly a partial soln. of MnO_2 in concd. HCl, adding to the filtrate I and crystg. in a desiccator. $MnCl_2.2$ I (Reitzenstein, *loc. cit.*), pale rose crystals, was formed by treating a mixt. of concd. $MnCl_2$ and NH_4Cl with I. $Mn(NO_3)_2.2$ I (Grossmann, *Ber.* 37, 1255(1904)) was prepd. from $Mn(NO_3)_2$ and NH_4NO_3 with I as above. All these compds. begin to decomp. at 40-65°. The new compd. $MnSO_4.I.H_2SO_4$, colorless crystals, was obtained by the interaction of $MnCl_2.2$ I and slightly acid (H_2SO_4) Ag_2SO_4 soln. It is decompd. in air and more rapidly in H_2O. Chas. Blanc

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Iz. Akad. Nauk SSSR, Ser. Khim.

A.S.M.-S.L.A. METALLURGICAL LITERATURE CLASSIFICATION

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"Chimie des composes complexes dans l'URSS durant 20 ans". Zvjagintzev, O. E. (p. 2581)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii). 1937, Volume 7, No. 20-21.

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Chemistry of complex compounds in U. S. S. R. during the last twenty years. (I. I. Zvyagintsev. *J. Gen. Chem. (U. S. S. R.)* 7, 2581–651 (1937). A review of complex inorg. compds. Forty-three references. S. L. M.

Zhur. Obshch. Khim.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

ZVYAGINTSEV, O. Ye.

Chemical study of the gold ore of the Baley mine. O. E. Zvyagintsev, V. A. Volkova and K. L. Pearzhev. Zhur. Prik. Khim., 1937, No. 10, 13-16; Chimie & industrie 40, 999.—The Baley ore carried chiefly Au and Ag; the mineral proper contains about 70% Au and 20% Ag. In the rock, however, the proportion of Ag is relatively higher, as a considerable part of the Ag is present uncombined with Au, as pyrargyrite, etc. The compn. and structure of the Au do not vary with depth (down to 120 m.). The Baley Au bearing veins have a relatively very high K content, greater than that of gran ite.

A. Papineau Couture

8

Development of the Pacific Cod, Trudy Inst. Okeanology, 1957

MUKHACHEVA, V.A.; ZVYAGINA, O.A.

Development of the Pacific cod Gadus morhua macrocephalus Tilesius. Trudy Inst. okean. 31:145-165 '60. (MIRA 14:4)
(Codfish)

ZVYAGINA, O.A.

Materials on the reproduction and development of fishes in the Laptev Sea. Report No.1: East Siberian cod (Arctogadus borisovi, Gadidae). Trudy Inst.okean. 43:320-327 '61. (MIRA 14:6)
(Laptev Sea--Codfish)

ZVIAGINA, O.A.

Distribution of eggs of the Pacific mackerel Pneumatophorus japonicus (Houttuyn) and the mullet Mugil so-iuy Basilewsky in Peter the Great Bay. Trudy Inst.okean. 43:328-336 '61. (MIRA 14:6)
(Peter the Great Bay--Fishes--Eggs)
(Mackerel) (Great mullets)

BOROVIKOV, Ye. M.; ZVYAGINA, O. F.; PUZANOVA, A. A.

Nature of the deformation of frame saw blades in the rolled spots. Der. prom. 12 no.2:16-17 F '63. (MIRA 16:4)

1. Arkhangel'skiy lesotekhnicheskiy institut.

(Saws)

Ca

7

Determination of butyraldehyde. S. V. Alekseev and S. I. Zvyagina. *Sintet. Kauchuk* (U. S. S. R.) 1936, No. 9, 19–20.—A special *app.* was devised. The aldehydes were oxidized to acids with Ag_2O and the soln. made alk. with 1–2 cc. of 2 *N* KOH. Then all alcs., hydrocarbons, etc., were distd. off with steam. The residual soln. was made acid with 10–15 cc. of *N* H_2SO_4 and evapd. to dryness. The condensed acids were oxidized with 3–5 cc. of a mixt. of 1.5 g. $Fe(NH_4)(SO_4)_2.12H_2O$ in 1 l. of *N* H_2SO_4 and 3% H_2O_2. The aldehydes and ketones formed were distd. off into a 3rd flask and the aldehydes were oxidized with the Ag_2O mixt. 10–15 g. Ag_2O in 10–15 cc. of H_2O, 0.4 cc. of 0.1 *N* KOH and 0.5 cc. of *N* $MgSO_4$. Then the mixt. was distd. off, to the distillate was added 5 cc. of 2 *N* KOH, 20–25 cc. of 0.02 *N* I and HCl (1:11) to acidify it and it was titrated with $Na_2S_2O_3$. The accuracy 7–10% abs. Thirteen references. A. Petroff

ZVYAGINA, R.A.

Linear programming problems with partitioned matrices. Optim. plan. no.2:50-61 '64. (MIRA 18:6)

KUSAKIN, N.D.; SIGAREV, A.M.; ZVYAGINA, Ye.V.; Prinimali uchastiye: DOTSENKO, A.M.; KOKOREVA, M.A.; LYUBIMOVA, E.M.; SEMENOVA, L.V.

Investigating the gaseous medium surrounding carbon-graphite blanks during their baking in a multiple compartment ring kiln. TSvet. met. 37 no.10:51-54 O '64. (MIRA 18:7)

ZVYAGINA, Ye.V.

Statistical method for studying dwarf satellites of galaxies. Astron. zhur. 43 no. 1:34-39 Ja-F '66 (MIRA 19:2)

1. Gosudarstvennyy astronomicheskiy institut imeni P.K. Shternberga. Submitted June 1, 1965.

S/137/62/000/005/063/150
A006/A101

AUTHOR: Zvyagintsev, A. F.

TITLE: The relationship between the properties of initial forgings and the macrostructure of press-formed and rolled turbine disks

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 5, 1962, 6, abstract 5D35 (V sb. "Proiz-vo trub", no. 4, Khar'kov, Metallurgizdat, 1961, 163-168)

TEXT: The author analyzes the technique of producing blanks for turbine disks on a wheel-rolling mill, analogous to the production of railroad wheels. Simultaneously, information is given on the micro- and macro-structure of blanks intended for the manufacture of turbine disks. Moreover, characteristic deficiencies occurring in blanks produced by the given method, are dealt with.

A. Leont'yev

[Abstracter's note: Complete translation]

Card 1/1

36580
S/123/62/000/007/013/016
A004/A101

1.1700

AUTHOR: Zvyagintsev, A. F.

TITLE: Connection between the quality of initial forgings and the macrostructure of stamped and rolled turbine disks

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 7, 1962, 6, abstract 7V35 (V sb. "Proiz-vo trub", no. 4, Khar'kov, Metallurgizdat, 1961, 163-168)

TEXT: The author investigated the effect of the initial forging quality on the macrostructure of stamped and rolled turbine disks. The manufacture of the disk includes the forging of the initial cylindrical forging, preliminary upsetting on a 3,000-ton press, upsetting in a calibration ring on a 3,000-ton press, marking with a punch on a 3,000-ton press, die-forging on a 7,000-ton press, expanding on an expanding machine. In the cylindrical initial forgings 420 mm in diameter of alloyed or carbon steel, rods 20 mm in diameter were placed at a distance of 50, 110, 170 mm from the center. After each operation, one of the blanks was cooled and specimens were cut out to investigate, on the basis of the changes of the rods, the nature of metal flow. It was found that the disk hub is formed mainly on account of the forging zone which is limited

Connection between the quality ...

by radius r = 0.25 R_{forg} (R_{forg} - outer radius of forging, in this case 240 mm), and the zone of difficult deformation at the face ends. The disk band is produced from the forging zone which is located as in a tube, limited on one side by r = 0.25 R_{forg} and on the other side by r = 0.5 R_{forg}. The peripheral zone beginning at 0.5 R_{forg} is used to form the rim. If the initial forging possesses nonuniform and porous spots and other metallurgical defects located from the center at a distance of 0.5 R_{forg} and approximately in the central part of its height, the defective metal can be introduced into the rim or to the place of junction between the rim and the band. The flaws remain in the part also after expanding since the metal forming the disk periphery is not subjected to considerable all-sided compressive stresses. There are 6 figures.

V. Pavlyuchenko

[Abstracter's note: Complete translation]

ACCESSION NR: AR4018324 S/0137/64/000/001/D014/D014

SOURCE: RZh. Metallurgiya, Abs. 1D72

AUTHOR: Zvyagintsev, A. F.

TITLE: New method of manufacturing disks using existing equipment of wheel-rolling shops

CITED SOURCE: Sb. Proiz-vo trub. Vy*p. 9. M., Metallurgizdat, 1963, 141-148

TOPIC TAGS: Turbine manufacture, turbine disk, press processing, high alloy steel, high-alloy steel processing, press equipment conversion

TRANSLATION: Under existing manufacturing methods, large turbine disks are made of blanks, which are disk shaped and produced by smith forging. In machining such disks, a large quantity of metal becomes chips. For this reason, it was necessary to find methods of obtaining disks which would not entail substantial loss of metal. One of these methods is the pressing of blanks on press equipment of wheel-rolling shops. In the production of certain types of disks, the savings in metal reach 38%. The existing method of producing disks in wheel-rolling shops is tied to the fact

Card 1/2

ACCESSION NR: AR4018324

that the equipment (7,000-ton press) operates at the maximum rated pressure. This was an impediment in the production of disks of high-alloys on the press equipment of wheel-rolling shops. A new system of deformation of disk blanks was proposed, which would lower significantly the load of a 7,000-ton press. For this purpose, two unlike dies are suspended on the upper sliding plate of the cross-arm of the press. At first, the one of the dies deforms the central part of the blank, and then the other die deforms the peripheral part of it. The lower die remains fixed. Experimental blanks for disks made of EI481 and EI437B alloys were pressed according to the new technological scheme with only one heating, whereas using existing methods, heating on a continuous basis is required. The capacity of the 7,000-ton press was fully satisfactory for the production of blanks, even of such alloys as EI481 and EI437B. The forming of blanks by the new method does not require any basic alterations of existing presses. The new method provided a savings of metal of 30-40%, cuts labor consumption for machining by one-third, and increases equipment productivity to 20 times that of the old method. Schematic diagrams explaining the old and new manufacturing processes are cited; graphs of the change of the average specific pressure of alloys in dependence on the speed of deformation (for shrinkage) is given.

SUB CODE: MM ENCL: 00

ZVYAGINTSEV, A.F., kand. tekhn. nauk

Efficient functional diagram for a wheel-rolling mill. Proizv. trub no.10:122-126 '63. (MIRA 17:10)

L 42033-66 EWT(m)/EWP(w)/EWA(d)/EWP(v)/EWP(t)/EWP(k)/EWP(z)/EWP(b)/EWA(c)/ETC(f)

ACC NR: AT5022787 SOURCE CODE: UR/3164/64/000/014/0133/0137

IJP(c) JD/WW/HW/EM

AUTHOR: Zvyagintsev, A. F. (Candidate of Technical Sciences)

ORG: none

TITLE: Selection of technology for the production of turbine disk blanks with regard to the stress state at the focus of deformation

SOURCE: Dnepropetrovsk. Vsesoyuznyy nauchno-issledovatel'skiy i konstruktorsko-tekhnologicheskiy institut trubnoy promyshlennosti. Proizvodstvo trub, no. 14, 1964. Sbornik statey po teorii i praktike trubnogo proizvodstva (Collection of articles on the theory and practice of pipe production), 133-137.

TOPIC TAGS: turbine disk, tensile stress, metal rolling, production engineering, metal forging, material deformation

ABSTRACT: The authors point out that in the manufacture of turbine-disk blanks a production process causing numerous tensile stresses, especially during the deformation of alloys of low plasticity, favors the development of breaks and cracks, while a process involving compressive stresses favors the healing of cracks

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APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065720008-1"

L 12033-66
ACC NR: AT5022787

and improved quality of the blanks. The authors investigated two processes: 1) press forging followed by rolling on a wheel mill, and 2) repeated press forging without subsequent rolling. The latter gave better results. Orig. art. has: 7 figures.

SUB CODE: 13,11/ SUBM DATE: none/ ORIG. REF: 002

2/2

OC

ZVYAGINTSEV, A.F.; IVANOV, Yu.N.; KAZAKOV, V.E.; STETSENKO, A.M.; SOLOMOVICH, M.Ya.; KORZH, V.I.; DASHKEVICH, A.A.; Prinimali uchastiye: LIPTSEN, S.Kh.; RYZHIKOV, A.P.; STAL'NOKRITSKIY, V.N.; LEVENETS, L.Ye.; MOGILA, V.A.; KOVAL', A.A.; VLASOV, V.F.; ROSHCHIN, A.G.; RAYKO, V.P.; KORNIYENKO, V.G.; PANTYUSHKIN, N.V.

Investigating the possibility of manufacturing all-rolled electric locomotive wheels with existing equipment. Kuz.-shtam. proizv. 5 no.11:11-14 N '63.

(MIRA 17:1)

ACC NR: AP6009911 SOURCE CODE: UR/0413/66/000/004/0108/0108

AUTHOR: Barykin, N. A.; Barykina, S. V.; Zvyagintsev, A. M.; Izovskiy, V. L.

ORG: none

TITLE: An electropneumatic transducer. Class 42, No. 179100 [announced by Scientific Research Institute of Heat and Power Engineering Equipment (Nauchno-issledovatel'skiy institut teploenergeticheskogo priborostroyeniya)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 4, 1966, 108

TOPIC TAGS: pneumatic device, electromechanic converter, pneumatic servomechanism

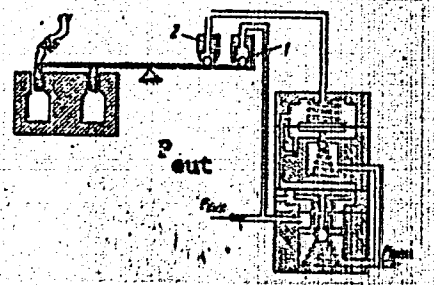
ABSTRACT: This Author's Certificate introduces an electropneumatic transducer which contains an electromagnetic mechanism, lever, ball type indicator and power nozzles and an amplification relay with pressure amplification factor. The accuracy of the transducer is increased by using a cylindrical power nozzle and making the diameter of the indicator nozzle and its ball smaller than that of the power nozzle and ball.

UDC: 681.142-525

Card 1/2

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065720008-1

ACC NR: AP6009911



1--power nozzle; 2--indicator nozzle

control device

SUB CODE: 13/ SUBM DATE: 27Dec63/ ORIG REF: 000/ OTH REF: 000

Card 2/2

ZVYAGINTSEV, A. M.

Use of structural clamps instead of sunk keys. Geod. i kart no.4:73 Ap '60. (MIRA 13:8)

(Triangulation towers)

ZVYAGINTSEV, A.Ye., dotsent; VOROKHOBOV, L.K.

Intravenous and intraosseous anesthesia with tourniquet in children. Khirurgiia no.3:45-49 Mr '54. (MLRA 7:5)

1. Iz kliniki detskoy khirurgii II Moskovskogo meditsinskogo instituta im. I.V.Stalina (zaveduyushchiy kafedroy - professor S.D. Ternovskiy) na baze detskoy bol'nitsy im. N.F.Filatova (glavnyy vrach M.N.Kalugina)

(ANESTHESIA, LOCAL,
intraosseous with tourniquet in child)
(ANESTHESIA, INTRAVENOUS,
in child., with tourniquet)

ARENDT,A.A., prof.; ARTARYAN,A.A., kand.med.nauk; BAIROV,G.A.,prof.; VOLKOV,M.V., prof.; VARSHAVSKAYA, D.Ya., kand. med. nauk; VOROKHOBOV, L.A.; GENERALOV, A.I., kand. med. nauk; DANIYEL'BEK, K.V., kand. med. nauk; DERZHAVIN, V.M., kand. med. nauk; DOLETSKIY, S.Ya., prof.; YERMOLIN, V.N.; ZATSEPIN, S.T., kand. med. nauk; ZVYAGINTSEV, A.Ye., dots.; ISAKOV,Yu.F., doktor med. nauk; KOZYREV, V.A., kand. med. nauk; KONOVALOV, A.N.; KORNYANSKIY, G.P., prof.; KLIMANSKIY, V.A., kand. med. nauk; KLIMKOVICH, I.G., dots.; KONDRASHIN, N.I., kand. med. nauk LEVINA, O.Ya., kand. med. nauk; LENYUSHKIN, A.I., kand. med. nauk; LEYBZON, N.D., doktor med. nauk; MALININA, L.I., doktor med. nauk; MAREYEVA, T.G., kandidat meditsinskikh nauk; NERSESYANTS, S.I., kand. med. nauk; OVCHINNIKOV, A.A.; OGLEZNEV, K.Ya., kand. med. nauk; ROSTOTSKAYA, V.I., kand, med. nauk; STEPANOV, E.A., kand. med. nauk; EPSHTEYN, P.V.; OSTROVERKHOV, G.Ye., prof., glav. red.; DOMBROVSKAYA, Yu.F., prof., otv. red.

[Multivolume manual on pediatrics]Mnogotomnoe rukovodstvo po pediatrii. Moskva, Meditsina. Vol.9.[Pediatric surgery] Khirurgiia detskogo vozrasta. Red.toma S.IA.Doletskii. 1964. 654 p. (MIRA 17:9)

1. Deystvitel'nyy chlen AMN SSSR (for Dombrovskaya). 2. Chlen-korrespondent AMN SSSR (for Bairov, Volkov).

ZVYAGINTSEV, A.Ye.; VOLKOV, M.V.; DOLETSKIY, S.Ya.

No transl. Khirurgiia 32 no.10:84-85 O '56 (MIRA 12:7)
(BIOGRAPHIES
Ternovskiy, Sergei D.)

ZVYAGINTSEV, A.Ye.; VOLKOV, M.V.; DOLETSKIY, S.Ya.

Sergei Dmitrievich Ternovskii. Ortop., travm. i protez. 18 no.1: 78-79 Ja-F '57. (MLRA 10:6)
(TERNOVSKII, SERGEI DMITRIEVICH, 1896-)

ZVYAGINTSEV, A.Ye., dotsent; ZHELEZNYAKOVA, F.I.; GADZHIMIRZAYEV, G.A.

Surgical treatment of hypospadias in children. Urologiia 29 no.3:3-6 My-Je '64. (MIRA 18:10)

1. Klinika detskoy khirurgii (zav.- prof. I.K. Murashov) II Moskovskogo meditsinskogo instituta imeni Pirogova.

ZVYAGINTSEV, B.N.

Some statistical characteristics of the second derivative of the envelope of a normal random process. Radiotekh. i elektron. 10 no.4:749-754 Ap '65. (MIRA 18:5)

ZVYAGINTSEV, D.F., kapitan, voyenny letchik vtorogo klassa; BELKIN, G.N., kapitan, voyennyy shturman pervogo klassa

How we carry out aerial reconnaissance. Vest.Vozd.Fl. no.8:33-37 Ag '60. (MIRA 13:9)
(Aeronautics, Military--Observations)

ZVYAGINTSEV, D.G.; VINOGRADOVA, K.A.; AGRE, N.S.; PERTSOVSKAYA, A.F.

Natural (primary) fluorescence of actinomycetes. Mikrobiologiia 33 no.4:631-638 Jl-Ag '64. (MIRA 18:3)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

ZVYAGINTSEV, D.G.

Study of attaching micro-organisms with the help of fluorescence microscopy. Nauch.dokl.vys.shkoly; biol.nauki no.3:173-177 '65.
(MIRA 18:8)

1. Rekomendovana kafedroy biologii pochv Moskovskogo gosudarstvennogo universiteta.

MANTROVA, Yelizaveta Zakharovna; ZVYAGINTSEV, D.G., red.

[Fertilizers for ornamental plants] Udobrenie dekorativnykh rastenii. Moskva, Izd-vo Mosk. univ., 1965. 300 p. (MIRA 18:8)

ZVYAGINTSEV, D. G., Candidate of Biol Sci (diss) -- "The adsorption of microorganisms by soil particles". Moscow, 1959. 20 pp (Moscow Order of Lenin and Order of Labor Red Banner State U im M. V. Lomonosov, Soil-Biol Faculty), 120 copies (KL, No 20, 1959, 110)

ZVYAGINTSEV, D.G.

Activity of bacteria adsorbed by soil particles. Mikrobiologiia 28 no.4:527-533 Jl-Ag '59. (MIRA 12:12)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.
(SOIL microbiol.)
(BACTERIA)

ZVYAGINTSEV, D.G.

Fluorescence microscopy in the study of soil micro-organisms. Nauch.dokl.vys.shkoly; biol.nauki no.2:212-216 '59.
(MIRA 12:6)

1. Rekomendovana kafedroy biologii pochv Moskovskogo gosudarstvennogo universiteta im. M.V.Lomonosova.
(Fluorescence microscopy)
(Soil micro-organisms)

ZVYAGINTSEV, D.G.

Adsorption of micro-organisms by soil particles. Pochvovedenie no.2:19-25 F '62. (MIRA 15:3)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.
(Soil micro-organisms)

17(2) SOV/20-123-2-44/50

AUTHORS: Krasil'nikov, N. A., Corresponding Member, Academy of Sciences, USSR, Zvyagintsev, D. G.

TITLE: The Application of Fluorescent Microscopy in Incident Light to Soil Microflora Investigations (Primeneniye fluorestsentnoy mikroskopii v otrazhennom svete dlya izucheniya pochvennoy mikroflory)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 123, Nr 2, pp 366-367 (USSR)

ABSTRACT: The authors suggest a modification of the method of direct microscopic investigation of the soil microflora: instead of observing a soil-suspension in permeating blue light an undestroyed section of fresh soil is lighted by the mercury-quartz lamps SVDSh 250-2 and -3, and studied in the incident light. Thus, it was possible to see the natural normal distribution of microbes in the soil as well as their colonies on soil particles of any size. The staining method remained unchanged (Refs 1,2): fluoro chrome acridine orange. The color microphotographs (Figs 1-3) give an idea of the location of the microbe in the soil and of its main forms. It was possible to

The Application of Fluorescent Microscopy in Incident Light to Soil Microflora Investigations

find out that the soil microorganisms are placed in their natural state on the surface of soil particles. Only a few of them are floating freely in between. Some particles are densely (Fig 1 a), others, however, only weakly populated (Fig 1 b). They form colonies different in size (4-20 up to 100 and more individual microbes). Single cells, and chains occur relatively often. The bulk of the bacterial cells in the soil is in a state of ball- or coccus-like forms; smaller or bigger rods are rare. Mycelial hyphae of actinomycetes and fungi occur. Organic materials, such as peptone, saccharose, starch, and mannitol caused an impetuous development of microorganisms in humus. A lot of freely floating cells occurred. The authors successfully applied the method suggested for investigating the adsorption by the soil of individual species of bacteria (Fig 3). Some species (Pseudomona pyocyanea) are adsorbed in great quantities, some others in a smaller degree (Bacterium coli, B. mycoides), and a third group not at all. As fluorescence device OI-17 was used. There are 3 figures and 2 references, 1 of which is Soviet.

SOV/20-123-2-44/50

The Application of Fluorescent Microscopy in Incident Light to Soil Microflora Investigations

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED: June 27, 1958

Card 3/3

ZVYAGINTSEV, D.G.

Effect of cations on the adsorption of micro-organisms by a glass surface. Nauch. dokl. vys. shkoly; biol.nauki no.2:166-170 '62. (MIRA 15:5)

1. Rekomendovana kafedroy biologii pochv Moskovskogo gosudarstvennogo universiteta im. M.V.Lomonosova.
(CATIONS) (BACTERIA) (ELECTROCHEMISTRY)

KORENEVSKAYA, V. Ye.; KAPLUNOVA, L.S.; ZVYAGINTSEV, D.G.

Agrochemical hydrophysical and microbiological characteristics of turf-Podzolic soils with removed humus horizon. Pochvovedenie no. 2:43-52 D '65 (MIRA 19:1)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.
Submitted July 18, 1962.

ZVYAGINTSEV, D.G.

Study of the microflora of the rhizosphere using reflected light fluorescence microscopy. Mikrobiologiia 31 no.1:111-115 Ja-F '62. (MIRA 15:3)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta imeni Lomonosova.
(RHIZOSPHERE) (MICROBIOLOGY)
(FLUORESCENCE MICROSCOPE)

ZVYAGINTSEV, D.G.

Use of quenchers for the study of soil microorganisms with the help of fluorescence microscopy. Mikrobiologiia 32 no.4:732-736 Jl-Ag '63. (MIRA 17:6)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta imeni M.V. Lomonosova.

ZVYAGINTSEV, D.G.

Studying forms and dimensions of soil micro-organisms by means of fluorescence microscopy. Pochvovedenie no.3:101-105 Mr '64. (MIRA 17:4)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

ZVYAGINTSEV, D.G.

Effect of antibiotics adsorbed by soil particles on the development of free and adsorbed micro-organisms. Nauch. dokl. vys. shkoly; biol. nauki no.1:205-208 '64. (MIRA 17:4)

1. Rekomendovana kafedroy biologii pochv Moskovskogo gosudarstvennogo universiteta im. M.V.Lomonosova.

KORENEVSKAYA, V.Ye; KAPLUNOVA, L.S.; ZVYAGINTSEV, D.G.

Studies on the recultivation of lands pitted with quarries. Nauch. dokl. vys. shkoly; biol. nauki no.4:192-195 '63 (MIRA 16:11)

1. Rekomendovana kafedrami fiziki i melioratsii pochv, agrokhimii i biologii pochv Moskovskogo gosudarstvennogo universiteta im. Lomonosova.

*

KRASIL'NIKOV, N.A., prof., otv. red.; DROBKOV, A.A., doktor biol. nauk, red.; ZVYAGINTSEV, D.G., kand. biol. nauk, red.; CHISTYAKOVA, K.S., tekhn. red.

[Microorganisms in agriculture] Mikroorganizmy v sel'skom khoziaistve; trudy Mezhvuzovskoi nauchnoi konferentsii. Moskva, Izd-vo Mosk. univ., 1963. 207 p. (MIRA 16:7)

1. Chlen-korrespondent AN SSSR (for Krasil'nikov).
(Agricultural microbiology)

ZVYAGINTSEV, D.G.

Adsorption of micro-organisms by a glass surface [with summary in English]. Mikrobiologiia 28 no.1:112-115 Ja-F '59. (MIRA 12:3)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.
(GLASS,
adsorption of micro-organisms by glass surface
(Rus))
(MICRO-ORGANISMS,
same)

KACHINSKIY, Nikodim Antonovich; ZVYAGINTSEV, G.D., red.; MUKHINA, L.V., tekhn. red.

[Soil structure] Struktura pochvy; itogi i perspektivy izucheniia voprosa. Moskva, Izd-vo Mosk. univ., 1963. 98 p. (MIRA 16:10)

(Soil research)

SATAROVA, N.A.; ZVYAGINTSEV, I.V.

Method for the extermination of the tobacco shrips. Zashch.rast. ot vred.i bol. 7 no.5:40-41 My '62. (MIRA 15:11)

1. Krymskaya stantsiya Vsesoyuznogo instituta tabaka i makhorki.
(Crimea--Tobacco thrips--Extermination)

BOK, N.B.; ZVYAGINTSEV, D.K.; ROTIN, Ya.P.; AZHORIN, A.A., red.

[Overall mechanization of livestock farms in virgin regions] Kompleksnaia mekhanizatsiia zhivotnovodcheskikh ferm v tselinnykh raionakh. Moskva, Kolos, 1964. 127 p. (MIRA 18:1)

ZVYAGINTSEV, K.I.

Reorganization of foundries in the Voronezh Economic Council.
Lit. proizv. no.6:16-22 Je '61. (MIRA 14:6)
(Voronezh Province--Foundries)

ZVYAGINTSEV, K.N.; KRAPIVNAYA, V.F.

Igniting the gas producer, and connection limiting in the experimental section of the Dnieper Basin. Trudy VNII Podzemgaza no.13:74-78 '65. (MIRA 18:8)

1. Laboratoriya tekhnologii podzemnoy gazifikatsii ugley Vsesoyuznogo nauchno-issledovatel'skogo instituta podzemnoy gazifikatsii ugley.

ZYBALOVA, G.P.; ZVYAGINTSEV, K.N.

Effect of certain lignite properties on fire drift movements advancing toward the blow. Podzem.gaz.ugl. no.2:46-51 '59. (MIRA 12:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy i proyektnyy institut podzemnoy gazifikatsii ugley.
(Lignite--Testing) (Coal gasification, Underground)

NUSINOV, G.O., doktor tekhn.nauk; ZYBALOVA, G.P., kand.tekhn.nauk;
Prinimali uchastiye: RETINSKAYA, A.N., inzh.;
ZVYAGINTSEV, K.N., inzh.; DUSHANOVA, N.N., inzh.;
KARNASH, E.M., inzh.

First data on the underground coal gasification in the experimental gas producer of the Angren "Podzemgaz" Gas Producer Plant. Nauch. trudy VNII Podzemgaza no.6:3-10 '62. (MIRA 15:11)

1. Laboratoriya gazifikatsii burykh ugley Vsesoyuznogo nauchno-issledovatel'skogo instituta podzemnoy gazifikatsii ugley.

(Angren Basin--Coal gasification, Underground)

ZVYAGINTSEV, L.I.

Symposium on the physicomechanical properties of rocks in the upper part of the earth's crust. Sov. geol. 8 no.3:151-156 '65. (MIRA 18:5)

ZVYAGINTSEV, L.I.

Relationship between volcanism and plutonism as revealed by the studies in the Rudnyy Altai. Biul.MOIP.Otd.geol.38 no.2:151-152 Mr-Ap '63. (MIRA 16:5)

(Altai Mountains--Rocks, Igneous)

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Age of granitoids of the Zmeinogorsk intrusive complex in the Rudnyy Altai. Izv.vys.ucheb.zav.; geol. i razv. 1 no.5:40-49 My '58.
(MIRA 12:2)

1. Moskovskiy geologorazvedochnyy institut imeni S. Ordzhonikidze, kafedra izverzhennykh i metamorficheskikh porod.
(Altai Mountains—Granite)

ZVYAGINTSEV, G.

Automation of production and labor organization in a thermal electric power plant. Sots.trud 5 no.1:108-111 Ja '60. (MIRA 13:6)

1. Nachal'nik Chelyabenergo.
(Chelyabinsk Province--Electric power plants)
(Automation)

ZVYAGINTSEV, I.V.

Centralized freight transportation by truck. Tekst.prom.15 no.8: 6-7 Ag'55. (MLRA 8:11)
(Transportation, Automotive--Freight) (Textile industry)

STRASHNOV, N.M.; ZVYAGINTSEV, I.V.

For efficient organization in the transportation of industrial freight. Tekst.prom.16 no.4:4-5 Ap '56. (MIRA 9:7)
(Textile fabrics--Transportation)(Raw materials--Transportation)

1. ZVIAGINTSEV, K. F.

2. USSR (600)

4. Swine--Feeding and Feeding Stuffs

7. Work practice of the swine breeding section, Dost. sel'khoz., No. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April, 1953, Uncl.

ZVYAGINTSEV, K.N.

Studying the effect of the moisture content of Dnieper Basin brown coals on their gasification with the oxygen blowing method. Nauch. trudy VNIIPodzemgaza no.7:41-47 '62. (MIRA 15:11)

1. Laboratoriya gazifikatsii kamennykh ugley Vsesoyuznogo nauchno-issledovatel'skogo instituta podzemnoy gazifikatsii ugley.
(Coal gasification, Underground) (Dnieper Basin--Lignite)

ZAGREBEL'NAYA, V.S., kand.tekhn.nauk; ZVYAGINTSEV, K.N.

Gasification of Dniepr lignite. Podzem.gaz.ugl. no.4:10-13 '59. (MIRA 13:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut Podzemgaz.
(Dnieper Basin--Coal gasification, Underground)

ZVYAGINTSEV, Leonid Ivanovich; SHIPULIN, F.K., doktor geol.-miner. nauk, otv. red.

[Paleozoic volcanism in the southeastern part of the Rudnyy Altai] Paleozoiskii vulkanizm iugo-vostochnoi chasti Rudnogo Altaia. Moskva, Nauka, 1965. 155 p. (MIRA 18:3)

KOSHKIN, M. L., prof.; GIL'MAN, B. I.; DUDA, M. N.; DUDCHENKO, I. I.; ZVYAGINTSEVA, L. I.; SLASHCHOVA, K. V.

Preventive irradiation of preschool and younger school-age children with small (non-erythematic) doses of ultraviolet irradiation. Vrach. delo no.6:127-132 Je '62. (MIRA 15:7)

1. Kafedra obshchey gigiyeny (zav. - prof. M. L. Koshkin) Khar'kovskogo meditsinskogo instituta.

(ULTRAVIOLET RAYS--THERAPEUTIC USE)
(SCHOOL HYGIENE)

ZVYAGINTSEV, O.Ye., red.; PTITSYN, B.V., red.; SHUL'MAN, V.M., red.; PESHCHEVITSKIY, B.I., red.; ZAYTSEVA, I.P., red.; OVCHINNIKOVA, T.K., tekhn. red.

[Problems in the analysis of noble metals; proceedings of the Fifth All-Union Conference on the Analysis of Noble Metals] Voprosy analiza blagorodnykh metallov; trudy Vsesoiuznogo soveshchaniia po analizu blagorodnykh metallov. 5th. Novosibirsk, Izd-vo Sibirskogo otd-niia AN SSSR, 1963. 100 p. (MIRA 17:4)

1. Vsesoyuznoye soveshchaniye po analizu blagorodnykh metallov. 5th.

ZVYAGINTSEV, O. YE. & SHVINDLYAN, N. M.

"On mutual influence of atoms and groups in complexes of nitrosyl ruthenium."

report submitted for 8th Intl Conf on Coordination Chemistry, Vienna, 7-11 Sep 64.

ZVYAGINTSEV, O.Ye.; FROLOV, Yu.G.; SUDARIKOV, B.N.

Mechanism of the extraction of tetra- and hexavalent uranium sulfates by tri- and di-n-octylamines. Trudy MKHTI no.47:134-139 '64. (MIRA 18:9)

ZVYAGINTSEV, O.Ye.; FROLOV, Yu.G.; PUSHKOV, A.A.; DUSHEK, B.

Extraction of inorganic acids by aniline derivatives. Zhur. neorg. khim. 10 no.2:512-517 F '65. (MIRA 18:11)

1. Submitted Sept. 16, 1963.

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EWT(m)/EPF(c)/EWP(j)/T/EWP(t)/EWP(b) L/P(c) JD/RM

ACC NR: AP5027210 SOURCE CODE: UR/0078/65/010/011/2571/2573

AUTHOR: Sinitsyn, N. M.; Zvyagintsev, O. Ye.

ORG: None

50
B

TITLE: The thermal stability of complex compounds of ruthenium containing an NO group

SOURCE: Zhurnal neorganicheskiy khimii, v. 10, no. 11, 1965, 2571-2573

TOPIC TAGS: ruthenium compound, thermal stability, nitrogen compound

ABSTRACT: A thermographic study was made of a series of nitroso compounds of ruthenium in a vertical pyrometer with simultaneous automatic recording of the change in weight during heating in air. Temperature measurements were made with a platinum-platinum rhodium thermocouple with a diameter of 0.3 mm. A table shows the formulas of the nitroso ruthenium compounds, the temperature of the start of the endothermic effect, and the temperatures of the initial and maximum exothermic effects. For all the compounds, the dissociation of the RuNO

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groups is accompanied by a strong exothermic effect; in most cases, this is preceded by an endothermic effect, which goes over suddenly to the exothermic effect. The first endothermic effect at 300 C reflects the elimination of two molecules of NH_4Cl (calculated weight loss 31.10%, found experimentally 32.00%). For all compounds investigated, the final dissociation product was ruthenium dioxide. The final products of thermal dissociation were analyzed for ruthenium content, which varied from 74.8 to 76.7%; no nitrogen or chlorine was found. To confirm the conclusion that the RuNO group exists up to the temperature of the following endothermic effect, the products obtained by heating the salts to a point somewhat lower than this temperature (by 20-30C) were analyzed for nitrogen. Nitrogen was found in all the products. The data indicates that the dissociation temperature of the RuNO group varies over a wide interval, from 220 to 410 C. Orig. art. has: 1 figure and 1 table

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PROCESSES AND PROPERTIES INDEX

Ca

6

Ternary compounds of rhodium. II. O. E. Zvyagintsev, E. A. Vorob'eva and S. I. Khorunzhenkov. *Ann. inst. platine* (U.S.S.R.) No. 7, 113-[illegible] (1929). The salt of Wilm has the formula $(NH_4)_2[RhCl_4(NH_2Cl)]NO_2$. Cond. measurements prove the presence of 2 anions and 3 cations. It crystallizes in the hexagonal system and has the following elements of symmetry: $CL_6(A_6)3L_23P$.

RAE MAIZEL

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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PROCESSES AND PROPERTIES INDEX

2

The action of hydrogen on the solutions of ruthenium salts at high pressures and temperatures. V. N. IPAT'EV AND O. E. ZVYAGINTSEV. *J. Russ. Phys. Chem. Soc.* 61, 823-5(1929).—See *C. A.* 23, 2635.

V. VESSELOVSKY

Zhur. Fiz. Khim.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

Soviet platinum. Moskva, Gosl nauch.-tekhn. izd-vo, 1931. 55 p.
(50-41592)

TN799.P7Z93

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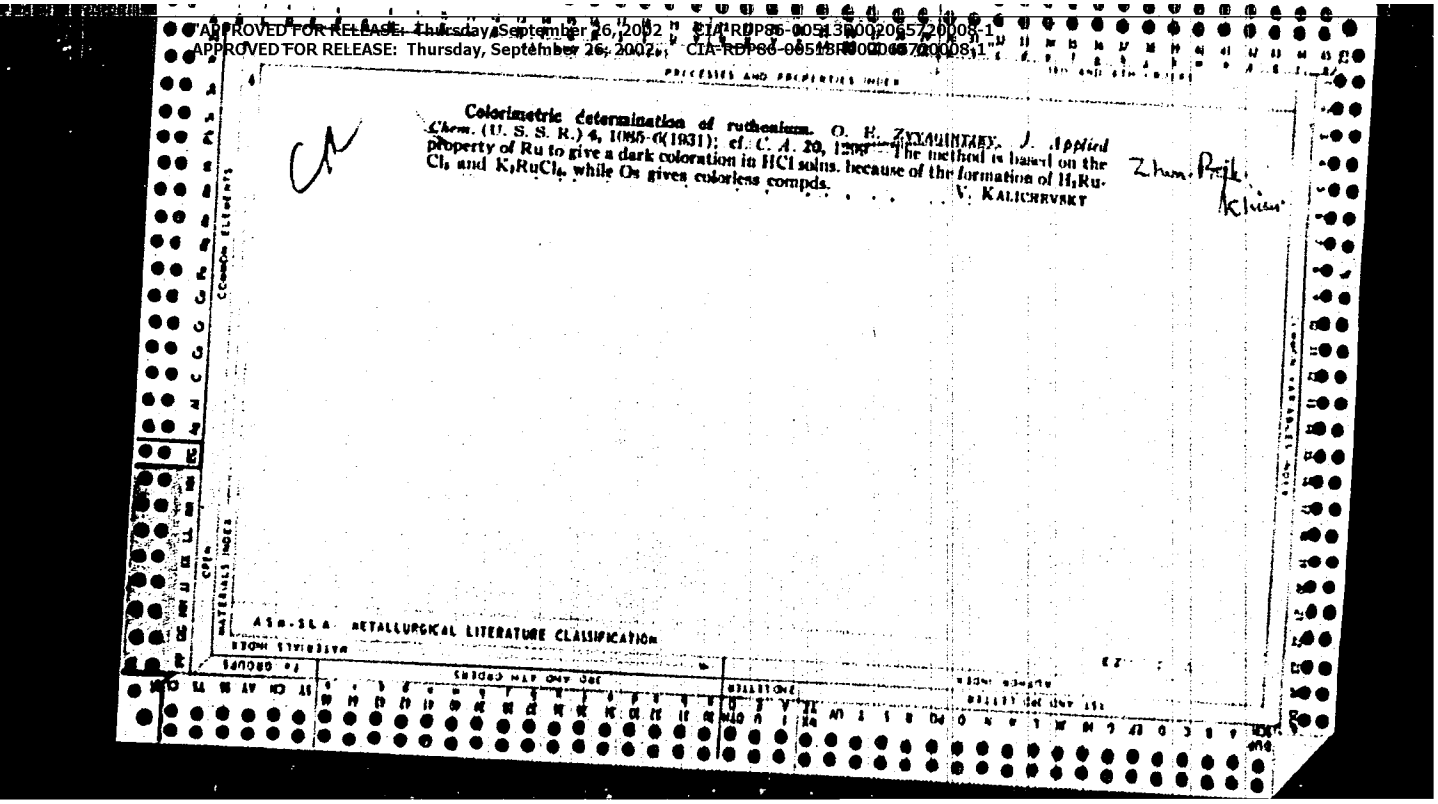

PROCESSES AND PROPERTIES INDEX

Colorimetric determination of ruthenium. O. E. ZVYAGINTSEV. *J. Applied Chem.* (U. S. S. R.) 4, 1085-6(1931); cf. *C. A.* 20, 1209.—The method is based on the property of Ru to give a dark coloration in HCl solns. because of the formation of H_2RuCl_5 and K_2RuCl_5 while Os gives colorless compds. . . . . V. KALICHEVSKY

Zhur. Prik. Khim.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

Forms of occurrence of platinum-group metals. O. E. Zvyagintsev. *Tsvet. Metal.* 1932, No. 7-8, 140-5.—The content of the Pt metals in the lithosphere is probably somewhat higher than that given by I. and W. Noddack (C. A. 25, 3280). This correction is suggested by the work of V. A. Obruchev who reported that Pt occurs frequently in Siberian traps. The Pt content is far too low for com. extn., but the occurrence of the Pt-bearing traps is very widespread.

B. N. Dankoff

Tsvet. Met.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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PROCESSES AND PROPERTIES INDEX

Cu

7

Analytical separation of copper from rhodium. O. E. Zvyagintsev. *J. Applied Chem. (U. S. S. R.)* **15**, 217-18(1942); cf. C. A. **26**, 1551.—Sepn. of Rh from Cu is never complete. Rh should be detd. first if its content is over 50%, but with lower concns. Cu is pptd. before Rh. V. Kalichevsky

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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M

2

*Os Osmiridium.—L. O. E. Zviagintsev (*Izvestia Platinogo Instituta* (*Annales de l'Institut de Platine*), 1932, (8), 31–48).—[In Russian.] See abstract from German source, *J. Inst. Metals*, 1933, 52, 352.—N. A.

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3

*Os Osmiridium. II.—X-Ray Analysis. O. E. Zvyagintsev and B. K. Brunovskiy (*Izvestia Platinago Instituta* (*Annales de l'Institut de Platine*), 1932, (9), 49–53).—[In Russian.] Cf. *J. Inst. Metals*, 1933, **52**, 352. Osmiridium of various origins and compositions has a close-packed hexagonal lattice, like osmium; $a = 2{\cdot}720$–$2{\cdot}90$ A., $c = 4{\cdot}235$–$4{\cdot}60$ A., $c/a = 1{\cdot}581$–$1{\cdot}617$. Some of the atoms in the osmium lattice can be replaced by up to 51% of iridium and platinum without altering its character. Osmiridium must therefore be regarded as a solid solution of iridium (and platinum) in osmium.—N. A.

The metallurgy and technology of platinum and the platinum group. Moskva, TSvet-metizdat, 1933. 111 p. (50-40631)

TN799.P7Z9

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BC

A-2

Forms under which platinum and allied metals occur in nature. — O. E. ZVYAGINTSEV. (Ann. Inst. Platine, 1932, No. 10, 14—33).—A discussion.

R. T.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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PROCESSES AND PROPERTIES INDEX

Ca

9

The presence of platinum in sulfur ores. O. E. Zvyagintsev, V. V. Lebedinskiĭ and A. N. Filippov. *Compt. rend. acad. sci.* (U. R. S. S.) [N. S.], 1938, 165-9.—Pt was detected in various ores and final products by spectroscopic means. Up to 50 mg. per kg. was found in ores from Ridder, Allaverdui, Buron and Karabash contg. Cu, Pb, Zn, Fe, SiO_2, Se, As, S, Al_2O_3, CaO, MgO, Au and Ag. Electrolytic mud, waste from concentrates, etc., contained Pt.

A. A. Boehtlingk

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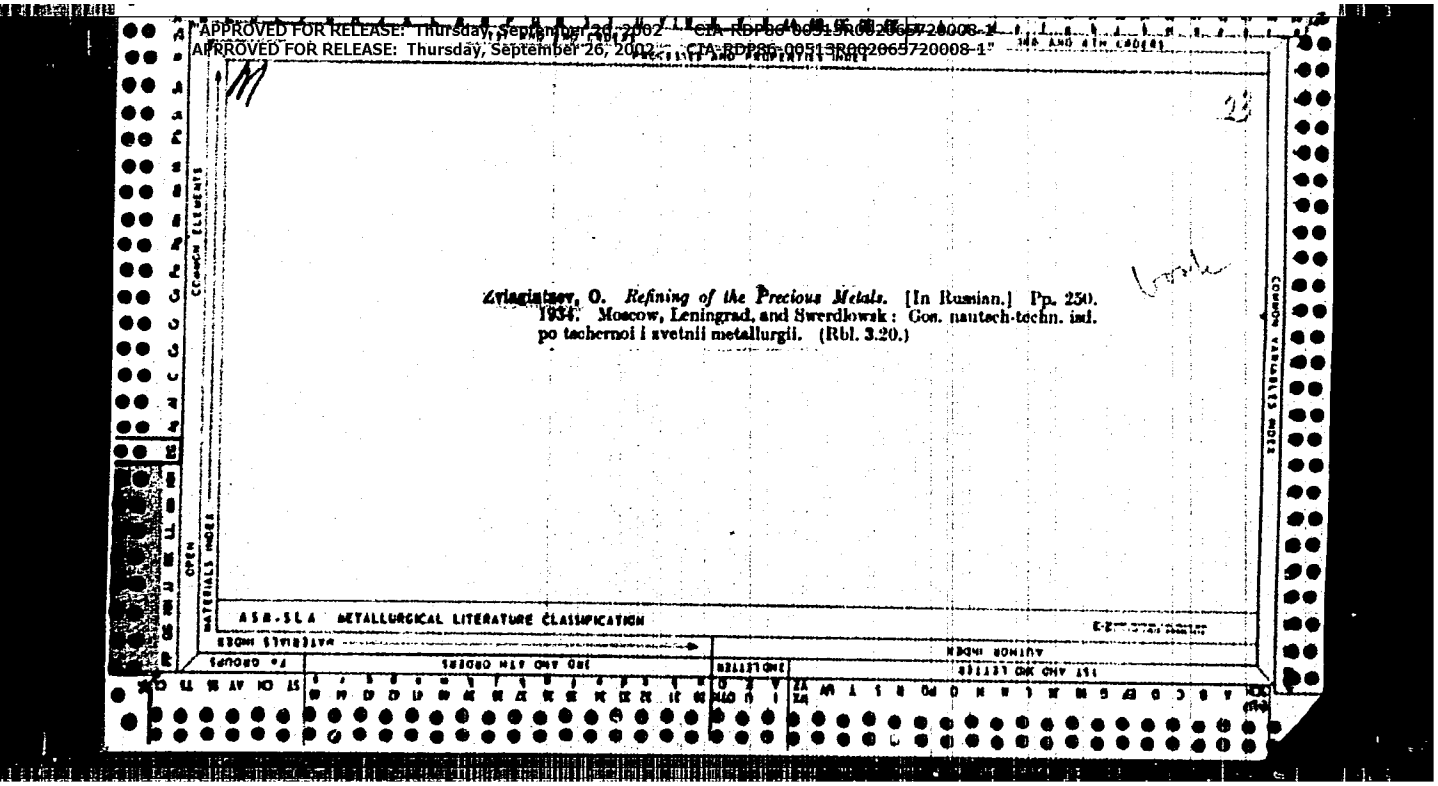
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



Zviagintsev, O. *Refining of the Precious Metals.* [In Russian.] Pp. 250. 1934. Moscow, Leningrad, and Swerdlowsk: Gos. nautech-techn. ind. po tschernoi i svetnii metallurgii. (Rbl. 3.20.)

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065720008-1"

Osmiridium in northern Caucasus and in Kuznetsk-Altau. O. E. Zvyagintzev. *Sovet. Zolotoprom.* 1934, No. 1, 37-9.—Analysis gave 31.3-43.0% Os, 33-55% Ir and some Rh, Ru, Pt and Au. The specimens evidently represent variable solid solns. of Ir, etc., in Os, which retains its cryst. structure. S. L. Madorsky

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PROCESSES AND PROPERTIES INDEX

A new mineral containing metals of the platinum group. O. E. Zvyagintsev. *Compt. rend. acad. sci. U. R. S. S.* 4, 170–8 (in German 178–9)(1934); cf. *C. A.* 28, 2290[4].—The mineral was obtained in bright silvery grains by treating concentrates from the Sverdlovsk mines with aqua regia to remove Pt. Its hardness is 6–7, sp. gr. 20 and it has no cleavage (unlike iridosmine). X-ray study showed that the structure is face-centered cubic, with a_0 = 3.810 A. (for pure Ir, a_0 = 3.822). Analysis gave Ir 51.7, Os 25.5, Ru 3.5, Au 10.3% and Fe trace. It is a solid soln. of Au, Os and Ru in Ir. The name *aurosmirid* is proposed for the cubic mineral, iridosmine being used for solid solns. having the hexagonal Os structure. M. P.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

CR

9

The occurrence of platinum in sulfide ores. A. [illegible] Zvyagintzev and A. N. Filippov. *Compt. rend. acad. sci. U. R. S. S.* 1, No. 2-3, 130-2(in German 133-5)(1935); cf. *C. A.* **28**, 1635[9].—The av. Pt content of 17 ore deposits varied from 0.02 to 11 g./ton. The processes now used do not permit economical recovery. Pt appears to be concd. in ores assocd. with acid magmas. **The platinum content of minerals of sulfide ores.** *Ibid.* 130-7(in German 138-9).—The Pt was found to be largely concd. in the galena. Sphalerite carried some Pt; pyrite and chalcopyrite, very little or none.

Michael Fleischer

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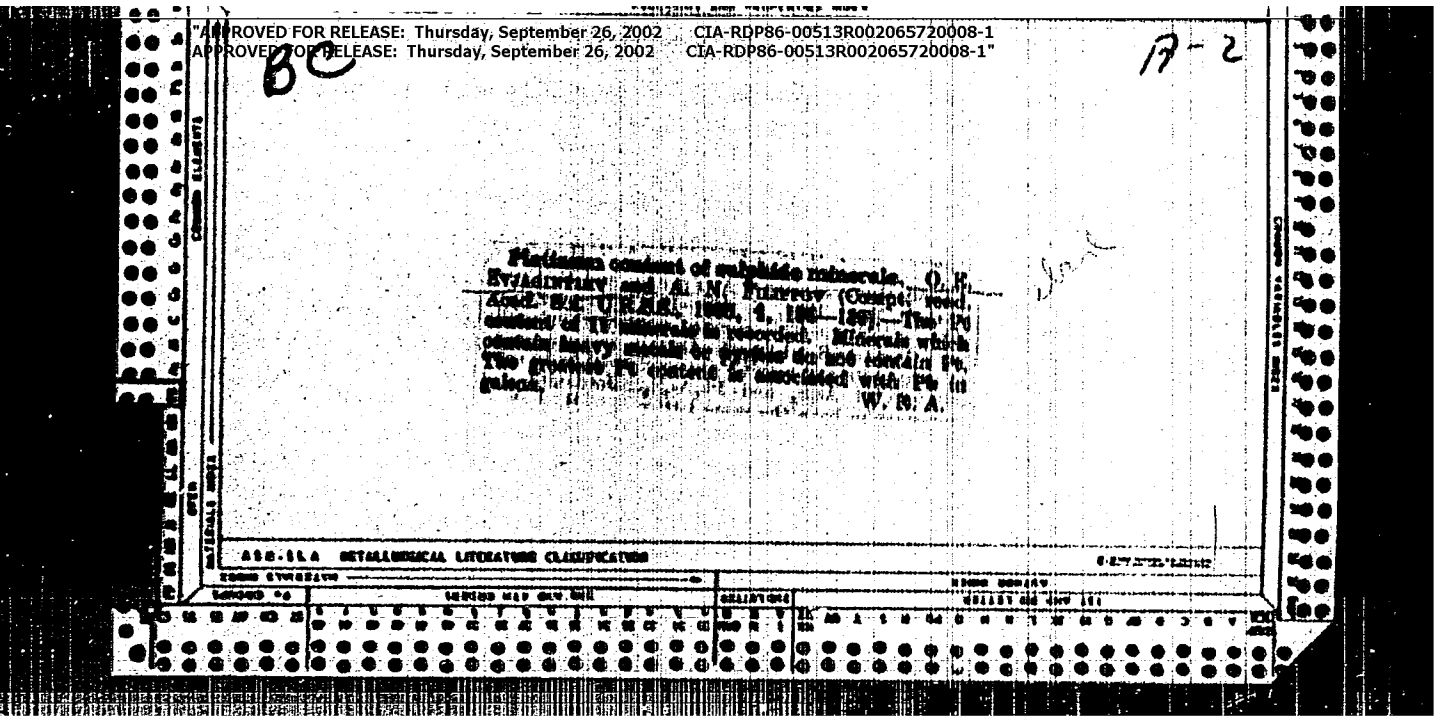

PROCESSES AND PROPERTIES INDEX

/ **Aurosmiridium.** O. Zvyagintsev. *Sotsialist. Rekonstruktsiya i Nauka* **1935**, No. 3, 176.—A new mineral has been found composed of Ir 52, Os 25, Au 19 and Ru 3.5%; it represents a natural alloy in the form of grains 0.2-2 mm. in diam. B. V. Shvartsberg

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

m

3

*Os Osmiridium. O. E. Zvyagintsev and B. K. Brunovskiy (*Izvestia Platinovo Instituta* (*Ann. Inst. Platine*), 1935, (13), 5–15).—[In Russian.] X-ray analysis of native osmiridium has shown it to possess a definite phase structure, and in some varieties have been found signs of incipient recrystallisation; the probable causes of these phenomena are discussed. Laue photograms of a single-crystal specimen of the mineral revealed the presence of constituents with an orientation differing by 10° from that of the crystal itself.—N. A.

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M

Jm2

1

*On Rhodium-Copper Alloys. O. E. Zvigintsev and B. K. Rumovskiy (*Izvestia Platinovo Instituta* (*Ann. Inst. Platine*), 1935, (13), 37–66).—(In Russian.) The system has been investigated by hardness measurements on, and micrographic examination of, quenched and annealed alloys. The hardness curve for the quenched alloys is characteristic of a continuous series of solid solutions, whereas that for annealed alloys has minima at 50 and 75 atomic-% rhodium. The microstructure of quenched alloys is homogeneous between 0 and 20, and between 90 and 100 atomic-% rhodium as well as at 50 and at 75–80 atomic-% rhodium; other alloys have a duplex structure. Owing to the rapidity with which alloys with 25–50 atomic-% rhodium oxidize in the air, they could not be obtained in a homogeneous state, and therefore a complete equilibrium diagram could not be obtained by thermal analysis. The cooling curve of the 1 : 1 (atomic) alloy showed an arrest at 1015° C., indicative of the formation of the compound CuRh. X-ray examination showed that quenched alloys with 0–20 atomic-% rhodium have the face-centred cubic lattice of copper, a increasing regularly with the rhodium content. Similarly, alloys with 90–100 atomic-% rhodium have the rhodium lattice; all other alloys have a structure containing both these phases ($\alpha + \beta$). On annealing, alloys with about 50 atomic-% rhodium are converted into pure β_1; and those with about 75 atomic-% rhodium into β'', whereas those with 25 atomic-% rhodium do not become homogeneous. These results and the presence of superstructure lines in photograms of alloys with an atomic ratio of 1 : 1, 3 : 1, and 1 : 3, indicate the existence of the compounds RhCu, $RhCu_3$, and Rh_3Cu. The latters of all the compounds are similar to that of the β-phase, and resemble each other in parameter.—N. A.

CA

8

Iridosmine from the river B. Laba (north Caucasus).
O. E. Zvyagintsev. *Akad. V. I. Vernadskomu k Pyatides-yatiletiyu Nauch. Deyatelnosti* 2, 807-11(1936); *Chem. Zentr.* 1938, I, 2519.—In its chem. compn. (Os 43, Pt 7, (Ir + Rh) 33, Ru 13 and Fe 4.6%) and cryst. structure the irodosmine found in the north Caucasus is very similar to that found in the Ural and the East Siberia Region.
M. G. Moore

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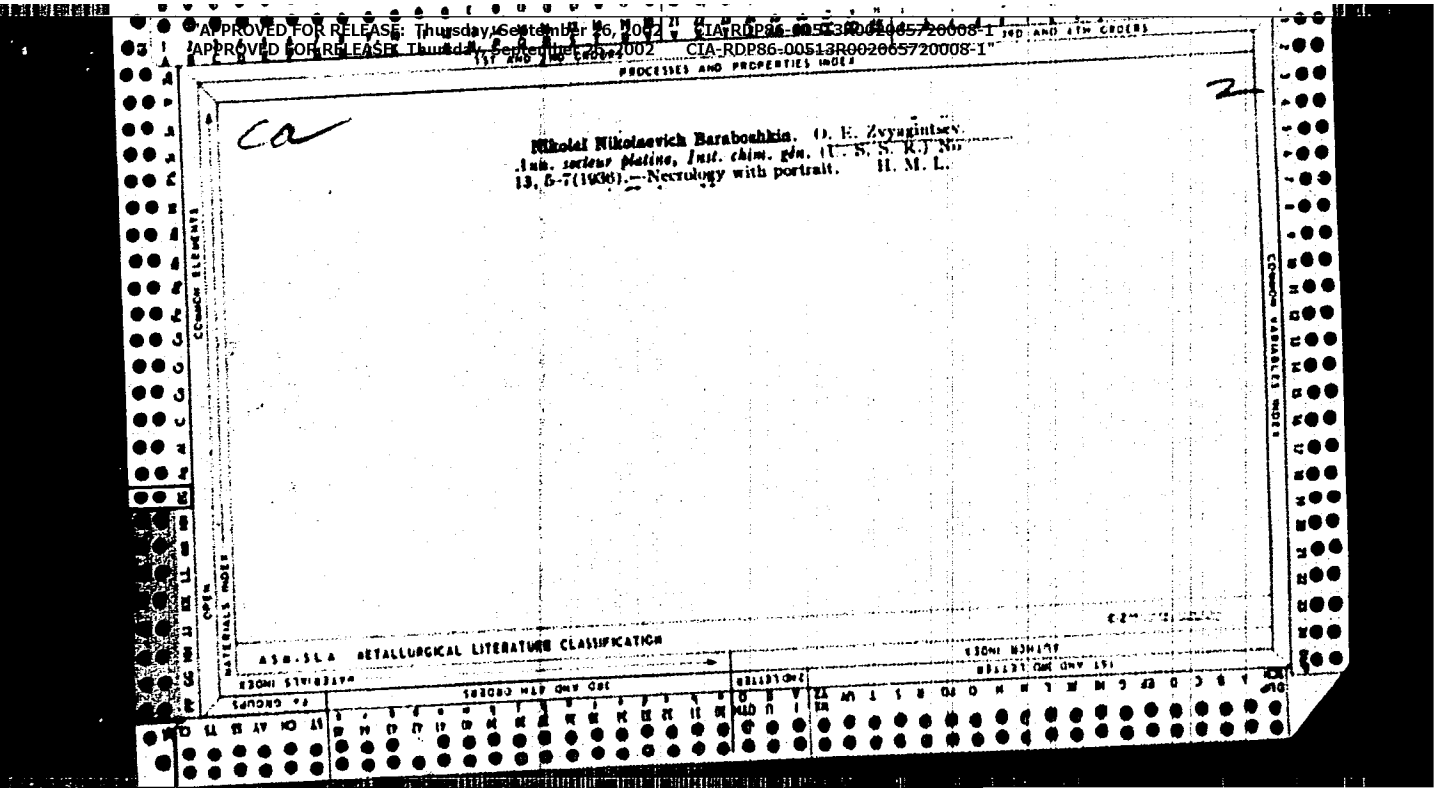

Nikolai Nikolaevich Baraboshkin. O. E. Zvyagintsev.
Ann. secteur platine, Inst. chim. gén. (U. S. S. R.) No
13, 5-7(1936).—Necrology with portrait. H. M. L.

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18C

a-1

Dokl. AN SSSR

Action of sulphide minerals on solutions of gold and platinum salts. O. E. ZVIAGINTSEV and E. L. PEARSHEVSKAJA (Compt. rend. Acad. Sci. U.R.S.S., 1936, 4, 73—74).—The actions of powdered galenite, sphalerite, pyrite, and chalcopyrite on solutions of Na_2PtCl_6 and H_2PtCl_6 have been investigated. After 1—1·5 months the galenite contained about 20% Pt as PtS_2. Reaction with the other minerals is slow.

O. D. S.

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PROCESSES AND PROPERTIES INDEX

8

Osmiridium. IV. Osmiridium from the Kuznetsk Alatau and the northern Caucasus. O. E. Zvyagintsev. *Ann. secteur platine, Inst. chim. gén.* (U. S. S. R.) No. 13, 133-7(1936); cf. *C. A.* 30, 5479.—Analyses are reported for several samples. H. M. Leicester

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

Copper nuggets from Allaverda deposits. O. R. Zyrin-gintsev and E. L. Pisarzhevskaya. *Bull. acad. sci. U. R. S. S., Classe sci. math. nat. Sér. chim.* 1937, 675-9 (in German 680).—A study was made of chem. compn., microstructure and hardness of Shamlugsk copper nuggets in the Allaverda District (Armenia). The nuggets are of high-purity Cu and contain small amts. of Fe, Ag and V, i. e., metals having an at. radius less than 1.45 A., but contain no metals of at. radius greater than this. In hardness the nuggets compare with electrolytic Cu. Sixteen references. S. L. Madorsky

Iz. Ak. Nauk SSSR, Ser. Khim.,

CA

9

World platinum industry. O. E. Zvyagintsev. Sovet. *Zolotoprom.* 1937, No. 1, 76 p. Statistical for the period 1913-36.

S. L. Mudorsky

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PROCESSES AND PROPERTIES INDEX

Ca

Complex manganese compounds. I. Compounds of manganese salts with pyridine. O. E. Zvyagintsev, D. Yu. Mamulaishvili and M. Chkoniya. *Bull. acad. sci. U. R. S. S., Classe sci. math., Sér. chim.* 1937, No. 5, 1235-0.—Improved procedures for the prepn. of the compds. of Mn with C_5H_5N (I), free from the contaminating $Mn(OH)_2$, are described. $MnCl_2.2$ I (Reitzenstein, *Z. anorg. Chem.* 18, 200(1898)), green needles, was prepd. by filtering quickly a partial soln. of MnO_2 in concd. HCl, adding to the filtrate I and crystg. in a desiccator. $MnCl_2.2$ I (Reitzenstein, *loc. cit.*), pale rose crystals, was formed by treating a mixt. of concd. $MnCl_2$ and NH_4Cl with I. $Mn(NO_3)_2.2$ I (Grossmann, *Ber.* 37, 1255(1904)) was prepd. from $Mn(NO_3)_2$ and NH_4NO_3 with I as above. All these compds. begin to decomp. at 40-65°. The new compd. $MnSO_4.I.H_2SO_4$, colorless crystals, was obtained by the interaction of $MnCl_2.2$ I and slightly acid (H_2SO_4) Ag_2SO_4 soln. It is decompd. in air and more rapidly in H_2O. Chas. Blanc

6

Iz. Akad. Nauk SSSR, Ser. Khim.

A.S.M.-S.L.A. METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065720008-1"

"Chimie des composes complexes dans l'URSS durant 20 ans". Zvjagintzev, O. E. (p. 2581)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii). 1937, Volume 7, No. 20-21.

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Chemistry of complex compounds in U. S. S. R. during the last twenty years. (I. I. Zvyagintsev. *J. Gen. Chem. (U. S. S. R.)* 7, 2581–651 (1937). A review of complex inorg. compds. Forty-three references. S. L. M.

Zhur. Obshch. Khim.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

ZVYAGINTSEV, O. Ye.

Chemical study of the gold ore of the Baley mine. O. E. Zvyagintsev, V. A. Volkova and K. L. Pearzhev. Zhur. Prik. Khim., 1937, No. 10, 13-16; Chimie & industrie 40, 999.—The Baley ore carried chiefly Au and Ag; the mineral proper contains about 70% Au and 20% Ag. In the rock, however, the proportion of Ag is relatively higher, as a considerable part of the Ag is present uncombined with Au, as pyrargyrite, etc. The compn. and structure of the Au do not vary with depth (down to 120 m.). The Baley Au bearing veins have a relatively very high K content, greater than that of gran ite.

A. Papineau Couture

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