ROMANOV, V.F., kand.tekhn.nauk; KRINZBERG, TS.Z., inzh.; KHASIN, Ya.M., inzh.

New technological process for finishing spur-gear teeth. Vest. mashinostr. 44 no.1:44-50 Ja '64. (MIRA 17:4)

NEFEDOV, V.D.; TOROPOVA, M.A.; KRIOKHATSKAYA, I.V.; KESAREV, O.V.

Separation of phenyl derivatives of arsenic and germanium by means of partition paper chromatography. Radiokhimiia 6 no. 1:112-113 '64. (MIRA 17:6)

KRIOUK, A. S.

Report of the 22d session of the White Russian Society of Traumatologists and Orthopedists. Ortop., travm. i protez. 22 no.8:90-91 Ag '61. (MIRA 14:12)

(WHITE RUSSIA--ORTHOPEDIC SOCIETIES)

KRIPAITIS, A.; GLEBAVICIENE, S., red.

[More attention to flax farming] Daugiau demesio lininin-kystei. Vilnius, Leidykla "Mintis," 1965. 80 p. [In Lithuanian] (MIRA 18:6)

KRIPAITAS, K., gyd.

Resuscitation after drowning by external cardiac massage and artificial respiration. Sveik. apsaug. 7 no.8:49 '62.

1. Kauno Greitosios pagalbos stotis.
(DROWNING) (HEART MASSAGE) (RESPIRATION ARTIFICIAL)

KRIPAK, N.

Scientific and technical conference of workers of the meat and milk industries in Kazakhstan. Mias. ind. SSSR 29 no.5:32-33 '58. (MIRA 11:10)

1. Semipalatinskiy myasokombinat.
(Kazakhstan--Food industry)

KRIPAK, N.; KEL'MAN, I.; BRAZHNIKOV, V.

Our experience in modernizing production. Mias. ind. SSSR 29 no.6:8-13 '58. (MIRA 11:12)

1.Semipalatinskiy myasokombinat.
(Meat industry--Equipment and supplies)

KRIPAK, N.

Means for fully utilizing the productive capacities of large packing houses. Mias.ind.SSSR 31 no.1:27-29 '60. (MIRA 13:5)

1. Direktor Semipalatinskogo myasokombinata.
(Semipalatinsk--Packing houses)

F

M

(2 ?). NEW PORTABLE STEAM ENGINE FOR SUPPLYING HEAT AND POWER. [illegible]erskii, V.M. and Krijets, E.S. (Za Ekon Topliva (Fuel Econ.), July 1951, 26-33). Though described as a "Locomobile" this plant is intended for stationary mounting. It has a reciprocating steam engine mounted on top of a fire-tube boilers. It produces 125 h.p. exhausting to atmosphere, or 85 h.p. plus 1,200 kg/h of process steam at 3.5 ats. back pressure. (L).

KRIPETS, E.S., inzhener.

Operating practice of a locomobile. Energetik 1 no.7:15-16 D '53.
(MLRA 6:12)
(Steam engines)

KRIPETS, B.S.

ACHERKAN, N.S., doktor tekhnicheskikh nauk, professor, glavnyy redaktor; ANTSYFEROV, M.S., kandidat fiziko-matematicheskikh nauk; ASTAKHOV, K.V., professor; VUKALOVICH, M.P., professor, doktor tekhnicheskikh nauk; KORELIN, A.I., kandidat tekhnicheskikh nauk; KRIPETS, B.S., inzhener; LAZAREV, L.P., kandidat tekhnicheskikh nauk; MAZYRIN, I.V., inzhener; MATYUKHIN, V.M., kandidat tekhnicheskikh nauk; NIKITIN, N.N., kandidat fiziko-matematicheskikh nauk; PANICHKIN, I.A., kandidat tekhnicheskikh nauk; PETUKHOV, B.S., kandidat tekhnicheskikh nauk; PODVIDZ, L.G., kandidat tekhnicheskikh nauk; SIMONOV, A.F., inzhener; SMIRYAGIN, A.P., kandidat tekhnicheskikh nauk; FAYNZIL'BER, B.M., professor, doktor tekhnicheskikh nauk; KHALIZEV, G.P., kandidat tekhnicheskikh nauk; YAN'SHIN, B.I., kandidat tekhnicheskikh nauk; MARKUS, M.Ye., inzhener, redaktor; KARGANOV, V.G., redaktor graficheskikh materialov, inzhener; SOKOLOVA, T.F., tekhnicheskiy redaktor.

[A machinebuilder's manual in six volumes] Spravochnik mashinostroitelia v shesti tomakh. Izd. 2-e, ispr. i dop. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, Vol. 2. 1954. 559 p. (MLRA 8:1)
(Machinery--Construction) (Mechanical engineering)

ANTSYFEROV, M.S., kand.fiz.-mat.nauk; VUKALOVICH, M.P., prof., doktor tekhn.nauk, laureat Leninskoy premii; KRIFETS, N.S., insh.; LAZAREV, L.P., prof., doktor tekhn.nauk; MAZYRIN, I.V., insh.; NIKITIN, N.N., kand.fiz.-mat.nauk; OCHKIN, A.V., insh.; PANICHKIN, I.A., prof., doktor tekhn.nauk; PETUKHOV, B.S., prof., doktor tekhn.nauk; PODVIDZ, L.G., kand.tekhn.nauk; SIMONOV, A.F., insh.; SMIRYAGIN, A.P., kand.tekhn.nauk; TOKMAKOV, G.A., kand.tekhn.nauk; FAYNZIL'BER, M.M., prof., doktor tekhn.nauk; KHALIKEV, G.P., kand. tekhn.nauk; CHERSACHENKO, V.F., kand.tekhn.nauk; YAN'SHIN, B.I., kand.tekhn.nauk; ACHERKAN, N.S., prof., doktor tekhn.nauk, red.; KUDRYAVTSEV, V.N., prof., doktor tekhn.nauk, red.; POMOMAREV, S.D., prof., doktor tekhn.nauk, laureat Leninskoy premii; red.; 'SATEL', M.A., prof., doktor tekhn.nauk, red.; SERENSEN, S.V., akademik, red.; RESHETOV, D.N., prof., doktor tekhn.nauk, red.; KARGANOV, V.G., insh., red.graficheskikh materialov; GIL'BERBERG, M.I., red.izd-va; SOKOLOVA, T.F., tekhn.red.

[Manual of a mechanical engineer in six volumes] Spravochnik mashinostroitelia v shesti tomakh. Red.sovet N.S.Acherkan i dr. Izd.3., ispr. i dop. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry. Vol.2. 1960. 740 p. (MIRA 14:1)

1. AN USSR (for Serensen).
(Mechanical engineering) (Machinery--Construction)

PUSTIL'NIKOV, M.R.; KORNEYEV, V.I.; KRIPINEVICH, V.L.

New anticlinal zones of the southern margin of the western part of the Kuban Lowland in the light of seismic investigations. Geol.nefti i gaza 9 no.2:44-48 F '65.

(MIRA 18:4)

1. Trest Krasnodarneftegeofizika.

15(6)

SOV/101-59-2-2/13

AUTHORS: Syrkin, Ya. M., Frenkel', M. B. and Kripitser, A. M.

TITLE: Quick-Setting Slag Portland Cements

PERIODICAL: Tsement, 1959, Nr 2, pp 3-6 (USSR)

ABSTRACT: The authors state that in 1960 the cement industry has to increase the symbol mark of cement to "425", and stop the production of cement below the "300" mark. Various ways have been proposed in order to achieve a better crushing strength of cement. P.P. Budnikov, G.A. Sokhatskaya, I.I. Kholin, A.L. Gershuns, I.L. Znachko-Yavorskiy, M.I. Strelkov, M.G. Kashperskiy, I.D. Zaporozhets, V.V. Kind, V.I. Satarin, F.F. Ladygin, A.A. Panarina and G.V. Kalishchuk, all studied manufacturing details which should improve the qualities of cement. Problems concerning the grounding fineness, mineralogical composition of the slag cements, and addition of the hardening acceleration ingredients of the slag portland cements were under construction. Yuzhgiprotsement (Southern Planning

Card 1/4

Quick-Setting Slag Portland Cements

Institute for Cement Industry Enterprises) has studied the problem of obtaining quick-hardening slag-portland-cement, with a hardening intensity similar to that of the portland-cement marked "400" - "500" for several years. Such cement might be obtained for rammed and plastic solutions under the following conditions: the cement composition must contain not less than 50% clinker and the fineness of the ground mixture, clinker - slag - gypsum, must attain 4000 to 5000 cm^2/g. Clinker must contain tricalciumsilicate (C_3S) 50 to 60% and tricalciumaluminate (C_3A), not less than 6%. At the Dneprodzerzhinskiy tsementnyy zavod (Dneprodzerzhinsk Cement Plant) for slag-portland-cement, the optimum gypsum dosing is 5%, as shown in diagram 1. Diagram 2 shows that an increase in the fineness of ground slags, above the specific surface of 3000 to 4000 cm^2/g, has little practical significance in relation to the crushing strength of cement. Tables 1 and 2 show chemical and mineralogical compositions of clinker, and the chemical composition of blast furnace

Quick-Setting Slag Portland Cements

granulated slags, obtained at the Dneprodzerzhinsk Cement Plant, and of mixed slags, in proportion 1 : 1, produced by Krivorozhskiy and Dneprodzerzhinskiy metallurgicheskiye zavody (Krivoy Rog and Dneprodzerzhinsk Metallurgical Plants), respectively. The results of experiments carried out at the plant and at the institute of the Southern Planning Institute for Cement Industry Enterprises are compiled in tables 3 and 4, showing mechanical properties of the quick-hardening slag-portland-cement (rammed solution 1:3) and of the same cement (plastic solution), respectively. Table 5 shows the strength of the concrete made of portland cement "500", produced by the Belgorodskiy tsementnyy zavod (Belgorod Cement Plant). Diagrams 3 and 4 show the possible schemes of the two stage grinding of mixed material for cement manufacturing. From the experiments carried out by the Southern Planning Institute for Cement Industry Enterprises it is seen that the prime costs of the quick-setting slag-portland-cement are 25 - 30% lower than such costs of the portland-cement of the same marks.

SOV/101-59-2-2/13

Quick-Setting Slag Portland Cements

It is projected, in 1959, to realize a mass production of the quick-hardening slag-portland-cement at a series of plants in the USSR. There are 2 diagrams, 2 graphs and 5 tables.

Card 4/4

GAZAR'YANTS, Z.; KRIPITSER, M.

From separate enterprises to a consolidated maintenance unit.
Avt.transp. 41 no.1:33-35 Ja '63. (MIRA 16:2)

1. Zamestitel' ministra avtomobil'nogo transporta i shosseynykh dorog Uzbekistana (for Gazar'yants). 2. Glavnyy inzh. tresta "Uzavtoremont" (for Kripitser).
(Motor vehicles—Maintenance and repair)

KRIPITSER, M.

New developments in the organization of motor-vehicle repair in Uzbekistan. Avt. transp. 42 no.10:32-33 O '64.
(MIRA 17:11)

1 General'nyy direktor proizvodstvennogo ob"yedineniya "Uzavtoremont".

ŠKLENÁŘ, V., inz.

Back flow in vaned rotary machines. Strojirenstvi 14 no.6:435-440 Je '64.

1. Energoprojekt, Prague.

KRIPNER, V.

"Electric driving of boiler pumps in electric-power stations."

ELEKTROTECHNIK, Praha, Czechoslovakia, Vol. 14, No. 6, June 1959.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 9, September 1959.

Unclassified.

KRIPNER, Vaclav, inz.

Automatic starting of feeders in case of failure of one of them. Energetika Cz 12 no.10:556-558 O '62.

1. Energoprojekt, Praha 7, Bubenska 1.

KRIPNER, Vaclav, inz.

Large electric motors in projects of industrial installations.
El tech obzor 51 no.9:436-441 S '62.

1. Energoprojekt Praha.

KRIPP, L.I., inzh.; ITMAN, B.L., inzh.

Vibrational removal of ash deposits from a screen type steam superheater. Elek. sta. 31 no.3:2-7 Mr '60. (MIRA 13:8)
(Boilers—Cleaning)

KRIPPA, A., inzh.

Athletic field houses made of synthetic materials. Zhil. stroi. no.1:12-14 '65. (MIRA 18:3)

KOSHKIN, V.G., kand. tekhn.nauk; MAKOTINSKIY, M.P., kand. arkh.; MUNTS, V.O., kand. arkh.; RUDINA, M.A., arkh.; SILUANOVA, G.V., arkh.; SHORYGINA, N.V., kand. khim. nauk; Priminali uchastiye: BOGUSLAVSKIY, A.I., inzh.; ZARUBITSKIY, A.Ye., inzh.; LIVSHITS, A.M., inzh.; MASHINA, N.N., inzh.; OTLIVANCHIK, A.N., kand. tekhn. nauk; ROMANOVA, L.A., inzh.; CHERKINSKIY, Yu.S., inzh.; ANDREYEV, V.S., retsenzent; IOFAN, B.M., retsenzent; KRIPPA, A.I., arkh., retsenzent; GURVICH, E.A., red.izd-va; BRUSINA, L.N., tekhn. red.

[Catalog of finishing materials and products] Katalog otdelochnykh materialov i izdelii. Moskva, Gosstroiizdat. Pt.1.[Plastics; polymer finishing materials] Plastmassy; polimernye otdelochnye materialy. 1962. 119 p. (MIRA 16:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut novykh stroitel'nykh materialov. 2. Chleny-korrespondenty Akademii stroitel'stva i arkhitektury SSSR (for Andreyev, Iofan, Krippa).
(Plastics) (Building--Details)

KOSHKIN, V.G., kand. tekhn. nauk; MAKOTINSKIY, M.P., kand. arkh.; MUNTS, V.O., kand. arkh.; RUDINA, M.A., arkh.; SILUANOVA, G.V., arkh.; SHORYGINA, N.V., kand. khim. nauk. Prinimali uchastiye: BOGUSLAVSKIY, A.I., inzh.; ZARUBITSKIY, A.Ye., inzh.; LIVSHITS, A.M., inzh.; MASHINA, N.N., inzh.; OTLIVANCHIK, A.N., kand. tekhn. nauk; ROMANOVA, L.A., inzh.; CHERKINSKIY, Yu.S., inzh.; ANDREYEV, V.S., retsenzent; IOFAN, B.M., retsenzent; KRIPPA, A.I., arkh., retsenzent; GURVICH, E.A., red.izd-va; BRUSINA, L.N., tekhn. red.

[Catalog of finishing materials and articles] Katalog otdelochnykh materialov i izdelii. Pod red. M.P.Makotinskogo. Moskva, Gosstroiizdat. Pt.1.[Plastics; polymer finishing materials and articles] Plastmassy; polimernye otdelochnye materialy i izdeliia. 1962. 119 p. (MIRA 16:4)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut novykh stroitel'nykh materialov. 2. Chlen-korrespondent Akademii stroitel'stva i arkhitektury SSSR (for Andreyev, Iofan, Krippa).
(Finishes and finishing--Catalogs) (Plastics)

KRIPPEL, Eduard, prom.biol.

Working methods of historical geobotany and their results in Slovakia. Biologia 16 no.4:299-305 '61.

1. Geologicky ustav Dionyza Stura v Bratislave, Mlynska dolina.

(PHYTOGEOGRAPHY)

KARPATIOVA, Vera, dr.; KARPATI, Istvan, dr.; KRIPPELOVA, Terezia, dr.; KRIPPEL, Eduard, prom.biol.

Community of white poplar and common juniper in Sturovo area. Biologia 16 no.7:481-492 '61.

1. Botanicky ustav Madarskej akademie vied, Vacratot, Hungary (for Karpatiova and Karpati) 2. Biologicky ustav Slovenskej akademie vied, Oddelenie geobotaniky a systematiky rastlin, Bratislava, Sienkiewiczova 1 (for Krippelova) 3. Geologicky ustav Dionyza Stura, Bratislava 9, Mlynska dolina (for Krippel).

(POPLAR) (JUNIPER)

CZECHOSLOVAKIA

Eduard KRIPPEL and Maria KOLACKOVSKA, Geological Institute (Geologicky ustav) "Dionyza Stura", Bratislava.

"Listing of Palcobotany Studies About Slovak Territory Until 1960."

Bratislava, Biologia, Vol 18, No 6, 1963; pp 477-480.

Abstract: Bibliography of about 80 articles and monographs pertaining to paleobotanical studies on the territory of Slovakia and published in a great variety of primarily German and Czechoslovak periodicals between 1851 and 1960.

1/1

CZECHOSLOVAKIA

KRIPPEL - Eduard; Dionysius Stur's Institute of Geology [Geologicky Ustav Dionysia Stura], Bratislava.

" Development of the Vegetation in the North Part of the Danube Valley in the Postglacial Period. "

Bratislava, Biologia, Vol 18, No 10, 1963, pp 730 - 742

Abstract: The author made an analysis of pollen in three peat bogs. An analysis of the problem of the origin of the steppe is made, and an evaluation of the absence of forests in the area is presented. The pollen analysis was used to show the development of the vegetation in the area since the period of the warming up 10,000 years ago. Comparison is made with results of work conducted in neighboring areas.
6 Figures, 1 Western, 2 Czech, 5 German, 11 Hungarian references.

1/1

KRIPPEL, Eduard

Contribution to the problem of flora boundary between the Tertiary and Quaternary. Geol prace 63:157-162 '62.

1. Geologicky ustav D.Stura, Bratislava.

KRIPPEL, Eduard; KOLACKOVSKA, Maria

An adapter for the microphotograph revolver. Biologia (Bratisl.) 19 no.3:197-199 '64.

1. Geologicky ustav Dionyza Stura v Bratislave.

KRIPPEL, Eduard

Development of plants during the Quaternary in Slovakia.
Geol prace 64:53-58 '63.

1. Dionyz Stur Geological Institute, Bratislava.

KRIPPELOVA, T.

J. Kornas' Recent results of Phytosociologic Research on Weeds" a review of an article. p. 530.

BIOLORGIA. (Slovekska akasemia vied) Bratislave CZECHOSLOVAKIA

Vol. 10, No. 4, 1955.

SOURCE: East European Accessions List (EEAL) Library of Congress. Vol. 5, No. 1, January, 1956.

Ahlfeld V., F.

Vaclav Kuhn's Pestovani rostlin (Plant Cultivation); a book review. p. 121

BIOLOGIA vol. 11, no. 2, 1956

Czechoslovakia

SO. EAST EUROPEAN ACCESSIONS LIST vol. 5, no. 10 Oct. 1956

KRIPPELOVA, T.

Problems of some Hungarian biological research centers.

P. 381, (Biologia) Vol. 12, no. 5, 1957, Praha, Czechoslovakia

SO: Monthly Index of East European Acessions (EEAI) Vol. 6, No. 11 November 1957

KARPATIOVA, Vera, dr.; KARPATI, Istvan, dr.; KRIPPELOVA, Terezia, dr.; KRIPPEL, Eduard, prom.biol.

Community of white poplar and common juniper in Sturovo area. Biologia 16 no.7:481-492 '61.

1. Botanicky ustav Madarskej akademie vied, Vacratot, Hungary (for Karpatiova and Karpati) 2. Biologicky ustav Slovenskej akademie vied, Oddelenie geobotaniky a systematiky rastlin, Bratislava, Sienkiewiczova 1 (for Krippelova) 3. Geologicky ustav Dionyza Stura, Bratislava 9, Mlynska dolina (for Krippel).

(POPLAR) (JUNIPER)

CZECHOSLOVAKIA

KRIPPELOVA, Terezia and SPANIKOVA, Anatolia; Department of Geobotany and Plant Systematics of the Botanical Institute of the Slovak Academy of Sciences, Czechoslovak Academy of Sciences, (Oddelenie geobotaniku a systematiky rastlin Slovenskej akademie vied, CSAV,) Bratislava.

"New Loci of Some Plants Rarely Found in Slovakia."

Bratislava, Biologia, Vol 18, No 7, 1963; pp 525-527.

Abstract : New locales are reported for 2 dozen plants rarely found in Slovakia, based on collection activity in the Small Carpathian Mountains, Southern White Carpathians, Zitny Ostrov and Kosicke Kotlina in 1962. Brief description of habitats and ecologic and taxonomic data.

1/1

CZECHOSLOVAKIA

KRIPPELOVA, Terezia [Affiliation not given.]

" International Phytosociological Visit to Poland."

Bratislava, Biologia, Vol 18, No 10, 1963, pp 793 - 795

Abstract: The author describes a visit made by 130 foreign and 50 Polish scientists to various places of interest between 3rd and 11 th June 1963.
3 Photographs, no references.

1/1

KRIPPNER, V.

Production of medicinal plants. Cesk. farm. 2 no.7-8:275-277 Aug 1953. (CIML 25:4)

KRIPS, G.M.

Nonoccupational injuries in adults according to data of the Kishinev Emergency Hospital. Zdravookhranenie 6 no.3:12-14 My-Je'63 (MIRA 16:11)

*

Kripskiy, A. M.

137-58-2-4385

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 2, p 298 (USSR)

AUTHOR: Kripskiy, A.M.

TITLE: Quantitative Determination of High Sulfur Contents With ST-7 Stylometer (Kolichestvennoye opredeleniye vysokikh soderzhaniy sery na stilometre ST-7)

PERIODICAL: Vestsi AN BSSR, ser. fiz.-tekhn. n., Izv. AN BSSR, ser. fiz.-tekhn. n., 1957, Nr 1, pp 157-159

ABSTRACT: Means are described of determining 1-30% S contents in Fe- and Cu-base specimens. Standards for the Fe-base specimens were made by diluting an Fe sulfide with steel ST-45 (in the molten state); standards for the Cu-base specimens were made by a powder-metallurgical method from Cu and CuS. Optimum conditions for analysis were: generator type - IG-2; U = 240 volts; C = 0.01 μf ; I = 3.5 amp.; L = 0.01 millihenry; auxiliary gap = 3 mm; analytical gap = 2 mm; stylometer slit = 0.04 mm (the slit being illuminated by means of a short-focal-length condenser). Auxiliary electrodes, 6 mm in diameter, were made of aluminum and carbon. The S gradually burns up at the spot being spark-spectrum tested, for which reason it is necessary

Card 1/2

Quantitative Determination of High (cont.)

to move the specimen several times in the course of the analysis. Where S contents were of the order of 10-30%, the samples did not have to be moved. In this event, preliminary spark-spectrum analysis of the specimens for 30-40 seconds yielded good results. The pairs analyzed with Al electrodes were: S II 5640 angstrom/N II 5667 angstrom and S 5640 angstrom/Al III 5696 angstrom; with carbon electrodes, S II 5606 angstrom/N II 5686 angstrom.

M.N.

1. Copper alloys--Sulfur--Determination 2. Sulfur--Determination--Test methods

Card 2/2

KRIPSKIY, A.M.

Mutual spectroscopic effect of sulfur and iron in light sources for spectrum analysis. Trudy Inst.fiz. i mat. AN BSSR no.2: 93-109 '57. (MIRA 12:1)
(Iron--Spectra) (Sulfur--Spectra)

KRIPSKIY, A.M.

Effect of sulfur on iron spectrum in operating with detachable electrodes of various shapes and materials. Inzh.-fiz.zhur. no.1: 88-90 Ja '58. (MIRA 11:7)

1.Institut fiziki i matematiki AN BSSR; g. Minsk.
(Iron--Spectra) (Sulfur)

SOV/137-59-1-2120

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 1, p 278 (USSR)

AUTHOR: Kripskiy, A. M.

TITLE: Effect of Certain Elements on the Intensity of Spectral Lines of Iron (Vliyaniye nekotorykh elementov na intensivnost' spektral'nykh liniy zheleza)

PERIODICAL: Dokl. AN BSSR, 1958, Vol 2, Nr 1, pp 11-14

ABSTRACT: A report on the results of an investigation of the reciprocal effect of Fe and S, Si, C, Mg, Al, Zn, Pb, Sn, Mn, Ni, Cr, W, Cu, Ce, and Zr, which was achieved photographically in the 1950-9300-angstrom range on the ISP-22 and KSA-1 spectrographs. The amounts of the elements entering the Fe discharge and affecting its spectral lines were determined by microanalytical weighing. S and Si from Fe-based specimens, Ce and Zr from Ni-Ce and Ni-Zr alloys, and the rest of the elements from pure carbon, Mg, Al, and other electrode inserts were introduced into the discharge. Armco-Fe was used for the counterelectrode in all cases. The elements investigated are subdivided into four groups, according to their character and size: 1) S, 2) C, Si, 3) Mg, Al, Zn, Sn, Pb, and Mn, and 4) Cr, Ni,

Card 1/2

Effect of Certain Elements on the Intensity of Spectral Lines of Iron

W, Cu, Ce, and Zr. Elements of the groups 1-3 increase the intensity of all the Fe lines. S has the maximum effect, C and Si are considerably weaker, Mg, Al, Zn, Pb, Sn, and Mn are the weakest. Elements of group 4 do not exercise this effect. The effect is at its maximum with 30-80% relative atomic concentrations of the active element in the discharge cloud. Lines that are most sensitive to the influence attain a maximum later than others. Spark lines attain a maximum earlier than arc lines. The reverse phenomenon, namely, a weakening of the intensity of S, C, Si, Mg, Al, Zn, Pb, and Sn lines upon the introduction of Fe discharge cloud was observed. As a rule, arc lines are "squelched" to a much greater extent than spark lines. Similar reciprocal influences are found also among other pairs of elements: S, C, Si, P, Mg, Al, Zn, Pb, and Sn on one hand and Fe, Ni, Cr, W. Co, V, Nb, Cu, Ce, and Zr on the other. It is concluded that in the discharge cloud the excitation energy is transferred from S, C, Si, Mg, Zn, Al, Pb, and Sn atoms to Fe atoms.

A. Sh.

KRIPSKIY, A.M.

Some features of the vaporization of electrode substance in sources of light used for spectral analysis. Inzh.-fiz.zhur. no.2:53-57 F '58. (MIRA 13:1)

1. Institut fiziki i matematiki AN BSSR, Minsk.
(Electrodes)

S/081/60/000/024/006/016
A005/A001

Translation from: Referativnyy zhurnal, Khimiya, 1960, No. 24, p. 347, # 97335

AUTHORS: Bezborodov, M.A., Krinskiy, A.M.

TITLE: Methods for Investigating the Glass Crystalline Structure

PERIODICAL: Sb. nauchn. tr. Belorussk. politekhn. in-t, 1960, No.82, pp. 3-15

TEXT: The authors enumerate and describe briefly the direct and indirect methods, both in application and being suggested, which are suitable in principle for the investigation of the structural changes in glasses.

I. Mikhaylova

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

Card 1/1

ZHUNINA, L.A., kand.tekhn.nauk; KRIPSKIY, A.M., inzh.; NOVIKOVA, Ye.Z.

Preparation of crystalline glass material from easily melting White Russian clays. Sbor. nauch. trud. Bel. politekh. inst. no.82:79-85 '60. (MIRA 15:5)
(Glass manufacture) (White Russia—Clay)

S/058/61/000/003/006/027
A001/A001

Translation from: Referativnyy zhurnal, Fizika, 1961, No. 3, pp. 228-229, # 30141

AUTHOR: Kripskiy, A. M.

TITLE: The Use of МФ-4 (MF-4) Microphotometer as Radiation Receiver in Spectral Studies

PERIODICAL: "Sb. nauchn. tr. Belorussk. politekhn. in-t", 1960, No. 82, pp.120-125

TEXT: The author proposes a simple method of using the MF-4 microphotometer for studying time changes in intensities of individual spectral lines, line groups and the entire spectrum as a whole with time resolution up to 0.3 sec. To single out individual spectral lines in the ЖФ-4 (ZhF-4 ?) slit, light filters are employed. The author shows the applicability of this method to studying full curves of burning and sparking, investigating stability of sources, and other purposes. Using this method the author investigated the time change in the effect of sulfur on the spectra intensity of Fe, Cu, Cr, Ni and W.

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

Card 1/1

89937

S/030/61/000/001/006/017
B105/B206

15.2120

AUTHORS: Bezborodov, M. A., Academician AS BSSR, Kripskiy, A. M.

TITLE: Ways of producing super-strength unbreakable glass

PERIODICAL: Vestnik Akademii nauk SSSR, no. 1, 1961, 65-69

TEXT: Conclusions may be drawn on the degree of unbreakability of a material from its brittleness, the estimation of which is however very complicated. For reasons of simplicity it is proposed to consider the value $\chi_p = \frac{1}{\delta_p^{max}} = \frac{l_o}{l_p^{max}}$ as coefficient of brittleness, δ_p being the maximum relative deformation at the moment before breaking, l_o the initial and l_p^{max} the final dimensions of the deformed sample. The dimensions δ_p^{max} and the values χ_p of some materials calculated therefrom are tabulated. Materials with $\delta_p^{max} \geq 0.05$ (and $\chi_p \leq 20$

Card 1/4

correspondingly) may be assumed as being unbreakable. Glass may be considered as being practically unbreakable if its resistance to static, dynamic and impact loads under normal conditions is not inferior to that of carbon steel. The strength properties of solids depend on the percentage of weak spots and their distribution in the sample volume. Most dangerous are gap-like cavities and cracks with sharp edges lying vertically to the tensile forces. The durability of solids with structural microdefects is mainly determined by the quantity and character of these microdefects as well as partially by the plasticity of the material, but not by the durability of the main compounds. It follows therefrom that all materials would have a hundred times bigger tensile strength and hundred times lower brittleness and greater elasticity, if all microdefects were eliminated. Even a partial reduction of the amount of cracks through pickling increases the strength of glass and other materials by a multiple. The nature and mechanism of the development of microdefects has not been studied yet. The authors assume that there are three types of microdefects in the glass: 1) microcracks developing in the mass of the sample and on its surface owing to local changes of the glass density; 2) microcracks

developing on the sample surface as a result of chemical and corrosion effects of adsorbed liquids, vapors and gases; 3) microdefects developing during the deformation process of the sample at the destruction of gap-like submolecular sections, which are localized inside and at the surface of the glass by admixtures with weak bonds, as well as microsections with greatly weakened structure. Microdefects develop not only on the surface of the glass, but also inside. The following macrodefects have also an effect on the durability: macrocracks, cavities, gas bubbles, solid inclusions, stresses and chemical heterogeneity. Super-strength unbreakable glass could be produced by a special technology of melting and processing. The liquid glass must be submitted to a pressure of several kg/cm^2 and cooled under pressure. The formation of crystal nuclei could be suppressed by intense γ-irradiation. The effect of microdefects may be reduced by increasing the plasticity of the glasses (malleable glasses). The microdefects of the structure form a common fault of all materials, mainly metals, alloys, minerals, ceramics, and plastics. Their elimination is the only effective way in the fight for increasing the durability of materials. There are 1 table and 6 references: 2 Soviet-bloc and 3 non-Soviet-bloc.

89937

S/030/61/000/001/006/017
B105/B206

Ways of producing super-strength ...

Legend: · Table. Limits of relative deformation and brittleness values of some materials. a) material, 1) glass rods, 2) glass fibers, 3) pure zinc, 4) industrial zinc, 5) pure aluminum, 6) pure iron, 7) industrial lead, 8) organic glass, 9) celluloid, 10) vinyl plastic, 11) soft rubber, 12) hard rubber.

а) Материалы	ε_p^{max}	τ_p
1 Стеклянные палочки	0,0008—0,001	1250—1000
2 Стеклянные нити	0,05	20
3 Цинк чистый	0,02	50
4 Цинк технический	0,10	5
5 Алюминий чистый	0,5	2
6 Железо чистое	0,36—0,46	2,8—2,2
7 Свинец технический	0,32	3,1
8 Органическое стекло	0,01	25
9 Целлулоид	0,08—0,22	12,5—4,5
10 Винипласт	0,1—0,5	10—2
11 Резина мягкая	2—8	0,5—0,125
12 Резина жесткая	3—6	0,33—0,17

Card 4/4

B KRIPYAKEVICH, I.I. /0

2593* The Relationship Between Lattices of the NiAs and Ni$_2$In Type and Certain Rhombic Crystals. (In Russian.) I. I. Kripiakevich. *Doklady Akademii Nauk SSSR*, new ser., v. 79, July 21, 1951, p. 439-442.
The lattice constants of the above systems were compared. Results are discussed and tabulated. 14 ref.

YATSKEVICH, Yevgeniy Antonovich [IAtskevych, IE.A.]; KRIP'YAKEVICH, I.P., prof., doktor istor.nauk, otv.red.; NOVIKOVA, G.O. [Novykova, H.O.], red.izd-va; YURCHISHIN, V.I., tekhn.red.

[Conditions of Galician workers in the capitalist period, 1848-1900; a brief study] Stanovyshche robitnychoho klasu Halychyny v period kapitalizmu, 1848-1900; narys. Kyiv, Vyd-vo Akad.nauk URSR, 1958. 106 p. (MIRA 12:10)
(Ukraine, Western--Labor and laboring classes)

PASHCHENKO, V.Ya.; SISETSKIY, A.G.[Sisets'kyi, A.H.]; SIZONENKO, G.S. [Syzonenko, H.S.]; DASHKEVICH, Ya.R.[Dashkevych, IA.R.]; KOVAL'CHAK, G.I.[Koval'chak, H.I.]; KOVAL', F.T., red.; KRIP'YAKEVICH, I.P.[Kryp'iakevych, I.P.], red.; CHUGAYOV, V.P. [Chuhaiov, V.P.], red.; DENKACH, I., red.; BURKATOVSKAYA, TS. [Burkatovs'ka, TS], tekhn. red.

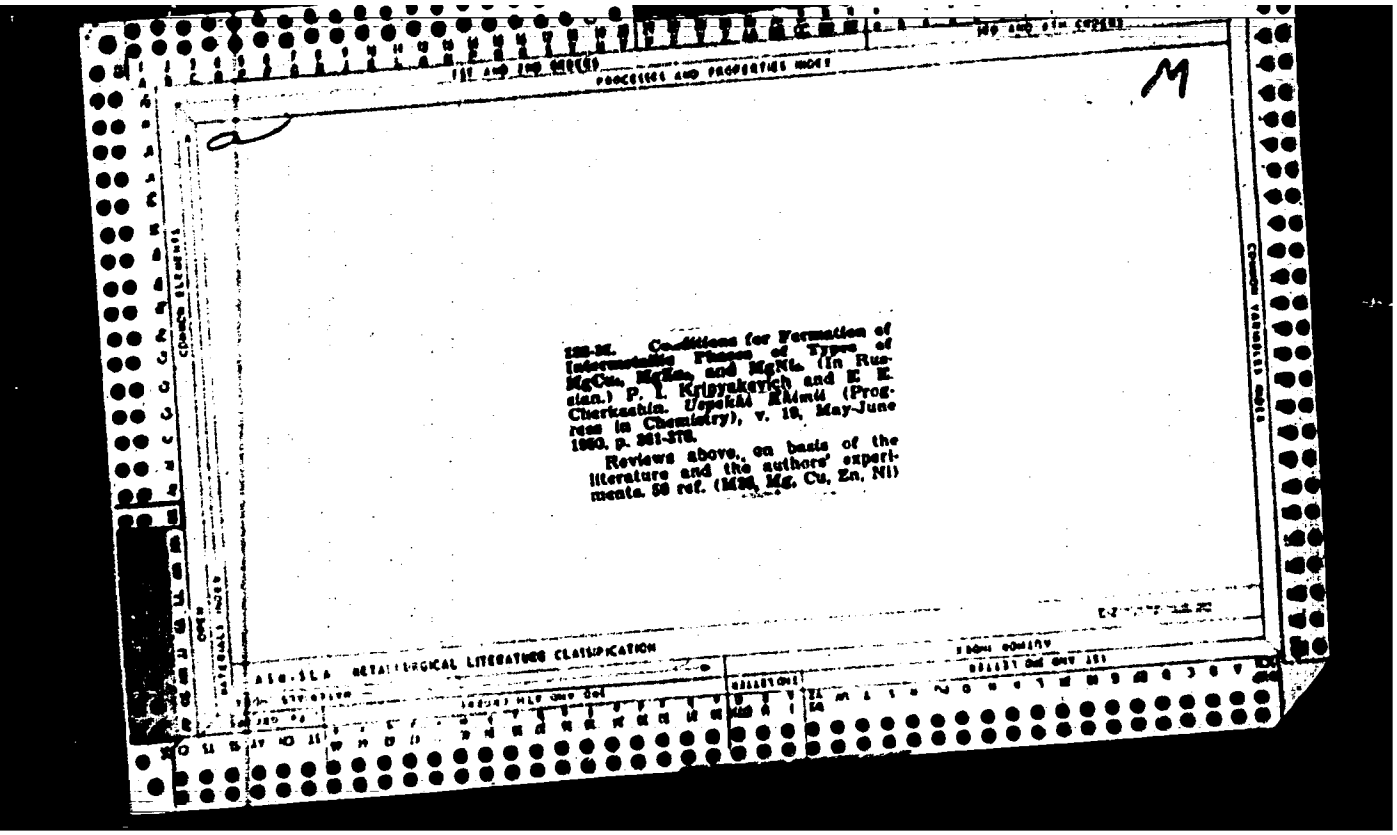
[Condition of Lvov workers, 1917-1939]Stanovyshche trudiashchykh L'vova, 1917-1939; dokumenty ta materialy. L'viv, Kryzhkovo-zhurnal'ne vyd-vo, 1961. 443 p. (MIRA 15:11)

1. Ukraine. Arkhivnoye upravleniye.
(Lvov--Labor and laboring classes)

CHERKASHIN, Ye.Ye. [Cherkashyn, IE.IE.]; GLADYSHEVSKIY, Ye.I. [Hladyshevs'kyi, IE.I.]; KRYPYAKEVICH, P.I. [Kryp'iakevych, P.I.]

Chemical properties of intermetallic phases. Part 4: X-ray studies of extraction residues. Nauk zap. L'viv. un. 13:69-76 '49. (MIRA 12:10)

1. Kafedra obshchey i neorganicheskoy khimii L'vovskogo gosudarstvennogo universiteta imeni I. Franko.
(Phase rule and equilibrium) (Alloys--Metallography)



Conditions for Formation of Intermetallic Phases of Types of MgCu2, MgZn2 and MgNi2. (In Russian.) P. I. Kripyakevich and E. E. Cherkashin. Uspekhi Khimii (Progress in Chemistry), v. 19, May-June 1950, p. 361-378.

Reviews above, on basis of the literature and the authors' experiments. 58 ref. (MM, Mg, Cu, Zn, Ni)

178T84

KRIPYAKEVICH, P. I.

USSR/Metals- Alloys, CuMgSn 11 Nov 50
Physics - Crystals, Powdered
X-Ray, Roentgenograms

"Crystallic Structure of the Ternary CuMgSn Phase," P. I. Kripyakevich, Ye. I. Gladyshevskiy, Ye. Ye. Cherkashin, L'vov State U imeni Ivan Franko.

"Dok Ak Nauk SSSR" Vol LXXV, No 2, pp 205-207

Roentgenograms of the powder of the CuMgSn phase. Description of the system Cu-Mg-Sn, their compositions and phases. Submitted 17 Sep 50 by Acad D. S. Belyankin.

178T84

[redacted]

Relation between the lattice types of NiAs and NiSb and some rhombics. P. I. Kripyakevich (L'vov State Univ.). *Doklady Akad. Nauk S.S.S.R.* 79, 639 (2)(1951).
The rhombic lattice of Co_2Si characterizes the deformed structure of NiSb or the structure of the A atoms introduced into the lattice of the MnP type. The deformation depends on the aggregation of B atoms in the chain. In the lattices of the rhombic Cr_3C_2 some of the A atoms are regrouped. The B atoms in the Cr_3C_2 lattice are connected in zig-zag chains. On the basis of facts considered in the report, such morphotropic transitions as Co_2Si-Co_2Ge and Co_2Si-CoP are made more understandable. Also, it is possible to consider the probable existence of new types of structures with a ratio of components A_2B_3 in the lattice of which the B atoms do not form chains. Fourteen references.
Gladys S. Macy

KRIP'YAKEVICH, P.I., starshiy laborant.

Morphotropy and polymorphism of intermetallic phases of MX and MX_2 type compounds. Dop.ta pov.L'viv.un. no.3 pt.2:25-26 '52. (MLRA 9:11)

(Organo-metallic compounds)

GLADISHEVS'KIY, Ye.I.; KRIP'YAKEVICH, P.I.; CHERKASHIN, Ye.Ye.

Chemical properties of the intermetallic phases. Part 5: Analysis of the residue after extraction of magnesiu, from alloys with copper and nickel. Nauk.zap.L'viv.un. 21:83-88 '52. (MLRA 10:7)

1. Kafedra neorganichnoi khimii.
(Magnesium alloys)

KRIPYAKEWICH, P.I.

USSR/Physics - Crystallography, Cu_4MgSn 1 Jul 52

"Crystalline Structure of the Ternary Phase Cu_4MgSn," Ye. I. Gladyshevskiy, P. I. Kripyakevich, N. Yu. Seslyuk, L'vov State U imeni I. Franko

"Dok Ak Nauk SSSR" Vol LXXXV, No 1, pp 81-84

With the purpose of investigating the relation of the ternary phase Cu_4MgSn (found by Gladyshevskiy, Kripyakevich, and Ye. Ye. Cherkashin in 1950) to the other phases of the system Cu-Mg-Sn, the authors conducted thermal and roentgenological phase analyses, and also investigations of the microstructure of alloys for the series Cu-Mg_2Sn-Cu, to find that the liquidus curve of these alloys pass through the max in the case of a compn close to Cu_4MgSn and temp 750-10°, shown to be homogeneous according to the microstructure. Give results of roentgenographic studies of powdered Cu_4MgSn. Submitted by Acad D. S. Belyankin 23 Apr 50.

22R100

22R100

KRIPYAKEVICH, P.I.

(3)

Corrections [to "Crystal Structure of the Ternary Phase Cu_2MgSn"]. E. I. Gladyshevsky, P. I. Kripyakevich, and M. Yu. Teslyuk (Doklady Akad. Nauk S.S.S.R., 1952, 97, (4), 649). - [In Russian]. See M.A., 20, 697. - G. V. E. T.

12/16/54

KRIPYAKEVICH, P. I. and CHERKASHIN, YE. YE.

"Systematics of Double Intermetallic Phases"
Izv. Sektora Fiz. -Khim. Analiza IONKh AN SSSR, 24, 1954, pp 59-123

Classification of all known double intermetallic phases is outlined, based on the structure type and chemical bond. The tabulation contains around 1800 double intermetallic phases as well as their distribution in binary alloys. (RZhFiz, No 11, 1954)

SO: W-31187, 8 Mar 55

"The [illegible] Structure of the Compounds Co_2MnSn and Ni_2MnSn. P. I. Kripyakevich, E. [illegible] and O. S. Zarechnyuk [illegible] Nauk S.S.S.R. 1954, 95, (3), 625–628). [In Russian]. Specimens of [illegible] Me_2MnSn where Me = Co or Ni, were prepared from electrolytic [illegible] and Mn, and from analytically pure Sn [illegible] X-ray diffraction method. The dimensions of the [illegible] cells of Me_2MnSn were of the same order as those of [illegible] and the most probable structure was that of the [illegible] The cell constants $a = 5.991 \pm 0.002$ and [illegible] 0.002 kX for Co_2MnSn and Ni_2MnSn, resp. As these [illegible] 3.5–3.6 kX [illegible] are not found in Co and Ni solid soln. [illegible] concluded that both Co_2MnSn and Ni_2MnSn are [illegible] compounds belonging to the class of interstitial phases. Although the atomic radius of Co [illegible] Ni, the const. [illegible] as in the case of $CeCo_2$ and $CeNi_2$, and of $CoSi_2$ and $NiSi_2$. S. K. I.

KRIP'YAKEVICH, P. I.

USSR/Solid State Physics - Systems, E-4

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 34666

Author: Gladyanevs'kiy, Ye. I., Krip'yakevich, P. I.

Institution: None

Title: X-Ray Structural Investigation of the Copper-Magnesium-Zinc System in the Vicinity of the $MgCu_2$ - $MgZn_2$ Section

Original Periodical: Nauk. zap. L'vovs'k. un-tu, 1955, 34, 64-71; Ukrainian; Russian resumé

Abstract: X-ray structural and micro-structural methods were used to determine the region of the homogeneity of a solid solution of zinc in the $MgCu_2$ compound at $t = 400^0$. The homogeneity region appears on the diagram of state in the form of a long strip, located along the $MgCu_2$-$MgZn_2$ section, expanding with increasing contents of Zn. The minimum contents of magnesium in the solid solution is 30 atomic percent and the maximum is 38 atomic percent. The maximum content of zinc is 39 atomic percent (58.5 molecular percent of $MgZn_2$). The lattice constant of homogeneous alloys in the $MgCu_2$-$MgZn_2$ section with a structure of the $MgCu_2$ type varies as the zinc content increases from 7.020 to 7.161 kX. The V phase of the magnesium-

USSR/Solid State Physics - Systems, E-4

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 34666

Author: Gladyanevs'kiy, Ye. I., Krip'yakevich, P. I.

Institution: None

Title: X-Ray Structural Investigation of the Copper-Magnesium-Zinc System in the Vicinity of the $MgCu_2$ - $MgZn_2$ Section

Original Periodical: Nauk. zap. L'vovs'k. un-tu, 1955, 34, 64-71; Ukrainian; Russian resumé

Abstract: copper-zinc system (Mg_2CuZn_4) was obtained by V. I. Mikheyeva and O. N. Kryukova (Izv. Sektora fiz. khim. analiza, 1950, 20, 76), has a structure of the $MgNi_2$ type (a 5.11; c 16.55; c/a 3.24) and is identical to the phase at the $MgCu_2$-$MgZn_2$ section, described by Luves and Lohberg (Luves, F.; Lohberg, K.; Strukturber, 1937, 3, 312).

2 of 2 - 2 -

KRIPYAKEVICH, P.I.

USSR/Physical Chemistry - Crystals, B-5

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 213

Author: Kripyakevich, P. I.

Institution: Lvov University

Title: The Relation Between Quantitative Composition, Structure Factor, and Stability in Intermetallic Phases

Original Periodical: Zap. L'vovsk. un-ta, 1955, Vol 34, 78-83 (published in Ukrainian with a summary in Russian)

Abstract: The quantitative composition of phases with clearly-defined nonmetallic bonding, Ni-As phases, and covalent compounds is determined by the valence states of the components. The quantitative composition of intermetallic phases with closest packing of atoms differing in size (e.g., W_6Fe_7, $MgZn_2$, $MgCu_2$, $MgNi_2$, $CaZn_5$, $NaZn_{13}$, etc) is determined by the structure factor of the atoms: The fraction of atoms with the smaller diameter (component X) increases as the ratio of the atomic radii $k = r_R/r_X$ increases. If 2 or more closest-packing phases

Card 1/2

USSR/Physical Chemistry - Crystals, B-5

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 213

Abstract: containing atoms of different sizes are present in the system they will differ greatly in stability. The most stable phase will be that in which the composition will most closely approximate the optimum closest packing composition for the given system (e.g., in the Mg-Zn system, where k = 1.17, the $MgZn_2$ phase will be more stable than either the MgZn or the Mg_2Zn_{11} phases, and in the system Ce-Ni, where k = 1.47, the $CeNi_5$ phase is more stable than the $CeNi_2$ phase); the stability of such phases ($MgZn_2$, $CeNi_5$) is due to the absence of structural stresses.

Card 2/2

USSR/Chemistry - Crystallography

Card 1/1 Pub. 22 - 24/53

Authors : Gladyshevskiy, Ye. I., and Kripyakevich, P. I.

Title : Arrangements of Cu and Mg atoms in the CuMgSn structure

Periodical : Dok. AN SSSR 102/4, 743-746, Jun 1, 1955

Abstract : It was established experimentally that the triple metallic CuMgSn compound belongs to the CaF_2 structural type and that the Pb atoms in this compound occupy the cubical more dense shells and the Cu and Mg atoms are arranged

USSR (1937-1952). Tables; diagrams.

Institution : The Iv. Franko State University, L'vov

Presented by : Academician N. V. Belov, December 24, 1954

KRIPYAKEVICH, P. I.

USSR/Physical Chemistry. Thermodynamics, Thermochemistry, B-8
Equilibria, Physical-Chemical Analysis, Phase Transitions.

Abs Jour: Ref Zhur-Khimiya, No 5, 1957, 14682

Author : Ye. I. Gladyshevskiy, P. I. Kripyakevich
Inst : Institute of Organic and Inorganic Chemistry, Academy of Sciences of USSR
Title : Solubility of Zinc in Metallic Compounds Cu_2Mg and Cu_2Cd.

Orig Pub: Izv. Sektora Fiz.-khim. analize IONKh AN SSSR, 1956, 27, 209-211

Abstract: The solubility of zinc in Cu_2Mg and Cu_2Cd was studied by the roentgenographic method in specimens annealed at 400° and tempered. The solubility of Zn in Cu_2Mg, agreeing with data obtained earlier (Mikheyeva V. I., Kryukova O. N., Izv. sektora fiz.-khim. analiza, 1950, 20, 76), is from 2 to 6 at. percent, the lattice period changing from 7.020 to 7.182 kilocycles. The solubility of zinc in Cu_2Cd is considerably lower, it is about 3 percent and the lattice period changes from 5.013 to 5.016 kilocycles.

Card 1/2

USSR/Physical Chemistry. Thermodynamics, Thermochemistry, B-8
Equilibria, Physical-Chemical Analysis, Phase Transitions.

Abs Jour: Ref Zhur-Khimiya, No 5, 1957, 14682

Abstract: The authors explain it (using the theory of energy zones of Brillouin) by the greater electron capacity of Cu_2Mg. The computed magnitudes of the limiting electron concentration for Cu_2Mg (1.72) and Cu_2Cd (1.36) agree well with the data about the solubility of Zn in these compounds.

Card 2/2

KRIPYAKEVICH, P. I.

E-4

Category : USSR/Solid State Physics - Systems

Abs Jour : Ref Zhur - Fizika, No 3, 1957, No 6604

Author : Kripyakevich, P.I., Gladyshevskiy, Ye.I.
Title : Crystalline Structure of the Compounds $CrBe_{12}$, VBe_{12}, and $NbBe_{12}$.

Orig Pub : Dokl. AN SSSR, 1956, 104, No 1, 82-84

Abstract : The R-Be systems (R = Cr, B, Nb) was found to include compounds of composition RBe_{12} with a structure of the type $ThMn_{12}$ (Fedorov Group $I4/mmm$) with atom positions: 2 R in (a), Be(1) in 8(f), Be(2) in 8(i) with x = 0.361 and Be(3) in 8(j) with x = 0.277. The lattice periods are : $CrBe_{12}$ -- a-7.219, c-4.158; VBe_{12} -- a-7.251, c-4.186; $NbBe_{12}$ -- a-7.357, c-4247 kX; in all the structures c/z = 0.577. The R atom is surrounded by 8Be(1) + 4Be(2)+ 8 Be(3) (20-vertex figure), the atom Be(1) is surrounded by 2Be(1) + 4 Be(2) + 4 Be(3) + 2 R (deformed icosohedron) the Be(2) atom by 1 Be(2)+ 4 Be(2) + 2 Be(3) + 2 Be(3) + 4 Be(1) + 1 R (14-vertex figure), and the Be(3) atom by 2 Be(3) + 2 Be(2) + 2 Be(2) + 4 Be(1) +

Card : 1/2

Category : USSR/Solid State Physics - Systems E-4

Abs Jour : Ref Zhur - Fizika, No 3, 1957, No 6604

2 R (deformed icosahedron). The coordinations of the atoms indicates a similarity between structures of the type $ThMn_{12}$ and structures of the types W_6Fe_7, $MgZn_2$, $MgCu_2$, $MgNi_2$, $CaZn_5$, Mg_2Zn_{11}, $BaCd_{11}$, and $NaZn_{13}$. The interatomic distances in the structures of RBe_{12} are given.

Card : 2/2

KRIPYAKEVICH, P. I. Cand Chem Sci -- (diss) "Studies in the Crystallochemistry of Metal Compounds With High Coordination Numbers." L'vov, 1957. 12 pp 23 cm. (Min of Higher Education Ukrainian SSR, L'vov State Univ im I. Franko, Chemical Faculty, Chair of Inorganic Chemistry), 150 copies (KL, 26-57, 105)

CHERKASHIN, Ye.Ye.; KRIP'YAKEVICH, P.I.; FRANKEVICH, D.P.

Ternary solid solutions in the system Cu - Mg - Cd. [with summary in English]. Dop. AN URSR no.1:33-37 '57. (MLRA 10:4)

1. L'vivs'kiy dershavniy universitet im. Iv. Franka. Predstaviv akademik AN URSR O. I. Brods'kiy.
(Copper-manganese-cadmium alloys)

KRIPYAKEVICH, P.I.

AUTHOR: Gladyshevskiy, Ye.I. and Kripyakevich, P.I. 70-6-6/12

TITLE: The Crystal Structures of the Compounds $MoBe_{12}$, WBe_{12} and $TaBe_{12}$. (Kristallicheskaya struktura soyedineniy $MoBe_{12}$, WBe_{12} and $TaBe_{12}$.)

PERIODICAL: Kristallografiya, 1957, Vol.2, No.6, pp. 742 - 745 (USSR).

ABSTRACT: Be forms compounds of the $ThMn_{12}$ type with Cr, V and Nb. An investigation to see whether there were analogous compounds with Mo, W and Ta has been made. The existence of a compound of Mo and Be with a composition about $MoBe_{13}$ and a tetragonal unit cell (space group P42) with a=10.27 and c=4.29 KX and Z=4 (S.G. Gordon et al., J. Metals, 3, 637, 1951) was known. The compound $NbBe_{12}$ with a=7.357 and c=4.247 KX was also known (Dokl.Ak.nauk SSSR, 104, 82, 1955). Mo was melted with Be in a BeO crucible under argon in an H,F. furnace and the resulting alloy was found to contain 92.3 atomic % of Be. It was annealed at 400° and on quenching was found to have a homogeneous microstructure. Measurements of an X-ray powder photograph (57.4 mm dia. camera, unfiltered Cr radiation) are given. Comparison with measurements of $ThMn_{12}$ shows it to have this

Card1/3

70-6-6/12

The Crystal Structures of the Compounds $MoBe_{12}$, WBe_{12} and $TaBe_{12}$.

structure and therefore the formula $MoBe_{12}$. The cell dimensions are a=7.237 ± 0.004 and c = 4.233 ± 0.002 KX. Intensities were calculated for a structure of the $ThMn_{12}$ type with space group 14/mmm with 2 Mo in (a), 8 Be in (f), 8 Be in (i) with x=0.361 and 8 Be in (j) with x=o.277 and very good agreement with the experimental data was found. Since this work was done, Raeuchle and Batchelder (Acta Crystallography, 8, 691, 1955) were found to have obtained exactly similar results. The compound WBe_{12} was similarly prepared as was $TaBe_{12}$ and their unit cells were found to be a=7.220 ± 0.004, c=4.224 ± 0.002 KX and a=7.322 ± 0.004, c=4.247 ± 0.002 KX, respectively. The $ThMn_{12}$ structure is thus found for the compounds of V, Nb, Ta, Cr, Mo and W with Be. In the Mo-Be and W-Be systems new compounds richer in Be than $MoBe_{12}$ (about 98 at.% Be) have been found which have cubic-face centred cells with a=11.60 and 11.59 KX respectively. I.V. Smol'yaninov participated in the work. There are 2 tables and 4 references, 1 of which is Slavic.

ASSOCIATION: Ivan Franko State University, Lvov.
(L'vovskiy Gosudarstvennyy Universitet im. I. Franko)

Card 2/3

70-6-6/12

The Crystal Structures of the Compounds $MoBe_{12}$, WBe_{12} and $TaBe_{12}$.

SUBMITTED: October 1, 1957.

AVAILABLE: Library of Congress.

Card 3/3

KRYP'YAKEVYCH, P.I.

137-58-5-10414

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 5, p 218 (USSR)

AUTHORS: Cherkashin, Gladyshevskiy, Kripyakevich [Cherkashyn, Ye. Ye., Gladyshevs'kyy, Ye. I., Kryp"yakevych, P. I.]

TITLE: Compounds of the Transition Metals With Beryllium, Silicon, Germanium, and Tin (Soyedineniya perekhodnykh metallov s berilliyem, kremniyem, germaniyem i olovom) [Spoluky perekhidnykh metaliv z beryliyem, kremniyem, germaniyem i olovom]

PERIODICAL: Dopovidi ta povidomlennya. L'vivs'k. un-t, 1957, Nr 7, Part 3, pp 180-183 (in Ukrainian)

ABSTRACT: An investigation is made of binary and ternary systems (Mn, Cr, V, Nb, Mo, and W with Be; Co+Si, Ni+Si, Co+Ge, Ni+Ge, Co+Sn, and Ni+Sn with Mn). X-ray and microstructural analyses were made, resulting in the discovery of 17 new compounds and determination of the crystal structures of 12 of these. (See Table on Card 2)

Card 1/2

Compounds of the Transition (cont.)

Compound	Structural Type	Syngony	Lattice periods, kc
$MnBe_{3\to13}$	$MdCu_2$	Cubic	$\alpha = 5.91$
$GrBe_{12}$	$ThMn_{12}$	Tetragonal	$\alpha = 7.219$, $c = 4.168$
$MoBe_{12}$	"	"	7.240 4.180
VBe_{12}	"	"	7.251 4.186
$NbBe_{12}$	"	"	7.357 4.247
Go_2MnSi	CsCl	Cubic	$a = 2.827$
Co_2MnGe	Cu_2MnAl	"	5.72
Ni_2MnGe	"	"	5.68
Go_2MnSn	"	"	5.991
Ni_2MnSn	"	"	6.045
$Mn_3Go_3Si_2$	$MdZn_2$	Hexagonal	$\alpha = 4.738$, $c = 7.452$
$Mn_3Ni_3Si_2$	"	"	4.752 7.492

Mn and Be form coupounds of variable composition $MnBe_{3\to13}$ with a wide interval of homogeneity. The compounds CO_2MnSn and Ni_2MnSn have melting points of 950 and 1050°C, respectively, and are ferromagnetic. G. L.

1. Chemical compounds--Production 2. Chemical compounds--Microstructure

Card 2/2

Krip'yakevich, P. I.

SOV/137-58-10-21414

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 10, p 136 (USSR)

AUTHORS: ~~Krip'yakevich, Gladishevskiy~~ [Kryp"yakevych, P. I., Hladyshevs'kyy, S. I.]

TITLE: X-ray Diffraction Investigation of Cr-Be Alloys with a High Beryllium Content (Rentgenostrukturnoye issledovaniye Cr-Be-splavov s vysokim soderzhaniyem berilliya) in Ukrainian

PERIODICAL: Dopovidi ta povidomlennya. L'vivs'k. un-t, 1957, Nr 7, part 3, pp 183-187

ABSTRACT: Alloys containing 70.9 - 98.5 atom·% Be were investigated. The smelting was conducted in quartz ampoules in an H_2 atmosphere. X-ray diffraction patterns were photographed in unfiltered Cr radiation from powders annealed at 400°C. Comparative tables of the results of the interpretation of X-ray diffraction patterns are adduced. It was found that alloys with 70.9 - 75.5 atom·% Be consist of the $CrBe_2$ compound (of the $MgZn_2$ type). The X-ray diffraction pattern of the alloy with 95.5 atom·% Be has only lines corresponding to the $CrBe_{12}$ compound. This compound has a tetragonal body-centered lattice with the following periods: a = 7.185 ± 0.02 kX,

Card 1/2

SOV/137-58-10-21414

X-ray Diffraction Investigation of Cr-Be Alloys (cont.)

c = 4.148 ± 0.01 kX, c/a = 0.577 and 26 atoms in the elementary lattice, while two atoms of Cr are located in (a) positions and 24 atoms of Be are in (f), (i), and (j) positions of the Fedorov group D_{4h}^{17} - 14 mmm.

A. F.

1. Beryllium-chormium alloys--X-ray diffraction analysis

Card 2/2

AUTHORS: Kripyakevich, P. I., Khorin, Ya. D. SOV/163-58-1-36/53

TITLE: The Crystal Structure of the Ternary Compound in the System Titanium-Chromium-Cobalt (Kristallicheskaya struktura troynogo soyedineniya v sisteme titan-khrom-kobal't)

PERIODICAL: Nauchnyye doklady vysshey shkoly. Metallurgiya, 1958, Nr 1, pp 198-200 (USSR)

ABSTRACT: In the system Ti-Cr-Co the triple bond $TiCr_2Co_4$ is formed. The radiographic investigations of $TiCr_2Co_4$ showed that this compound has cubic lattices. It is assumed that this compound is a structure of the α phase or α-Mn type.
The structures of the three phases were compared to one another and it was found that the intensity of the lines in the radiograms of this compound agree.
The compound $TiCr_2Co_4$ is very similar to the compound $Mo_5Cr_6Fe_{18}$ (χ-phase) as regards its structure. The interatomic distances in the structure of $TiCr_2Co_4$ were given in table 2; these distances of the structure as well as of the structure of the α-Mn (α = 8,89 k) are very probable.

Card 1/2

SOV/163-58-1-36/53

The Crystal Structure of the Ternary Compound in the System Titanium-Chromium-Cobalt

The coordination numbers of the compounds $TiCo_2$ and $TiCr_2Co_4$ are 16, 15 and 14.
There are 2 tables and 6 references, 2 of which are Soviet.

ASSOCIATION: Moskovskiy institut stali (Moscow Steel Institute) L'vovskiy gosudarstvennyy universitet (L'vov State University)

SUBMITTED: October 1, 1957

Card 2/2

78-3-3-17/47

AUTHORS: Cherkashin, Ye. Ye., Gladyshevskiy, Ye. I., Kripyakevich, P. I., Kuz'ma, Yu. B.

TITLE: X-Ray Structural Investigations of Some Systems of Transition Metals (Rentgenostrukturnoye issledovaniye nekotorykh sistem perekhodnykh metallov)

PERIODICAL: Zhurnal Neorganicheskoy Khimii, 1958, Vol. 3, Nr 3, pp. 650-653 (USSR)

ABSTRACT: By the X-ray structural method alloys in the following systems were investigated: Mn-Be, Cr-Be, V-Be, Mo-Be, W-Be, Ta-Be, Nb-Be, Mn-Fe-Si, Mn-Fe-Sn, Mn-Co-Si, Mn-Co-Ge, Mn-Co-Ni, Mn-Ni-Si, Mn-Ni-Ge, Mn-Ni-Sn, Mn-Cu-Si, Zr-V-Ni, Zr-Cr-Ni, Zr-Mn-Ni, Zr-Fe-Ni, Zr-Co-Ni.
By the investiagtions of the systems the following new compounds were determined which occur at 400°C: $MnBe_8$ (at t = 1100°C, the composition is $MnBe_{13}$ of the type $MgCu_2$), $CrBe_{12}$ ($ThMn_{12}$), VBe_{12} ($ThMn_{12}$), $NbBe_{12}$ ($ThMn_{12}$)m $NbBe_2$, $NbBe_5$, $MoBe_{12+x}$, WBe_{12+x}, CO_2MnSi (CsCL), $Mn_3CO_3Si_2$

Card 1/2

X-Ray Structural Investigations of Some Systems of Transition Metals

($MgZn_2$), MnCoSi, $Mn_{12}CO_3Si_5$, $Mn_3Ni_3Si_2$ ($MgZn_2$), MnNiSi, CO_2MnGe (Cu_2MnAl), Ni_2MnGe (Cu_2MnAl), Co_2MnSn (Cu_2MnAl), Ni_2MnSn (Cu_2MnAl), ZrMnNi ($MgCu_2$), $ZrV_{0,5}Ni_{1,5}$ ($MgCu_2$).

In the systems Mo-Be, W-Be and Ta-Be compounds with a tetragonal structure occur. The composition determined for the first time is the following: $MoBe_{12}$, WBe_{12} and $TaBe_{12}$. All these compounds belong to the type $ThMn_{12}$. In the system Mn-Fe-Si the following solid solutions occur: Mn_3Si and Fe_3Si. In the system Mn-Co-Si solid solutions of cobalt and silicon in β-Mn occur and solutions of cobalt in Mn_5Si_3 and Co in MnSi. In the system Zr-Fe-Ni a solid solution of Ni in $ZrCo_2$ occurs. In the system Zr-Co-Ni a solid solution of Ni in $ZrCo_2$ occurs. There are 1 figure and 11 references, 5 of which are Soviet.

ASSOCIATION: L'vovskiy gosudarstvennyy universitet im. I. Franko (L'vov State University imeni I. Franko)

SUBMITTED: June 25, 1957

Card 2/2

AUTHORS: Pylayeva, Ye.N., Gladyshevskiy, Ye.I., Kripyakevich, P.I. SOV/ 78-3-7-28/44

TITLE: The Crystalline Structure of the Compounds Ni_3Nb and Ni_3Ta (Kristallicheskaya struktura soyedineniy Ni_3Nb i Ni_3Ta)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1958, Vol 3, Nr 7, pp 1626-1631 (USSR)

ABSTRACT: The metallic compounds Ni_3Nb and Ni_3Ta and 9 ternary alloys of the series Ni_3Nb-Ni_3Ta were investigated with respect to their structure by the X-ray method. The results obtained showed that the compounds Ni_3Nb and Ni_3Ta belong to the structural type β-Cu_3Ti. The structural arrangement of atoms is the following: 2 Nb (or Ta) in (a) with $Z_a = 2/3$
2 Ni in (b) with $Z_b = 1/3$, 4 Ni in (f) with $x = 1/4$; $Z_f = 1/6$.
The lattice constant for the compound Ni_3Nb are the following:
$a = 5.10$, $b = 4.24$, $c = 4.53$ Å
The ratio $a : b : c = 2 : 1,66 : 1,78$
For the compound Ni_3Ta the lattice constants are as follows:

Card 1/2

The Crystalline Structure of the Compounds Ni_3Nb and Ni_3Ta SOV/ 78-3-7-28/44

a = 5.09, b = 4.23, c = 4.51 X , a : b : c = 2 : 1.66 : 1.77. The compounds Ni_3Nb and Ni_3Ta together form continuous series of solid solutions. There are 2 figures, 2 tables and 5 references, 3 of which are Soviet.

ASSOCIATION: Institut metallurgii im. A.A.Baykova Akademii nauk SSSR i L'vovskiy gosuniversitet im. I.Franko
(Institute of Metallurgy imeni A.A.Baykov, AS USSR and L'vov State University imeni I.Franko)

SUBMITTED: June 18, 1957

1. Intermetallic compounds--Crystal structure 2. Intermetallic compounds--Atomic structure 3. Intermetallic compounds--X-ray analysis 4. Intermetallic compounds--Lattices

Card 2/2

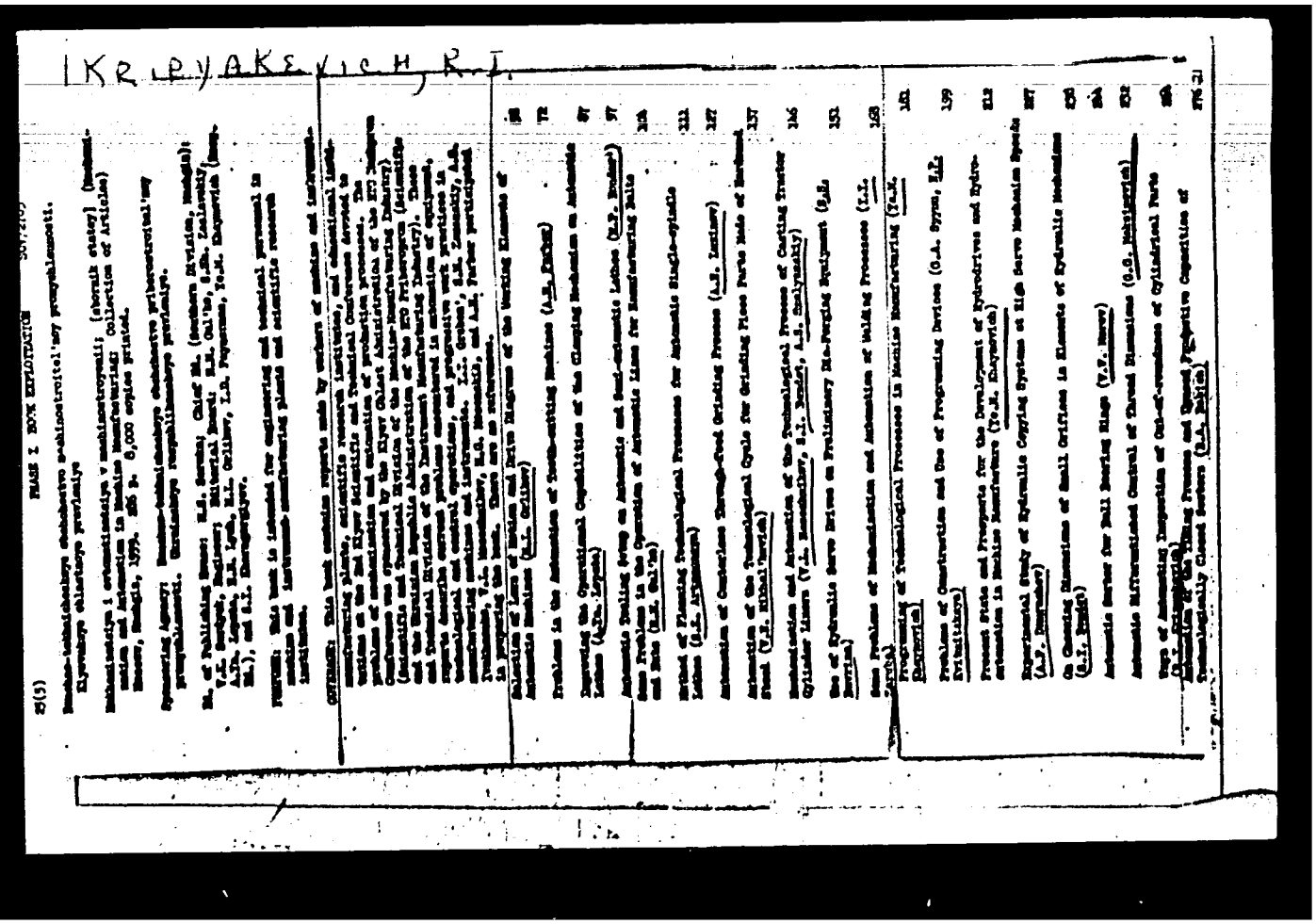
KRIPYAKEVICH, P.I. [Kryp'iakevych, P.I.]

Crystal structure of the compounds MgLiZn and $MgLi_{0.25}Zn_{1.75}$.
Nauk.zap.L'viv.un. 46:107-114 '58. (MIRA 12:7)
(Magnesium-lithium-zinc alloys)

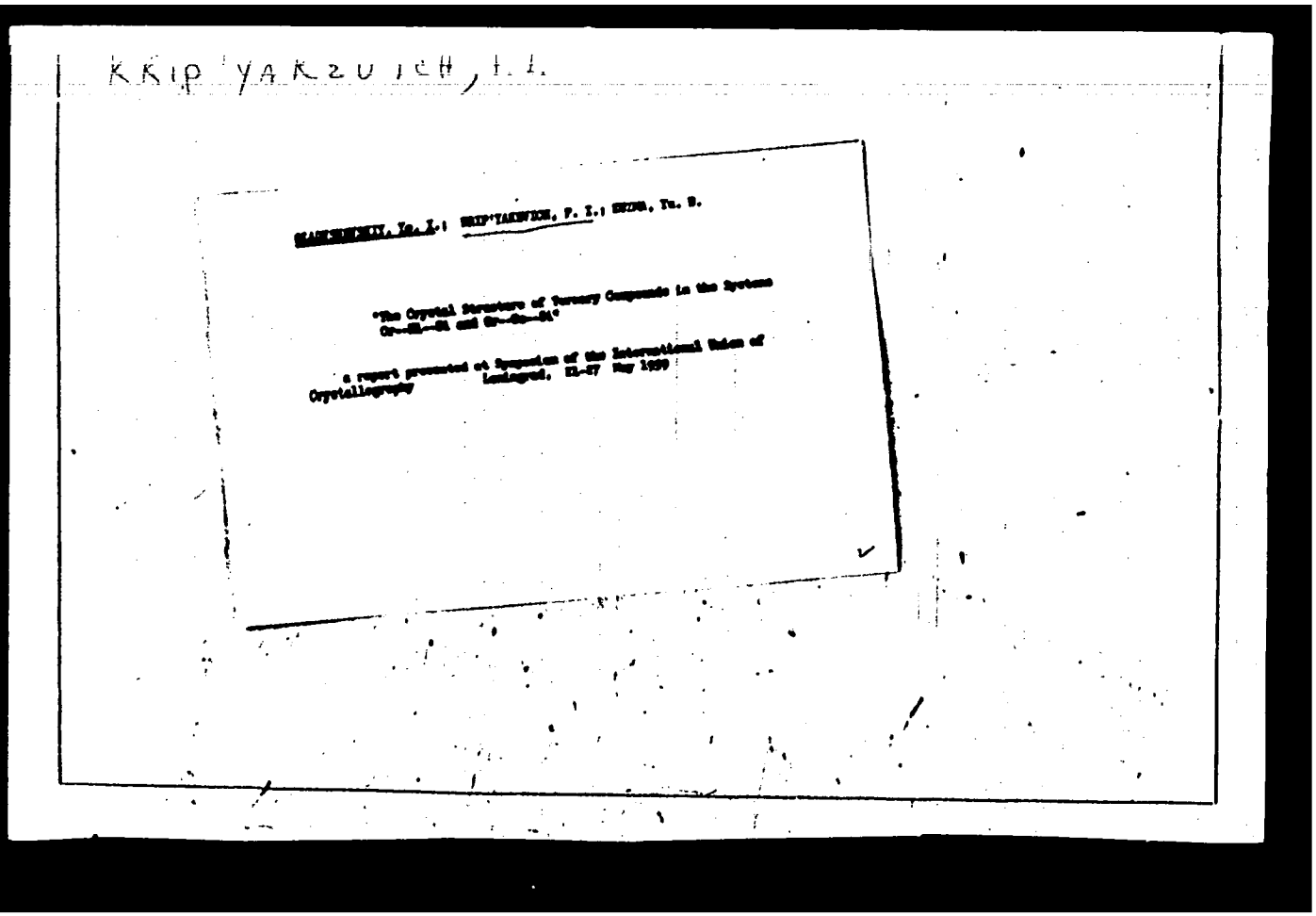
KRIPYAKEVICH, P.I. [Kryp'iakevych, P.I.]; GLADYSHEVSKIY, Ye.I. [Hladyshevs'kyi, E.I.]; ZALUTSKIY, I.I. [Zaluts'kyi, I.I.] pri uchastii studentok; YEVDOKIMENKO, V.I. [Yevdokymenko, V.I.]; BORUSEVICH, L.K. [Borusevych, L.K.]

Crystal structure of the compounds $ZrNi_4$, ZrMnNi, and $ZrV_{0.5}Ni_{1.5}$.

Nauk.sap.L'viv.un. 46:118-123 '58. (MIRA 12:7)
(Systems (Chemistry))



KRUPYAKEVICH, R.I.



KRIP'YAKEVICH, I. I.

[redacted], Ya. I.; KRIP'YAKEVICH, P. I.; ZHUN, Yu. G.

"The Crystal Structure of Ternary Compounds in the Systems [redacted] and [redacted]"

a report presented at Symposium of the International Union of Crystallography Leningrad, 23-27 May 1959

15(6)

AUTHORS: Andriyevskiy, A. I., Kabitovich, I. D., SOV/20-124-2-22/71
Kripyakevich, P. I.

TITLE: On the Structure of Selenium in Thin Layers
(O strukture selena v tonkikh sloyakh)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 124, Nr 2, pp 321-323
(USSR)

ABSTRACT: The authors produced the samples for their investigations by sublimation of chemically pure vitreous or of red amorphous selenium in vacuum ($\sim 10^{-4}$ mm): 1) On zapon varnish films which were mounted on wire loops. The base was then dissolved in acetone and the selenium film was fished out by means of a copper net. 2) On zapon varnish films which were mounted on a specimen holder made of copper wire netting. The selenium film was then coated on the top with a second dense zapon varnish film. Sublimation was in both cases carried out at room temperature and the evaporation of vitreous or red amorphous selenium under these conditions led to the production of red amorphous selenium. A film thickness of 600 - 800 Å is best suited for determining a normal diffraction picture. During the

Card 1/3

thermal treatment of the first samples (without bases) the following results were obtained: If the samples are exposed to a temperature of 25° for 5 hours, the electronogram of such samples consists of 4 aureoles, which are lacking in the case of an electronographic investigation of freshly prepared samples. Gradual heating to 30° increases the aureoles somewhat, and weak lines form on them. At 35-40° the electronogram of a polycrystal already became noticeable, which is characteristic of the α-monoclinic modification of selenium. An increase of temperature up to 55-60° leads to recrystallization, and at ~65° β-monoclinic selenium was observed. A further increase of temperature up to 150-160° leads to a gradual recrystallization, and if the samples are kept for some time at a temperature of 160°, a new hitherto not observed modification of the selenium occurs. The new structure of selenium belongs to the cubic syngony with face-centered cubic lattice. This structure is here described as β-cubic (see the 15 photographs in figure 1). The thermal treatment of the selenium layers enclosed between zapon varnish films was carried out immediately in the electron microscope at a pressure of

 10^{-5} torr. After such a local thermal treatment not only

On the Structure of Selenium in Thin Layers SOV/20-124-2-22/71

various electronograms of hexagonal selenium were obtained in addition to the aforementioned results, but also a hitherto not observed modification of selenium could be discovered. This new modification is here described as α-cubic. The intensities observed agree well with those which were calculated for a structure with one atom per elementary cell. Also this structure is, like the other crystalline modifications of selenium, stable at room temperature and normal pressure. Both modifications have structures which are not usual with selenium. Nevertheless, the structure of the α-modification can by all means be described as probable. The considerable increase of the atomic radius (1.485 Å) of selenium in cubic α-modification as compares to the covalent radius (1.16 Å) can be explained by variation of the character of coordination. There are 2 figures, 1 table, and 11 references, 10 of which are Soviet.

ASSOCIATION: L'vovskiy politekhnicheskiy institut (L'vov Polytechnic Institute)

PRESENTED: September 9, 1958, by N. V. Belov, Academician

SUBMITTED: August 25, 1958

Card 3/3