

**Lovchortite-rinkolite deposits of the outer belt of the Khibin Mountains.** I. S. Oshinskii. *Mf., no. 1666, mineral.*, 66, 353-414 (in English 413-415) (1935). The field relations and petrography of 4 lovchortite and rinkolite deposits occurring in pegmatites associated with rocks of the nepheline-syenite series are described. Six complete analyses and 1 partial analysis of lovchortite show that there is considerable variation between samples from different localities, particularly in Sr, Ca and Th. Three analyses show that rinkolite is somewhat lower in TiO<sub>2</sub>, CaO and rare earths than is lovchortite, although not sufficiently to indicate that the 2 are fundamentally different chemically. The minerals undoubtedly belong to the rano-sandrite group. Crystallographic and optical data are given. The m. ps. of 2 lovchortites were determined as 1370° and 1307° and of 2 rinkolites as 1215° and 1300° (all +25°). The differences in m. p. are probably the result of differences in composition. Lovchortite fused with K and W, compacts, crystd. as rinkolite. Thin sections of isotropic lovchortite examined under the Endel heating microscope acquired the optical properties of rinkolite, and thermal curves show that lovchortite changes to rinkolite at 725-730°. It is believed that the amorphous lovchortite is formed from cryst. rinkolite by a process of breaking down of the internal structure.

R. H. Beckwith

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

BILIBINA, T.V.; BOGDANOV, Yu.V.; OZHINSKIY, I.S.

Formation of uranium ores of the sedimentary-metamorphic type in  
pre-Cambrian marbles and rocks of the skarn type. Zap.Vses.min.ob-va  
88 no.4:369-376 '59. (MIRA 12:11)

1. Deyativitel'nyye chleny Vsesoyuznogo mineralogicheskogo obshchestva.  
(Uranium ores)

OZHOGIN . . .

IVANOV, Nikolay Ivanovich; OZHOGIN, I.I., otvetstvennyy red.; IL'INSKAYA, G.M.,  
tekhn.red.; NADЕINSKAYA, A.A., tekhn.red.

[The coal industry; a guidebook] Ugol'naia promyshlennost'; putevoditel'.  
Moskva [Ugletekhizdat, 1957] 178 p. (MIRA 11:1)

1. Moscow. Vsesoyuznaya promyshlennaya vystavka, 1956.  
(Moscow--Coal mining machinery--Exhibitions)

OZHOGIN, S.

Improvements in the village of Viryatino. Sel'. stroi. 14 no.11:7-8  
N '59 (MIRA 13:3)

1. Predsedatel' kolkhoza "Put' Lenina", Sosnovskogo rayona, Tambovskoy oblasti.  
(Viryatino--Building)

PAVLENKO, S. M. OZHOGIN, V.

Physiology, Pathological

Brief news, Zhur. vys. nerv. deist., 2, no. 3, 1952.

9. Monthly List of Russian Accessions, Library of Congress, October <sup>X</sup> 1952 Uncl.

ZLOTIN, G.N., kand. tekhn. nauk; LEONT'YEV, G.A., kand. tekhn. nauk;  
OZHOGIN, V.A.

Capacitorce torsion meter. Avt. prom 30 no.7:31-33 J1 '64.  
(MIRA 17:9)

1. Volgogradskiy politekhnicheskiy institut.

OZHOGIN, V. I.

82595

S/056/60/039/01/03/029  
B006/B070

24.7900  
24.2200

AUTHORS: Borovik-Romanov, A. S., Ozhogin, V. I.

TITLE: The Weak Ferromagnetism in an Antiferromagnetic  $\text{CoCO}_3$  Single Crystal X

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1960,  
Vol. 39, No. 1 (7), pp. 27-36

TEXT: The present work is the continuation of an earlier work (Ref. 1) where the discovery of weak ferromagnetism in polycrystalline cobalt- and manganese carbonate crystals is reported. The authors have now investigated the magnetic properties of  $\text{CoCO}_3$  single crystals in the temperature range of 1.3 to  $300^{\circ}\text{K}$  by a balance method due to Faraday. The results of measurements are shown in diagram form. Fig. 1 shows the dependence of the molar magnetic moment  $m$  on the magnetic field strength  $H$ . The five upper curves are for  $H \parallel z$ , and the lower ones for  $H \parallel z$ ,  $z$  being the trigonal axis. Fig. 2 shows the angular dependence of the projection of the magnetic moment on the  $H$ -direction in the  $(yz)$  plane

Card 1/4

82595

The Weak Ferromagnetism in an Antiferromagnetic S/056/60/039/01/03/029  
CoCO<sub>3</sub> Single Crystal B006/B070

an anomalously large anisotropy of susceptibility (~ 30% at 300°K). T<sub>N</sub> lies at 18.1°K. CoCO<sub>3</sub> is further distinguished by its large spontaneous ferromagnetic moment ( $\sigma_0 \approx 1440$  CGSM/mole) and the sharp peak near T<sub>N</sub>. The latter can be explained by the thermodynamic theory of weak magnetism, and can be related to the fact that, when a magnetic field acts on a substance in a disordered state, it induces an antiferromagnetic ordering in it. The anomaly observed in the temperature dependence of the spontaneous moment at low temperatures (Fig. 6) can be explained within the framework of the spin wave theory as being due to a transition from the excitation of a single branch to the excitation of both branches of the spin wave spectrum. Here, as well as in the case of MnCO<sub>3</sub>, the predictions of the spin wave theory do not show quantitative agreement.

The authors thank, in conclusion, Academician P. L. Kapitsa for his interest in the work, I. Ye. Dzvaloshinskiy and N. M. Krevnes for discussions, N. Yu. Ikornikova for having supplied the sample, and V. I. Kolokol'nikov for help in the experimental work. There are 7 figures and 10 references: 8 Soviet and 2 French.

Card 3/4

OZHOGIN, V.I.

The antiferromagnetic substances  $\text{CoCO}_3$ ,  $\text{CoF}_2$  and  $\text{FeCo}_2$   
in strong fields. Zhur. eksp. i teor. fiz. no. 5:1687-1690 N '63.  
(MIRA 17:1)

ACCESSION NR: AP4019217

S/0056/64/046/002/0531/0536

AUTHOR: Ozhogin, V. I.

TITLE: Magnetic moment relaxation in an antiferromagnet with anisotropy of the "easy plane" type

SOURCE: Zhurnal eksper. i teor. fiz., v. 46, no. 2, 1964, 531-536

TOPIC TAGS: magnetic moment, antiferromagnet, magnetic moment relaxation, easy plane anisotropy, three-magnon process, antiferromagnetic resonance, line width, spin flip, spin flipped sublattice

ABSTRACT: The relaxation time is calculated for the case when the magnetic moment of an antiferromagnet is perpendicular or parallel to the magnetic field in an "easy" plane, when the relaxation proceeds via three-magnon processes, which are possible at not very low temperature, in contrast with antiferromagnets with anisotropy of the "easy access" type, which were shown by Urushadze (ZhETF v.

Card: 1/3

ACCESSION NR: AP4019217

39, 681, 1960) to be impossible in this case, since they violate the energy and momentum conservation law. The antiferromagnetic resonance line width due to these processes can depend strongly on the field if the antiferromagnet has weak ferromagnetism. Only processes involving three spin waves are considered, since those involving four spin waves turned out to be of one order of magnitude lower. It is also shown that three-magnon processes can have a significant value for relaxation in antiferromagnets with "easy access" anisotropy if the sublattices are "flipped." The equations obtained for the relaxation time, the magnetic moment and line width of the corresponding resonances, as functions of the temperature and magnetic fields, are valid in the framework of the spin wave theory and their contribution to the relaxation at not too low fields and temperatures is found to be decisive in comparison with contributions of higher orders. It is pointed out that conditions for experimental verifications of the theoretical results are favorable since the frequencies of the corresponding resonances lie in the microwave

Card 2/8

ACCESSION NR: AP4019217

region.' "We take this opportunity to express deep gratitude to A. S. Borovik-Romanov for helpful discussions." Orig. art. has: 13 formulas and 1 figure.

ASSOCIATION: None

SUBMITTED: 23Apr63 DATE ACQ: 27Mar64 ENCL: 00

SUB CODE: PH NO REF Sov: 008 OTHER: 001

Card 3/3

I 58150-65 EWT(1) LIP(c)  
ACCESSION NR: AP5013889

UR/0056/65/048/005/1307/1318

AUTHOR: Ozhogin, V. I.

Moderator: Shchurkin, V. G. 24  
22  
21 ref. 486.03 13

TITLE: Nonlinear dynamics of antiferromagnetics with anisotropy of the "easy plane" type

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 48, no. 5, 1965,  
1307-1318

TOPIC TAGS: antiferromagnetism, quantum mechanical calculation, nonlinear effect, anisotropy, Dzyaloshinskiy field, pumping instability, spin wave spectrum

ABSTRACT: A phenomenological quantum-mechanical calculation of various types of nonlinear dynamic phenomena is carried out for antiferromagnets with anisotropy of the "easy plane" type. These phenomena are of interest because of their susceptibility to detailed investigation by modern experimental methods. It is shown, in particular, that the threshold field for occurrence of parallel pumping instability is inversely proportional to the Dzyaloshinskiy field responsible for such magnetism. Also calculated are effects of a combination type, connected with the

Card 1/2

L 58450-65  
ACCESSION NR: AP5013889

2

interaction of two branches of the spin-wave spectrum (low and high frequency). The effects considered are 4- and 3-magnon instability of low and high frequency antiferromagnetic resonance, low and high frequency parallel pumping, parametric sum resonance, and parametric difference resonance. "I am deeply grateful to A. S. Borovik-Romanyuk and V. Bar'yakhtar for meaningful discussions." Orig. art. has: 1 figure, 33 formulas, and 1 table.

ASSOCIATION: None

SUBMITTED: 05 Oct 84

REPORT: 00

STRA CODE: EM A/P

HF KEY COW: 008

OTHER: 0 "

178 212

RUSINKOVSKIY, Yuriy Pavlovich, inzh.; KAPLAN, Musiy Abramovich, inzh.;  
OZHOGIN, V.Ya., inzh., retsenzent; TSYBA, L.A., inzh., red.  
izd-va; SHAFETA, S.M., tekhn. red.

[Automatic control of gas-fired boiler rooms] Avtomatizatsiya ga-  
zifitsirovannykh kotel'nykh. Kiev, Gostekhizdat USSR, 1963. 115 p.  
(MIRA 16:3)

(Boilers) (Automatic control)

OKHOGIN, V.Ya.

Republic exhibition of teaching machines. Izv. vys. ucheb.  
zav.; radiotekh. 7 no.1:127-128 Ja.-F'64. (MIRA 17:5)

FIRSANOVА, Ye.N.; ARABYAN, S.G.; OZHOGINA, M.M.

Effect of the alkalinity of oils with additives on engine  
wear. Khim. i tekhn. topl. i masel 8 no.9:59-64 S '63.

(MIRA 16:11)

l. Gosudarstvennyy soyuznyy nauchno-issledovatel'skiy  
traktornyy institut.

OZHOGINA, Ye. P.

Vitamin C insufficiency in healthy and tuberculous inhabitants  
of the Far North. Probl. tub. no.2:30-32 '62.  
(MIRA 15:2)

1. Iz Gosudarstvennogo nauchno-issledovatel'skogo instituta tuberkuloza (dir. - prof. A. D. Semenov) i kafedry legochnogo tuberkuleza Gosudarstvennogo ordena Lenina instituta usovershenstvovaniya vrachey imeni S. M. Kirova (dir. - dotsent A. Ye. Kiselev, zav. kafedroy - prof. A. D. Semenov), Leningrad.

(RUSSIA, NORTHERN—TUBERCULOSIS)  
(ASCORBIC ACID)

37249

S/200/62/000/002/002/003  
D204/D301

18.149

AUTHORS: Valtsev, V.K., Oziashvili, Ye.D., and Solov'yev, L.K.

TITLE: Zone crystallization of lanthanon compounds from certain molten salts

PERIODICAL: Akademiya nauk SSSR. Sibirskoye otdeleniye, Izvestiya, no. 2, 1962, 53 - 57

TEXT: Description of an investigation aimed at clarifying the rules prevailment during the zone crystallization of complex systems of lanthanon compounds from fused  $\text{NH}_4\text{NO}_3$  and  $\text{NH}_4\text{CNS}$  (as oxides) and  $\text{MgCl}_2$  and  $\text{BaCl}_2$  (as chlorides). The following mixtures were tested (%): (1) La 2.5, Pr 8-11, Nd 86.84, Sm 2-3, and (2) Pr 3.66, Sm 29.3 Eu 1.0, Gd 24.3, Dy 5.77, Ho 0.5, Eb 4.7, La, Tb, Yb 1, Y 25.2. The melts were cast into rods which were then zone crystallized 6-9 times, passing the zone at 5 cm/hr. The experimental method for chloride melts is indicated; for the other two the procedure was that used earlier. Sections of rod were then analyzed spectrographically for the lanthanons. The results are tabulated and discuss-

Card 1/3 X

S/200/62/000/002/002/003/  
D204/D301

Zone crystallization of lanthanon ...

sed. In  $\text{NH}_4\text{NO}_3$  the heavier elements tended in general to concentrate at the end of the bar and the same was observed for Sm (mixture (1)) in the  $\text{NH}_4\text{CNS}$  melt. Similar tendencies were observed for the chloride melts although the results were only qualitative. It is concluded that (a) zone crystallization from  $\text{NH}_4\text{NO}_3$  or  $\text{NH}_4\text{CNS}$  is promising owing to the low temperature of the process. The chloride process is further made difficult due to the hygroscopic properties of the lanthanon chlorides. (b) Concentration of the heavier elements at the end of the bar is probably due to their lower m.p.'s although discrepancies to this rule were observed. (c) Relative proportions of the lanthanons (mixture (1)) in  $\text{NH}_4\text{NO}_3$  and  $\text{NH}_4\text{CNS}$  melts were relatively unaltered after zone crystallization. The distribution is probably affected rather more in the high temperature chloride process. Analytical work was carried out by R.R. Shvangi-chloride. There are 3 tables and 5 references: 4 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: H. Reed, B.S. Hopkins, J. Amer. Chem. Soc., 57, 1159, 1935.

Card 2/3

11530  
S/251762/029/003/001/001  
D287/D307

52440

AUTHORS: Ozinashvili, Ye.D., Nikolayev, Yu.V. and Myasoyedov, N.F.

TITLE: On the possibility of using NO - H<sub>2</sub>O isotope exchange in nitric acid solutions for concentrating <sup>18</sup>O

PERIODICAL: Soobshcheniya akademii nauk Gruzinskoy SSR, v. 29, no. 3, 1962, 289-292

TEXT: The heavy isotope <sup>15</sup>N can be obtained by isotope exchange in the system: nitric acid (aqueous solution) - nitric oxide, the isotope being concentrated in the aqueous phase. The gaseous phase of the same system contains increased quantities of the heavy isotope <sup>18</sup>O. Isotope exchange occurs between NO and H<sub>2</sub>O and is accelerated by HNO<sub>3</sub>. Exchange columns, used for concentrating <sup>15</sup>N, can also be utilized for increasing the rate of this process. The apparatus for the separation of <sup>18</sup>O and the apparatus for <sup>15</sup>N concentration can be operated simultaneously. The authors con-

Card 1/2

VLASENKO, V.A.; GVERDTSITELI, I.G.; NIKOLAYEV, Yu.V.; OZIASHVILI, Ye.D.

Production of the isotope  $B^{10}$  by the exchange distillation of  
the complex  $(CH_3)_2O \cdot BF_3$ . Soob. AN Gruz. SSR 33 no.1:79-84  
Ja '64.  
(MIRA 17:7)

1. Fiziko-tehnicheskiy institut AN Gruzinskoy SSR. Predstavлено  
akademikom G.V. TSitsishvili.

ACCESSION NR: AP4018354

S/0251/64/033/001/0079/0084

AUTHORS: Vlasenko, V. A.; Gverdtsiteli, I. G.; Nikolayev, Yu. V.; Oziashvili, Ye. D.

TITLE: Production of  $B^{10}$  isotope by the method of exchange distillation of the  $(CH_3)_2O \cdot BF_3$  complex (Presented by academician G. V. Tsitsishvili, Oct. 10, 1962)

SOURCE: AN GruzSSR. Soobshcheniya, v. 33, no. 1, 1964, 79-84

TOPIC TAGS: boron, boron isotope, boron trifluoride, methyl ether, ether fluoride complex, distillation, exchange distillation, neutron, thermal neutron

ABSTRACT: Since the  $B^{10}$  isotope possesses a large thermal neutron capture cross section, a method was developed which permitted the enrichment of boron with the  $B^{10}$  isotope. This method is based on the principle of exchange distillation of the complex  $(CH_3)_2O \cdot BF_3$  in a pilot fractionating column at 100C, at a pressure of 150 mm mercury. Its daily capacity amounted to 10 g of boron containing 80%  $B^{10}$ , while in the issuing complex the concentration amounted to only 16%. The separation of the boron isotopes is achieved by vaporization of the fluid  $(CH_3)_2O \cdot BF_3$  phase and condensation of the gaseous  $BF_3$  phase. The result is an enrichment of the fluid phase with  $B^{10}$  and a corresponding depletion of  $B^{10}$  in the gaseous phase, according

Card 1/2

ACCESSION NR: AP4018354

to the formula  $(\text{CH}_3)_2\text{O}\cdot\text{B}^{11}\text{F}_3 + \text{B}^{10}\text{F}_3 \rightleftharpoons (\text{CH}_3)_2\text{O}\cdot\text{BF}_3 + \text{B}^{11}\text{F}_3$ .

In view of the corrosive properties of the  $(\text{CH}_3)_2\text{O}\cdot\text{BF}_3$  complex, only corrosion resistant materials were used in the installation, such as stainless steel, copper, lead, teflon, and polyethylene. Orig. art. has: 1 picture, 1 chart, and 1 table.

ASSOCIATION: Akademiya Nauk Gruzinskoy SSR, Fiziko-tehnicheskiy institut (Academy of Sciences Georgian SSR, Physical and Technical Institute)

SUBMITTED: 25Aug62

DATE ACQ: 19Mar64

ENCL: 00

SUB CODE: CH

NO REF SOV: 004

OTHER: 003

Card 2/2

OZIASHVILI, Ye.D.; NIKOLAYEV, Yu.V.; MYASOYEDOV, N.F.

Applicability of isotope exchange between NO and H<sub>2</sub>O in nitric acid solutions for an O<sup>18</sup> concentration. Soob. AN Gruz. SSR no. 3:289-292 S '62 (MIRA 19:1)

1. Fiziko-tehnicheskiy institut AN GruzSSR. Submitted September 14, 1961.

OZLEBLO, Leszek; PASZKO, Zygmunt

Activity of beta-glucuronidase of the blood serum in menstruating pregnant and puerperal women. Ginek. Pol. 35 no.3:361-365  
Maj-Je '64

1. Z II Kliniki Położnictwa i Chorób Kobiecych Akademii Medycznej w Warszawie (Kierownik: prof. dr. med. I. Roszkowski).

7

CA

Determination of formaldehyde in mixtures with hexamethylenetetramine. M. Dorer and M. Ozmid. *Formal.* Glasnik 5, No. 9/10, 174-8(1949).—For detg. HCHO in mixts. with hexamethylenetetramine, in addn. to the very exact Biichi method (C.A. 33, 10599), the isometric method by Ronijn (*Z. anal. Chem.* 30, 10(1897)) can be used. As reagent, a soln. of 1 at least 0.1 N must be used. A ppt. of complex compds. of hexamethylene-tetramine with I has no effect upon the results.  
E. J. Freih

Ozierska, H.

OZIERSKA H.

Powiklania w plonicy leczonej penicyliną, sulfonamidami i ogólnie.  
Complications in scarlet fever treated with penicillin, sulfonamides  
and symptomatically/ Pediat. polska 24:8 Aug 50 p. 668-82.

1. Of the Second Clinic for Children's Diseases of Warsaw Medical Academy (Head—Prof. Wł. Szemajch, M.D.).  
CLML Vol 20, No. 2 Feb 1951

MACIUREWICZ, Maria; OZIEMSKA-LOZINSKA, Halina; TYRMAN, Jadwiga

Bacteriolog. evaluation of diagnostic methods in diphtheria. Med. dosw. mikrob. 10 no.2:213-221 1958.

l. Z Miejskiego Szpitala Zakaznego Nr 3 w Warszawie Dyrektor: dr med. E. Pomeraska.

(DIPHTHERIA, diagnosis,  
bacteriol. evaluation (Pol))

OZIEMSKA-LOZINSKA, Halina

Diffusely chronic hepatitis following viral hepatitis. Przegl.  
epidem. 18 no.4:459-464 '64.

l. Z Miejskiego Szpitala Zakaznego Nr. 3 w Warszawie (Dyrektor:  
dr. med. W. Gloskin).

OZIEMSKA, H.

Treatment of whooping cough with streptomycin. Pediat polska 26  
no.5:512-521 May 1951. (CML 21:1)

1. Of the Clinic for Children's Infectious Diseases (Head — Prof.  
J. Bogdanowicz, M.D.) of Warsaw Medical Academy.

OZIEMSKA, Halina

KUNICKA, Ann; OZIEMSKA, Halina; WIERUCHOWA, Maria

Agglutinin level in diphtheria. Postepy hig. med. dosw. 11 no.2:173-177  
1957.

1. Zaklad Mikrobiologii Immunologii Instytutu Matki i Dziecka.  
Warszawa, ul. Kasprzaka 17.  
(DIPHTHERIA, immunology.  
agglutinin level, review (Pol))

OZIEMSKI, Stanislaw, dr inz.

*Dynamic forces generating in full-web overhead traveling cranes  
during the moment of taking up the load from the base. Przegl  
mech 21 no.22:686-690 25 N '62.*

1. Politechnika, Warszawa.

OZIEMSKI, Stanislaw

Problems of rigidity and damping capacity of hoisting cables.  
Archiw bud masz 10 no. 2: 173-87 '63.

1. Katedra Dzwignic, Politechnika, Warszawa.

OZIEMSKI, Stanislaw (Warszawa)

Effect of acceleration on the work of lifting installations.  
Archiw bud masz ll no.2:266-267 '64

OZIEMSKI, Stanislaw, dr inz., adiunkt

The work of crane ropes during a period of unsteady movements.  
Przegl. mech 23 no. 3:71-73 10 F '64.

1. Katedra Dzwignic, Politechnika, Warszawa.

OZIEMSKI, Stanislaw, dr inz., adiunkt

Economic significance and development of truck cranes.  
Przegl mech 23 no. 5:138-141 10 Mr '64.

1. Katedra Dzwignic, Politechnika, Warszawa.

CZHIEKOV, G.

Toward unified procedures. Izobr.i rats. no.6:44 Je '60.  
(MFA 14:2)  
1. Starshiy inzhener TSentral'nego soveta Vsesoyuznogo obshchestva  
izobretateley i ratsionalizatorov.  
(Technological innovations—Accounting)

OZHIMKOV, G., inzh.

What is a plan for the introduction of suggestions? Izobr.i rats.  
no.12:46-47 D '60. (MITRA 13:12)

1. TSentral'nyy sovet Vsesoyuznogo obshchestva izobretateley i  
ratsionalizatorov.  
(Technological innovations)

KORNILOV, I.I.(Moskva); OZHINKOVA, O.V.(Moskva); PRYAKHINA, L.I.(Moskva)

Correlation between the composition, the temperature and the  
heat-resistance of alloys in the system nickel-chromium-tungsten-  
titanium-aluminum. Izv. AN SSSR. Otd.tekh.nauk. Mat.i topl.  
no.5:136-141 S-O '60. (MIRA 13:11)

(Nickel-chromium-tungsten-titanium-aluminum alloys)  
(Phase rule and equilibrium)

OZHINSKIY, I.S.  
3(5)

PHASE I BOOK EXPLOITATION

SOV/1192

USSR Ministerstvo geologii i okhrany nedr

Geologiya SSSR, t. XXVII: Murmanskaya oblast'. Ch. I, Geologicheskoye opisanie. (Geology of the USSR, v. 27. Murmansk Oblast. Pt. I, Geological Description) Moscow, Gosgeoltekhnizdat, 1958. 714 p. 4,000 copies printed.

Editorial Staff: Abdullayev, Kh.M., Aladinskiy, P.I., Aliyev, M.M., Amiraslanov, A.A., Antropov, P.Ya. (Chief Ed.), Aslanyan, A.T., Assovskiy, A.N., Bakirov, A.A., Belevtsev, Ya.M., Belcovsov, V.V., Belyayevskiy, N.A. (Dep. Chief Ed.), Betekhtin, A.G., Bogdanov, A.A., Bogatyrev, A.S., Vas'kovskiy, A.P. Veber, V.V., Golubin, V.N., Dzhanelidze, A.I., Drabkin, I.Ye., Yershov, V.A., Zaytsev, I.A., Kereselidze, K.G., Koptev - Dvornikov, V.S., Kreyter, V.M., Krasnikov, V.I. (Dep. Chief Ed.), Kuz'menko, V.I., Librovich, L.S., Lungersgauzen, G.F., Magak'yan, I.G., Malinovskiy, F.M. (Dep. Chief Ed.), Marinov, N.A., Markovskiy, A.P., Merkulov, M.I. (deceased), Mirlin, G.A., Mirchink, M.F., Nalivkin, D.V., Nedzvetskiy, A.P., Nikitin, P.M., Nikolayev, V.A. (Dep. Chief Ed.), Paffengol'ts, K.N., Saks, V.N., Satpayev, K.I., Semenenko, N.P., Sinitsin, N.M., Snyatkov, L.A., Strakhov, N.M., Tatarinov, P.M., Tyzhnov, A.V.

Card 1/ 11

Geology of the USSR (Cont.)

SOV/1192

TABLE OF CONTENTS:

|  |    |
|--|----|
| Introduction (Kharitonov, L.Ya.)   | 7  |
| Ch. I. Review of Past Geological Explorations (Kharitonov, L.Ya.)        | 10 |
| Ch. II. Physico-Geographic Description (Rikhter, G.D.)                   | 20 |
| Relief   | 20 |
| Climate  | 27 |
| Hydrography  | 36 |
| Soil-vegetation conditions   | 40 |
| Basic economic regions   |    |
| Ch. III. Basic Features of Geological Structure (Kharitonov, L. Ya.)     | 42 |
| Distribution, composition and age of geological formation                | 42 |
| Basic tectonic elements  | 55 |
| Period of initiation of basic tectonic processes and magmatic activity   | 57 |
| Ch. IV. Stratigraphy, Magnetic Differentiation and Metamorphic Phenomena | 63 |
| Card 3/11  |    |

|   |          |
|---|----------|
| Geology of the USSR (Cont.)   | SOV/1192 |
| Stratigraphy  | 148      |
| Proterozoic formations of the eastern part of the Kola Peninsula  | 150      |
| Imandra-Varzuga suites (Yegorova-Furzenko, Ye.N.)   | 150      |
| Sedimentary - volcanic complex of rocks in rivers   |          |
| Ponoy-Kachkovka-Snezhnitsa area (Yegorova-Furzenko, Ye.N.,<br>supplementary remarks by L.Ya. Kharitonov.)         | 175      |
| Keyv suite (Sokolov, P.V.)  | 180      |
| Voron'ya Tundra - Porosozero suites-(Voron'ya - Porosozero)<br>(Yegorova-Furzenko, Ye.N. and Sokolov, P.V.)       | 246      |
| Proterozoic formations of the northwestern part of the Kola Peninsula   | 253      |
| Complex of slaty amphibolites (Yegorova-Furzenko Ye.N.)   | 253      |
| Lower-Proterozoic formations of the White Sea area<br>(Yegorova-Furzenko, Ye.N.)                                  | 257      |
| Korva tundra suites Yegorova-Furzenko, Ye.N.)   | 258      |
| Suite of slaty-amphibolites of the Podas, Khanluts-Varaka,<br>Terma and Kareka tundras (Yegorova-Furzenko, Ye.N.) | 260      |
| Tikshozer suite (Kharitonov, L.Ya.)   | 262      |

Card 5/11

- Geology of the USSR (Cont.)

SOV/1192

|  |     |
|--|-----|
| Basic and ultrabasic intrusions of Mt. Zasteyd II and Lovnozero (Murashov, D.F. and Polferov, D.V.)                                  | 314 |
| Ultrabasic intrusions of the "Serpentinovyy Poyas" (Serpentine Belt)-Podas Tundra, etc. (Murashov, D.F.)                             | 318 |
| Olivine pyroxenites, peridotites and other younger intrusions of the Kolvitskiy and Kandalakshskiy massifs (Kharitonov, L.Ya.)       | 321 |
| Basic and ultrabasic rocks of the basin of the lower Varzuga, Strel'na, Pyalitsa Rivers and the Ondomskiye Lakes (Kharitonov, L.Ya.) | 322 |
| Granites   |     |
| Microcline granites of the northwestern part of the Kola region (Yegorova-Furzenko., Ye.N.)  | 325 |
| Microcline granites of the eastern part of the Kola region (Yegorova-Furzenko, Ye.N. Kharitonov, L.Ya.)                              | 328 |
| Microcline granites of the White Sea region (Kharitonov, L.Ya.)  | 333 |
| Metamorphism of Proterozoic formations (Yegorova-Furzenko, Ye.N. and Kharitonov, L.Ya.)  | 337 |
| Metamorphic phenomena and the origin of the Keyv crystalline suite of rocks (Kharitonov, L.Ya.)                                      | 344 |
| General conclusion on magmatic phenomena in the Proterozoic  |     |

Card 7/11

Geology of the USSR (Cont.)

SOV/1192

|  |     |
|--|-----|
| Ultrabasic and alkaline shield intrusions of Caledonian Time   | 418 |
| Kovdorskiy massif (Volotovskaya, N.A.)   | 419 |
| Afrikanda massif (Yeliseyev, N.A.—supplementary data by<br>M.S. Afanas'yev)  | 428 |
| Massifs in the Khabozero region (Yeliseyev, N.A.)  | 431 |
| Koydozerskiy massif (Volotovskaya, N.A.)   | 433 |
| Dikes of the Kandalakshskoe littoral (Yeliseyev, N.A.)   | 435 |
| Salmogorskiy massif (Gubachem, B.V.)   | 437 |
| Gremiyakha-Vyrmes massif (Yeliseyev, N.A.)   | 438 |
| Alkaline granites  | 442 |
| Alkaline granites of the eastern part of the Kola region   | 444 |
| Zapadnyy Keyv massif (Ginzburg, I.V. and Volotovskaya, N.A.)   | 444 |
| Massif of the Belya Tundra region (Fizhenko, V.V. and<br>Volotovskaya N.A.)  | 455 |
| Massif of Mt. Lavrent'yevskaya (Fizhenko, V.V. and<br>Volotovskaya N.A.)   | 457 |
| Massifs of the middle course of the Ponoy river and the upper<br>course of the Strel'na river (Ivanov, A.M. and Morozov, A.I.) | 458 |

Card 9/11

|  |          |
|--|----------|
| Geology of the USSR (Cont.)                                    | SOV/1192 |
| Ch. V. Tectonics (Kharitonov, L.Ya.)                           | 548      |
| Tectonic grouping  | 548      |
| Structure description  | 553      |
| Kola region  | 553      |
| White Sea region   | 614      |
| Ch. VI. Geomorphology (Apukhtin, N.I.)                         | 632      |
| Ch. VII. History of Geological Development (Kharitonov, L.Ya.) | 653      |
| Bibliography   | 673      |
| Index of Geographical Names                                    | 697      |
| Subject Index  | 708      |

AVAILABLE Library of Congress

Card 11/11

MM/gmp  
3-6-59

OZHIGOVA, A. P., Cand Biol Sci -- (diss) "Architectonics of the occipital region of the cortex of the large /cerebral/ hemispheres of primates." Moscow, 1960. 12 pp; (Moscow State Univ im M. V. Lomonosov); 150 copies; price not given; (KL, 23-60, 122)

OZHIMKOV, G., inzh.

Measure with rubles. Izobr.i rats. no.4:40-41 Ap '60.  
(MIRA 13:6)  
1. TSentral'nyy Sovet Vsesoyuznogo obshchestva izobretateley i  
ratsionalizatorov.  
(Efficiency, Industrial)

VAL'TSEV, V.K.; OZIASHVILI, Ye.D.

Distribution of rare earth elements in the hydrolysis of alloys of their oxides with aluminum thiocyanate. Izv.Sib.otd.AN SSSR no.6:59-64 '60. (MIRA 13:9)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR.  
(Rare earths) (Aluminum alloys)

22876

21.3200

S/089/61/010/005/004/015  
B102/B214

AUTHORS:

Gverdtsiteli, I. G., Nikolayev, Yu. V., Oziashvili, Ye. D.,  
Ordzhonikidze, K. G., Muskhelishvili, G. N., Kiladze, N. Sh.,  
Mikirtumov, V. R., Bakhtadze, Z. I.

TITLE:

An automatic cascade apparatus for obtaining highly  
concentrated heavy nitrogen isotope

PERIODICAL: Atomnaya energiya, v. 10, no. 5, 1961, 487-492

TEXT: The growing use of  $N^{15}$  in different domains (for example,  $N^{15}$  nitrates in homogeneous reactors;  $N^{15}$  has a thermal neutron capture cross section of  $2 \cdot 10^{-5} b$ , whereas the value for natural nitrogen is  $1.8 b$ ) makes it of interest to develop suitable methods for the preparation of this isotope. The principal difficulty lies in the smallness (0.365%) of  $N^{15}$  content in the natural nitrogen. Spindel and Taylor (Ref. 1: W. Spindel, T. Taylor. J. Chem. Phys., 23, 981 (1955); 24, 626 (1956); Trans. N. Y. Acad. Sci., 19, 3 (1956); T. Taylor, W. Spindel. Proceedings of the

Card 1/4

22876

S/089/61/010/005/004/015

B102/B214

An automatic cascade apparatus for...

International Symposium on Isotope Separation. Amsterdam, North - Holland Publishing Company, 1958, p. 158; L. Kauder, T. Taylor, W. Spindel. J. Chem. Phys., 31, 232 (1959)) have developed a cascade apparatus with two columns allowing N<sup>15</sup> to be obtained with 99.8 % purity. On this basis the authors of the present paper have developed and constructed an automatic cascade apparatus that allows 99.8 % pure N<sup>15</sup> to be obtained from natural nitrogen by the method of NO-HNO<sub>3</sub> exchange. The yield is about 0.5 g per day. The chemical exchange NO-HNO<sub>3</sub> is described in Ref. 1, and also in the introduction of the present paper. Fig. 2 shows the scheme of construction of the actual automatic apparatus; 3 and 6 (in Fig. 2) correspond to the first and the second column of the cascade. The HNO<sub>3</sub> is conveyed from the reservoir 1 to the first column via a regulating valve 4 and a flow meter 2. The enriched solution is taken through a regulating valve 5 and a second flow meter 2 to the upper part of the second column for further enrichment, the remaining part flowing through the sleeve pipe 7 into the reactor. In the reactor 10 HNO<sub>3</sub> reacts with SO<sub>2</sub>. The oxide

Card 2/4

An automatic cascade apparatus for...

22876  
S/089/61/010/005/004/015  
B102/B214

mixture produced is led into the column 3 where it reacts with nitric acid with isotope exchange. The HNO<sub>3</sub> from column 6 enters the reactor 9 (which is analogous to the reactor 10). The nitric oxide from the reactors is brought back to the column 6 and reaches finally the lower part of the first column. The NO free of N<sup>15</sup> is discharged from the cascade; the H<sub>2</sub>SO<sub>4</sub> formed in the reactors is led off to the reservoir. The HNO<sub>3</sub> enriched in N<sup>15</sup> is led away from the lower part of the second column through an electromagnetic dropper 8. Columns, valves, and connecting pieces are made of nonrusting steel of the type 1X19H9T (1Kh19N9T). The packing material is teflon. The reactors consist of quartz. The automatic regulation is related to the stabilization of the acid and water flows in the large and small reactor, to the stabilization of the quantity of the discharged product (acid), and the regulation of the gas addition. The regulating system consists of the automatic stabilizers, a signal block controlling the automatic regulators and stabilizers, and a feeding block. The whole regulating system is free from contacts in its working and must give an accurate and reliable performance over a period of

Card 3/4

22876

An automatic cascade apparatus for...

9/089/61/010/005/004/015  
B102/B214

operation. The enriched samples ( $N_2$  and NO) were subjected to a mass spectroscopic investigation which allowed the isotopic composition to be determined to an accuracy of  $\pm 0.02\%$ . Depending on the amount of nitrogen taken the concentrations are given by:

| Nitrogen taken, g/day | $N^{15}$ concentration, % |
|-----------------------|---------------------------|
| 0.55                  | 99.8                      |
| 0.69                  | 64                        |
| 0.84                  | 50                        |

X

The authors thank V. A. Vlasenko, R. V. Tishchenko, R. M. Sakandelidze, D. K. Puradashvili, G. L. Partsakhashvili, L. V. Yermakova, A. M. Gasparov, M. S. Mikhelashvili, L. I. Chernova, S. V. Bubnov, and I. A. Kuras for collaboration. There are 5 figures, 1 table, and 5 references; 2 Soviet-bloc and 3 non-Soviet-bloc.

SUBMITTED: June 7, 1960

Legend to Fig. 2: Specifications of length in mm; (A) outlet of the product.

(NOTE: Due to the size of the figure, we were unable to fit it to a master.)

YUGOSLAVIA/Chemical Technology, Chemical Products and their Application. Ceramics, Glass, Binding Materials.

Abs Jour: Rof Zbir-Klan, No 10, 1959, 35664.

Author : Doksečanin, S., Perlin, M., Kowalik, S., Lindner, M.  
Ožin, V., Šoemek, B.

Inst : Slovenske Chemical Society

Title : Yugoslav Corundum Production.

Orig Pub: Vestnik Slov. Nauk Drus. v. 1, No 1-2, 65-63 (1957) (in  
Slovene with an English summary)

Abstract: Geological and chemical prospecting has led to  
the discovery of a deposit of bauxites suitable for  
the production of corundum. A plant constructed at  
the site is now furnishing all of Yugoslavia's abru-  
sives demand. -- from a summary by the authors.

Card : 1/1

H-39

OZIM, V., KOTNIK, S., SORSAK, V.

Qualified chemical workers under the conditions prevailing in the Yugoslav chemical industry. p. 51

Slovensko kemijsko drustvo. VESTNIK. Ljubljana, Yugoslavia, Vol. 5, No. 1/2, Jan/June 1958

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

OZIM, V.

OZIM, V. Trends of development of the calcium-carbide industry in the ~~Soviet~~ and  
conditions in our country.

Vol. 6, no.1, April 1955

NOVA PROIZVODNJA

SO:Monthly List East European Accessions (EEAL), LC, Vol. 5 No. 3  
March, 1956

OZIM, V.

Effect of raw materials on production of calcium carbide. p. 49  
NVA PROIZODNJA (Uprava za napredok v proizvodiji)  
Ljubljana, Vol. 7, no. 1, Mar. 1956

SOURCE: East Europe Accession Lists (EEAL),  
Library of Congress, Vol. 5, no. 11, Nov. 1956

OZIMEK, S.

"An imposing panorama, and a more modest project; a motion-picture review."

p. 15 (Zolnierz Polski) No. 2, Jan. 1958  
Warsaw, Poland

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,  
April 1958

OZIMEK, S.

OZIMEK, S.

The motion-picture forepost of the Polish Army, also at the present time.

p. 16 (Zolnierz Polski) No. 22, Oct. 1957, Warszawa, Poland

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, NO. 1, JAN. 1958

OZIMEK S

OZIMEK, S.

Nights in Vienna.

p. 10 (Zolnierz Polski) No. 23, Oct. 1957, Warszawa, Poland

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, NO. 1, JAN. 1958

OZIMEK, S.

Gina and the Italian Higher School of Education; a modern-picture review.

P. 15 L (AOLNIERZ POLSKI) (Warszawa, Poland) No. 4, Jan. 1958

SO: Monthly Index of East European Accessions (EEAI) LC Vol. 7, No. 5. 1958

OZIMEK, S.

"30 years above Warsaw."

p. 19 (Zolnierz Polski) No. 2, Jan. 1958  
Warsaw, Poland

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,  
April 1958

OZIMEK, S.

OZIMEK, S. A test performance on the deck of the Czerwona Roza; a criticism  
of a play. p. 22.

No. 16, Aug. 1956  
ZOLNIERZ POLSKI.  
MILITARY & NAVAL SCIENCES  
POLAND, WARSZAWA.

So: East European Accession, Vol. 6, No. 5, May 1957

OZIMEK, S.

OZIMEK, S. From visiting the art exhibition "From David to Cezanne." p. 2<sup>4</sup>.

No..13, July 1956.

ZOLNIERZ POLSKI  
MILITARY & NAVAL SCIENCES  
Warszawa, Poland

So: East European Accession, Vol. 6, No. 2, Feb. 1957

L 20521-66 EWT(1) SOTC 30  
ACC NR: AP5022948 SOURCE CODE: FO/0094/65/000/020/003/0009

AUTHOR: Ozimek, S.

ORG: none

TITLE: Parachute jump training on brake cables anchored to high peaks

SOURCE: Zolnierz Polski, no. 28, 1965, 8-9

TOPIC TAGS: parachute, military training, military personnel, specialized training

ABSTRACT: Troops consisting of infantrymen, skiers, drivers, snipers, and swimmers learn parachute jumping by training on brake cables anchored to high peaks. The training is under the direction of Major Stanislaw Rekiert who is finishing his studies in geography at the Jagiellonian University, writing a thesis about the suburbs for his master's degree. Orig. art. has: 2 figures.

SUB CODE: 15 SUM DATE: none

28  
B

Card 1/1 L/C

OZIMIC, M.

Colorimetrid determination of ergot alkaloids. p. 13

Slovensko kemijsko drustvo ~~WESTNEK~~. Ljubljana, Yugoslavia. Vol. 5, No. 1/2,  
Jan./June 1958.

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

OZIMIC-TRAMPUZ, Lea

Organization of health education in obstetrical wards. Higijena, Beogr.  
9 no.2-3:193-195 1957.  
(HEALTH EDUCATION  
of pregn. women (Ser))

OZIMIC - TRAMPUZ, LEA

SURNAME (in caps); Given Name

Country: Yugoslavia

Academic Degrees: [not given]

Affiliation:

Source: Ljubljana, Zdravstveni Vestnik, Vol XXX, No 1-2, 1961, pp 6-12

Data: "Epidemiological Aspects of Puerperal Mastitis."

Authors:

TRAMPUZ, Vladimir, Clinic for Gynecology and Obstetrics (Klinika za Ginekologijo in Porodnistvo) of the Faculty for General Medicine and Stomatology (Fakultet za Splošno Medicino in Stomatologijo), Ljubljana; Director (Predstojnik): Prof Dr F Novak

OZIMIC-TRAMPUZ, Lea (Presumed: same affiliation as for V. Trampuz)  
SKRINJAR, Boga, Central Hygienic Institute (Centralni Higieniski Zavod), Ljubljana; Director (Predstojnik): Dr M Ahcin  
LIKAR, Miha, Microbiological Institute (Microbioloski Institut) of the Faculty for General Medicine and Stomatology, Ljubljana; Director: Prof Dr M Valentincic

1. CZIMOV, B.; GOGO, Ye.; ALIAMOVSKIY, I.
2. USSR (600)
4. Cheese - Analysis
7. Method for speedy determination of moisture in process cheese. Mol. prom. 12,  
No. 12, 1952.
9. Monthly List of Russian Accessions, Library of Congress. March, 1953. unclassified

OZIMOV, B. B.

K. V. Flerov and B. B. Ozimov - "Absorption spectra of solutions of organic dyes and inorganic salts in the red region." (p. 789)

SO: Journal of General Chemistry, (Zhurnal Obozrhei Khimii), 1950, Vol. 20, No. 5

The separation of cadmium from copper in qualitative analysis without potassium cyanide. B. T. Tolmachev and B. V. Osinov. *J. Applied Chem. (U. S. S. R.)* 12, 408-9 (1939; French, 409) (1939).—Cu<sup>+</sup> is reduced with Al and CdS ppd. by adding H<sub>2</sub>S. About 40% of the Cd<sup>+</sup> is reduced with the Cu<sup>+</sup>. A. A. Podgorny.

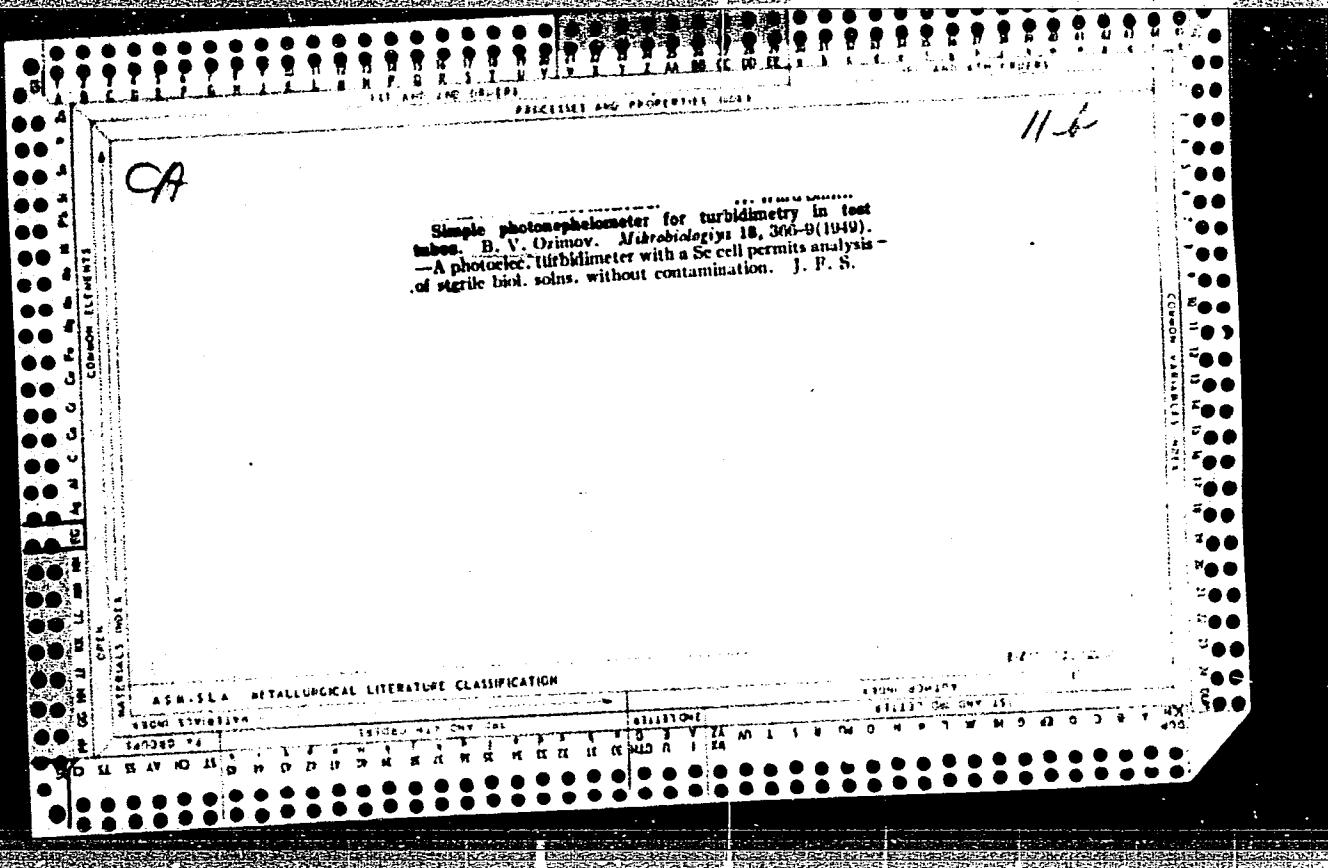
7

201

## APPENDIX B METALLURGICAL LITERATURE CLASSIFICATION

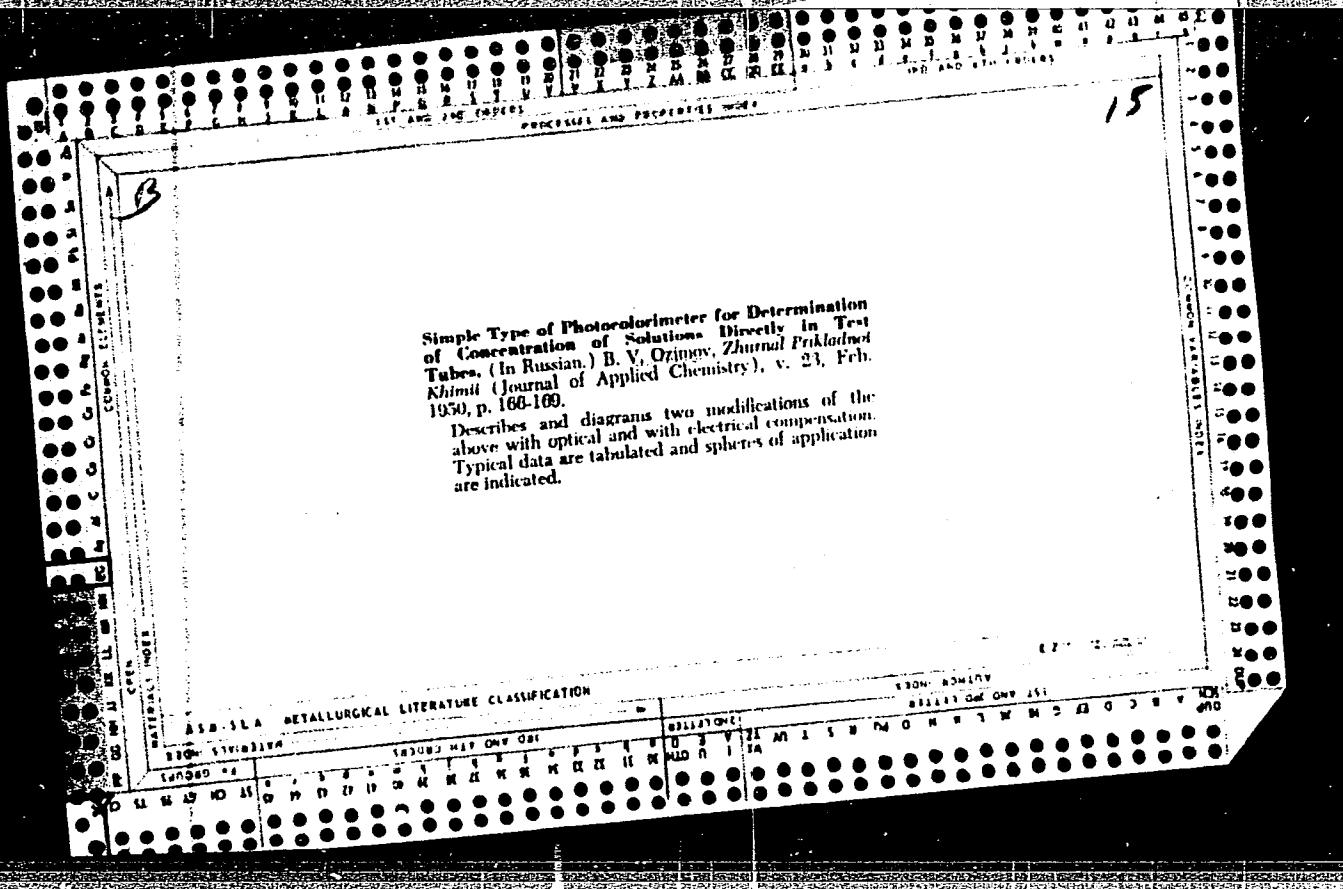
卷之三

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387



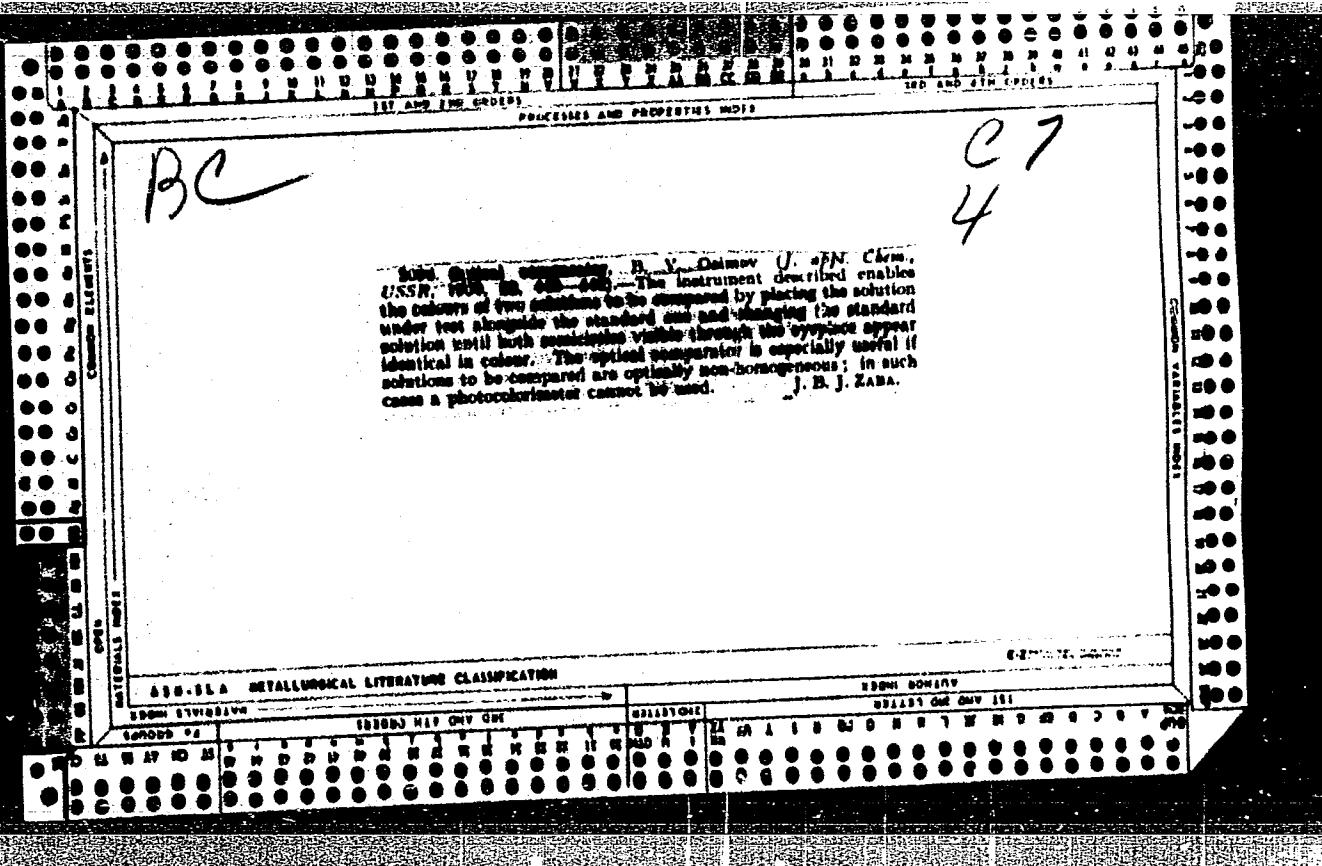
CA

Absorption spectra of solutions of organic dyes and of  
inorganic salts in the red region. M. V. Florov and B. V.  
Osipov (Inst. Refrig. and Milk Ind., Leningrad). *Zhur.*  
*Osnikai Khim.* (*J. Gen. Chem.*) 20, 789-93 (1950).—  
Inorg. salt solns. imitating the colors of Bogen indicator  
(phenolphthalein, methyl red, dimethyl aminobenzene,  
bromothymol blue, and thymol blue) solns. at pH from  
2.4 to 3.2 were prepd. by mixing definite proportions of  
aq. solns. of  $\text{CoCl}_4$  and  $\text{FeCl}_3$ , and the absorption spectra  
compared for solns. appearing to have an identical color  
either visually or photocolorimetrically. Examples of the  
composn. of the imitation solns. (in ml. 0.07/0.25 g./l.  
-  $\text{CoCl}_4$  soln., ml. 0.07/1.370 g./l.  $\text{FeCl}_3$  soln., and ml.  $\text{H}_2\text{O}$ )  
made up by visual estn., are: for pH 2.4, 1.60, 0.15, and  
0.25; for pH 3.3, 1.00, 0.20, and 0.20. Spectra of the  
indicator and the imitation solns. coincide in the range  
6000-5100 Å., and the coincidence is better with solns.  
chosen by visual estn. of the color rather than by photo-  
colorimetry with Sc cells, on account of the poor red-  
sensitivity of the latter. N. Thor



CA

Simple photometer to determine solution concentra-  
tions directly in test tubes. B. V. Chingov. (Leningrad  
Inst. Radio, and Dairy Ind.). J. Applied Chem. U.S.S.R.  
23, 171-4 (1950) (Eng. translation); Zhur. Priblud.  
Khim. 20, 100-9. A simple, sensitive photometer  
is described in which an ordinary test tube replaces a test  
cell. Two models are illustrated (a) equipped with optical  
compensation and (b) with electrical compensation—  
inserting a variable resistance in the circuit of one of the  
photocell elements. M. McMahon



CA

In memory of B. G. Tideman. B. V. Osimov. Zhur.  
Priklad. Khim. (J. Applied Chem.) 23, 1007-8(1950).  
Obituary of Tideman (1879-1942), an authority on the  
chemistry of combustion. G. M. Kosolapoff

USSR /Chemistry - Colorimetry

Jun 52

"The Effect of Colloids on the Accuracy of Photo-colorimetric Analysis," K. V. Flerov, B. V. Ozimov, Leningrad Inst. of the Refrigeration and Dairy Ind.

"Zhur Prik Khim" Vol XXV, No 6, pp 634-639

The effect of a colloidal dispersion system on photocolorimetric analysis was investigated with colored solns of inorg salts in all ranges of the spectrum. It was shown that the smallest errors occur in colorimetry of solns with high absorption (in the region of red, blue and violet) and the greatest errors in those with low adsorption (yellow).

218F35

USSR /Chemistry - Colorimetry (Contd)

Jun 52

With increasing concn of the colored soln, the measurement error in the presence of a small quantity of colloid decreases. In colorimetry of similar solns, optimum conditions must be established, i.e., the concn must be chosen so as to reduce the error to zero.

218F35

OZIMOV, B. V.  
Chemical Abst.  
Vol. 48 No. 9  
May 10, 1954  
Analytical Chemistry

Effect of colloids on the accuracy of photocolorimetric analysis. V. K. V. Flerov and B. V. Ozimov. *J. Appl. Chem. (U.S.S.R.)* 25, 713-16 (1952) (Engl. translation). See C.A. 47, 12098c.

92-54  
jfp

OZIMOV, I.S.V.

USSR

Sensitivity of a selenium cell to red solutions. R-V  
Ozimov and K. V. Mirov. J. Appl. Chem. U.S.S.R. 27,  
no. 1 (1954) (Engl. translation).—See C.A. 48, 8034u.

H. L. [initials]

Sensitivity of a selenium cell to red solutions. B. V. Ozimov and K. V. Fisov [Inst. Refrig. Dairy Ind., Tashkent, U.S.S.R.]. Zhur. Prilad. Khim. 27, 209-12 (1954); cf. C.A. 45, 2723b.—The red-sensitivity of a Se cell was tested and found satisfactory for photocolorimetry with: Congo red, methyl red, cresol red, phenol red, methyl orange, fuchsin, and KMnO<sub>4</sub>. It was most sensitive to the first and least to the last. It was more sensitive to the red of methyl orange (pH 3.1, 0.05 × 10<sup>-3</sup> mol/l.) than to the orange (pH 4.4, 0.25 × 10<sup>-3</sup> mol/l.). The greater the mol. wt. the greater the sensitivity except with fuchsin, which might be hydrolyzed at low concns.

I. Bracowitz

(1) TNG

**"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238"**

**APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387**

OZIMOV, B.V., kand. tekhn. nauk; VAL'KOVA, N.K., inzh.; GOLOVKINA, M.T.,  
kand. tekhn. nauk.

Reflection spectra of solid fats. Masl.-zhir. prom. 24 no.2:10-11  
'58. (MIRA 11:3)

1. Leningradskiy tekhnologicheskiy institut mholodil'noy promyshlen-  
nosti.

(Oils and fats--Spectra)

OZIMOV, B.V.; VOL'NOV, Yu.N.

Reflection spectra of some inorganic compounds in a medium of organic liquids. Izv.vys.ucheb.zav.; khim.i khim.tekh. 4 no.1: 28-32 '61. (MIRA 14:6)

1. Leningradskiy tekhnologicheskiy institut kholodil'noy promyshlennosti, kafedra obshchey i analiticheskoy khimii.  
(Spectrum analysis) (Refractive index) (Reflection (Optics))

S/063/60/005/005/014/021  
A051/A029

AUTHORS: Vol'nov, Yu.N., Ozimov, B.V.

TITLE: Reflection Spectra and Their Application to the Study of Sorption Processes

PERIODICAL: Zhurnal Vsesoyuznogo Khimicheskogo Obshchestva im. D.I. Mendeleyeva, 1960, No. 5, Vol. 5, pp. 591-592

TEXT: Reference is made to the works of Sidorov, (Refs. 1,2) and Vedeneysova (Ref. 3) on the application of reflection spectra to the study of adsorption phenomena and to the study made on the effect of optical factors on the reflection spectrum (Ref. 4-7). The authors of this article made a study of the possibilities of applying the reflection spectra to the study of the sorption of certain organic liquids by chromium hydroxide. Chromium hydroxide was prepared by precipitating CrCl<sub>3</sub> with a stoichiometric quantity of NaOH. The residue was washed with hot water until a reaction on a chlorine ion and on an alkaline ion was absent. The residue was then dried to a constant weight at 120°C. The following organic liquids were used: ethanol, ✓  
Card 1/8

S/063/60/005/005/014/021  
A051/A029

Reflection Spectra and Their Application to the Study of Sorption Processes

benzene, acetoacetic ether and monoethanolamine. Water was used in the control tests. The organic liquids were distilled three times and dehydrated. Their constants coincided with literature data. The solid substance  $\text{Cr}_2\text{O}_3 \cdot n\text{H}_2\text{O}$  was passed through a sieve and the particles were 0.20-0.25 mm in size. The prepared samples of chromium hydroxide were calcinated for two hours at 120, 200, 360, 600 and 800°C. Reflection spectra were taken from all the samples, both the dry ones, as well as those mixed with the solvent (100 g  $\text{Cr}_2\text{O}_3 \cdot n\text{H}_2\text{O} + 50$  ml of solvent). The measurements were made in an infinitely thick layer on a CP-2(SF-2) spectrophotometer. The measurement data are given in Fig. 1. It was found that the reflection spectra of the  $\text{Cr}_2\text{O}_3 \cdot n\text{H}_2\text{O}$  changed according to the calcinating temperature (Ref. 8) and this is assumed to be connected with the change in the hydration and structure of  $\text{Cr}_2\text{O}_3 \cdot n\text{H}_2\text{O}$ . The samples prepared at the indicated temperatures were tested in the following media: ethanol, acetoacetic ether, monoethanolamine, benzene and ethanol vapors. In order to determine the ethanol vapor sorption,  $\text{Cr}_2\text{O}_3 \cdot n\text{H}_2\text{O}$  samples were placed in an exsiccator for 48 hours, which contained anhydrous ethanol. The data of the experiments are given in Table 1 for comparative

Card 2/8

S/063/60/005/005/014/021  
A051/A029

Reflection Spectra and Their Application to the Study of Sorption Processes

purposes, using different samples. In Table 2 a comparison is made of the refraction coefficients of the light of the binding medium, the percentage of reflection at  $\lambda = 589 \text{ m}\mu$  and the wavelengths corresponding to the maxima and minima of reflection of the above-indicated samples. The obtained data were found to confirm the fact that the optical properties of the binding medium have a significant effect on the reflection percentage of light. Fig 2-4 show the curves percentage of reflection versus wave-length for some of the samples of  $\text{Cr}_2\text{O}_3 \cdot n\text{H}_2\text{O}$  obtained at the corresponding temperatures in the media of the organic liquids. The experimental data lead to the assumption that the optical properties of  $\text{Cr}_2\text{O}_3 \cdot n\text{H}_2\text{O}$  are dependent on the binding medium. The shift of the maxima and minima percentage of reflection according to the wavelength of  $\text{Cr}_2\text{O}_3 \cdot n\text{H}_2\text{O}$  in the organic liquid media is determined by the physico-chemical causes, of which solvation is one. There are 2 tables, 4 figures and 8 Soviet references.

Card 3/8

S/063/60/005/005/014/021  
A051/A029

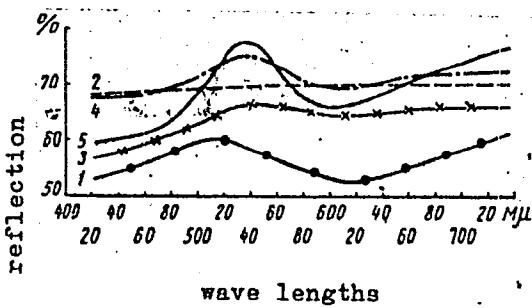
Reflection Spectra and Their Application to the Study of Sorption Processes

ASSOCIATION: Leningradskiy tekhnologicheskiy institut kholodil'noy promyshlennosti (Leningrad Technological Institute of the Refrigeration Industry)

SUBMITTED: February 12, 1960

Figure 1:

Measurement data of the reflection spectra:  
1-120°; 2-200°; 3-360°;  
4-600°; 5-800°.



Card 4/8

S/063/60/005/005/014/021  
A051/A029

Reflection Spectra and Their Application to the Study of Sorption Processes

Table 1:

Weight increase of the percentage of reflection of light  $\lambda = 600 \text{ m}\mu$  of the  $\text{Cr}_2\text{O}_3 \cdot n\text{H}_2\text{O}$  samples calcinated at various temperatures

| calcinating temperature $^{\circ}\text{C}$ | weight addition(in %) after sorption of the ethanol vapors | increase of the reflection percentage after the sorption as compared to the initial sample |
|--|--|--|
| 120  | 10   | 15   |
| 200  | 5  | 9  |
| 360  | 6  | 10   |
| 600  | 1  | 2  |
| 800  | 0,5  | 1  |

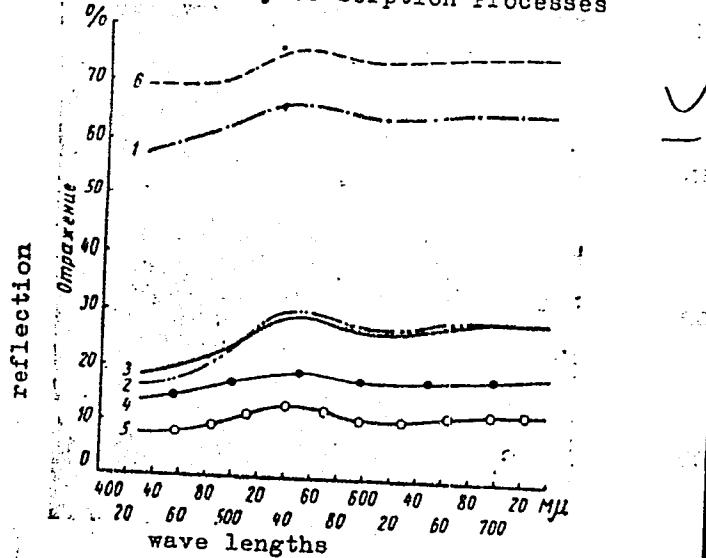
Card 5/8

S/063/60/005/005/014/021  
A051/A029

Reflection Spectra and Their Application to the Study of Sorption Processes

Figure 2:

Relationship of the reflection (%) to the wave length:  
1. without solvent, 2. ethanol, 3. water, 4. acetacetic ether,  
5. ethanol amine, 6. alcohol vapors.



Card 6/8

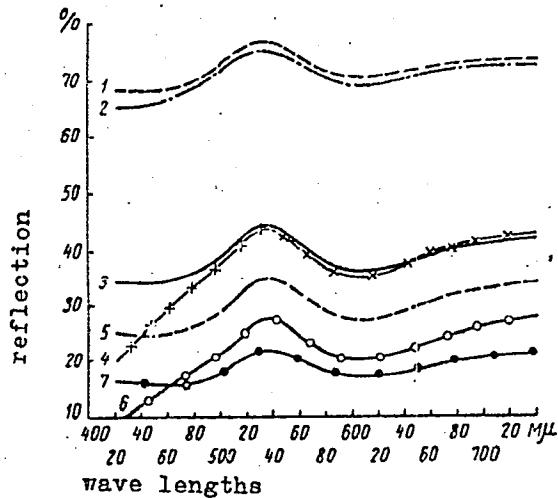
S/063/60/005/005/014/021  
A051/A029

Reflection Spectra and Their Application to the Study of Sorption Processes

Figure 3:

The same:

1. ethanol vapors, 2. without solvent, 3. ethanol, 4. water,  
5. acetacetoic ether, 6. ethanamine, 7. benzene



Card 7/8

9/063/60/005/005/014/021  
A051/A029

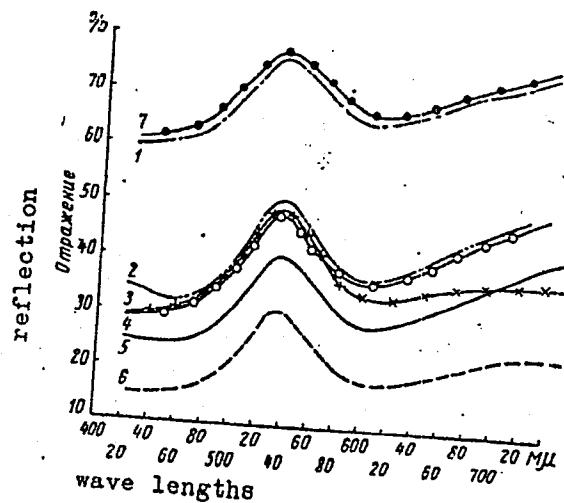
Reflection Spectra and Their Application to the Study of Sorption Processes

Figure 4:

The same:

1. without solvent,
2. ethanol, 3. water,
4. benzene, 5. acetoacetic ether,
6. ethanolamine,
7. ethanol vapors

Card 8/8



OZIMOV, B.V., dotsent, kand.tekhn.nauk; VOROB'YEVA, L.V., kand.fiziko-matematicheskikh nauk

Optical properties of milk. Trudy LTIKHP 13:28-34 '57.  
(MIRA 13:6)

1. Kafedra obshchey i analiticheskoy khimii i kafedra fiziki  
Leningradskogo tekhnologicheskogo instituta kholodil'noy  
promyshlennosti.  
(Milk--Spectra)

OZIMOV, B.V.; VAL'KOVA, N.K.; GOLOVKINA, M.T.

Reflection spectra used in the analysis of food products.  
Trudy LTIKHP 15:81-86 '58. (MIRA 13:4)

1. Predstavlena Kafedroy neorganicheskoy i analiticheskoy  
khimii Leningradskogo tekhnologicheskogo instituta kholodil'noy  
promyshlennosti.  
(Food--Spectra)

5(2)  
AUTHOR:

Ozimov, B. V.

SOV/153-58-2-10/30

TITLE: The Reflection Spectra and Their Evaluation in Colorimetric Analyses (Spektry otrazheniya i ikh ispol'zovaniye v kolorimetricheskem analize)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya tekhnologiya, 1958, Nr 2, pp 58 - 62 (USSR)

ABSTRACT: The photocolorimetric analysis may be used only for transparent solutions or optically empty media. Small amounts of colloids usually distort the results of the photocolorimeter and cause great errors (Ref 1). Single components of the colloidal solutions, emulsions and coarse suspensions cannot at all be determined colorimetrically by means of the usual colorimeter. The methods of nephelometry and turbidimetry can be used in these solutions only to a certain extent as the conditions at which reproducible suspensions can be produced are difficult to prepare (Ref 2). The author tried to devise a colorimetric method

Card 1/4

The Reflection Spectra and Their Evaluation in  
Colorimetric Analyses

S07/103-58-2-10/30

of determining single components in disperse systems independent of the particle-sizes of the disperse phase. Reflection spectra of non-transparent colored compounds were taken as the basis of this method. EXPERIMENTAL PART. Reflection spectra of colored non-transparent solutions which, within a thin layer, permit light to pass were recorded by the spectrophotometer SF-2 using as a background, paper (Ref 3), sodium chloride, -nitrate, and sulfate (Ref 4) as well as barium sulfate (Ref 5). The author used barium sulfate which is almost insoluble and chemically inactive. Figure 1 shows that a barium sulfate paste is the best background. Figure 2 gives the reflection spectra of the inner complex salt nickel dimethyl glyoxime (ruby), also the copper ferrocyanide (brown-red), and finally the complex salt iron ferrocyanide (blue). As can be seen from figure 2 the reflection spectra are specific for each salt, and their minima are in

Card 2/4

The Reflection Spectra and Their Evaluation in  
Colorimetric Analyses

SCV/153-58-2-10/7c

different parts of the spectrum. Figures 3-5 show the reflection spectra of the same salts in dependence on their concentration. These spectra show a certain dependence between the percents of reflection and the concentration of the salt; the character of the curve does not change. This latter circumstance makes possible a quantitative determination of the content of certain ions on a BaSO<sub>4</sub> background by the spectrophotometric as well as by the colorimetric method. The field of application, and directions for carrying out the analysis are given. Figures 6-8 show calibration curves for determining iron, copper and nickel. There are 8 figures and 6 references, 5 of which are Soviet.

ASSOCIATION: Leningradskiy tekhnologicheskiy institut kholodil'noy promyshlennosti (Leningrad Technological Institute of Refrigerator Industry) Kafedra obshchey i analiticheskoy khimii (Chair of General and Analytical Chemistry)

Card 3/4

OZIMOV, B.V.

Reflection spectra used in colorimetric analysis. Izv. vys. ucheb.  
zav.; khim.i khim.tekh. no.2:58-62 '58. (MIRA 11:7)

1. Leningradskiy tekhnologicheskiy institut kholodil'noy promyshlennosti,  
Kafedra obshchey i analiticheskoy khimii.  
(Colorimetry) (Spectrum analysis)

OZIMOV, B. V.

USSR/ Analytical Chemistry. General Problems.

G-1

Abs Jour: Referat. Zhur.-Khimiya, No. 8, 1957, 27126.

Author : B. V. Ozimov.

Inst : Leningrad Institute of Technology of Refrigeration Industry.

Title : Colorimetric Analysis of Opaque Solutions.

Orig Pub: Sb. tr. obshchetskhn. kafedr. Leningr. tekhnol. in-ta kholodil'n. prom-sti, 1956, 12, 109 - 117.

Abstract: The colorimetric analysis of opaque solutions is carried out following the principle of reflection with the application of a corresponding background, into which the solution under study together with the reagent is introduced. Suspension of BaSO<sub>4</sub> or impregnated filter paper are

Card 1/2

ACCURACY OF INFORMATION

U.S. AIR FORCE: Turbine's Protection - 1964

AUTHOR: Sinegrev, I. N., et al.

TITLE: Study of the intake system of the aircraft engine

CITED SOURCE: Tr. Tsentr. n.-i. avtomob. i avtomobilem. iss-tva, vyp. 14, 1964, 25-56

TOPIC TAGS: inlet screen, radial gas turbine, inlet guide vane, turbine engine test 26

TRANSLATION: The line diagram of a device for static studies of gratings for the vanes of radial turbines is given. Guide vane assembly gratings differing in contour shape, thickness of the trailing edge, relative spacing and other characteristics are shown. The geometry of the vane, location of the slot, and the position of the slot relative to the trailing edge are indicated.

Coro 1-2