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Subject	:	USSR/Medicine
Card 1/1	Pu	b. 37 - 19/22
Author		Troitskiy, A. A.
Title		Review on chapters VI and IX of the book <u>Methods of</u> <u>Investigating Industrial Hygiene</u> , ed. by V. K. Navrotskiy
Periodical	:	Gig. 1 san., 8, 58-60, Ag 1955
Abstract	:	A review of the chapters: "Methods of determining the chemical substances in air" by I. B. Kogan, and "Laboratory methods of the diagnosis of occupational poisoning", by K. G. Abramovich. Footnotes.
Institution	1:	Not given
Submitted	:	No date
	S (2)	

NAVKOTSKY, VK. MATROCHIJ, V. K., Prof. Gertain problems of lowering of temporary disability in industrial workers. Gesk. zdravot. 4 no.7:381-384 July 56. 1. Clen koresp. ALV SSSE. (INDUSTRIAL HIGIENS, control of temporary disability in workers (Cz)) Source of temporary disability in workers (Cz)



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NAVROTSKTY, V. E.

"The role of factors of industrial environment in the immunobiological reactivity of the organism."

report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists and Infectionists, 1959.

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"Basic Frinciples and Methods of Hygienic Normalization of Factors of the Environmental Industrial Medium."

report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists and Infectionists, 1959.



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CESSION NR: APLOLO	741	5/0213/64/004/003/0396	6/04:07
THOR: Navrotskiy,	V. V.	TSR	
TLE: Interaction o lantic	of oceanic currents and	atmospheric processes in the north	ern
URCE: Okeanologiya	, v. 4, no. 3, 1964, 3	96-407	
PIC TAGS: ocean, a	tmosphere, temperature	gradient, pressure gradient	
tream and the Labrac ater at the ocean su n developing atmospi onsiders some theory 1953, Fisika morya, radient. He derive	dor and North Atlantic urface (horisontal temp heric processes above t stical relations, begin Isd. AN SSSR, N), rela s the equation	strate from available data on the currents that temperature contrast perature gradient) are important fa the North Atlantic. As a prelimina- uning with the equation of V. V. Sh ating pressure gradient to temperat	ctors ry, he uleykin
, dp	$1 - \exp\left(-\frac{g_{1}}{RT_{m}}\right) \int \frac{r_{1}}{T_{0}^{4}} dT_{0}$	$+\rho_{o}R\left[1-\frac{dH}{RT_{m}}-\exp\left(-\frac{dH}{RT_{m}}\right)\right]dT_{m}$	
here g is accelerat: he gas constant, Po 1/3	ion of gravity, if the i the absolute pressure	neight of the investigated air layer at the surface, T_0 the absolute	ifj R
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ACCESSION NR: APLOL0741

temperature at the surface, T_m the average temperature of the air layer at the height H. For small distances, when changes in average temperature may be neglected, the relationship reduces to

grad $p = -\left[1 - \exp\left(-\frac{eH}{RT_m}\right)\right] \frac{\rho_0 T_m}{T_0^4} \operatorname{grad} T_0$

The approach is approximate, but it may be seen that, in general, the dependence of the pressure gradient at sea level on the amount of heat coming from the underlying surface is due chiefly to the temperature gradient on that underlying surface, the height of the air layer (H), and the change in average temperature of this layer. The relation of surface temperature gradient to atmospheric circulation is almost linear. This means that vortical and divergent phenomena may be neglected in the vicinity of the marine currents indicated. Changes in average temperature of the air layer may also be neglected, and the basic consideration becomes that of the horizontal temperature gradient at the ocean surface. The average temperature of an air layer does not change appreciably when air masses pass over any particular area. Averaging occurs as several different masses of air pass over, the effects of the masses on surface temperature more or less mutually cancelling each other. It may be stated, therefore, that the effect of changes in absolute temperature at the surface reduces to some small constant value. The effect is smaller the larger the change along the horisontal. The author has found good agreement between tempera-2/3 Card '

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ACCESSION NR: AP4040741 ture anomalies in the water and anomalies of circulation. This signifies a constant relationship over long periods of time. Orig. art. has: 6 figures and 9 formulas. ASSOCIATION: Kaliningradskoye otdeleniye Institute okeanologii AN SSSR (Kaliningrad Department of the Institute of Oceanography, AN SSSR) SUBHITTED: 29Junó3 SUB CODE: ES NO REF SOV: 002 OTHER: 005			<u> </u>		Ē
ture anomalies in the water and anomalies of circulation. This signifies a constant relationship over long periods of time. Orig. art. has: 6 figures and 9 formulas. ASSOCIATION: Kaliningradskoye otdeleniye Institute okeanologii AN SSSR (Kaliningrad Department of the Institute of Oceanography, AN SSSR) SUBHITTED: 29Jun63 HD AFF SOM: 002 OTHER: 005					
ture anomalies in the water and anomalies of circulation. This signifies a constant relationship over long periods of time. Orig. art. has: 6 figures and 9 formulas. ASSOCIATION: Kaliningradskoye otdeleniye Institute okeanologii AN SSSR (Kaliningrad Department of the Institute of Oceanography, AN SSSR) SUBHITTED: 29Jun63 ENCL: 00 OTHER: 005		Matanggan sa sa kasara Bras	and the second		
ture anomalies in the water and anomalies of circulation. This signifies a constant relationship over long periods of time. Orig. art. has: 6 figures and 9 formulas. ASSOCIATION: Kaliningradskoye otdeleniye Institute okeanologii AN SSSR (Kaliningrad Department of the Institute of Oceanography, AN SSSR) SUBHITTED: 29Junó3 ENCL: 00		anna an an an an an ann an an an an an a	من م	na an a	
ture anomalies in the water and anomalies of circulation. This signifies a constant relationship over long periods of time. Orig. art. has: 6 figures and 9 formulas. ASSOCIATION: Kaliningradskoye otdeleniye Institute okeanologii AN SSSR (Kaliningrad Department of the Institute of Oceanography, AN SSSR) SUBHITTED: 29Junój Department OT HER: 005	3/2			· · · · · · · · · · · · · · · · · · ·	and a state
THER: 005			d enomalies of circulation.	This signifies a cons 6 former and 9 formul	stant Las.
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"APPROVED FOR RELEASE: Monday, July 31, 2000 CIA-RDP86-00513R001136220 NAVROTSKIY, Z. POLAND/Cultivated Plants- Method of Experimentation M-3 Abs Jour : Ref Zhur - Biol., No 1, 1958, No 4161 Author : Z. Navrobskiy : Not Given Inst Title : Statistical Methods in Plant Selection Orig Pub : Ryul. Inst. hodowli i aklimat. orslin. 1956, No 11, 22-51. Abstract : No abstract : 1/1 Card i A140



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磁調調

SOV/115-59-3-10/29 28(5) Chadayev, A.F., and Navskiy Ye.V. AUTHOR : A Device for Adjusting Large Micrometers (Prisposob-TITLE: leniye dlya dovodki bol'shikh mikrometrov) Izmeritel'naya tekhnika, 1959, Nr 3, p 16 (USSR) PERIODICAL: The author developed a device, shown by figure 1, ABSTRACT: for adjusting (lapping) the measuring surfaces of micrometers having a measuring range of more than 100 mm. This device is used at the Gor'kiy avtozavod (Gor'kiy Automobile Plant). A cast iron lap is used having a hardness of 90-120 H_B with the follow-ing chemical composition: 4% carbon, 2.8% silicon, 0.7% manganese, 0.12% phosphorus, 0.2% chrome and not more than 0.016% sulfur. The structure of the lap must be graphitic, medium or fine-laminar; the metallic basis must have ferrite structure, perlite inclusions must not exceed 25%. For preliminary Card 1/2

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A Device for Adjusting Large Micrometers SOV/115-59-3-10/29
lapping, paste GOI 30-40 microns is used. ?or
finishing paste GOI 7-10 microns and for final
lapping paste GOI 3-4 microns are used. There is
l diagram.
Card 2/2



1214年後期時期後期時期時期時間 s/137/62/000/006/060/163 A052/A101 Navtanovich, M. L., Chernyak, A. S. AUTHORS : Liquid extraction of metals by means of acid alkyl phosphate TITLE: PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 6, 1962, 19, abstract 60148 ("Sb. nauchn. tr. Irkutskiy n.-i. in-t redk. met", no. 9, 1961, 140 - 151) A report on some results of the studies carried out on the extrac-TEXT: tion of rare elements by means of acid alkylphosphates as well as of the studies on the chemical nature of extraction and on investigating cheap and effective extractors. There are 13 references. **G.** Svodtseva [Abstracter's note: Complete translation] Card 1/1

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uninerana antica la presenta la presenta da la presenta de la compositiva de la compositiva de la compositiva d s/137/62/000/008/001/065 A006/A101 Chernyak, A. S., Navtanovich, M. L. AUTHORS: The part of organic reagents in hydrometallurgy TITLE: Referativnyy zhurnal, Metallurgiya, no. 8, 1962, 12, abstract 3A62 PFRIODICAL: ("Nauchn. tr. Irkutskiy n.-1. in-t redk. met.", 1961, no. 10, 316 - 342) Basic methods of using organic reagents in hydrometallurgy are TEXT: analyzed. Organic reagents can be employed as solvents for extracting metals from solid products (lixiviation) and from aqueous solutions (liquid extraction); the latter process is used more frequently. The following extracting agents are used: hydrocarbons and chlorine derivatives, oxygen-containing organic solvents which do not contain saltforming groups, plain esters, alcohols, complex carbonic acid esters, phosphorus- and nitrogen-containing extracting agents. Individual examples are quoted of separating-out metals by lixiviation and extraction, and the basic difficulties of the process are mentioned. The other field of employing organic reagents is the precipitation process. The advantages of organic preci-Card 1/2

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The part of organic reagents in hydrometallurgy

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pitating agents are given, individual examples are quoted of using same; the possibility is indicated of using organic reagents as precipitating agents. The next field of using organic reagents are ion-exchange processes used for extracting metals from solutions with poor metal content, for refining valuable metal solutions from impurities and for the selective separation of valuable metals. Advantages and individual examples are mentioned of using ion-exchange processes. Organic reagents are employed as reducing agents to transfer the metal extracted into lower valences, and as coagulating agents. In the latter case organic poly-electrolytes are used. Other fields of using organic reagents are also mentioned; such as bacterial processes for performing oxidizing-reducing reactions with the aid of bacteria, electrolytic processes, in studying the chemism of hydrometallurgical processes. There are 106 references.

L. Povedskaya

[Abstracter's note: Complete translation]

Card 2/2

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"APPROVED FOR RELEASE: Monday, July 31, 2000 CIA-RDP86-00513R001136220

3/080/61/034/004/010/012 A057/A129

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AUTHORS: Chernyak, A. S., Navtanovich, M. L.

TITLE: Extraction of metals by alkyl phosphoric acids synthesized from industrial alcohol mixtures

FERIODICAL: Zhurnal prikladnov khimii, v. 34, no. 4, 1961, 916 - 919

TEXT: An economical method for the manufacture of alkyl phosphate extractants by direct synthesis from industrial mixtures of alcohols and hydrocarbons obtained in hydrogenation of oxidized paraffins over a sinc-chromium catalyst (V. V. Veselov et al., Ref. 3: Novosti neftyanoy tekhniki (News of petroleum technology), Neftepererabotks, 1, 1960) is described. Technological investigations demonstrated that the alkyl phosphoric acids obtained from the alcohol mixtures have the same extractability as alkyl phosphoric acids synthesized from single alighatic alcohols. Thus the sumbersome and expensive separation of alcohols from hydrocarbons was avoided and a selective extractant for rare metals was obtained. The initial mixture for the synthesis of alkyl phosphates contains usually 50 - 60 % alcohols, 85 % of which are iso-alcohols. The main part are C₅ - C₂₂

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Extraction of metals by

alcohols, i.e., $12 \leq C_5 - C_9$, $47 \leq C_{10} - C_{15}$ and $41 \leq C_{16} - C_{22}$ alcohols. The synthesis was carried out using a molar ratio of alcohol to phosphoric anhydride of 2 : 1, i.e., in condition favorable for the formation of dialkylpyrophosphates according to prior investigation of the present authors (Ref. 4: ZhFKh, 33, 85, 1960). The obtained extractant contains usually 40 - 50 % alkyl phosphoric acids. some hydrocarbons with small amounts of fatty acids, ethers, esters, oxy acids, and carbonyl compounds. Differently from single dialkylpyrophosphates the extractant obtained from the mixture of industrial alcohols maintains the extractability for several weeks. It was not determined which of the compounds present in the extractant causes this stabilization of extractability, but the solution of this question could be of interest for the use of correspondent admixtures to the single alkylpyrophosphates. Laboratory tests on the extractability of the obtained extractant were carried out with sulfuric, hydrochloric, nitric, phosphoric and oxalic acid solutions containing ions of alkali and alkali earth metals, Al, Fe (III and II), So, Y, lanthanides, Ti, Hf, Zr, Sn, Nb, W and others. It was observed that the extractant has an extraction selectivity for multi-valent metals (3 - 6 valent). Extraction is possible from concentrated, as well as from weakly acidic, almost neutral, mineral acid solutions. The extraction Card 2/6

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Extraction of metals by

is effected by the ratio of volumes of the solution and extractant. Thus inorease in the ratio helps to avoid emulsifying, and the present experiments were carried out with ratios of solution: extractant = 5 : 1 and 10 : 1. It was observed that the use of diluted solutions (in kerosene) of the extractant effects decrease in expense of alkylphosphates almost not decreasing the extraction of metals. The most convenient concentration is 5 - 10 % alkyl phosphoric acids in the solution of the extractant. The extraction depends considerably on the concentration of the metal in the solution, i.e., the higher the concentration the better is extraction (Table 1). Extractability of alkyl phosphoric acids obtained from the total mixture of industrial alcohols and from single fractions is compared in Figure 2. It can be seen that an improvement can be effected by separating single fractions from the initial mixture. In Table 2 properties of the obtained extractant with those obtained from single alcohols were compared. There are 2 figures, 2 tables and 4 Soviet references.

SUBMITTED: June 13, 1960.

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CCESSION NR: AP5005567 \$/0080/65/033/002/0345/0348	
UTHOR: Navtanovich, M. L.; Chernyak, A. S.; Sutyrin, Yu. Ye. 14	
a traction of scandium with alkylphospheric acids	1284 a 11 1 - 27 1 - 27 2 - 27 2 - 27
OURCE: Zhurnal prikladnoy khimii, v. 38, no. 2, 1965, 345-348	
OPIC TACS: scandium, scandium extraction, alkylphosphoric acid, alkyl phosphate, opic TACS: scandium, scandium extraction, alkylphosphoric acid, alkyl phosphate, noncalkyl phosphate, dialkyl phosphate, extraction selectivity, rare metal, rare metal extraction	
ESTRACT: A method for obtaining relatively pure (approx 99%) scandium fluoride ESTRACT: A method for obtaining relatively pure (approx 99%) scandium fluoride or scandium buide from ore or slag leaching solutions by extraction with mono- or fialkyI phosphates is described. After the precipitation of scandium oxalate, moth fialkyI phosphates is described. After the precipitation of scandium oxalate, moth fialkyI phosphates is described. After the precipitation of scandium oxalate, moth fialkyI phosphates is described. After the precipitation of scandium oxalate, moth fialkyI phosphates is described. Scandium in solution, can also be treated in the same fiquors, which contain some scandium. Scandium content in the raw materials used in	et
Hilly, phosphates an some scandium in solution, can also be recard an used in Hignory, which contain some scandium. Scandium content in the raw materials used in way for recovery of all scandium. Scandium content in the raw materials used in the study, i. e., residues after the decomposition of wolframite concentrates or the study, i. e., residues after the decomposition of wolframite concentrates or tin melting slags, ranged from 0.05 to 0.5%; other metals, which occur together tin melting slags, ranged from 0.05 to 0.5%; other metals, which occur together with scandium, were present in comparable quantities. The extracting agent was with scandium, were present in comparable quantities. The extracting agent was either a 0.85 m solution of n-octyl phosphate or EIR-2, which is a mixture of alky phosphates prepared from commercial mixtures of alcohols. After extraction the	/1
way for recovery of all scandiduct the decomposition of wolframite concentrates of the study, i. e., residues after the decomposition of wolframite concentrates of tin melting slegs, ranged from 0.05 to 0.5%; other metals, which occur together with scandium, were present in comparable quantities. The extracting agent was with scandium, were present in comparable quantities. The extracting agent was either a 0.85 m solution of n-octyl phosphate or EIR-2, which is a mixture of alky phosphates prepared from commercial mixtures of alcohols. After extraction the	/1
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CGESSION NR: AP5005567 reganic phase was washed with dilute HCl or H ₂ SO ₄ to remove the major part of the ther metals. The reextraction of scandium was effected by using a calculated mount of concentrated hydrofluoric acid; scandium fluoride was precipitated in mount of concentrated hydrofluoric acid; scandium fluoride was precipitated in the aqueous phase as a whire sediment; an excess of HF dissolves the precipitate the aqueous phase as a whire sediment; an excess of HF dissolves the precipitate the aqueous phase as a whire sediment; an excess of HF dissolves the precipitate the aqueous phase as a whire sediment; an excess of HF dissolves the precipitate the aqueous phase as a whire sediment; an excess of HF dissolves the precipitate the aqueous phase as a whire sediment; an excess of HF dissolves the precipitate the aqueous phase as a whire sediment; an excess of HF dissolves the precipitate the aqueous phase as a whire sediment; an excess of HF dissolves the precipitate the aqueous phase as a whire sediment; an excess of HF dissolves the precipitate the aqueous phase as a whire sediment; an excess of HF dissolves the precipitate the aqueous phase as a whire sediment; an excess of HF dissolves the precipitate is the sediment fluoride obtained can be either converted to Se2O3 or used as a lioutide by removal of Th(as iodate) and extraction of iron (according to Rote) is lioutide by removal of Th(as iodate) and extractive in the extraction of scandium uggester. Alkyl phosphates have good selectivity in the extraction of scandium us the separation of it from other metals. Orig, art. has: 3 tables and 1 (BN) article (Irkutsk: State Scientific Research Institute of Rare Netals) BUBHITTED: 29Nov62 ENCL: 00 SUB CODE: IC,GC- ATE FRESS: 3189	CCESSION NR: APS005567 rganic phase was washed with dilute HCl or H ₂ SO ₄ to remove the major part of the ther metals. The reextraction of scandium was effected by using a calculated ther metals. The reextraction of scandium vas effected by using a calculated in mount of concentrated hydrofluoric acid; scandium fluoride was precipitated in mount of concentrated by drofluoric acid; scandium fluoride was precipitate he aqueous phase as a white sediment; an excess of HF dissolves the precipitate cF ₃ . The scandium fluoride obtained can be either converted to Sc ₂ O ₃ or used as a cF ₃ . The scandium fluoride obtained can be either converted to Sc ₂ O ₃ or used as a cF ₃ . The scandium fluoride obtained can be either converted to Sc ₂ O ₃ or used as a cF ₃ . The scandium fluoride obtained can be either converted to Sc ₂ O ₃ or used as a cF ₃ . The scandium fluoride obtained can be either converted to Sc ₂ O ₃ or used as a cF ₃ . The scandium fluoride obtained can be either converted to Sc ₂ O ₃ or used as a cF ₃ . The scandium fluoride obtained can be either converted to Sc ₂ O ₃ or used as a cF ₃ . The scandium fluoride obtained can be either converted to Sc ₂ O ₃ or used as a luoride by removal of Th(as iodate) and extraction of iron (according to Rote) is luoride by removal of Th(as iodate) and extraction of iron (according to Rote) is luoride by removal of it from other metals. Orig, art. has: 3 tables and 1 (BN) ormula. SSOCIATION: Irkutskiy gosudarstvennyy nauchro-issledovatel'akiy institut redkikh hetallov (Irkutsk State Scientific Research Institute of Rare Hetals) SUBMITTED: 29Nov62 ENCL: O9 SUB CODE: IC,GC- Here parect, 3189					н н страница н страница страница н страница страница н страница страница н страница страница н страница страница н страни н страни н страница н страни н страни н ст				
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ormula. SSOCIATION: Irkutskiy gosudarstvennyy naucho-isaledovatel'akiy institut redkikh stallov (Irkutsk State Scientific Research Institute of Rare Metals) UBMITTED: 29Nov62 ENCL: 00 SUB CODE: IC,GC- COMPANY 2004 AND PRESS: 3189	ormula. SSOCIATION: Irkutskiy gosudarstvennyy naucho-isaledovatel'akiy institut redkikh stallov (Irkutsk State Scientific Research Institute of Rare Metals) UBMITTED: 29Nov62 ENCL: 00 SUB CODE: IC,GC- COMPANY 2004 AND PRESS: 3189	ommercial p	removal of Th(as	idate) and	extracti	on of iron	(accord	ling to a	candium	
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5.3630	77507 SOV/80-33-1-162-9	
AUTHORS:	Chernyak, A. S., Navtanovich, M. L.	
TITLE:	Concerning the Extraction of Metals With Acid Alkyl- phosphates	
PERIODICAL:	Zhurnal prikladnoy khimii, 1960, Vol 33, Nr 1, pp 85-89 (USSR)	
ABSTRACT:	This is a study of the composition of acid alkylphos- phates used in the extraction of metals from aqueous media, and of the chemistry of this process. Acid alkylphos- phates are usually obtained in reaction of alcohols with P_2O_5 ; the reaction yields various phosphoric acid esters, depending on the ratio of the reagents and the conditions	
Card 1/4	of the reaction:	

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Concerning the Extraction of Metals With Acid Alkylphosphates

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 $2ROH + P_2O_5 \rightarrow R_2H_2P_2O_7$

 $2ROH + P_2O_5 + H_2O \rightarrow 2RH_2PO_4$

 $3ROH + P_2O_5 \rightarrow RH_2PO_4 + R_2HPO_4$

 $6ROH + P_2O_5 \rightarrow 2R_3PO_4 + 3H_2O_5$

N-butyl and isomyl alcohols were used in the study. The acid and neutral esters obtained were extracted with a fourfold excess of water and then with 5% sodium carbonate solution in amount equal to that of the organic solution. The initial organic solution, the aqueous extract, and the organic solution after both extractions were titrated with NaOH. Phosphorus was determined quantitatively by oxidation with surfurie and nitric acid mixture and using the usual molybdate method. It was established that the reaction of

Card 2/4

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Concerning the Extraction of Metals With Acid Alkylphosphates

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alcohols with P_2O_5 gave no neutral esters but only acid esters in the form of a mixture of mono- and diesters. The yield of monoesters increased, and that of diesters decreased with the increase of the molar ratio of alcohol to anhydride (from 2 to 6). The molar ratio 2:1 gave predominantly diesters (67.7 to 90.5%); chiefly, dialkylpyrophosphates. The metal extraction capacity of the alkylphosphates was investigated on solutions with various cations (Fe³⁺, TiIV, ZnIV, Cb') and anions (Cl⁻, NO₃, SO₄²⁻, PO₄³⁻), and the content of extracted cations and anions in the alkylphosphates was determined by quantitative analysis and with the help of radioactive isotopes. Apparatus B-2 and end-window counter MST-17 were used in the study. In the case of Fe₂(SO₄)₃ solution, alkyl phosphate was taken in 1:5 volumetric ratio and Fe³⁺ extracted in practically identical amounts (about 52%) from acid as well as from nearly neutral

Card 3/4

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Concerning the Extraction of Metals With Acid Alkylphosphates

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solutions. The degree of extraction of ${\rm SO_h}^{2-}$ was

considerably higher from acid than from neutral solutions. Most of the sulfate ion, however, was eliminated on washing with water, whereas the iron cation remained insoluble. Accordingly, the re-extraction from the organic phase gave 5 to 13 times more iron than sulfate ions. These and other experimental data indicate that the extraction of metals with acid alkylphosphates has an ionic character. It can also be assumed that acid alkylphosphates can be used for metal extraction from strongly acid as well as from weakly acid solutions. There are 3 tables; and 8 references, 1 U.S., 1 U.K., 1 German, 5 Soviet. The U.S. and U.K. references are: R. E. Treybal, Ind. Eng. Chem. 49, 514 (1957); D. F. Peppard, et al., J. Inorg. a. Nucl. Chem., 4, 334 (1957).

ASSOCIATION: Irkutsk State Scientific Research Institute for Rare Metals (Irkutskiy gosudarstvenny nauchno-issledovatel'skiy institut redkikh metallov) SUBMITTED: May 20, 1959 Card 4/4

CIA-RDP86-00513R001136220

S/080/62/035/004/003/022 D204/D301 Navtanovich, M. L. and Chernyak, A. S. AUTHORS: Characteristics of iodate precipitation of Th and see-TITLE: ments of the Ti subgroup from solutions containing scandium Zhurnal prikladnoy khimii, v. 35, no. 4, 1962, 730-735 PERIODICAL: TEXT: The authors studied the separation of Th, Zr, Ti and Hf drom Sc by selective precipitation of the impurities as iodates, as the process has not as yet been studied in detail. The starting miterial consisted of Sc oxide to which various amounts of the other metals were added. Th, Zr, Ti and Hf were precipitated with 15% KIO3 in HNO3 from acid nitrate solutions. The precipitates were then washed with 1% KIO3 while Sc was precipitated from the filtrate with NH40H, dissolved in HCl, reprecipitated with oxalic and and ignited to the oxide. HIO3 and NH4 IO3 could be used in place of Card 1/ 3

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9825-66 F#T(m)/E#P(t)/ET C NR: AR6009953 JTHOR: Navtanovich, M. L.; C	SOURCE CODE: UR/0137/0	23
ITLE: Certain problems in <u>s</u>		B
OURCE: Ref. zh. Metallurgiy	$\frac{1}{\nu}$	
EF SOURCE: Nauchn. tr. <u>1rku</u>	tskiy ni. in-t redk. met., vyp.	12, 1965, 307-314
metal extracting	al separation, solvent extraction,	
BSTRACT: Difficult problems aused by the complexity of t hemical properties of Sc an evelop effective methods for ethod) and from Ca and Mg (b elective method of Sc separa queous solutions of alkyl-ph y these acids sharply increa	in technology of Sc extraction from the original raw material, and by the d impurities. Investigations have esparating Sc from Th, Zr, Hf, and by leaching NH ₄ Cl solution), as we ation from different types of raw m momphorus acids in the Sc-extraction uses the overall separation of Sc. and 99.99% Sc ₂ O ₃ are being confirm as the second seco	he proximity of the made it possible to d Ti (by the iodide ll as to create the materials, (using g acid). Extraction Investigations for
BSTRACT: Difficult problems aused by the complexity of t hemical properties of Sc an evelop effective methods for ethod) and from Ca and Mg (b elective method of Sc separa queous solutions of alkyl-ph y these acids sharply increa eveloping methods for obtain Translation of abstract.]	the original raw material and by the dimpurities. Investigations have a separating Sc from Th, Zr, Hf, and by leaching NH4Cl solution), as we ation from different types of raw momphorus acids in the Sc-extractinues the overall separation of Sc. Ang 99.99% Sc ₂ O ₃ are being confirm	he proximity of the made it possible to d Ti (by the iodide ll as to create the materials, (using g acid). Extraction Investigations for med. G. Svodtseva.

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14.15301-65 EWT(m)/EWP(b) IJP(c) DS/JD/JG	
ACC NR: AP6002813 SOURCE CODE: UR/0078/66/011/001/0184/0190	•
AUTHORS: Navtanovich, M. L.; Chernysk, A. S.; Shemet, V. V.	
ORGs none	
TITLE: Extraction of metals from aqueous solutions of hydrohalic acids by means of dialkylalkylphosphinates	8
SOURCE: Zhurnal neorganicheskoy khimii, v. 11, no. 1, 1966, 184-190	
TOPIC TAOS: rare earth element, solvent extraction, scandium, iron	
ABSTRACT: Investigation of extracting <u>iron</u> and rare earth metals from HGl and of tantalum and niobium from HF using dialkylalkylphosphinates (DAAFh) are reported, and new data on chemistry of DAAFh extraction of scandium are presented. The latter subject was studied by the authors and reported earlier (Nauchn. tr. Irgiredmeta, 1963, vyp. 11, str. 252). A new concept of the "relative affectiveness of extract- ants" (RE ^G - D ₆₂ /D ₆₁ , where c = ratio of initial concentrations of solvent and metal, D_{62} = distribution coefficient of the investigated solvent, D_{61} = distribution	
coefficient of known solvent) was formulated for evaluating now autoestants	
established that the extracting ability of DAAPh with alkyl radicals from C _{3H7} to C12H25 is directly related to the electron-donating properties of phosphoryl oxygen.	
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	AR6035489	SOURCE CODE: UR/0081/66/000/017/V141/V141
AUTHOR:	Navtanovich, M. L.; Shes	wet, V. V.; Sutyrin, Yu. Ye.; Chernyak, A. S.
TITLE: oxidos	Soarch for new ways of pr	oparing pure scandium, lanthanum and neodymium
SOURCE:	Rof. zh. Knimiya, Part 1	[, Abs. 17V]2
REF SOUL	RCE: Nauchn. tr. Irkutski	y n1. in-t rodk. mot., vyp. 13, 1965, 390-398
ABSTRAC purities tions, s Fe, Ti, bination and extu- lity of tigated, crystall hydroger	I: The following methods sout of solid oxide, prec selective extraction of im Zr and Yo by each of thes n of soveral methods (for raction of Zr with 2.5% Th removing La and Nd oxides Selective precipitation lization of LaCl ₂ .7H ₂ O and a chloride, and selective	anthanum oxide, noodymium compound, method of purifying 99% Se20, were studied: leaching im- cipitation and extraction of Sc from aqueous solu- npurities. The extent of removal of Si, Ca, Mg, Al, se methods was determined. It was found that a com- example, thiosulfate and oxalate pracipitation of Sc P) produces Sc20, of > 99.95% purity. The possibi- s from impurities other than rare earths was inves- to of rare earths in the form of hydroxide and oxalate. NdCl3.6H20 isothermally and during salting out with elution of impurities with oxalic acid with KU-2 he rare earth element was adsorbed were studied. It

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ACC NR. ADGOG7521 (A) SOURCE CODE: UNION AUTHOR: Navumava, S. F.; Slabodchykava, L. K.; Yerafeyev, B. V.	- 24
ORG: None	B
TITLE: Epoxy resin based on polycyclohexadiene-1,3	10-15
SOURCE: AN BSSR. Vestsi. Seryya khimichnykh navuk, no. 2, 1965,	av -/
TOPIC TAGS: epoxide, epoxy resin , hydrogen peroxide, cyclic a olefin ABSTRACT: The authors study epoxidation of polycyclohexadiene	1,3 in a mixture of n of the epoxidizing mperature of epoxi- duces an eposy resin
dation. It is found that epoxidation under mild conditions provide the analysis of the second state of th	ns for using hydrogen ,3 are as follows: peroxide; a hydrogen exadiene-1,3 to be
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SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 005/ OTH REF: 0	

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L 1996-66 ENT(m)/EFF(c)/EFF(n)-2/ENG(m) WH	
ACCESSION NR: AP5014734 UR/0201/65/000/001/0008/0017	2
AUTHORS: Krasin, A. K.; Navumaw, V. A. (Naumov, V. A.); Savushkin, B	
I. A.; Stralkow, R. I.; Yarashevich, A. I.	
TITLE: Physical characteristics of the type IRT-2000 swimming-pool research reactor with loop channels 19.65	
SOURCE: AN BSSR. Izvestiya. Seriya fiziko-tekhr.icheskikh nauk, no. 1, 1965, 8-17	
TOPIC TAGS: nuclear research reactor, nuclear reactor component, nuclear reactor technology	
ABSTRACT: The article describes a modified standard reactor which went into operation at the Institute of Heat and Mass Exchange of the Academy of Sciences of the Belorussian Republic in May 1962. The original design was described by V. V. Goncharov et al. at the second Geneva Conference in 1958 (Trudy II Mezhdunarodnoy konferen-	
Card 1/3	

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READ POLICE POLICE PARTY PART L 1996-66 ACCESSION NR: AP5014734 tsii po mirnomu ispol'zovaniyu atomnoy energise, v. 2, Atomizdat, 1959) and elsewhere. Since the original design made no provision for test loops, the authors describe the changes in the construction of the individual units of the reactor at the location where the 1000 was installed, the differences arising in the physical characteristics, experimental investigations of the physical characteristics, experimental investigations of the physical characteristics of the modified reactor, including the new critical experiments (performed by Yu. G. Nikolayev of the I. V. Kurchatov Institute of Atomic Energy), and the main results. The latter have shown that installation of a loop channel with approximately 3 kg of steel is feasible, and that optimal materials surrounding the loop channel can be chosen so as to make possible either a maximum run or a maximum flux of thermal neutrons. At a power of 2000 kW the attainable neutron flux is 1014 neutron/cm² sec. Orig. art. has: 5 figures and 2 tables. 2/3 Card

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"Erce field operators and the Yang-Feldman formalism." In English. p. 200.

ACTA PHYSICA. (Manyor Tudemany's Akademia). Budarest, Hungary, Vol. (, No. 3, 1959.

Monthly list of East European Accessions (NFAI), LC, Vol. 9, Me. 9, August 1959. Uncla.

"APPROVED FOR RELEASE: Monday, July 31, 2000 CIA-RDP86-00513R001136220 NAVYAZHSKAYA, E. A. and the state of t The determination of free potassium chromate in a cor-resion-inhibiting pigmont. P. M. Begatyrev and B. A. Naryazhisaya. Khim. Prom. 1955, 182-4.—The pigment Maryazhisaya. Khim. Prom. 1955, 182-4.—The pigment onim. KalBa(CrOshi, which is slowly broken down by comm. KalBa(CrOshi, which is slowly broken down by hydrolysis with the formation of free KaCOs and the imad. BaCrO. The formation of the complex was confirmed by r-ray analysis. Fourteen org. solvents, including abs. aics., ketones, ethers, hydrocarbons, chlorinated hydrocarbons, pridine, were tested as possible solvents for the LaCrO, extin, but only anhyd. ethylene slycol was found suitable. at colloidal soln. Is formed necessitating centrifuging for the sepns. of the ext. from the residue. KaCrO, is the ext. can be detd. lodometrically or colorimetrically.

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211 NAVYAZHSKAYA, E.A.; SPORYKHINA, V.S. Determination of hydroquinone in dark-colored polyester acrylates. Lakokras.mat. i ikh prim. no.2:44-45 '60. (MIRA 14:4) (Acrylic acid) (Hydroquinone) CIA-RDP86-00513R001136220(APPROVED FOR RELEASE: Monday, July 31, 2000

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Determination of cobalt and iron in cobalt naphthenate solutions in styrene and polyester lacquers. Lakokras.mat. i ikh.prim. no.2:48-49 '60. (MIRA 14:4) (Cobalt-Analysis) (Iron-Analysis) (Paint materials)

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Polarographic Method of Determining Maleic, Fumaric, and Phthalic Acid in Polyester Resins

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of maleic acid "suppresses" that of fumaric acid. With the use of an ammonia - ammonium-chloride solution as a buffer and auxiliary electrolyte, the effect of the maleic-acid wave on the fumaric-acid wave was eliminated With the use of an auxiliary electrolyte with pH = 0.2, fumaric acid did not influence the maleic-acid wave. Table 2 shows the results of the polarographic determination of maleic and fumaric acid (with reference to the anhydride) in polyester resins by the author's method. The results show that the maleic anhydride used for synthesizing the polyester resins was almost quantitatively isomerized to fumaric acid. For control, the author determined the sum of the two acids volumetrically with permanganate, and back titration of the unused permanganate iodometrically. The results obtained are also given in Table 2, the difference between the results of the two methods averaging $\pm 1.9\%$. The author determined phthalic acid polarographically with the auxiliary electrolyte 0.2 M tetramethyl ammonium iodide acidified with sulfuric acid, Congo red being used as indicator, and obtained good results. She describes the method of determining phthalic acid in polyester resins. Deviation averaged 12.3% It is of some interest that phthalic acid can be determined without previous isolation. There are 3 figures, 3 tables, and 6 references:

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"APPROVED FOR RELEASE: Monday, July 31, 2000 CIA-RDP86-00513R001136220 BOGATTERV, P.M.; MATIAZHSTATA, B.A.; FORTHINA, V.S. Photocolorimetric method for determining free dipherglpropase is exposide resine. Lakokras. mt. 1 1hh prim. no. 6153-55 '60. (HIRA 13:12) (Topaxy resine) (Propane)

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L 12348-63 EWP(j)/EWT(m)/BDS RM AFFTC/ASD Po-L \$/081/63/000/005/026/075 AUTHOR: Navyazhskaya, E. A. TITLE: Polarography in analysis of polyester resins PERIODICAL Referativnyy zhurnal, Khimiya, no. 5, 1963, 137, abstract 56198 (Teoriya i praktika polograficheskogo analiza, Kishinev, "Shtiintsa", 1962, 409-414) TEXT: A simple and rapid polarographic method was developed for determination of maleic (I) fumaric (II) and pthalic (III) acids in polyester resins when present together without preliminary separation. For determination of (I) 0.2 - 0.4 g of the resin are saponified with 30 ml of 0.5 N solution of NaCH by heating in a flask with an air-cooled condenser over a period of 1-1.5 hours (to resins which are difficult to saponify 5 ml of (CH3)2CO) are added). Solution is then neutralized with 0.5 N HCl to phenolphthalein end-point and trans-3 fered into a 100 ml flask. (solution A). Ten ml of solution A are transferred into a 25 ml flask, diluted with 0.9 N of ammonia solution (pH 8.2), transferred to an electrolysis cell, 3 drops of gelatin are added, oxygen is removed and polaregraphs are taken from -1.0 v (E_1 -1.38 v). The determination of II is Card 1/2

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L 12348-63 Polarography in analysis of $S/081/63/000/005/026/075$ conducted in the same manner, except on the background of a buffer solution (pH 9.7), without addition of gelatin, and polarographs are taken from -1.2 v							
(ph 9.7), without add ($E_1 = 1.65$ v). The co For determination of acidified with $1 = 2$ freshly prepared 0.2 using congo paper) is solution is tranferre	ntent of I and III, 2.5 - 5 m drops of cond N solution of	i II is dete ml of soluti entrated H ₂ S (CH ₃) ₄ NI, (ater is adde	rmined by on A are p Ouusing co previously d up to t	a callbrate placed in a ongo paper, y acidified he mark. Te	od graph. 25 ml flask, 15 ml of with H ₂ SO ₄ on ml of this		
$(E_1 - 1.25 v)$. G. Pro [Abstractor's note:	okhorov.						
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MAVYAZISIAYA, E.A.; SFORYKHINA, V.S. frilonometric method for determining aluminum oxide in titanium dioxide, Lakokras.mat. 1 ikh prim. no.4452-54 (62. (MIRA 1611)

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MAVYAZHSKAYA, F.A.; SPORYKHINA, V.S. Improving the rapid method of colorimetric determination of the free maleic anhydride in polyester resins (Mileinek method). Lakokras.mat. : ikh prim. no.2:50-52 '64. (MIRA 17:4)

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"Radio Transmitters," bk., Moscow, 1950.	
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1. Museum of the Earth, Polish Academy of Sciences (Muzeum Ziemi Polskiej Akademii Nauk), Warsaw; 2. Dept. of Petrography of Sedimentary Rocks, Univ. of Warsaw (Zaklad Petrografii Skal Osadowych Uniwersytetu Warszawskiego)

Warsaw, Acta Geologica Polonica, No 4, Oct-Dec 1965, pp 501-525

"Recent transport and sedimentation of sands in the Dunajec River and some of its tributaries."

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