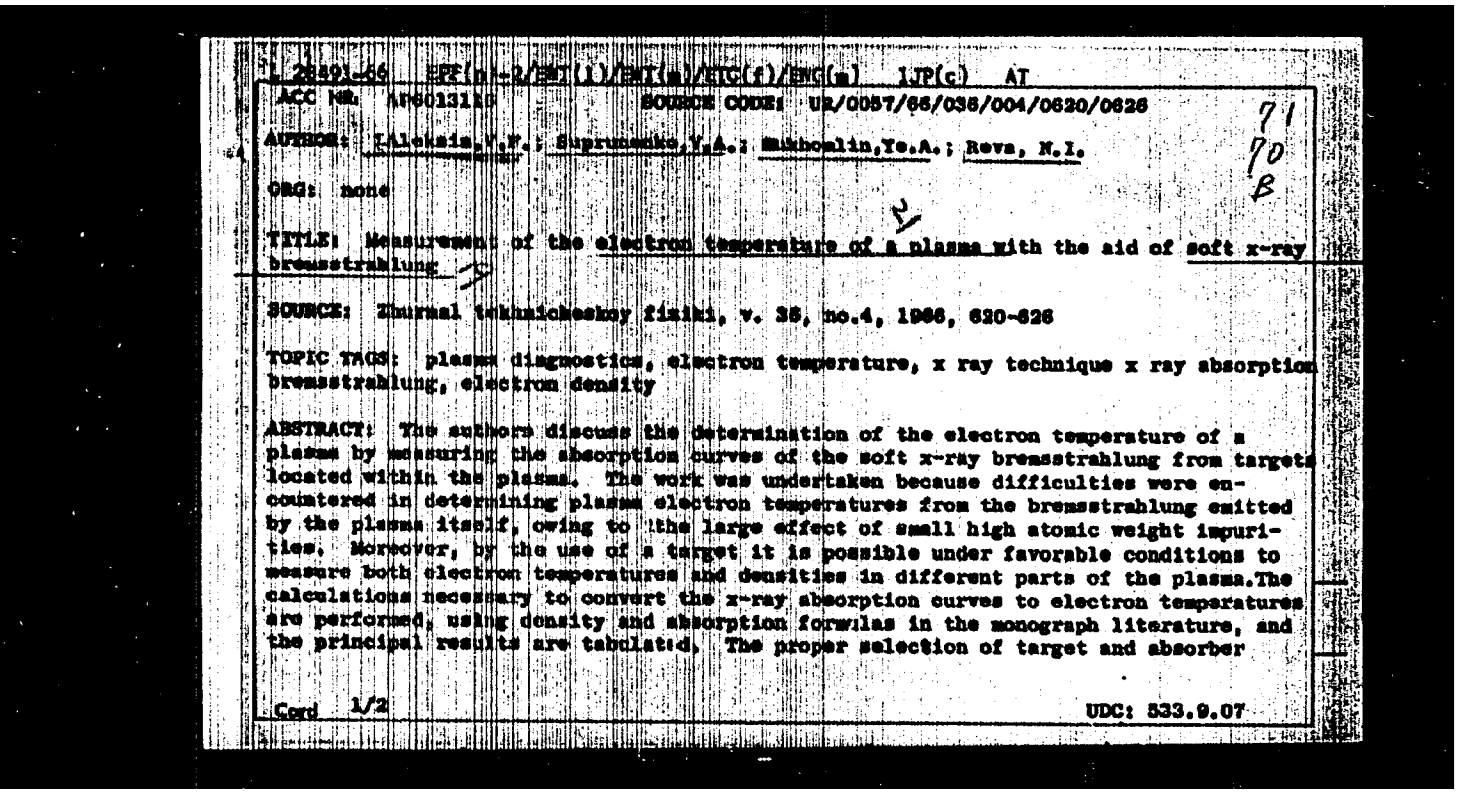


L 28491-66 EPF(n)-2/EWT(l)/EWT(m)/ETC(f)/EWG(m) IJP(c) AT

ACC NR: AT6013110 SOURCE CODE: UR/0057/66/036/004/0620/0626

71
70
B

AUTHOR: Alekseyev, V.F.; Suprunenko, V.A.; Mikhaylin, Ye.A.; Reva, N.I.

ORG: none

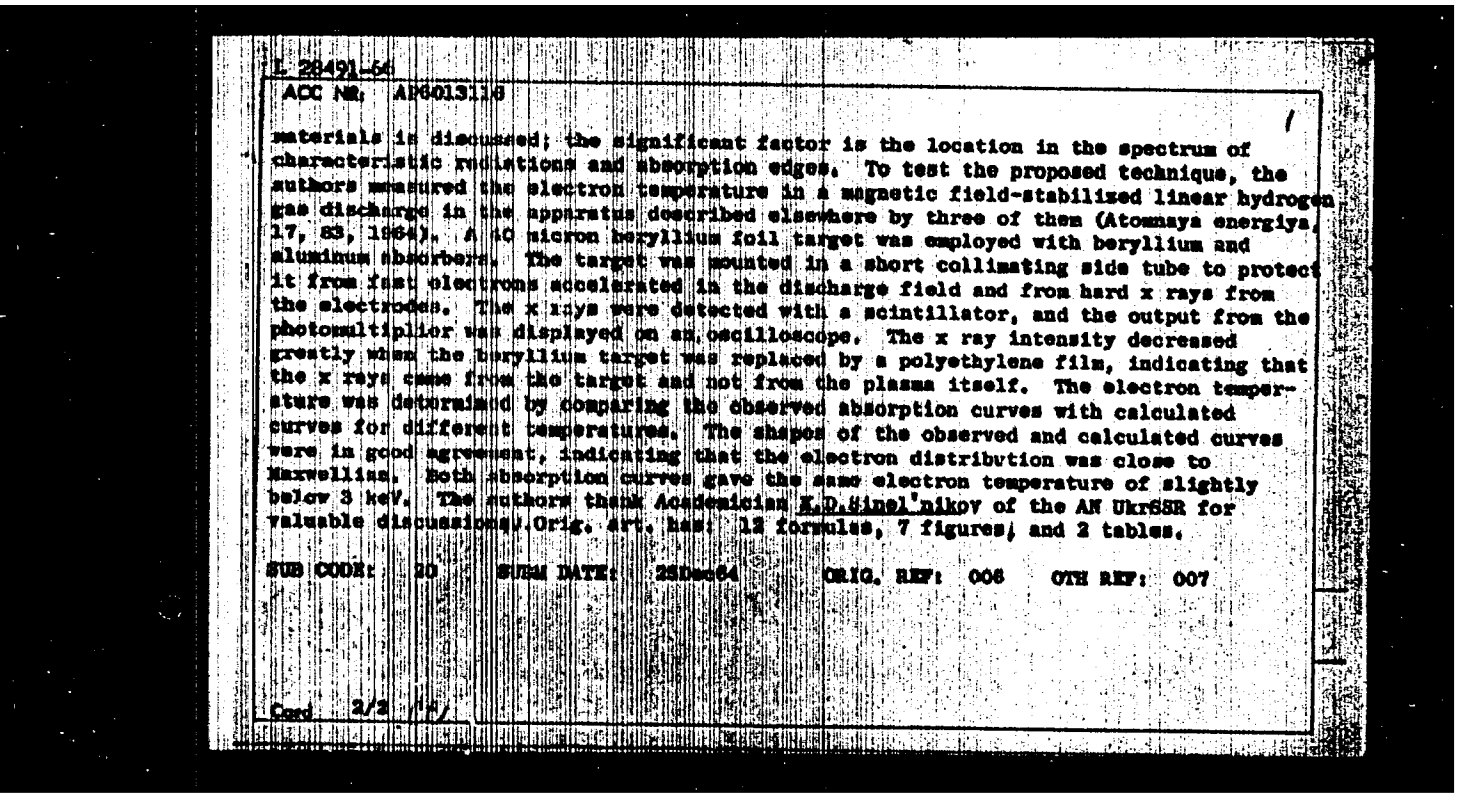
TITLE: Measurement of the electron temperature of a plasma with the aid of soft x-ray bremsstrahlung

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no.4, 1966, 620-626

TOPIC TAGS: plasma diagnostics, electron temperature, x ray technique x ray absorption, bremsstrahlung, electron density

ABSTRACT: The authors discuss the determination of the electron temperature of a plasma by measuring the absorption curves of the soft x-ray bremsstrahlung from targets located within the plasma. The work was undertaken because difficulties were encountered in determining plasma electron temperatures from the bremsstrahlung emitted by the plasma itself, owing to the large effect of small high atomic weight impurities. Moreover, by the use of a target it is possible under favorable conditions to measure both electron temperatures and densities in different parts of the plasma. The calculations necessary to convert the x-ray absorption curves to electron temperatures are performed, using density and absorption formulas in the monograph literature, and the principal results are tabulated. The proper selection of target and absorber

Card 1/2 UDC: 533.9.07



L 28491-64
ACC NR: AP6013116

materials is discussed; the significant factor is the location in the spectrum of characteristic radiations and absorption edges. To test the proposed technique, the authors measured the electron temperature in a magnetic field-stabilized linear hydrogen gas discharge in the apparatus described elsewhere by three of them (Atomnaya energiya, 17, 83, 1964). A 40 micron beryllium foil target was employed with beryllium and aluminum absorbers. The target was mounted in a short collimating side tube to protect it from fast electrons accelerated in the discharge field and from hard x rays from the electrodes. The x rays were detected with a scintillator, and the output from the photomultiplier was displayed on an oscilloscope. The x ray intensity decreased greatly when the beryllium target was replaced by a polyethylene film, indicating that the x rays came from the target and not from the plasma itself. The electron temperature was determined by comparing the observed absorption curves with calculated curves for different temperatures. The shapes of the observed and calculated curves were in good agreement, indicating that the electron distribution was close to Maxwellian. Both absorption curves gave the same electron temperature of slightly below 3 keV. The authors thank Academician K.D.Sinel'nikov of the AN UkrSSR for valuable discussions. Orig. art. has: 12 formulas, 7 figures, and 2 tables.

SUB CODE: 20 SUBM DATE: 25Dec64 ORIG. REF: 006 OTH REF: 007

Card 2/2

L 41112-66 EWT(1) IJP(c) GG/AT/GD

ACC NR: AT6020566 (N) SOURCE CODE: UR/0000/65/000/000/0060/0070

AUTHOR: Aleksin, V. F.; Yashin, V. I.

ORG: none

TITLE: Dielectric permittivity of plasma in a linear corrugated and linear helical magnetic fields

SOURCE: AN UkrSSR. Vysokochastotnyye svoystva plazmy (High frequency properties of plasma). Kiev, Naukova dumka, 1965, 60-70

TOPIC TAGS: dielectric penetrability, helical magnetic field, inhomogeneous plasma, plasma stability

ABSTRACT: [illegible] and electrical conductivity [illegible] of plasmas with helical and [illegible] magnetic fields are investigated [illegible] with the problem of plasma [illegible] inhomogeneous plasma. These [illegible] requires the calculation [illegible] electric fields. The [illegible] fields of cylindrical symmetry [illegible] axial currents. This is [illegible] function [illegible] in equilibrium) and [illegible] Similar computation

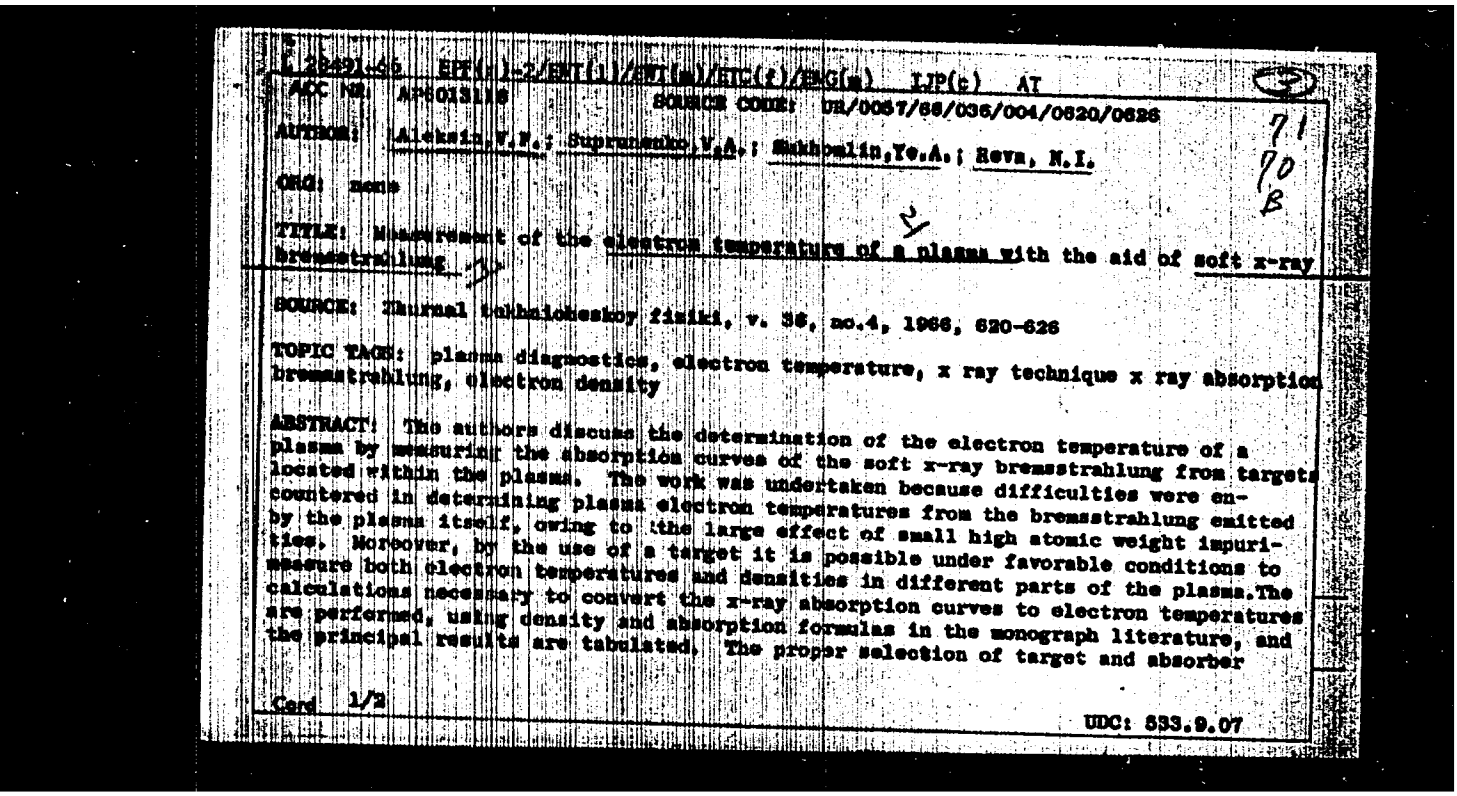
Card 1/2

ACC NR: [illegible]

is [illegible] the helical fields in plasma with [illegible] magnetic fields. An additional polarization tensor for the plasma is also derived. In both cases, the results are considerably simplified if the wavelength of the [illegible] is much greater than the maximum and minimum radii of the magnetic [illegible]. The derived results will be used in the study of plasma stability. Orig. art. has: [illegible] formulas.

SUB CODE: [illegible] SUBM DATE: 19Nov65/ ORIG REF: 006

Card 2/2



L 28491-66 EPF(n)-2/EWT(l)/EWT(m)/ETC(f)/ETC(m) IJP(c) AT

ACC NR: AP6013118 SOURCE CODE: UR/0057/66/036/004/0620/0626

AUTHOR: Aleksin, V.F.; Supranenko, V.A.; Skobelin, Ye.A.; Reva, N.I.

ORG: none

TITLE: Measurement of the electron temperature of a plasma with the aid of soft x-ray bremsstrahlung

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no.4, 1966, 620-626

TOPIC TAGS: plasma diagnostics, electron temperature, x ray technique x ray absorption, bremsstrahlung, electron density

ABSTRACT: The authors discuss the determination of the electron temperature of a plasma by measuring the absorption curves of the soft x-ray bremsstrahlung from targets located within the plasma. The work was undertaken because difficulties were encountered in determining plasma electron temperatures from the bremsstrahlung emitted by the plasma itself, owing to the large effect of small high atomic weight impurities. Moreover, by the use of a target it is possible under favorable conditions to measure both electron temperatures and densities in different parts of the plasma. The calculations necessary to convert the x-ray absorption curves to electron temperatures are performed, using density and absorption formulas in the monograph literature, and the principal results are tabulated. The proper selection of target and absorber

Card 1/2

UDC: 533.9.07

L 28491-66
ACC NR: AP6013116

materials is discussed; the significant factor is the location in the spectrum of characteristic radiations and absorption edges. To test the proposed technique, the authors measured the electron temperature in a magnetic field-stabilized linear hydrogen gas discharge in the apparatus described elsewhere by three of them (Atomnaya energiya, 17, 83, 1964). A 40 micron beryllium foil target was employed with beryllium and aluminum absorbers. The target was mounted in a short collimating side tube to protect it from fast electrons accelerated in the discharge field and from hard x rays from the electrodes. The x rays were detected with a scintillator, and the output from the photomultiplier was displayed on an oscilloscope. The x ray intensity decreased greatly when the beryllium target was replaced by a polyethylene film, indicating that the x rays came from the target and not from the plasma itself. The electron temperature was determined by comparing the observed absorption curves with calculated curves for different temperatures. The shapes of the observed and calculated curves were in good agreement, indicating that the electron distribution was close to Maxwellian. Both absorption curves gave the same electron temperature of slightly below 3 keV. The authors thank Academician K.D.Sinel'nikov of the AN UkrSSR for valuable discussions. Orig. art. has: 12 formulas, 7 figures, and 2 tables.

SUB CODE: 20 SUBM DATE: 28Dec64 ORIG. REF: 006 OTH REF: 007

Card 2/2

L 10271-67 EWT(1) IJP(c)
ACC NR: AP7003085 SOURCE CODE: UR/0057/66/036/009/1594/1600

AUTHOR: Aleksin, V. F., Sobko, V. P. 21

ORG: none

TITLE: Magnetic surfaces of a direct helical magnetic field in the presence of axial current

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 9, 1966, 1594-1600

TOPIC TAGS: helical magnetic field, electron gun, longitudinal magnetic field

ABSTRACT: With the aid of a circular multiple-beam electron gun (500-3000 ev) it is established that the maximum radius of the magnetic surfaces of a stellarator increases and its minimum radius decreases with increase in axial current from 0 to 500 a, in the presence of a longitudinal magnetic field of from 0 to 1.5 10^3 oe. Photographs of magnetic surface cross sections indicate that they are triangle-shaped when the direction of the axial current is opposite to the direction of the longitudinal magnetic field and circle-shaped when both these directions are the same. The deviation of experimental findings from theory is found not to exceed 15%. Orig. art. has: 5 figures, 8 formulas and 1 table. [JPRS: 39,040]

SUB CODE: 20 / SUBM DATE: 04Sep65 / ORIG REF: 006

Card 1/1

AUTHOR: Aleksina, I. A. SOV/20-121-2-17/53

TITLE: On Suspendend Substances in the Waters of the Eastern Part of the Middle Caspian (O vzveshennykh veshchestvakh v vodakh vostochnoy chasti srednego Kaspiya)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 121, Nr 2, pp. 257 - 259 (USSR)

ABSTRACT: In continuation of previous papers (Ivanov, Ref 2, as well as Refs 5,6) information is given here on investigations of water samples from the middle part of the eastern coastal strip of the Caspian Sea. Filters Nr 2 (35 mm diameter, and a pore diameter of 5μ) were used for the filtration of the samples. The suspended matter found in the water was divided into three groups: 1)Mineral carbonaceous suspensions: They occur in the zone of highest suspension concentration in the coastal strip. Mainly pelitic carbonate with small admixtures of lens-shaped and rhombic granules and granules of calcite fragments were found. 2) Carbonaceous mineral suspensions: smallest mica flakes, subrounded granules of quartz and feldspar, single granules of garnet, zircon, mineral ores and disthene; carbonate occurs in the form of pelite, calcite

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On Suspended Substances in the Waters of the Eastern Part of the Middle Caspian SOV/2o-121-2-17/53

fragments and in the form of rhombohedra. Sporadically also fragments of lime algae as well as cells of diatoms (Coscinodiscus) were found. 3) Biogenous-mineral-carbonaceous suspensions: These can mainly be found in areas of submerged slopes and are composed of pelitomorphous carbonate, shell fragments, carbonate granules, traces of mica, quartz, feldspar and other elements. The biogenous component consists of large detrital pieces, fragmental lime algae, plankton remains, spicules, diatoms and single specimens of Coscinodiscus. There are 4 figures and 6 references, which are Soviet.

ASSOCIATION: Institut okeanologii Akademii nauk SSSR (Institute of Oceanography, AS USSR)

PRESENTED: January 3o, 1958, by D.I.Shcherbakov, Member, Academy of Sciences, USSR

Card 2/2

3(5,8)

AUTHOR: Aleksina, I. A. SOV/20-127-2-54/70

TITLE: On the Characteristic of the Eolian Material of the East Coast of the Middle Caspian Sea

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 127, Nr 2, pp 427-430 (USSR)

ABSTRACT: The problem of the influence exercised by the material mentioned in the title on the sediment formation of the Caspian Sea has hitherto not been solved. This material itself is not yet completely investigated (Refs 1,2,4,5 for the north Caspian Sea). The collection of this material was organized on the coast and on the ship in order to investigate it on the east coast. For this purpose two object carriers on which glycerin was spread were fixed at the peak of a wind vane against the wind, then taken away, the surfaces on which glycerin was spread were put together and then examined under the microscope. Table 1 shows the quantitative computation of all particles in 10 fields of vision related to 1 cm^2. Then particles of different size were separated. No rolled particles were found, the "half-rolled" and the organic particles were separately determined. The results show that the air contains much dust even when it is calm. The

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mineral composition of the aleuritic fraction is given separately according to 4 object carriers. This is the result: salt grains 3 - 40.6%, carbonates 31.7 - 58.6%, muscovite mica 16.2 - 54.3%, ore minerals (limonite, magnetite), single grains up to 5.4%, quartz, single grains up to 8.4%, biotite, single grains up to 3.4%, finally single grains of feldspar, staurolite (?), pyrites, ilmenite, gypsum and garnet. Organic remains are represented by threadlike pieces of calcareous algae, diatoms, spores, and by finest microfauna. The author tries to bring these results in connection with the wind conditions existing at the places where the dust was collected. By this method (Table 3) she calculated the annually added quantity of eolian material: 39.5 g/m^2 . Since the collected dust quantity was so small neither a chemical nor a mechanical analysis were possible and the author had to carry out only a spectroscopic - and X-ray geometrical analysis (Fig 2). Besides the already enumerated minerals she mentions the following ones: half-rolled grains of zirconium, epidote, hornblende as well as rutile and describes the individual mica species contained in the dust. It was proved by spectral

On the Characteristic of the Eolian Material of the East Coast of the Middle Caspian Sea SOV/20-127-2-54/70

analysis that carbonates are represented by calcite and dolomite. The added material consists mainly of pelite with an only inconsiderable quantity of fine-aleuritic material, coarse aleurites are only percent fractions. The results agree well with those for Astrakhan' (Ref 2). In the given quantity of added eolian material its role in the recent sediment formation on the submarine slope of the east coast of the central Caspian may be assumed with great certainty. The other coasts of this sea are compared. There are 2 figures, 2 tables, and 5 Soviet references.

ASSOCIATION: Institut okeanologii Akademii nauk SSSR
(Institute of Oceanography of the Academy of Sciences, USSR)

PRESENTED: January 14, 1959, by D. V. Shcherbakov, Academician

SUBMITTED: February 13, 1959

Card 3/3

PETHLIN, V.P.; ALEKSINA, I.A.

Selecting the method for aquatic mechanical analysis of marine bottom sediments. Okeanologiia 1 no.4:717-733 '61. (MIRA 14:11)
(Deep-sea deposits--Analysis)

KLENOVA, Mariya Vasil'yevna; SOLOV'YEV, Vladimir Filippovich; ALEKSINA, Iya Aleksandrovna; VIKHRENKO, Nina Makarovna; KULAKOVA, Lidiya Sergeyevna; MAYEV, Yegor Georgiyevich; RIKHTER, Vladislav Gavrilovich; SKORNYAKOVA, Nadezhda Sergeyevna; ZENKOVICH, V.P., otv. red.; LEONT'YEV, O.K., red. izd-va; LADYCHUK, L.P., red. izd-va; GUS'KOVA, O.M., tekhn. red.

[Geology of the subsurface slope of the Caspian Sea]Geologicheskoe stroenie podvodnogo sklona Kaspiiskogo moria. [By] M.V.Klenova i dr. Moskva, Izd-vo Akad. nauk SSSR, 1962. 636 p. (MIRA 15:9)

(Caspian Sea--Geology)
(Caspian Depression--Geology)

ALEKSINA, I.A.

Mineralogy of coarse silt fractions of bottom sediments of Kremotskiy Gulf and Avacha Bay. Trudy Inst. okean. 61:104-154 '62. (MIRA 16:9)

ALEKSINA, I. A. PETELIN, V. P.

Mineralogical Provinces of the Pacific Ocean

report submitted for the 13th General Assembly, IUGG (Oceanography), Berkelye, California, 19-31 Aug 63

ALEKSINA, I.A.

Characterization of the mineral composition of the coarse silt fraction of bottom sediments of the northwestern Pacific Ocean. Dokl. AN SSSR 149 no.6:1420-1423 Ap '63. (MIRA 16:7)

1. Institut okeanologii AN SSSR. Predstavleno akademikom N.M.Strakhovym.

(Pacific Ocean--Silt--Analysis)

ALEKSINA, L. A.

Aleksina, L. A. "Certain data on the distribution of infectious diseases in foreign countries during the Second World War," (Survey of the literature), Trudy Kirovskogo in-ta epidemiologii i mikrobiologii, Collection 2, 1946, p. 64-70, - Bibliog: 9 items.

SO: U-3736, 21 May 53, (Letopis 'Zhurnal'nykh Statey, No. 17, 1949).

SUTOKOV, V.A.; SAAKOV, B.A.; KOLOTIYENKO, D.I.; ALEKINA, L.G.

Functional characteristics of the course of burn shock in radiation sickness. Eksper. khir. i anest. 8 no.4:10-12 Jl-Ag '63. (MIRA 17:5)

1. Kafedra patofiziologii (zaveduyushchiy-prof. A.N. Gordiyenko), i kafedra rentgenologii i radiologii (zaveduyushchiy-prof. A.I. Dombrovskiy) Rostovskogo meditsinskogo instituta.

CA

ALEKSINA, L.I.

15

The problem of the nature of soil acidity. S. N. Aleshin and L. I. Aleksina. *Pedology* (U.S.S.R.) 1940, 153 ‹4› — Expts. on the influence of anions on soil acidity have shown that with Al the oxalate ion forms from a soln. of $Na_2C_2O_4$ a complex, $[Al(C_2O_4)_3]^{---}$; this eliminates the hydrolytic acidity of Al salts. The result is that whereas a Na_2SO_4 ext. gives 3.76 milliequivs. of acid per 100 g. of soil, the Na oxalate gives an alk. ext. A similar reaction is expected with the acetate ion when R_2O_3 is present to form mixed acetates. Expts. with cations show that for a lateritic red soil (Kaznozem) the acidity of the salt ext. increases in the following order: $K^+ < Ba^{++} > Ca^{++} > Sr^{++} > Na^+$; for a podzolic soil the cations are arranged in the following order: $Ba^{++} > K^+ > Ca^{++} > Sr^{++} > Na^+$. The variability is explained on the basis of the mineral complex. Acidity is the result of the breakdown of the unstable acids of the aluminum silicates when reacted upon by salt solns. J. S. Joffe

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

ALEKSINA, L. I.

ALEKSINA, L. I.: "On the nature of the acidity of the mineral portion of soil". Moscow, 1955. Moscow Order of Lenin Agricultural Academy imeni K. A. Timiryazev. (Dissertation for the Degree of Candidate of AGRICULTURAL Sciences)

SO: Knizhnaya Letopis' No. 51, 10 December 1955

GRIGOR'YEVA, V.N.; SHEVCHENKO, M.G.; SHILLINGER, Yu.I., kand. med. nauk; ALEKSINA, L.I.; LEBEDEV, Yu.D., red.; SHTENBERG, A.I., prof.; BONDAREV, G.I., red.; LYUDKOVSKAYA, N.I., tekhn. red.

[Collection of directives on the control of chemical poisons used in agriculture] Sbornik ofitsial'nykh materialov po kontroliu za iadokhimikatami, primeniaemymi v sel'skom khoziaistve. Moskva, Medgiz, 1961. 439 p. (MIRA 15:4)

1. Gosudarstvennaya sanitarnaya inspektsiya SSSR (for Grigor'yeva, Shevchenko). 2. Institut pitaniya Akademii meditsinskikh nauk SSSR (for Shillinger). 3. Moskovskiy nauchno-issledovatel'skiy institut sanitarii i gigiyeny im. F.F.Erismana (for Aleksina).
(Agricultural chemicals)

ALEKSEYENKAYA, L.A.

Dynamics of the secretory function of the stomach during the reflex and neurochemical phase in peptic ulcers. Sbor. nauch. trud. Ivan. gos. med. inst. no.25:59-63 '62. (MIRA 17:5)

1. Iz kafedry gospital'noy terapii (zav. - prof. Ye.S. Myasoyedov) Ivanovskogo gosudarstvennogo meditsinskogo instituta (rektor - dotsent Ya.M. Romanov).

ALEKSINSKI, Kazimierz, inz.

Application of polyethylene film for tightening antiflood dikes. Gosp. wodna 22 no.10:447 O '62.

1. Hydroprojekt, Oddzial Wloclawek.

ALEKSINSKIY, V.N.

Experiment demostrating the obtaining of sulfuric acid from hydrogen sulfide. Khim. v shkole 18 no.5:53-55 S-O '63. (MIRA 17:1)

1. Pedagogicheskiy institut, Yaroslavl'.

ALEKSIS, O.

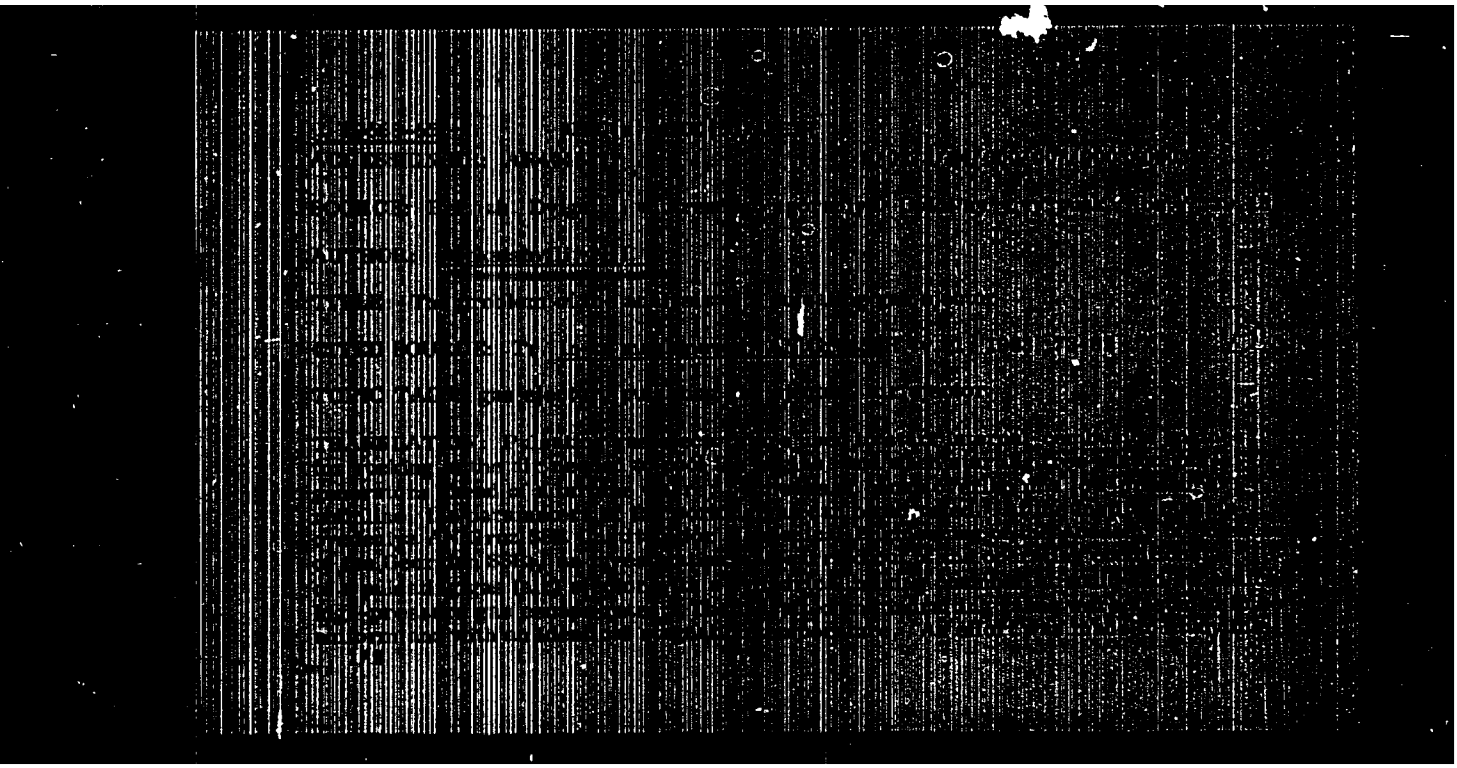
Mediastinomy by the median sternomy approach. Vestis Latv ak no.10: 107-113 '61.

(MEDIASTINUM--SURGERY)

ALEKSISHVILI, N.I.

Using a gas ejector in the cooling system of internal combustion engines. Soob. AN Gruz. SSR 32 no.2:413-420 '63. (MIRA 18:1)

1. Institut mashinovedeniya AN Gruzinskov SSR, Tbilisi. Submitted August 28, 1963.



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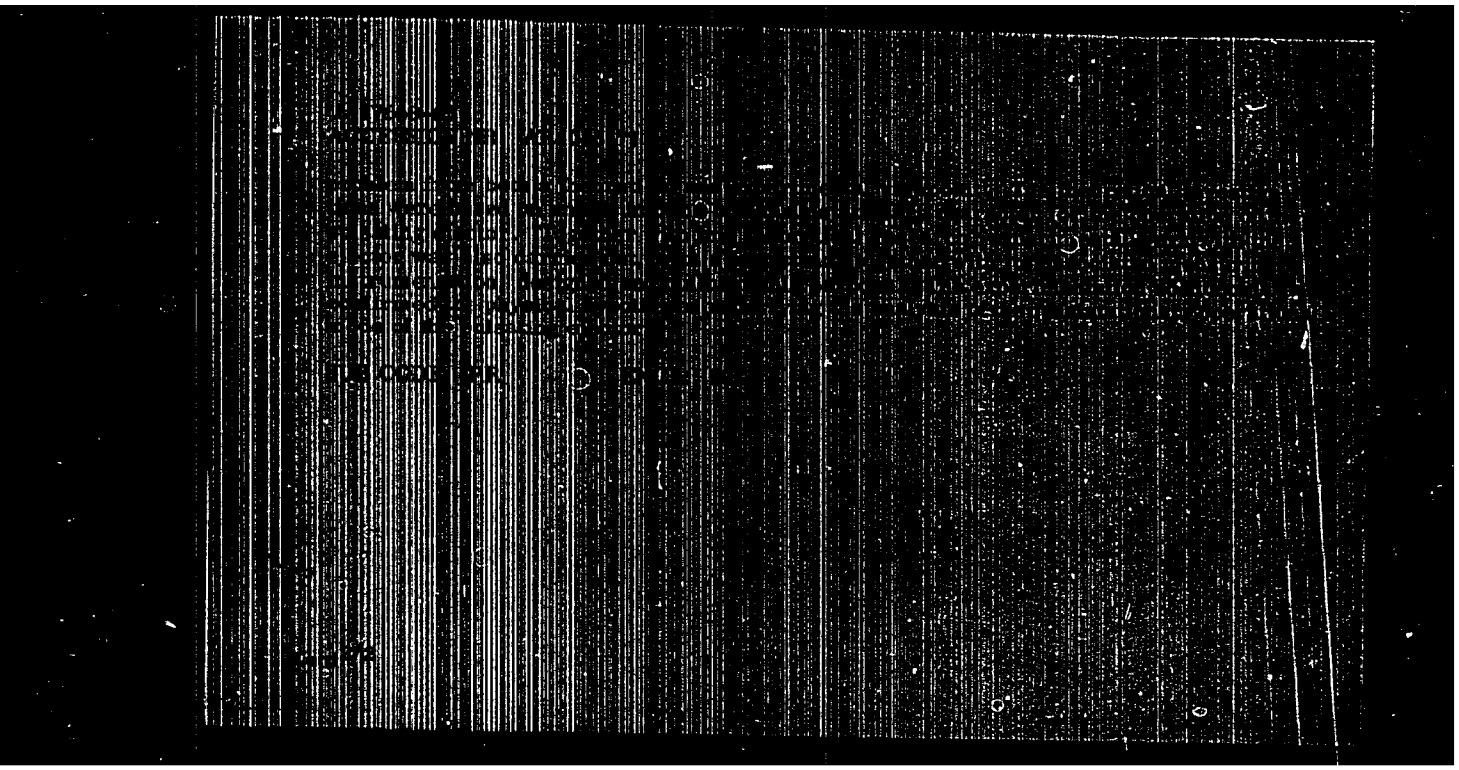


ALEKSISHVILI, T.I.

Automatic system for textile printing by the phototranspositography method. Tekst.prom. no.2:83-84 F '63. (MIRA 16:4)

1. Sotrudnik Gosudarstvennogo komiteta Soveta Ministrov Gruzinskoy SSR po koordinatsii nauchno-issledovatel'skikh rabot.
(Textile printing) (Machinery, Automatic)

DVERNITSKIY, P.M.; SOKOLOV, N.V.; [illegible]; [illegible], N.I.; KOMAROVA, P.I.; NOVICHKOV, I.A.; [illegible]

Strides of the "big" chemistry. Tekst. prom. 24 no.4:1-9 Ap '64. (MIRA 17:6)

1. Predsedatel' Vladimirskogo oblastnogo pravleniya Nauchno-tekhnicheskogo obshchestva legkoy promyshlennosti (for Dvernitskiy). 2. Uchenyy sekretar' Gruzinskogo respublikanskogo pravleniya Nauchno-tekhnicheskogo obshchestva legkoy promyshlennosti (for [illegible]). 3. Predsedatel' Kostromskogo oblastnogo pravleniya Nauchno-tekhnicheskogo obshchestva legkoy promyshlennosti (for Sokolov). 4. Direktor Ivanovskogo sitsenatobumazhnogo kombinata im. Samoylova (for [illegible]). 5. Predsedatel' Kalininskogo oblastnogo komiteta professional'nogo soyuza rabotnikov tekstil'noy i legkoy promyshlennosti (for Komarova). 6. Direktor Korablinskogo kombinata shelkovykh tkaney iz shtapel'nogo volokna (for Novichkov). 7. Direktor Vsesoyuznogo nauchno-issledovatel'skogo instituta torfyanoy promyshlennosti (for Medvedev).

[illegible], Gediminas.; [illegible]NAITE A., red.

[The story of a plant] Gamyklos [illegible]. [illegible], Leidykla "Mintis," 1965. 64 p. [In Lithuanian]
(MIRA [illegible])

IVANOV, Ch.P.; ALEKSIYEV, B.V.

Nitration of 2,3-diaryl- and 2-aryl-3-alkylindones. Dokl.AN SSSR 94 no.1:57-60 Ja '54. (MLRA 7:1)

1. Sofiyskiy khimiko-tekhnologicheskiy i metallurgicheskiy institut. (Indone)

Aleksiyev B. V.

USSR/Chemistry - Dyes

Card 1/1 Pub. 22 - 27/56

Authors : Ivanov, Ch. P., and Aleksiyev, B. V.

Title : Reduction of nitro derivatives of 2,3-diaryl and 2-aryl-3-alkylindones

Periodical : Dok. AN SSSR 106/2, 275-278, Jan 11, 1956

Abstract : The reduction of nitroindones was investigated to determine the possibility of obtaining different types of indone derivatives including azo-dyes. This reduction method was found to be highly effective in spite of the fact that the double bond reactivity of nitroindones, because of their conjugation with the carbonyl group, is much higher than usual. The different nitro-products obtained are described. Four references: 2 USSR and 2 Germ. (1882-1954). Tables.

Institution : The Sofia Chemicotechnological Institute, Sofia, Bulgaria

Presented by: Academician I. N. Nazarov, September 25, 1955

IVANOV, Ch.P.; ALEKSIYEV, B.V.

Diazotization of 2- n -aminoarylindodones; synthesis of azo dyes, containing an indene ring. Dokl. AN SSSR 117 no.2:230-233 N '57.
(MIRA 11:3)

1. Sovivskiy khimiko-tekhnologicheskiy institut Sofiya, Bolgariya. Predstavleno akademikom I.N. Nazarovym.
(Azo dyes) (Indene)

IVANOV, Ch.P.; ALEKSIYEV, B.V.; KRYSTEVA, M.A.; YORDANOV, B.I.

Infrared spectrometric determination of methionine. Izv. AN SSSR. Otd.khim.nauk no.7:1356 Jl '61. (MIRA 14:7)

1. Sofiyskiy khimiko-tekhnologicheskiy institut i Institut organicheskoy khimii Bolgarskoy Akademii nauk.
(Methionine)

ALEXIEV, B. [Aleksiev, B.]; NISANJAN, P. [Nishanian, P.]

On the nitrating of substituted alkylaryl indones. Doklady BAN 15 no.8:845-848 '62.

1. Chemisch-technologisches Institut, Sofia. Vorgelegt von Akademiemitglied D. Ivanoff [Ivanov, D.].

ALEXIEV, B. [Alekxiev, B.]; NISANJAN, P. [Nishanian, P.]

Nitration of certain 2,3-diaryl-substituted indones. Doklady BAN 16 no.2:169-172 '63.

1. Chemisch-technologisches Institut, Sofia. Vorgelegt von Akademiemitglied D. Ivanoff [Ivanov, D.]

ALEKSIYEV, B.V.; IVANOV, Ch.P.; YUKHNOVSKI, Iv.N.

Interaction of 2,3-diaryl- and 2-aryl-3-alkylindones with nitrogen oxides. Dokl. AN SSSR 149 no.6:1315-1318 Ap '63. (MIRA 16:7)

1. Khimiko-tekhnologicheskiy institut, Sofiya, Bolgariya.
(Indone) (Nitrogen oxides)

ALEKSIYEV, B.V.; IVANOV, Ch.P.; YUKHNOVSKI, Iv.N.

Stability and spectroscopic characteristics of the intermediate products formed in the nitration of some 2,3-disubstituted indones. Dokl. AN SSSR 150 no.1:89-92 My '63. (MIRA 16:6)

1. Khimikotekhnologicheskiy institut, Sofiya, Bolgariya. Predstavleno akademikom B.A.Kazanskim.
(Indone) (Nitration) (Spectrum analysis)

BELOV, N.Ya.; ASSONOV, A.D.; CHIZHIK, A.I.; ZAMOTAYEV, S.P.; BUTOMO, D.G.; SERGEYEV, L.N., rukovoditel' issledovatel'skoy gruppy; MASUROVA, A.I.; SHUBIN, G.N.; NOVIK, A.A.; PODSHIVALOV, R.N.; ALEKSO, A.I.; KUZ'MINA, L.I.; KORF, D.M.; KOZACHENKO, N.S.

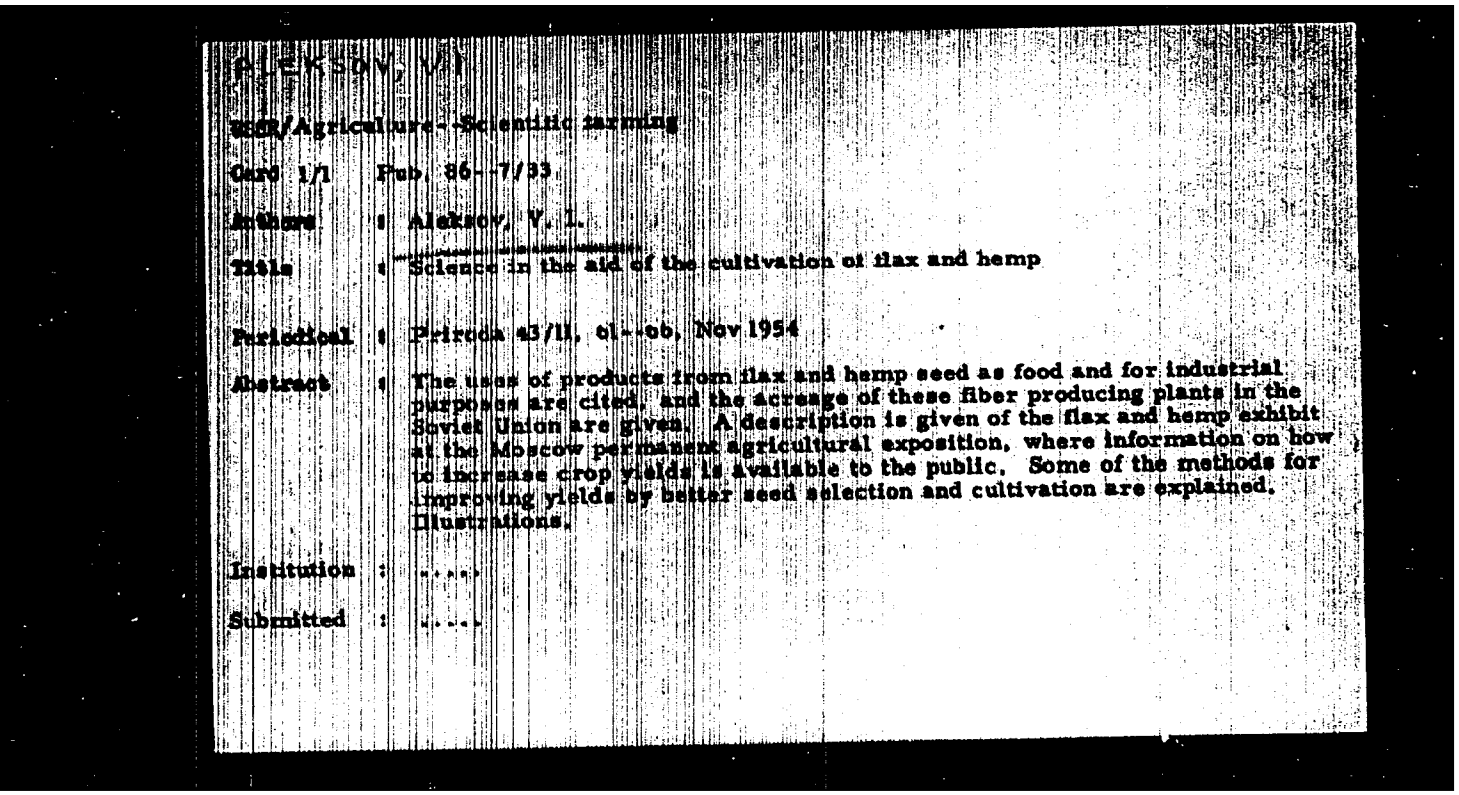
Articles and suggestions of supervisors of central industrial laboratories. Zav. lab. 25 no.1:5-22 '59. (MIRA 12:1)

1.Nachal'nik TSentral'noy zavodskoy labotarorii Kirovskogo mashinostroitel'nogo zavoda (for Belov). 2.Glavnyy metallurg Avtozavoda imeni Likhacheva (for Assonov). 3.Nachal'nik TSentral'noy zavodskoy laboratorii Leningradskogo metallicheskogo zavoda imeni Stalina (for Chizhik). 4.Nachal'nik TSentral'noy zavodskoy laboratorii Uralmashzavoda, g. Sverdlovsk (for Zamotayev). 5.Nachal'nik TSentral'noy laboratorii zavoda "Krasnyy Vyborzhets" (for Butome). 6.Laboratoriya zavoda "Krasnyy Vyborzhets" (for Sergeyev). 7.Nachal'nik khimicheskoy laboratorii metallurgicheskogo zavoda imeni Petrovskogo (for Masurova). 8.Nachal'nik TSentral'noy laboratorii Verkh-Isetskogo metallurgicheskogo zavoda (for Shubin). 9.Zamestitel' nachal'-nika TSentral'noy zavodskoy laboratorii zavoda imeni Malysheva, g. Khar'kov (for Novik). 10.Zamestitel' nachal'nika TSentral'noy zavodskoy laboratorii Sverdlovskogo turbomotornogo zavoda (for Podshivalov). 11.Nachal'nik eksperimental'nogo otdela Spetsial'nogo konstruk-torskogo byuro Sverdlovskogo turbomotornogo zavoda (forAlekso). 12.Nachal'nik TSentral'noy laboratorii Okhtinskogo khimicheskogo kombinata (for Kuz'mina). 13.Nachal'nik TSentral'noy laboratorii zavoda "Krasnyy khimik" (for Korf). 14.Nachal'nik TSentral'noy zavodskoy laboratorii Kiyevskogo mashinostroitel'nogo zavoda "Bol'shevik" (for Kozachenko). (Chemical engineering laboratories)(Testing laboratories)

KOVACHEV, K., kand. na tekhn. nauki; ALEKSOV, A., inzh.

Flotation of partially oxidized copper ore with high content of clay and tails. Min delo 18 no.10:20-22 O'63.

1. Minno-gelozhki institut (for Kovachev), 2. DMP "Bugnski medni mini".



ALEKSOV, V.I.

USSR/Agriculture--Scientific farming

Card 1/1 Pub. 86--7/33

Author : Alekseev, V. I.

Title : Science in the aid of the cultivation of flax and hemp

Periodical : Priroda 43/11, 61--66, Nov 1954

Abstract : The uses of products from flax and hemp seed as food and for industrial purposes are cited, and the acreage of these fiber producing plants in the Soviet Union are given. A description is given of the flax and hemp exhibit at the Moscow permanent agricultural exposition, where information on how to increase crop yields is available to the public. Some of the methods for improving yields by better seed selection and cultivation are explained. Illustrations.

Institution : .....

Submitted : .....

STANKOVSKI, [illegible]; SUKAROV, Ljubomir; ALEKSOVSKI, Dimitar

Surgical correction of cervix insufficiency during pregnancy in habitual abortion. God. zborn. med. fak. Skopje 11:67-73 '64.

1. Akusersko-ginekoloska klinika pri medicinskiot fakultet, Skopje (upravnik: prof. d-r Anton Cakmakov).

STANKOVSKI, Metodije, doc., dr.; ALEKSOVSKI, Dimitar, dr.;
MILETIC, Mirjana, dr.

Severe megaloblastic anemias in pregnancy. Med. glas. 17 no.5:
178-181 My '63.

1. Ginekolosko-akuserska klinika Medicinskog fakulteta u
Skoplju (Upravnik: prof. dr. Anton Cakmakov).
(PREGNANCY COMPL., HEMATOLOGIC)
(ANEMIA, MACROCYTIC)

S

TYUTINA, N.A.; ALEKSOVSKIY, V.B.

Effect of soil acids on the migration ability of niobium.
Trudy IMGRE no.7:83-90 '61. (MIRA 16:11)

KALINKIN, I.P.; ALEKSOVSKIY, V.B.

Spectrophotometric determination of the microquantities of copper and chlorine in cadmium selenide. Izv.vys.ucheb.zav.; khim.i khim. tekh. 6 no.4:553-556 '63. (MIRA 17:2)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta. Kafedra analiticheskoy khimii.

KALINKIN, I.P.; SERGEYEVA, L.A.; ALEKSOVSKIY, V.B.; STRAKHOV, L.P.

Electron diffraction study of the structure of monocrystalline cadmium selenide films. Kristallografiia 8 no.3:459-461 My-Je '63. (MIRA 16:11)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta.

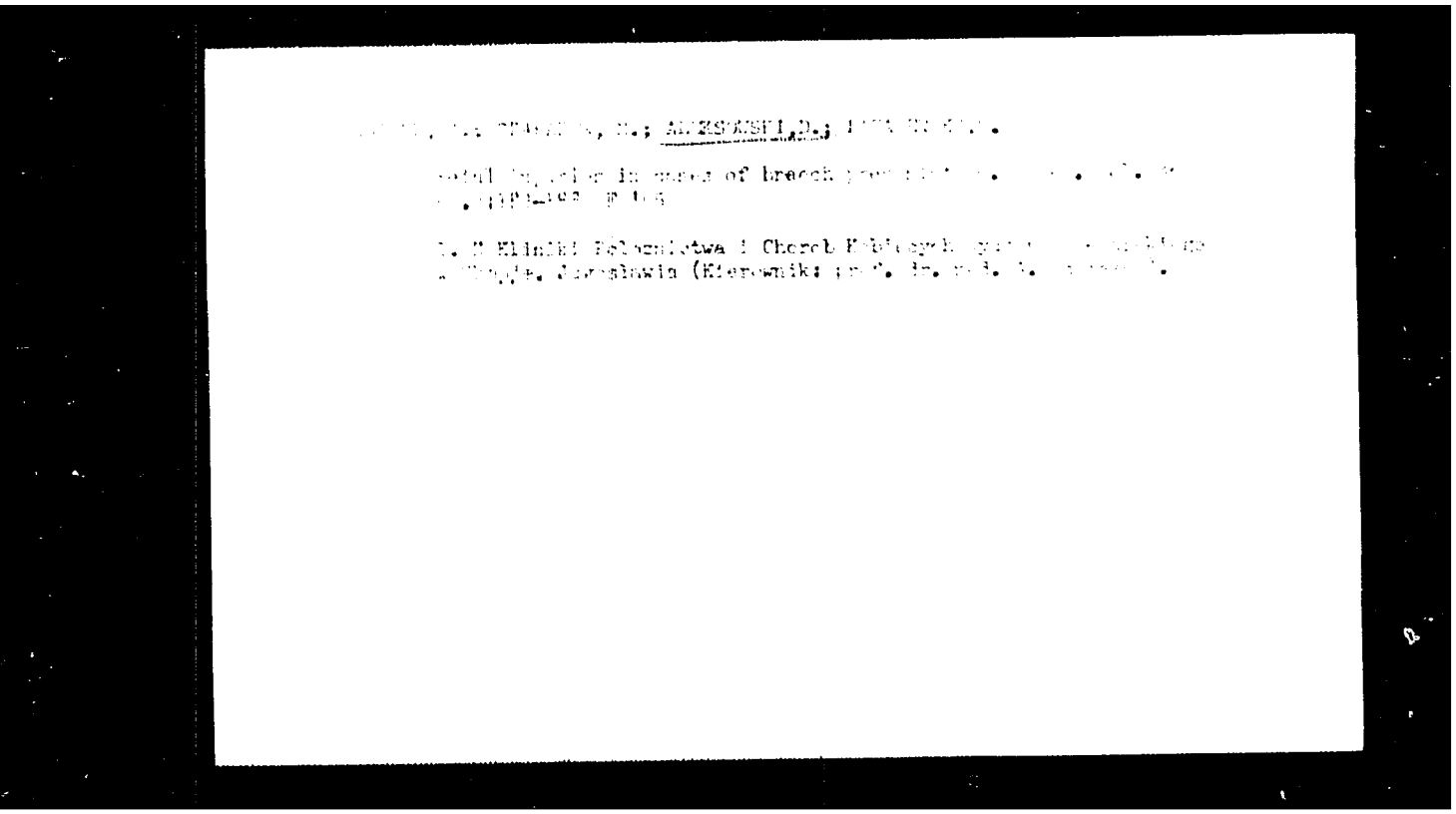
NIKOLAYEV, G.I.; ALEKSOVSKIY, V.B.

Atomic-absorption micromethod for determining aluminum in pure metals and alloys. Zhur.anal.khim. 18 n.7:816-821 Jl '63.
(MIRA 16:11)

ALEKSKOVSKIY, V.B.; KOVAL'TSOV, V.A.; FEDOROV, I.N.; [illegible], G.F.

Automatic analyzer for determining oxygen in [illegible]. Zav. lab. 30 no.1:105-107 '64. (MIRA 17:2)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta.



SUKHAREV, Grigoriy Mikhaylovich. Prinimali uchastiye: PETROVA, A.A., inzh.-khimik; LYALIN, L.K., geolog; ALEKSUYENKO, V.M., tekhnik. VYSOTSKIY, I.V., nauchnyy red.; DOLMATOV, P.S., vedushchiy red.; LASHCHURZHINSKAYA, A.B., tekhn.red.

[Hydrogeology and waters of oil and gas fields] Gidrogeologiia i vody neftianykh i gazovykh mestorozhdenii. Leningrad, Gos. nauchno-tekhn.izd-vo neft. i gorno-toplivnoi lit-ry. Leningr. otd-nie, 1959. 342 p. (MIRA 13:5)
(Water, Underground) (Oil field brines)

ALEKSYAN, V.T.; LUKINA, M.Yu.; STERIN, Kh.Ye.; KAZANSKIY, B.A.

Raman spectra of some hydrocarbons of the cyclobutane series. Izv. AN SSSR Ser.fiz. 18 no.6:699-702 N-D '54. (MLRA 8:3)

1. Komissiya po spektroskopii pri OFMN Akademii nauk SSSR.
2. Institut organicheskoy khimii im. N.D.Zelinskogo Akademii nauk SSSR.
(Hydracarbones--Spectra) (Raman effect)

PISKUN, L., inzh.-mekhanik (Leningrad); ALEKSYUK, F.

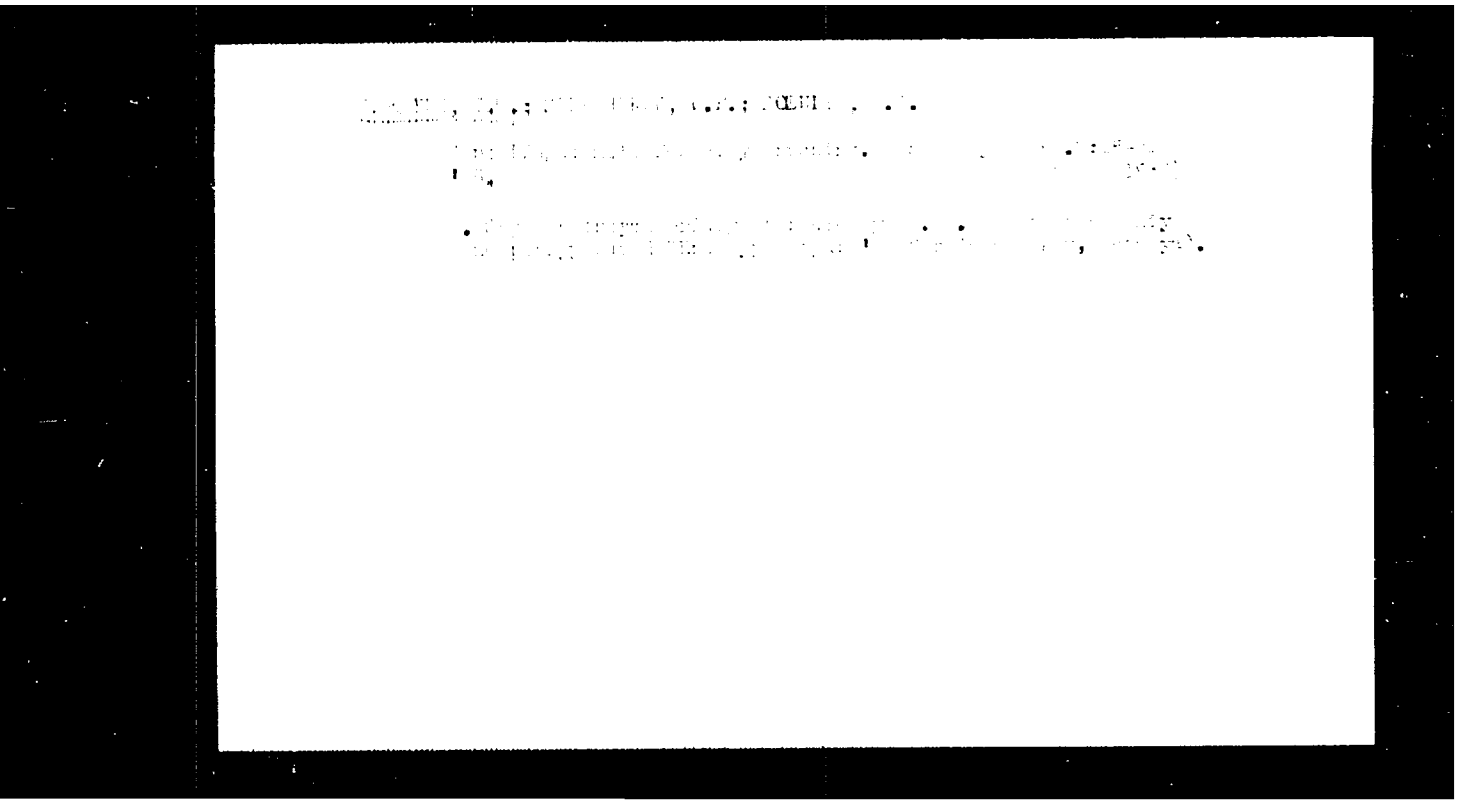
Aggregation of the ONK-B with a motor vehicle. Zashch. rast. ot vred. i bol. 10 no.5:30-31 '65. (MIRA 18:6)

1. Proizvoditel' rabot mekhanicheskogo uchastka Krasnoyarskogo upravleniya selenogo stroitel'stva (for Aleksyuk).

ALEKSYUK, I.M., inzh.; KOZLOV, V.Ya., kand. tekhn. nauk; [illegible], G.P., kand. tekhn. nauk; SOLDATOV, S.A., inzh.; [illegible], N.P., inzh.

Centrifugal mill for the grinding of clay materials. Stek. i ker. 22 no.7:27-30 Jl '65. (MIRA 18:9)

1. Khar'kovskiy politekhnicheskiy institut imeni Lenina (for Aleksyuk, Kozlov, [illegible]). 2. Khar'kovskiy plitochnyy zavod (for Soldatov, [illegible]kin).



APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000101010018-9"

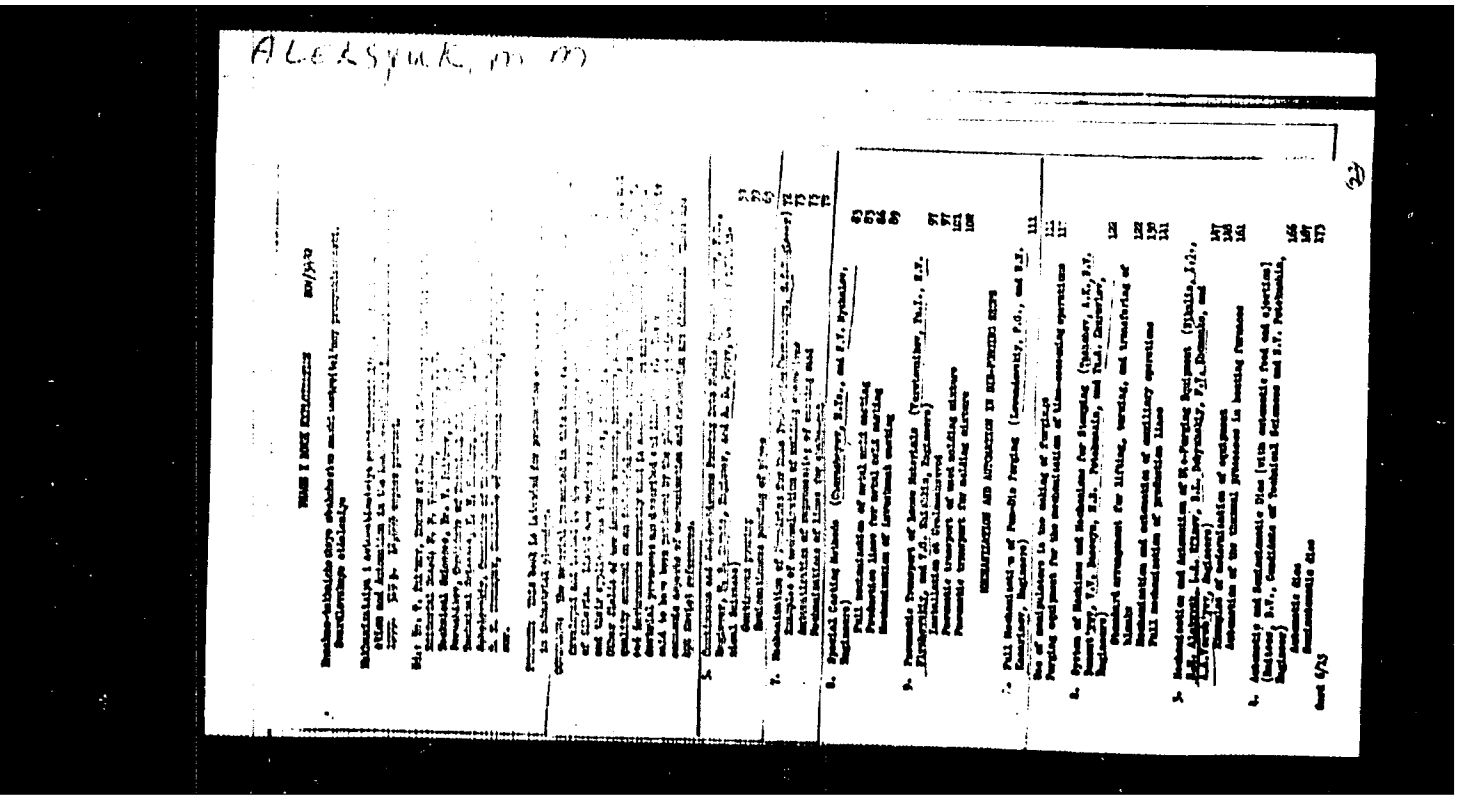
IGNATKIN, I.O., red.; KASIMENKO, O.K., red.; KOSARIK, S.M., red.; ALEKSYUK, I.M. [Oleksiuk, I.M.], red.; STAROVOYTENKO, I.P., red.; GNATYUK, D.I. [Hnatiuk, D.I.]; SILIN, B.I.; BEREZINA, Z., red.; DEREVYANKO, G. [Derevianko, H.], tekhn. red.

[Notable places in the Ukraine] Vyznachni mistsia Ukrainy. Kyiv, Derzh. vyd-vo polit. lit-ry URSR, 1958. 721 p. (MIRA 11:8)
(Ukraine--Description and travel)

VDOVTSOVA, Ye.A.; ALEKSYUK, M.A.

Alkylation of aromatic compounds by diene hydrocarbons. Part 4: Alkenylation of phenethyl alcohol b piperylene in the presence of ahydrous orthophosphoric acid. Zhur.ob.khim. 32 no.5:1494-1498 My '62. (MIRA 15:5)

1. Voronezhskiy gosudarstvennyy universitet.
(Phenethyl alcohol) (Piperylene)



ALEKSIUK, M.A.

Preparations for seed disinfection. Zashch. rast. ot vred. i bol. 8 no.11:54 N '63. (MIRA 17:3)

ALEKSIUK, V.N. (Leningrad)

Convergence to the limit under the sign of a Lebesgue integral.
Izv.vys.ucheb.zav.; mat. no.5[3-L] '[illegible]5.

(MIRA 13:10)

DMITRIYENKO, M.G.; KUBIKOV, V.F.; ALEKSYUTOVICH, I.A.; ZABOLUYEV, V.N.

"K" divided fastenings. Put' i put.khoz. 4 no. 5:17-20 My '60. (MIRA 13:11)

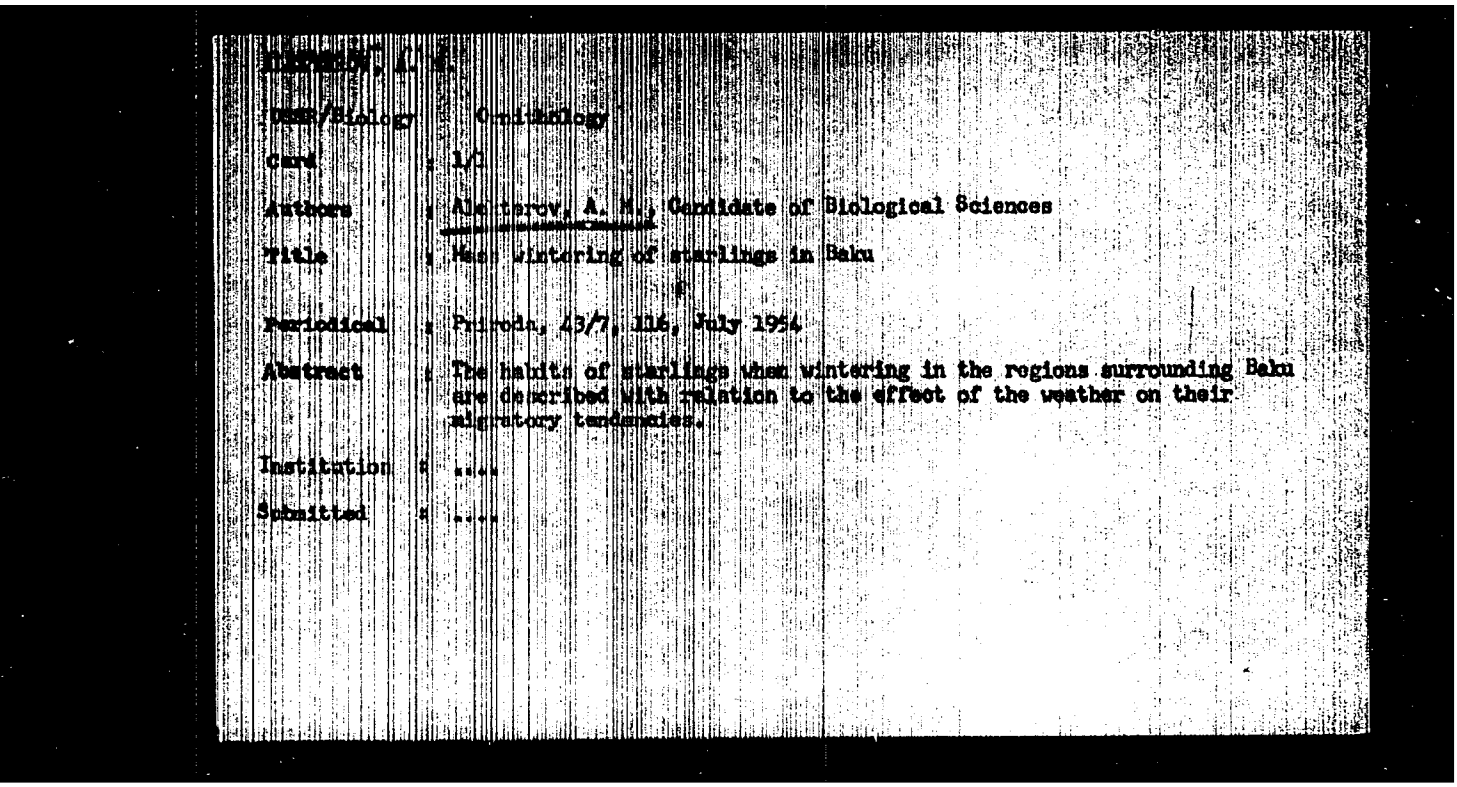
1. Nachal'nik distantsii puti, stantsiya Molodechno, Belorusskoy dorogi (for Dmitriyenko). 2. Nachal'nik distantsii puti, stantsiya Dorogobuzh, Kalininskoy dorogi (for Kubikov). 3. Nachal'nik distantsii puti, stantsiya Moskva, Moskovskoy dorogi (for Aleksyutovich). 4. Nachal'nik distantsii puti, stantsiya Ramenskoye, Moskovskoy dorogi (for Zaboluyev).
(Railroads--Rails--Fastenings)

ALEKSEEV, I. M.

The Committee on Stalin Prizes (of the Council of Ministers USSR) in the fields of science and inventions announces that the following scientific works, popular scientific books, and textbooks have been submitted for competition for Stalin Prizes for the years 1952 and 1953. (Sovetskaya Kultura, Moscow, No. 22-40, 20 Feb - 3 Apr 1954)

Name	Title of work	Nominated by
Patsiora, P. P. Belyayev, B. S. Ginsburg, L. M. Alekseev, V. M. Almazov, [illegible]	Series of textbooks and student manuals on the electrification of timber felling	Moscow Forestry Engineering Institute

SO: W-30604, 7 July 1954



USSR/Biology : Ornithology

Card : 1/1

Authors : Alekseyev, A. M., Candidate of Biological Sciences

Title : Mass wintering of starlings in Baku

Periodical : Priroda, 43/7, 116, July 1954

Abstract : The habits of starlings when wintering in the regions surrounding Baku are described with relation to the effect of the weather on their migratory tendencies.

Institution : ....

Submitted : ....

Name	ALEKTOROV, Boris Aleksandrovich
Dissertation	Kidney Sutures and Post-Operative Complications
Degree	Doc Med Sci
Affiliation	/Not indicated/
Defense Date, Place	17 Feb 56, Coucil of State Order of Lenin Inst for the Advanced Training of Physicians imeni Kirov
Certification Date	15 Dec 56
Source	BMVO 7/57

ALENTOROV, B.A., doktor med.nauk

Peritoneal complications following disturbances in the mesenteric blood supply. Sbor. nauch. trud. GIDUV no. 14:15-20 '58. (MIRA 13:10)

1. Iz kafedry operativnoy khirurgii gosudarstvennogo instituta dlya usovershenstvovaniya vrachey (zav. kafedroy prof. A.P. Nadein).
(MESENTERIC ARTERIES—WOUNDS AND INJURIES)
(ABDOMEN—DISEASES)

ALEKTOROV, V.A.; BELYAYEV, B.S.; PATSIORA, P.P.; POYARKOV, M.F., pro-[illegible], doktor tekhnicheskikh nauk, redaktor; LARIN, V.T., retsenzent; MOLOTOV, V.D., retsenzent; VOLKHOVER, R.S., tekhnicheskiy redaktor.

[Electric power plants, substations and electric power lines in lumbering] Elektrostantsii, podstantsii i elektroseti na lesorazrabotkakh. Pod red. M.F.Poiarkova. Moskva, Goslesbumizdat, 1953. 632 p. (MLRA 7:10)

(Electric power plants) (Lumbering)

[illegible], V. [illegible]

[illegible], V. [illegible] --"Investigation of Electric Motors at Higher Frequencies and of Generators of Movable Electric Stations, Used in the Electrification of [illegible] Laborious Operations." * (Dissertations for Degrees in Science and Engineering Defended at USSR Higher Educational Institutions) Min of Higher Education USSR, Kiev Order of Lenin Polytechnic Inst, Chair of Electric Machinery, Kiev, 195[illegible]

So: *Knizhnaya Letopis'*, No. 25, 18 Jun 55

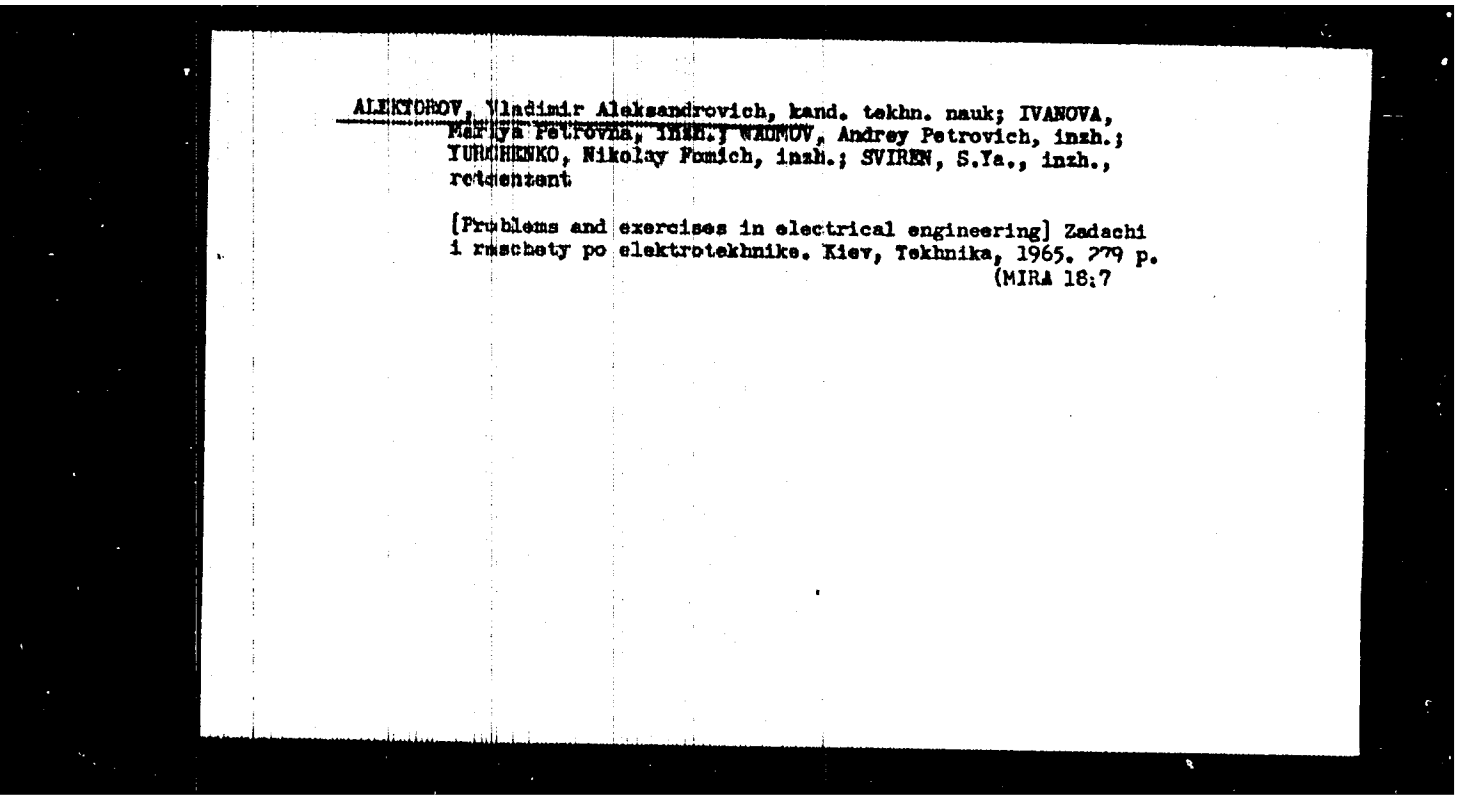
* For Degree of Candidate in Technical Sciences

REBROV, Sergey Alekseyevich,; BORODAVKA, A.S., inzh., retsenzent,; DENISENKO, L.P., inzh., retsenzent,; OL'SHANSKIY, M.A., inzh., retsenzent,; SHPOLYANSKIY, M.N., inzh., retsenzent,; ALEKTOROV, V.A., kand. tekhn. nauk, red.; SERDYUK, V.K., inzh., red.

[Trolley buses] Trolleibusy, Kiev, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1958. 278 p. (MIRA 11:11)
(Trolley buses)

ALEKTOROV, Vladimir Aleksandrovich [Alektorov, V.O.]; IVANOVA, Mariya Petrovna; MITROFANOV, Yevgeniy Mitrofanovich [Mytrofanov, IE.M.]; NAUMOV, Andrey Petrovich; YURCHENKO, Nikolay Fomich [IUrchenko, N.Kh.]; KOVAL'CHUK, O., red.; GUSAROV, K. [Husarov, K.], tekhn.red.

[Electric engineering problems and calculations] Zadachi ta rozrakhunky z elektrotekhniky. Kyiv, Derzh.vyd-vo tekhn.lit-ry URSR, 1960. 254 p. (MIRA 14:3)
(Electric engineering--Problems, exercises, etc.)



ALEKTOROV, Vladimir Aleksandrovich, kand. tekhn. nauk; IVANOVA, Mariya Petrovna, inzh.; MAKAROV, Andrey Petrovich, inzh.; YURCHENKO, Nikolay Fomich, inzh.; SVIREN, S.Ya., inzh., retsenzent

[Problems and exercises in electrical engineering] Zadachi i raschety po elektrotekhnike. Kiev, Tekhnika, 1965. 279 p. (MIRA 18:7

ALELISHVILI, Benson Yairovich; LEVINSKIY, Grigoriy Isaakovich; MUSAYEVA, E., red.; AKHMEDOV, S., tekhn. red.

[Work safety in the aluminum industry] Bezopasnost' truda v aliumunievoi promyshlennosti. Baku, Azerbaidzhanskoe gos. izd-vo, 1963. 69 p. (MIRA 16:4)
(Aluminum industry—Safety measures)

ALEMAN, M.; TUTUIUGA, I.; ZAHARIE, O.

Notes on several cases of malignant systemic primary reticulosis. Med. int. Bucur. 10 no.5:729-734 May 58.

1. Lucrare efectuata in Spitalul orasenesc de adulti, Sibiu.
(LYMPHOID TISSUE, neoplasms
malignant systemic primary reticulosis, manifest. & case reports)

ALEMAN, M., dr.; STOICHITA, Gh., dr.; TAMAS, E., dr.

Fanconi-Hegglin syndrome. Med. intern. 3:341-346 Mr '62.
(BRONCHOPNEUMONIA case reports)

ALEMAN, Veronica, ing.

Documentation problems in the oil industry. Petrol si gaze 15 no.10:564-568 O '64.

ALEMAN, Veronica, ing.

Automatic library. St si Teh Buc 17 no.3:9-11 Mr '65.

1. Documentation Center of the Petroleum and Chemical Industry.

ALEMAN, Veronica, ing.

Few words on pH. St si Teh Ruc 14 no. 12: 14-15 D'62.

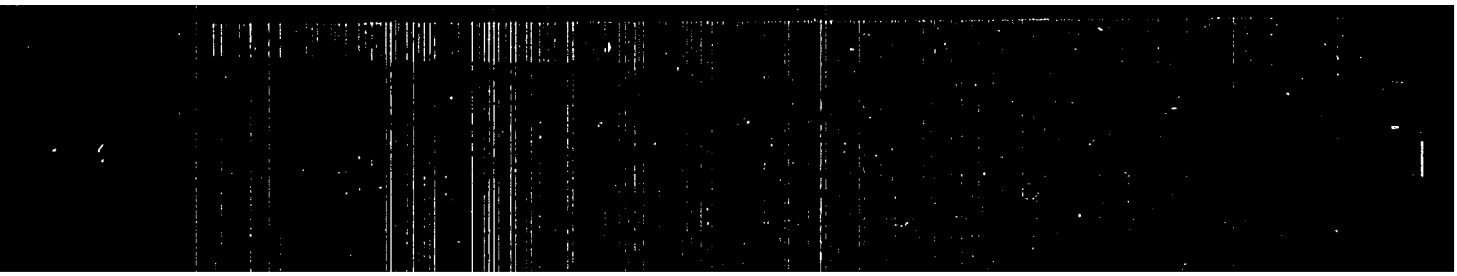
YEDEMSKIY, L.M. [translator]; BASISTOV, A.G., redaktor; MAKAROVA, Ye.M., redaktor; PINYAGIN, N.B., redaktor; ALEMANOVA, N.S., vedushchiy redaktor; TROFIMOV, A.B., tekhnicheskiy redaktor

[Technological systems of the processes of refining oil in the United States] Tekhnologicheskie skhemy protsessov pererabotki nefti v SShA. Moskva, Gos. nauchno-tekhn. izd-vo neftianoi i gorno-toplivnoi lit-ry, 1956. 131 p. (MLRA 9:7)

1. TSentral'nyy nauchno-issledovatel'skiy institut tekhnicheskoy informatsii i ekonomiki neftyanoi promyshlennosti.
(United States--Petroleum--Refining)

DEGTYAREV, G.R.; MEN'SHOV, Yu.A.; ALEMASOV, B.Ye.

Characteristics of the heat balance of the northwestern part of the Atlantic Ocean in the summer of 1960. Izv. AN SSSR. Ser. geofiz. no.7:965-970 Jl '62. (MIRA 15:7)
(Atlantic Ocean--Ocean temperature)



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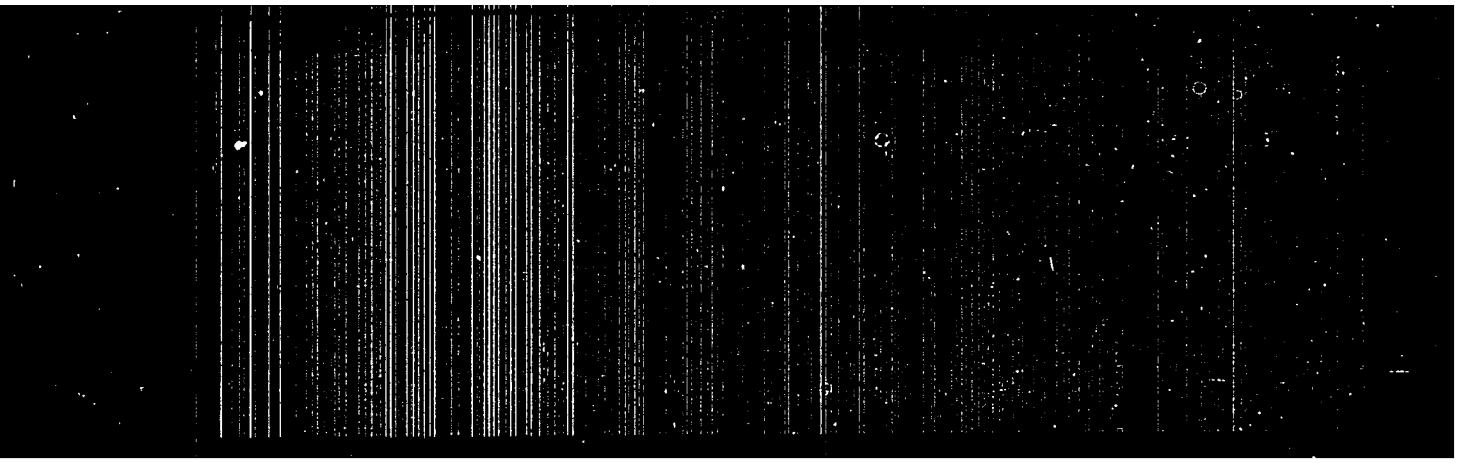

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000101010018-9"

AUTHOR: Alemasov, V.Ye. SOV/147-58-1-11/22

TITLE: Gas Generation for Auxiliary Systems in Aircraft (Generatsiya gaza dlya vspomogatel'nykh sistem letatel'nykh apparatov)

PERIODICAL: Izvestiya Vysshikh Uchebnykh Zavedeniy, Aviatsionnaya Tekhnika, 1958, Nr 1, pp 87 - 94 (USSR).

ABSTRACT: Auxiliary systems are frequently driven by the energy of a gas at high temperature and pressure. The author discusses three methods of gas generation which do not involve the use of atmospheric oxygen. A one-component fuel may be used which is either solid or liquid. A catalyst, or certain conditions of temperature and pressure, may be necessary. The thermodynamic properties of the dissociation of H_2O_2 of different concentrations in the presence of a solid or liquid catalyst are illustrated graphically. The second possibility is the use of a two-component fuel. This may well be the fuel consumed by the engine of the aircraft. The values of the theoretical temperature of combustion and the quantity RT are the products of combustion of a hydrocarbon fuel and oxygen for a wide range of the coefficient of excess oxygen α. A lowering of the temperature of the products of combustion can be achieved

Cardl/3

either by having an excess of fuel ($\alpha < 1$) or by having an excess of oxygen ($\alpha > 1$). A third possibility is the use of a three-component fuel. The lowering of the temperature of combustion can be achieved by introducing into the chamber of combustion water with a high heat capacity and a considerable heat of vaporization. The author compares the effectiveness of the various methods of vapour-gas generation from which it appears that the quantity RT is one of the criteria of effectiveness, which is convenient for a comparison of the systems. For the case of gas generation for turbines, a more characteristic index of effectiveness of the system in given conditions is the quantity of disposable adiabatic work L_{ad}. The results of the comparison are shown graphically, where RT and L_{ad} are increasing functions of the temperature. The picture obtained from these graphs is a particular one insofar as the results relate to a definite vapour-gas pressure and are not characteristic of all fuels. The picture, however, does not change in detail for fuels and pressures in current use.

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000101010018-9"

SOV/147 -58-1-11/22

Gas Generation of Auxiliary Systems in Aircraft

The least thermo-dynamically effective method of gas generation is by burning the basic fuel at large values of α. A more effective method is the decomposition of H_2O_2 having a concentration of 80-90%. The thermo-dynamic efficiency of the combustion of powders is approximately equal to that of dissociation of H_2O_2. Best thermo-dynamic efficiency is achieved by the combustion of a two-component fuel at small values of α and the dissociation of one-component liquid fuels of the ethylene oxide type. There are 7 figures and 7 references, of which 5 are Soviet and 2 English.

ASSOCIATION: Kafedra teorii aviadvigateley, Kazanskiy aviatsionnyy institut (Chair of Theoretical Aeropropulsion, Kazan. Aviation Institute)

SUBMITTED: October 17, 1957

Card 3/3

1. Aircraft--Equipment 2. Gas generating systems--Applications
3. Gas generating systems--Theory

ALEMASOV, V.Ya.; TISHIN, A.P.

Universal method for calculating thermodynamic characteristics of jet fuels. Izv. vys. ucheb. zav.; av. tekh. no.2:74-85 '58. (MIRA 11:6)

1. Kazanskiy aviatsionnyy institut, Kafedra teorii aviadvigateley.
(Jet propulsion)

PHASE I BOOK EXPLOITATION SOV/6280

Alemasov, Vyacheslav Yevgen'yevich

Teoriya raketnykh dvigateley (Theory of Rocket Engines). Moscow, Oborongiz, 1962. 476 p. Errata slip inserted. 12,000 copies printed.

Reviewers: A. V. Kvasnikov, Doctor of Technical Sciences, Professor and F. L. Yakaytis, Doctor of Technical Sciences, Professor; Ed.: I. L. Yanovskiy (Deceased), Engineer; Ed. of Publishing House: L. I. Sheynfayn; Tech. Ed.: L. A. Garnukhina; Managing Ed.: S. D. Krasil'nikov, Engineer.

PURPOSE: This textbook is intended for students in aviation and other higher institutes who are specializing in aircraft engines. It may also be used by engineers in the same field of interest.

COVERAGE: The author states that while previous textbooks written by Soviet scientists A. V. Bolgarskiy and V. K. Shchukin, A. V. Kvasnikov, G. B. Sinyarev and M. V. Dobrovol'skiy, Sinyarev and

Card 1/6

Theory of Rocket Engines SOV/6280

V. I. Feodos'yev, M. I. Shevelyuk, and others describe only liquid-propellant rocket engines, the theory of solid-propellant rocket engines is discussed to only a very limited extent. Besides this, there is a lack of textbooks dealing simultaneously with the theory of jet engines operating on different types of fuel; books of this type would be quite useful and economical. The present work describes fundamentals in the calculation and theory of different types of jet engines. An analysis is given of operating processes and the characteristics and parameters of engines utilizing the chemical energy of liquid and solid propellants.

TABLE OF CONTENTS [Abridged]:

Card 2/6

ALEMASOVA, N.A.

Combined performance of the rotor and vaned diffusor of a centrifugal compressor. Izv.vys.ucheb.zav.; av.tekh. 2 no.3:36-45 '59. (MIRA 12:12)

1. Kazanskiy aviatsionnyy institut. Kafedry teorii aviadvigateley.

(Air compressors)

S/124/62/000/004/010/030
D251/D301

AUTHORS: Vinogradov, B. S., Krasil'nikov, V. A., Alemasova, M. A. and Novikov, A. L.

TITLE: Investigating the working process and the characteristics of centrifugal compressors

PERIODICAL: Referativnyy zhurnal, Mekhanika, no. 4, 1962, 39, abstract 4B235 (Tr. kazansk. aviats. in-ta, 1960, no. 56

TEXT: Existing methods of calculating the flow part of a centrifugal compressor with the application of results of experimental investigations conducted in the Kazanskiy aviatsionnyy institut (Kazan Aviation Institute) between 1949-1959 were described and discussed. The described experiments were carried out on the basis of two compressors of types TK-19 (TK-19) and AM-35A (AM-35A) with straight radial blades having two variants of the working wheels (closed and semi-closed) and two variants of the diffusors (with and without blades). The work consists of five chapters. In the first are described the known basic dependences between the para-

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meters of a centrifugal compressor obtained with the help of one-dimensional jet calculation theory. The second chapter is devoted to the experimental investigation of the flow of air in a working wheel. The distribution of the flow parameters is measured at various radii and in the outlet section with respect to the breadth of the inter-blade channel and the blade height for the closed and semi-closed wheels. Numerous graphs are given. The well-known lack of coincidence between the actual distribution of the parameters and the theoretical distribution for the uninterrupted flow of an ideal liquid is confirmed, and for some regimes the dip in the curve of pressure distribution with respect to the channel breadth is shown. The influence of the air circulation is analyzed for the working of a wheel of semi-closed type. All investigations in this chapter are carried out for small subsonic velocities of rotation. In the third chapter an appraisal is made of the experimental investigation of the air flow in bladeless and bladed diffusors, also carried out for small subsonic velocities, and a comparison made with previously published data. Graphs are given for the distribution of the parameters along the breadth and length of

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the channel. Possibilities are considered of improving the characteristics of the compressors with a project of a bladed diffusor taking into consideration the structure of the running current, and corresponding recommendations are given for the design and set-up of a bladed diffusor. It is affirmed, in contrast to recommendations wide-spred in the literature, that the directing blades ought to be set up with a minimum distance between the wheel and the forward edge of the blade. The entry angle of the blade, it is recommended, should be made as small as possible, and even equal to zero. In the fourth chapter the construction of the characteristics is considered of the compressor, the most convenient coordinate system is discussed, and the influence on the characteristics of various similarity criteria. The possible displacement is discussed and the deformation of the curves of the characteristics due to different atmospheric conditions at the entry. In the fifth chapter an approximation method is proposed for the evaluation of the characteristic of the centrifugal compressor with revolution of the blades of the entry directing apparatus, if the characteristics are known for some given angle of the blade set-up. A method is

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recommended for compressors with regularized entry directing apparatus. It is necessary to point out that each form of the experiments of the KAI was carried out only for one type of compressor, which makes the wide generalization of the data difficult. 51 references. [Abstracter's note: Complete translation.]

Card 4/4

ALEMATKIN, F.I., prepodavatel'.

Growth of mono-derivative ammonium phosphate crystals from a solution. Dop.ta pov L'viv.un. no.3 pt.2:41-42 '52. (MLRA 9:11)

(Ammonium phosphate crystals)

ALEKHAYKIN, F.I., prepodavatel'.

Electric conductivity of mono-derivative ammonium phosphate crystals. Dop.ta pov.L'viv.un. no.3 pt.2:42-43 '52. (MLRA 9:11)

(Ammonium phosphate--Electric properties)

ALEKHAYKIN, F.M., starshiy prepodavatel'.

Natural oscillations of crystalline bars of an arbitrary section of ammonium dihydrophosphate. Dop.ta pov.L'viv. un. no.4, pt.2:67-68 '53. (MLRA 9:11)

(Piezoelectricity)

ALEMAYKIN, F.M., starshiy prepodavatel'.

Natural oscillations of crystalline flakes of an arbitrary section of ammonium dihydrophosphate on the basis of thickness. Dop.ta pov. L'viv.un. no.4, pt.2:68-70 '53. (MLRA 9:11)

(Piezoelectricity)

ALEMAYKIN, F.M.

Effect of impurities on the piezoeffect of the crystal of ammonium dehydrophosphate. Dop. ta pov. L'viv. un. no.5 pt.2:73-76 '55. (MLRA 9:10)

(Piezoelectricity) (Phosphates)

ALEMAYKIN, F.M.

USSR / Electricity G

Abs Jour : Ref Zhur - Fizika, No 4, 1957, No 9610

Author : Alemaykin, F.M.
Inst : Not given
Title : Dependence of the Electric Conductivity of Crystals of Dihydrophosphate of Ammonium on the Extraneous Impurities.

Orig Pub : Dopovidii ta povidomleniya L'vivsk. yn-t, 1955, vyp 6, ch 2, 129

Abstract : An investigation was made of the effect of admixtures of $(NH_4)_2MoO_4$, $(NH_4)_2CrO_4$, $(NH_4)SO_4$, and of phosphates of sodium and potassium on the electric conductivity of $NH_4H_2PO_4$ crystals. It is found that the electric conductivity of crystals with the above impurities fits the ordinary logarithmic relation $\ln \sigma = \beta + \alpha/T$. The activition energy is 14 -- 17 kcal/mol for pure crystals, and 20 -- 22 kcal/mol for crystals with Mo and Cl impurities and 9 -- 12 kcal/mol for crystals with other impurities.

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USSR/Physical Chemistry - Crystals, B-5

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 283

Author: [redacted]

Institution: Lvov University

Title: The Effect of Extraneous Impurities on the Growth of Crystals of Ammonium Dihydrophosphate

Original Periodical: Dopovidi ta povidomlennya. L'vivs'k. un-t, 1955, Vol 6, No 2, 130

Abstract: The amount of impurities present in the solution and in growing crystals of $(NH_4)H_2PO_4$ (I) was determined spectrographically. It was found that the impurities (Fe, Al, Mg, Ca, Cu, Si, Na, Mn, Pb, Cr, Mo, S, and others) enter the growing crystal when their concentration in the solution is greater than 0.1-1.0%. The addition of ammonium molybdate makes it possible to obtain rhombic crystals even though I has tetragonal syngony. Sodium or potassium phosphate make it possible to obtain undistorted basic crystalline prisms of I. The addition of ammonium chromate and sulfate increases the rate of growth along

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USSR/Physical Chemistry - Crystals, B-5

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 283

Abstract: the z axis 2 or 3 times and contracts the crystals in the x and y direction in such a way that the basic prism is transformed into a pyramid.

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