ATLIVANNIKOVA, R.V.; MAKAROVA, K.A.

Some clinical forms of lymphgranulomatosis; clinical-anatomical observations. Terap. arkh. 30 no.12:71-77 D '58. (MIRA 12:1)

1. Iz 4-y kafedry terapii (zav. - chlen-korrespondent AMN SSSR prof. P. I. Yegorov) TSentral'nogo instituta usovershenstvovaniya vrachey i patologoanatomicheskogo otdeleniya (nach. Ye. S. Krylova) TSentral'noy klinicheskoy bol'nitsy Ministerstva putey soobshcheniya.
(HODGKIN'S DISEASE, case reports,
(Rus))

ATMADZHOV, P.

The electric resistance thermometer. Radio i televiziia 11 no.12:375-376 '62.

ATMADZHOV', P. (Pazardzhik)

Source of high tension. Mat i fiz Bolg 6 no.2:63-64 Mr-Ap '63.

ATMADZHOV, P.

Miniature speaker with a flat plastic foam membrane. Radio i televiziia 8 no.7:204 '64.

Some characteristic faults in the "Rubin 102" television receiver. Ibid.:213-214

ATMADZHOV, P. (Plovdiv)

Indicator of radioactive emissions. Mat i fiz Bulg 8 no.1:57-60 Ja-F '65.

ATMAKIN I.A.

KARDANOV, Zamikhsheri Kasimovich; ATMAKIN, I.A., red.; LEBEDINSKAYA, M.F., tekhn.red.

[Karachay-Cherkess Autonomous Province during forty years of the Soviet regime] Karachaevo-Cherkesiia za sorok let sovetskoi vlasti. [Cherkessk] Karachaevo-Cherkesskoe knizhnoe izd-vo, 1957. 37 p. (MIRA 11:6)

(Cherkess Autonomous Province)

POPUT'KO, Andrey Lavrent'yevich; MIKHAYLOV, Vladimir Viktorovich; ATMAKIN, I.A., red.; LEBEDINSKAYA, M.F., tekhn.red.

[Karachay-Cherkessia] Karachaevo-Cherkessiia. Cherkessk, Karachaevo-Cherkesskoe knizhnoe izd-vo, 1959. 157 p. (MIRA 13:6)
(Stavropol Territory--Economic conditions)

NEVSKAYA, Valeninta Pavlovna; LAYPANOV, Kh.O., kand. ist. nauk, red.; ATMAKIN, I.A., red.

[Social and economic development of Karachay in the 19th century; prereform period] Sotsial'no-ekonomicheskoe razvitie Karachaia v XIX veke; doreformennyi period. Pod red.Kh.O. Laipanova. Cherkessk, Karachaevo-Cherkesskoe knizhnoe izd-vo, 1960. 159 p. (MIRA 17:7)

KOLCHIN, Ye.M., gornyy inzh.; ATMANSKIKH, S.A., gornyy inzh.

Testing of expansion shells and plugs of rod bolting. Gor.zhur. no.3:39-40 Mr '61. (MIRA 14:3)

1. Unipromed', Sverdlovsk.
(Mine roof bolting—Testing)

ATMANSKIKH, S.A., inzh.; VAGIN, N.A., inzh.

Using rod bolting in explosive store rooms. Shakht.stroi. 6 no.1:26-27 Ja '62. (MIRA 14:12)

1. Ural'skiy nauchno-issledovatel'skiy i proyektnyy institut mednoy promyshlennosti.
(Coal mines and mining—Explosives)

ATNAGULOV, S.

ATNAGULOV, S. Bashkiriia. S prilozheniem karty Bashkirskoi Respubliki. Moskva, Gosizdat, 1925. 122 p. (Respubliki i oblasti SSSR).
MN

SO: LC, Soviet Geography, Part II, 1951, Unclassified

AL'FONTSEV, Ye.P., marksheyder; TONKIKH, I.M., marksheyder; ATNASHKIN, N.G., marksheyder

Instrument for fixing benchmarks. Ugol' 37 no.3:59 Mr '62. (MIRA 15:2)

1. Shakhta "Yagunovskaya" kombinata Kuzbassugol'.
(Mine railroads--Equipment and supplies)

ATNYUKOV, V.S.

Students' work in the collective farm section. Biol. v shkole no. 3:62-64 My-Je '58. (MIRA 11:8)

1. Direktor Staro-Besovskoy semiletney shkoly Novo-Malyklinskogo rayona Ul'yanovskoy oblasti.
(Novo-Malykla District--Stock and stockbreeding--Study and teaching)

ATOCHKIN F. I.

Bee Culture

My experiences Pchelovodstvo 29, no. 4, April 1952

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

ATOLJAK, S.

Yugoslavia (430)

History and Description - Serials

Cadastral survey of Zadar in the 15th century. p. 371. Jugoslavenska adademija znanosti i umjetnosti. STARINE. Zagreb. (Studies on the legal and cultural history of the southern Slavs, published by the Yugoslav Academy of Sciences and Arts. Includes references). Vol.42, 1949

East European Accessions List, Library of Congress, Vol. 1, no. 13, November 1952.
UNCLASSIFIED

"Card 1 of 2"

AUTHORS: Atonen, A., Khobta, P. M. 50-1-16/26

TITLE: Two Opinions on the Report Forms "TD" for Stations and Observation Posts (Dva mneniya o blankakh "TD" dlya stantsiy i postov).

PERIODICAL: Meteorologiya i Gidrologiya 1958, Nr 1, pp. 51-52 (USSR)

ABSTRACT: I. The report forms of the technical data of a station (observation post) which were introduced instead of the earlier "passports" regulate, systematize and considerably simplify the technical recording of the network. The work of the inspectors for the formulation of inspection data is facilitated, therefore the inspectors can now spend more time on practical help in the very spot. In spite of these facts these blanks possess some disadvantages (An enumeration of these disadvantages is given).
II. After looking through the form of technical data for posts (instead of the "passports") the following conclusions may be drawn: At present two technical files were among others instead of a "passport" introduced for almost all observation posts. The volume of work was thereby considerably increased. The data are dispersed and very badly arranged.

Card 1/2

Two Opinions on the Report Forms "TD" for Stations and Observation Posts. 50-1-16/26

AVAILABLE: Library of Congress

1. Weather stations

Card 2/2

1. ATONENKO, N. V.; NESTERENKO, V. V.; PLEMYASHOV, A. S. Engs.

2. USSR (600)

4. Mining Engineers

7. Block-caving system at the Ingulets mine. Gor. zhur no. 10, 1952.

9. Monthly List of Russian Accessions, Library of Congress, January, 1953. Unclassified.

ATON'YEVA, N. M.

A. A. Bashilov, N. M. ATON'YEVA and *B. S. Dzhelepov

The β-Spectrum of Ir^{192} (News of the Academy of the Sciences of the USSR Physical Series, 16.264-305 May/Jun 1952) Pub. by Physical Tech. INst.

*An important worker in the field

LXII-2

ALEKPEROV, V.P., inzh.; ATOYMYAN, I.O., inzh.; ZUYEV, V.I., inzh.; KAVUN, Ye.S., kand.tekhn.nauk; KOGAN, B.Ya., kand.tekhn.nauk; KOPAY-GORA, P.N., kand.tekhn.nauk; KULAKOV, A.A., inzh.; LEBEDEV, A.N., kand. tekhn.nauk; PAPERNOV, A.A., doktor tekhn.nauk; PEL'POR, D.S., doktor tekhn.nauk; PLOTNIKOV, V.N., kand.tekhn.nauk; RUZSKIY, Yu.Ye., kand.tekhn.nauk; SOLODOVNIKOV, V.V., doktor tekhn.nauk; TOPCHEYEV, Yu.I., kand.tekhn.nauk; ULANOV, G.M., kand.tekhn.nauk; SHRAMKO, L.S., kand.tekhn.nauk; DOBROGURSKIY, S.O., doktor tekhn. nauk, retsenzent; KAZAKOV, V.A., kand.tekhn.nauk, retsenzent; PETROV, V.V., kand.tekhn.nauk, retsenzent; KHAVKIN, G.A., inzh., retsenzent; SOLODOVNIKOV, V.V., prof., doktor tekhn.nauk, red.; VITENBERG, I.M., kand.tekhn.nauk, nauchnyy red.; MOLDAVER, A.I., kand.tekhn.nauk, nauchnyy red.; KHETAGUROV, Ya.A., kand.tekhn.nauk, nauchnyy red.; POLYAKOV, G.F., red.izd-va; KONOVALOV, G.M., red. izd-va; SOKOLOVA, T.F., tekhn.red.

[Fundamentals of automatic control] Osnovy avtomaticheskogo regulirovaniia. Vol.2. [Elements of automatic control systems] Elementy sistem avtomaticheskogo regulirovaniia. Pt 2. [Compensating elements and computer components] Korrektiruiushchie elementy i elementy vychislitel'nykh mashin. Moskva, Gos.nauchno-tekhn. izd-vo mashinostroit.lit-ry. 1959. 453 p. (MIRA 12:4)
(Automatic control) (Electronic apparatus and appliances)
(Electronic calculating machines)

ATOVMYAN, I.O.

PHASE I BOOK EXPLOITATION SOV/4651

Moscow. Inzhenerno-fizicheskiy institut

Vychislitel'naya tekhnika; sbornik statey (Computer Technique; Collection of Articles) Moscow, Atomizdat, 1960. 54 p. 2,500 copies printed.

Sponsoring Agencies: Ministerstvo vysshego i srednego spetsial'nogo obrazovaniya RSFSR; Moskovskiy inzhenerno-fizicheskiy institut.

Resp. Ed.: Ya.A. Khetagurov, Candidate of Technical Sciences; Tech. Ed.: S.M. Popova.

PURPOSE: This collection of reports is intended for technical personnel working with computers.

COVERAGE: The collection contains reports dealing with some problems of computer technique. The reports of I.O. Atovmyan, V.I. Zuyev, and G.N. Solov'yev discuss various problems concerning a general-purpose discrete-action computer which was designed and is presently under construction at the MIFI, Moskovskiy inzhenerno-fizicheskiy institut (Moscow Engineering Physics Institute). The reports of Ya.A. Khetagurov, I.M. Vitenberg and Ye.P. Zhidkov examine other technical problems of computer design. There are no references.

Card 1/4

29751
S/194/61/000/006/009/077
D201/D302

16,8000
16.8100

AUTHOR: Atovmyan, I.O.

TITLE: Problems in designing digital computer control installation

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 6, 1961, 19, abstract 6 B138 (V sb. Vychisl. tekhnika M., Atomizdat, 1960, 5-12)

TEXT: A list of requirements is given as applied to the command and address system in designing an optimum control arrangement (CA). A system of command is chosen which consists of 31 commands together with two types of address systems - triple address system with possible modifications and a single address system (2 commands per word). The CA consists of a central CA (CCA) and regional CA (RCA). The RCA has one cycle of operation equal in time to the longest operation to be performed and it performs repetitive elementary operations (reading and writing in the delay line, shifting, divi-

Card 1/2

Problems in designing...

sion, normalization etc.) The cycles of CCA and RCA are asynchronously related, the operations within every cycle are synchronous. The bloc-diagram of CA is given and the function of all sub-assemblies explained. The CA requires 504 vacuum tubes (420 6H8 (6N8) and 184 6П9 (6P9)) tubes. 3 figures. [Abstracter's note: Complete translation]

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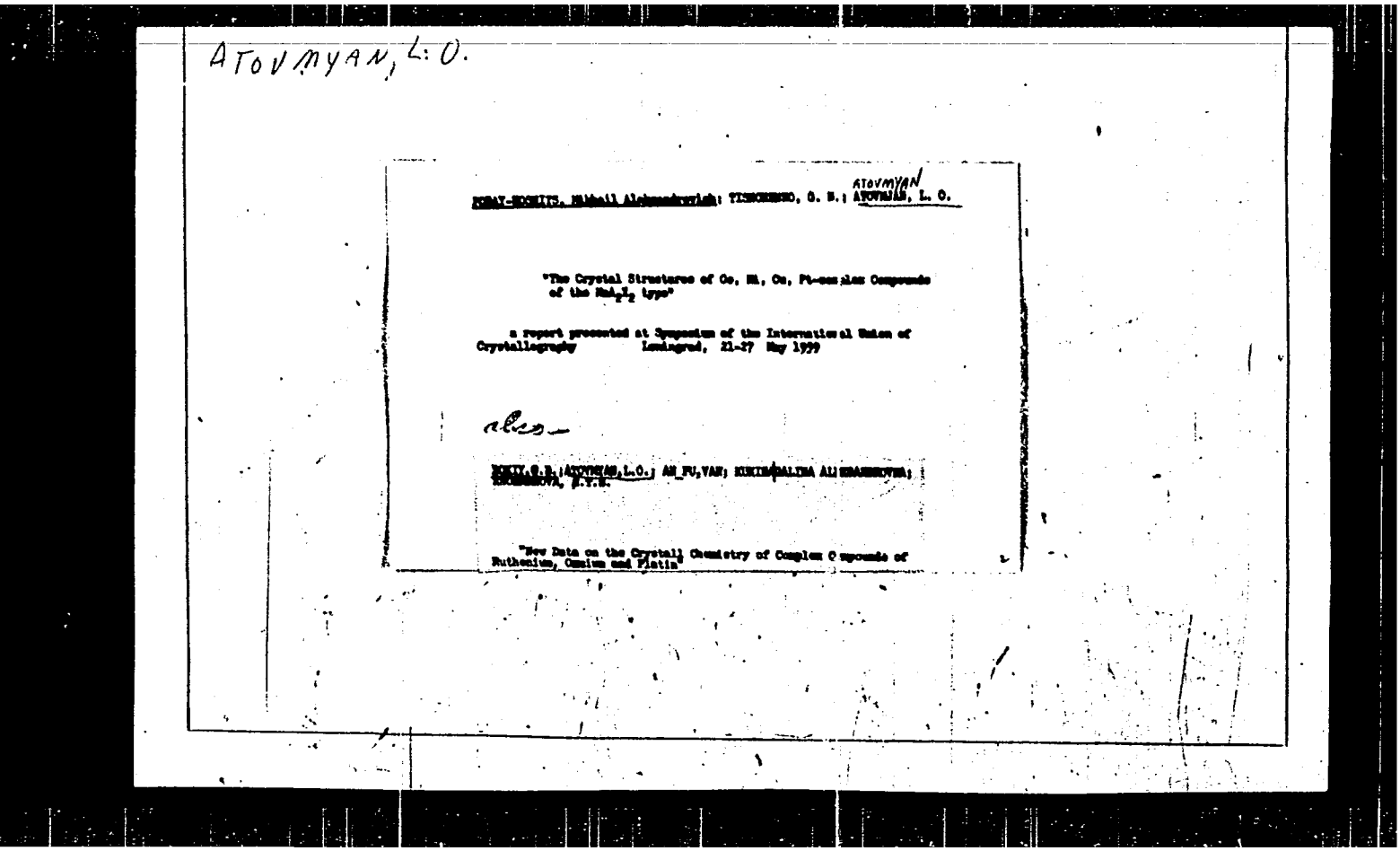
Card 2/2



ATOVMYAN, L. O.

KUSAY-KOSHITS, Mikhail Aleksandrovich; TIMOKHMOV, O. S.; ATOVMYAN, L. O.

"The Crystal Structures of Co, Rh, Cu, Pt-complex Compounds of the MeA_2I_2 type"

a report presented at Symposium of the International Union of Crystallography Leningrad, 21-27 May 1959

KUSAY, S. S.; ATOVMYAN, L. O.; AN FU, YAN; KUKINA-DALINA ALIKHANOVNA; [illegible], P. V.

"New Data on the Crystal Chemistry of Complex Compounds of Ruthenium, Osmium and Platin"

24(2)

AUTHORS: Bokiy, G. B., Corresponding Member, AS USSR, Atovmyan, L. O., Khodasheva, T. S.

SOV/20-128-1-20/58

TITLE: On Some Special Crystallochemical Features of the Complex Compounds of Ruthenium and Osmium

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 128, Nr 1, pp 78-80 (USSR)

ABSTRACT: The afore-mentioned compounds have been only little investigated from the crystallochemical standpoint. These elements contain several stable groupings of the metal with light atoms, i.e. primarily with oxygen and nitrogen. The metal - hydrogen bond may differ according to the nature and number of the other atoms linked up to nitrogen: Me - NH_3, Me - NO_2, Me - NO, Me - N.

A similar series may be obtained for oxygen-containing compounds: Me - OH_2, Me - OH, Me - O. There is a certain similarity between these series, which the authors believe to be very important for the chemistry of these compounds. This fact has hitherto been to much neglected. The solid bond Ru - NO is a specific property of the complex compounds of ruthenium. The authors first point out some facts known from previous articles.

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On Some Special Crystallochemical Features of the Complex Compounds of Ruthenium and Osmium

SOV/20-128-1-20/58

New data is then given on the structure of the complex compounds of ruthenium and osmium, which contain NO, N, H_2O, and Cl as components. The compounds $K_2[RuNOCl_5]$ and $K_2[RuCl_5H_2O]$ exhibit the same structure and belong to the deformed structure of the type K_2PtCl_6. The structure of $K_2[RuNOCl_5]$ was investigated more in detail. The bond Ru - N - O is linear, and the distances Ru - N and N - O amount to 1.70 Å and 1.25 Å. This is also confirmed by the following concept: $Me \equiv {}^{+}N - {}^{-}O$. Investigation of the Ru - NO bond is continued with the compound $K_2[RuNO(OH)(NO_2)_4]$. The osmium compounds $K_2Os_5NCl_5$ and $KOsNBr_4 \cdot 2H_2O$ exhibit the same structure though their chemical formulas differ. These compounds are interesting because of the particular features of the sixth component, i.e. of nitrogen. In the structures of $K_2[OsNCl_5]$ and $K[OsNBr_4H_2O]H_2O$ the distance Os - N ~ 1.60 is distinctly

Card 2/4

shorter than the sum of covalent radii (1.35 +0.55 = 1.90). The chlorine atom (which is in trans-position to the nitrogen atom) has a shortened distance on the coordinate N - Os - Cl ($\sim$2.1 Å). All this indicates the possible existence of a linear group which is similar to O - Os - O. The above series Me - N and Me - O are very similar in Ru- and Os compounds because the distances Me - N and Me - O are shortened in both cases. The authors then report briefly on the final members of the series of nitrogen-containing compounds. The assumption of linear groups in Os permits a new interpretation of the structure of the series of complex compounds. The authors believe that a compound of the composition $K_2OsO_4 \cdot 2H_2O$ contains the osmyl group $K_2\left[OsO_2(OH)_4\right]$. They began to analyze the structure of this group. Complex compounds similar to those investigated here are also found in Ru and some other metals. In many cases investigated in this article the one coordinate of the octahedral complex differs greatly from the two other coordinates. This assumption will be checked by several examples. There are 2 tables and 14 references, 5 of which are Soviet.

On Some Special Crystallochemical Features of the Complex Compounds of Ruthenium and Osmium SOV/20-128-1-20/58

ASSOCIATION: Institut obshchey i neorganicheskoy khimii im. N. S. Kurnakova Akademii nauk SSSR (Institute of General and Inorganic Chemistry imeni N. S. Kurnakov of the Academy of Sciences, USSR)

SUBMITTED: June 12, 1959

Card 4/4

PORAY-KOSHITS, M.A.; ATOVMYAN, L.O.; TISHCHENKO, G.N.

Crystal structure of isomorphic cobalt and zinc dihalodipyridinates. (concerning the nature of the isomerism of cobalt compounds having the composition CoA_2X_2). Zhur. strukt. khim. 1 no.3:337-341 S-O '60. (MIRA 14:1)

1. Institut obshchey i neorganicheskoy khimii imeni N.S. Kurnakova AN SSSR.
(Cobalt compounds) (Zinc compounds)

ATOVMYAN, L.O.; BOKIY, G.B.

Structure of K_2OsNCl_5 and $K[OsNBr_4H_2O]$ H_2O. Zhur. strukt. khim. 1 no. 4:501-503 N-D '60. (MIRA 14:2)

1. Institut obshchey i neorganicheskoy khimii AN SSSR imeni N.S. Kurnakova i Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR, Novosibirsk.
(Osmium compounds)

BOKIY, G.B.; ATOVMYAN, L.O.

Covalent atomic radii in multiple bonds. Zhur.strukt.khim. 2 no.3:308-311 My-Je '61. (MIRA 15:1)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR, Novosibirsk i Institut obshchey i neorganicheskoy khimii imeni N.S. Kurnakova, AN SSSR.

(Chemical bonds)

ATOVMYAN, L.O.

New achievements of Soviet crystallochemistry. Vest.AN SSSR 32 no.4:128-130 Ap '62. (MIRA 15:5)
(Crystallography)

ATOVMYAN, L.O.; BOKIY, G.B.

Structure of the $NH_4Na[MoO_3C_2O_4]\cdot H_2O$ complex and its place in the classification of molybdenum compounds. Dokl. AN SSSR 143 no.2:342-344 Mr '62. (MIRA 15:3)

1. Institut obshchey i neorganicheskoy khimii im. N.S.Kurnakova AN SSSR. 2. Chlen-korrespondent AN SSSR (for Bokiy).
(Molybdenum compounds)

ATOVMYAN, L. O.

Dissertation defended for the degree of Candidate of Chemical Sciences at the Institute of General and Inorganic Chemistry imeni N. S. Kurnakov: in 1962:

"X-ray Structural Investigation of Several Compounds with Multiple Bonds."

Vest. Akad. Nauk SSSR. No. 4, Moscow, 1963, pages 119-145

ATOVMYAN, L.O.; ANDRIANOV, V.G.; PORAY-KOSHITS, M.A.

Crystalline structure of potassium tetrahydroxydioxyosmate. Zhur. strukt.khim. 3 no.6:685-690 '62. (MIRA 15:12)

1. Institut obshchey i neorganicheskoy khimii imeni N.S. Kurnakova AN SSSR.
(Osmium compounds) (X-ray crystallography)

SHUSTOROVICH, Ye.M.; ATOVMYAN, L.O.

Particular features in the structure of complex compounds of molybdenum. Zhur.strukt.khim. 4 no.2:273-276 Mr-Ap '63. (MIRA 16:5)

1. Institut obshchey i neorganicheskoy khimii imeni N.S.Kurnakova AN SSSR i filial Instituta khimicheskoy fiziki AN SSSR.
(Molybdenum compounds) (Chemical structure)

ATOVMYAN, L.O.; BOKIY, G.B.

Structure of the crystals $NaNH_4[MoO_3C_2O_4] \cdot 2H_2O$. Zhur.strukt.khim. 4 no.4:576-583 Jl-Ag '63. (MIRA 16:9)

1. Institut khimicheskoy fiziki AN SSSR, Moskva i Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR, Novosibirsk.
(Molybdenum compounds) (X-ray crystallography)

KHARITONOV, Yu.Ya.; ATOVMYAN, L.O.

Infrared absorption spectra of complexes. Izv. AN SSSR Ser. khim. no.2:257-261 '65. (MIRA 18:2)

1. Institut obshchey i neorganicheskoy khimii im. N.S. Kurnakova AN SSSR i Institut khimicheskoy fiziki AN SSSR.

SHIBAYEVA, R.P.; ATOVMYAN, L.O.

Crystal structure of α-trichloromethyl-N-methylolethylenimine $C_4H_6ONCl_3$. Dokl. AN SSSR 160 no.2:334-336 Ja '65.
(MIRA 18:2)

1. Institut khimicheskoy fiziki AN SSSR. Submitted August 7, 1964.

ATOYAN, A.M.

Preventing landslides. Put' i put. khoz. 9 no.12:30-32 '65.
(MIRA 19:1)

1. Nachal'nik Ordubadskoy distantsii Zakavkazskoy dorogi.

86134

S/112/59/000/012/075/097
A052/A001

26.2532

Translation from: Referativnyy zhurnal, Elektrotekhnika, 1959, No. 12, p. 215, # 25393

AUTHOR: Atoyan, A.T.

TITLE: Thermoelectric Parameters of Cu_2S-Base Synthetic Semiconductors

PERIODICAL: Tr. 1-y Mezhvuzovsk. konferentsii po sovrem. tekhn. dielektrikov i poluprovodnikov, 1956, Leningrad, 1957, pp. 325-329

TEXT: Properties of Cu_2S hole semiconductors were investigated at different concentrations of Sb, Zn, Sn, PbS admixtures. As initial material for samples served pure electrolytic Cu which was ground in a ball mill, mixed with powdered admixture and S in a beater, heated in a furnace from 100° to 700°C, held for 40-60 min and cooled by H_2O. Specific gravity of the substance was 4.6 g/cm^3, mechanical compressive strength was 2.8 t/cm^2. Samples pressed of the material were sintered in a muffle furnace at 650-700°C or in a silit furnace at 1,300°C. Coefficient z, characterizing thermoelectric properties of semiconductor, was for investigated samples from 2 to $4 \cdot 10^{-3}$ degree^{-1}, coefficient of heat conductivity

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86134

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A052/A001

Thermoelectric Parameters of Cu_2S-Base Synthetic Semiconductors

fluctuated from 2 to $0.3 \cdot 10^3$ cal/cm. sec. degree. The best properties for conversion of heat energy into electric energy had the following semiconductors: 2.0(Cu) + 1.25(Zn) + 6(S) with $z = 4 \cdot 22 \cdot 10^{-3}$ and 20(Cu) + 1.5(Mg) + 6(S) with $z = 3.65 \cdot 10^{-3}$ degree^{-1}.

N.P.U.

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

Card 2/2

Atoyan, K.M.

LEONOV, N.Ya.; ATOYAN, K.M.

Modernizing the K-32 truck-crane jib. Nauch.zap. IMA L'viv AN URSR 2 no.1:105-107 '53. (MIRA 8:11)
(Cranes, derricks, etc.)

ATOYAN, K.M.

113-58-5-5/22

AUTHORS: Osepchugov, V.V., Candidate of Technical Sciences and Atoyan, K.M.

TITLE: About the Rigidity and Durability of the Body of the LAZ-695 Autobus (O zhestkosti i prochnosti kuzova avtobusa LAZ-695)

PERIODICAL: Avtomobil'naya Promyshlennost', 1958, Nr 5, pp 14-17 (USSR)

ABSTRACT: The body of the LAZ-695 autobus differs from other framed or frameless bodies by a joining of the frame with the chassis. Such a body usually absorbs torsional and bending loads. After 5,000 to 12,000 km, the body was tested and found to be in bad shape. The L'vovskiy avtobusnyy zavod (The L'vov Autobus Plant), together with the NAMI, introduced many changes into its construction, and reinforced its frame. A complete test brought out the following conclusions: 1) The best value of the angle of torsion for the LAZ-695 bus cannot be more than 1°, and for its frame - no more than 4°. This corresponds to the relative angle of torsion of the bus of not more than 6.5 for 1m of length; 2) The coefficient (K) of its relative rigidity must not exceed the average value of K=4; 3) The rigidity of the back console at the large sweep has an influence on the defor-

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About the Rigidity and Durability of the Body of the LAZ-695 Autobus

mation of the external covering; 4) The distribution of the angle of torsion in the sense of length of the autobus can characterize the uniformity of its rigidity. There are 3 figures, 3 graphs, 1 table and 1 Soviet reference.

ASSOCIATION: L'vovskiy avtobusnyy zavod (The L'vov Autobus Plant)

AVAILABLE: Library of Congress

Card 2/2 1. Automobils industry 2. Bodies-Design

ATOYAN, K.

Five thousand motorbuses in one year. Za rul. 17 no.7:3 Jl '59. (MIRA 13:1)

1. Glavnyy konstruktor L'vovskogo avtobusnogo zavoda.
(Lvov--Motorbuses)

ATOYAN, K.

Modernization of the LAZ-695 motorbus. Avt. transp. 37 no.9:30-32 S '59. (MIRA 12:12)
(Motorbuses)

ATOYAN, K.M.

Torsional rigidity and strength of a frameless motorbus. Avt.prom. no.2:14-17 F '60. (MIRA 13:5)

1. L'vovskiy avtobusnyy zavod.
(Motorbusses--Testing)

ATOYAN, K.M.

The LAZ-697 "Turist" motorbus. Avt.prom. no.3:44 Mr '60.
(MIRA 13:6)

1. L'vovskiy avtobusnyy zavod.
(Motorbuses)

LYALIN, D.V.; ATOYAN, K.M.; YUSHMANOV, A.N.

Passenger cars and motorbuses at the Geneva Automobile Exhibition in 1960. Avt.prom. no.8:36-43 Ag '60. (MIRA 13:8)

(Geneva--Exhibitions) (Automobiles) (Motorbuses)

ATOYAN, K.M.; KRAKOVETSKIY, M.S.; NAGORNYAK, O.A.; OSEPCHUGOV, V.V., kand.tekhn.nauk; AVSHAROVA, Ye.G., red.izd-va; EL'KIND, V.D., tekhn.red.

[The LAZ-695B "L'viv" motorbus; construction and servicing] Avtobus LAZ-695B "L'viv"; ustroistvo, obsluzhivanie. Pod red. V.V.Osepchugova. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit. lit-ry, 1960. 185 p. (MIRA 13:12)
(Motorbuses)

S/191/60/000/012/012/016
B020/B066

AUTHORS: Atoyan, K. M., Klyagina, T. A.

TITLE: Application of Glass-reinforced Plastics in the Construction of Automobile Bodies

PERIODICAL: Plasticheskiye massy, 1960, No. 12, pp. 41 - 43

TEXT: At the promyshlennaya vystavka (Industrial Exposition) in Moscow in 1958, a "Moskvich" automobile was displayed with a plastic body having a weight of 50 kg, i.e., 27% less than a metal body. The body of the truck ЗИЛ-150 (ZIL-150) is 20% lighter when produced from glass-reinforced plastics. Glass-reinforced plastics are a good material for bodies of sports cars, sidecars of motor scooters, engine casings of motorcycles, trailers, truck cabins, tank cars, and others. The advantages in the use of glass-reinforced plastics for the production of bodies are indicated which are mainly based on a reduction of metal consumption, weight, and cost, on the properties of glass-reinforced plastics, and on the quicker exchangeability and repair of cars. Most common are glass-reinforced plastics on the basis of cold-setting polyester resins. The technology of

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manufacture of large parts made of them was described, for instance, by P. Z. Li. et al., A. A. Peshekhonov, and B. A. Peshekhonov in the periodical "Plasticheskiye massy", No.2, 1959. Since 1957, the konstruktorskiy otdel (Design Department) and the laboratory of the eksperimental'nyy tsekh (Experimental Workshop) of the LAZ (= Leningradskiy avtomobil'nyy zavod = Leningrad Automobile Works) in co-operation with the nauchno-issledovatel'skiy institut plastmass (Scientific Research Institute of Plastics) in Moscow has been doing research work regarding the use of glass-reinforced plastics. At the LAZ, panels from glass-reinforced plastics on the basis of polyester resins (formed under atmospheric pressure and cold-set), resins БФ-2 (BF-2), ТГМ-3 (TGM-3), МГФ-9 (MGF-9), and ТГМФ-11 (TGMF-11) (vacuum-formed and hot-set), the ЭД-5 (ED-5) epoxy resin, and others, were produced and tested. Fig.1 shows a general view of the ЛАЗ-695 (LAZ-695) motorbus with plastic body, Fig.2 the fastening of the bonnet made of glass-reinforced plastics on the bus body, Fig.3 the inner panel of the upper air seal made of glass-reinforced plastics, and Fig.4 a seat of glass-reinforced plastics. Output and advantages, as well as prospects of the manufacture of such vehicles are dealt with. There are 4 figures.

ATOYAN, K.M.

Hungarian motorbuses. Avt.prom. no.12:39-41 D '60. (MIRA 13:12)
(Hungary—Motorbuses)

ATOYAN, K. M.

Cand Tech Sci - (diss) "Torsion of bus with supporting basis as caused by road unevenness." L'vov, 1961. 19 pp with diagrams; (Ministry of Higher and Specialist Secondary Education Ukrainian SSR, L'vov Polytechhic Inst); 150 copies; price not given; (KL, 5-61 sup, 187)

ATOYAN, K.M.

The LAZ-698 "Karpaty" motorbus. Biul. tekh.-ekon. inform. no. 4:73-74 '61. (MIRA 14:5)

(Motorbuses)

ATOYAN, K.; KAMINSKIY, Ya.

Electric drive for speedometers of the LAZ motorbuses. Avt.transp. 39 no.9:42-44 S '61. (MIRA 14:10)

1. Glavnyy konstruktor L'vovskogo avtobusnogo zavoda (for Atoyan).
2. Vedushchiy konstruktor L'vovskogo avtobusnogo zavoda (for Kaminskiy).

(Motorbuses--Electric equipment)

ATOYAN, K.M.

Modernized LAZ motorbuses. Za rul. 20 no.1:11-13 Ja '62.
(MIRA 15:2)

1. Glavnyy konstruktor L'vovskogo avtobusnogo zavoda.
(Lvov--Motorbuses)

ATOYAN, K.M.

The "Ukraine" motorbuses. Avt.prom. 28 no.4:42-44 Ap '62.
(MIRA 15:4)

1. L'vovskiy avtobusnyy zavod.
(Motorbuses)

ATOYAN, K.M.; KAMINSKIY, Ya.N.

Electropneumatic drive for door-control equipment of the LAZ-695B urban bus. Avt.prom. 28 no.8:27-28 Ag '62. (MIRA 16:3)

1. L'vovskiy avtobusnyy zavod.
(Motorbuses)

TUROK, A.I., inzh.; ANISIMOV, B.N., inzh.; ATOYAN, K.M., inzh., red.
ARTYUKHIN, V.A., red.izd-va; EL'KIND, V.D., tekhn. red.

[Catalog of spare parts for the LAZ-695B "L'viv" motorbus]
Katalog zapasnykh chastei avtobusa LAZ-695B "L'viv." Moskva, Mashgiz, 1963. 259 p. (MIRA 16:5)

1. L'vovskiy avtobusnyy zavod.
(Motorbuses--Catalogs)

ATOYAN, Karp Mironovich, kand. tekhn. nauk; NAGORNYAK, Georgiy Andreyevich, inzh.; GRINBERG, P.I., red.

[Operation of the LAZ motorbuses] Ekspluatatsiia avtobusov LAZ. Moskva, Izd-vo "Transport," 1964. 109 p.
(MIRA 17:4)

ATOYAN, K.M., kand.tekhn.nauk; SHKAPYAK, G.A.

Economic expediency of the reduction of motorbus weight. Avt.prom. 30 no.2:23-24 F '64. (MIRA 17:4)

1. L'vovskiy avtobusnyy zavod.

ATOYAN, K.M., kand. tekhn. nauk; KAMINSKIY, Ya.N.

Radio equipment of urban conductorless motorbuses. Avt. prom. 30 no.6:39 Je '64. (MIRA 17:12)

1. L'vovskiy avtobusnyy zavod.

ATOYAN, K.M., kand. tekhn. nauk; KAMINSKIY, Ya.N.

Characteristics of electric equipment for interurban and tourist buses. Avt. prom. 31 no.1:35-37 Ja '64.
(MIRA 18:3)

1. L'vovskiy avtobusnyy zavod.

ATOYAN, K.M., kand. tekhn. nauk; GENBOM, B.B., kand. tekhn. nauk; ERCBOT, Yu.I., kand. tekhn. nauk; TOPOL'NIK, V.D.; MAGOMYAK, G.A.; NIKITIN, N.N.; RYABOV, A.V.

Power consumption for driving auxiliary units and its effect on the traction and speed characteristics of the LAZ motorbuses. Avt. prom. 31 no.3:30-32 Mr '65. (MIRA 18:7)

1. L'vovskiy politekhnicheskiy institut i L'vovskiy avtobusnyy zavod.

TURUK, A.I., inzh.; ANISIMOV, B.N.; NAGORNYAK, G.A.; ATOYAN, K.M., kand. tekhn. nauk, red.

[Catalog of spare parts for the LAZ-695E "L'viv" and LAZ-697E "Turist" motorbuses] Katalog zapasnykh chastei avtobusov LAZ-695E "L'viv" i LAZ-697E "Turist." Moskva, Mashinostroenie, 1965. 319 p. (MIRA 18:5)

1. L'vovskiy avtobusnyy zavod. 2. Konstruktorsko-eksperimental'nyy otdel L'vovskogo avtobusnogo zavoda (for Turuk, Anisimov, Nagornyak).

ATOYAN, Karp Mironovich, kand. tekhn. nauk; KAMINSKIY, Yakov Noyevich, inzh.; BOROVSKIKH, Yu.I., red.

[Electrical equipment of the LAZ motorbuses] Elektrooborudovanie avtobusov LAZ. Moskva, Transport, 1965. 95 p. (MIRA 18:4)

ATOYAN, K.M., kand.tekhn.nauk; GENBOM, B.B., kand.tekhn.nauk; DROBOT, Yu.I., kand.tekhn.nauk; BRAZ, A.S.; NAGORNYAK, G.A.

Design and efficiency of the engine brake of the LAZ motorbuses with carburetor V-engines. Avt.prom. 31 no.4:8-11 Ap '65. (MIRA 18:5)

1. L'vovskiy politekhnicheskiy institut i L'vovskiy avtobusnyy zavod.

ATOYAN, K., kand. tekhn. nauk

Motorbuses manufactured at the Lvov Plant in 1965. Avt. transp. 43 no.9:36-38 S '65. (MIRA 18:9)

1. Glavnyy konstruktor L'vovskogo avtobusnogo zavoda.

L 01088-67 DJ
ACC NR: AP6026312 (A) SOURCE CODE: UR/0113/66/000/005/0029/0031

AUTHOR: Genbom, B. B. (Candidate of technical sciences); Kobylyanskiy, V. N.; Kizman, A. M.; Gudz, G. S.; Ryabov, A. V.; Gomma, E. F.; Starinskiy, A. D.; Atoyan, K. M. (Candidate of technical sciences)

ORG: L'vov Polytechnical Institute (L'vovskiy politekhnicheskiy institut); L'vov Bus Plant (L'vovskiy avtobusnyy zavod)

TITLE: Experimental investigation of the power capacity of brake mechanisms

SOURCE: Avtomobil'naya promyshlennost', no. 5, 1966, 29-31

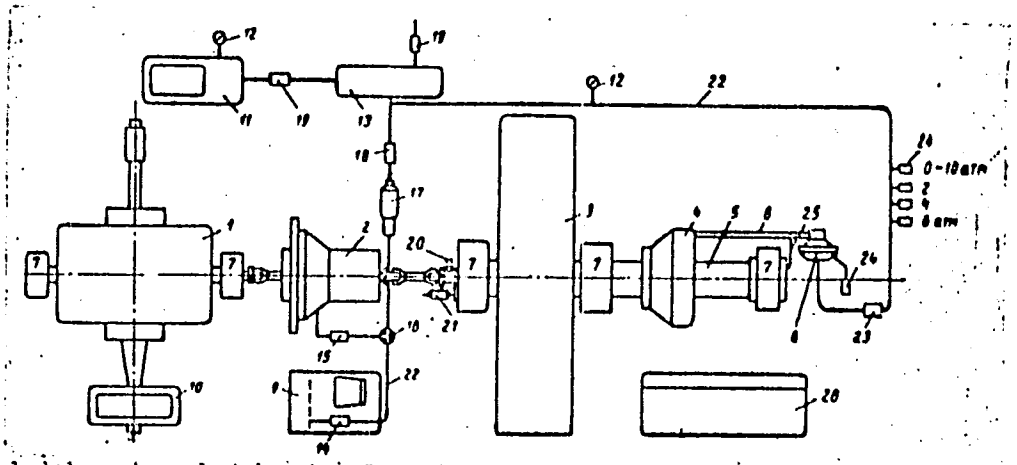
TOPIC TAGS: vehicle braking system, test stand, vehicle component

ABSTRACT: The authors describe a combination stand developed at the L'vov Polytechnical Institute to be used for both inertial and constant braking tests. A diagram of the installation is shown in the accompanying figure. The principal elements of the stand are: .100 kw electric motor 1; clutch and gearbox 2 mounted on the clutch bracket; flywheel 3 with a moment of inertia of 16 kg·sec^2; brake mechanism 4 with the drum mounted on the flywheel shaft while the disc and shoes are mounted on the clutch shaft 5 which is coaxial with the flywheel shaft. The stand is equipped for measuring the braking moment and the moment on the release shaft, the temperatures of the brake linings and drum, the rotational velocity of the drum, the pressure in the brake chamber and rod travel. Provision is made for programmed control of brake operation. The device may be used for studying the effect of a variety of factors on the power capacity of braking mechanisms. Orig. art. has: 4 figures, 3 tables.

UDC: 629.11.013.001.5

L 01088-67

ACC NR: AP6026312



1--balance-type electric motor; 2--gearbox with clutch; 3--flywheel; 4--brake mechanism; 5--brake shaft; 6--release shaft; 7--support bearings; 8--brake chamber; 9--panel for controlling clutch and gear ratio; 10--VKM-57 weighing device; 11-main receiver; 12--manometer; 13--working receiver; 14--hydraulic cylinder; 15--clutch disconnection cylinder; 16--valve; 17--pneumohydraulic cylinder; 18--GA-13M electric valve; 19--EKR-8 electropneumatic valve; 20--contact breaker; 21--DT-6M tachogenerator; 22--pipeline; 23--EK-49 electropneumatic valve; 24--pressure gauge; 25--rod travel gauge; 26--dohtrol panel.

SUB CODE: 13/ SUBM DATE: None/ ORIG REF: 002

Card 2/2 vlr

ACC NR: AP7004799 (A) SOURCE CODE: UR/0413/67/000/001/0140/0140

INVENTOR: Rakhmanov, N. N.; Atoyan, K. M.; Akopyan, R. A.; Rossovskiy, V. M.

ORG: None

TITLE: A hydraulic spring for a pneumohydraulic elastic element in vehicle suspension systems. Class 63, No. 190223

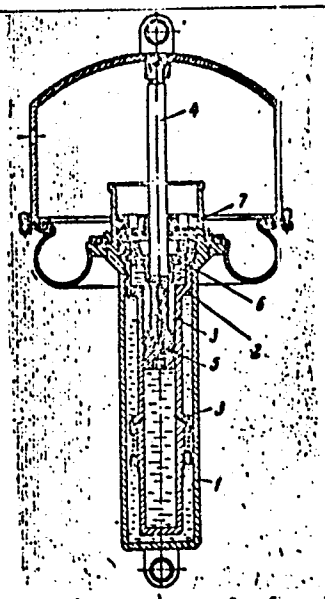
SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 1, 1967, 140

TOPIC TAGS: vehicle suspension system, spring, hydraulic device

ABSTRACT: This Author's Certificate introduces a hydraulic spring for a pneumohydraulic elastic element in a vehicle suspension system. The unit contains a casing which holds a liquid-filled cylinder with radial openings connecting the internal cavity of the cylinder with the cavity between the cylinder and the casing. Located inside the cylinder is a rod with a plunger which divides the cylinder into two working chambers connected by radial and axial passages in the plunger. Mounted in the axial passage is a check valve and on top of the cylinder is a cap with an opening for admission of the rod. In order to achieve optimum characteristics on the compression stroke, the spring is equipped with a floating piston which has an opening for passage of the rod and is mounted in the cylindrical section of the casing. The cavity between the piston and the cap is connected through a channel to the cavity between the cylinder and the casing.

Card 1/2 UDC: 629.11.012.82

ACC NR: AP7004799



1--casing; 2--cylinder; 3--radial openings; 4--rod; 5--check valve; 6--cap; 7--floating piston

SUB CODE: 13, 15/ SUBM DATE: 14Sep64

Card 2/2

RADKEVICH, P.Ye., prof.; DERIPASKO, P.G.; DMITRIYEVSKIY, L.M.; DAVYDOV, G.D.; SAAKYAN, V.Sh.; FINK, Ye.G.; ATOYAN, P.G., vetvrach.

Poisoning of cattle by corn silage contaminated by pathogenic fungi. Veterinariia 35 no.4:79-81 Ap '58. (MIRA 11:5)

1. Vsesoyuznyy institut eksperimental'noy veterinarii (for Radkevich). 2. Nachal'nik vetotdela (for Deripasko). 3. Starshiy vetvrach vetotdela Groznenskogo oblsel'khozupravleniya (for Dmitriyevskiy). 4. Direktor oblvetbaklaboratorii (for Davydov). 5. Zaveduyushchiy khimicheskim otdelom (for Saakyan). 6. Glavnyy vetvrach Groznenskogo rayona (for Fink). 7. Kolkhoz imeni 1-go Maya (for Atoyan).
(Cattle--Diseases and pests)

ATOYAN, S. M. Engineer

Mechanized laying of asphalt-concrete on main highways. Mekh.trud.rab. 6 no. 5, 1952.

SO: MLRA August, 1952

ATOYAN, S.M., inzhener; BAGDASAROV, S.M., redaktor; PETROVSKAYA, Ye., tekhnicheskiy redaktor

[Use of shell limestone in asphalt concrete surfaces] Primenenie rakushechnykh izvestniakov v asfal'tobetonnykh pokrytiiakh. Moskva, Izd-vo Ministerstva kommunal'nogo khoziaistva RSFSR, 1953. 110 p. [Microfilm] (MLRA 7:10)
(Limestone) (Roads, Concrete)

ATOYAN, V., inzh.; MINASYAN, Sh., inzh.

Comparison evaluation of stabilization methods against the oxidation of transformator oils. Prom.Arm. 5 no.2:29-32 F '62.
(MIRA 15:2)

1. Armyanskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta elektromekhaniki.
(Armenia—Insulating oils)

S/081/62/000/018/050/059
B168/B186

AUTHORS: Atoyan, V. V., Chitinyan, Yu. S.

TITLE: Viniplast as material for 6-10 kv insulators

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 18, 1962, 508, abstract 18P124 (Sb. nauchn. tr. Yerevansk. politekhn. in-t. Yerevan, 1960, 325 - 334)

TEXT: The authors investigated the properties of Viniplast (dielectric losses, corona resistance, atmospheric resistance, resistance to thermal breakdown) as material for 6-10 kv insulators. It was found that Viniplast is not suitable for such insulators owing to its corona instability, its low thermal stability and its susceptibility to thermal breakdown at ambient temperature of 50 - 60°C. [Abstracter's note: Complete translation.]

Card 1/1

KUPREVICH, V.F., glavnyy red.; ATRAKHOVICH, K.K., red.; LUKASHOV, K.I. [Lukashou, K.I.], red.; YARMOLENKO, M.F. [Iarmolenka, M.F.], red.; NESTSYAROVICH, M.D., red.; GLEBKO, P.P. [Hlebka, P.P.], red.; SUDNIK, M.R., red.; PERTSOV, U.M. [Pertsau, U.M.], red.; VINOKUROV, F.P. [Vinakurau, F.P.], red.; BYAL'KEVICH, P.I., red.; VALAKHANOVICH, I., tekhn.red.

[Science in White Russia during 40 years] Navuka u Belaruskai SSSR za 40 hod. Minsk, Vyd-va Akad.navuk BSSR, 1958. 475 p.
(MIRA 12:3)

1. Akademiya navuk BSSR, Minsk.
(White Russia--Science)

DOVGYALLO, G.Kh., prof.; RAKITYANSKAYA, A.A., kand.med.nauk; ATRAKHOVICH, Z.N.

Myelosan treatment of chronic myeleukosis. Zdrav. Belor. 5 no.11: 9-11 N '59. (MIRA 13:3)

1. Kafedra gospital'noy terapii Moskovskogo gosudarstvennogo meditsinskogo instituta (MGMI) (zaveduyushchiy kafedroy - professor G.Kh. Dovgyallo) i Belorusskiy nauchno-issledovatel'skiy institut perelivaniya krovi (direktor S.S. Kharamonenko).

(LEUKEMIA) (METHANESULFONIC ACID)

RAKITYANSKAYA, A. A., kand. med. nauk; ATRAKHOVICH, Z. N.

Protein composition of the blood serum in patients with leukemias. Terap. arkh. no.7:91-95 '61. (MIRA 15:2)

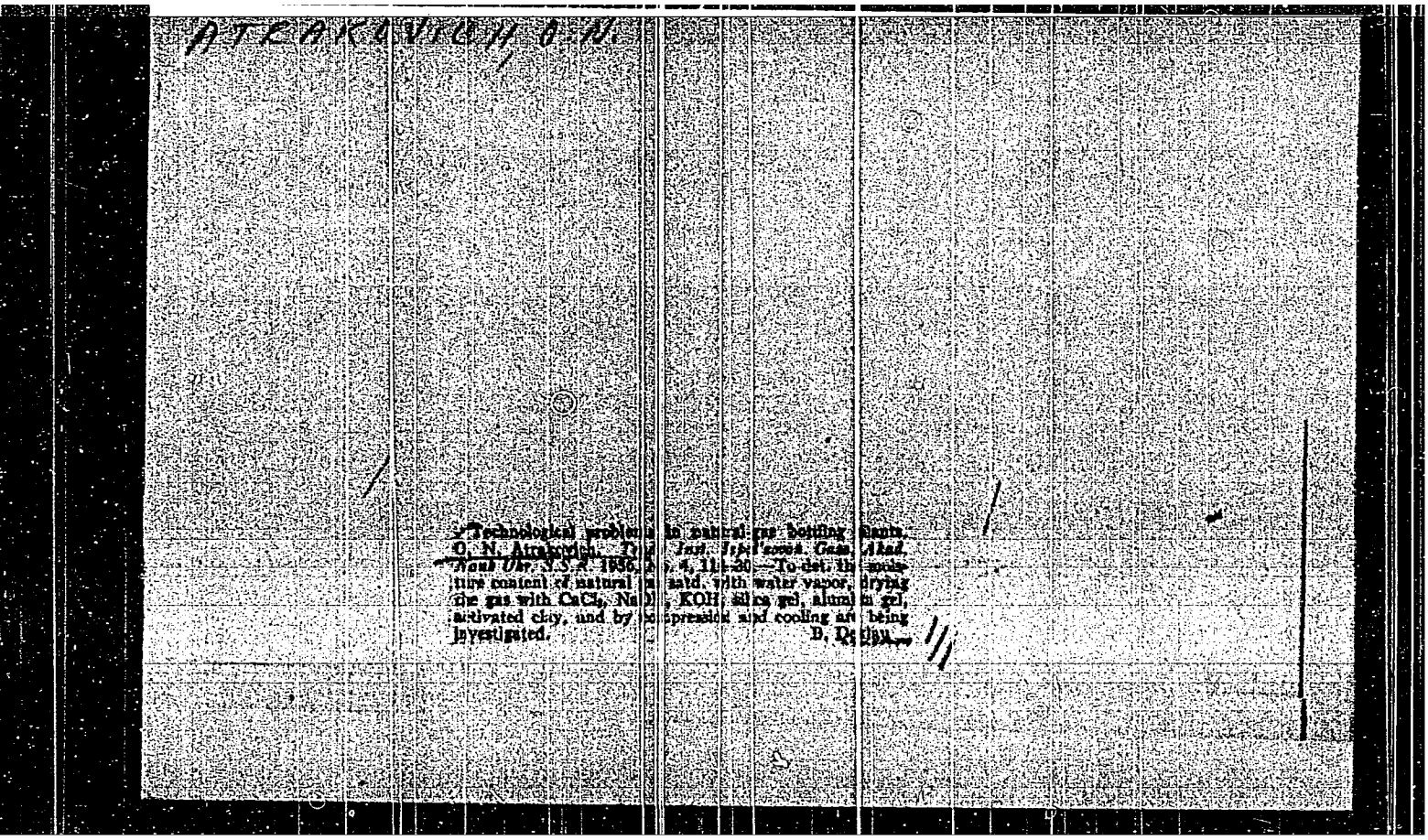
1. Iz Belorusskogo nauchno-issledovatel'skogo instituta pereli-vaniya krovi (dir. S. S. Kharamonenko) i kafedry gospital'noy terapii (zav. - prof. G. Kh. Dovgyalo) Minskogo meditsinskogo instituta.

(LEUKEMIA) (BLOOD PROTEINS)

GURINOVICH, T.A.; ATRAKHOVICH, Z.N.

Importance of the hyaluronidase system - hyaluronic acid in the permeability factor of the vascular wall in hemorrhagic diatheses. Zdrav.Bel. 8 no.12:22-24 D '62. (MIRA 16:1)

1. Belorusskiy nauchno-issledovatel'skiy institut perelivaniya krovi (dir. S.S.Kharamonenko) i kafedra gospital'noy terapii.
(HYALURONIDASE) (HEMOPHILIA)



ATRAKCHI O.N.

Technological problems in natural gas bottling plants.
O. N. Atrakchi. Trudy Inst. Tyumenneft. Gaz. Akad. Nauk Uzb. S.S.R. 1956, No. 4, 111-20.—To det. the moisture content of natural gas said, with water vapor, drying the gas with $CaCl_2$, NaOH, KOH, silica gel, alumina gel, activated clay, and by compression and cooling are being investigated.
D. Dzhaparidze

ATRAKOVICH, O.N.

Analysis of Ukrainian industrial and natural gases used by cities and for automotive transportation. Trudy Inst.isp. gaza AN URSR no.6:96-111 '58. (MIRA 12:8)
(Ukraine--Gases--Analysis)

ATRAKOVICH, O.N.

Analysis of technical and operational indices of gas bottling stations. Gaz.prom. 4 no.8:19-26 Ag '59. (MIRA 12:11)
(Liquefied petroleum gas)

ATRAKOVICH, O.N.

Balanced concentrations of water, compressor oil, and diethylene glycol vapors in compressed natural and commercial gases. Gaz. prom. 5 no.5:7-11 My '60. (MIRA 14:11)
(Gases, Compressed--Analysis)

ATRAKOVICH, O.N.

Equilibrium of water in light paraffin hydrocarbons in the vapor phase at high pressures. Trudy Inst.isp.gaza AN USSR 9:13-20 '61. (MIRA 15:9)
(Paraffins) (Water)

GRACHEV, A.V.; ATRAN, S.L., red.; FEDOROV, B.M., red. izd-va; BACHURINA, A.M., tekhn. red.

[Present-day methods of artificially drying wood; "Lumber industry and forestry" pavilion] Sovremennye sposoby iskusstvennoi sushki drevesiny; pavil'on "Lesnaia promyshlennost' i lesnoe khoziaistvo." [Moskva] Goslesbumizdat [1957] 6 p. (MIRA 11:11)

1. Moscow. Vsesoyuznaya promyshlennaya vystavka.
(Lumber drying)

L 06321-67 EWP(j)/EWT(m) IJP(c) RM/DJ

ACC NR: AR6004034 SOURCE CODE: UR/0277/65/000/009/0042/0043

AUTHORS: Spitsyn, N. A.; Atras, S. O.; Tazhibayev, S. D.

36
13

TITLE: Ball bearings which work without lubrication at higher speeds

SOURCE: Ref. zh. Mashinostroitel'nyye materialy, konstruktsii i raschet detaley mashin. Gidroprivod, Abs. 9.48.357

REF SOURCE: Tr. Vses. n.-i. konstrukt.-tekhnol. in-ta podshipnik, prom-sti, v. 3(39), 1964, 66-74

TOPIC TAGS: self lubricating bearing, ball bearing, solid lubricant, teflon

ABSTRACT: Based on the work of Soviet and foreign authors developing self-lubricating ball bearings and on the experimental work performed at MIEM, the following conclusions are reached. Ball bearings with massive separators made of teflon 4 and a special lubricant are acceptable for unlubricated operation under atmospheric conditions at normal temperatures. They provide a useful life of 100 and more hours at a speed parameter of $\frac{d+D}{2} n \leq 40\,000$ mm/rev/min. Lubrication is provided by gradual wearing of the separator. Characteristics of a failing unlubricated bearing are increased noise during operation and a rapid rise in operating temperature, measured on the outer rings (by 10-15C or more), which is due to destruction of the

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L 06321-67

ACC NR: AR6004034 O

separator and accumulation of wear products. The operating life of the same bearings in a vacuum (to 10^{-5} mm Hg) decreases by factors of more than 10 because of insufficient heat transfer due to the absence of gas convection in the bearing body and to the influence of vacuum in increasing the friction torque and changing the structural composition of the separator material. 7 illustrations. Bibliography of 5 titles. /Translation of abstract/

SUB CODE: 13

Card 2/2 mfe

15-1957-10-14145

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 10, p 124 (USSR)

AUTHORS: Starik, I. Ye., Starik, F. Ye., Atrashenkok, L. Ya., Kostyrev, G. B., Kosyakov, V. N., Krylov, A. Ya.

TITLE: The Influence of Different Elements on the Fluorescence of Uranium in Sodium Fluoride (Vliyaniye razlichnykh elementov na lyuminestsentsiyu urana vo ftoristom natrii)

PERIODICAL: Tr. Radiyev. in-ta AN SSSR, 1956, vol 7, pp 114-125

ABSTRACT: The principal merits of the fluorescent method of determining U are its simplicity, speed, and high sensitivity. It is possible to determine up to 1 x 10^{-10} grams of U in the bead. The precision of the determination is generally close to 20%. In any method using different activators, measuring devices, and sources of ultraviolet light, impurities exert considerable influence by altering the fluorescence of the Uranium or by extinguishing it. The influence of 45 elements on the fluorescence of U in NaF was studied. The investigations were made on

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The Influence of Different Elements on the Fluorescence of Uranium in Sodium Fluoride

beads of NaF weighing 5 mg and containing 5 x 10^{-9} g of U. The elements were introduced into the bead either by mixing with NaF or with the corresponding salt, in different proportions, in case of soluble compounds, by dipping the bead of NaF, which contains a definite quantity of U, into the quenching salt solution. When using the dipping method, it is necessary to know the precise weight of the bead, inasmuch as beads of different weights take up different amounts of solution. The intensity of fluorescence is strongly influenced by the surface of the bead, which is a function of the quality of fusion, of the cooling of the bead, and also of the quantity of NaF. The elements investigated may be divided approximately into five groups, according to their influence on the fluorescence of uranium. 1) Na, K, Rb, Zn, Ti, S, Mo, W, Cl, Br, and J show essentially no effect, even in relatively large quantities. 2) Be, Ce, La, Th, P, Ni, Fe, Mn, Cu, Sr, Cd, Mg, B, Se, Cs, Zn, Ba, Li, and Si extinguish fluorescence when present in the bead in large quantities (on the order of several per cent of the weight of the bead). 3)

15-1957-10-14145

The Influence of Different Elements on the Fluorescence of Uranium in Sodium Fluoride

Ag, Hg, Pb, Bi, Cr, and Co sharply extinguish the fluorescence when present in quantities several times ten per cent of the weight of the bead. 4) Ca, Al, Tl, and Sn strengthen the fluorescence or produce changes in the color. When the relative concentration of U to Ca is 1:10,000, U fluoresces green. With higher Ca content, the intensity of fluorescence begins to increase and then decrease. The fluorescent color changes from yellow-green to blue. When the concentration of Al is $5 \cdot 10^{-5}$ g in the bead, it does not fuse to transparency. Tl and Sn strengthen the fluorescence when their concentration in the bead is $1 \cdot 10^{-5}$-$5 \cdot 10^{-5}$ g. 5) Ce, V, Nb, Ta, and Sb produce distinctive fluorescence in NaF. Ce and V give a red color, Sb a medium blue. The fluorescence of Nb and Ta is very similar to that for uranium. Some elements have a two-fold effect, depending on their concentration: with low concentrations they increase the fluorescence; with high they extinguish it.

Card 3/3

A. A. Rozbianskaya

ATKASHENOK, L. YA.

8
4E2C

Luminescence method of uranium determination without separation of quenchers. L. Ya. Atkashenok, L. I. Voloshenko, and A. Ya. Krylov. *Trudy Radievogo Inst. im. V. G. Khlopina, Khim. i Geokhim.* 7, 120-30(1956); cf. *C.A.* 51, 17181f. Northup, *C.A.* 46, 29i; preceding abstr.—Various elements have been investigated with respect to their quenching action on the luminescence of U in NaF. The extent of quenching is approx. additive if elements which are present in small concns. exhibit the same type of quenching, e.g., Fe-Ca, Al-Ca, and Fe-Al, while some diminished quenching takes place if Fe and Co are jointly present. More complicated regularities are observed if the elements react in the NaF bead. For instance, silicates of Fe, Al, and Ca have a greater quenching capacity than the sum of the effects of the components. This behavior can be explained as a result of the formation of compds. or solid solns. during melting, and the consequent uniform distribution of the elements and light emission; while these elements form coagulated nonmelting oxides in the absence of Si. Therefore, the summation of the quenching effects can only be approx. calcd. in the case of polycomponent compds., and a separate investigation is required in every specific case. As a result of the investigation of the influence of various elements and their combinations on the luminescence of U in NaF, it was found that interferences are dependent on the concn. of these elements to that of U. Large concns. of U (above 0.001% by wt.) can be detd. in many cases by the luminescence method without previous sepn. of quenching elements, as the majority of elements does not show an

ATRASHENOK, L. YA.

"Determination of Uranium in Rocks and Minerals by the Luminescence Method," by I. Ye. Starik, L. Ya. Atrashenok, and A. Ya. Krylov, Radium Institute imeni V. G. Khlopin, Academy of Sciences USSR, Leningrad, Geokhimiya, No 8, 1956, pp 39-46

To investigate the possibility of the determination of uranium by the luminescence method without preliminary chemical separation of this element, the effect exerted on the luminescence of uranium contained in NaF beads by various elements was studied. Furthermore the effect of combinations of two elements present simultaneously was subjected to investigation. On the basis of the effect exerted on uranium luminescence, all elements investigated were subdivided into five groups:

1. Elements which have no effect or only an insignificant effect even when present in high concentrations: Li, Na, K, Rb, Cs, Zn, Ti, S, Mo, W, Cl, Br, and I.

2. Elements which exert an effect when present in a quantity of 1×10^{-6} -1×10^{-4} grams in a bead weighing 5 mg: Cu, Be, Mg, Ca, Sr, Cd, Ba, B, Si, Zr, Th, P, and Se.

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3. Elements which have the strongest effect on luminescence, causing extinction of it when present in the bead in a quantity of 5×10^{-9} -5×10^{-7} grams: Ag, Hg, La, Pb, Bi, V, Cr, Mn, Fe, Co, Ni, and Ce.

4. Elements which luminesce themselves under the conditions investigated: Ce, V, Nb, Ta, Sb.

5. Elements the presence of which in some concentrations creates the impression that the luminescence has been increased: Al, Tl, and Sn.

On the basis of the results reported, the conclusion has been reached that the quantitative determination of uranium in rocks and minerals can be carried out by the luminescence method without chemical separation of this element if the uranium concentration is high enough (in the majority of cases 1×10^{-5} grams of U per gram). The quantitative relationships between NaF and some other commonly used fluxes at which the intensity of the uranium luminescence remains unchanged have been determined. The extent to which various minerals and rocks must be diluted with the flux for accurate determination of uranium by the luminescence method has been established. (U)

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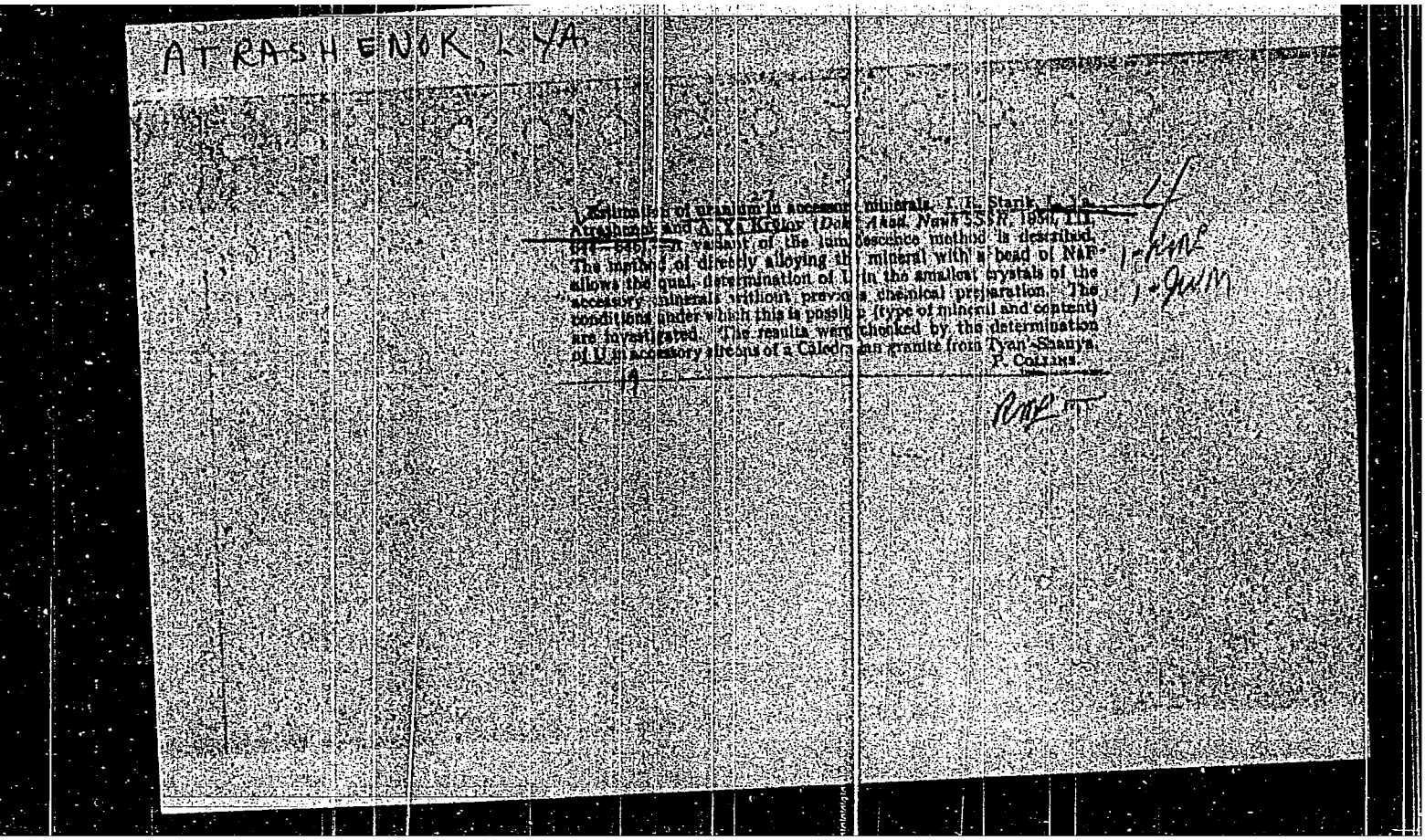

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Determination of uranium in accessory minerals. I. D. Stanik and L. Ya. Atrashenok (*Doklady Akad. Nauk SSSR*, 1956, 111, 849—852). A variant of the luminescence method is described. The method of directly alloying the mineral with a bead of NaF allows the qual. determination of U in the smallest crystals of the accessory minerals without previous chemical preparation. The conditions under which this is possible (type of mineral and content) are investigated. The results were checked by the determination of U in accessory minerals of a Caledonian granite from Tyan'-Shan'a. P. Coutrins.

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TITLE: On the Forms of the Occurrence of Uranium in Granites (O formakh nakhozhdeniya urana v granitakh)

PERIODICAL: Geokhimiya, 1959, Nr 3, pp 246-251 (USSR)

ABSTRACT: For the purpose of obtaining data concerning the form in which uranium occurs, samples of rocks and minerals were leached out for five days with a 0.2 N solution of Na_2CO_3. Five groups of metamorphosed granite from the Tyan'-Shan' (Table 1) were investigated. Table 2 shows the results obtained with individual rock-forming and accessorial minerals. Minerals from pegmatite seams which also contain uraninite show individual behavior (Table 3). The following is, on the whole, found: 1. monazite, zirconium, sphene, fluorite, and orphite during leaching-out give off only a small part of their uranium. 2. Quartz and feldspar give off a larger part of their uranium content only if also uraninite occurs in the rock. 3. The largest quantity of uranium is leached out of magnetite. A second leaching-out in all cases resulted in considerably lower values. In conclusion it may be said that uranium occurs in granites as an

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