"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

1/2 023 UNCLASSIFIED PROCESSING DATE--16OCT70

TITLE--MECHANISM OF RADIOSTRONTIUM INTAKE IN POTATO TUBERS -U-

AUTHOR-(02)-MELNIKOVA, M.K., BARANOVA, Z.A.

COUNTRY OF INFO--USSR

SOURCE--AEC-TR-7128, PP 127-42

DATE PUBLISHED--------70

SUBJECT AREAS--NUCLEAR SCIENCE AND TECHNOLOGY, BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--STRONTIUM ISOTOPE, RADIATION PLANT EFFECT, PLANT CHEMISTRY, DIFFUSION COEFFICIENT, TEMPERATURE DEPENDENCE, CHEMICAL ABSORPTION

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1983/1780 STEP NO--UR/0000/70/000/000/0000/0000

CIRC ACCESSION NO--AT0054618

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

2/2 023 UNCLASSIFIED PROCESSING DATE--16OCT70

CIRC ACCESSION NO--AT0054618

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. INCREASING THE TEMPERATURE FROM 1 TO 35DEGREESC CAUSED NO SIGNIGICANT INTENSIFICATION OF THE PROCESS OF ABSORPTION OF PRIME90 SR BY POTATO TUBERS. DATA ON TEMPERATURE COEFFICIENTS OF THE REACTION OF STRONTIUM ABSORPTION BY THE TUBERS DEMONSTRATED THE NONMETABOLIC NATURE OF THE PROCESS. THE DIFFUSION NATURE OF THE PROCESS WAS INDICATED BY THE DIFFUSION COEFFICIENTS CALCULATED FOR STRONTIUM AND CALCIUM IN THE TUBER. COMPARISON OF THE DATA OBTAINED UNDER VARIOUS EXPERIMENTAL CONDITIONS WITH RESPECT TO TEMPERATURE COEFFICIENTS MADE IT POSSIBLE TO CONCLUDE THAT THE ABSORPTION OF CALCIUM AND STRONTIUM BY POTATO TUBERS IS A PHYSICAL PROCESS, DIFFUSION, AND IS NOT METABOLIC IN NATURE. FACILITY: GOSUDARSTVENNYI KOMITET PO ISPOL'ZOVANIYU ATOMNOI ENERGII SSSR, MOSCOW.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

1/2 023 UNCLASSIFIED PROCESSING DATE--20NOV7C
TITLE--ELECTRODEPOSITION OF IRON ALLOYS -U-

AUTHOR-(04)-SIDELNIKOV, V.K., YAGUBETS, A.N., BONDAR, V.V., MELNIKOVA, M.M.
COUNTRY OF INFO--USSR

SOURCE--U.S.S.R. 264,099
REFERENCE--OTKRYTIYA, IZOBRET., PROM. OBRAZTSY, TOVARNYE ZNAKI 1970,
DATE PUBLISHED--10FEB70

SUBJECT AREAS--MATERIALS, CHEMISTRY

TOPIC TAGS--CHEMICAL PATENT, ELECTROLYTE, METAL DEPOSITION, IRON ALLOY, COBALT IRON ALLOY, PHOSPHORUS ALLOY, ELECTRODEPOSITION

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAME--3004/1428 STEP NO--UR/0482/70/000/000/0099/0099

CIRC ACCESSION NO--AA0132093

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

CIRC ACCESSION NO--AA0132093

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. AN FE,CO,P ALLOY IS DEPOSITED AT 20-5 A-DM PRIME2, PH 0.4-0.3, AND 50-60DEGREES FROM AN ELECTROLYTE CONTG. FECL SUB2 450-600, NA HYPOPHOSPHITE 10-15, AND COCL SUB2 5-15 G-L. FACILITY: INSTITUT PRIKLADNOY FIZIKE AN MOLDAVSKOY SSR.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

MEL'NIKOVA, N.

Trade

INTERNATIONAL FREIGHT [illegible] AUTOMOTIVE TRANSPORT

[Article by N. Mel'nikova, chief engineer of the Administration's Administration of the Soviet Ministry of Foreign Trade in the Information Sec[illegible]
Council of Ministers Adviser, Committee for Economic Assistance, No 10, 1971, p 50]

Each year sees an improvement in the economic relationships of the CEMA member nations. It is based on full equality, respect of independence and sovereignty, mutual gain, and fraternal mutual aid. Production specialization and cooperation is deepening and mutual trade is expanding. The successful collaboration of the socialist countries is greatly dependent on the organization of shipments.

The effectiveness of foreign trade greatly depends on the means with which transports are equipped, on the rational distribution of freight shipments between the types of transport because transport outlays enter into the cost of exported and imported freight. Transport development is of great significance for the Soviet Union whose industrial enterprises, in manufacturing export products, are often at considerable distance from the markets.

The main mass of freight, within the individual socialist countries and between them, is carried by railroad transports. The CEMA member nations have begun to make wide use of automotive transport in the past few years. Collaboration by the CEMA member nations in the field of automotive transports, and the participation of the Soviet Union in it, continues to expand. Technical and operating requirements for specialized trucks, trailers, semi-trailers, and motor trains for international shipments were developed and approved within the CEMA framework. Technical conditions were approved to design and maintain international motor roads as were recommendations for their maintenance. Suggestions were developed to organize repair and technical maintenance and to provide technical and other assistance to the automotive transport facilities of the CEMA member nations along the main highways used for international shipments.

The Soviet Union already has certain know-how in the organization of international freight shipments by automotive transport. Even in the pre-war period Soviet vehicles were carrying freight between the USSR and the Mongolian People's Republic and, later, between the USSR and China. The

- 13 -

USSR, 5 Dec 1971

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[illegible] freight by automotive transport between the USSR, including Belorussia, and the European socialist countries by highways.

The Belorussian SSR takes an active part in the USSR's economic relationship with socialist countries. This is facilitated by the great concentration in the development of the USSR's national economy, the territorial proximity of the European socialist countries, and the development of the transport network with direct access to common borders.

The Belorussian SSR's export freight suppliers began to use automotive transport primarily to ship food commodities, meat and animal fat, edible fat, confectionery sheese, and other items because automotive transport has a high delivery rate. As compared to railroads, the freight delivery period by automotive transport is reduced 5-6 times in international traffic. For example, [illegible] to deliver freight from Minsk to Poland, the GDR, Czechoslovakia, Hungary, Romania, and Bulgaria whereas it takes 10-17 days to deliver it by railroad.

At the same time, the most freight forwarders currently make available small cargo lots to automotive transport such as spare parts for machines and equipment, electrotechnical items, and radioelectronical items.

The "door-to-door" ability of automotive transport, that is directly from the supplier's warehouse to that of the receiver, helps to avoid a large number of loading-unloading operations and to ensure a better preservation of freight in transit and cuts the possibility to reduce packaging costs by the use of lighter containers or even by not using containers at all. For example, the Minsk motor vehicle plant had a savings of nearly 100,000 rubles in 1970 through the use of lighter containers in which to pack spare parts carried by automotive transport and through reduction in labor costs for container manufacture.

In the Soviet Union, the organization and implementation on commercial bases of international freight shipments has been levied on the Main Ministry of Motor Transport and Highways which can furnish the automotive facilities from the common carrier motor vehicle enterprises of other union republics to carry out these shipments. In particular, the transport facilities of the motor vehicle enterprises subordinated to the Belorussian SSR Ministry of Motor Vehicle Transport are recruited to transport foreign trade freight to the socialist countries of Europe. It should be mentioned that the USSR Ministry of Motor Vehicle Transport gives due attention to the organization of such shipments. The USSR's foreign trade organizations are pressed with the state of shipments, especially in the matter of freight preservation during transit, and manifest interest in the further development of this type of shipment. However, the main mass of export freight from the USSR to the European socialist countries is still carried by railroad transport.

It appears expedient for the CEMA member nations to make maximum use of automotive transport in the shipment of export-import freight. Shifting

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

part of the foreign trade freight from railroad to automotive transport will help reduce the overload on the more important international railroad lines.

In our estimation, we should organize the specialization of motor vehicle enterprise to implement international automotive shipments subordinated to the Belorussian SSR Ministry of Motor Vehicle Transport to ensure the shipment of export freight from different areas of Belorussia and areas of the Soviet Union contiguous to it.

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CSO: 1823-E

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

USSR

UDC 621.316.722.1(088.8)

ISTYUFEYEV, V.A., MEL'NIKOVA, N.N.

"Voltage And Current Regulator"

USSR Author's Certificate No 265968, filed 6 June 68, published 1 July 70 (from RZh--Elektronika i yeye primeneniye, No 1, January 1971, Abstract No 1B469P)

Translation: A circuit is proposed for a voltage and current regulator in which the transition from a regime of current regulation to a regime of voltage regulation is accomplished automatically. In order to assure small inertia during transition from regime to regime, in the regulator a supplementary comparator circuit is used which measures the load current, the signal from which is fed across a semiconductor diode to the input of the comparator circuit of the provoltage regulator, where a signal is fed (also across a semiconductor diode) proportional to the output voltage of the regulator. If the signal proportional to the output voltage is larger than the signal from the output of the comparator circuit of the current regulator, then the semiconductor diode of the current regulator cuts off, and the comparator circuit of the voltage regulator controls the common regulating element of the regulator which assures voltage regulation.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

USSR

ISTYUFEYEV, V. A., MEL'NIKOVA, N. N., USSR Author's Certificate No 265968
(from RZh--Elektronika i yeye primeneniye, No 1, Jan 1971, Abstract No 1B469P)

If the signal proportional to the current is larger than the voltage signal then the semiconductor diode of the voltage regulator is blocked and the comparator circuit of the voltage regulator controlling the regulating element maintains a constant load current for the regulator. 1 ill. 8. D.

2/2

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

USSR

15

BUDAGOV, YU. A., VINOGRADOV, V. B., VOLOD'KO, A. G., DZHELEPOV, V. P., KIRILLOV-UGRYUMOV, V. G., KLADNITSKIY, V. S., KUZNETSOV, A. A., LOMAKIN, YU. F., NEL'NIKOVA, N. N., PONOSOV, A. K., FLYAGIN, V. B., SHLYAPNIKOV, P. V., MARTINSKA, G. (1), BOLDEA, V. (2), MIKHUL, A. (2), MUMUYANU, D. (2), PONTA, T. (2), FELEA, S. (2), and CHADRAA, B. (3), Joint Institute of Nuclear Research; (1) University imeni P. I. Shafarik, Koshitse, Czechoslovak SSR; (2) Institute of Atomic Physics, Bucharest, Romania; (3) Physics Institute of the Academy of Sciences Mongolian People's Republic, Ulan-Bator

"Study of the Mass Spectrum of a ΛK-System in $\pi^- p$-Interactions at 4 and 5.1 Gev/c"

Moscow, Pis'ma v Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki, Vol. 11, No. 1, 5 Jan 70, pp 31-35

Abstract: The results of a study of the spectrum of the effective masses of a ΛK-system are reported. The spectrum was obtained in investigating $\pi^- p$-interactions in a 24-liter and a 1-meter propane bubble chamber irradiated in π-meson beams of the proton synchrotron of the Joint Institute of Nuclear Research with pulses of 4 and 5.1 Gev/c, respectively. An investigation of the structure of the effective mass spectrum of a ΛK-system was of interest from the viewpoint of observing new

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

USSR

BUDAGOV, YU. A., et al, Pis'ma v Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki, Vol. 11, No. 1, 5 Jan 70, pp 31-35

resonances with zero strangeness and the decays of different isobars via the channel $N^* \to \Lambda + K$, to determine the relative probabilities of these decays. Approximately 230,000 photographs were analyzed for each bubble chamber. The effective mass spectra of ΛK^0 combinations for events in which the decays of a Λ-hyperon and a K^0-meson were simultaneously recorded in the chamber are graphed. The graphs show a considerable excess in the number of events above the background in the mass region 1.61-1.96 Gev/c^2. It is shown that this anomaly is not associated with the reflection of known resonances Y^* (1385) and K^* (890) in the ΛK^0-spectrum. The total excess in the number of events over the background in the mass interval 1.61-1.96 Gev/c^2 was 114 ± 13. The experimental data verify the existence of two resonances with masses about 1685 and 1935 Mev/c^2 and widths of the order of 150 Mev/c^2. It is concluded that the anomaly observed in the effective mass spectrum of ΛK can be explained only by the decay of the isobar S_{11} (1710), P_{11} (1750) via the channel $N^* \to \Lambda + K$ or by the existence of a new resonance with mass about 1685 Mev/c^2, as the data of R. Erbe et al indicate.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

1/2 021 UNCLASSIFIED PROCESSING DATE--04DEC70

TITLE--ANALYSIS OF NORMAL VIBRATIONS OF THE ETHYLXANTHATE ION AND IR SPECTRA OF METAL ETHYLXANTHATES -U-

AUTHOR-(02)-MELNIKOVA, N.V., PILIPENKO, A.T.

COUNTRY OF INFO--USSR

SOURCE--ZH. NEORG. KHIM. 1970, 15(5), 1186-91

DATE PUBLISHED--------70

SUBJECT AREAS--CHEMISTRY

TOPIC TAGS--IR SPECTRUM, ORGANIC SULFUR COMPOUND, COORDINATION CHEMISTRY, METAL COMPLEX COMPOUND, XANTHIC ACID, COPPER COMPLEX, ZINC COMPLEX, LEAD COMPOUND, MERCURY COMPLEX, CADMIUM COMPLEX

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3008/0933 STEP NO--UR/0078/70/015/005/1186/1191

CIRC ACCESSION NO--AP0137961

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

UNCLASSIFIED PROCESSING DATE--04DEC70

2/2 021

CIRC ACCESSION NO--AP0137961

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. FREQUENCIES OF NORMAL VIBRATIONS AND MATRIX COMPONENTS OF FORCE CONSTS. OF THE ETHYLXANTHATE ION, ET C(S)S PRIME NEGATIVE, ARE TABULATED. THE RESONANCE FORM RO :CSS PRIME2 NEGATIVE CONTRIBUTES TO THE STRUCTURE OF THIS ANION MUCH LESS THAN THE ANALOGOUS FORM R SUB2 N PRIME POSITIVE:CSS PRIME2 NEGATIVE CONTRIBUTES TO THE STRUCTURE OF ET SUB2 NC(S)S PRIME NEGATIVE. ON COORDINATION TO METALS, THE INTENSITY OF VC,O OF ETOC(S)S PRIME NEGATIVE DECREASES, MORE PROPONOUNCED FOR COORDINATION TO CU,ZN, PB, HG, CO, THAN TO NI, PD, PT, OR CO. THE RESULTS IMPLY DELOCALIZATION AND PRESENCE OF EQUIV. M,S BONDS IN THE LATTER METAL COMPLEXES. FACILITY: KIEV. GOS. UNIV. IM. SHEVCHENKO, KIEV, USSR.

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APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

UNCLASSIFIED PROCESSING DATE--30OCT70

1/2 023

TITLE--PSYCHOTHERAPY IN NEUROTIC REACTIONS WITH A CARDIOPHOBIC SYNDROME

-U-

AUTHOR--MELNIKOVA, P.K.

COUNTRY OF INFO--USSR

SOURCE--VRACHEBNOYE DELO, 1970, NR 5, PP 31-32

DATE PUBLISHED--------70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--PSYCHOTHERAPY, TRANQUILIZER, SLEEP, CLINICAL MEDICINE

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3002/1732 STEP NO--UR/0475/70/000/005/0031/0032

CIRC ACCESSION NO--AP0129100 UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

UNCLASSIFIED PROCESSING DATE--30OCT70

2/2 023

CIRC ACCESSION NO--AP0129100

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE SIGNIFICANCE IS EMPHASIZED OF NEURO PSYCHIC OVERSTRIAN, PECULIARITIES OF HIGHER NERVOUS ACTIVITY, IATROGENIC FACTORS, INFECTIONS AND INTOXICATIONS IN THE DEVELOPMENT OF THE CARDIOPHOBIC SYNDROME IN 38 PATIENTS. POSITIVE RESULTS ARE REPORTED OF SUGGESTION BOTH DURING SLEEP AND IN WAKING STATES. THE PATIENTS ALSO RECEIVED CORRESPONDING DRUG THERAPY: SMALL DOSES OF LIBRIUM, MEPROBAMATE, RARER AMINAZINE. DRUGS WERE EXCLUDED CONSIDERED AS "CARDIAC" BY THE PATIENT AND ALSO ALCOHOL WAS EXCLUDED. THE TREATMENT WAS CARRIED OUT IN AMBULATORY CONDITIONS. FACILITY: OBLASTNAYA BOL'NITSA IM. N. N. BURDENKO.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

UNCLASSIFIED PROCESSING DATE--23OCT70

1/2 020

TITLE--INFRARED SPECTRA OF COPPER SELENITES -U-

AUTHOR-(04)-MAKATUN, V.N., PECHKOVSKIY, V.V., MELNIKOVA, R.YA., GUSEV, S.S.

COUNTRY OF INFO--USSR

SOURCE--ZH. PRIKL. SPEKTROSK. 1970, 12(3), 497-503

DATE PUBLISHED-------70

SUBJECT AREAS--CHEMISTRY, PHYSICS

TOPIC TAGS--COPPER COMPOUND, SELENIUM COMPOUND, OXYGEN COMPOUND, CHRYSTALLOGRAPHY, IR SPECTRUM

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1997/0330 STEP NO--UR/0368/70/012/003/0497/0503

CIRC ACCESSION NO--AP0119317

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

UNCLASSIFIED PROCESSING DATE--23OCT70

2/2 020

CIRC ACCESSION NO--AP0119317

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE STATE OF H SUB2 O IN CRYST. CU SELENITE HYDRATES, AND THE CHANGES OF THE SPECTRAL CHARACTERISTICS OF SEO SUB3 PRIME2 NEGATIVE ION BOUND TO ONLY ONE CATION WERE STUDIED AS A FUNCTION OF THE CHANGE OF CRYSTALLOGRAPHIC PARAMETERS. THE PREPN. OF CUSEO SUB3.2H SUB2 O, CUSEO SUB3.2D SUB2 O, CRYST. CUSEO SUB3, AMORPHOUS CUSEO SUB3, CUO.CUESEO SUB3, AND CUO. 2SEO SUB3 IS DESCRIBED IN GREAT DETAIL. THE IR SPECTRA WERE OBTAINED BETWEEN 400 AND 4000 CM PRIME NEGATIVE1.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

1/2 010 UNCLASSIFIED PROCESSING DATE--09OCT70

TITLE--SYNTHESIS OF SUBSTITUTED TETRAPEPTIDES CORRESPONDING TO THE 14-17 SEQUENCE YEAST CYTOCHROME C -U-

AUTHOR-(04)-LVOVA, S.D., YEVSTIGNEYEVA, R.P., MELNIKOVA, S.A., RYABOVA, I.N.

COUNTRY OF INFO--USSR

SOURCE--ZH. OBSHCH. KHIM. 1970, 40(1), 242-5

DATE PUBLISHED--------70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--YEAST, PEPTIDE, CHEMICAL SYNTHESIS

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1989/1255 STEP NO--UR/0079/70/040/001/0242/0245

CIRC ACCESSION NO--AP0107731

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

2/2 010 UNCLASSIFIED PROCESSING DATE--09OCT70

CIRC ACCESSION NO--AP0107731

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. TREATING 0.18 G GAMMA ME ESTER OF CARBOBENZOXY,L,GLUTAMIC ACID IN TETRAHYDROFURAN WITH 0.086 ML N,METHYLMORPHOLINE AND 0.164 ML ISO,BUO SUB2 CCL AT MINUS 15DEGREES, FOLLOWED IN 10 MIN BY 0.27 G BENZYL ESTER OF L,LEUCYL,S,BENZYL,L,CYSTEINE,HCL AND 0.086 ML N,METHYLMORPHOLINE, GAVE OVERNIGHT 97PERCENT BENZYL ESTER OF N,CARBOBENZOXY,(GAMMA METHYL L GLUTAMYL),L,LEUCYL,S,BENZYL,L,CYSTEINE, M. 142-3DEGREES. SIMILARLY WERE PREPD. IN 50-80PERCENT YIELDS THE FOLLOWING PEPTIDE ESTERS; CARBOBENZOXY,L,LEUCYL,S,BENZYL,L,CYSTEINE BENZYL ESTER, M. 100-100.5DEGREES. (ME ESTER, M. 115-16DEGREES); CARBOBENZOXY,DL,LEUCYL, S,BENZYL,DL,CYSTEINE BENZYL ESTER, M. 89-9.5DEGREES. TERT,BUTOXY, CARBONYL,L,LEUCYL,S,BENZYL,L,CYSTEINE BENZYL ESTER, M. 86.5-7.5DEGREES. CARBOBENZOXY,DL,(METHYL GLUTAMYL),DL,LEUCYL,S,BENZYL,DL,CYSTEINE BENZYL ESTER, M. 140-1DEGREES. TERT,BUTOXYCARBONYL,L,GLUTAMYL, (BENZYL ESTER),L,LEUCYL,S,BENZYL,L,CYSTEINE ME ESTER, M. 129-9.5DEGREES. CARBOBENZOXY,S,BENZYL,L,CYSTEINYL,L,GLUTAMYL(METHYL ESTER),L, LEUCYL,S,BENZYL,L,CYSTEINYL BENZYL ESTER, M. 124-5DEGREES. CARBOBENZOXY, S,BENZYL,L,CYSTEINYL,L,GLUTAMYL(BENZYL ESTER),L,LEUCYL,S, BENZYL,L,CYSTEINYL ME ESTER, M. 160-60.5DEGREES. CARBOBENZOXY,S, BENZYL,DL,CYSTEINYL,DL,GLUTAMYL(ME ESTER),DL,LEUCYL,S,BENZYL, DL,CYSTEINE BENZYL ESTER, M. 145.5-6DEGREES.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

1/2 018 UNCLASSIFIED PROCESSING DATE--20NOV70

TITLE--CALCULATION OF THE HEATS OF DISSOLUTION OF ALKYLBENZENES IN A NONPOLAR FIXED PHASE -U-

AUTHOR-(02)-KELNIKOVA, S.L., KOROL, A.N.

COUNTRY OF INFO--USSR

SOURCE--TEOR. EKSP. KHIM. 1970, 6(1), 72-8

DATE PUBLISHED--------70

SUBJECT AREAS--CHEMISTRY

TOPIC TAGS--CALCULATION, ALKYL BENZENE, SQUALENE, SOLVENT ACTION, HEAT OF REACTION

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3002/1170 STEP NO--UR/0379/70/006/001/0072/0078

CIRC ACCESSION NO--AP0128592

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

2/2 018 UNCLASSIFIED PROCESSING DATE--20NOV70

CIRC ACCESSION NO--AP0123592

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE HEATS OF SOLN. OF 32 ALKYLBENZENES IN NONPOLAR FIXED PHASES (PENTADECANE, SQUALENE AND APIEZON L) WERE CALCD. AS A SUM OF DISPERSE POWERS, HOLE FORMATION WORK, AND INTERACTION BETWEEN SOLVENT MOLS. AND ME GROUPS OF DISSOLVED AGENTS.

FACILITY: INST. FIZ. KHIM. IM. PISARZHEWSKOGO, KIEV, USSR.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

1/2 009 UNCLASSIFIED PROCESSING DATE--04DEC70

TITLE--ARGENTOMETRIC METHOD FOR DETERMINING EPOXY GROUPS -U-

AUTHOR-(03)-CHAPURIN, V.I., SHAPOSHNIK, S.SH., MELNIKOVA, S.N.

COUNTRY OF INFO--USSR

SOURCE--LAKOKRASOCH. MATER. IKH PRIMEN, 1970, (2), 56-8

DATE PUBLISHED--------70

SUBJECT AREAS--MATERIALS

TOPIC TAGS--EPOXY RESIN, TITRATION, SILVER NITRATE/(U)ED5 EPOXY RESIN, (U)E41 EPOXY RESIN, (U)E49 EPOXY RESIN

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY FICHE NO----FD70/605012/D08 STEP NO--UR/0303/70/000/002/0056/0058

CIRC ACCESSION NO--AP0140296

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

2/2 009 UNCLASSIFIED PROCESSING DATE--04DEC70

CIRC ACCESSION NO--AP0140296

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. TO A SAMPLE OF AN EPOXY RESIN (OE 5, ED 5, E 41, OR E 49) A STOICHIOMETRIC EXCESS OF AQ. HBR WAS ADDED. THE EXCEDD HBR WAS REACTED WITH AGNO SUB3 AND THE AMT. OF AGNO SUB3 USED WAS DETD. BY THE TITRN. AGAINST NH SUB4 SCHN. THE METHOD IS VERY RAPID AND GIVES SATISFACTORY REPRODUCIBILITY AND ACCURACY.

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USSR UDC 547.1.3'821

KOST, A. N., YUROVSKAYA, M. M., NEL'NIKOVA, T. V., and POTANINA, O. I., Moscow State University imeni M. V. Lomonosov

"Chemistry of Indole. XXXIII. Pyridylethylation of the NH Group of Indole Compounds"

Riga, Khimiya Geterotsiklicheskikh Soyedineniy, No 2, Feb 73, pp 207-212

Abstract: Direct pyridylethylation of pyrrole, of a series of indole compounds, of carbazole and carboline was carried out taking advantage of the ability of highly polar aprotonic solvents -- such as dimethylsulfoxide [DMSO] -- to activate the anion forming on the NH group to such an extent that even the relatively poorly polarized bond in 3-vinylpyridine was adequately activated for the reaction to take place. The activation by DMSO is based on the fact that in absence of protonic solvents, when no hydrogen bonds can form, the anions being formed are solvated to a lesser degree and therefore are more reactive. The reaction goes especially well when excess 2-methyl-5-vinylpyridine is used, and the reaction mixture is heated to 100-200°. Metallic sodium or sodium ethoxide can be used as the alkaline reagents.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

USSR

UDC 547.759.3:542.953.4

MEL'NIKOVA, T. V., KOST, A. N., SAGITULLIN, R. S., AND BORISOV, N. N., Moscow State University imeni M. V. Lomonosov

"Indole Chemistry. XXXVIII. Splitting of the Carbon-Carbon Bond in the Reaction of 2-Aminoindoles with Bifunctional Compounds"

Riga. Khimiya Geterotsiklicheskikh Soyedineniy, No 9, Sep 73, pp 1273-1278

Abstract: Reaction of 2-aminoindole with α, β-unsaturated aldehydes and ketones yields α-carbolines. In this reaction the β-carbon atom of the keto compound attacks the C_3 atom of the indole. The reaction with bifunctional derivatives occurs in many cases with a split of the carbon-carbon bond, leading to the formation of a pentacyclic system of indolo[2,3-b]-α-carboline. Identical compounds can be obtained from 3-arylidene-2-aminoindole or 3-arylideneoxindoles. Substituting one molecule of 2-aminoindole by other acceptors failed to yield nonsymmetric structures.

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USSR

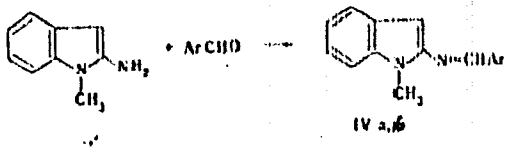
UDC 547.752'759.5:542.953.4

KOST, A. N., SAGITULLIN, R. S., MEL'NIKOVA, T. V., and KAPLUN, G. V., Moscow State University imeni M. V. Lomonosov

"Indole Chemistry. 32. Reaction of 1-Methyl-2-Aminoindole With Aldehydes"

Riga, Khimiya Geterotsiklicheskikh Soyedinenly, No 10, 1972, pp 1368-1373

Abstract: The 1-methyl-2-aminoindole will react with RCHO in alcoholic alkali to form a pentacyclic structure with the elimination of H_2O, NH_3, and H_2. By varying conditions, one mole of the HI salt of the aminoindole will condense with one mole of ArCHO to form a Schiff's base in the presence of base according to the reaction

[reaction II] 

IV a,б

or a salt in its absence by

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USSR

KOST, A. N., et al., Khimiya Geterotsiklicheskikh Soyedineniy, No 10, 1972, pp 1368-1373

[reaction I]

III a,b

(a:Ar={-3,4-$(CH_3O)_2C_6H_6$}; b:Ar={4-$(CH_3)_2NC_6H_4$}) IR spectra confirm the presence of these compounds. Several derivatives of 1,3-dimethyl-2-aminoindole were also prepared and characterized.

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UDC 547.752'759.5:542.953.4.

KOST, A. N., SAGITULLIN, R. S., MEL'NIKOVA, T. V., and KAPLUN, G. V., Moscow State University imeni M. V. Lomonosov

"Indole Chemistry. 32. Reaction of 1-Methyl-2-Aminoindole With Aldehydes"

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Abstract: The 1-methyl-2-aminoindole will react with RCHO in alcoholic alkali to form a pentacyclic structure with the elimination of H_2O, NH_3, and H_2. By varying conditions, one mole of the HI salt of the aminoindole will condense with one mole of ArCHO to form a Schiff's base in the presence of base according to the reaction

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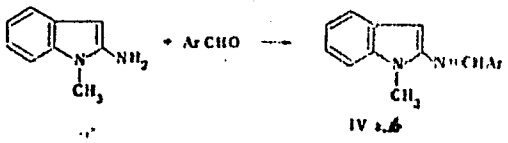

IV a,b

or a salt in its absence by

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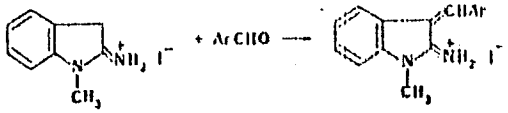
"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

USSR

KOST, A. N., et al., Khimiya Geterotsiklicheskikh Soyedineniy, No 10, 1972, pp 1368-1373

[reaction I] 

III a,b

(a:Ar=[-3,4-$(CH_3O)_2C_6H_6$]; b:Ar=[4-$(CH_3)_2NC_6H_4$]) IR spectra confirm the presence of these compounds. Several derivatives of 1,3-dimethyl-2-aminoindole were also prepared and characterized.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

UDC 576.851.49.083.3

USSR

BASNAK'YAN, I. A., and MEL'NIKOVA, V. A., Moscow Institute of Vaccines and Sera imeni Mechnikov

"A Study of the Content of Macromolecular Compounds in Continuously Cultured Typhoid Bacteria. Report IV. Effect of Bacterial Concentration on the DNA/Mass Ratio in the Presence of Balanced and Unbalanced Growth"

Moscow, Zhurnal Mikrobiologii, Epidemiologii, i Immunobiologii, No 3, 1973, pp 66-71

Abstract: The DNA/mass ratio of S. typhi vaccine strain Ty_2 4446 cultured under various conditions was studied to determine if this ratio could serve as an index of optimum culturing conditions. Cultures grown in excess glucose (1.0-11.5 mg/ml) and limited glucose (0.04-0.32 mg/ml) were compared. Bacterial concentrations were varied in excess glucose by changing the medium's O_2 content and in limited glucose by changing the initial glucose concentration prior to dilution. Experiments showed that the DNA/mass ratio did not depend on bacterial concentration in limited glucose but was high at 0.2-1 billion cells/ml and low at smaller and greater concentrations in excess glucose. The higher DNA/mass ratio noted in exponential growth (balanced) in previous papers can be explained by these findings: Exponential growth occurs in excess

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MSNAK'YAN, I. A. and MEL'NIKOVA, V. A., Zhurnal Mikrobiologii, Epidemiologii, i Immunobiologii, No 3, 1973, pp 66-71

glucose, and since under such conditions DNA/mass ratio varies with bacterial concentration, when the latter reaches 0.2 billion cells/ml the DNA/mass ratio begins to climb until glucose becomes limiting. This suggestion was confirmed experimentally. The range of bacterial concentrations at which the DNA/mass ratio is high in excess glucose also corresponds to high physiological activity and high concentrations of other macromolecular compounds, as shown in preview studies. Thus the DNA/mass ratio can be used as a sensitive index of optimum conditions in the culture medium.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

USSR UDC 577.1:612.12.015

MEL'NIKOVA, V. A., and BASIAK'YAN, I. A.

"Study of the Content of Macromolecular Compounds and the Continuous Cultivation of Typhoid Bacteria. Report III. Comparative Study of Physiological Activity and Content in the Cells of Nucleinic Acid and Protein Under Conditions of Excess Glucose and Its Full Utilization"

Zh. mikrobiol. epidemiol. i immunobiol. (Journal of Microbiological Epidemiology and Immunobiology), No 2, 1973, pp 11-16 (English Resume) (From RZh-Biologicheskaya khimiya, No 12, Jun 73, Abstract No F1623)

Translation: It was found that in the continuous cultivation when glucose is fully utilized, the activity of cells and their DNA and RNA content depend solely on the rate of growth which is equal to the rate of dilution which can be altered to produce a population with certain given properties. When there is an excess of the substrate, the rate of consumption of glucose and the content of DNA and RNA and protein in the cells depends not only on the growth rate but also on the concentration of microorganisms. Optimal concentrations of microorganisms in which the highest content of macromolecular compounds and the highest physiological activity of cells are within the range of 0.2-1.2 billion.ml.

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UDC 577.1:612.12.015

MEL'NIKOVA, V. A., and BASIAK'YAN, I. A.

"Study of the Content of Macromolecular Compounds and the Continuous Cultivation of Typhoid Bacteria. Report III. Comparative Study of Physiological Activity and Content in the Cells of Nucleinic Acid and Protein Under Conditions of Excess Glucose and Its Full Utilization"

Zh. mikrobiol. epidemiol. i immunobiol. (Journal of Microbiological Epidemiology and Immunobiology), No 2, 1973, pp 11-16 (English Resume) (From RZh-Biologicheskaya khimiya, No 12, Jun 73, Abstract No F1623)

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

USSR UDC 576.851.49(Bact. typhi).098.083.1

BASNAK'YAN, I. A., and MEL'NIKOVA, V. A., Moscow Institute of Vaccines and Sera imeni Mechnikov

"A Study of the Content of Macromolecular Compounds During Continuous Culturing of Typhoid Bacilli. Report II. A Study of the DNA/Mass Ratio"

Moscow, Zhurnal Mikrobiologii, Epidemiologii i Immunobiologii, No 11, 1971, pp 44-49

Abstract: The DNA-mass ratio was determined in typhoid bacilli grown under various conditions. The microbial population begins to divide only after the DNA/mass ratio exceeds the critical value of 1.68. This ratio assumes a minimum value during the interphase, increases prior to the beginning of the first division, and remains at a relatively steady level of about 3.5 throughout the exponential reproduction phase and the reduced reproduction phase. The DNA/mass ratio assumes these values during both continuous and periodic culturing, at higher and lower cell division rates, under various nutritional conditions, and in different types of synthetic media.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

USSR UDC: 621.391.244

POSTNIKOV, L. V. and MEL'NIKOVA, V. A.

"Amplification on the Three-Frequency Interaction Principle"

Gor'kiy, Izvestiya VUZ-Radiofizika, No 10, 1972, pp 1517-1526

Abstract: A weakly linear system with three degrees of freedom, excited at one of its characteristic frequencies, is considered in this paper. With an outside oscillation, at a harmonic of a frequency close to that characteristic frequency applied with sufficiently low amplitude, it is shown that an amplification effect with frequency conversion can be obtained in such a system. The behavior of the amplitude-frequency characteristics and the stability of the system are investigated as functions of its parameters. It is noted that this effect may be used as the basis for a compact parametric amplifier in which a self-oscillating system excited by the negative resistance of a tunnel diode, for example, is used for pumping. The authors express their gratitude to M. I. Rabinovich for posing the problem and for participating in the discussion of the results.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

USSR UDC 576.851.49.095.6.576.851.49.098.396.332

MEL'NIKOVA, V. A., and BASNAK'YAN, I. A., Moscow Institute of Vaccines and Sera Imeni Mechnikov

"A Study of the Content of Macromolecular Compounds in Continuous Cultures of Typhoid Bacilli. Report I. The Relationship Between the Rate of Cell Division and the Intracellular Content of DNA, RNA, and Proteins"

Moscow, Zhurnal Mikrobiologii Epidemiologii i Immunobiologii, No 5, May 71, pp 62-66

Abstract: The S. typhi Ty_2 4446 vaccine strain was used in this investigation of the cell division rate and the intracellular concentration of various compounds during continuous and periodic culturing. The fastest rate of cell division occurred in the exponential phase of proliferation, but was constant for any given medium. With increasing concentration of nutrients in the medium, the rate of division and the concentration of intracellular contents also increased. For example, at a cell division rate of 0.170 generations per hour, the concentrations of intracellular compounds, expressed in micrograms per 10^8 cells, were: RNA -- 1.176; proteins -- 10.71; acid-soluble compounds -- 0.0522; optical density -- 0.0402; and DNA -- 0.191. At a cell division rate of 0.710 generations per hour, the corresponding figures were: 3.300; 21.07; 0.352;

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MEL'NIKOVA, V. A., et al, Zhurnal Mikrobiologii Epidemiologii i Immunobiologii, No 5, May 71, pp 62-66

0.147; and 0.732 (last figure at division rate of 0.68). Although some authors report a decrease in the concentration of DNA in analogous investigations, the discrepancy is only apparent and due to different methods of calculating the results. In this study, all concentrations are expressed per unit number of cells, while the other authors use a unit volume of the biomass as the common denominator. All findings indicate that the size and weight of individual cells increase with an increasing rate of cell division.

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Burn Therapy

USSR

UDC 617-001.17-085.33-059:615.357.453

MEL'NIKOVA, V. M., BOLKHOVITINOVA, L. A., and GLADSHTEYN, A. I., Central Institute of Traumatology and Orthopedics Ministry of Health USSR, Moscow

"Combined Topical Application of Antibiotics and Corticosteroids in the Treatment of Burn Wounds"

Moscow, Sovetskaya Meditsina, Vol 33, No 7, Jul 70, pp 108-112

Abstract: Hydrocorticocin ointment (active ingredients, hydrocortisone and neomycin) was used for topical treatment of burn wounds in 76 patients and on excessively scarred skin donor areas in 27 patients. The burns were of the 2nd and 3rd (both A and B) degree and covered from 5-45 percent of the body surface area. The results indicated that hydrocorticocin is effective in such cases, particularly for treatment of 3-A burns, if it is applied after detachment of the scab. Hydrocorticocin prevents excessive proliferation of the granulation tissue, promotes epithelization, reduces inflammation, and eliminates microflora, thus accelerating healing. Formation of keloid scars is markedly inhibited. Since the drug is applied topically, it does not upset the body's natural balance of corticosteroid hormones.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

Acc. Nr: AP0054656 Ref. Code: UR9115

PRIMARY SOURCE: Ortopediya, Travmatologiya i Protezirovaniye, 1970, Nr 2, pp 39-44

ANTIBIOTICS IN THE PROPHYLAXIS AND TREATMENT OF BACTERIAL INFECTION IN TRAUMATOLOGIC AND ORTHOPAEDIC PATIENTS

V. N. Mel'nikova, A. I. Gladshteyn, O. V. Markova, M. I. Matova, N. P. Ivanova, Z. G. Sirinova and V. V. Kashchenko

Facts on the prophylaxis and treatment with antibiotics of infected wound in traumatologic and orthopaedic patients based on clinical and laboratory data of [illegible] are presented in the paper. In primary surgical wound debridement the authors prescribe penicillin with streptomycin or tetracyclin. It is stressed that the use of antibiotics in the so-called „clean" orthopaedic operations should be substantially limited and the demands of surgical aseptic enhanced. In purulent wound infection the staphylococcus and representatives of the intestinal group of microorganisms were the most common bacterial associations cultured. For the last year the appearance of staphylococcus in the monoculture from the infected wounds increased. Various antibiotics, their combinations with each other, sulfanilamides or nitrofuranic preparations, depending on the microflora sensitivity to them and concentration created in the focus of infection, are used in the treatment of purulent infection. The success of antibacterial therapy has been shown to depend on the rational use of antibiotics in complex with other methods of conservative and operative treatment and drugs which stimulate the organism reactivity.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

USSR UDC 538.113:541.67:546.221

PILIPENKO, A. T., MEL'NIKOVA, V. N., and ROZENFEL'D, A. AL., Kiev State University imeni T. G. Shevchenko

"Investigation of Paramagnetic Shifts in the PMR Spectra of Isoquinoline Coordinated with Nickel Diallyldithiophosphate"

Moscow, Zhurnal Neorganicheskoy Khimii, Vol 18, No 10, Oct 73, pp 2692-2695

Abstract: Paramagnetic shifts of isoquinoline in its complex with nickel diallyldithiophosphate [NiDADTP] have been investigated by the dilution method in large excess of the ligand. By the method of isomolar series the composition of the isoquinoline-NiDADTP complex has been established as 1:2, its configuration being that of a distorted octahedron. The data on paramagnetic shifts have been used to calculate spin densities at the hydrogen atoms in isoquinoline. An assumption has been made that the dislocation of spin density occurs principally along the amine σ-bonds.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

Acc. Nr: AP0047351 Ref. Code: UR0589

PRIMARY SOURCE: Vestnik Khirurgii imeni I. I. Grekova, 1970, Vol 104, Nr / , pp 61-65

ACUTE GASTRODUODENAL ULCERS AND THEIR COMPLICATIONS

By V. P. Melnikova, V. I. Filin, M. G. Kamenchik and M. A. Samoylova

The work is based on the study of case reports of two recovered and 66 died patients in whom acute erosion and ulcer of the stomach and duodenum were revealed. In 33 patients there were multiple erosions and ulcers, in the remainder — single. Of 44 patients with complicated acute ulcers in 28 patients these were the principal cause of death, while in 14 patients they accelerated the inevitable lethal issue. Two patients have recovered one after gastrectomy and the other — after suturing mucosa around the bleeding ulcer and ligation of the left gastric artery.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

1/2 029 UNCLASSIFIED PROCESSING DATE--18SEP70
TITLE--THE INFLUENCE OF ADRENALINE ON THE ADHESIO9 THE INFLUENCE OF ADRENALINE ON THE ADHESIVE CAPACITY OF THROMBOCYTES IN VIVO AND IN VITRO
AUTHOR-(02)-NIKITIN, YU.P., MELNIKOVA, V.S.

COUNTRY OF INFO--USSR

SOURCE--BYULLETIN' EKSPERIMENTAL'NOY BIOLOGII MEDITSINY, 1970, VOL 69, NR 3, PP 17-18
DATE PUBLISHED--------70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--ADHESIVE, ADRENALINE, THROMBOCYTE, DOG, RABBIT

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAME--1982/0861 STEP NO--UR/0219/70/069/003/0017/0018

CIRC ACCESSION NO--AP0052295
UNCLASSIFIED

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CIRC ACCESSION NO--AP0052295

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. IN THE CITRATE BLOOD OF DOGS IN VIVO THE AUTHORS CREATED AN ADRENALINE CONCENTRATION FROM 0.01 TO 100 MUG-ML. IN A CONCENTRATION OF L AND MORE MUG-ML THE ADHESIVENESS OF THROMBOCYTES AUGMENTED. IN VITRO EXPERIMENTS 21 RABBITS WERE EXPERIMENTED UPON. A 0.1PERCENT SOLUTION OF ADRENALINE HYDROCHLORIDE WAS INTRODUCED SUBCUTANEOUSLY IN A DOSE OF 0.1 ML-LKG OF ANIMAL BODY WEIGHT. ONE HOUR AFTER INJECTION OF ADRENALINE THE ADHESIVENESS OF THROMBOCYTES WAS AUGMENTED.

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USSR

UDC 576.858.25.097.2.077.3

GAYDAMOVICH, S. Ya., OBUKHOVA, V. R., MEL'NIKOVA, Ye. E., VOLOKHOVA, N. A., KIRYUSHCHENKO, T. V., KLISENKO, G. A., KRASNOBAYEVA, Z. N., LAVROVA, N. A., SHARIPOVA, Sh. A., and SHANOYAN, N. K., Institute of Virology imeni D. I. Ivanovskiy, Academy of Medical Sciences USSR, Moscow

"Use of Ultrasound to Increase Arbovirus Antigen Activity in Serological Tests in Vitro"

Moscow, Voprosy Virusologii, No 3, May/Jun 1973, pp 356-360

Abstract: An ultrasonic technique to increase antigen activity was tested on five groups of arbovirus antigens. Antigens prepared from suckling mouse brain by the sucrose-acetone and freon methods, or in chick fibroblasts without preliminary processing, were subjected to 30-40 sec of 20,000-25,000 Hz ultrasonic treatment. Titers determined before and after treatment by hemagglutination inhibition (HAI), complement fixation (CF), and agar gel diffuse precipitation (AGDP) were compared. For group A and B arboviruses CF and HAI titers increase 4-8 times after treatment, while AGDP titers remained unchanged. In the Kemerovo-Bunyamvera-California group, the CF titers increased by 2-4 times, and no change was observed in HAI titers. CF titers increased 2-8 times for all but Neapolitan arbovirus of the Phlebotomus group.
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USSR

GAYDAMOVICH, S. Ya., et al., Voprosy Virusologii, No 3, May/Jun 1973, pp 356-360

The only HAI response in this group was by Bujaru arbovirus, and only after treatment the AGDP titers increased in a few cases. Ultrasonic treatment had an especially favorable effect on CF and AGDP titers in the Uukuniemi group, while changes in HAI titers were less pronounced. Thus ultrasonic treatment normally facilitates antigen activity in CF and HAI reactions and has a variable effect on the AGDP reaction. Treated antigens did not lose specificity. It is concluded that ultrasonic treatment can be used not only to increase titers but also to reveal titers of relatively inactive antigens.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

USSR

UDC 576.858.25

GAYDAMOVICH, S. YA., NIKIFOROV, L. P., GROMASHEVSKIY, V. L., OBUKHOVA, V. R., KLISENKO, G. A., CHERVONSKIY, V. I., and NEL'KINOVA, YE. E., Institute of Virsology imeni D. I. Ivanovskiy, USSR Academy of Medical Sciences, Moscow

"New Arbovirus Sumakh from the Uukuniemi Group"

Moscow, Voprosy Virusologii, No 1, Jan/Feb 71, pp 21-25

Abstract: Isolation of the arbovirus Sumakh in the USSR is described for the first time. The virus was obtained from the hearts and lungs of blackbirds (Turdus merula) collected in Azerbaydzhan. The virus was similar to but not identical with Uukuniemi, as shown in the agar gel diffusion test, but not by the complement fixation test. The isolated virus was pathogenic for suckling white mice. An incubation period of 11 days was found upon intracerebral, which in subsequent passages was reduced to 96 hours. Mice 1-3 days of age were most susceptible. An antigen for hemagglutination reactions was prepared from suckling mouse brains by the sucrose-acetone method. The titer of this antigen did not exceed 1:64. Subsequent workup with Tween-80 and ether raised the titer to 1:256-1:512. When the antigen was prepared by the freon method, the material was enriched with Tween-80 and ether and 1/2

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GAYDAMOVICH, S. YA., et al., Voprosy Virusologii, No 1, Jan/Feb 71, pp 21-25

could serve for agglutination of erythrocytes in dilutions of 1:32-1:64. Optimum hemagglutination was achieved at pH 5.8 and at a temperature of 37°C. According to preliminary data on agar diffusion, the Sumakh virus is not identical with the Uukuniemi virus. A detailed study of the antigenic structure of Sumakh virus is under way.

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USSR UDC 576.858.25.08(478.)

SKOFERITSA, P. G., GAYDAMOVICH, S. Ya., OKUNKOVA, V. R., [illegible], N. D., YAROVOY, P. I., KLICHKO, G. A., and PEL'TIKOVA, Ye. E., Scientific Research Institute of Hygiene and Epidemiology, Kishinev, Moldavian SSR, and Institute of Virology imeni D. I. Ivanovskiy, Academy of Medical Sciences USSR, Moscow

"Isolation of Kharagysh Virus From the Kemerovo Group in the Moldavian SSR"

Moscow, Voprosy Virusologii, No 6, 1972, pp 709-711

Abstract: A virus isolated in 1971 from an Ixodes ricinus pool collected from sheep in the Moldavian SSR, named Kharagysh by the authors, was lethal to one-day mice and not to 3-4 week mice. The virus passed through a Seitz EK type pore filter but was retained at 50 nanometers. Sodium deoxycholate and ether had little effect on virus titers. Inasmuch as it was impossible to obtain a hemagglutinating antigen to the virus by usual methods, identification studies were carried out by the complement-fixation reaction. Tests with immune rabbit fluid reactive to several arboviruses were positive only for the Kemerovo group. Moreover, within that group the most pronounced cross-reaction was with the Tribec subgroup. Thus it is demonstrated that Kharagysh virus belongs to the Kemerovo-Tribec group. Apparently I. ricinus plays an important carrier role in the infection cycle.
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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

1/2 023 UNCLASSIFIED PROCESSING DATE--30OCT70

TITLE--PRECIPITATING ANTIGEN IN THE BLOOD OF MICE INFECTED WITH ARBOVIRUSES -U-

AUTHOR-(04)-GAYDAMOVICH, S.YA., KRECHETOVA, N.A., LVOVA, A.I., MELNIKOVA, YE.E.

COUNTRY OF INFO--USSR

SOURCE--VOPROSY VIRUSOLOGII, 1970, NR 3, PP 337-341

DATE PUBLISHED--------70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--ARBOVIRUS, ANTIGEN, MOUSE, BLOOD SERUM, VENEZUELAN EQUINE ENCEPHALITIS VIRUS

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--2000/1835 STEP NO--UR/0402/70/000/003/0337/0341

CIRC ACCESSION NO--AP0125446

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

2/2 023 UNCLASSIFIED PROCESSING DATE--30OCT70

CIRC ACCESSION NO--AP0125446

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE POSSIBILITY OF USING THE AGAR GEL DIFFUSION TEST FOR DETECTION OF VIRUS (ANTIGEN) IN THE BLOOD ON EXPERIMENTAL ARBOVIRUS INFECTION WAS STUDIED. TWELVE ARBOVIRUSES WERE TESTED. THE ANTIGEN WAS THE NATIVE BLOOD SERUM FROM INFECTED SUCKLING MICE COLLECTED AT THEHEIGHT OF THE DISEASE, WHILE IMMUNE ASCITES TO THE CORRESPONDING VIRUSES WERE USED AS THE SOURCE OF ANTIBODY. POSITIVE RESULTS WERE OBTAINED WITH SEMLIKI, PIKSUNA, VENEZUELAN EQUINE ENCEPHALOMYELITIS AND UUKUNIEMI VIRUSES. DETECTION OF ANTIGEN IN THE BLOOD SERUM DEPENDS UPON THE LEVEL OF VIREMIA AND CAN BE REGULARLY ACHIEVED AT A VIRUS TITER IN THE BLOOD OF LG 8 LD SUB50-0.02 ML. FACILITY: INSTITUT VIRUSOLOGII IMENI D. I. IVANOVSKOGO AMN SSSR, MOSKVAAA.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

USSR

MEL'NIKOV, L. C. and MEL'NIKOVA, YE. P.

"Variations on a Theme: Metrics in Tournaments"

Diskretn. Analiz. [Discrete Analysis -- Collection of Works], No 22, Novosibirsk, 1973, pp 39-52 (Translated from Referativnyy Zhurnal Kibernetika, No 10, 1973, Abstract No 10V352)

Translation: Metric characteristics of radius and diameter of three types are studied, as well as the minimum length of a detour in the class of n-point tournaments. Precise high and low estimates of these characteristics in this class are given. In certain cases, classes of extreme tournaments are described. Author's view

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

1/2 012 UNCLASSIFIED PROCESSING DATE--16OCT70
TITLE--MODIFIED P TOLUENESULFONAMIDE,FORMALDEHYDE RESINS -U-

AUTHOR-(05)-MELNIKOVA, YE.P., KOROTKAYA, L.I., KHARIT, YA.A., KOROLEVA, N.G., TAGIEV, B.A.
COUNTRY OF INFO--USSR

SOURCE--U.S.S.R. 260,884
REFERENCE--OTKRYTIYA, IZOBRET., PROM. OBRAZTSY, TOVARNYE ZNAKI 1970 47(4)
DATE PUBLISHED--06JAN70

SUBJECT AREAS--CHEMISTRY, MATERIALS

TOPIC TAGS--TOLUENE, SULFONAMIDE, FORMALDEHYDE, POLYCONDENSATION, CYCLOHEXANONE, CHEMICAL PATENT, PLASTIC PRODUCTION

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAME--1995/1055 STEP NO--UR/0482/70/000/000/0000/0000

CIRC ACCESSION NO--AA0116521
UNCLASSIFIED

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

2/2 012 UNCLASSIFIED PROCESSING DATE--16OCT70

CIRC ACCESSION NO--AA0116521

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. HCHO RESINS ARE PREPD. BY COPOLYCONDENSATION OF HYDROXYMETHYL DERIVS. OF P TOLUENESULFONAMIDE, HCHO, AND A MODIFIER, SUCH AS CYCLOHEXANONE OR M SULFAMOYLBENZOIC ACID (I). FACILITY: INSTITUTE OF HIGH MOLECULAR WEIGHT COMPOUNDS, ACADEMY OF SCIENCES, U.S.S.R.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

1/2 020 UNCLASSIFIED PROCESSING DATE--13NOV70

TITLE--SYNTHESIS OF RESINS BASED ON SULFANILAMIDE AND VARIOUS ALDEHYDES -U-

AUTHOR-(04)-KOROTKAYA, L.I., KHARIT, YA.A., SHVARTS, A.S., MELNIKOVA, YE.P.

COUNTRY OF INFO--USSR

SOURCE--IZV. VYSSH. UCHEB. ZAVED., TEKHNOL. LEGK. PROM. 1970, (1), 59-63

DATE PUBLISHED--------70

SUBJECT AREAS--CHEMISTRY, MATERIALS

TOPIC TAGS--SULFANILAMIDE, FURFURAL, ALDEHYDE, SCHIFF BASE, RESIN, ACRYLATE, ADHESIVE, THERMAL SHOCK

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3006/1106 STEP NO--UR/0323/70/000/001/0059/0063

CIRC ACCESSION NO--AT013792

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

2/2 020 UNCLASSIFIED PROCESSING DATE--13NOV70

CIRC ACCESSION NO--AT0134792

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. ARYLSULFAMIDE RESINS WERE SYNTHESIZED FROM SULFANILAMIDE, FURFURAL, AND PARALDEHYDE VIA THE INTERMEDIATE SCHIFF BASES. RESINS OBTAINED BY THIS METHOD DEMONSTRATED BETTER THERMAL SHOCK RESISTANCE THAN THOSE OBTAINED BY THE DIRECT CONDENSATION OF SULFANILAMIDE AND FURFURAL OR PARALDEHYDE. SOLNS. OF THESE RESINS IN NH SUB4 OH WERE COMPATIBLE WITH ACRYLIC EMULSIONS, SUGGESTING APPLICATIONS AS COMPONENTS IN ACRYLIC COATINGS AND ADHESIVES OF INCREASED THERMAL SHOCK RESISTANCE. FACILITY: LENINGRAD. INST. TEKST. LEGK. PROM. IM. KIROVA, LENINGRAD, USSR.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

1/2 014 UNCLASSIFIED PROCESSING DATE--16OCT70

TITLE--MECHANISM OF THE CYTOSTATIC ACTION OF AMINOACRIDINES -U-

AUTHOR-(05)-ZELENIN, A.V., KIRYANOVA, YE.A., LYAPUNOVA, YE.A., MELNIKOVA, YE.YU., STEPANOVA, N.G.

COUNTRY OF INFO--USSR

SOURCE--FARMAKOL. TOKSIKOL. (MOSCOW) 1970, 33(1), 96-101

DATE PUBLISHED--------70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--ANTITUMOR DRUG EFFECT, MITOSIS, PROTEIN SYNTHESIS, NUCLEIC ACID

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1994/1158 STEP NO--UR/0390/70/033/001/0096/0101

CIRC ACCESSION NO--AP0115177

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

2/2 014 UNCLASSIFIED PROCESSING DATE--15OCT70

CIRC ACCESSION NO--AP0115177

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. 3,6,DIAMINOACRIDINES, INCLUDING ACRIDINE ORANGE, PROFLAVINE, ACRIFLAVINE, EUCRISINE 2, AND CORIPHOSPHINE, WERE CHARACTERIZED BY SIGNIFICANT ANTIMITOTIC ACTION STARTING IN THE 1ST FEW MIN OF THE EXPT., WITH A SHARP PARALLEL NOTED BETWEEN INHIBITION OF MITOTIC ACTIVITY AND PROTEIN SYNTHESIS, AND DELAYED PASSAGE OF CELLS THROUGH THE MITOTIC G SUB2 PERIOD. ACRICHINE AND RIBOFLAVINE ANTIMITOTIC ACTIONS APPEARED ONLY SEVERAL HR AFTER THE START OF THE EXPT. AND WERE NOT ACCOMPANIED BY EFFECTS ON PROTEIN SYNTHESIS OR BY ANY CHANGE IN THE G SUB2 PERIOD OF THE CYCLE. ANTIMITOTIC ACTIVITY OF THE 3,6,DIAMINOACRIDINES APPARENTLY INVOLVES DIRECT INHIBITION OF PROTEIN SYNTHESIS, WHILE THE 2ND GROUP OF COMPDS. INTERFERES WITH NUCLEIC ACID SYNTHESIS. FACILITY: INST. MOL. BIOL., MOSCOW, USSR.

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USSR

UDC: 519.2

MEL'NYK, Yu. I.

"Concerning the Number of Zeros of a Stationary Gaussian Process"

Visnyk Kyyiv un-tu. Ser. mat. ta mekh. (Kiev University Herald. Mathematics and Mechanics Series), 1972, No 14, pp 136-140 (from RZh-Kibernetika, No 10, Oct 72, abstract No 10V133 by V. Prelov)

Translation: Let $\xi(t)$ be a stationary Gaussian process with correlation function $R(\tau)$, $R(0) = 1$. Furthermore, let

$$R(\tau) = \int_{-\infty}^{+\infty} \cos \lambda \tau \, dF(\lambda) \text{ и } \int_{-\infty}^{+\infty} \lambda^2 dF(\lambda) < \infty.$$

The number of zeros N of process $\xi(t)$ on segment $[0,T]$ the author defines by the formula

$$N = \int_0^T \delta(\xi(t)) |\xi'(t)| \, dt,$$

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

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MEL'NYK, Yu. I., Visnyk Kyyiv un-tu. Ser. mat. ta mekh., 1972, No 14, pp 136-140

where $\delta(x) = \lim_{n\to\infty} \delta_n(x)$,

$$\delta_n(x) = \begin{cases} n, \text{ если } |x| < \frac{1}{2n}, \\ 0, \text{ если } |x| > \frac{1}{2n}. \end{cases}$$

Formulas are derived for the mathematical expectation and variance of N.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

USSR

UDC 577.44

MIRZOYAN, V. S. and MELOYAN, E. A., Laboratory of Visual Perception, Academy of Sciences Armenian SSR

"The Effects of Ultrasound on the Functional State of the Frog Retina as Indicated on Electroretinograms"

Yerevan, Biologicheskiy Zhurnal Armenii, Vol 23, No 12, pp 50-59

Abstract: The effects of ultrasound waves on biological organisms are especially interesting since neither man nor animals have special receptors for these waves. In this study electroretinograms (ERG) were recorded from frog eyes before and after the frogs were exposed to 20,000 Hz of ultrasound waves of an intensity of 5 w/cm². In the first group, frogs were irradiated with the ultrasound waves until they died; the average survival time was 12-13 min. The second group was irradiated for 10 min. The ERG taken 1 hour later showed significant shifts in the "V" waves; the frogs died in 3-8 days. The third group was irradiated for only 8 minutes, and the frogs survived. The ERG showed definite shifts in all its components: the amplitude of the waves was markedly decreased, and new waves appeared. Complete normalization of the ERG took place in 1-2 months. Repeated irradiation under identical conditions induced similar but less pronounced shifts which disappeared in 18-20

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USSR

MELS, T. E.

"Probability Density for Angle of Rotation with One Partially Normal Distribution of Probabilities in Group SO(3)"

Tr. Vychisl. Tsentra. Tartus. Un-t [Works of Computer Center of Tartus University], 1972, No 36, pp 74-98 (Translated from Referativnyy Zhurnal Kibernetika, No 4, 1975, Abstract No 4V19, by D. Mushtari).

Translation: In an SO(3) group of rotations of Euclidean space E^3, the limiting distributions $\lim_{n\to\infty}(P_n)$ of probabilities of measures P_n are studied, for which the Euler angles α, γ, β are independent random quantities, evenly distributed respectively in the intervals $\left[-\sqrt{\frac{t_1}{n}}, \sqrt{\frac{t_1}{n}}\right], \left[-\sqrt{\frac{t_2}{n}}, \sqrt{\frac{t_2}{n}}\right]$ and in the two-point set $\{0, 2\pi/N\}$, where $2 \leq N \in Z$.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

USSR

MELS, T. E.

"Description of a Class of General Correlation Factors for Random Elements in a Finite Set"

Tr. Vychisl. Tsentra. Tartus. Un-t [Works of Computer Center of Tartus University], 1972, No 36, pp 3-18 (Translated from Referativnyy Zhurnal Kibernetika, No 4, 1973, Abstract No 4V38, by D. Mushtari).

Translation: A description is presented for all general correlation factors (RZhMat, 1973, 1V9, 1V10) in the case where the area of their definition consists of random quantities with values in a finite set; their topoloyical equivalence is proven.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

USSR

MELS, T. E.

"Existence of a Broad General Correlation Factor for Random Elements in a Compact Set"

Tr. Vychisl. Tartus. Un-t. [Works of Computer Center, Tartu University], 1972, No 25, pp 79-105 (Translated from Referativnyy Zhurnal, Kibernetika, No 1, 1973, Abstract No 1 V10 by D. Mushtari).

Translation: The symbols of Abstracts 1 V8 and 1 V9 are used. In the case when (M, τ) is a compact, metrizable space, the existence of gcf k in Y × Y is proven, for which $x_i \xrightarrow{\tau^2} x \Rightarrow k(x_i, x) \to k(x, x) = 1$.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

USSR

MELS, T. E.

"Generalization of Convergence According to Probability: τP-Convergence"

Tr. Vychisl. Tartus. Un-t. [Works of Computer Center, Tartu University], 1972, No 25, pp 45-60 (Translated from Referativnyy Zhurnal, Kibernetika, No 1, 1973, Abstract No 1 V8 by D. Mushtari).

Translation: τP-convergence, coinciding in the case of metrizable τ with ordinary probable convergence, is defined in space X of measurable mappings of the probability space $\{\Omega, \mathfrak{A}, P\}$ in a certain T_2-space (M, τ) with a denumerable topology base.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

USSR

MELS, T. E.

"Determination of General Correlation Coefficients"

Tr. Vychisl. Tartus. Un-t. [Works of Computer Center, Tartu University], 1972, No 25, pp 61-78 (Translated from Referativnyy Zhurnal, Kibernetika, No 1, 1973, Abstract No 1 V9 by D. Mushtari).

Translation: The symbols of Abstract 1 V8 are used. Natural axioms are used to introduce the concept of the general correlation factor (gcf) of mapping k (·, ·) of the Cartesian square of a certain subset Z of set Y of all nondegenerate random quantities from X in [0, 1]. A number of problems of classification of gcf are formulated.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

USSR UDC 629.78.015.077.4

MEL'TS, I. O. and USKOV, G. V.

"Gradient Method of Guidance Correction For Solving a Boundary Problem"

Uch. Zap. Tsentr. Aerogidrodinam. In-ta (Scientific Writings of the Central Aerohydrodynamics Institute), Vol 3, No 2, 1972, pp 77-85 (from Referativnyy Zhurnal--Raketostroyeniye, No 8, 1972, Abstract No 8.41.84)

Abstract: The gradient method of plotting the correction of guidance functions and parameters is examined which, in the linear approximation, provides a specified change in the boundary conditions vector at the right end of the trajectory. A comparison of the results of a number of works on direct methods of optimization is conducted in which this problem is examined. Plotting of guidance function corrections in the class of piecewise-constant functions was examined. Results of calculations for the problem on guidance by angle of attack, providing the design of aircraft at a given point, are presented as an illustration. Author's view, 6 figures, 9 bibliographical references.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

USSR

UDC 543.43:632.95.024

NOVIKOVA, K. F., and MEL'TSER, F. R., All Union Scientific Research Institute of Chemical Agents for Plant Protection

"Colorimetric Method for the Determination of Microquantities of DDVP in Milk and Water"

Moscow, Khimiya v Sel'skom Khozyaystve, Vol 11, No 8 (118), 1973, pp 47-49

Abstract: A colorimetric method has been developed for the determination of DDVP (0,0-dimethyl 0,2,2-dichlorovinyl phosphate) in milk and water, based on the extraction of the insecticide from water by methylene chloride and from milk by petroleum ether, after treatment with acetone, followed by spectrophotometric determination at λ 487 mμ of the dichloroacetaldehyde condensation product obtained as a result of alkaline hydrolysis with resorcinol. The sensitivity of the method is 0.1 mg/l of milk and 0.04 mg/l of water.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

USSR

UDC 632.95

MEL'TSER, F. R., NOVIKOVA, K. F.

"New Specific Colorimetric Method of Analyzing Residual Amounts of Phosalone in Plants"

Tr. 2-go Vses. soveshch. po issled. ostatkov pestitsidov i profilakt. zagryaz-neniya imi produktov pitaniya, kormov i vneshn. sredy (Works of the Second All-Union Conference on the Investigation of Pesticide Residues and Preventive Contamination of Food Products, Feeds and Environment), Tallin, 1971, pp 295-299 (from RZh-Khimiya, No 12, Jun 72, Abstract No 12N446)

Translation: Phosalone (I) is extracted from fruits with acetone; it is re-extracted with $CHCl_3$, the extract is evaporated and I is sublimed at 85-90° 0.4-0.5 for 30 minutes. The sublimed I is dissolved in acetone, hydrolyzed by NaOH to 5-Cl-2-$NH_2C_6H_3OH$ (II) and the coupling product of diazotized II with resorcinol is analyzed spectrophotometrically at 490 nm. The sensitivity of the method is 0.1 mg/kg; the degree of detection of I is 90.1 ± 12.4%.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

USSR

UDC 632.95

NOVIKOVA, K. F., and MEL'TSER, F. R.

"Chromatophotometric Determination of Residual Quantities of Phthalophos and Phozalone in Foodstuffs of Vegetative Origin"

V sb. Khim. sredstva zashchity rast. (Chemical Agents for Plant Protection -- collection of works), vyp 1, Moscow, 1970, pp 86-94 (From RZh-Khimiya, No 11, Jun 72, Abstract No 11S408)

Translation: In order to determine residues of phthalophos (I) and phozalone (II) in foodstuffs derived from plants, I and II are extracted with acetone, re-extracted with $CHCl_3$, the extract is clarified on a layer of silica gel (13 x 18 cm), washing I and II with acetone. After removing the solvent, I or II is hydrolyzed with HCl, and the liberated HCHO is determined colorimetrically or spectrophotometrically at 570 nm in the form of a product of combination with chromotropic acid. The sensitivity of the method is 0.3 mg/kg.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

USSR

UDC 543.544:632.951

MEL'TSER, E. R., NOVIKOVA, K. F., All-Union Scientific Research Institute of Chemical Agents for Plant Protection

"Chromatophotometric Method of Determining Residual Quantities of Phosalon in Fruit and Vegatable Products"

Moscow, Khimiya v Sel'skom Khozyaystve, Vol 8, No 9 (83), Sep 70, pp 40-42

Abstract: Phosalon is a new organophosphorus insecticide of comparatively low toxicity for warm-blooded animals. This chemical is based on 0,0-diethyl-S-(6-chlorobenzoxazolinyl-3-methyl)-dithiophosphate, and is a promising substitute for DDT is combatting aphids, the lesser apple worm, grape pests, mites and other insects. The authors of this article describe a chromatophotometric method which they have developed for determining phosalon in apples, pears and grapes. The method is based on acetone extraction of phosalon residues with subsequent redistribution from the acetone:water system (1:2) into chloroform, chromatographic separation, and identification on a thin layer of silica gel. After acetone elution of the

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

USSR

MEL'TSER, F. R., and NOVIKOVA, K. F., et al., Khimiya v Sel'skom Khozyzystve, Vol 8, No 9 (83), Sep 70, pp 40-42

of the insecticide from the sorbent layer, the product formed by combination of the formaldehyde isolated during acid hydrolysis of the phosalon with chromotropic acid is photometrically determined. The method has a sensitivity of 0.3-0.5 mg/kg (6 µg in the sample).

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

USSR

UDC 661.668.621.9-492

BELOZERSKIY, N. A., SEGAL, L. D., MEL'TSER, R. L., and ZELIKHMAN, L. A., State Planning Institute for Nickel Industry

"Iron-Nickel-molybdenum Carbonyl Powders"

Kiev, Akademiya Nauk Ukr SSR, Poroshkovaya Metallurgiya, No 7, Jun 72, pp 1-4

Abstract: A carbonyl method for obtaining iron-nickel-molybdenum powders containing from 0.5 to 5.8% Mo is described. In order to increase the molybdenum content in the powder, an organic solvent such as $Ni(CO)_4$, $Fe(CO)_5$, $Mo(CO)_6$, or acetone is added to the initial carbonyl iron-nickel mixture, or the temperature of the latter is raised. Articles with high magnetic properties are produced from carbonyl iron-nickel-molybdenum powders.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

USSR

UDC 621.396.62

MEL'TSER, V.G. [Member Scientific And Technical Society Of Radio Engineering, Electronics, And Communications im. A.S.Popov]

"Effect Of Duration Of Gating Of Receiving Channel On The Detection Characteristics Of A Single Signal In Normal Noise"

Moscow, Radiotekhnika, Vol 26, No 12, Dec 1971, pp 41-47

Abstract: The paper considers a standard receiving channel (high-frequency amplifier, low-frequency detector-filter, and threshold circuit) in a gating regime. The dependence is found of the detection characteristics on the duration of the gating pulses and the loss in the power of the threshold signal resulting from nonoptimal gating of the channel is determined. Received by editors 19 Nov 69; after further improvement 24 June 70.

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APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

USSR

UDC: 532.529

EL'PERIN, I. T., MEL'TSEV, V. L., LEVENTAL', L. I.

"Motion of a Solid Particle in Head-on Gas Jets"

V sb. Teplo- i massoperenos v apparatakh s dispersn. sistemami (Heat and Mass Transfer in Devices With Disperse Systems--collection of works), Minsk, "Nauka i tekhn.", 1970, pp 83-91 (from RZh-Mekhanika, No 4, Apr 71, Abstract No 4B920)

Translation: The motion of a solid particle in opposed gas jets is analytically considered for the self-similar, transition and Stokes regions of the law of resistances. Generalized analytical relationships are found which permit approximate calculation of the basic parameters of motion of the particles in the acceleration section and in the zone of collisions of the jets. It is shown that use of the method of opposed jets makes it possible to increase the stay of the solid phase as compared with ordinary flows of a gas suspension. Authors' abstract.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

472 022 UNCLASSIFIED

TITLE--PROPHYLACTIC APPLICATION OF DRY POLYVALENT DYSTENTERY BACTERIOPHAGE WITH PECTIN IN CHILDREN'S PRE SCHOOL INSTITUTIONS -U-

PROCESSING DATE--16OCT70

AUTHOR-(05)-SOLODOVNIKOV, YU.P., PAVLOVA, L.I., MELYANCV, P.I., GARNOVA, N.A., NOGIEVA, YU.B.

COUNTRY OF INFO--USSR

SOURCE--ZHURNAL MIKROBIOLOGII, EPIDEMIOLOGII I IMMUNOBIOLOGII, 1970, NR 5, PP 131-137

DATE PUBLISHED-------70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--PROPHYLAXIS, BACTERIOPHAGE, DYSENTERY, EPIDEMIOLOGY

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1994/0139

STEP NO--UR/0016/70/000/005/0131/0137

CIRC ACCESSION NO--AP0114535

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

2/2 022 UNCLASSIFIED PROCESSING DATE--16OCT70

CIRC ACCESSION NO--AP0114535

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE AUTHORS PRESENT THE RESULTS OF STRICTLY CONTROLLED EPIDEMIOLOGICAL TRIAL ON THE STUDY OF THE EFFICACY OF DRY POLYVALENT DYSENTERY BACTERIOPHAGE WITH PECTIN IN CHILDREN'S PRE SCHOOL INSTUTIONS OF YAROSLAVL. THE CHILDREN WERE GIVEN BACTERIOPHAGE DAILY DURING THE MONTHS FROM JUNE TO OCTOBER. THIS LED TO DECREASE OF THE INCIDENCE OF THE FOLLOWING DISEASES IN THE GROUP UNDER STUDY: OF BACTERIOLOGICALLY CONFIRMED DYSENTERY, 2.5 TIMES, OF CLINICALLY AND BACTERIOLOGICALLY CONFIRMED DYSENTERY, 2.3 TIMES, AND OF THE SUM TOTAL OF ACUTE INTESTINAL DISEASES, 2.1 TIMES. FACILITY: TSENTRAL'NYY INSTITUT EPIDEMIOLOGII, GOR'KOVSKIY INSTITUT EPIDEMIOLOGII I MIKROBIOLOGII, YAROSLAVSKAYA GORODSKAYA SANITARNO-EPIDEMIOLOGICHESKAYA STANTSIYA.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

USSR

UDC 621.396.67

MEL'YANOVSKIY, P.A., MEN', A. V.

"Methods Of Control Of The Parameters Of Phased Antenna Arrays"

Moscow, Elektrosvyaz', No 10, Oct 71, pp 66-71

Abstract: Methods are considered for high-frequency control of the parameters of multi-elements of phased antenna arrays. The principles of construction are given for a built-in automated system of operational remote control of the parameters of the phasing system for the T-shaped UTR-2 radiotelescope of the decimeter wave range. Received by editors 6 Dec 70. 7 ref. 7 ill.

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APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

USSR

UDC: 621.396.677

MEL'YANOVSKIY, P. A.

"On the Input Impedance of a Wide-Band Dipole in a Line Array"

V sb. Antenny (Antennas--collection of works), Vyp. 9, Moscow, "Svyaz'", 1970, pp 24-30 (from RZh-Radiotekhnika, No 12, Dec 70, Abstract No 12B45)

Translation: Data are analyzed on the input impedance of a wide-band dipole in a phased line array. The information was found by direct measurement in this array, and by calculation according to the conventional formula for coupled circuits. Four illustrations, one table, bibliography of five titles. Resumé.

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APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

USSR UDC: 621.396.677

MEL'YANOVSKIY, P. A., INYUTIN, G. A.

"On the Investigation of Mutual Coupling in Wide-Band Antenna Arrays"

V sb. Antenny (Antennas--collection of works), Vyp. 9, Moscow, "Svyaz'", 1970, pp 13-23 (from RZh-Radiotekhnika, No 12, Dec 70, Abstract No 12B44)

Translation: The authors analyze the parameters of an antenna array which characterize the mutual coupling between radiators, and discuss methods of measuring these parameters. Data are given from measurements of mutual impedances of wide-band dipoles. Eight illustrations, bibliography of five titles. Resumé.

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APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

Optics & Spectroscopy

USSR UDC 536.3;536.52

MELYUSHEV, V. V.

"Light Modeling of Thermal Radiation"

Sb. nauchn. tr. Chelyab. politekhn. in-ta (Collection of Scientific Works of Chelyabinsk Polytechnical Institute), 1970, No 60, pp 35-43 (from RZh-Fizika, No 12(I), Dec 70, Abstract No 12D1257)

Translation: An attempt is made to establish experimentally the relationship between thermal and light radiation in order to make extensive use of the method of light modeling. A light model reflecting a radiant heat exchange pattern was constructed by means of an artificial selection of materials, light sources, and distribution corresponding to them. A plane surface 70 × 170 mm was used as an emitter. A copper-constantan thermocouple or a selenium photoelement with diaphragm was used as a receiver of radiant energy.

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APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

UDC 51

USSR

KOSHARSKIY, B. D., ASHEROV, A. T., TIMOSHENKO, A. N., TIMCHENKO, M. D., MELYUSH KINA, L. P.

"Problem of Selecting the First Stage of an Automated Enterprise Control System"

V sb. Sistemotekhnika (Systems Engineering--collection of works), Kiev, 1972, pp 113-125 (from RZh-Kibernetika, No 12, Dec 72, Abstract No 12V400)

Translation: The problem of selecting the first stage of automation when introducing an automated enterprise control system is formulated. Possible optimalness and restriction criteria, possible statements of the problem and the statement used in the present paper, the method of solution and the results of experimental research for the Western Siberian Metallurgical Plant are presented.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

USSR UDC 621.762:669.018.24(088.8)

AL'TMAN, A. B., GLUSKIN, Ya. A., GRIB, V. V., ZALMANOV, Ya. S., MEMELOV, V. L.

"Metal Ceramic Antifriction Material"

USSR Author's Certificate No 316738, filed 2/04/70, published 14/12/71, (Translated from Referativnyy Zhurnal, Metallurgiya, No 5, 1972, Abstract No 5 G197 P).

Translation: A material based on Co is suggested, containing a solid lubricant. In order to increase the mechanical and antifriction properties in the dry friction mode, Ag is introduced with the following ratio of components (in %): Ag 5-30, solid lubricant 5-15, Co -- remainder.

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

UNCLASSIFIED PROCESSING DATE--16SEP70

1/2 044

TITLE--ANISTROPY OF THE ANTIFRICTION CERMENT MATERIALS WITH A SOLID LUBRICANT -U-

AUTHOR-(05)-ABRAMOVA, L.S., ALTMAN, A.B., VAYNSHTEYN, V.E., GLUSKIN, YA.A., MENELOV, V.L.

COUNTRY OF INFO--USSR

SOURCE--POROSHKOVAIA METALLURGIIA, VOL. 10, FEB. 1970, P 85-89

DATE PUBLISHED--------70

SUBJECT AREAS--MATERIALS

TOPIC TAGS--SOLID LUBRICANT, ANISOTROPY, CERMET, COMPOSITE MATERIAL, SILVER, MOLYBDENUM DISULFIDE, ANTIFRICTION MATERIAL

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED STEP NO--UR/0226/70/010/000/0085/0089

PROXY REEL/FRAME--1989/0589

CIRC ACCESSION NO--AP0107186 UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

UNCLASSIFIED PROCESSING DATE--18SEP70

2/2 044

CIRC ACCESSION NO--AP0107186

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. STUDY OF THE ANTIFRICTIONAL PROPERTIES OF A SYSTEM AG-MOS2 WITH A DIFFERENT CRYSTALLOGRAPHIC ORIENTATION OF THE MOS2 WITH RESPECT TO THE FRICTION SURFACE. IT IS FOUND THAT THIS COMPOSITE MATERIAL EXHIBITS AN ANISOTROPY OF ITS MECHANICAL AND ANTIFRICTIONAL PROPERTIES. IT IS SUGGESTED THAT IN THE FABRICATION OF ANTIFRICTION PARTS MADE OF THIS COMPOSITE, AN ATTENTION MUST BE GIVEN TO THE SELECTION OF THE MOST SUITABLE ORIENTATION OF THE SOLID LUBRICANT.

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APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

UDC 669.14.018.298:620.178.324

USSR

ALEKSANDROV, B. I., and MEMELOVA, YE. G.

"Fatigue Strength of 12Kh2N4VA Steel After Heat and Chemical-Heat Treatment"

Moscow, Metallovedeniye i Termicheskaya Obrabotka Metallov, No 3, 1971, pp 51-53

Abstract: A study was made of the effect of various types of heat and chemical-heat treatment on the fatigue strength of 18Kh10K2VA steel under axial loads with different cycle asymmetry. Vibration machines were used which permitted axial loads P_m to 6,500 kg and P_a to ±5000 kg to be obtained with a frequency of 1,300-2,500 cycles per minute. Limiting stress diagrams with asymmetrical axial loading cycles and the distribution of residual stresses in rings made of 18Kh2N4VA steel are presented. These diagrams permit selection of the optimal surface hardening for machine parts operating under axial loads. The mechanism of the effect of the axial is discussed briefly.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

UDC 669.14.018.298:620.178.324

USSR

ALEKSANDROV, B. I., and MEMELOVA, YE. G.

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

USSR

UDC 681.326

[illegible], V. V., [illegible], G. D., PYKETIN, V. YA., [illegible], A. M., ZAPOL'SKIY, A. P., KAL'TSOVA, V. A., IVANOV, G. A., KEMOKOVA, R. A., [illegible], M. YE., and KUSHELOV, N. T.

"Processor for Digital Data Processing System"

USSR Authors' Certificate No [illegible] Cl. G06 f 15/16, Filed 18 Apr 69, published 29 Jul 71 (from Kib-Avtomatika, Telemekhanika i Vychislitel'naya Tekhnika, No 5, May 72, Abstract No 5B220P)

Translation: The proposed device can be used in general-purpose computers operating in the binary and decimal number systems, under fixed- and floating-point conditions, and with representation of information in the form of machine levels and alphanumeric symbols, which have the capability of a wide build-up of peripherals. The processor contains arithmetic and logic units broken down into sections, a data store with word addressing and symbolic addressing, a control device to perform operations in accordance with a program routine, built-in multiplex and selector channels to communicate with the set of peripherals operating simultaneously with the arithmetic and logic unit, a symbol isolation unit, a [illegible] unit, and a storage address register.

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APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

USSR

UDC 535.345.1

MEN', A. A., and SETTAROVA, Z. S., All-Union Scientific Research Institute of Metrology imeni D. I. Mendeleyev

"On the Degree of Blackness of Quartz Glass"

Moscow, Teplofizika Vysokikh Temperatur, Vol 10, No 2, Mar-Apr 72, pp 279—284

Abstract: The degrees of blackness of pure quartz glasses were calculated on the basis of measured values of the spectral absorption coefficient k_λ and the refraction index n_λ. Relations of k_λ and n_λ to spectral, integral, directed, and semi-spherical blackness degrees of a plane layer of finite thickness were derived by solving the equation of radiation transfer. The temperature dependence of k_λ was previously found for the 2.5—5μ region, where quartz glass possesses a notable transmission. For the $\lambda > 5\mu$ region, the transmission of quartz glass is unimportant and the refraction and absorption indices were approximated by simple algebraic functions. The reflection coefficients of the

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

USSR

MEN', A. A. and SETTAROVA, Z. S., Teplofizika Vysokikh Temperatur, Vol 10, No 2, Mar-Apr 72, pp 279-284

layer boundaries for s- and p-polarization components were calculated from Fresnel formulas considering a strong absorption band of valence Si-O-Si oscillations. The results showed a strong dependence of the spectral blackness degree on temperature in the regions of translucence and high absorption. Deviations from the Lambert law of absorption are most expressed by low optical thickness. By wave lengths over 5μ, the Lambert law is satisfied anywhere for angles of 0--55 deg., except in the 7--11μ region. The same regularity is observed for the integral blackness degree. In proportion to the temperature increase from 700 to 1100 °K, the integral blackness degree of a one cm thick quartz glass (brand KV) decreases from 0.74 to 0.55. Comparative results of KV and KI quartz glasses in the 2.5--3μ region are presented. Six illustr., six formulas, one table, thirteen biblio. refs.

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APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

1/2 028 UNCLASSIFIED PROCESSING DATE--30OCT70
TITLE--AN INTEGRAL EQUATION OF RADIANT CONDUCTIVE HEAT TRANSFER -U-

AUTHOR--MEN, A.A.

COUNTRY OF INFO--USSR

SOURCE--INZHENERNO-FIZICHESKII ZHURNAL, VOL. 18, MAR. 1970, P. 474-480

DATE PUBLISHED----MAR70

SUBJECT AREAS--PHYSICS

TOPIC TAGS--RADIATIVE HEAT TRANSFER, CONDUCTIVE HEAT TRANSFER, INTEGRAL EQUATION, TEMPERATURE DISTRIBUTION

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAME--1996/1440 STEP NO--UR/0170/70/018/000/0474/0480

CIRC ACCESSION NO--AP0118429

UNCLASSIFIED

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

2/2 028 UNCLASSIFIED PROCESSING DATE--30OCT70

CIRC ACCESSION NO--AP0118429

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. DEVELOPMENT OF AN ANALYTICAL METHOD FOR THE SOLUTION OF A LINEARIZED FREDHOLM INTEGRAL EQUATION OF THE SECOND TYPE WHICH DESCRIBES THE TEMPERATURE FIELD IN THE CASE WHERE ENERGY TRANSPORT OCCURS BOTH BY RADIATION AND HEAT CONDUCTION. IT IS SHOWN THAT UNDER CERTAIN CONDITIONS ENCOUNTERED IN PRACTICE, A SOLUTION FOR THE HEAT CONDUCTIVITY OF A SEMITRANSPARENT MATERIAL CAN BE OBTAINED IN CLOSED FORM. FACILITY: VSESOIUZNYI NAUCHNO-ISSLEDOVATEL'SKII INSTITUT METROLOGII, LENINGRAD, USSR.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

UDC 541.451:669

USSR

MEN', A. N., Doctor of Chemical Sciences, Professor (Editor), Academy of Sciences USSR, Ural Scientific Center, Institute of Metallurgy

Fizicheskaya Khimiya Okislov (Physical Chemistry of Oxides), Moscow, "Nauka," 1971, 189 pp.

Translation of Annotation: This collection presents review articles by prominent scientists which reflect the present state of the main trends in the physical chemistry of oxides in the USSR and abroad, i.e., the kinetics and thermodynamics of the processes of metal oxidation and reduction, the relationship between the structure and composition with various physico-chemical properties, and the nature and specific properties of nonstoichiometric oxides.

This publication is intended for a wide circle of researchers, i.e., chemists and physical chemists, metallurgists, engineering and technical personnel of ferrous and nonferrous metallurgy, and instructors and students of chemical and metallurgical higher educational institutions.

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USSR

MEN', A. N., Fizicheskaya Khimiya Okislov (Physical Chemistry of Oxides), Moscow, "Nauka," 1971, 189 pp

Grigoriy Ivanovich Chufarov 3

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

USSR

MEN', A. N., Fizicheskaya Khimiya Okislov (Physical Chemistry of Oxides), Moscow, "Nauka," 1971, 189 pp

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

USSR

MEN', A. N., Fizicheskaya Khimiya Okislov (Physical Chemistry of Oxides), Moscow, "Nauka," 1971, 189 pp

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

USSR

MEN'. A. N., Fizicheskaya Khimiya Okislov (Physical Chemistry of Oxides), Moscow, "nauka," 1971, 189 pp

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

UNCLASSIFIED PROCESSING DATE--27NOV70

1/2 018

TITLE--COMPLEX STRUCTURE AND SURFACE ENERGY OF BINARY METALLIC MELTS -U-

AUTHOR-(04)-VOROBYEV, YU.P., BOGDANOVICH, M.P., MEN, A.N., CHUFAROV, G.I.

COUNTRY OF INFO--USSR

SOURCE--FIZ. METAL METALLOVED. 1970, 29(2), 445-8

DATE PUBLISHED-------70

SUBJECT AREAS--MATERIALS

TOPIC TAGS--LIQUID BINARY ALLOY, SURFACE TENSION, FLUID STRUCTURE, SURFACE ENERGY, ALLOY COMPOSITION, MODEL

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

STEP NO--UR/0126/70/029/002/0445/0448

PROXY REEL/FRAME--3003/0355

CIRC ACCESSION NO--AP0125581

UNCLASSIFIED

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"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020004-9

UNCLASSIFIED PROCESSING DATE--22NOV70

2/2 018
CIRC ACCESSION NO--AP0129587
ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. AN INTERPRETATION WAS PERFORMED OF CONCN. DEPENDENCE OF SURFACE TENSION OF BINARY METALLIC MELTS IN A COMPLEX MODEL. THE NONPARTICIPATION OF INTRACOMPLEX BINDING ENERGIES IN THE TOTAL SURFACE TENSION OF THE MELT AND THE DEVELOPMENT IN THE SURFACE TENSION OF ONLY WEAKER INTERACTIONS BETWEEN THE COMPLEXES AND THE ATOMS OF THE REDISUAL COMPONENT WERE ASSUMED IN THIS INTERPRETATION. THE PARAMETERS FOUND FOR SEVERAL SYSTEMS ARE TABULATED. IN THE OPINION OF THE AUTHORS, THE PROPOSED MODEL FOR THE STRUCTURE OF BINARY METALLIC MELTS IS RATHER GENERAL, AT LEAST AT 1ST GLANCE. THE FOLLOWING SYSTEMS WERE CONSIDERED: PD,NI, PD,CO, PD,CU, SN,CI, AND SN,PB. FOR THE SN,BI SYSTEM, THE COEFF. OF THE WEAKENING OF THE BI,BI BOND WAS EQUAL TO ZERO.
FACILITY: INST. MET., SVERDLOVSK, USSR.

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TITLE--THEORY OF PHASES OF VARIABLE COMPOSITION AND DEFECT CONTENT -U-

AUTHOR-(04)-MEN, A.N., BOGDANOVICH, M.P., VOROBYEV, YU.P., CHUFAROV, G.I.

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