

UNCLASSIFIED

PROCESSING DATE--30OCT70

2/2 024

CIRC ACCESSION NO--AP0121536

ABSTRACT/EXTRACT--(U) GP-0-

ABSTRACT. IN COMPLEX BINARY AU-PD FILMS WITH AN OVERLAP BAND, DURING ANNEALING, SURFACE DIFFUSION IS ATTENUATED, AND ON THE BOUNDARY OF THE AU SOLID SOLN. (50 AT. PERCENT) FILMS, ISOLATED PARTICLES OF SOLID SOLN. FORM WITH A SIZE 2 ORDERS OF MAGNITUDE GREATER THAN THE THICKNESS OF THE FILM. THE OBSD. CHANGES IN THE STRUCTURE OF THE BOUNDARY ARE CAUSED BY THE FORMATION ON THE SURFACE OF THE FILMS OF THIN LAYERS DUE TO THE POLYMN. OF ADSORBED VAPORS OF THE DIFFUSION PUMP OIL, AS WELL AS BY THE RELAXATION OF THE STRESSES FORMED DURING BULK DIFFUSION.

FACILITY: KHAR'KOV. POLITEKH. INST. IN. LENINA,

KHARKOV, USSR.

UNCLASSIFIED

1/2 021 UNCLASSIFIED PROCESSING DATE--2/NOV70
TITLE--POSSIBLE USE OF THIN FILM METHOD FOR EVALUATING THE PURITY OF
ORGANIC COMPOUNDS -U-
AUTHOR--(03) LEBEDEVA, N.D., KUZNETSOVA, I.N., LYADOVA, N.P.
COUNTRY OF INFO--USSR
SOURCE--ZH. FIZ. KHIM. 1970, 44(1), 274-7
DATE PUBLISHED-----70
SUBJECT AREAS--CHEMISTRY
TOPIC TAGS--CHEMICAL PURITY, CHEMICAL LABORATORY APPARATUS, HEAT EFFECT,
CRYOGENIC EFFECT, PROPYLENE OXIDE, CHLORINATED ORGANIC COMPOUND,
ETHYLENE
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAME--3006/0814 STEP NO--UR/0074770/044/001/0274/0277
CIRC ACCESSION NO--AP0134547
UNCLASSIFIED

UNCLASSIFIED

PROCESSING DATE--27NOV70

2/2 021

CIRC ACCESSION NO--AP0134547

ABSTRACT/EXTRACT--(U) GP-0-

ABSTRACT. A CRYOSCOPIC METHOD BASED ON THE MELTING CURVE (TEMP. TIME) OF A SMALL QUANTITY OF THE STUDIED MATERIAL (0.1-0.2 G) WAS USED TO DET. THE PURITY OF ORG. COMPOD. M. MINUS 120DEGREES TO PLUS 150DEGREES. THE PROPOSED APP. IS DESCRIBED IN DETAIL. THE METHOD WAS CHECKED BY USING BZOH, C SUB2 H SUB4 CL SUB2, AND PROPYLENE OXIDE CONTG. ANTHRACENE, STILBENE, PHOL, CCL SUB4, AND PHME AS IMPURITIES. REPRODUCIBILITY WAS 0.01-0.02 MOLE PERCENT AT INITIAL PURITY OF THE MATERIALS OF 99.9 MOLE PERCENT. FACILITY: GOS. INST. PRIKL. KHIM., LENINGRAD, USSR.

UNCLASSIFIED

1/2 018 UNCLASSIFIED PROCESSING DATE--02NOV70
 TITLE--SOLUBILITY IN A COBALT NITRATE, AMMONIUM NITRATE AND WATER SYSTEM AT
 20DEGREES -U-
 AUTHOR-(03)-ALIMOVA, L.N., KORF, D.M., LEBEDEVA, N.D.
 COUNTRY OF INFO--USSR
 SOURCE--ZH. PRIKL. KHIM. (LENINGRAD) 1970, 43(2), 458-9
 DATE PUBLISHED-----70
 SUBJECT AREAS--CHEMISTRY
 TOPIC TAGS--TERNARY FLUID SYSTEM, AQUEOUS SOLUTION, SOLUBILITY, AMMONIUM
 NITRATE, COBALT COMPOUND, PHASE COMPOSITION
 CONTROL MARKING--NO RESTRICTIONS
 DOCUMENT CLASS--UNCLASSIFIED STEP NO--UR/0080/70/043/002/0458/0459
 PROXY REEL/FRAE--1987/0349
 CIRC ACCESSION NO--AP0104285 UNCLASSIFIED

UNCLASSIFIED

PROCESSING DATE--02.JUL70

2/2 018

CIRC ACCESSION NO--AP0104285

ABSTRACT/EXTRACT--(U) GP-0-

ABSTRACT. IN THIS SYSTEM, SOLID CO(ND
 SUB3)SUB2 .6H SUB2 D IS EQUIL. WITH AN AQ. SOLN. THE COMPN. OF WHICH
 VARIES IN THE RANGE CO(ND SUB3)SUB2 47.96 PLUS NH SUB4 NO SUB3 3.9 WT.
 PERCENT TO CO(ND SUB3)SUB2 41.5 PLUS NH SUB4 NO SUB3 27.1 WT. PERCENT.
 AT AQ. PHASE COMPNS. OF CO(ND SUB3)SUB2 40.4 PLUS NH SUB4 NO SUB3 29.8
 WT. PERCENT TO CO(ND SUB3)SUB2 5.95 PLUS NH SUB4 NO SUB3 58.42 WT.
 PERCENT, NH SUB4 NO SUB3 IS THE ONLY COMPONENT OF THE SOLID PHASE. A
 MIXT. OF BOTH SALTS WAS IN PHASE EQUIL. WITH SOLNS. CONTG. 40.7-40.8 WT.
 PERCENT CO(ND SUB3) SUB2 AND 28.2-29.3 WT. PERCENT NH SUB4 NO SUB3.

UNCLASSIFIED

USSR

UDC 615.387.07

KARLOVA, N. G., SMIRNOV, V. I., and ~~LEBENOVA, K. I.~~ Central Laboratory for Quality Control and Study of Blood Preparations and Blood Substitutes, Central Institute of Hematology and Blood Transfusion, Ministry of Health USSR

"Use of the VSh-0.035 Vacuum Desiccator to Determine Residual Moisture in Lyophilized Protein Preparations"

Moscow, Laboratornoye Delo, No 7, 1970, pp 438-439

Abstract: The Soviet medical industry has recently put on the market a vacuum desiccator designated the VSh-0.035, for use in drying and heating various materials to temperatures ranging from 80 to 200°C. These temperatures are unsuitable for protein preparations, however. The authors therefore redesigned the automatic temperature control in the working chamber of the desiccator to permit maintenance of temperatures at 60 to 70°C. When air is withdrawn from the VSh-0.035 with a vacuum pump, the hygroscopic lyophilized material may become volatilized. The vacuum system of the VSh-0.035 was slightly modified to prevent this. Certain other changes that were made, as well as the mode of operation of the apparatus, are described in detail.

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USSR

UDC 541.91:547.1'118

IVANOV, B. Ye., SAMURINA, S. V., LEBEDEVA, N. N., AGEYEVA, A. B., and
GOL'DFARB, E. I., Institute of Organic and Physical Chemistry, imeni
A. Ye. Arbuzov, Academy of Sciences, USSR

"Reaction of o-Hydroxybenzyl Alcohol With Phosphorous Acid Esteramides
and Amides"

Moscow, Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya, No 8, Aug 73,
pp 1825-1827

Abstract: The reaction of o-hydroxybenzyl alcohol with diethylamidodiethyl-
phosphite, bis(diethylamido)ethyl phosphite and tris(diethylamido) phosphite
was studied. It was established that in the nucleophilic substitution re-
actions, the nucleophilic center may be at the phosphorus atom or at the
nitrogen atom in phosphorous acid esteramides and amides.

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- 29 -

USSR

CHEBURKIN, A. V., STEFANI, D. V., LEBEDEVA, N. N., YESIFENKO, H. V., and
IL'CHENKO, T. P.

"Immunoglobulins in Nasal Secretions of Small Children"

Vopr. Okhrany Materinstva i Detstva (Problems of the Protection of Motherhood
and Childhood), 1973, No 7, pp 53-57 (from RZh - Biologicheskaja Khimiya, No 22,
Nov 73, Abstract No 1704)

Translation: By the method of simple radial immunodiffusion it is not possible
to determine secretory immunoglobulins in the washout of nasal secretions of
one month old babies. After the age of 2 months a small quantity of immuno-
globulins of the class A and G are found. From the six months on -- the level
of IgA is increased, while IgG remains quite low, increasing slightly with age.
The immunoglobulins of the class M in nasal secretions are absent in small
babies. High individual fluctuations of IgA may be explained by the lability
of the system of local immunity. The results obtained support the point of
view of the local synthesis of class A immunoglobulins.

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Acc. Nr: AP0047163

Ref. Code: UR 0246

LEBEDEVA N.V.

PRIMARY SOURCE: Zhurnal Nevropatologii i Psichiatrii, 1970,
Vol 70, Nr 2, pp 177-181

MATHEMATICAL PROGNOSIS OF OUTCOMES IN HEMORRHAGIC
STROKES WITH THE PURPOSE OF DETERMINING
INDICATIONS TO SURGICAL TREATMENT

Gelfand, I. M.; Guberman, S. A.; Izvekova, M. L.;

Kandel, E. I.; Lebedeva, N. V.; Luriev, D. K.;

Nikolayeva, I. F.; Chebotareva, N. M.

The purpose of the convened study was to elaborate methods of mathematical prognosis in hemorrhagic strokes to define the indications to surgical treatment. The authors analyzed 124 case histories (52 case histories of living patients and 72 case histories of deceased) with hemorrhages into the brain hemisphere, following hypertensive disease and atherosclerosis. In such cases 56 items were considered which were the most significant for prognosing hemorrhagic strokes. Among them were different clinical symptoms and their development during 12 hours after admission to hospitals. An analysis of these items permitted to establish a correct prognosis in relation to survival during the first 5 days with exactness to 95%. The next stage of the study presumes an elaboration of methods for prognosis of hemorrhagic strokes in surgical treatment. This may be of aid in deciding the expediency of operations in each separate case.

REEL/FRA
19790657

USSR

UDC 539.171.4

LEBEDEVA, N. S., and MOROZOV, V. M.

"Anomalous Neutron Scattering"

Moscow, Atomnaya Energiya, Vol 28, No 4, Apr 70, pp 310-316

Abstract: An analysis indicates that conclusions regarding the existence of any anomalies in the current state of neutron elastic scattering theory are possible only if the process studied is accompanied by qualitative manifestations (for example, polarization of scattered neutrons in the case of Schwinger scattering). Current nuclear models do not apparently permit a reliable estimate of even the upper limit of possible scattering "anomalies" in $\sigma^{01}(\theta)$ which are due to any addends in the full neutron-nucleus interaction potential which are different from the short-range specifically nuclear potential and Schwinger potential.

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1/2 014

UNCLASSIFIED

PROCESSING DATE--16OCT70

TITLE--ANOMALIES IN THE SMALL ANGLE ELASTIC SCATTERING OF NEUTRONS -U-

AUTHOR--(03)-GORLOV, G.V., LEBEDEVA, N.S., MOROZOV, V.M.

COUNTRY OF INFO--USSR

SOURCE--IZV. AKAO. NAUK SSSR, SER. FIZ. 1970, 34(1), 138-46

DATE PUBLISHED-----70

SUBJECT AREAS--PHYSICS

TOPIC TAGS--NUCLEAR MODEL, NEUTRON SCATTERING, SMALL ANGLE SCATTERING, SCATTERING CROSS SECTION, CALCULATION, ERROR ANALYSIS, ELASTIC SCATTERING

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAE--1988/0237

STEP NO--UR/0048/70/034/001/0133/0146

ARC ACCESSION NO--AP0105313

UNCLASSIFIED

272 .014

UNCLASSIFIED

PROCESSING DATE--160CT70

CIRC ACCESSION NO--A0105313

ABSTRACT/EXTRACT--(U) GP-O- ABSTRACT. ALL INVESTIGATORS MAKE CONCLUSIONS ON THE PRESENCE OR ABSENCE OF ANOMALIES IN THE SMALL ANGLE SCATTERING OF N ON THE BASIS OF THE COMPARISON OF EXPTL. DATA WITH THE PREDICTIONS OF THEORY. UNFORTUNATELY, THE SIGNIFICANCE OF THEORETICAL PREDICTION IS NOT CUSTOMARILY DEALT WITH. THE FORM OF THE CROSS SECTION OF N ON THE NUCLEI OF THE MEAN AT. WT, IS SATISFACTORILY DESCRIBED BY ALL MODELS USED, BUT THE HEAVY NUCLEI EXHIBIT AN UNSTABLE RESULT. THE USE OF VARIOUS MODELS FOR THE INTERPRETATION OF DATA OBTAINED IN ONE AND THE SAME EXPT. OFTEN LEADS TO CONCLUSIONS BY THE SIGN OF THE EFFECT. THE ASSUMPTIONS MADE IN MANY WORKS ON THE EXISTENCE OF THE ANOMALOUS SMALL ANGLE SCATTERING OF N INCREASING WITH THE INCREASE OF ENERGY OF N ARE NOT JUSTIFIABLE.

UNCLASSIFIED

2/2 013

UNCLASSIFIED

PROCESSING DATE--27NOV70

CIRC ACCESSION NO--AP0137651

ABSTRACT/EXTRACT--(U) GP-O- ABSTRACT. A CRIT. ANAL. IS GIVEN ON PUBLISHED DATA AND THEORIES ON THE ORIGIN OF N ELASTIC SCATTERING AT VERY SMALL ANGLES (SMALLER THAN OR EQUAL TO 1 DEGREE). ALL CONCLUSIONS ON THE ANOMALIES IN N ELASTIC SCATTERING MAY BE DRAWN ONLY IF THE STUDIED PROCESS IS ACCOMPANIED BY QUAL. EFFECTS.

UNCLASSIFIED

USSR

UDC: 519.2

BRILLOVSKIY, B. L., LEBEDEVA, N. V.

"A Trial-and-Error Algorithm for Establishing a Relationship From a Sample,
and its Application"

Tr. in-t elektron. upravl. mashin (Works of the Institute of Electronic
Controllers), 1971, vyp. 16, pp 5-26 (from RZh-Kibernetika, No 5, May 72,
Abstract No 5V148)

[No abstract]

1/1

- 7 -

Organophosphorous Compounds

USSR

UDC 632.954

GRAPOV, A. F., ~~LEBEDEVA, N. V.~~, MEL'NIKOV, N. N., SERGEYEVA, T. A., STONOV, L. D., TITOVA, L. M., and VOLKOTRUB, E. N., All Union Scientific Research Institute of Chemical Means of Plant Protection

"A New Herbicide Called Isophos"

Moscow, Agrokhimiya, No 1, 1972, pp 96-103

Abstract: Herbicidal properties of isophos-1, $\text{ClCH}_2\text{P}(\text{S})\begin{cases} \text{NHC}_4\text{H}_9\text{-sec.} \\ \text{OC}_6\text{H}_3\text{Cl}_2\text{-2,4} \end{cases}$, and

isophos-2, $\text{ClCH}_2\text{P}(\text{S})\begin{cases} \text{NHC}_3\text{H}_7\text{-iso} \\ \text{OCOH}_3\text{Cl}_2\text{-2,4} \end{cases}$, were tested on many plants, including

cockspur grass (*Echinochloa crus-galli*), and rice grass (*Echinochloa oryzicola*), the weeds which commonly grow with rice. Application of 2-6 kg isophos-1 or isophos-2/ha killed 100% of the above weeds. The best time for application of the herbicides was before sowing of rice, or prior to its sprouting. A surface application produced the best results. Both types of isophos in 4-8 kg/ha doses were toxic to garden orache, amaranth, and white bent. Field pennycress, spring wild oat, and knotweed were of average sensitivity toward isophos.

USSR

GRAPOV, A. F., et al., *Agrokimiya*, No 1, 1972, pp 96-103

Among the cultivated plants, rice was most resistant toward this herbicide, followed by wheat, oats, and barley (most sensitive). Cotton, beans, radishes, and sunflowers are resistant to isophos, but sugar beets and flax are sensitive. Carrots were most resistant to isophos in doses of 1-4 kg/ha and tomatoes and cucumbers showed medium resistance. Isophos was 100% effective against rice grass in meadow-marshy, soddy-podzolic, and sierozem soils. It was only 83-97% effective in soils with high humus content. Effectiveness of isophos lasted for 30-100 days after application. Analysis of the soil horizons indicated that it remained mainly in the top 0-10 cm of soil. The structure of the aryl radical determines the phytotoxic properties of amides of thio- and dithiophosphonic acids. Presence of two Cl atoms in the phenyl group increases the herbicidal effects of these compounds.

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Acc. Nr: AP0047165

Ref. Code: UR 0246

PRIMARY SOURCE: Zhurnal Nevropatologii i Psikhologii, 1970,
Vol 70, Nr 2, pp 118-121

THE DIAGNOSIS OF THE DEPTH OF THE FOCUS
IN HEMORRHAGES INTO THE BRAIN HEMISPHERE

N. V. Lebedev

For prognostication and the determination of the necessity and expediency of surgical aid it is very important to evaluate the depth of the focus in hemorrhages of the hemisphere. A clinical study in combination with the EEG data and if necessary with the results of angiography made during the first hours of the disease gives enough grounds for a definite topical diagnosis not only in depth but in relation to the localization of the hemorrhage: backwards in the parieto-occipital direction or forwards in the direction of the lobe. The clinical picture is determined by the localization of the hemorrhage and its character (hematoma, hemorrhagic infiltration of the brain tissue).

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REEL/FRAME
19790659

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1/2 027 UNCLASSIFIED PROCESSING DATE--30OCT70
TITLE--REACTION OF GERMANIUM (IV) WITH 3,5-DINITROPYROCATECHOL -U-
AUTHOR--(03)--NAZARENKO, V.A., LEBEDEVA, N.V., VINARDYA, L.I.
COUNTRY OF INFO--USSR
SOURCE--ZH. NEORG. KHIM. 1970, 15(3), 643-7 L
DATE PUBLISHED-----70
SUBJECT AREAS--CHEMISTRY
TOPIC TAGS--GERMANIUM COMPOUND, ORGANIC NITRO COMPOUND, PYROCATECHOL,
POTENTIOMETRIC TITRATION, SPECTROPHOTOMETRIC ANALYSIS, COMPLEX COMPOUND,
IONIZATION
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAE--2000/1636 STEP NO--UR/0078/V07015/003/0643/0647
CIRC ACCESSION NO--APO125258
UNCLASSIFIED

2/2 027

UNCLASSIFIED

PROCESSING DATE--30OCT70

CIRC ACCESSION NO--AP0125258

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE REACTION OF DEEIV) WITH
 3,5-DINITROPYROCATÉCHOL (L) WAS STUDIED SPECTROPHOTOMETRICALLY AND
 POTENTIOMETRICALLY. AT A GE:L CONC.N. RATIO OF 1:1, A COMPLEX FORMED
 WHICH HAD PROPERTIES OF A STRONG DIBASIC ACID WITH A 2ND IONIZATION
 CONST. OF (1.24 PLUS OR MINUS 0.10) TIMES 10 PRIME NEGATIVE2. THE
 INSTABILITY CONST. OF THE COMPLEX IS (1.42 PLUS OR MINUS 0.29) TIMES 10
 PRIME NEGATIVE48. AT IONIC STRENGTH 0.1 AND 25PERCENT, THE IONIZATION
 CONSTS. OF L ARE: K SUB1 EQUALS 4.1 TIMES 10 PRIME NEGATIVE4 AND K SUB2
 EQUALS 9.3 TIMES 10 PRIME NEGATIVE11. FACILITY: INST. ODSHCH.
 NEORG. KHIM., KIEV, USSR.

UNCLASSIFIED

1/2 019

UNCLASSIFIED

PROCESSING DATE--16OCT70

TITLE--FLUX DENSITIES OF SOME RADIO SOURCES IN THE FREQUENCY RANGE 12-25
MHZ -U-

AUTHOR--(05)-BRAUDE, S.YA., LEBEDEVA, D.M., MEGN, A.V., RYABOV, B.P.,
ZHOUCK, I.N.

COUNTRY OF INFO--USSR

SOURCE--ASTROPHYS. LETTERS (GB), VOL. 5, NO. 3, P. 129-32 (MARCH 1970)

DATE PUBLISHED----MAR 70

SUBJECT AREAS--ASTRONOMY, ASTROPHYSICS, NAVIGATION

TOPIC TAGS--ELECTRON FLUX, RADIO TELESCOPE, COSMIC RADIO SOURCE / (U)UTAL
RADIO TELESCOPE

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1992/0539

STEP NO--UK70000770/005/003/0129/0132

CIRC ACCESSION NO--AP0111732

UNCLASSIFIED

2/2 019

UNCLASSIFIED

PROCESSING DATE--18OCT70

CIRC ACCESSION NO--AP0111732

ABSTRACT/EXTRACT--(U) GP-0-

ABSTRACT. THIS PAPER PRESENTS MEASUREMENTS OF THE FLUX DENSITIES OF 33 DISCRETE RADIO SOURCES, MADE WITH THE RADIO TELESCOPE UTR-1 IN GRAKOVO, AT FREQUENCIES RANGING FROM 12.6 TO 25 MHZ.

FACILITY: ACAD. SCI. UKRAINIAN SSR, KHARKOV, USSR.

USSR

UDC 523.164.42

BRAUDE, S. YA., ZHUK, I. N., SEDEVA, C. H., MEN', A. V. and RYABOV, B. P.,
Institute of Radiophysics and Electronics, Academy of Sciences UkrSSR, Kharkov

"Time Changes in the Flux Densities of Discrete Sources in the Decameter Range"

Kiev, Ukrainskiy Fizicheskii Zhurnal, Vol. 15, No. 2, Feb 70, pp 177-190

Abstract: Two series of experiments were conducted to clarify the problem of the flux variability of sources in the decameter range. The purpose of the first series of experiments was to determine the type of fluctuations in signals occurring in 5-10 consecutive measurements of sources with first and third types of spectra. The second group of experiments was to determine the change in the average flux density with time for 50 sources, each of which was measured for several months. The first group of experiments indicated that fluctuations in signals received from the sources are associated with the ionosphere and not with processes occurring in the sources. The following sources were selected for the second series of experiments to determine whether the average flux densities of different sources vary over time: 3C10, 3C111, 3C106, 3C213, 3C274, 3C353, 3C123, 3C405, 3C461, 3C64, 3C99, 3C104, and 3C374 in Cassiopeia-A. Experiments show that spectra of the majority of these sources were stable and independent of time. Some typical results of measurements made during 1966-1968

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USSR

BRAUDE, S. YA., et al., *Ukrainskiy Fizicheskiy Zhurnal*, Vol 15, No 2, Feb 70, pp 177-190

are given for several of these sources. The data showed, however, that as distinct from the majority of discrete sources where the average spectra remained unchanged over a considerable time period within the accuracy of measurement, time changes in intensity exceeding the natural spread of data and error of measurement were observed in the spectra of three discrete sources: 3C80, 3C144, and 3C461. The data were insufficient to establish the period of variability of these sources. A discussion of the question indicates that this variability cannot be explained within the framework of existing models, and the physical processes responsible for this flux variability at low frequencies remain an open question. It was concluded that since a systematic increase in the flux of Cassiopeia-A at low frequencies was not observed, one would expect that in an injection of particles with a total energy of $W_p = 10^{47}$ ergs, which is about 10% of the relativistic particles of the entire Cassiopeia-A, the variability observed during 1966-1967 must be a relatively rare phenomenon. Further systematic studies of these and other sources in the decimeter range are recommended.

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Acc. No. **046564**
AP0

Abstracting Service: **5170**
INTERNAT. AEROSPACE ABST.

Ref. Code:
UR0185

A70-23189 # Spectra of discrete radio sources in decametric wavelength range (Spektry diskretnikh dzhurei v dekametriivnomu diapazoni dovzhin khvil'). S. Ia. Brauda, I. M. Zhuk, O. M. Lutsivska, A. V. Man', and B. P. Babiy (Akademiia Nauk Ukrain's'koï RSR, Institut Radiofiziki i Elektroniki, Kharkov, Ukrainian SSR). *Ukrains'kii Fizichnii Zhurnal*, vol. 15, Jan. 1970, p. 132, 118 refs. In Ukrainian.

The analysis was carried out of the spectra measurements of discrete sources of cosmic radio waves in a decametric wavelength range. The spectral indices are presented of 113 discrete sources measured at the Radio Observatory of the Institute of Radiophysics and Electronics of the Academy of Sciences of the Ukrainian SSR in Grakovo. A new classification of decametric spectra of discrete sources was introduced. According to this classification 59 sources were related to type I (linear spectra), 8--to type II (negative curvature), 29--to type III (positive curvature) and 11 sources--the type IV (variable curvature). Different problems connected with generation and absorption of radio waves in the discrete sources were discussed and used to interpretation of various types of spectra. The analysis of preliminary data on the radio wave absorption of remote metagalactic hydrogen was discussed together with the question on possible values of temperature and density of the latter. (Author)

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REEL/FRA
19781828

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1/2 018 UNCLASSIFIED PROCESSING DATE--090CT70
TITLE--TIME VARIATIONS IN THE DENSITIES OF FLUXES FROM DISCRETE SOURCES
IN THE DECAMETER WAVELENGTH RANGE -U-
AUTHOR--(05)--BRAUDE, S.YA., ZHUK, I.M., LEBEDEVA, O.M., MEN, A.V., RYABOV,
B.P.
COUNTRY OF INFO--USSR
SOURCE--UKRAINS'KII FIZICHNII ZHURNAL, VOL. 15, FEB. 1970, P. 177-190
DATE PUBLISHED-----70
SUBJECT AREAS--ASTRONOMY, ASTROPHYSICS
TOPIC TAGS--ELECTRON FLUX, RADIO EMISSION, CRITICAL WAVELENGTH, SIGNAL
ANALYSIS
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAME--1991/0323 STEP NO--UR/0185/70/0157000/0177/0190
CIRC ACCESSION NO--AP0110211

UNCLASSIFIED

272 018

UNCLASSIFIED

PROCESSING DATE--0906170

CIRC ACCESSION NO--AP0110211

ABSTRACT/EXTRACT--(U) GP-O- ABSTRACT. THEORETICAL AND EXPERIMENTAL STUDY OF THE TIME VARIABLE INTENSITIES OF RADIATION FLUXES FROM RADIO EMISSION SOURCES IN THE DECAMETER WAVELENGTH RANGE. THE STUDY IS BASED ON OBSERVATIONS OF THE FLUCTUATIONS IN RADIO SIGNAL SEQUENCES AND ON LONG PERIOD OBSERVATIONS OF THE MEAN VALUES OF THE DENSITIES OF RADIO EMISSION FLUXES FROM A LARGE GROUP OF DISCRETE RADIO SOURCES. THE RADIO EMISSION SPECTRA OF MOST OF THESE SOURCES SHOWED ONLY SLIGHT VARIATIONS WITH TIME, WITH THE EXCEPTION OF 3084, 30144 AND 30961. THE TIME VARIABLE FLUCTUATIONS IN THE RADIO EMISSION SPECTRA OF THESE SOURCES ARE FOUND TO BE GREATER AT LOWER FREQUENCIES. POSSIBLE PHYSICAL CAUSES OF THESE TIME DEPENDENT FLUCTUATIONS ARE DISCUSSED. FACILITY: AKADEMIIA NAUK UKRAINS'KUI RSR, INSTITUT RADIOFIZIKI I ELEKTRONIKI, KHARKOV, UKRAINIAN SSR.

UNCLASSIFIED

USSR

UDC 576.851.31.097.22:615.33

PODOSINNIKOVA, L. S., DOMARADSKIY, I. V., LIBINZON, A. YE., IEBELEVA, S. A.,
and BOGDANOVA, M. I., Rostov-on-Don Antiplague Institute

"Multiple Resistance of El Tor Cholera Vibrios to Antibiotics"

Moscow, Zhurnal Mikrobiologii, Epidemiologii i Immunobiologii, No 4, 1973,
pp 9-13

Abstract: Fresh isolates of El Tor vibrios from patients with cholera were tested for resistance to a number of antibiotics, and several strains were found to show multiple resistance. Resistance was found to decrease on in vitro passage and, since it is known that the El Tor vibrios readily take up resistance transfer factors from intestinal bacteria, studies were undertaken to pass the putative resistance factor from the vibrios to Pasteurella pestis strains EV and 556/100, and to cure the vibrios with acriflavine. Exposure of the vibrios to 0.1-5 μ g/ml of acriflavine in Marten's broth for 18-20 hrs at 37°C resulted in loss or decrease of resistance. Exconjugate P. pestis cells were found to acquire resistance to tetracycline, levofloxacillin, and streptomycin from the resistant vibrios; the resistance factor was transferred with a frequency of 2×10^{-4} to 2×10^{-3} . In summary, the results showed that one strain of El Tor vibrios was cured by acriflavine and transferred resistance to 1/2

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USSR

PODOSINNIKOVA, L. S., et al., Zhurnal Mikrobiologii, Epidemiologii i Immunobiologii, No 4, 1973, pp 9-13

P. pestis, four other strains transferred resistance to *P. pestis* but exposure to acriflavine only decreased their antibiotic resistance, and one strain, which was resistant to tetracycline, oxytetracycline, penicillin, and ampicillin, did not transfer resistance to *P. pestis* but was cured of resistance to tetracycline and oxytetracycline by acriflavine. The data suggest the extrachromosomal nature of the resistance factor. The failure of one strain to transfer the plasmid to *P. pestis* may have been due to the latter's inability to accept the plasmid, or the factor could have been defective or integrated into the chromosome.

2/2

USSR

UDC 576.851.45.097.22:615.334

LEBEDEVA, S. A., MISHAN'KIN, B. N., and SUGHKOV, YU. G., Rostov-on-Don Scientific Research Antiplague Institute

"Episome Resistance of Plague Microbes to Penicillins"

Moscow, Antibiotiki, Vol 17, No 10, 1972, pp 908-910

Abstract: In a mixture of penicillin-resistant *Sh. newcastlai* (donor) and penicillin-sensitive *P. pestis* (recipient) incubated for 3 hrs., conjugation and recombination results in transfer of an R-episome with a frequency of $n \times 10^{-5}$. The recombinant plague bacteria became resistant to benzylpenicillin, ampicillin, cephorin, cephalin, metycillin, oxacillin, cloxacillin, and piperon. Donors, recipients, and recombinants are sensitive to merthiolata, and therefore, the episome in question has no gene resistant to Hg ions. The penicillin-resistance factor is eliminated by acriflavine in 1% of the cases and, upon incubation of the recombinants with other sensitive strains of plague bacteria, it is transferred to the latter with a frequency of $n \times 10^{-3}$. Since acquisition of resistance to penicillins is accompanied by acquisition of the ability to produce beta-lactamase (a highly active extracellular penicillinase) and since loss of one property is accompanied by loss of the other, it is concluded that beta-lactamase is the main factor determining resistance to penicillins.

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USSR

UDC 576.858.095.38:576.895.771

LEBEDEVA, O. P., and ZELENKO, A. P., Kiev University imeni T.G. Shevchenko, Kiev

"Detection of Virus-Related Formations in Larvae of Aedes and Culex Mosquitoes"

Moscow, Meditsinskaya Parazitologiya i Parazitarnyye Bolezni, Vol 41, No 4, Jul-Aug 72, pp 490-492

Abstract: Larvae of *Aedes aegypti* L. and *Culex pipiens molestus* Forsk. mosquitoes bred in the laboratory developed an infectious disease in the 4th instar and the stage of pupa formation that could be ascribed to a virus. The disease caused death of up to 30% of the larvae. In the cytoplasm of the fatty bodies of infected larvae inclusions were found that were similar to those that are caused by Vagoiavirus and are present in larvae of some *Culex* species from natural bodies of water. In addition to formations due to Vagoiavirus, the infected larvae of the laboratory cultures and those of *Culex* mosquitoes from natural bodies of water also had cell nuclei that exhibited hypertrophy and were structurally analogous to those found in densonucleosis of *Calleria mellonella*. Evidently the larvae were infected with a combination of two entomopathogenic viruses.

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USSR

UDC 576.851.45.097.22:615.332 (CHLORAMPHENICOL)

LEEDEVA, S. A., and MISHAN'KIN, B. N., Rostov-on-Don Scientific Research
Antiplague Institute, Rostov-on-Don

"Inactivation of Chloramphenicol by Plague Bacteria With Episome Resistance
to the Antibiotic"

Moscow, Antibiotiki, Vol 17, No 9, Sep 72, pp 806-808

Abstract: On conjugation of plague bacteria with a strain of *E. coli* resistant to chloramphenicol and also to streptomycin, tetracycline, and neomycin, the R-factor of the *E. coli* was transferred to the *P. pestis* with the result that an episomic resistance of the latter to chloramphenicol developed. It was established in tests in which an indicator strain of staphylococci was used that the modified *P. pestis* strains (recombinants) inactivated chloramphenicol. This effect could be ascribed to the action of chloramphenicolacetylase, the synthesis of which was associated with the presence of the R-factor. It was not exerted by the unmodified recipient strains. Chloramphenicol was inactivated at an equal rate by live cultures of the donor strain of *E. coli* and those of a *P. pestis* recombinant. Killing of the cultures by boiling destroyed their capacity to inactivate chloramphenicol.

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WDC 575.191.576.3

USSR

KOL'TSOVA, Ye. G., SUCHKOV, Yu. G., and LEBEDEVA, S. A., Rostov-na-Dona Anti-plague Institute

"Transfer of the Bacteriocinogenic Factor in *Pasteurella pestis*"

Moscow, Genetika, No 4, 1971, pp 118-122

Abstract: Crossing a pesticin producing donor having a drug resistance episome with non-pesticin producing recipients produced recombinants with the R factor. The frequency of transfer of the pesticinogenic factor (Pg) ranged from 10^{-2} to 10^{-6} . Determination of the pesticin producing capacity of antibiotic-resistant variants revealed the presence of recombinants which upon conjugation received not only the R episome but the Pg factor, as manifested by their ability to produce pesticin. Pesticin production did not disappear in the course of spontaneous or induced elimination of the R factor, an indication that these episomes are not linked in the recombinants. The markers of pesticin production and coagulase-fibrinolytic activity were transferred both together and separately. These markers are apparently controlled by different genes closely linked in the episome.

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USSR

UDC 576.851.65.095.5

LEBEDEVA, S. A., SUCHKOV, Yu. G., and DOMARADSKIY, I. V., Corresponding Member
of the Academy of Medical Sciences USSR, Scientific Research Antiplague Institute,
Rostov-na-Donu

"Syntrophism in Plague Bacteria and the Possible Biological Role of this Phenomenon"

Moscow, Byulleten' Eksperimental'noy Biologii i Meditsiny, No 3, 1970, pp 79-81

Abstract: Experimental data are reported on the existence of intraspecies and interspecies syntrophism among plague bacteria differing in amino-acid requirements. The ability of auxotrophic strains to multiply on a synthetic medium devoid of amino acids by means of syntrophism with prototrophic mutants is the factor responsible for the survival of these bacteria under adverse conditions.

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UNCLASSIFIED

PROCESSING DATE--11SEP70

1/2 013

TITLE--SYNTROPHISM IN PLAGUE MICROBE AND POSSIBLE BIOLOGICAL ROLE OF THIS PHENOMENON -U-

AUTHOR--LEBEDEVA, S.A., SUCHKOV, YU.G., DOMARADSKIY, I.V.

COUNTRY OF INFO--USSR

SOURCE--BYULLETEN EKSPERIMENTAL'NOY BIOLOGII I MEDITSINY, 1970, VOL 69, NR 3, PP 79-81

DATE PUBLISHED-----70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--PLAGUE, BACTERIA, AMINO ACID

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAF--1982/0838

STEP NO--UR/0219/70/069/003/0079/0081

CIRC ACCESSION NO--AP0052272

UNCLASSIFIED

2/2 013

UNCLASSIFIED

PROCESSING DATE--11SEP70

CIRC-ACCESSION NO--AP0052272

ABSTRACT/EXTRACT--(U) GP-0-

ABSTRACT. THIS PAPER GIVES EVIDENCE FOR OCCURENCE OF INTRASPECIES SYNTROPHISM IN PLAGUE CAUSATIVE AGENTS FOUND AMONG STRAINS DIFFERING BY AMINO ACID REQUIREMENT. A DISCRPTION IS GIVEN OF SYNTROPHISM OF A POPULATION OF SOME MUSEUM STRAINS HETEROGENEOUS BY FOOD REQUIREMENT, WHICH ALONG WITH MUTATION TO PROTOTROPHY, CAN PROVIDE SURVIVAL OF AUXOTROPHIC BACTERIA MAINTAINED ON MEDIA DEFICIENT BY GROWTH FACTOR.

UNCLASSIFIED

1/2	013	UNCLASSIFIED	PROCESSING DATE--11SEP70
TITLE--SYNTROPHISM IN PLAGUE MICROBE AND POSSIBLE BIOLOGICAL ROLE OF THIS PHENOMENON -U-			
AUTHOR--LEBEDEVA, S.A., SUCHKOV, YU.G., DOMARADSKIY, I.Y.			
COUNTRY OF INFO--USSR			
SOURCE--BYULLETEN' EKSPERIMENTAL'NOY BIOLOGII I MEDITSINY, 1970, VOL 69, NR 3, PP 79-81			
DATE PUBLISHED-----70			
SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES			
TOPIC TAGS--PLAGUE, BACTERIA, AMINO ACID			
CONTI.JL MARKING--NO RESTRICTIONS			
DOCUMENT CLASS--UNCLASSIFIED		STEP NO--UR/0219/70/069/003/0079/1091	
PROXY REEL/FRAME--1982/0838			
CIRC ACCESSION NO--AP0052272			
UNCLASSIFIED			

2/2 013

UNCLASSIFIED

PROCESSING DATE--11SEP70

CIRC ACCESSION NO--AP0052272

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THIS PAPER GIVES EVIDENCE FOR OCCURENCE OF INTRASPECIES SYNTROPHISM IN PLAGUE CAUSATIVE AGENTS FOUND AMONG STRAINS DIFFERING BY AMINO ACID REQUIREMENT. A DISCRPTION IS GIVEN OF SYNTROPHISM OF A POPULATION OF SOME MUSEUM STRAINS HETEROGENEOUS BY FOOD REQUIREMENT, WHICH ALONG WITH MUTATION TO PROTOTROPHY, CAN PROVIDE SURVIVAL OF AUXOTROPHIC BACTERIA MAINTAINED ON MEDIA DEFICIENT BY GROWTH FACTOR.

UNCLASSIFIED

LEBEDEVA, T. A.

Sci. JPRS 59562

23 July 1973

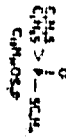
(5)

TOXIC CHEMOTHERAPEUTIC COMPOUNDS

[Chapter 2 from the book by M. A. El'sman, T. A. Lebedeva, E. P. Yurkova, Moscow, State Scientific Center of Toxicology and Pharmacology, Russian, 1972, pp 43-52]

Brief Information About the Properties of the Compounds

[in 7-tributyl trimethylphosphate]



Molecular weight: 316.18

Synonym: foies, prof, marginal.

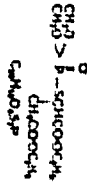
Pale yellow liquid with unpleasant odor.

Boiling point: 134° (0.5 mm Hg).

Virtually insoluble in water. Dissolves well in organic solvents.

Manufactured in the form of 70% concentrate of emulsion or oil solution.

Category: [0,0-dimethyl-6-(1,2-diacetylacetyl)-dithiophosphate]



Molecular weight: 330.35

Synonym: malathion, malathion, compound 4049.

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[1 - USSR - D]

USSR

UDC 615.9.074

KLISENKO, M. A., LEBEDEVA, T. A., and YURKOVA, Z. P.

"Chemical Analysis of Traces of Poisons"

Moscow, Khimicheskiy analiz mikrokolichestv yadokhimikatov (cf. English above), Meditsina, 1972, 312 pp (from Khimicheskiy analiz mikrokolichestv yadokhimikatov, pp 2-5, 308-312)

Translation: This book is a handbook on the analysis of traces of poisons. On the basis of many years of experience in the field of analyzing traces of poisons, the authors have included the most sensitive, reliable and simple chemical procedures for analyzing poisons in the air, water, soil, food products, and biological material in this book.

The book opens with a chapter in which the theoretical principles of the basic poison analysis techniques are discussed: photometric, spectrophotometric, polarographic and chromatographic.

In the book procedures are presented for determining all of the most widespread groups of poisons: organophosphorus, organochlorine, copper-containing, 1/21

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KLISENKO, M. A., et al., Khimicheskiy analiz mikrokolichestv yadokhimikatov, Meditsina, 1972, 312 pp (from Khimicheskiy analiz mikrokolichestv yadokhimikatov, pp 2-5, 308-312)

mercury-containing, dinitrophenols, carbamates and dithiocarbamates, poisons of plant origin and others. The procedures for analyzing herbicides are put in a separate chapter.

The description of the analysis procedures is preceded by brief information on the physical-chemical properties of the compounds. At the end of the book there is information about the limiting allowable poison concentrations in the air and water and also the admissible residual amounts of these compounds in food products and forage.

When selecting the reported general theoretical and practical data, we had in mind the interests of those readers who wish to approach the use of the procedures recommended in the book creatively.

The book is designed for chemists and sanitation is physicians at the rayon, municipal and oblast sanitation-epidemiological stations and other specialists working in the field of industrial sanitation chemistry, hygiene of
2/21

USSR

KLISENKO, A. A., et al., *Khimicheskiy analiz mikrokolichestv yadokhimikatov*, Meditsina, 1972, 312 pp (from *Khimicheskiy analiz mikrokolichestv yadokhimikatov*, pp 2-5, 308-312)

labor, hygiene of foods, and public and communal hygiene. It will be useful to toxicologists, forensic chemists, biochemists, veterinary doctors, agronomists, and so on.

The book can also be used as a training aid for students of the medical and other institutions of higher learning.

Introduction

At this time the list of chemicals used in the national economy is growing. The application of chemical means of plant protection from pests, diseases and weeds and also chemical means of protecting animals from ectoparasites is acquiring great significance. The research in the toxicity of applied compounds and their normalization in the external environment is expanding simultaneously. The network of laboratories studying the poison content in the air, water, soil, food products and biological material is growing.

3/21

USSR

KLISENKO, A. A., et al., *Khimicheskiy analiz mikrokolichestv yadokhimikatov, Meditsina*, 1972, 312 pp (from *Khimicheskiy analiz mikrokolichestv yadokhimikatov*, pp 2-5, 308-312)

However, basic research to study the biological effect of chemicals, deep penetration into the intimate links of the mechanism of their effect on man, animals and plants, sanitary monitoring of the pesticide content in the environment, the diagnosis and prophylaxis of possible acute and chronic poisonings -- these cannot be realized in the absence of reliable methods of qualitative detection and quantitative analysis of these chemicals and the products of their conversion in various media.

The indicated methods must be distinguished by high sensitivity. They must define the residual amounts of pesticides on the level of the maximum permissible concentrations (MPC) or the maximum residual amounts (MRA) which in the majority of cases do not exceed fractions of a milligram per cubic meter of air or per kilogram of food product. Thus, we are talking about analyzing tenths of a microgram of pesticide in a sample in cases where no poison content is admissible, even appreciably smaller amounts. The method must also be selective since several poisons can be present in a sample belonging to various groups of compounds. Transformations of the compounds

4/21

Analytical Chemistry

USSR

UDC 632.96

KLISENKO, M. A., LEBEDEVA, T. A., and YURKOVA, Z. F.

"Chemical Analysis of Trace Amounts of Poisonous Chemicals"

Khimicheskiy analiz mikrokolichestv yadokhimikatov (cf. English above),
Moscow, "Meditsina", 1972, 312 pp ill. 1 r. 66 k (from RZh-Khimiya, No 22,
Nov 72, Abstract No 22N382)

Translation: The work discusses the simplest, most sensitive and reliable methods of determining poisonous chemicals -- organophosphorus, organochlorine, copper-containing and mercury-containing dinitrophenols, carbazates and dithiocarbamates -- in the air, water, soil, food products and biological materials. In addition, the theoretical principles are given for basic methods of analyzing poisonous chemicals -- photometric, photospectrometric, polarographic and chromatographic. Information is given on the physical and chemical properties of chemicals, maximum permissible concentrations in the air and water, and also the permissible residual quantities of the chemicals in food products and animals feed. The authors generalize the experience on extracting chemicals from a sample and purifying the extracts. (From the abstract).

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USSR

UIC 632.95

LEBEDEVA, T. A.

"Analysis of Trichlorometaphos-3 in Air and Water by Thin-Layer Chromatography"

Tr. 2-go Vses. soveshen. po issled. ostatkov pestitsidov predizakt. zaprvac-
neniya imi produktov pitaniva, kormov i vnosa. srezv (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 169-
171 (from RZh-Khimiya, No 12, Jun 72, Abstract 12N441)

Translation: The pesticide was extracted with ether and chromatographically analyzed over silica gel KSK with starch in a hexane-acetone system (2:1) or a hexane- CHCl_3 system (2:1). It is developed with 5% NaOH solution, heating at 120° for 30 minutes with subsequent treatment with NH_4OH solution (specific weight 0.9), a 2% solution of 4-aminoantipyrine and a 20% solution of $(\text{NH}_4)_2\text{S}_2\text{O}_8$ or a 15% solution of $\text{K}_3[\text{Fe}(\text{CN})_6]$.

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USSR

UDC: 518.5:681.3.06

LEBEDEVA, V. G.

"An Algorithm for Isolating Independent Subsets"

V sb. Nekotoryye vopr. obrabotki inform. na tsifrovyykh vychisl. mashinakh
(Some Problems of Data Processing on Digital Computers--collection of
works), Moscow, 1971, pp 37-41 (from RZh-Kibernetika, No 9, Sep 71, Ab-
stract No 9V602)

Translation: In computerized production planning, the problem of iso-
lating independent subsets frequently arises. Let there be given a cer-
tain set {A, B, C, D, E, F, G, H}, and let certain relations exist be-
tween its elements. Various meanings may be assigned to the elements
of the set. They may be operations performed on various machine tools,
components of finished articles, etc. It is required to compute the
condition of compatibility for an arbitrary set with predetermined
orders of the relations.

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1/2 012 UNCLASSIFIED. PROCESSING DATE--13NOV70
TITLE--HYDROXYLAMINE DERIVATIVES. III. SYNTHESIS AND SOME REACTIONS OF
HYDROXYLAMINO DERIVATIVES OF 2-METHYL BENZIMIDAZOLE -U-
AUTHOR--(04)-MARKOVA, YU.V., OSTROUMOVA, N.G., LEBEDEVA, V.I., SHCHURINA,
M.N.
COUNTRY OF INFO--USSR
SOURCE--KHIM. GETEROTSIKL. SOEDIN. 1970, (3), 415-1B
DATE PUBLISHED-----70
SUBJECT AREAS--CHEMISTRY
TOPIC TAGS--HYDROXYLAMINE, BENZINE DERIVATIVE, ORGANIC AZOLE COMPOUND,
CHEMICAL SYNTHESIS, MOLECULAR STRUCTURE, NUCLEAR MAGNETIC RESONANCE
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAME--3002/0631 STEP NO--UR/0409/70/000/003/0415/0418
CIRC ACCESSION NO--AP0120109
UNCLASSIFIED

2/2 012

UNCLASSIFIED

PROCESSING DATE--13NOV70

CIRC ACCESSION NO--AP0128169

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. SHOWN ON MICROFILME.

FACILITY: VSES. NAUCH.-ISSLEO. KHIM.-FARM. INST. CH. OROZHONIAIOZE,
MOSCOW, USSR.

UNCLASSIFIED

LEBEDEVA V.N.

USSR

UDC 669.14.016.8:659.562

KAS'YANOV, A. G., GUREVICH, YU. G., MARCELOV, A. I., ~~GERASIMOV~~,
N. V., GERASIMOV, YU. V., KLASIN, G. A., CHISTYAKOV, S. I.,
POLYAKOV, YU. V., LEBEDEVA, V. N., Chelyabinsk Polytechnical
Institute and Zlatoust Metallurgical Plant

"Quality of Stainless, Low-Carbon Steel"

Moscow, Metallurg., No 5, May 70, pp 17-19

Abstract: A stainless, low-carbon steel developed at the Zlatoust Metallurgical Plant is described. The carbon content of this steel is less than 0.030%, and the steel is made in open-air furnaces using metal electrodes or by scavenging the liquid steel with argon. Comparisons were made between this steel and a similar metal made in vacuum induction furnaces. A table gives the impurities in the various types of steel produced by the two methods -- the use of metal electrodes and argon scavenging. An analysis of the results of a quantitative estimate of impurities showed that owing to the high degree of deformation, the contamination along the transverse axis of the steel sheet is less than that along the longitudinal axis. The mechanical
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USSR

KAS'YANOV, A. G., et al., Metallurg, No 5, May 70, pp 17-19

characteristics of the steel satisfied all technical requirements.
A comparison of the mechanical characteristics of this steel
made by the three processes discussed -- metallic electrodes,
argon scavenging, and vacuum induction -- is also presented.

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- 70 -

1/2 019 UNCLASSIFIED PROCESSING DATE--04DEC70
TITLE--EPITAXIAL GROWTH OF SILVER ON ELECTRICALLY HETEROGENEOUS SURFACES
OF SODIUM CHLORIDE CRYSTALS -U-
AUTHOR-(04)-DISTLER, G.I., LEBEDEVA, V.N., MOSKVIN, V.V., KORTUKOVA, YE.I.
COUNTRY OF INFO--USSR
SOURCE--FIZ. TVERD. TELA 1970, 12(4), 1149-54
DATE PUBLISHED-----70
SUBJECT AREAS--PHYSICS, MATERIALS
TOPIC TAGS--EPITAXIAL GROWTH, SILVER, SODIUM CHLORIDE, METAL CRYSTAL,
CRYSTAL SURFACE, CRYSTAL ORIENTATION
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAME--3001/0377 STEP NO--UR/0181/70/012/004/1149/1154
CIRC ACCESSION NO--AP0126132
UNCLASSIFIED

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UNCLASSIFIED

PROCESSING DATE--04DEC70

CIRC ACCESSION NO--AP0126132

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. BY ELECTRON MICROSCOPY, THE EPITAXIAL GROWTH WAS STUDIED OF AG ON ELEC. HETEROGENEOUS SURFACES OF NA CL CRYSTALS CONTG. 0.15 WT. PERCENT PBCL SUB2. AT CRYSTAL TEMPS. OF 100 AND 150DEGREES THE CRYSTAL SURFACES ARE DECORATED BY INCLUSIONS OF THE PBCL SUB2 PHASE SURROUNDED BY DOUBLE ELEC. LAYERS. ON THE SURFACE OF THESE DOUBLE ELEC. LAYERS, CHARGED NEG., ORIENTATION COALESCENCE OF AG CRYSTALS TAKES PLACE INITIALLY, WHICH DETS. THE PARALLEL ORIENTATION (100) SUBAG MAGNITUDE OF (100) SUBNA CL, WHILE ON THE REST OF THE SURFACE MIXED ORIENTATION (100)(111) SUBAG MAGNITUDE OF (100) SUBNA CL IS OBSD. AT 20DEGREES ON THE SECTIONS OF IMPURITY ENRICHED NA CL CRYSTALS, COALESCENCE OF AG PARTICLES WAS OBSD., WHICH CAUSED THE APPEARANCE OF MIXED ORIENTATION, WHILE AG CRYSTALS ON THE REMAINDER OF THE SURFACE WERE DISTRIBUTED HETEROGENEOUSLY. UNDER IDENTICAL CONDITIONS OF CRYSTN. (CRYSTAL TEMP., RATE OF CONDENSATION, DEGREE OF VACUUM), THE DETC. ROLE IN THE EPITAXIAL GROWTH IS PLAYED BY THE ELEC. RELIEF OF THE SURFACE OF THE CRYSTALS, AND THE ORIENTATIONAL COALESCENCE OF THE PREVIOUSLY FORMED PARTICLES TAKES PLACE PRIMARILY ON NEG. CHARGED SECTIONS OF THE CRYSTAL SURFACE.

FACILITY: INST. KRISTALLOGR., MOSCOW, USSR.

UNCLASSIFIED

USSR

UDC 615.616.24-003.656.6

LEBEDEVA, V. V.

"Alterations of Certain Indexes of the External Respiration Under the Effect of Ganglioblock (Fubromegan) with Experimental Silicosis"

V sb. Materialy XXI-XXII plenumov Resp. komis. po bor'be s sili-kozom (Materials of the 21st to 22nd Plenums of the Republic Commission for Controlling Silicosis--Collection of Works), Kiev, Nauk. dumka, 1972, pp 132-136 (from RZh-Farmakologiya, Khimioterapevticheskiye Sredstva. Toksikologiya, No 3, Mar 73, Abstract No 3.54.878)

Translation: The development of pulmonary silicosis (first group) was caused in rats by using 12-month intratracheal administration of powdered quartz with a particle size from 1 to 3 μ . Simultaneous administration (means not indicated) of fubromegalone in the amount of 50 mg/kg 3 times a week (second group) caused a vegetative ganglion block in the rats. The third group received only fubromegalone. After four months, the respiration rate of the animals in the first and second groups was 83 and 84 per minute (in the control it was 100). After 10 months the respiration rate of the animals in the first group remained as before, and in the

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USSR

LEBEDEVA, V. V., Materialy XXI-XXII plenunov Resp. Komis. po bor'be s silikozom, 1972, pp 132-136

second group it had dropped to 67 per minute. The suppression of respiration in response to stimulation with 5% solution of MH_4OH after 10 months reached 14.6 in the first group of animals, 7.8 in the second group of animals and 19.2 in the third group of animals; in the control it was 10.3 seconds. It is considered that the vegetative ganglion block has a favorable effect on the state of the external respiration in the presence of experimental silicosis. USSR, Donetsk, Institute of Hygiene of Labor and Professional Disease.

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- 74 -

1/2 030 UNCLASSIFIED PROCESSING DATE--20NOV70
TITLE--RGLE UF MULTISTAGE EXCITATION OF OPERATING LEVELS IN AN ARGON LASER
-U-
AUTHOR--(03)--LLBEDEVA, V.V., MASHTAKOV, D.M., UDINTSOV, A.I.
CCUNTRY OF INFO--USSR
SOURCE--OPTIKA I SPEKTROSKOPIIA, VOL. 28, FEB. 1970, P. 350-352
DATE PUBLISHED--FEB70
SUBJECT AREAS--PHYSICS
TOPIC TAGS--ARGON LASER, ELECTRON GAS, CURRENT DENSITY

CCNTRL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAE--1992/1480

STEP NO--0070051770702870007035070352

CIRC ACCESSION NO--AP0112474

UNCLASSIFIED

2/2 030

UNCLASSIFIED

PROCESSING DATE--20NOV70

CIRC ACCESSION NO--AP0112474

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. EXPERIMENTAL INVESTIGATION OF
AIMED AT MEASURING THE POPULATION OF THE UPPER LEVELS OF AN ARGON LASER
AS A FUNCTION OF THE CURRENT STRENGTH AT A CONSTANT ATOM DENSITY IN THE
CAPILLARY (ACHIEVED BY INCREASING THE PRESSURE IN PROPORTION TO THE
INCREASE IN CURRENT DENSITY). UNDER THESE CONDITIONS, THE ELECTRON
TEMPERATURE REMAINED CONSTANT. THE PRESSURE WAS DETERMINED AS THE SUM
OF THE PARTIAL PRESSURES OF THE ATOMIC AND ELECTRON GASES. ELECTRON
TEMPERATURE AND CONCENTRATION WERE CALCULATED FROM FORMULAS PROPOSED BY
HERZIGER AND SEELIG (1968). CURVES RELATING THE PRESSURE AND CURRENT
DENSITY IN THE CAPILLARY ARE PLOTTED, TOGETHER WITH CURVES SHOWING THE
POPULATIONS OF THE LEVELS AS A FUNCTION OF THE CURRENT DENSITY.

UNCLASSIFIED

Acc. Nr: **AP0044168**

Ref. Code: UR 0244

PRIMARY SOURCE: **Voprosy Pitaniya, 1970, Vol 29, Nr 1,**
pp 42 - 48

**AUTORADIOGRAPHIC INVESTIGATION OF THE RENAL S³⁵-METHIONINE
METABOLISM IN RELATION TO THE SPECIFICITY OF NUTRITION
AND AGE**

Y. E. A. Lebedeva (Leningrad)

Summary

S³⁵-methionine metabolism was studied in nephron structures of sexually mature and old mice kept for 8-9 weeks on isocaloric diets differing in the amount of fats and carbohydrates and similar in the levels of protein and other nutrients. Autographic studies were made 4 and 18 hours after intraperitoneal administration of S³⁵-methionine, at the rate of 0.5 microcuries/g. Differences in protein metabolism among individual nephron structures and also age-conditioned features of the metabolism were elicited. Changes in the fat and carbohydrate dietary component affected both the magnitude and dynamics of the S³⁵-methionine incorporation into the nephron structure. The influence of the alimentary factor was different in sexually mature and old animals.

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**REEL/FRA
19770652**

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USSR

UDC 621.373.029.67.001.5

GAPRINDASHVILI, KH. I., KUKHARSKIY, R. N., LEBEDEVA, YE. A.,
LEZHAVA, B. S., MUMLADZE, V. V., CHAVCHANIDZE, V. V.

"Coupled Filament Lasers"

Moscow, Radiotekhnika i Elektronika, Vol 15, No 7, 1970,
pp 1457-1460

Abstract: Experimental results are presented for the conversion of energy from one passive light conductor to another at a small distance from the first. The minimum length of contact required for maximum transfer of the radiation is determined. The effect of the transfer is used for mutual decrease in the radiation of two-filament lasers (quenching). The case in which a one-filament laser quenches two adjacent ones is investigated.

The possibility of an effect of a one-filament laser on several is also investigated. Experiments performed with three-filament lasers demonstrated that the radiation jumps from one filament to the other two and decreases their radiation intensity.

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USSR

GAPRINDASHVILI, KH. I., et al, Radiotekhnika i Elektronika,
Vol 15, No 7, 1970, pp 1457-1460

The experimental results are presented in a table including a case in which laser I extinguished lasers II and III. The maximum extinguishing coefficients obtained for two- and three-filament lasers turn out to be identical and equal to 0.50-0.65. The extinguishing coefficient depends on the radiation energy of the extinguishing laser and increases with an increase in it, for the cases of both two and three filaments.

2/2

1/2 022 UNCLASSIFIED PROCESSING DATE--18SEP70
TITLE--THE DYNAMICS OF QUANTITATIVE CHANGES IN INTRACELLULAR ORGANIC
SUBSTANCES DURING LONG TERM GROWTH OF CHLORELLA SP. K. --
AUTHOR--(04)-PIMENOVA, M.N., MAKSIMOVA, I.V., MELESHKO, G.I., LEBEDEVA,
YE.K.
COUNTRY OF INFO--USSR

SOURCE--MIKROBIOLOGIYA, 1970, VOL 39, NR 2, PP 274-279

DATE PUBLISHED-----70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--CHLORELLA, CULTURE MEDIUM, SACCHARIDE, NITROGEN COMPOUND

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAE--1983/1410

STEP NO--UR/0220/70/039/002/0274/0279

CIRC ACCESSION NO--AP0054273

UNCLASSIFIED

2/2 022

UNCLASSIFIED

PROCESSING DATE--19SEP70

CIRC ACCESSION NO--A00054273
ABSTRACT/EXTRACT--(U) GP-0-

ABSTRACT. LONG TERM CULTIVATION OF CHLORELLA SP. K IN THE FERMENTER OF A ROTATION TYPE WITH A DIRECT RETURN OF THE MEDIUM WAS ACCOMPANIED BY THE ACCUMULATION OF INTRACELLULAR ORGANIC SUBSTANCES. ENRICHMENT OF THE MEDIUM WITH METABOLIC PRODUCTS OF THE ALGAE WAS THE MOST INTENSIVE DURING THE FIRST TWO WEEKS OF THE EXPERIMENT. POLYSACCHARIDES AND NITROGEN COMPOUNDS PREVAILED AMONG SUBSTANCES ACCUMULATED IN THE MEDIUM. ORGANIC ACIDS WERE NOT ACCUMULATED IN THE MEDIUM UNDER THESE CONDITIONS OF GROWTH, SINCE THEY WERE THE SUBSTRATE FOR GROWTH OF THE ACCOMPANYING MICROFLORA.

UNCLASSIFIED

USSR

UDC 582.253.095.4

PIMENOVA, M. N., MAKSIMOVA, I. V., MELESHKO, G. I., and LEBEDEVA, Ye. K., Chair
of Microbiology, Soil Biology Faculty, Moscow State University, Leningrad N. V.
Lomonosov

"Dynamics of Quantitative Changes in Extracellular Organic Substances During
Prolonged Cultivation of *Chlorella* sp. K"

Moscow, Mikrobiologiya, Vol 39, No 2, Mar/Apr 70, pp 274-279

Abstract: Cultivation of *Chlorella* sp. K in a rotary fermentation apparatus with
direct return of the media was accompanied by accumulation in the media of
organic substances constituting extracellular products of algae metabolism. During
38 days of cultivation, the content of organic substances in the media increased
from 333.3 to 1465.3 mg/l. The substances consisted of polysaccharides, N-
containing compounds, keto acids, and volatile organic acids. During the 38 days
of cultivation, the content of carbohydrates in the media was approximately 50%
organic substances, varying from 26 to 42% with approximately 50% N-containing
compounds, varying between 21.9 and 63.4% and passing through a major maximum
(63.4%) on the 30th day; about the same amount of keto acids (1.3%); and 0.3-7.1%
of volatile acids. Maxima in the content of N-containing substances and of

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USSR

PIMENOVA, M. N., et al, Mikrobiologiya, Vol 38, No 2, Mar/Apr 70, pp 274-279

volatile acids coincided with maxima in Chlorella reproduction, while decreases in the content of these substances were accompanied by intensive propagation of bacteria. An equilibrium was established between the vital processes of Chlorella and those of the accompanying microflora, which utilized products of Chlorella metabolism (amino acids and volatile organic acids), thus preventing an increase in the amount of these products to a level at which they would have interfered with the propagation of Chlorella.

2/2

- 10 -

USSR

UDC 546.831-18+546.832-38

LEBEDEVA, Ye. N., KOROVIN, S. S., TOMILOV, N. P., and PETIKOV, K. I.

"Study of the Zirconium and Hafnium Hydroxyperchlorates by Means of IR-spectroscopy"

Moscow, Zhurnal Neorganicheskoy Khimii, Vol 16, No 3, Mar 71, pp 666-670

Abstract: Infrared spectra were obtained on the crystal hydrates of zirconium and hafnium hydroxyperchlorates containing varying number of water molecules, on deuterated zirconium crystal hydrate and on the compound with a formula $ZrO(OH)ClO_4 \cdot H_2O$. The spectra of corresponding compounds exhibited similarities in the absorption bands with an intensive complex band at 1100 cm^{-1} and another one of medium intensity at $620\text{-}630\text{ cm}^{-1}$, both being assigned to the valence and deformation vibrations of ClO_4^- . The spectra of compounds containing 6 or 8 water molecules indicate absence of the coordination of the perchlorate ion. Spectra of $HfO(ClO_4)_2 \cdot 3H_2O$, $ZrO(ClO_4)_2 \cdot 2H_2O$, and $ZrO(OH)ClO_4 \cdot H_2O$ exhibited definite changes indicating coordination of the ClO_4^- ion with metal cation. No bands were found characteristic of the $Mu=O$ group.

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1/2 022

UNCLASSIFIED

PROCESSING DATE--04DEC70
ALLOY -U-

TITLE--PREPARATION OF RANEY SILVER FROM A SILVER CALCIUM ALLOY -U-
AUTHOR-(04)-LEBEDEVA, YE.N., KARONIK, V.V., CHERKASHINA, N.V., KAGAN, N.M.

COUNTRY OF INFO--USSR

SOURCE--ZH. PRIKL. KHIM. (LENINGRAD) 1970, 43(4), 763-7

DATE PUBLISHED-----70

SUBJECT AREAS--MATERIALS

TOPIC TAGS--METAL CATALYST, SILVER, ETHYLENE, OXIDATION, ETHYLENE OXIDE,
SILVER ALLOY, CALCIUM ALLOY, PHASE ANALYSIS

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAE--3004/0968

STEP NO--UR/0080/70/063/004/0763/0767

CIRC ACCESSION NO--AP0131553

UNCLASSIFIED

UNCLASSIFIED

PROCESSING DATE--04DEC70

2/2 022

CIRC ACCESSION NO--AP0131553

ABSTRACT/EXTRACT--(U) GP-0-

ABSTRACT. A AG-CA (RANEY AG) ALLOY, USED AS A CATALYST IN OXID.-REDN. REACTIONS SUCH AS THE CONVERSION OF ETHYLENE TO ETHYLENE OXIDE, WAS PREPD. BY ALLOYING THE COMPONENTS IN AN OPEN CRUCIBLE IN AN AR ATM. THE ALLOY CONTAINED 40 AT. PERCENT CA IN THE CHARGE, AND SOMEWHAT LESS IN THE PRODUCT. PHASE ANAL. OF THE ALLOY SHOWED THE PRESENCE OF THE PHASES AG₂CA, AG₃CA, AG, AND CA(OH). DIFFRACTION DATA ARE GIVEN FOR ALLOY OXID. IN AIR AT 100-600DEGREES, AND IN WATER VAPOR AT 200-500DEGREES.

UNCLASSIFIED

USSR

UDC 620.193.01.669.29

LEBEDEVA, YE. N. Moscow Institut of Auto Mechanics
"Influence of Antimony on the Formation of a Gas-Saturated Layer During Oxidation of Titanium"

Moscow, Zashchita Metallov, No 4, 1972, pp 472-474.

Abstract: This work studied the formation of a gas-saturated layer on titanium alloys containing 0, 0.1, 1.5, and 9.9 wt. % antimony, both in air and in a steam-air atmosphere between 800 and 1000°. Test time was 7 hours. Antimony has no influence at all on the total quantity of oxygen absorbed, scale thickness, or oxidation kinetics of titanium. Only the characteristics of the subscale layer were studied. Simultaneous application of x-ray structural and metallographic methods to study the scale and subscale layers showed that the presence of antimony in the alloy facilitates the formation of a layer of TiO₂, the thickness of which depends on the oxidation conditions and alloy composition. Measurements of microhardness showed greater total depth of gas saturated layer in alloys with antimony than in unalloyed titanium. The authors assume that the antimony, a horophilic element for titanium, is concentrated at grain boundaries and increases the rate of removal of oxygen from the reaction front, decreasing the thickness of the visible alpha layer of Ti-Sb alloys; increasing the total depth of the gas

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USSR

Lebedeva, Ye. N., Moscow, Zashchita Metallov, No 4, 1972, pp 472-474.

saturated layer. Antimony, by increasing the diffusion rate of oxygen in titanium, thus facilitates the growth of a brittle layer with increased oxygen content.

2/2

1/2 023 UNCLASSIFIED PROCESSING DATE--16OCT70
 TITLE--EFFECTIVENESS OF THE INFLUENCE OF CO PRIME2 POSITIVE ON SPIN WAVE
 LOSSES -U-
 AUTHOR--(04)-GUNINA, M.P., LEBEDEVA, YE.V., PILSHCHIKOV, A.I.,
 SILVESTROBICH, I.I.
 COUNTRY OF INFO--USSR
 SOURCE--FIZ. TVERD TELA 1970, 12(2), 433-8 (RUSS)
 DATE PUBLISHED-----70
 SUBJECT AREAS--PHYSICS
 TOPIC TAGS--SPIN WAVE THEORY, COBALT, ZINC FERRITE, LITHIUM COMPOUND,
 TITANIUM COMPOUND, MAGNETIC PUMPING, METAL ION
 CONTROL MARKING--NO RESTRICTIONS
 DOCUMENT CLASS--UNCLASSIFIED
 PROXY REEL/FRAE--1983/1896 STEP NO--UR70181770701270027043371438
 CIRC ACCESSION NO--AP0054699
 UNCLASSIFIED

2/2 023

UNCLASSIFIED

PROCESSING DATE--18OCT70

CIRC ACCESSION NO--AP0054699

ABSTRACT/EXTRACT--(U) GP-0-

ABSTRACT. ON SPECIMENS OF LI-TI-ZN FERRITES WITH THE FORMULA $LI_{1-2T}Fe_{1-SUBT-2+X}Zn_{SUBX}$ ($LI_{SUB0.5}Fe_{SUB0.5}MINUS 0.5X Fe_{SUB1.5}MINUS T PLUS 0.5X Ti_{SUBT}O_{SUB4}$, WHERE T EQUALS 0.4-0.8 AND X EQUALS 0-0.4, INVESTIGATIONS WAS CARRIED OUT OF THE DEPENDENCE OF THE PARAMETER OF SPIN WAVE LOSSES, TRIANGLE H_{SUBK} , ON THE CONTENT OF CO PRIME2 POSITIVE. MEASUREMENTS OF TRIANGLE H_{SUBK} WERE CARRIED OUT BY THE METHOD OF PARALLEL PUMPING ON CYLINDRICAL SPECIMENS AT ROOM TEMP. AT 9400 MHZ. THE EFFECT OF CO PRIME2 POSITIVE ON TRIANGLE H_{SUBK} FOR SPIN WAVES PARAMETRICALLY EXCITED AT THE MIN. OF THE THRESHOLD FIELD VARIES ON THE INTRODUCTION INTO LI FERRITE OF ZN PRIME2 POSITIVE AND TI PRIME4 POSITIVE. THE CONTRIBUTION TO TRIANGLE H_{SUBK} DETO. BY CO PRIME2 POSITIVE IS PROPORTIONAL TO THE QUANTITY $(4 PI M-H_{SUBEX}) PRIME ONE HALF$, CHARACTERISTIC FOR THE MECHANISM OF 2 MAGNON SCATTERING. THE INTRODUCTION OF NONMAGNETIC IDNS INTO FERRITES CONTG. CO PRIME2 POSITIVE INCREASES TRIANGLE H_{SUBK} SHARPLY WITHOUT VARIATION OF THE CONTENT OF CO PRIME2 POSITIVE.

FACILITY: MOSK. DOS. UNIV. IN.

LOMONOSOVA, MOSCOW, USSR.

UNCLASSIFIED

USSR

UDC 654.939.1

LEBEDEV, YE. V., and LEBEDEVA, YE. V.

"Explosion-Proof Device"

USSR Authors' Certificate No 301726, Cl. G 08 b 3/10, filed 28 Jan 67, published 10 Jun 71 (from RZh-Avtomatika, Telemekhanika i Vychislitel'naya Tekhnika, No 1, Jan 72, Abstract No LA439P)

Translation: An explosion-proof sound signaling device with spark-proof control circuits is proposed. The device contains a power supply and signaling unit with audible linear devices containing a key transistor and accumulator connected to it through the communication line. To increase the sound emission power and reduce the number of wires in the communication line, it contains at the power supply and signaling unit output a pushbutton for changing the polarity of the direct current in a two-wire communication line, while in each of the audible linear devices it contains two pairs of series-and parallel-connected switching diodes; the outlets of the latter are connected to the wires of the communication line, the cathodes are connected to the key transistor's emitter and through a resistor to the positive pole of the accumulator, and the free anodes of the diodes of each pair are connected respectively to the negative pole of the accumulator and through the resistor to the key transistor base. 2 illustrations.

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UDC 654.939.1

USSR

LEBEDEV, YE. V., and LEBEDEVA, YE. V.

"Explosion-Proof Device"

USSR Authors' Certificate No 301726, Cl. G 08 L 3/10, filed 28 Jan 67, published 10 Jun 71 (from RZh-Avtomatika, Telemekhanika i Vychislitel'naya Tekhnika, No 1, Jan 72, Abstract No 1A439P)

Translation: An explosion-proof sound signaling device with spark-proof control circuits is proposed. The device contains a power supply and signaling unit with audible linear devices containing a key transistor and accumulator connected to it through the communication line. To increase the sound emission power and reduce the number of wires in the communication line, it contains at the power supply and signaling unit output a pushbutton for changing the polarity of the direct current in a two-wire communication line, while in each of the audible linear devices it contains two pairs of series-and parallel-connected rectifying diodes; the outlets of the latter are connected to the wires of the communication line, the cathodes are connected to the key transistor's emitter and through a resistor to the positive pole of the accumulator, and the free anodes of the diodes of each pair are connected respectively to the negative pole of the accumulator and through the resistor to the key transistor base. 2 illustrations.

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AA0040690

Lebedev, Ye. V.

UFR 0462

Soviet Inventions Illustrated, Section I Chemical, Derwent, 1-70

241817 PNEUMATIC LEVEL GAUGE is used to measure the level of molten metal and comprises a piezometric recorder moved in accordance with the level of melt at any moment by means of a servo system. The piezometric recorder is in the form of an ejector with an expansion chamber 2, placed at the discharge end of the recorder's measuring channel 1, and finishing with an outlet of the measuring channel 3. Channel 3 connects the cavity of the expansion chamber 2 with the measuring channel 1 leading out to the atmosphere. At the outlet is fitted a nozzle 4 connected to the feed 5 of the recorder. As a result of ejection of gas from the nozzle of the measuring cavity, a negative pressure is induced. The level gauge operates as follows. When gas is directed to feeding cavity of the recorder 5, a certain amount of vacuum is formed in the expansion cavity. At that the contact pressure gauge switches

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AA0040690

on an electric motor, which puts the shutter 8 of the outlet of the measuring channel in its maximum closed position. Correspondingly there is a drop in pressure in the nozzle and the gauge pointer connected to the driving shaft shows the maximum separation of the surface level from the recorder.

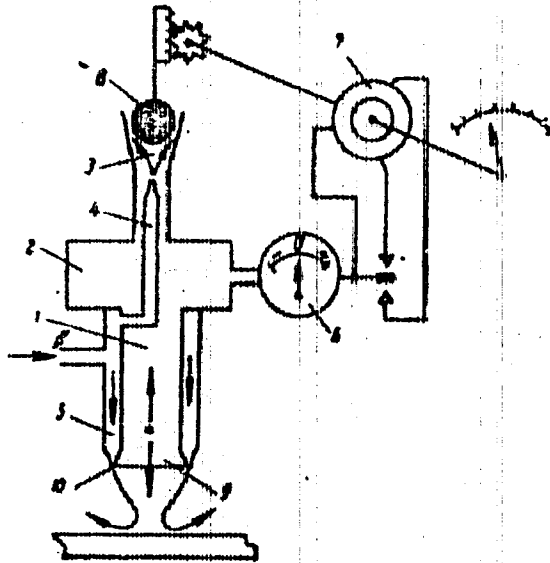
8.1.68 as 1209675/18-10. E. V. LEBEDEV & M. E. PARYLIS.
PRODUCTION & TECHNICAL COMBINE "URALENERGOSVETMET"
(29.8.69) Bul 14/18.4.69. Class 42a. Int. Cl. C 01f.

AUTHORS: Lebedev, Ye. V.; and Parylis, M. E.

Proizvodstvenno - Tekhnicheskoye Ob" edineniye "Ural-
energotsvetmet"

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19750306

AA0040690



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L.O

1/2 018 UNCLASSIFIED PROCESSING DATE--30OCT70
TITLE--CARDIOLOGICAL DEBUTS OF LEUKEMIA -U-
AUTHOR-(02)-LEBEDEVA, YU.L., LEBEDEV, V.N.
COUNTRY OF INFO--USSR
SOURCE--TERAPEVTICHESKIY ARKHIV, 1970, VOL 42, NR 5, PP 96-98
DATE PUBLISHED-----70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES
TOPIC TAGS--LEUKEMIA, CARDIOLOGY, TUMOR, DIAGNOSTIC MEDICINE

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAME--1998/0468

STEP NO--UR/0504/10/042/005/0096/0098

CIRC ACCESSION NO--AP0121142

UNCLASSIFIED

2/2 018

UNCLASSIFIED

PROCESSING DATE--30OCT70

CIRC ACCESSION NO--AP0121142

ABSTRACT/EXTRACT--(U) GP-0-

ABSTRACT. CARDIOLOGICAL SYMPTOMATICS IN LEUKEMIA AND NONLEUKEMIC RETICULOSIS (MALIGNANT LYMPHOMAS) USUALLY MANIFEST THEMSELVES AT THE AGE WITH THE DIAGNOSIS HAVING BEEN STAGED LONG BEFORE. CARDIOLOGICAL DEBUTS OF LEUKEMIA OCCUR VERY RARELY. DURING LONG TERM DISPANSARIZATION THE AUTHOR RECORDED 4 CASES OF CARDIOLOGICAL MASKS OF 450 PATIENTS WITH MALIGNANT TUMOURS OF THE HEMATOPOIETIC SYSTEM (2 WITH ACUTE LEUKEMIA AND 2 WITH RETICULO(LIMPHOSARCOMA). THE MAIN MECHANISMS GOVERNING CARDIOLOGICAL DEBUTS WERE DIRECT PRESSURE AND REFLEX ACTION OF HYPERPLASTIC LYMPH NODES OF THE MEDIASTINUM, TOXICO ALLERGIC CHANGES AND LEUKEMIC INFILTRATION. FACILITY: GEMATOLOGICHESKOYE OTD. SOCHINSKOGO ONKOLOGICHESKOGO DISPANSERA.

UNCLASSIFIED

1/2 019 UNCLASSIFIED PROCESSING DATE--16OCT70
TITLE--ANALYSIS OF NEAR THRESHOLD PHOTOPRODUCTION OF CHARGED PIONS BASED
ON DISPERSION RELATIONS -U-
AUTHOR--(05)-ADAMOVICH, M.I., LARIONOVA, V.G., LEBEDEV, A.I., KHARLAMOV,
S.P., YAGUDINA, F.R.
COUNTRY OF INFO--USSR
SOURCE--YAD. FIZ. 1970, 11(3), 657-68
DATE PUBLISHED-----70
SUBJECT AREAS--PHYSICS
TOPIC TAGS--EMISSION THRESHOLD, PHOTONUCLEAR REACTION, PION, GAMMA
SPECTRUM, EXCITATION CROSS SECTION, DISPERSION EQUATION, PARTICLE
PRODUCTION
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRA--1991/1067 STEP NO--UR/0367/70/011/00 170657/0668
CIRC ACCESSION NO--AP0110757

UNCLASSIFIED

2/2 019
CIRC ACCESSION NO--AP0110757

UNCLASSIFIED

PROCESSING DATE--160CT70

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE PHOTOPRODUCTION OF CHARGED PIONS IN THE NEAR THRESHOLD REGION OF THE PHOTON ENERGY IS INVESTIGATED THEORETICALLY. THE AMPLITUDE AND THE CROSS SECTION OF PHOTOPRODUCTION OF PIONS ON N AND THE AMPLITUDE AND THE DIFFERENTIAL CROSS SECTION FOR PI POSITIVE ON P ARE CALCD. THE RESULTS ARE COMPARED WITH EXPIL. DATA.
FACILITY: FIZ. INST. IM. LEBEDEVA, MOSCOW, USSR.

UNCLASSIFIED

USSR

UDC 621.762:621.771

CHEKMAREV, A. P., MUSIKHIN, A. M., KLIMENKO, P. L., and ~~LEBEDIK, G. I.~~
Dnepropetrovsk Metallurgical Institute; Institute of Problems of Material
Science, Academy of Sciences Ukrainian SSR

"Using Sheet Mills for Rolling Metal Powders"

Kiev, Poroshkovaya metallurgiya, No 2, Feb 72, pp 91-93

Abstract: The objective of this study was the potential use of conventional roll mills for high-speed rolling of metal powders. The experiment involved a 330 mill with a roll diameter of 394 mm and PZh-100 grade of metal powder with a bulk weight of 2.32 and shake-down weight of 2.80 g/cm³. The mill was equipped with a force-feed mechanism. The measurements included: a) the stresses at the contact surface of the metal powder with the roll; b) rolling torque; c) rpm of both the work rolls and the worm roll. The diagram of the force feed mechanism is shown. The study indicates that conventional roll mills are well suited for rolling metal powder into sheets and tape at roll speeds of 2 m/sec and higher on condition that the roll mills are equipped with force feed systems. (2 illustrations, 1 table, 6 biblio. references)

1/1

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LEBEDINETS, V.N.

JRS 5700 C
14 MAY 1973

INVESTIGATIONS OF METEORS IN THE UPPER ATMOSPHERE
(Separation in Space)

Abstract of Symposium on Meteoroid and Meteoroid Debris, 1971, Moscow, USSR, 1971, pp. 101-109

The work of the International Geophysical Commission of the USSR Academy of Sciences and other scientific organizations on 19-21 September 1971 in Garm, a symposium on the theme "Separation of Meteoroid Meteoroid Debris" and methods of investigation of the upper atmosphere. The results of the work are presented in the scientific literature. The work was carried out by the Institute of Space Research of the USSR Academy of Sciences and the Institute of Physics of the USSR Academy of Sciences.

The work of the symposium proceeded in plenary and sectional sessions (the sections "Meteoroid Astronomy and the Physics of Meteors" and "The Circulation of the Upper Atmosphere and the Physics of the Upper Atmosphere"). The following papers were presented: "On the Problem of Meteoroid Debris in the Earth's Atmosphere" (V. N. Lebedinets), "The Physics of the Interaction of Meteoroid Bodies with the Atmosphere and Structure of the Atmosphere on the Basis of Observations of Meteors and Separation and the Separation of the Products of the Interaction of Meteoroids" (V. N. Lebedinets).

In the report of V. N. Lebedinets and A. K. Nizhnev (Institute of Space Research and Analytical Chemistry, Leningrad V. I. Vernyadsky Institute of Space Research), revised estimates were given of the density of the meteoroid bodies with different masses in the interplanetary space (10¹⁰ and 10¹¹ g/cm³) and the interplanetary space (10¹⁰ and 10¹¹ g/cm³). That estimate was based on the results of a statistical analysis of practically all data available in the literature on impacts of meteoroid bodies obtained in the last 30-40 years in the USSR and the USA on artificial earth satellites and space

In the attached primary report a general description is given of the state and progress of research in the field of the study of meteors and meteoric materials in the atmosphere. The research in the field of meteoric materials of Radioelectronics and the Institute of Experimental Physics of the Academy of Sciences of the USSR is described. The results of investigations with the direct language of results of field measurements and weight measurements on particles of their input in a computer is considered in the report in that area.

1/2 020 UNCLASSIFIED PROCESSING DATE--23OCT70
TITLE--RADAR METEOR INFLUX AND ITS COMPARISON WITH DIRECT COSMIC DUST
MEASUREMENT DATA -U-
AUTHOR--LEBEDINETS, V.N.

COUNTRY OF INFO--USSR

SOURCE--COSPAR, PLENARY MEETING, 13TH, LENINGRAD, USSR, MAY 20-29, 1970,
PAPER, 20 P
DATE PUBLISHED-----70

SUBJECT AREAS--ASTRONOMY, ASTROPHYSICS, ATMOSPHERIC SCIENCES

TOPIC TAGS--COSMIC DUST, RADAR METEOR OBSERVATION, METEOR OBSERVATION

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRA--3001/0550

STEP NO--UR/0000/10/000/000/0020/0020

CIRC ACCESSION NO--AT0126297

UNCLASSIFIED

2/2 020

UNCLASSIFIED

PROCESSING DATE--23OCT70

CIRC ACCESSION NO--AT0126297

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. EVALUATION OF RADAR METEOR INFLUX AND ITS COMPARISON WITH OPTICAL METEOR OBSERVATIONS AND DIRECT MEASUREMENTS ON SPACE VEHICLES. THE DIFFERENT NOTICEABILITY OF METEORS WITH VARIOUS VELOCITIES AND RADIANTS, WHICH IS REPRESENTED BY THE GEOMETRY FACTOR (DEFINING RELATIVE NOTICEABILITY OF METEORS WITH VARIOUS RADIANT POSITIONS), AND THE PHYSICAL FACTOR (DEFINING RELATIVE NOTICEABILITY OF METEORS WITH VARIOUS VELOCITIES), IS CONSIDERED. A METHOD OF CALCULATING THE PHYSICAL FACTOR, AND A METHOD OF METEOROID CALCULATION ACCORDING TO THE DATA OF THE RADAR METEOR SHOWER RATE OBSERVATIONS IS PRESENTED. THE RESULTS OBTAINED ARE DISCUSSED AND COMPARED TO THE RESULTS OF OPTICAL AND DIRECT OBSERVATIONS..

UNCLASSIFIED

1/3 040	UNCLASSIFIED	PROCESSING DATE--30OCT70
TITLE--ORBITS OF RADIO METEORS -U-		
AUTHOR--(02)--KORPUSOV, V.N., <u>LEBEDINETS, V.N.</u>		
COUNTRY OF INFO--USSR		
SOURCE--MOSCOW, ASTRONOMICHESKIYE VESTNIK, VOL IV, NO 2, 1970, PP 102-107		
DATE PUBLISHED-----70		
SUBJECT AREAS--BEHAVIORAL AND SOCIAL SCIENCES, ASTRONOMY, ASTROPHYSICS, NAVIGATION		
TOPIC TAGS--METEOR RADIANT, RADAR METEOR OBSERVATION, VELOCITY MEASURING INSTRUMENT, MEASUREMENT, ORBIT, METEOROLOGIC RESEARCH FACILITY		
CONTROL MARKING--NO RESTRICTIONS		
DOCUMENT CLASS--UNCLASSIFIED	STEP NO--UR/0454/TD/004/002/0102/0107	
PROXY REEL/FRA--3001/0114		
CIRC ACCESSION NO--A0125931		
	UNCLASSIFIED	

2/3 040

UNCLASSIFIED

PROCESSING DATE-- 30 OCT 70

CIRC ACCESSION NO--AP0125931

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. SPECIALISTS AT THE INSTITUTE OF EXPERIMENTAL METEOROLOGY (OBNINSK) HAVE DEVELOPED RADAR APPARATUS FOR MEASURING THE VELOCITY AND RADIANT OF INDIVIDUAL METEORS AND BETWEEN SEPTEMBER 1967 AND THROUGH AUGUST 1968 AN ANNUAL CYCLE OF MEASUREMENTS WAS MADE. THIS PAPER DESCRIBES THE APPARATUS AND MEASUREMENT METHOD AND GIVES SOME MEASUREMENT RESULTS. APPARATUS WAS SET UP AT A PRINCIPAL POINT AND TWO OUTLYING POINTS. THE LATTER WERE AT DISTANCES OF 4.9 AND 3.7 KM FROM THE PRINCIPAL POINT. THEIR AZIMUTHS RELATIVE TO THE PRINCIPAL POINT WERE 129 AND 214 DEGREES. THE BASIC PARAMETERS WERE: WAVELENGTH 11.9 M, TRANSMITTER PULSE POWER 75 KW, PULSE REPETITION RATE 500 CPS, PULSE DURATION 20 MU SEC. THE TRANSMITTING AND RECEIVING ANTENNAS WERE IDENTICAL FIVE ELEMENT WAVEGUIDE TUPES SET UP 0.5 LAMBDA ABOVE THE EARTH'S SURFACE. THIS SETUP MADE IT POSSIBLE TO MEASURE RADIANTS AND VELOCITIES OF METEORS BRIGHTER THAN APPROXIMATELY 7 PRIMEM.5. THE OBSERVATIONS WERE MADE DURING THE TIME OF THE ORIONIDS AND GEMINIDS IN 1967 AND THE QUADRANTIDS IN 1968. TABLES 1-3 FOR EACH STREAM GIVE: NUMBER OF DETERMINED ORBITS OF INDIVIDUAL METEORS IN THE STREAM, MEAN EXTRA ATMOSPHERIC VELOCITY, MEAN COORDINATES OF RADIANT AND ORBITAL ELEMENTS OF THE STREAM. SIMILAR DATA OBTAINED BY OTHER AUTHORS ARE GIVEN. THESE TABLES REVEAL THAT THE DETERMINED MEAN VELOCITIES AND ORBITAL ELEMENTS OF ALL THREE STREAMS AGREE WELL WITH DATA FROM PHOTOGRAPHIC OBSERVATIONS. FIGURES 1-3 GIVE THE METEOR DISTRIBUTION FOR THESE STREAMS BY VELOCITIES AND COORDINATES OF RADIANTS.

UNCLASSIFIED

3/3 040

UNCLASSIFIED

PROCESSING DATE--30OCT70

CIRC ACCESSION NO--AP0125931

ABSTRACT/EXTRACT--DURING THE PROCESSING THE MEAN SQUARE ERRORS IN DETERMINING VELOCITIES AND RADIANT COORDINATES OF AN INDIVIDUAL METEOR GROUP WERE: SIGMA SUBV EQUALS PLUS OR MINUS 1.2 KM-SEC FOR MEAN VELOCITIES. SIGMA SUBDELTA EQUALS PLUS OR MINUS 2DEGREES.0 SIGMA SUBDELTA EQUALS PLUS OR MINUS 2DEGREES.0 SEC DELTA. FACILITY: INSTITUTE OF EXPERIMENTAL METEOROLOGY.

UNCLASSIFIED

LEIBEDINETS, V. N.

JRS Storo
14 MAY 1973

INVESTIGATIONS OF METEORS IN THE UPPER ATMOSPHERE

(Symposium in Odessa)

(Article by Doctor of Physical and Mathematical Sciences, V. N. Leibedinets, Moscow, Vestnik Akademii Nauk SSSR, Russian, No. 1, 1972, pp. 102-117)

The Commission on Comets and Meteors of the Astronomical Council, the International Geophysical Committee of the AS USSR, and Odessa University conducted, on 18-21 September 1972 in Odessa, a symposium on the theme "Interaction of meteoric matter with the earth and methods of investigating the upper atmosphere." Participating in it were representatives of 30 scientific institutions, 122 design offices and industrial enterprises of various cities of the country.

The work of the symposium proceeded in "theory and practical sessions" (the sections "Meteoric astronomy and physics of meteors" and "The circulation of the upper atmosphere and the physics of the upper atmosphere"). The following problems were discussed: the inflow of meteoric matter on the earth and the circumterrestrial dust cloud, the physics of the interaction of meteoric bodies with the atmosphere and structural parameters of the atmosphere on the basis of observation of meteors, and apparatus and the automation of the processing of results of observations.

In the report of T. N. Nazarova and A. K. Rybakov (Institute of Geochemistry and Analytical Chemistry Imeni V. I. Vernadsky of the AS USSR), refined estimates were given of the density of flow $N(K)$ of meteoric bodies with different masses M for interplanetary space $N(M, G)$ and circumterrestrial space $N(M, G)$. That estimate was based on the results of a critical analysis of practically all data available in the literature on impacts of meteoric bodies, obtained in the last 10-12 years in the USSR and the USA on artificial earth satellites and space

1/2 032 UNCLASSIFIED PROCESSING DATE--09OCT70
TITLE--STABILIZATION OF THE DIMENSIONS OF THE ORIENTED ZONE DURING POLYMER
DRAWING -U-
AUTHOR-(03)-KOVVIGA, V.V., LEBEDINSKAYA, M.L., CHALKOZE, V.N.
COUNTRY OF INFO--USSR
SOURCE--PLAST. MASSY 1970, (2), 34-5
DATE PUBLISHED-----70
SUBJECT AREAS--MATERIALS
TOPIC TAGS--PLASTIC INJECTION MOLDING, CAPRONE, TENSILE STRENGTH, MATERIAL
TESTING EQUIPMENT, MATERIAL DEFORMATION, MATERIAL DEGRADATION
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAME--1992/1822 STEP NO--UR/0191/TQ/000/002/0034/0035
CIRC ACCESSION NO--AP0112806

2/2 032

UNCLASSIFIED

PROCESSING DATE--09DEC70

CIRC ACCESSION NO--AP0112805

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. KAPRON (I) SAMPLES (OBTAINED BY INJECTION MOLDING) WERE DRAWN ON A ZWICK TENSILE TESTING MACHINE AT 5-500 MM PER MIN (AT 23-40DEGREES) UNTIL A REINFORCED REGION WAS FORMED. THE TESTS WERE DESIGNED TO DET. THE RELATION BETWEEN THE GEOMETRICAL PARAMETERS OF THE TRANSITIONAL REGION AND THE DRAWING CONDITIONS OF I. THE DEFORMATION IN THE TRANSITIONAL REGION BECAME CONST. AT A DRAWING RATE OF GREATER THAN OR EQUAL TO 40 MM PER SEC. AT HIGH DRAWING RATES, THE DEGREE OF DRAWING BECAME ESSENTIALLY CONST., BUT I FIBERS UNDERWENT A MARKEDLY MORE RAPID DEGRADATION.

UNCLASSIFIED

1/2 028 UNCLASSIFIED PROCESSING DATE--30OCT70
TITLE--X RAY CHAMBER FOR STUDYING THE DEFORMATION OF THREADLIKE CRYSTALS
-U-
AUTHOR--(03)-YELISEYENKO, L.G., LEBEDINSKAYA, S.B., LINKOVA, O.YE.
COUNTRY OF INFO--USSR
SOURCE--PRIB. TEKH. EKSP. 1970, 1, 220-1
DATE PUBLISHED-----70
SUBJECT AREAS--PHYSICS, METHODS AND EQUIPMENT
TOPIC TAGS--X RAY CAMERA, CRYSTAL DEFORMATION, FIBER CRYSTAL, X RAY
DIFFRACTION ANALYSIS, IRON
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAME--1988/1554 STEP NO--UR/0120/70/001/000/0220/0221
CIRC ACCESSION NO--AP0106300

UNCLASSIFIED

2/2 028

UNCLASSIFIED

PROCESSING DATE--30OCT70

CIRC ACCESSION NO--AP0106300

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. AN X RAY CAMERA IS DESCRIBED FOR STUDYING OF THE ELASTIC DEFORMATION OF THREADLINE CRYSTALS BY USING THE CHARACTERISTIC RADIATION OF THE X RAY TUBE. REFLECTION OF $Cu K_{\alpha}$ SUB ALPHAI RADIATION FROM THE (310) PLANE OF A FE WHISKER WAS PHOTOGRAPHED. THE FE WHISKER WAS DEFORMED BY TENSION. THE DEVICE MEASURES THE CHANGE IN INTERPLANAR DISTANCES WITH AN ACCURACY OF SIMILAR TO 0.01PERCENT.
FACILITY: CAL'NEVOST. GOS. UNIV., VLADIVOSTON, USSR.

UNCLASSIFIED

1/2 006 UNCLASSIFIED PROCESSING DATE--13NOV70
TITLE--SOLUBILITY POLYTHERM OF THE ALUMINUM SULFATE AMMONIUM SULFATE WATER
TERNARY SYSTEM -U-
AUTHOR--(02)-LEBEDYNSKIY, D.N., SHEVCHUK, V.G.
COUNTRY OF INFO--USSR
SOURCE--ZH. NEORG. KHIM. 1970, 15(5), 1432-3
DATE PUBLISHED-----70
SUBJECT AREAS--CHEMISTRY
TOPIC TAGS--AQUEOUS SOLUTION, SOLUBILITY, ALUMINUM SULFATE, AMMONIUM
SULFATE, CHEMICAL COMPOUND
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAME--3006/1398 STEP NO--UR70078/7070157005/1432/1433
CIRC ACCESSION NO--AP0135072
UNCLASSIFIED

2/2 006

UNCLASSIFIED

PROCESSING DATE--13NOV70

CIRC ACCESSION NO--AP0135072

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. A SOLY. POLYMER (0-100DEGREES)
OF SALTS OF THE TITLE SYSTEM IS CONSTRUCTED. THE SYSTEM FORMS 3(NH
SUB4) SUB2 SO SUB4 .AL SUB2 (SO SUB4) SUB3, A COMPO. WHICH HAS NOT BEEN
PREVIOUSLY REPORTED. FACILITY: POLTAV, INZH.-STROIT. INST.,
POLTAVA, USSR.

UNCLASSIFIED

1/2 029 UNCLASSIFIED PROCESSING DATE--30OCT70
 TITLE--STUDYING THE DEPENDENCE OF THE WEAR RESISTANCE OF CYLINDER SLEEVES
 ON THE MICRORELIEF OF THE WORKING SURFACE -U-
 AUTHOR-(G4)-SHNEYDER, YU.G., ~~LEBEDINSKIY, G.G.~~ BUNGA, G.A., GUTIN, M.YE.
 COUNTRY OF INFO--USSR
 SOURCE--MOSCOW, AVTLOBIL'NAYA PROMYSLENNOST', NO 2, 1970, PP 41-42
 DATE PUBLISHED-----70

SUBJECT AREAS--MECH., IND., CIVIL AND MARINE ENGR
 TOPIC TAGS--METAL ROLLING, BIBLIOGRAPHY, VIBRATION EFFECT, WEAR
 RESISTANCE, METAL MICROSTRUCTURE/IUM412 ENGINE CYLINDER SLEEVE

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED
 PROXY KEEL/FAME--1999/1215

STEP NO--UR/0113/70/000/002/0041/0042

CIRC ACCESSION NO--AP0123179

UNCLASSIFIED

2/2 029

UNCLASSIFIED

PROCESSING DATE--30OCT70

CIRC ACCESSION NO--A0123179

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE RESULTS OF AN EXPERIMENTAL COMPARATIVE STUDY OF THE WEAR RESISTANCE OF THE M-412 ENGINE CYLINDER SLEEVES AS A FUNCTION OF THE MICRORELIEF OF THEIR WORKING SURFACES ARE PRESENTED. A PROCEDURE IS GIVEN FOR THE ANALYTIC CALCULATION OF REGULAR MICRORELIEF PRODUCED BY THE VIBRATION ROLLING METHOD.

UNCLASSIFIED

USSR

UDC 8.74

LEBEDINSKIY, M. M.

"The Algorithm as a System of Subroutines and Memory Distribution Using Equipment Operating in Parallel"

Zap. nauch. seminarov Leningr. otd. Mat. in-ta AN SSSR (Notes of Scientific Seminars of Leningrad Department of Mathematics Institute of Academy of Sciences USSR), 1971, 23, pp 94-98 (from RZh-Matematika, No 5, May 72, Abstract No 5V525 by V. MIKHEYEV)

Translation: It is shown that an algorithm can be represented as a system of subroutines. The following problems are formulated: 1) A certain schedule is given which is characterized by the time that operator α begins to function, by a processor on which the operator is to be executed, and by a copy of the subroutine on which the reference containing α is executed. The problem is to find, for the given subroutines, the minimum number of copies (and the distribution of references in these copies) which must be stored in the memory so that all references to this subroutine can be executed in strict accordance with the assigned schedule. 2) Among the time-optimal schedules, compiled on the assumption that available storage is unlimited, that schedule must be found which is storage-optimal. Solution to the first problem is presented.

1/1

USSR

UDC: 6.74

LEBEDINSKIY, M. M.

"An Algorithm as a System of Subprograms, and Memory Distribution in Parallel Operating Equipment"

Zap. nauch. seminarov Leningr. otd. Mat. in-ta AN SSSR (Notes of Scientific Seminars of the Leningrad Department of the Mathematics Institute, Academy of Sciences of the USSR), 1971, 23, pp 94-98 (from RZh-Kibernetika, No 5, May 72, Abstract No 5V525)

Translation: It is shown that an algorithm may be represented as a system of subprograms. The following problems are formulated: 1) A certain schedule is given which is characterized by the time of inception of the work of an operator α , by a processor on which the operator is to be implemented and by a copy of the subprogram on which the access containing α is performed. The problem consists in finding for the given subprogram the minimum number of copies (and the distribution of accesses in accordance with these copies) which must be stored in the memory in order that all accesses to this subprogram might be executed strictly in accordance with their predetermined schedule. 2) It is required to find among the time-optimum schedules compiled on the assumption of an infinite memory, that schedule which is optimum with respect to memory. A solution is given for the first problem.

V. Mikhryev.

1/1

- 2 -

1/2 019 UNCLASSIFIED PROCESSING DATE--ZONDV70
TITLE--MEDICAL PSYCHOLOGY: ITS ESSENCE AND OBJECTIVES -U-
AUTHOR--LEBEDINSKIY, M.S.
COUNTRY OF INFO--USSR
SOURCE--PAGES 31-35 VESTNIK AKADEMII MEDITSINSKIKH NAUK SSSR, VOL 25, NO
1, 1970
DATE PUBLISHED-----70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES
TOPIC TAGS--PSYCHIATRY, PERSONALITY INTEGRATION

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAME--3003/0958

STEP NO--UR/0248/70/025/001/0031/0035

CIRC ACCESSION NO--AP010016

UNCLASSIFIED