"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

UNCLASSIFIED PROCESSING DATE--23OCT70

1/2 024

TITLE--VARIABILITY OF THE LIVER SEGMENTS AND ITS IMPORTANCE IN HEPATECTOMY -U-

AUTHOR--MIKHALOV, G.A.

M

COUNTRY OF INFO--USSR

SOURCE--VESTNIK KHIRURGII IMENI I. I. GREKOVA, 1970, VOL 104, NR 4, PP 43-47

DATE PUBLISHED--------70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--LIVER, SURGERY, RADIOGRAPHY

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1988/0029 STEP NO--UR/0589/70/104/004/0043/0047

CIRC ACCESSION NO--AP0105128

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

UNCLASSIFIED PROCESSING DATE--23OCT70

2/2 024

CIRC ACCESSION NO--AP0105128

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. A COMPLEX INVESTIGATION WITH METHODS OF ROENTGENOGRAPHY, CORROSION AND PREPARATION OF FOUR INTRAORGANIC SYSTEMS OF THE LIVER ON 100 SPECIMENS HAS EVIDENCED GREAT VARIABILITY IN BOUNDARIES OF ALL 8 SEGMENTS (THE COUINAUD CLASSIFICATION IS GIVEN).

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

1/2 026 UNCLASSIFIED PROCESSING DATE--20NOV70

TITLE--ELECTROLYTE FOR DEPOSITION OF INDIUM GALLIUM ALLOY -U-

AUTHOR-(05)-AKMENS, YA.P., MIKHALOVICH, D.L., RIKMAN, S.E., CZOLINSH, I.M., UDEM, D.A.

COUNTRY OF INFO--USSR

SOURCE--U.S.S.R. 264,095
REFERENCE--OTKRYTIYA, IZOBRET., PROM. OBRAZTSY, TOVARNYE ZNAKI 1970,
DATE PUBLISHED--10FEB70

SUBJECT AREAS--CHEMISTRY, MATERIALS

TOPIC TAGS--CHEMICAL PATENT, ELECTROLYTE, INDIUM ALLOY, GALLIUM ALLOY, PHENOL, GLYCINE, INDIUM CHLORIDE, GALLIUM CHLORIDE, METAL DEPOSITION

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRAME--3004/1041 STEP NO--UR/0482/70/000/000/0000/0000

CIRC ACCESSION NO--AA0132166

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

2/2 026 UNCLASSIFIED PROCESSING DATE--20JUL70

CIRC ACCESSION NO--AAC12106

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. AN ELECTROLYTE FOR DEPOSITION OF IN,GA ALLOY HAS THE FOLLOWING COMPN. IN CHLORIDE 50-150, GA CHLORIDE 2.5-25, GLYCINE 30-60, AND PHENOL 0.3-1 G-L.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

UNCLASSIFIED PROCESSING DATE--13NOV70

1/2 018

TITLE--LI PRIMEPOSITIVE, NA PRIMEPOSITIVE PARALLEL TO PC SUB3 PRIMENEGATIVE, BO SUB2 PRIMENEGATIVE SYSTEM -U-

AUTHOR-(02)-BERGMAN, A.G., MIKHALKOVICH, L.N.

COUNTRY OF INFO--USSR

SOURCE--ZH. NEORG. KHIM. 1970, 15(5), 1390-3

DATE PUBLISHED-------70

SUBJECT AREAS--CHEMISTRY

TOPIC TAGS--METASTABLE STATE, PHASE DIAGRAM, BORATE, PHOSPHOROUS COMPOUND, LITHIUM COMPOUND, SODIUM COMPOUND

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3006/1412 STEP NO--UR/0078/70/015/005/1390/1393

CIRC ACCESSION NO--AP0135036

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

UNCLASSIFIED PROCESSING DATE--13NOV70

2/2 018

CIRC ACCESSION NO--AP0135056

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE METASTABLE SYSTEM OF LI PRIMEPOSITIVE, NA PRIMEPOSITIVE PARALLEL TO PO SUB4 PRIMEPOSITIVE, GO SUB2 PRIMENEGATIVE IS DETD. AND ITS PHASE DIAGRAMS ARE CONSTRUCTED. FORMATION OF LI ORTHOPHOSPHATE PREVAILS IN THIS SYSTEM WHICH IS A CROSS SECTION OF THE QUATERNARY LI SUB2 C MINUS NA SUB2 O MINUS P SUB2 O SUB5 MINUS B SUB2 O SUB3 SYSTEM. FACILITY: ROSTOV.-NA-DONU INZH.-STROIT. INST., ROSTOV-ON-DON, USSR.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

UNCLASSIFIED PROCESSING DATE--13NOV70

1/2 014

TITLE--POTASSIUM OXIDE PHOSPHOROUS PENTOXIDE BORON OXIDE SYSTEM -U-

AUTHOR-(02)-BERGMAN, A.G., MIKHALKOVICH, L.N.

COUNTRY OF INFO--USSR

SOURCE--ZH. NEORG. KHIM. 1970, 15(6), 1677-9

DATE PUBLISHED--------70

SUBJECT AREAS--CHEMISTRY

TOPIC TAGS--PHASE DIAGRAM, BORON OXIDE, PHOSPHOROUS OXIDE, POTASSIUM OXIDE, GLASS COMPOSITION

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3006/1394 STEP NO--UR/0078/70/015/006/1677/1679

CIRC ACCESSION NO--AP0135058

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

UNCLASSIFIED PROCESSING DATE--13NOV70

2/2 014

CIRC ACCESSION NO--AP0135068

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. AN INCOMPLETE PHASE DIAGRAM OF THE K SUB2 O-P SUB2 O SUB5 -B SUB2 O SUB3 SYSTEM IS CONSTRUCTED. COMPN. AND M.P. OF 4 EUTECTICS AND 4 PERITECTIC COMPNS. OF THE SYSTEM ARE TABULATED. THE STUDY REVEALS THAT, IN THIS SYSTEM, P SUB2 O SUB5 TRIES TO OBTAIN THE ENERGETICALLY MOST CONVENIENT COORDINATION, WHICH IS REALIZED AS THE PO SUB4 PRIMEBNEGATIVE ION. THE REGIONS OF GLASS FORMATION ARE DETD. FACILITY: ROSTOV.-NA-DONU INZH.-STROIT. INST., ROSTOV-UN-DON, USSR.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

Acc. Nr: AP0040312 Ref. Code: UR0481 3

PRIMARY SOURCE: Eksperimental'naya Khirurgiya i Anesteziologiya, 1970, Nr 1, pp 3-10

ON THE STATE AND PERSPECTIVES IN DEVELOPMENT OF CRYOSURGERY

Sirotkina, M. G.; Gol'dina, B. G.; Gutkin, V. S.; Komarov, B. A.; Kondrat'yeva, N. I.; Mikhalovts, S. N.; Rudnya, P. G.

The trends of development and practical evaluation of cryosurgical methods of treatment in the last two decades are presented. Their use being of pure empiric nature it has been decided to use canine palate tonsils as a suitable model for scientific optimization of demands applied to cryosurgical apparatuses and rationalization of their application. The dynamics of general and local changes after tonsilectomy in the fluid nitrogen (—196° C) as a cold source have been studied by clinical, haemathological and pathomorphological investigations. By lowering the temperature in the tissue under tonsil to —7° C a subsequent expressed destructive effect can be anticipated. Complete disappearance of the tonsil tissue was observed in 31.8 per cent of cases, partial destruction — in 35.1 per cent. The authors believe that along with an intensive biological search for complex evaluation of the method a simple cryogen technique for a number of surgical fields to be equipped with must be developed.

REEL/FRAME
19741743

02 Lc

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

UDC: 621.372.822

USSR

GAL'CHENKO, N. A., MIKHALEVSKIY, V. S.

"Electrical Parameters of a Rectangular Waveguide With a T"

Moscow, Radiotekhnika i Elektronika, Vol 15, No 12, Dec 70, pp 2504-2511

Abstract: The band properties of a rectangular waveguide with a T are theoretically and experimentally studied. Formulas are derived for calculating the characteristic impedance, maximum power and attenuation constant of the waveguide. It is found that the Schwartz method of calculating electrical parameters improves accuracy by 40-60% over conventional methods.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR UDC: 621.375.024(088.8)

RYABOV, V. S., MIKHALIN, I. S.

"A DC Amplifier"

USSR Author's Certificate No 261466, filed 1 Jul 68, published 12 May 70 (from RZh-Radiotekhnika, No 11, Nov 70, Abstract No 11D137 P)

Translation: This Author's Certificate introduces a DC amplifier which contains a bridge with two adjacent arms made up of paired variable resistors, and with fixed resistors in the other pair of arms. The purpose of the invention is to improve the thermal stability of the amplifier and to obtain a unipolar voltage at the output. To this end, two transistors of identical conductivity type are connected with their emitter-base junctions opposed in the diagonal of the bridge between the fixed and variable resistors. The collectors of these transistors are connected to a common load resistor and to one of the output terminals; in this hook-up, the fixed resistors of the bridge act simultaneously as the feedback resistors for the transistors.
E. L.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR UDC: 621.438-253.5-71.001.5

IVANOV, V. L., MANUSHIN, E. I., MIKHAL'TSEV, V. YE.

"Investigation of the Air-Liquid Cooling of Rotor Blades"

Moscow, Vysokotemperatur. Okhlazhdayemyye Gaz. Turbiny -- Sbornik (High-Temperature Cooled Gas Turbines -- Collection of Works), Mashinostroyeniye, 1971, pp 70-85 (from Referativnyy Zhurnal, Turbostroyeniye, No 1, Jan 72, Abstract No 1.49.105)

Translation: Results are given of cooling system and turbine rotor designs as part of the development of a multistage turbine for a gas temperature on the order of 1450-1500°K. A three-stage variant of a cooled high-temperature turbine was selected. For determining the thermal fluxes in the cooling system, the average surface temperature of the nozzle blade was assumed to be 1073° K. and that of the working blades was assumed to be 873° K. With these parameters heat removal of the cooling system was 3.44 times 10^4 joules/kg; for this, a total air intake of 9% into the cooling system, or a nonreturnable air intake of 5% behind the compressor, was required. The nozzle blades are internally air-cooled; the blades are hollow, with inserted deflectors. In the selection of the design variant of the rotor, preference was given to a rotor without covering disks. The cooling air is delivered into an annular cavity in the

1/4

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR

IVANOV, V. L., et al., Vysokotemperatur. Gibkazhdayemyye Gaz. Turbiny -- Sbornik, Mashinostroyeniye, 1971, pp 70-85

disk, and further on into the radiators. The radiator is two-sided, it is made for two-way air passage on each side. The air is delivered to each working blade through openings in the disk into the first half of the radial ribs of the radiator, passes along the inter-rib channels, then changes the direction of its movement by 180° and flows along the second part of the ribbed surface. The air is led out into the flow-through part behind the first-stage disk or into the flow-through part of the turbine. The parameters and dimensions of an experimental single-stage turbine were determined by means of simulation of the first stage of a three-stage experimental turbine. The basic dimensions of the stage and the circumferential velocities are the same in the full-scale stage and in the model stage. The model stage was designed for two kinematically similar regimes, which correspond to a pressure before the stage of 2.6 times 10^5 newtons/m^2 and 3.92 times 10^5 newtons/m^2. Here the flows of air in the crosssection before the combustion chamber comprise, respectively, 3.0 and 5.5 kg/sec when the turbine is operating with counterpressure. When the counterpressure on the model turbine is decreased to the atmospheric value, the pressure before the turbine is stabilized at (1.4-1.5) times 10^5 newtons/m^2, and the gas flow comprises approximately 2 kg/sec. The average surface

2/4

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR

IVANOV, V. L., et al., Vysokotemperatur. Okhlazhdayemyye Gaz. Turbiny -- Sbornik, Mashinostroyeniye, 1971, pp 70-85

temperatures of the nozzle blades and those of the working blades in the model turbine and in the full-scale turbine are identical. Cooling is of the two-circuit, air, liquid type. Six dead-end channels are situated in the blade fin for cooling it. The heat carrier is sodium metal. A procedure for filling and molding the blade cavities with sodium has been worked out. During experimental investigations of the turbine, the temperatures of the basic parts were measured by means of thermocouples, the gas parameters were determined in two-dimensional bands, before and after the turbine stage. The temperature, the total pressure and the static pressure, and the direction of the stream were measured. The turbine power was measured on the basis of the power of a hydraulic brake, and as a control, on the basis of gas parameters. The consumption, temperature, and pressure of the cooling air were measured at the entry and exit in each cooling channel. The braking temperature of the gas at the rotor blade was calculated on the basis of the stage parameters. In order to establish more precisely the heat-removal facilities to the turbine nozzle, an investigation was made to determine the rules governing heat exchange at this sector. The results of the investigation are generalized by the criterial

3/4

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR

IVANOV, V. L., et al., Vysokotemperatur. Okhlazhdayemyye Gaz. Turbiny -- Sbornik, Mashinostroyeniye, 1971, pp 70-85

relationship $N_u = A(0.606 \times 10^{-5} R_e)^{3.4} U/C_{mg}$. Results of experiments at three operating regimes are presented; at gas temperatures before the turbine equal to 1224, 1229, and 1237° K and temperature field of the external surface of the working blades along the profile of the middle cross section. In the preparation of the experiment with the turbine outlet for a calculated temperature of 1473° K, particular attention was devoted to fitting the blade radiators to the recesses in the disk, and tightening the point of contact of the radiators and the disk. Eight figures, one table.

4/4

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

UDC 621.311.25:621.039.003

USSR

MIKHAL'TSEV, V. YE., SUROVTSEV, I. G., YAKOVLEV, V. YA.

"The Economy of a Power Plant with a Chemically Reacting Working Medium under Partial Power Operating Conditions"

Dissotsiiruyushch. gazy kak teplonositeli i rab. tela energ. ustanovok -- V sb. (Dissociating Gases as Heat Transfer Agents and the Working Medium of Power Plants -- Collection of Works), Minsk, Nauka i Tekhn. Press, 1970, pp 138-144 (from RZh-Elektrotekhnika i Energetika, No 5, May 1971, Abstract No 5U25)

Translation: A study was made of the quantitative and qualitative methods of regulating a plant operating with respect to a gas-liquid cycle. The operating peculiarities of the regenerator of the plant are indicated for these regulating procedures. The results of the calculational research indicating the great economy of the plant under uncalculated conditions are presented for the quantitative procedure, and the variation of the prameters of the plant for both regulating procedures is given. The economy of the plant with regeneration at high and low pressures is compared for qualitative regulation. There are 4 illustrations and a 3-entry bibliography.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

Power, Turbine, Engine, Pump

USSR

UDC: 621.438.71.001.5

MANUSHIN, E. A., MIKHAL'TSEV, V. Ye., PUGIN, G. A., SOBHOV, Yu. V.

"An Experimental Turbine for a Gas Temperature of 1200°C With Two-Loop Air-Liquid Cooling"

Tr. Mosk. vyssh. tekhn. uch-shcha im. N. E. Baumana (Works of the Moscow Higher Technical Academy imeni N. E. Bauman), 1970, No 134, pp 133-140 (from RZh-Turbostroyeniye, No 8, Aug 70, Abstract No 8.49.72)

Translation: On the basis of research at the Moscow Higher Technical Academy, the Leningrad "Ekonomayzer" Plant made an experimental semi--industrial pilot model of a high-temperature gas-turbine installation with air-liquid cooling of the working blades. In order to finish the cooling system, an experimental gas turbine was designed at the Moscow Higher Technical Academy, the full-scale dimensions of the blading being taken from the dimensions of the first stage of the cooled turbine in the high-temperature gas-turbine installation. A description is given of the stand and debugging tests of the experimental high-temperature gas-turbine installation at 4500-9000 rpm. An analysis of the thermal state of the guide vanes showed that the air cooling system, in reducing the vane temperature by 150-200°C, provides satisfactory cooling at temperature of up to 960°C. Six illustrations, one table, bibliography of three titles. L. F. D.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

UNCLASSIFIED PROCESSING DATE--11SEP70

1/2 031

TITLE--ELECTRICAL NONLINEARITY OF A FERROELECTRIC SEMICONDUCTOR IN A HETEROGENEOUS ELECTRIC FIELD -U-

AUTHOR--VENDIK, O.G., MIKHALVESKIY, A.N.

COUNTRY OF INFO--USSR

SOURCE--FIZ. TVERD. TELA 1970, 12(2), 612-14

DATE PUBLISHED--------70

SUBJECT AREAS--PHYSICS, ELECTRONICS AND ELECTRICAL ENGR.

TOPIC TAGS--SEMICONDUCTOR DEVICE, FERROELECTRIC MATERIAL, ELECTRIC FIELD

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

STEP NO--UR/0181/70/012/002/0612/0614

PROXY REEL/FRAME--1988/0253

CIRC ACCESSION NO--AP0105327

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

UNCLASSIFIED PROCESSING DATE--11SEP70

2/2 031

CIRC ACCESSION NO--AP0105327

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. FOR A TRUNCATED CONICAL CONDENSER FOR SUPER HIGH FREQUENCY USE THERE IS A LIMITING FREQUENCY F SUB0 EQUALS 0.3 HZ SUCH THAT AT F SMALLER THAN F SUB0 CONTROLABILITY BY THE EXTERNAL FIELD DECREASES. FOR SRTIO SUB3 F SUB0 EQUALS 10 PRIME3 MINUS 10 PRIME4 HZ.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR

ASKAR'YAN, G. A., MIKHAILICHA, V. G., SHIPULO, G. P., Physics Institute imeni P. N. Lebedev, Academy of Sciences, USSR

"Nonlinear Scattering and Self-Focussing of Intense Light by Perturbations of the Medium Near Absorbing Inhomogeneities"

Moscow, Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki, No 4, 1971, pp 1270-1272

Abstract: A study is made of the refraction of intense light by a halo originating in the transparent medium surrounding an absorbing inhomogeneity. A new effect is observed: namely, self-focussing of the light by an inhomogeneity in the medium. Experiments were conducted in the beam of a continuous yttrium-garnet (YAG -- ND) laser. For visualization of the process, a beam of red light from a helium-neon laser was added to the invisible beam. Scattering and shuttering of the beam, increasing in time due to an absorbing particle in water or in plexiglass, as well as self-focussing in various types of optical glass. The dynamics of the process are investigated by means of motion-picture color photography. Note is taken of the practical significance of the observed effects of nonlinear light scattering by halos near inhomogeneities in natural media (water, air) and in optical and laser elements (platinum particles in 1/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR

ASKAR'YAN, G. A., et al, Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki, No 4, 1971, pp 1270-1272

neodymium glass, carbon particles in a ruby, particles in liquid media, etc.) which limit the transmission of high intensities. These effects may also be used for the pulsed scattering, reflection, or modulation of intense light. 3 figures. 6 bibliographic entries.

2/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR

UDC: None

KOBZEV, A. P., MIKHALYAK, S., RUTKOVSKI, Ye., and FRANK, I. M.

"Optical Radiation Excited by Nonrelativistic, Charged Particles on Metal Surfaces"

Moscow, Yadernaya Fizika, vol 15, No 2, 1972, pp 326-333

Abstract: The phenomenon of radiation in the visible and ultraviolet ranges of the spectrum from metal surfaces excited by charged particles has been observed in experiments in which silver, gold, and aluminum targets were bombarded by protons with energies of up to 4.5 Mev, with the radiation observed at an angle of 86° with the normal to the target surface. These results were found to be in agreement with the theory of transitional radiation. The purpose of the present article is to obtain additional arguments for the detection of transitional radiation by comparing measurements made in bombarding the same targets with protons and electrons. The measurements were made using protons at an energy level of 1.5-4.5 Mev, and electrons with levels of 0.5-15 kev. A description of the equipment is

1/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR

KOBZEV, A. P., et al., Yadernaya Fizika, Vol 15, No 2, 1972, pp 326-333

given together with an explanatory diagram, and the method of measurement is explained. The authors conclude that their experiments provide additional proof of the usefulness of the transitional radiation theory.

2/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

UNCLASSIFIED PROCESSING DATE--30OCT70

1/2 018

TITLE--INFLUENCE OF EXTERNAL MAGNETIC FIELD ON STATIC AND DYNAMIC CHARACTERISTICS OF MAGNETIC CORES WITH RECTANGULAR HYSTERESIS LOOP -U-

AUTHOR-(03)-MIKHALYCHEVA, A.P., PIROGOV, A.I., SHAMAYEV, YU.M.

COUNTRY OF INFO--USSR

SOURCE--AVTOMATIKA I TELEMEKHANIKA, 1970, NR 6, PP 149-155

DATE PUBLISHED--------70

SUBJECT AREAS--PHYSICS

TOPIC TAGS--MAGNETIC CORE, EXTERNAL MAGNETIC FIELD, HYSTERESIS LOOP, SATURATION MAGNETIZATION

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--2000/1210 STEP NO--UR/0103/70/000/006/0149/0155

CIRC ACCESSION NO--AP0124864

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

UNCLASSIFIED PROCESSING DATE--30OCT70

2/2 018

CIRC ACCESSION NO--AP0124864

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THERE ARE PRESENTED THE THEORETICAL AND EXPERIMENTAL RESULTS OF THE INVESTIGATION OF THE EXTERNAL MAGNETIC FIELD INFLUENCE ON THE STATIC AND DYNAMIC CHARACTERISTICS OF THE MAGNETIC CORE WITH A RECTANGULAR HYSTERESIS LOOP PREVIOUSLY MAGNETIZED TO SATIETY.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

SAN/1/K-166/5-AKI-73
sec. 19.

XIV. SOIL MECHANICS

Yevk. A. A., and A. V. Mikhalyuk. Wave process characteristics in a ground mass during explosions by air-casing charges. ZhPMTF, no. 2, 1972, 105-110.

A study of the wave process characteristics in a ground mass during explosions by air-casing charges was conducted with concentrated confined charges (charge weight 0.2 kg) and linearly distributed ejection charges (4 kg of explosive per meter) in loam with a density of 1990 kg/m^3 and an average moisture content of 14.1% by weight. The effect of the charge air-casing size on the parameters of detonation waves propagating in the ground during the explosion was investigated. The explosive used in all experiments was pressed trotyl with a density of 1600 kg/m^3, a detonation rate of 6 km/sec, and a specific intrinsic energy of 1010 kcal/kg. The charge was placed in a cardboard case, with a volume exceeding the charge volume by the air casing size. The stress wave parameters were measured by a tensometric complex. Sensors were installed to permit registration of the radial σ_r, axial σ_z, and circumferential σ_φ components of the stress tensor.

An analysis of the experimental results shows that when the volume of the air casings is close to optimal, an increase of the detonation impulse time in the low-pressure region occurs. This is particularly evident in explosions of linearly distributed charges. Scattering of the experimental point data precluded the drawing of conclusions on the explosions of the concentrated confined charges. Changes in stress wave parameters during the explosion of air-casing charges affect the distribution of pressure impulse values. The redistribution of the deformation energy due to changes in the charge design was confirmed by experimentally established relationships on the change with distance of the radial impulse values on the load sector at various relative volumes of the air casings during explosions of centrally-symmetric and axisymmetric charges.

MIKHALYUK, A.V.

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR

UDC 622.215.2

VOVK, A. A. and MIKHALYUK, A. V.

"Features of Wave Processes in a Soil Mass During the Detonation of Charges With Air Envelopes"

Novosibirsk, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 2, March-April 1972, pp 105-110

Abstract: Results are presented of experimental research on wave processes in soils during the detonation of charges surrounded by an air envelope, and some general relationships are established. It is shown that the air envelope of a charge exerts an essential influence on practically all the parameters of a wave disturbance propagating in soil during an explosion. The established features of wave processes in soils during the detonation of charges with air envelopes can be used for calculating the action of an explosion when cutting through mine workings and other underground structures in compressible soils. 5 figures. 7 references.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

Polymers and Polymerization

UDC 678.744.422-19:546.98

USSR

SHVETS, T. M., MIKHALYUK, S. A., MEL'NICHENKO, Z. M., BOTVINOV, V. A., and ARYUPINA, K. A., Institute of Colloidal Chemistry and Chemistry of Water, Acad. Sc. UkrSSR

"Electroconductivity of Metallopolymers Based on the Alloy Fe-Co-Ni and the Copolymers of Vinyl Chloride With Vinyl Acetate"

Kiyev, Ukrainskii Khimicheskii Zhurnal, Vol 39, No 3, Mar 73, pp 258-261

Abstract: Experimental data have been reported on the value of electroconductivity in relationship to the nature of polymer, composition of metallopolymer, and the temperature of treatment of the metallopolymer obtained by electrolytic method from the alloys consisting of iron-cobalt-nickel and copolymers of vinyl chloride with vinyl acetate. It has been shown that the electroconductivity depends on the composition of the metallopolymers and on the temperature of preliminary treatment.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR

UDC 632.95

GUNAR, M. I., MIKHALYUTINA, YE. B., SHVETSOVA-SHILOVSKAYA, K. D., and MEL'NIKOV, N. N.

"Method of Preparing 0,0-Dialkyl-0-acylnaphthyl Phosphates or Thiophosphates"

USSR Authors' Certificate No 257501, filed 5 Nov 67, published 20 May 70 (from RZh-Khimiya, No 1, 10 Jan 71, Abstract No 1N565P)

Translation: Compounds possessing pesticidal activity of the formula (RO)(R'O)P(X)OY (I) (R and R' = lower alkyl; X = O or S; Y = 1-acetylnaphthyl-2) are obtained by the reaction of (RO)(R'O)P(X)Cl with acetylnaphthol (II) or naphtholate in the presence of K_2CO_3 or NaOH at 70-110° in organic solvent. For example, 0.62 g Na is added to a solution of 5 g II in 50 ml MePh at 90° and stirred 30 min; the unreacted Na is removed; at 100° 5.1 g $(EtO)_2P(S)Cl$ is added and heated 8 hr at 110°. On cooling, 50 ml water is added; the organic layer is rinsed with saturated solution of K_2CO_3 and water, and dried over $MgSO_4$; the solvent is distilled off, to yield after distillation I (R = R' = Et; X = S), yield 63%, boiling point 159-62°/0.14 mm, d_4^{20} 1.2003, $n^{20}D$ 1.5740. The following I's are prepared analogously with a yield of 40-45% (given here are: R = R', X, boiling point in °C/mm,

1/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR

GUNAR, M. I., et al., USSR Authors' Certificate No 257501, filed 5 Nov 67, published 20 May 70 (from RZh-Khimiya, No 1, 10 Jan 71, Abstract No 1N565P)

d_4^{20}, $n^{20}D$): Me, S, 172-5/0.2, 1.2544, 1.6050; Me, 0.156-8/0.18, 1.3548, 1.5630; Et, 0, 155-60/0.1, 1.2177, 1.5465. A mixture of 3.72 g II in 50 ml PhMe, 3.49 g (MeO)(EtO)P(S)Cl and 2.9 g K_2CO_3 is heated 7 hr at 90° to yield I (R = Me; R' = Et; X = S), boiling point 170-3°/0.2 mm, d_4^{20} 1.2396, $n^{20}D$ 1.5850.

2/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

UDC 632.95

USSR

SHAPOVALOVA, G. K., ROMANOVA, V. V., MARCHENKO, L. F., GUKKR, M.I. SHUMYATSKAYA, T. N., MIKHALYUTINA, YE. B., SHVETSOVA-SHILOVSKAYA, K. D., and MEL'NIKOV, N. N.

"Insecticide"

USSR Authors' Certificate No 244800, filed 9 Feb 68, published 15 Jan 70, (from RZh-Khimiya, No 20 (II), 25 Oct 70, Abstract No 20 N547P by S. LYUBARSKAYA)

Translation: The authors suggest as insecticides compounds of the formula (RO)(R'O)P(X)(OR") (I; R and R' = Me, Et; R" = acetyl-, halogen- or alkyl-substituted phenyl or naphthyl; X = O or S), which are obtained by the interaction of dialkyl chlorophosphates or thiophosphates with the corresponding phenols or naphthols or phenolates in MeCN with K_2CO_3 at 75-80° or in an inert solvent at 90-110°. The following are obtained: I (R = R', R" = substituted phenyl; given are R, substituents in the phenyl ring, X, boiling point in °C/mm, d_4^{20}, $n^{20}D$): Me, 2-Ac, S, 120-6/0.14, 1.2465, 1.5372; Et, 2-Ac, S, 110-4/0.09, 1.1911, 1.5271; Et, 3-Ac, S, 120-4/0.1, 1.1378, 1.5260; Me, 4-Ac, O, 124-30/0.08, 1.2539, 1.5070; Et; 4-Ac, O, 130-3/0.1, 1.1846, 1.4970; Me, 4-Ac, S, 120-3/0.08, 1.2648, 1.5445; Et, 4-Ac, S, 127-30/0.08, 1.1822, 1.5280; Me,

1/3

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR

SHAPOVALOVA, G. K., et al., USSR Authors' Certificate No 244300

2-Ac-4-Cl, S, 136-43/0.15, 1.3519, 1.5510; Et, 2-Ac-4-Cl, S, 126-30/0.13, 1.2531, 1.5295; Et, 2-Ac-5-Cl, S, 125-7/0.1, 1.2542, 1.5325; Me, 2-Ac-6-Cl, 0.127-9/0.11, 1.3555, 1.5118; Me, 4-Ac-2Cl, 0.152-3/0.15, 1.3556, 1.5218; Et, 4-Ac-2-Cl, O, 159-61/0.12, 1.2699, 1.5094; Me, 4-Ac-2-Cl, S, 135-43/0.18, 1.3463, 1.5538; Me, 2-Ac-4-Me, S, 133-8/0.15, 1.2340, 1.5405; Me, 2-Ac-5-Me, S, 132-8/0.17, 1.1864, 1.5388; Me, 4-Ac-2-Me, S, 153-6/0.18, 1.2400, 1.5465; Et, 4-Ac-3-Me, O, 150-1/0.2, 1.1740, 1.5015; Me, 4-Ac-3-Me, S, 155-61/0.22, 1.2404, 1.5442; Et, 4-Ac-3-Me, S, 152-4/0.2, 1.1656, 1.5290; Me, 2-Ac-4-Me_2, S, 130-2/0.05, 1.1927, 1.5380; Et, 2-Ac-4, 5-Me_2, S, 135-40/0.05, 1.1312, 1.5200; Et, 2-EtCO, O, 130-2/0.1, 1.2565, 1.4930; Me, 4-EtCO, O, 149-52/0.08, 1.2273, 1.5070; Me, 4-EtCO, S, 142-7/0.1, 1.2264, 1.5420; I (R = Me, R' = Et, X = S; R" = substituted phenyl; given here are substituents in the phenyl nucleus, boiling point in °C/mm, d_4^{20}, $n^{20}D$): 4-Ac, 121-4/0.1, 1.2338, 1.5368; 2-Ac, 120-4/0.13, 1.2245, 1.5318; 4-Ac-2,5-Me_2, 156-8/0.05, 1.1896, 1.5375; 4-EtCO, 148-52/0.1, 1.1.95, 1.5321; I (R" = 2-acetylnaphthyl; given here are R, R', X, boiling point in oC/mm, d_4^{20}, $n^{20}D$): Me, Me, O, 156-7/0.18, 1.3548, 1.5630; Et, Et, O, 155-60/0.1, 1.2177, 1.5465; Me, Et, S, 170-3/0.2,

2/3

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR

SHAPOVALOVA, G. K., et al., USSR Authors' Certificate No 244800

1.2396, 1.5850; Et, Et, S, 159-62/0.14, 1.2003, 1.5740. I's are approximately as active as chlorophos against Musca domestica, Calandra orycae and Porthetria dispar and have low toxicity for warm-blooded animals.

3/3

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

UNCLASSIFIED PROCESSING DATE--30OCT70

1/2 023

TITLE--EFFECT OF MOISTURE AND SURFACE ACTIVE AGENTS ON THE TENSILE STRENGTH OF CHROME TANNED LEATHER -U-

AUTHOR-(03)-MIGLYACHENKO, A.F., MIKHANOSHA, YE.S., TSIMBALENKO, A.A.

COUNTRY OF INFO--USSR

SOURCE--IZV. VYSSH. UCHEB. ZAVED., TEKHNOL. LEGK. PROM. 1970, (1), 91-3

DATE PUBLISHED--------70

SUBJECT AREAS--MATERIALS

TOPIC TAGS--SURFACE ACTIVE AGENT, LEATHER, TENSILE STRENGTH, TANNING MATERIAL/(U)OP7 SURFACE ACTIVE AGENT

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--2000/0950 STEP NO--UR/0323/70/000/001/0091/0093

CIRC ACCESSION NO--AP0124610

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

UNCLASSIFIED PROCESSING DATE--30OCT70

2/2 023

CIRC ACCESSION NO--AP0124610

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. SAMPLES OF CHROME TANNED LEATHER WERE COMPLETELY SOAKED IN DISTD. H SUB2 O OR IN A 0.5PERCENT AQ. SOLN. OF SURFACTANT OP-U AND THE DEPENDENCE OF THEIR TENSILE STRENGTHS ON H SUB2 O CONTENT WAS DETD. AT H SUB2 O CONTENTS LARGER THAN OR EQUAL TO 120PERCENT (COMPLETE SATN), THE STRENGTH OF THE SAMPLES WAS ONLY SLIGHTLY GREATER THAN THAT OF DRY LEATHER. THE STRENGTH INCREASED UNIFORMLY AS THE H SUB2 O CONTENT WAS REDUCED TO 40PERCENT (FOR DISTD. H SUB2 O) OR 20PERCENT (FOR OP-7 SOLN.), AND THEN FELL SHARPLY. THE STRENGTH VALUES WERE SLIGHTLY HIGHER FOR SAMPLES WETTED WITH DISTD. H SUB2 O. THE MAX. VALUE OF TENSILE STRENGTH OCCURRED AT THE POINT OF TRANSFER OF BONDING OF WATER FROM MECH. TO PHYSICOCHEM. TYPE BONDING.

FACILITY: KIEV. TEKHNOL. INST. LEGK. PROM., KIEV, USSR.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

1/2 006 UNCLASSIFIED PROCESSING DATE--30OCT70

TITLE--USE OF HIGHER ALCOHOLS IN RUSSIAN LEATHER PRODUCTION -U-

AUTHOR-(03)-DANISH, L.V., MIKHANOSHA, YE.S., KOTOV, N.P.

COUNTRY OF INFO--USSR

SOURCE--IZV. VYSSH. UCHEB. ZAVED., TEKHNOL. LEGK. PROM. 1970, (2), 68-9

DATE PUBLISHED--------70

SUBJECT AREAS--MATERIALS

TOPIC TAGS--ALCOHOL, LEATHER, INDUSTRIAL PRODUCTION

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--2000/0951 STEP NO--UR/0323/70/000/002/0068/0069

CIRC ACCESSION NO--AP0124611

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

2/2 006 UNCLASSIFIED PROCESSING DATE--30OCT70

CIRC ACCESSION NO--AP0124611

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. IN INDUSTRIAL TRIALS ON 1000 KG BATCHES, THE NORMAL FATTING MIXT. CONTG. SYNTHETIC FAT 60, FISH OIL 20, TANNING PASTE 15, TAR 5PERCENT, WAS REPLACED BY A MIXT. OF 5:1 HIGHER ALC. KEROSINE. USAGE IN BOTH CASES WAS 20PERCENT OF THE SQUEEZED WT. OF LEATHER, AND TIME OF TREATMENT 2 HR AT 55-60DEGREES. THE EXPTL. BATCHES, CONTG. HIGHER ALCS., WERE SIMILAR TO CONTROL BATCHES ACCORDING TO CHEM. ANAL. AND PHYSICOMECH. TESTS. THEIR WATER PERMEABILITY WAS REDUCED TO HALF THAT OF THE CONTROL BATCHES, AND DRYING TIME, AFTER FATTING, WAS REDUCED BY 25PERCENT. FACILITY: KIEV. TEKHNOL. INST. LEGK. PROM., KIEV, USSR.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

MIKHANOVICH, Yuriy

Mathematician

NOSAVIAGA, Djakarta
21 January 1972

KGB

Yuriy Mikhanovich, a mathematician, was arrested by the KGB on January 10 for interrogation. Two nights before, he was searched for, as so were eight others who disagreed with the government, including Pavel Yakir, whom the KGB thought was the leader of the movement. None had been sought before by the KGB.

It appears the Russian government is resolved to silence the small group of political dissenters in Moscow once and for all, claims The Times of January 17.

Yakir's flat was searched on Friday night and Saturday morning for 17 hours. The KGB agents took more than 3,000 documents, a typewriter, cameras, photographs, papers, magnetic tapes, and a copy of "1984" by George Orwell.

Other people searched for that night were Sergei Pankin, a mathematician; Abram Ginzburg, a close friend of Yakir's and reportedly a member of the Soviet Communist Party; Mrs. Adel Maidenovich, the wife of a publisher of a new underground magazine; Poalt Mukhamediarov, a Tatar, (but not a Crimean Tatar); Yully Kim, Yakir's adopted son; and Kronid Lubarskiy, an astronomist.

They described the searchers as a coordinated operation that demonstrated the government's resolve to silence them. They said they did not know what was behind this decision but it seems like a reflection of the recent harsh trial of Vladimir Bukovsky, which disclosed the arbitrary arrests of innocent people.

The searches were conducted by seven KGB agents and a militiaman. The mastermind of the purge was Boris Leonidovich Shilov, a senior officer of the KGB in charge of matters relating to differences of opinion. In the fall of last year Boris warned Yakir to cease his activities.

The man who issued orders for the searches was General Yeikov, head of the KGB investigation department. David Bonavia, who sent the report from Moscow, related how he and his wife, on their way home from Yakir's flat where they asked for details of the confiscation, were taken by force by men in civilian clothes and escorted to a police station. Bonavia was told, "Don't meddle in our internal affairs and don't go to that address again."

It was said that the order came from Captain Alexei Semyenov of the militan division of Moscow's Proletarski district. As far as David knew, Captain Alexei has no official authority to issue such an order.

Although the men who captured David claimed to be militiamen, and not KGB, it was apparently not true because those who arrested him found it difficult to reach the militia headquarters.

Another British reporter and two American reporters were not even allowed to enter the building where Yakir lived. The three of them were told not to "interfere" in Russia's internal affairs.

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

1/2. 027 UNCLASSIFIED PROCESSING DATE--18SEP70

TITLE--POLY(VINYL ETHERS) OF METHYLENE SUBSTITUTED D, GLUCOSE -U-

AUTHOR-(03)-SOPINA, V.E., LAPENKO, V.L., MIKHANTYEV, B.I.

M

COUNTRY OF INFO--USSR

SOURCE--VYSOKOMOL. SOEDIN, SER. B 1970, 12(2), 159-60

DATE PUBLISHED--------70

SUBJECT AREAS--CHEMISTRY

TOPIC TAGS--VINYL COMPOUND, ETHER, GLUCOSE, METHYLENE, CATALYTIC POLYMERIZATION, POLYMER, OPTIC ACTIVITY, SOLUBILITY, BORON FLUORIDE

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1984/0936 STEP NO--UR/0460/70/012/002/0159/0160

CIRC ACCESSION NO--AP0055634

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

UNCLASSIFIED PROCESSING DATE--18SEP70

2/2 . 027

CIRC ACCESSION NO--AP0055634

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

6-VINYL-1,2:3,5-DIMETHYLENE-D-GLUCOSE WAS POLYMD. IN THE PRESENCE OF BF SUB3 OET SUB2 AT PLUS 3 TO MINUS 22DEGREES FOR 2-8 HR TO GIVE COLORLESS RESINS (MOL. WT. 1200-8200) IN 35-95PERCENT YIELD, SOL. IN DIOXANE AND HALOGENATED HYDROCARBONS. THE SOLNS. OF THE POLYMERS WERE OPTICALLY ACTIVE. POLY(6-VINYL-1,2:3,5-DIMETHYLENE, D-GLUCOSE) (MOL. WT. 1800-2100) WAS HYDROLYZED IN AQ. DIOXANE-ALC. SOLN BY REFLUXING THE MIXT. (IN THE PRESENCE OF H SUB2 SO SUB4 DISSOLVED IN ETOH) AT 70-90DEGREES FOR 40 HR. THE PRODUCT, POLY(6-VINYL-1,2-METHYLENE-D-GLUCOSE), WAS SOL. IN AQ. ALC.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

1/2 035 UNCLASSIFIED PROCESSING DATE--30OCT70

TITLE--QUASI CROSSLINKED RIGID POLYAMIDES -U-

AUTHOR-(03)-TROSTYANSKAYA, YE.B., KAZANSKIY, YU.N., MIKHASENOK, O.YA.

COUNTRY OF INFO--USSR

SOURCE--VYSOKOMOL. SOEDIA 1970, 12(2), 311-16

DATE PUBLISHED--------70

SUBJECT AREAS--CHEMISTRY, MATERIALS

TOPIC TAGS--POLYMER CROSSLINKING, POLYAMIDE RESIN, QUARTZ, PHENOL FORMALDEHYDE RESIN, SURFACE AREA, ELASTIC MODULUS, THERMAL STABILITY, TENSILE STRENGTH, IMPACT STRENGTH

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--2000/0674 STEP NO--UR/0459/70/012/002/0311/0316

CIRC ACCESSION NO--AP0124346

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

2/2 035 UNCLASSIFIED PROCESSING DATE--30OCT7(

CIRC ACCESSION NO--AP0124346

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. POLYAMIDE P 68 (I) (DONOR) WAS FILLED WITH FINELY DIVIDED QUARTZ (II) (SURFACE AREA 0.177-0.887 M PRIME2-G) OR A HARDENED PHENOL HCHO RESIN (III) (ACCEPTOR) (SURFACE ARE/ 0.267-2.342 M PRIME2-G) IN PROPORTIONS YIELDING THE SAME TOTAL SURFACE AREA. THE VISCOSITY OF I MELTS STEADILY INCREASED WHEN FILLED WITH EITHER FILLER UNTIL THE TOTAL SURFACE AREA OF THE FILLER WAS 20 M PRIME2-100 G MIXT.; A HIGHER CONTENT OF III BROUGHT ABOUT A MORE RAPID INCREASE IN VISCOSITY AND FORMATION OF A RIGID STRUCTURE (QUASICROSSLINKED STRUCTURE DUE TO A DONOR ACCEPTOR INTERACTION). SMALL AMTS. OF III CAUSED A SIGNIFICANT INCREASE IN THE MODULUS OF ELASTICITY AND THERMAL STABILITY. THE QUASICROSSLINKING EFFECT BECAME LESS NOTICEABLE WHEN THE III SURFACE AREA WAS 4 M PRIME2-100 G MIXT. THE TENSILE STRENGTH OF II FILLED I GRADUALLY DECLINED WITH INCREASED II CONTENT. THE STRENGTH OF I SAMPLES INCREASED UNTIL THE III CONTENT WAS 2.5PERCENT FURTHER FILLING BROUGHT ABOUT A SHARP DECLINE IN IMPACT STRENGTH. FACILITY: MOSK. AVIATS. TEKHNOL. INST., MOSCOW, USSR.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR UDC 666.764.36

KARPINOS, D. M., GROSHEVA, V. N., MIKHASHCHUK, YE. P., and TOTSKAYA, G. A.,
Institute of Problems of Material Science, Academy of Sciences UkrSSR

"A Refractory Based on Chromium Oxide"

Moscow, Ogneupory, No 1, 1974, pp 55-56

Abstract: Studies are performed on the production of refractory materials from chromium oxide, reinforced with mullite single crystal fibers. The promise of the use of mullite fiber as a reinforcing component to increase the thermal and impact strength of products of chromium oxide is demonstrated.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

UDC 666.3/7:539.24:549.517.1:621.762.4

USSR

PAVLIKOV, V. N., MIKHASHCHUK, YE. P., and ARTEMOV, V. A., Institute of Problems of Material Science, Academy of Sciences USSR

"Effect of Beta-Alumina Lamellar Crystals on Certain Properties of a Corundum Ceramic"

Moscow, Neorganicheskiye Materialy, Vol 10, No 1, Jan 74, pp 117-121

Abstract: Results are reported from studies on the effect of additions of crystalline beta- alumina with a lamellar structure on the properties of a dense corundum ceramic. The basic material was the gamma-modification of alumina containing 99.5% (by weight) with lamellar crystals of beta-alumina added as the filler. The samples were hot pressed at temperatures of 1400-1700° C and pressures of 50-175 kG/mm^2 with a sintering time at maximum temperature of 15-45 minutes. It was found that the bend strength of the ceramic decreased with increased volume content of the filler, which was caused by the weak bonding of the matrix material with the smooth surfaces of the lamellar crystals. Despite the loss of strength, this ceramic had high thermal stability which increased with increased beta-alumina content, with the best thermal stability being exhibited by a composite alumina+15% beta-alumina ceramic

1/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR

PAVLIKOV, V. N., et al., Neorganicheskiye Materialy, Vol 10, No 1, Jan 74, pp 117-121

which withstood 45 thermal shocks from being heated from 20° C to 1100° C and quenched in water to 20° C. It was concluded that it is not possible to achieve a high strength and high thermal stability for this material and that the trade-offs in its use must be taken into consideration. Three figures, two tables, seven bibliographic references.

2/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

UDC: 666.764.36

USSR

KARPINOS, D. M., PAVLIKOV, V. N., MIKHASHCHUK, Ye. P., PILIPOVSKIY, Yu. L., "Order of the Red Banner of Labor" Institute of Problems of Material Science Academy of Sciences of the Ukrainian SSR

"A Composite Material"

Moscow, Otkrytiya, Izobreteniya, Promyshlennyye Obraztsy, Tovarnyye Znaki, No 22, Aug 72, Author's Certificate No 345111, Division C, Filed 22 Jun 70, published 14 Jul 72, p 86

Translation: This Author's Certificate introduces a composite material based on aluminum oxide. As a distinguishing feature of the patent, thermal stability is improved without sacrificing flame resistance and impact strength by adding lamellar single crystals of chromic oxide with the following ratios of components (in wt.%): aluminum oxide -- 80-95, lamellar single crystals of chromic oxide -- 5-20.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

UDC: 681.3

USSR

VEPRIK, V. N., KAN, V. G., ZHIRATKOV, V. I., MIKHASHOV, A. I.

"Some Singularities in the Construction of Distributed Universal Computer Systems"

V sb. Vychisl. sistemy (Computer Systems--collection of works), vyp. 39, Novosibirsk, 1970, pp 137-146 (from RZh-Matematika, No 11, Nov 71, Abstract No 11V788)

Translation: Distributed universal computer systems are classified with regard to types of data transmission networks. The authors consider the peculiarities of distributed universal computer systems with fixed directional connections and universal computer systems with commutation of messages. Note is taken of the effect which these peculiarities have on the productivity of the computer system. V. Mikheyev.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

UDC: 681.3

USSR

VEPRIK, V. N., ZHIRATKOV, V. I., KAN, V. G., MIKHASHOV, A. I.

"Some Peculiarities in the Construction of Distributed Universal Computer Systems"

V sb. Vychisl. sistemy (Computer Systems--collection of works), vyp. 39, Novosibirsk, 1970, pp 137-146 (from RZh-Kibernetika, No 11, Nov 71, Abstract No 11V788)

Translation: Distributed universal computer systems are classified with regard to types of data transmission networks. The authors consider the singularities of distributed universal computer systems with single and repeated establishment of communications as well as those with fixed directions of communications, and those with message commutation. Mention is made of the effect which these singularities have on the productivity of universal computer systems. V. Mikheyev.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR

UDC 616.8-02:612.766.2

PANOV, A. G., LOBZIN, V. S., and MIKhAYLENKO, A. A., Military-Medical Academy imeni Kirov, Leningrad

"Neurological Manifestations of Prolonged Hypodynamia"

Moscow, Zhurnal Nevropatologii i Psikhiatrii, No 4, 1973, pp 506-511

Abstract: Neurological and muscular reactions were studied in 22 healthy young persons during 70 to 100 days of continuous bedrest. The neurological disturbances developed in a definite sequence. The first 7 to 10 days were marked by adaptive reactions; the subjects complained of muscular pain, headache, hyperhidrosis, and mild insomnia. There was some dissociation between subjective and objective symptoms during the next 20 days. While the number of complaints diminished and sense of well-being improved, insomnia worsened, muscular hypotonia and hypotrophy progressed, and strength decreased. Symptoms of oral automatism and nystagmoid twitching of the eyeballs appeared. About the 8th week the initial neurological manifestations of hypodynamia intensified and some new ones developed, e.g., irascibility, anorexia, apathy, and aggressiveness. The diverse neurological reactions comprised three clinical syndromes: asthenoneurotic, peripheral nervous-muscular, and interhemisphere pyramidal asymmetry.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR UDC 616.832.9-008.8:616.981.49]074

PONOMARENKO, V. N., MIKHAYLENKO, A. F., and PETROVA, T. A.

"Isolation of the Mendoza Type Salmonella from Spinal Fluid"

Kiev, Vrachebnoye Delo, No 9, 1971, pp 117

Abstract: A pure Mendoza type Salmonella culture was isolated from the spinal fluid of a 2-month-old infant who died of purulent meningoencephalitis and cerebral edema. The child, fed whole cow's milk since it was 3 weeks old, had been hospitalized 6 days for bilateral acute catarrhal otitis and parenteral dyspepsia.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

UDC 546.224

USSR

BELYAKOVA, L. D., KISELEV, A. V., MIKHAYLENKO, I. Ye., SOLOYAN, G. A., and SPITSYN, V. I., Academician

"Gas-Chromatographic Study of the Effect of Radioactive Radiation and Heat Treatment on the Adsorption Properties of Magnesium Sulfate"

Moscow, Doklady Akademii Nauk SSSR, Vol 197, No 1, March-April 1971, pp 88-90

Abstract: The procedure and results of a gas-chromatic study of the effect of radioactivity and heat treatment on the adsorption properties of magnesium sulfate are presented. The initial magnesium sulfate samples contained about 1% water, and the variation of their adsorption properties with respect to n-hydrocarbons and benzene as a result of the removal of this water during calcination was studied. Curves are presented for the retained volumes of n-nonane and benzene as a function of the calcining time of $MgSO_4$ at 400° and 500°C and the ratios of the retained volumes of benzene measured at a column temperature of 245° to n-nonane (column temperature 200°) as a function of the calcining time of $MgSO_4$. It was found that radioactive samples of sulfates containing SO_4^{2-} ions with S^{35} exhibit appreciably stronger adsorption of hydrocarbons, the molecules of which belong to group B (containing high-bonds)

1/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR

BELYAKOVA, L. D., et al, Doklady Akademii Nauk SSSR, Vol 197, No 1, March-April 1971, pp 88-90

and to group A (containing only σ-bonds) by comparison with nonradioactive sulfates. Removal of water during calcining increases the adsorption of both groups of hydrocarbons. The specificity of molecular adsorption of aromatic hydrocarbons, which reaches a maximum after calcining at 400° for 5 hours, increases especially sharply.

2/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

1/2 020 UNCLASSIFIED PROCESSING DATE--20NOV70

TITLE--PHOTOMETRIC DETERMINATION OF PALLADIUM USING 2,MERCAPTOIMIDAZOLE DERIVATIVES -U-

AUTHOR-(03)-TSERKASEVICH, K.V., KNIZHKO, P.O., MIKHAYLENKO, M.I.

COUNTRY OF INFO--USSR

SOURCE--ZH. ANAL. KHIM. 1970, 25(3), 532-4

DATE PUBLISHED--------70

SUBJECT AREAS--CHEMISTRY

TOPIC TAGS--PHOTOMETRIC ANALYSIS, PALLADIUM, METAL CHEMICAL ANALYSIS, IMIDAZOLE

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3001/0465 STEP NO--UR/0075/70/025/003/0532/0534

CIRC ACCESSION NO--AP0126217

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

2/2 020 UNCLASSIFIED PROCESSING DATE--20NOV70

CIRC ACCESSION NO--AP0126217

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE PHOTOMETRIC DETN. OF PD WITH 2,MERCAPTOIMIDAZOLE (I) IN AN AQ. MEDIUM (50-500 MUG PD) AND THE EXTN. PHOTOMETRIC DETN. OF PD WITH 4,PHENYL,2,MERCAPTOIMIDAZOLE (II) AND 4,5,DIPHENYL, 2,MERCAPTOIMIDAZOLE (III) (5-50 MUG PD) WERE STUDIED. IN THE FORMER CASE ADD TO THE SOLN. CONTG. PD 1.5 ML 5N HCL AND 4 ML 0.1M I; DIL. TO 15 ML WITH H SUB2 O AND MEASURE THE ABSORBANCE AT 440 NM OR BY USING A NO. 4 FILTER. LI, MG, CA, NI, SR, CD, BA, HG, AL, TI, SN, PB, V, BI, CR, MO, W, MN, FE, CO, AND NI, 50-100 FOLD, DO NOT INTERFERE IN THE DETN. IN THE 2ND METHOD ADD TO THE SOLN. CONTG. PD 1 ML 5N HCL AND DIL TO 5 ML WITH H SUB2 O. THEN ADD 6 ML 0.01M II OR III IN AMYL ALC. AND SHAKE FOR 1 MIN. DIL. THE ORG. PHASE WITH AN SUB4 OH TO 6 ML AND DET. SPECTROPHOTOMETRICALLY AT 440 NM OR BY USING A NO. 4 FILTER; 500-2000 FOLD AMTS. OF THE ABOVE ELEMENTS DO NOT INTERFERE.

FACILITY: ODESSA TECHNOL. INST. FOOD REFRIG. IND., ODESSA, USSR.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

172 007 UNCLASSIFIED PROCESSING DATE--04DEC70

TITLE--COMPLEXING OF PALLADIUM WITH 4,5,DIPHENYL,2,MERCAPTOIMIDAZOLE -U-

AUTHOR-(03)-MIKHAYLENKO, M.I., TSERKASEVICH, K.V., KIZHKO, P.O.

COUNTRY OF INFO--USSR

SOURCE--UKR. KHIM. ZH. 1970, 36(4), 326-9

DATE PUBLISHED-------70

SUBJECT AREAS--CHEMISTRY

TOPIC TAGS--PALLADIUM COMPOUND, COMPLEX COMPOUND, MERCAPTAN, IMIDAZOLE

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3008/0898 STEP NO--UR/0073/70/036/004/0326/0329

CIRC ACCESSION NO--AP0137926

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

2/2 007 UNCLASSIFIED PROCESSING DATE--04DEC70

CIRC ACCESSION NO--AP0137926

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. PD FORMS A 1:2 COMPLEX, ABSORBANCE MAX. AT 440NM, WITH 4,5,DIPHENYL,2, MERCAPTOIMIDAZOLE. THE OPTIMUM ACIDITY IS 2-5N HCLO SUB4. THE APPARENT FORMATION CONSTS. AS DETD. BY ISOMOLAR SERIES AND BY HIGH FREQUENCY TITRN. ARE (2.7-2.9) TIMES 10 PRIME NEGATIVE11 IN AQ. ME SUB2 CO AND (1.46-2.7) TIMES 10 PRIME NEGATIVE11 IN AMYL ALC. FACILITY: ODESS. TEKHNOL. INST. PISHCH. KHOLOD. PROM., ODESSA, USSR.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

MIKHAYLENKO, N. A.

JPRS 55982

15 May 72

STUDY OF THE ELECTRIC FIELDS IN TWO SPECIES OF WEAKLY ELECTRIC BLACK SEA FISHES

[Article by N. A. Mikhaylenko, Sevastopol'; Kiev, Bionika, Russian, no 5, 1971, Izd-vo Naukova Dumka, pp 117-120]

In addition to electric fish, so-called nonelectric fish also emit electric discharges which are registered using electronic instrumentation. Three hundred species of fish have electric organs and are capable of generating electric discharges.

The physical nature of electric discharges of nonelectric fish has not yet been finally explained. In collaboration with V. R. Protasov the author registered electric discharges of nonelectric fish (jackfishes, atherines, etc.). The most important consideration in studying the electric discharges emitted by nonelectric fish is an explanation of the mechanism of radiation of the discharges and their purpose. An interpretation of the nature, radiation mechanism and reception of the electric discharges of nonelectric fish will assist in investigating fish having electric organs.

The purpose of our study was a clarification of the site of origin of the electric discharges in the Black Sea stargazer and Raja clavata and collecting physical data and determining the specific nature of the electric discharges for each species of fish.

In the experiments we investigated Raja clavata (Raja clavata L.) and stargazers (Uranoscopus scaler L.). The investigations were made in the autumn of 1967 and in the summer of 1968 at the Karadagskoye Division of the Institute of Biology of Southern Seas under the direction of Doctor of Biological Sciences V. R. Protasov.

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

MIKHAYLENKO, N. A.

~~PART V. ELECTRIC FIELDS~~

JPRS 55982
15 May 72

ELECTRIC DISCHARGES OF THREE SPECIES OF ~~NONELECTRIC~~ BLACK SEA FISH

[Article by B. M. Kasov, V. N. Krumin', ~~[illegible]~~ Mikhaylenko and V. N. Protasov, Sevastopol'; Kiev, Biofizika, Russian, No 3, 1971, [illegible] "Neshkova Dumka," pp 113-116]

Until recently it was assumed that all fish can be classified as strongly electric, using their strong fields with a strength of hundreds of volts along the length of the fish for defense and attack, and weakly electric, using their pulsating fields with a strength of tens-hundreds of millivolts for spatial orientation, and also nonelectric species of fish. Biologists assigned the overwhelming majority of the species to the third group. Recently, as a result of studies by H. Lissman (1958), who studied the mechanism of electrolocation in weakly electric fish (Gnathonemus Bigotcus), and H. Minto, who discovered a capacity of fish to emit waves of a new physical nature (called hydronic waves), interest in clarifying the electric properties of fish has increased considerably.

Investigations of nonelectric fish made by the authors during 1967-1968 revealed that many species of fish earlier considered nonelectric in actuality are capable of emitting weak electric discharges (Protasov, 1968).

We will examine the electric discharges of three species of school fish in the Black Sea: jackfish (Trachurus trachurus L.), the atherine (Atherina hepsetus ponticus Kuna) and anchovy (Engraulis ponticus Alek). In experiments conducted in aquariums at the Karadagskoye Division of the Institute of Biology of Southern Seas in August 1968 we studied young atherines (120 fish) measuring 2-3 cm and adults (50 fish),

1 Bennett, 1962.

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR

DABAGYAN, A. V., BORISOV, V. G. and MIKHAYLENKO, N. S.

"The Problem of Prediction of Random Processes"

Upravlyayushchiye Sistemy i Mashiny [Control Systems in Machines], 1973, No 1, pp 42-46 (Translated from Referativnyy Zhurnal Kibernetika, No 9, 1973, Abstract No 9V204)

Translation: The possibility is studied of predicting a stable random process formed by a discrete sequence of random quantities distributed normally using a linear prediction model. An example is presented of prediction of the quality of manufacture of series-produced electric motors.

Author's view

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR UDC: 534.22;541.8

MIKHAYLENKO, S. A., BLAGOY, Yu. P., and BUTKO, A. Ye.

"Speed of Sound in Liquefied Gas Solutions"

Kiev, Ukrainskiy Fizicheskiy Zhurnal, No 2, 1973, pp 184-189

Abstract: This article is the fifth of a series under the general title given above; the title of this installment is "Systems Containing a Component of Molecules (C_3H_6-CH_4, C_3H_6-Kr) Without Spherical Symmetry." The four earlier installments investigated liquid solutions and obtained expressions for changes in their thermodynamic characteristics, including the speed of sound. In the present paper, the authors investigate methane-propylene and krypton-propylene systems in which the purity of the krypton was 99.92%; of methane, 99.95%; and of the propylene, 99.81%. Results of the measurements for the speed of sound as a function of the temperature for these solutions are given in tabular form, and curves are plotted for the speed of sound as a function of the solution concentration for comparison with similar curves for ideal solutions. The authors regret that in the absence of a satisfactory theory, they cannot explain the phenomena they observed in terms of the liquid's structure and its changes in solution.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

1/2 023 UNCLASSIFIED PROCESSING DATE--11DEC70

TITLE--SOUND VELOCITY IN LIQUEFIED GAS SOLUTIONS. III. ADIABATIC AND ISOTHERMAL COMPRESSIBILITIES OF THE ARGON KRYPTON SYSTEM -U-

AUTHOR-(04)-SUTKU, A.YE., MIKHAYLENKO, S.A., BLAGOY, YU.P., SOKOLIN, V.A.

COUNTRY OF INFO--USSR

SOURCE--UKR. FIZ. ZH. (RUSS ED.) 1970, 15(4), 563-70 (RUSS)

DATE PUBLISHED--------70

SUBJECT AREAS--CHEMISTRY, PHYSICS

TOPIC TAGS--ARGON, KRYPTON, SOUND TRANSMISSION, ULTRASONIC VELOCITY

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3007/0139 STEP NO--UR/0185/70/015/004/0563/0570

CIRC ACCESSION NO--AP0135636

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

2/2 023 UNCLASSIFIED PROCESSING DATE--11DEC70

CIRC ACCESSION NO--AP0135636

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE COEFF. OF ADIABATIC COMPRESSIBILITY AND THE SPEED OF SOUND (V) IN THE SYSTEM AR,KR INDICATED A STRONG DEVIATION OF THIS SYSTEM FROMIDEAL BEHAVIOR. ASSUMING IDEAL BEHAVIOR, THE DEPENDENCE OF V ON THE COMPN. OF THE LIQS. SHOULD HAVE A MIN. AT MOLE RATIO OF KR EQUALS 0.6 AT 120-400DEGREESK. CURVES BASED ON THE EXPTL. DATA ARE QUAL. DIFFERENT AND SHOW A STEADY INCREASE OF V WITH INCREASING AMTS. OF KR IN THE MIXTS. FACILITY: FIZ. TEKH. INST. NIZKIKH TEMP., KHARKOV, USSR.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

1/2 030 UNCLASSIFIED PROCESSING DATE--20NOV70

TITLE--PHTHALOCYANINES AND RELATED COMPOUNDS. IV. POLYCHLOROPHTHALOCYANINES -U-

AUTHOR-(03)-MIKHALENKO, S.A., KOROBKOVA, YE.V., LUKYANETS, YE.A.

COUNTRY OF INFO--USSR

SOURCE--ZH. OBSHCH. KHIM. 1970, 40(2), 400-3

DATE PUBLISHED--------70

SUBJECT AREAS--CHEMISTRY

TOPIC TAGS--PHTHALOCYANINE, UREA, CHLORINATED ORGANIC COMPOUND, COMPLEX COMPOUND, SOLUBILITY, IR SPECTRUM, MOLYBDENUM COMPOUND, CATALYST, VANADIUM OXIDE, ALUMINUM COMPOUND, COPPER COMPLEX

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3002/1119 STEP NO--UR/0079/70/040/002/0400/0403

CIRC ACCESSION NO--AP0128546

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

2/2 030 UNCLASSIFIED PROCESSING DATE--20NOV70

CIRC ACCESSION NO--AP0123546

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. HEATING 0.01 MOLE APPROPRIATELY CHLORINATED PHTHALIC ANHYDRIDE WITH 0.1 MOLE UREA AND 0.0035 MOLE METAL CHLORIDE IN C SUB6 H SUB3 CL SUB3 FOR 4 HR AT 200DEGREES IN THE PRESENCE OF NH SUB4 MOLYBDATE OR METAVANADATE CATALYST GAVE THE TITLE PHTHALOCYANINE (PC) COMPLEXES (I). ALTERNATIVELY, EQUIMOLAR AMTS. OF UREA AND O,(NC) SUB2 C SUB6 CL SUB4 HEATED AS ABOVE WITH METAL CHLORIDE IN PHNO SUB2 FOR 4-5 HR ALSO GAVE I, PURIFIED BY TREATMENT WITH AQ. HNO SUB3 AND NAOH. THE CL ATOMS IN I RESULTED IN BATHOCHROMIC SHIFTSIN THE VISIBLE AND NEAR IR REGIONS. SPECTRA WERE REPORTED FOR THE TETRA, 4,CHLORO, TETRA,3,CHLORO, OCTA,3,4,CHLORO, OCTA,4,5,CHLORO, OCTA,3,6,CHLORO, AND HEXADECACHLORO DERIVS. OF VOPC; HEXADECACHLORO ALOPC; THE TETRA,4,CHLORO, TETRA,3,CHLORO, OCTA,3,4,CHLORO, OCTA,4,5,CHLORO, OCTA,3,6,CHLORO, AND HEXADECACHLORO DERIVS. OF CUPC. THE UNSYM. COMPLEXES WERE MORE READILY SOL. IN ORG. SOLVENTS THAN THE SYM. ANALOGS. FACILITY: NAUCH.-ISSLED. INST. ORG. POLUPROD. KRASITELEI, MOSCOW, USSR.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR

UDC: 533.6.013.42

SMIRNOV, A. I., ALIKHASHKIN, Ya. I., and MIKHAYLENKO, V. M.

"Importance of Aerodynamic Damping in Flutter Problems of Three-Layer Panels and Circular Cylindrical Shells"

Moscow, Doklady Akademii nauk SSSR, No 6, 1973, pp 1314-1316

Abstract: Investigation of the part played by aerodynamic damping in flutter problems has hitherto been slight even for single-layer panel structures; the purpose of the present paper is, therefore, to discuss aerodynamic damping in connection with three-layered rods, plates, and shells and their fluttering. This discussion is based on the elastic equilibrium equations obtained in earlier papers (e.g., E. I. Grigolyuk, et al, Izv. AN SSSR, Mekhanika i mashinostr., No 1, 67, 1964). The analysis of the present paper begins with the equation of equilibrium for a three-layer plate, shows how the equation is simplified for the case of a three-layer rod, and gives the equation for a three-layer circular cylindrical shell. An algebraic equation of the sixth degree is obtained and is solved in combination with the condition for a nontrivial solution. In the case of the plate, it is assumed that a supersonic gas flow acts one one side of it. The calculations show that for

1/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR

UDC: 533.6.013.42

SMIRNOV, A. I., et al, Doklady Akademii nauk SSSR, No 6, 1973, pp 1314-1316

the rod and the plate, the damping may be neglected under practical conditions; for the cylindrical shell, it is an important factor, especially for long and thick shells.

2/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR

UDC: 097.6

P'YUK, V. Ye., MIKHAYLENKO, V. S., Kiev

"On the Problem of Improving the 'Noise Resistance' of Facsimile Images When Pulse Interferences are Acting in Communications Channels"

Kiev, Otbor i Peredacha Informatsii, Resp. Mezhved. Sb., No 28, 1971, pp 43-50

Abstract: The authors investigate the possibility of improving interference suppression in facsimile copies by predistortion of the FM signal on transmission and restoration on reception when pulse interference is acting in the phototelegraph channel. The effectiveness of predistortion is determined by the statistics of the facsimile copy. The interference suppression is determined by the FM signal-to-noise ratio at the receiver input when the average signal power is constant at the input of the communications channel. The proposed predistortion method is fairly simple and can be utilized in future equipment as well as existing facsimile apparatus. Seven illustrations, bibliography of three titles.
1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

P'YUK, V. Ye. and MIKHAYLENKO, V. S.

"Estimating the Effectiveness of Preemphasis for Improving the Noise Immunity of FM Graphic Information Transmission"

Kiev, Izvestiya VUZ -- Radioelektronika, Vol. 13, No. 9, 1970, pp 1107-1112

Abstract: The system envisaged in this article is one of facsimile transmission to an electronic computer, a process which demands high receiver noise immunity to maintain the clarity of the transmitted line drawings. Since preemphasis has been considered in connection with improving the noise immunity of AM signals, this article is devoted to the possible role of preemphasis in noise-immunizing FM signals, particularly in connection with facsimile transmission. Expressions are obtained for the signal voltage at the receiver input with preemphasis, and the effectiveness of the preemphasis system is estimated from the signal/noise ratio at the receiver input for a constant average signal power at the input to the communication channel of the receiver. The voltage of the response to pulse noise at the output of the deemphasis circuit is determined under the assumption that the noise can be described by the Dirac function. The authors conclude that the use of preemphasis does improve the noise immunity of facsimile images and that the method they describe can be used in projected as well as existing facsimile equipment.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

1/2 028 UNCLASSIFIED PROCESSING DATE--02OCT70

TITLE--METHOD FOR CALCULATING THE TRANSIENT PROCESS OF THE AMPLITUDE STABILIZATION OF A HORMONIC OSCILLATION IN A FULLY BAND PASS FOUR

AUTHOR--MIKHAYLENKO, V.S.

COUNTRY OF INFO--USSR

SOURCE--IZVVYZ RADIOELEKTRONIKA, VOL 13, JAN. 1970, P 46-52

DATE PUBLISHED-------70

SUBJECT AREAS--ELECTRONICS AND ELECTRICAL ENGR., NAVIGATION

TOPIC TAGS--ELECTRONIC CIRCUIT, PULSE SIGNAL, VOLTAGE STABILIZATION, LINEAR SYSTEM, HARMONIC OSCILLATION

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--1991/0144 STEP NO--UR/0452/70/013/000/0046/0052

CIRC ACCESSION NO--AP0110110

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

2/2 028 UNCLASSIFIED PROCESSING DATE--02OCT70

CIRC ACCESSION NO--AP0110110

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. DESCRIPTION OF A METHOD FOR CALCULATING THE STABILIZING PROCESS AT THE OUTPUT OF A LINEAR FOUR TERMINAL NETWORK WITH ARBITRARY PHASE AND AMPLITUDE CHARACTERISTICS (REAL INFORMATION TRANSFER SYSTEMS). THE METHOD IS BASED ON THE REPRESENTATION OF THE FOUR TERMINAL NETWORK'S PULSE TRANSFER FUNCTION BY A KOTEL'NIKOV SERIES. THE USE OF THE PROPOSED PROCEDURE SIGNIFICANTLY REDUCES THE VOLUME OF COMPUTING OPERATIONS REQUIRED FOR ANALYSIS OF STABILIZING PROCESSES IN FOUR TERMINAL NETWORKS WITH LINEAR DISTORTIONS.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR

SCHASTLIVTSEV, V. M., [illegible], V. [illegible], TEKOLEOV, Ya. M., [illegible],
Institute of Physics of Metals, AN USSR

"X-Ray Study of the Substructure of Polycrystalline Nickel [illegible] High Temperatures"

Sverdlovsk, Fizika Metallov i Metallovedeniye, Vol 30, No 1, Aug 7[illegible], p 41-[illegible]

Abstract: This work is a continuation of studies on the mechanism of high-temperature deformation performed at high speeds. The dependence of certain characteristics of the substructure of polycrystalline nickel on the [illegible] and degree of plastic deformation is studied. It is noted that an increase in the degree of deformation from 2 to 10% in technical nickel leads to an [illegible] in the angle of disorientation of the grains and between [illegible] of the first order, as well as an increase in the grain [illegible] with the deformation. Increasing the size of deformation from [illegible] with an identical degree of deformation increases the total [illegible] of the material.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

Masers

USSR

UDC 621.373:530.145.6

SEM, M. F., KEYDAN, V. F., MIKHAYLEVSKIY, V. S.

"Continuous Generation of Coherent Radiation in Ion Transitions of Substances Introduced into the Discharge Volume by Cataphoresis"

Elektron. tekhnika. Nauchno-tekhn. sb. Elektron. SVCh (Electronic Engineering Scientific and Technical Collection. Microwave Electronics), 1971, vyp. 1, pp 69-76 (from RZh-Radiotekhnika, No 4, Apr 71, Abstract No 4D166)

Translation: The possibility of using cataphoresis to introduce the vapors of a number of substances into the discharge volume of a laser operating in the continuous mode is discussed. The experimental results of obtaining continuous generation on 37 wavelengths in the 0.81-0.4 micron range in iodine, phosphorus, selenium, cadmium, arsenic, zinc and tellurium vapors show that zinc, tellurium and, in particular, selenium are prospective for use in practical laser designs as a result of their high amplification coefficients.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR

UDC 621.922.34:666.233

GINZBURG, B. I., Candidate of Economics, NAZAROV, V. I., engineer, Superhard Materials Institute, and MIKHAYLICH, V. V., engineer, VPKTI stroydormash (All-Union Planning, Design and Technological Institute of Road Machine Building)

"Utilization of Synthetic Diamonds by the Branch Enterprises"

Moscow, Stroitel'nyye i Dorozhnyye Mashiny, No 3, March 1971, pp 36-37

Abstract: The use of synthetic diamonds by the enterprises of the Ministry of Construction, Road and Utility Machine Building has been investigated by the Superhard Materials Institute. The investigation showed that 89.1% of synthetic diamonds were used in the form of cutting tools, 2.6% in powder form, 8.3% in the form of paste. The use of synthetic diamonds resulted in an increase of the cutting tool wear resistance by 1.1 to 3.0 times, improvement of finish of machined surface, increase of productivity by 7 to 30%.

The total consumption of 147,000 carat of synthetic diamond resulted in savings of 352,400 rubles.

1/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR

GINZBURG, B. I., et al., Stroitel'nyye i Dorozhnyye Mashiny, No 3, March 1971, pp 36-37

In order to widen the use of synthetic diamonds it is necessary to provide more suitable equipment, such as universal tool sharpeners, and to educate the personnel on the use of synthetic diamonds.

2/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR

UDC: 531.441.3

[redacted], TURKIN, V. F., FISHMAN, I. S., Institute of Nuclear Physics, Academy of Sciences of the USSR, Novosibirsk

"A Multichannel Analyzer of Rapidly Alternating Frequencies"

Moscow, Pribory i Tekhnika Eksperimenta, No 3, May/Jun 72, pp 115-118

Abstract: When studying coherent phase instability in accelerators, it is necessary to observe the amplitudes of a rapidly alternating spectrum. The rf voltage applied to the accelerating gap when coherent oscillations arise is modulated by the voltage induced by the beam current. Thus side frequencies appear in the spectrum of the induced voltage across the pickup electrodes. The side frequencies differ from the corresponding harmonics of the rotational frequency by the frequency Ω of small phase oscillations:

$$\Omega^2 = \omega_0^2 \frac{qeKV \sin\varphi_s}{2\pi E_s(t)},$$

where ω_0 is the rotational frequency, q, ϕ, V are the multiplicity, equilibrium phase and amplitude of the accelerating voltage, and $E_s(t)$ is the energy of an equilibrium particle. This paper describes a three-channel

1/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR

MIKHAYLICHENKO, A. A., et al., Pribory i Tekhnika Eksperimenta, No 3, May/Jun 72, pp 115-118

receiver for tracking the side frequencies of coherent phase oscillations $\omega_0 \pm \Omega$, $2\omega_0 - \Omega$ in the B-4 synchrotron. Each channel is a superhet receiver with sweep-driven self-tuning heterodynes. The signal from the pickup or probe is sent by 75-ohm cable through a matched coupler to attenuators which expand the dynamic range of input amplitudes to 60 dB. The signal from the attenuator output is sent to preselectors. The preselectors isolate bands of 36.7-37, 37.5-37.8 and 74-74.3 MHz respectively with a selectivity of about 30 dB. From the preselectors, the signals go to mixers. Here they are mixed with signals from the sweep-driven heterodynes. The heterodyne frequencies vary in accordance with a law given by the controlling voltage proportional to the driving magnetic field. The frequency tuning bands of the heterodynes are equal to the deviation of the side frequencies being studied. A block diagram, schematic and photograph of the receiver are given. The authors thank N. S. Dikanskiy for constructive criticism.

2/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR UDC 621.762.002.5

MOKSHANTSEV, G. F., BULANOV, V. Ya., MIKHAYLICHENKO, A. V., and ROTMISTROVA, V. P.

"Experience in the Production of a Reducing Atmosphere From Compressed Propane-Butane Mixture and Its Utilization in Powder Metallurgy"

Nauka i proiz-vo [Science and Production -- collection of works], No. 4, Chelyabinsk, 1970, pp. 47-52, (Translated from Referativnyy Zhurnal — Metallurgiya, No. 1, 1971, Abstract No.1 G501 by G. Derkacheva).

Translation: A compact laboratory gas reactor has been produced which can be used to perform various processes involved in the conversion of compressed propane-butane mixtures and their application for reduction and sintering of various metal powders. The operating principle of the reactor is described. Optimal modes are determined for complete conversion of the propane-butane mixture. The mixture produced is also recommended for heat treatment processes during heating of metals and alloys in controlled atmospheres. 4 figures; 6 tables.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR

BULANOV, [illegible], [illegible], A. V., [illegible], G. A., [illegible], and SELAKH, Ye. A., Orsk-Khalilovov Metallurgical Combine

"Cermet [illegible] Based on Iron Powders from the Rolling Scale of [illegible] 10KhSND Steels"

Kiev, Poroshkovaya Metallurgiya, No 7, [illegible] 10, pp 57-61

Abstract: Iron powders from the rolling scale of 17GS and [illegible] alloyed steels were produced by combined reduction. These [illegible] to produce cermet case materials both with additions of carbon, [illegible] S-6 graphite, and without it. The principal properties of the po[illegible] for comparison with the properties of PZhRZ iron powder of the [illegible] composition produced by the same method. A table in the original [illegible] the density of the specimens as a function of full compacting [illegible] shrinkage was detected in the process of sintering at 1010 and [illegible] hydrogen atmosphere for 2 hours. The results show that an increase [illegible] is [illegible] increase in shrinkage for all specimens [illegible] with [illegible] decreasing density as. The tests for uniaxial [illegible], bending, [illegible] show indicate that the ultimate strength of materials [illegible]

1/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR

SULANOV, V. Ya., [illegible]

alloyed iron powders [illegible] unalloyed iron powders. [illegible] with zero graphite content consists of alloyed ferrite with a microhardness higher than that in the ferrite of PZh2M; an increase in the graphite content in the initial mixture raises the amount of pearlite. Additions of graphite above 2% result in cementite.

2/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR

UDC 631.547.04:633.2/.3

MIKHAYLICHENKO, B. P., and SHISHKINA, Z. S., All Union Scientific Research Institute of Feeds

"Use of Chlorocholine Chloride for the Treatment of Meadow Fescue Grass and dew Grass Seedlings"

Moscow, Khimiya v Sel'skom Khozyaystve, Vol 11, No 10 (120), 1973, pp 58-60

Abstract: The preparation tur did not prevent the tumbling of fescue grass seedlings and did not increase the crop of its seeds. Treating the dew grass seedlings during the tillering phase with the retardant, the growth of the plants was slowed down, affecting positively their resistance to tumbling.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

MEDICINE

MIKHAYLIK, A.A.

UDC: 613.88:374

EXPERIENCE IN SEX EDUCATION AND HYGIENE PROPAGANDA

[Article by S.I. Rezin, L.Ya. Leshchenko, A.A. Mikhaylik, Khar'kov Scientific Research Institute of Dermatology and Venereology (director: Professor A.I. Fyatikop), Khar'kov oblast (chief physician: A.A. Mikhaylik) and municipal (chief physician: L.Ya. Leshchenko) dermatovenereological dispensaries; Moscow, Sovetskoye Zdravookhraneniye, Russian, No 4, 1972, submitted 30 November 1971, pp 31-33]

We use the term sex education to designate the multifaceted and comprehensive work done with children, young people, and adults to assure normal physiological development of the organism in accordance with the distinctions in function of sex glands and correct attitude toward sex issues at different stages of life.

All of our work dealing with sex education for children and adolescents is directed toward instilling habits related to the basic laws of general hygiene and care of sex organs, creation and consistent adherence to the proper regimen at home and in school for proper physical development of the child precluding the possibility of early puberty and development of bad habits. Among young girls and men, this work also pursued the goal of preventing early start of sex life and of helping avoid venereal disease.

We were governed by the fact that sex education is an inseparable element of general education, and should be pursued daily: in the home by parents and other relatives, and in child groups by pedagogues, educators, as well as social workers.

At the first stage of this work, jointly with the department of public education, and health education center, we developed plans for one and two-day seminars for the medical and nursing personnel of schools and child combines, instructors of biology, class supervisors, as well as activists of women's councils form a number of major enterprises, public inspectors of children's rooms, police, and departments for the control of juvenile delinquency based at the rayon executive committees.

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

1/2 006 UNCLASSIFIED PROCESSING DATE--27NOV70

TITLE--COMPOSITION FOR EXTINGUISHING FIRE IN CLOSED LOCATIONS -U-

AUTHOR--MIKHAYLIK, P.G.

COUNTRY OF INFO--USSR

SOURCE--U.S.S.R. 264,918

REFERENCE--OTKRYTIYA, IZOBRET., PROM. OBRAZTSY, TOVARNYE ZNAKI, 1970

DATE PUBLISHED--03MAR70

SUBJECT AREAS--CHEMISTRY

TOPIC TAGS--CHEMICAL PATENT, FIRE FIGHTING EQUIPMENT, SULFUR, POTASSIUM PERMANGANATE

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3002/0077 STEP NO--UR/0482/70/000/000/0000/0000

CIRC ACCESSION NO--AA0127704

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

2/2 006 UNCLASSIFIED

CIRC ACCESSION NO--AA0127704 PROCESSING DATE--27NOV70

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE TITLE COMPN. CONTAINS S AND KMNO SUB4 IN A RATIO OF SIMILAR TO 2:1 BY WT., RESP.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR

UDC 547.26'118

IVANOVA, ZH. M., MIKHAYLIK, S. K., and DIKKACH, the late, G. I., Institute of Organic Chemistry, Academy of Sciences Ukrainian SSR

"Mono- and Diisocyanates of Alkylthiophosphonic Acids"

Leningrad, Zhurnal Obshchey Khimii, Vol 40, No 7, Jul 70, pp 1473-1476

Abstract: Heating of diisocyanates of alkylphosphonous acids with thiophosphoryl chloride gives diisocyanates of alkylthiophosphonic acids. Fluorination of the latter with antimony trifluoride gives equal quantities of isocyanatoalkylthiophosphonic acid fluoride and alkylthiophosphonic acid difluoride. The diisocyanates of alkylphosphonic and alkylthiophosphonic acids and the acid fluorides of isocyanatoalkylphosphonic and isocyanatoalkylthiophosphonic acids give adducts with 1-piperidyl-1-phenylethylene.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

1/2 019 UNCLASSIFIED PROCESSING DATE--30OCT70

TITLE--ALKYLTHIONOPHOSPHONIC ACID FLUORIDE CHLORIDES -U-

AUTHOR-(03)-IVANOVA, ZH.M., MIKHAYLIK, S.K., DERKACH, G.I.

COUNTRY OF INFO--USSR

SOURCE--ZH. OBSHCH. KHIM. 1970, 40(3), 702

DATE PUBLISHED--------70

SUBJECT AREAS--CHEMISTRY

TOPIC TAGS--CHEMICAL SYNTHESIS, PHOSPHONIC ACID, FLUORINATED ORGANIC COMPOUND, CHLORINATED ORGANIC COMPOUND, PHOSPHORUS SULFIDE, ORGANIC PHOSPHORUS COMPOUND

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--2000/0887 STEP NO--UR/0079/70/040/003/0702/0702

CIRC ACCESSION NO--AP0124550

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

2/2 019 UNCLASSIFIED PROCESSING DATE--30OCT70

CIRC ACCESSION NO--AP0124550

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. HEATING 0.4 MOLE MEP(O)FCL AND 0.1 MOLE P SUB2 S SUB5 4 HR AT 150-60DEGREES GAVE 38PERCENT MEP(S)FCL, B. 109-11DEGREES, D PRIME20 1.3890, N PRIME20 SUBD 1.4755. SIMILARLY WAS PREPD. 40PERCENT ISO,PRP(S)FCL, B SUB8 41-3DEGREES, 1.2641, 1.4770.

FACILITY: INST. ORG. KHIM., USSR.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

Mikhaylina, L. A.

Gas analysis

ARN/FSTC /HT-23-830-72

Joyce

DEPARTMENT OF THE ARMY
U.S. ARMY FOREIGN SCIENCE AND TECHNOLOGY CENTER
220 SEVENTH STREET NE
CHARLOTTESVILLE, VIRGINIA 22901

In Reply Refer to:
FSTC HT-23-830-72
DIA Task No. T70 23 01

Date: 26 June 1972

TRANSLATION

ENGLISH TITLE: Use of a High-Temperature Fuel Cell in Gas Analysis

FOREIGN TITLE: Ispol'zovanie vysokotemperaturnogo toplivnogo elementov v analize gazov

AUTHOR: S. I. Bykov
A. A. Popov
A. V. Nikolov
L. A. Mikhaylina

LANGUAGE: Russian

SOURCE: G. S. Yuriyev
Zavodskaya Laboratoriya
No. 12, pp 1448-1451.
(1970)

TRANSLATOR: Leo Kanner Assocs.

REQUESTOR: AMST-CE Mr. Bost

ABSTRACT: Gases may be analyzed in apparatus containing a high-temperature fuel cell. Carbon dioxide, hydrogen, carbon monoxide, and hydrocarbons can be determined under certain conditions.

DESCRIPTORS: Gas Analyzer
Fuel Cell
Gas Analysis
Polarographic Analyzer
Polarographic Analysis

USSR DIVISION/CRS
AUG 11 1972

GRAPHICS NOT REPRODUCIBLE

This translation was accomplished from a xerox manuscript. The graphics were not reproducible. An attempt to obtain the original graphics yielded negative results. Thus, this document was published as is, in order to make it available on a timely basis.

Approved for public release. Distribution unlimited

2172-64-8

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

1/2 011 UNCLASSIFIED PROCESSING DATE--27NOV70

TITLE--DERIVATIVES OF QUINOLINE,7,CARBOXYLIC ACID, II. 4,AMIDO SUBSTITUTED,QUINOLINE,7,CARBOXYLIC ACIDS AND THEIR DERIVATIVES -U-

AUTHOR-(02)-BEKHLI, A.F., MIKHAYLITSYN, F.S.

COUNTRY OF INFO--USSR

M

SOURCE--KHIM. FARM. ZH. 1970, 4(2), 17-20

DATE PUBLISHED-------70

SUBJECT AREAS--CHEMISTRY

TOPIC TAGS--AMINE DERIVATIVE, QUINOLINE, AROMATIC CARBOXYLIC ACID, MOLECULAR STRUCTURE, CHEMICAL SYNTHESIS

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY REEL/FRAME--3003/1002 STEP NO--UR/0450/70/004/002/0017/0020

CIRC ACCESSION NO--AP0130044

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

2/2 011 UNCLASSIFIED PROCESSING DATE--27NOV70

CIRC ACCESSION NO--AP0130044

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. I OR II (0.05 MOLE), 0.1 MOLE RNH SUB2, AND 0.0015 MOLE O-NITROPHENOL IS HEATED IN 50 ML ISOAMYL ALC. TO GIVE III AS FOLLOWS: SHOWN ON MICROFICHE. FACILITY: INST. MED. PARAZITOL. TROP. MED. IM. MARTSINOVSKOGO, MOSCOW, USSR.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

Acc. Nr: AP0053780 Abstracting Service: CHEMICAL ABST. 5-70 Ref. Code: UR0366

110975r New reaction of acetylsalicylic acid chloride. Mikhailopulo, I. A.; Zharkov, V. V. (USSR). *Zh. Org. Khim.* 1970, 6(2), 400-1 (Russ). The reaction of 2-AcOC$_6$H$_4$COCl with HOCHRCHR'OH in C$_6$H$_6$ soln. gave 60-91% 2-HOC$_6$H$_4$CO$_2$H + ClCHRCHR'OAc (R and R' given): H, H; Me, H; Me, Me. The reaction mechanism is discussed. CPJR

REEL/FRAME
19830843

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

1/2 C16 UNCLASSIFIED PROCESSING DATE--11DEC70

TITLE--REDUCTION OF ASTRONOMICAL DETERMINATIONS OF LATITUDE, LONGITUDE, AND AZIMUTH TO A COMMON EPOCH -U-

AUTHOR--MIKHAYLOV, A.A.

COUNTRY OF INFO--USSR

SOURCE--ASTRONOMICHESKII ZHURNAL, VOL. 47, NO. 3, 1970, P. 613-618

DATE PUBLISHED--------70

SUBJECT AREAS--EARTH SCIENCES AND OCEANOGRAPHY, ASTRONOMY, ASTROPHYSICS

TOPIC TAGS--EARTH CRUST, GEOGRAPHIC LATITUDE, GEOGRAPHIC LONGITUDE, AZIMUTH, MOVING POLE METHOD, ASTROMETRY

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED

PROXY FICHE NO--FTD70-60501/000 STEP NO--UR/0033/70/047/003/0613/0618

CIRC ACCESSION NO--AP0140397

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

2/2 016 UNCLASSIFIED PROCESSING DATE--11DEC70

CIRC ACCESSION NO--AP0140397

ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. STUDY OF THE ANNUAL REPORTS OF THE INTERNATIONAL POLAR MOTION SERVICE, SHOWING THAT, IN ADDITION TO PERIODIC VARIATIONS OF LATITUDE, A SECULAR, NONPERIODIC MOTION OF THE MEAN POLE ON THE SURFACE OF THE EARTH, DUE PROBABLY TO A DRIFT OF THE EARTH'S CRUST, EXISTS. IT IS STRESSED THAT THIS MOTION OF THE POLE CANNOT BE IGNORED IN PRECISE ASTRONOMICAL DETERMINATIONS OF LATITUDE, LONGITUDE, AND AZIMUTH MADE AT DIFFERENT TIMES. FACILITY: GLAVNAIA ASTRONOMICHESKAIA OBSERVATORIIA, PULKOVO, USSR.

UNCLASSIFIED

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

Stress Analysis and Stability Studies

USSR

UDC 539.4:624

MIKHAYLOV, A. A., YELSUKOV, V. A., CHERNYSHOV, S. I.

"Actual Work of Masonry Walls Subjected to Seismic Effects"

V sb. Materialy 2-y Nauch.-tekhn. konferentsii Dal'morniiproyekta (Materials of the Second Scientific and Technical Conference of Dal'morniiproyekt), Vladivostok, 1971, pp 47-60 (from RZh-Mekhanika, No 10, Oct 71, Abstract No 10V632)

Translation: The article is devoted to experimental studies of the carrying capacity and deformations when compressed and uncompressed masonry courses of 40 × 120 mm blocks in grade 10 mortar are subjected to a horizontal load. Single-story models were made in the form of two walls measuring 300 × 300 × 40 mm with an inside spacing of 320 mm. Reinforced concrete plates served as floor and roof. Horizontal displacements of the floor plate were prevented by fastening it to a special metal frame. Vertical compression of the masonry was created by tension on rods 3 and 5 mm in diameter arranged in pairs outside of the masonry and on the inside surface of the walls. The tension was checked by strain gauges

1/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR

MIKHAYLOV, A. A. et al., Materialy 2-y Nauch.-tekhn. konferentsii Del'-morniiproyekta, Vladivostok, 1971, pp 47-60

with a 50 mm base cemented to the rods. Horizontal forces in the models were applied at the roof plate level both in the plane of the walls and perpendicular to them. It was found that vertical compression has an appreciable effect on the carrying capacity of the models. In the case of the 3 mm tension rods, no cracks appeared in the masonry until the model was destroyed. In the case of 5 mm tension rods, the structure was destroyed abliquely along the masonry joints. At the time of fracture, an increase was observed in horizontal deformations of models with tension rods by a factor of 9, and in the carrying capacity by a factor of 5.5 as compared with an uncompressed model. It is concluded that vertical compression of masonry walls has an overall positive effect on their carrying capacity. A. V. Cherkashin.

2/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR

UDC 627.8:550.834

MIKHAYLOV, A. D., YASHCHENKO, Z. G., and BOLOTINA, N. M., Engineers

"Experience in the Use of Seismoacoustic Methods for Determination of the Zone of Rock Removal for Foundations of Concrete Structures of the Ust'-Ilimskaya Hydroelectric Power Plant"

Moscow, Gidrotekhnicheskoye Stroitel'stvo, No 10, Oct 73, pp 17-21

Abstract: A description is given of the use of seismic methods for the determination of sectors with the predominant development of horizontal or vertical jointing. Seismic transmission between the joints is used for three-dimensional delineation of isolated zones within the depth of the massif. Seismic observation permits objective and continuous determination of the depth of propagation of intensively fissured rock of the basis of selected profiles, and permits quantitative characterization of the integrity of the rock in a zone of surface destruction.

A combination of geological-engineering and seismoacoustic research should be applied in study of the foundations of large hydraulic-engineering structures. 6 figures. 1 table. 7 references.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR

UDC 541.124-16+541.64

BOL'SHAKOV, A. I., MIKHAYLOV, A. I., BARKALOV, I. M., and GOL'DANSKIY, V. I.,
Institute for Physical Chemistry, Academy of Sciences SSSR, Moscow

"Low-Temperature Radiation Mechanism for the Polymerization of Acrylic Acid in an Alcohol Case, Studied by ESR and Calorimetry"

Moscow, Doklady Akademii Nauk SSSR, Vol 205, No 2, 1972, pp 379-382

Abstract: An attempt was made to optimize conditions to favor the lengthening of the main polymer chains and to suppress the formation of intermediate-size radicals. Since the heat content of the monomers is different from that of the polymers, changes in the heat content, as measured in a calorimeter, were used to follow the reaction products at different temperatures, radiation doses, and for two different states of the matrix. At about 100° K, the yield of the polymer was 80%. Increasing the temperature of 108° resulted in a large reduction of yield. At this point also, the ESR spectra indicated a significant increase in the mobility of the large radicals. Differences in the kinetics appear between reactions performed in the frozen (solid) alcohol matrix and those which took place in a supercooled (liquid) matrix.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR

UDC 541.1+541.15+541.117+541.16

MIKHAYLOV, A. I.

"Possible Role of the Tunnel Effect in Post-Radiative Reactions in Solid Organic Substances"

Moscow, Doklady Akademii Nauk SSSR, Vol 197, No 1, March-April 1971, pp 136-139

Abstract: The possible role of the tunnel effect in post-radiative reactions in solid organic substances was analyzed. The schematic of a potential barrier for tunnel transition of an electron stabilized in a trap during low temperature radiolysis was used as a model. Estimates made in the study indicate that the critical distances at which ions can exist for a prolonged period of time and also their limiting concentrations, are close to the experimentally observed ones, and, consequently, the tunnel mechanism of recombination can actually be defining both during charge stabilization in a solid organic matrix under low temperature radiolysis conditions and in further post-radiative reactions.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR

UDC: 539.128.2

BALDIN, A. M., BEZNOGIKH, Yu. D., ZINOV'YEV, L. P., ISSINSKIY, I. B., KAZANSKIY, G. S., MIKHAYLOV, A. I., MOROZ, V. I., PAVLOV, N. I., and PUCHKOV, G. P.

"Acceleration and Removal of Deuton Beams from the OIYaI Synchrophasotron"

Moscow, Pribory i Tekhnika Eksperimenta, No. 3, 1971, pp 29-31

Abstract: This article describes the realization of a proposal for accelerating and extracting deutons with existing synchrophasotron systems made in an earlier article (Beznogikh, Yu. D., et al, Reprint OIYaI, 1968, No. R9-4214, Dubna). The basic idea of the proposal was to multiply the linear acceleration by two through halving the velocity of the deutons going into and coming out of the linear accelerator compared to the velocity of the protons. The acceleration in the synchrotron is done in two steps: first, doubling the acceleration; second, reaching the limiting frequency of the accelerating system and then making the transi-

1/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR

BALDIN, A. M., et al., Pribory i Tekhnika Eksperimenta, No 3, 1971, pp 29-31

tion to the plateau in the first multiple of the acceleration. By using a debuncher at the accelerator output, the capture of the deutons in first the quasi-betatron and then the synchrotron modes was increased. The authors are associated with the OIYaI (Joint Institute of Nuclear Research, Dubna).

2/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7

USSR

UDC 548.0;576.858

VAYNSHTEYN, B. K., MIKHAYLOV, A. M.

"Some Properties of Synthesis of Projecting Functions"

Moscow, Kristallografiya, Vol 17, No 2, 1972, pp 258-263

Abstract: A study was made of some of the properties of synthesis of projecting functions. A method is proposed for photosummation of the synthesis of projecting functions. The method is used in electron microscopy to study the three-dimensional structure of biological subjects. The method of synthesizing projecting functions for reproduction of $\rho(r)$ [B. K. Vaynshteyn, Kristallografiya, Vol 15, No 5, 894, 1970; Dokl. AN SSSR, Vol 196, 1072, 1971] is analyzed. Summation algebraically on a discrete net is considered, and symmetry of the projection $L^{\alpha}(x_{\alpha}, y_{\alpha})$ and the function $E(r)$ for reproduction of $\rho(r)$ is discussed. The double Fourier transformation method and the "algebraic reconstruction technique" are compared. A synthesis based on operations in real space with which the method of synthesizing the projecting functions is valid can be performed in such a way that the desired function $\rho(r)$ is reproduced exactly without background [B. K. Vaynshteyn, et al., Kristallografiya, Vol 17, No 2, 253, 1972].

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002202020015-7"