

L 37102-66 EWP(k)/EWT(d)/EWF(h)/EWP(1)/EWP(v) RC/3D

ACC NR: AT6012888

SOURCE CODE: UR/0000/65/000/000/0070/0085

AUTHOR: Nikolayev, V. I.

ORG: None

40
37
C+1

TITLE: Entropy method for the analysis of control circuits

SOURCE: Sistema chelovek i avtomat (Man-automaton systems). Moscow, Izd-vo Nauka, 1965, 70-85

TOPIC TAGS: bionics, man machine communication, automatic control system, information theory

ABSTRACT: The author studies the problems which can be solved by the entropy method of control circuit analysis. This method is called entropic because it is based on the concept of information entropy. In setting up a control system a single goal is maintained to insure the required organization of the system. A system is set up which is fully and partially automated and in which a series of control functions are carried out by a man-operator. A diagram is given showing the control system with a man-operator included. The qualitative aspect of information is considered. Emergency control systems are studied, where the amount of information is not large but its meaning is essential. Operative con-
Card 1/2

L 36335-66 ~~BT~~(d)/~~BNP~~(1) GD

ACC NR: AT6012898

SOURCE CODE: UR/0000/65/000/000/0197/0214

AUTHOR: Gavrilov, L. V. ; Nikolayev, V. I. ; Temnov, V. N.

13
B+1

ORG: None

TITLE: Results of a study on working conditions of operators

SOURCE: Sistema chelovek i avtomat (Man-automaton systems). Moscow, Izd-vo Nauka, 1965, 197-214

TOPIC TAGS: information theory, man machine ^{relation,} ~~communication,~~ automatic control system, information processing

ABSTRACT: Experiments are set up to explain the basic factors which affect the duration of time lost by operators in performing their tasks. An experimental apparatus, OPERATOR, was constructed for this study. The results of this experiment show that information reception increases in proportion to the number of light signals. An expression is given for this relationship

$$\tau_{rec} = bH + a$$

Information reception time is not determined by input information presented by the apparatus
Card 1/2

NIKOLAYEV, V.K.

The use of all-steel fixed dentures in practice. Stomologia
37 no.4:70 JL-Ag '58 (MIRA 11:9)

1. Is Otkrshnoy stomatologicheskoy polikliniki Pribaltiyskogo
voyennogo okruga (nachal'nik S.N. Prokof'yev).
(DENTAL PROSTHESIS)

... EWP(r)/EWP(t)/EWP(k)/EWP(b) PC-4 JD

... ARKHOZ...

... Nikolayev, V. K.

... of feed and its direction in the relief angle in gear hobbing

... SOURCE: Tr. Kuybyshevsk. aviats. inst. 1961, 1962, 1963

... TAGS: gear hobbing, feed pattern, climb milling, out-cut milling, relief angle analysis

... DEFINITION: The cutting angle (relief angle) α differs in gear hobbing from the ... is determined as the ... between the ... the location of the cutting ...

L 41294-55

ACCESSION NR: A85005684

0

job with the velocity V , rotation of the hob around the machined piece at velocity V and the feed T parallel to the axis of the piece. After plotting the composite

of the coordinate axes of the hob and the piece, the effect of the hob on the piece can be verified. The effect of the hob on the piece can be verified by the relation $V = V \sin \alpha + T \cos \alpha$.

As α increased and the speed of the hob increased, the cutting speed and the feed rate increased. The cutting speed increased from 1000 to 1500 mm/min and the feed rate increased from 0.1 to 0.2 mm/rev. The cutting speed increased from 1000 to 1500 mm/min and the feed rate increased from 0.1 to 0.2 mm/rev.

As the cutting speed increased, the cutting force increased. The cutting force increased from 1000 to 1500 N and the cutting force increased from 1000 to 1500 N.

As the cutting speed increased, the cutting force increased. The cutting force increased from 1000 to 1500 N and the cutting force increased from 1000 to 1500 N.

REF ID: A67114 (REF ID: A67114) REF ID: A67114 REF ID: A67114 REF ID: A67114 REF ID: A67114 REF ID: A67114

ACCESSION NO: ARI047520

REF ID: A67114 (REF ID: A67114) REF ID: A67114 REF ID: A67114 REF ID: A67114 REF ID: A67114

SOURCE: Ref. zh. Tekhnologiya mashinostroyeniya. Svochnyy tom, No. 78985

AUTHOR: Nikolayev, V. K.

TITLE: The efficiency of gear cutting with the feed

CITED SOURCE: Tr. Kuybyshevsk. aviats. in-t, vyp. 17, 1963, 95-98

TOPIC TAGS: gear, cutting tool, metal cutting, machining/ steel
 ЛЕЖЕННА, steel 30Kh GSA, steel 40KhNMA

TRANSLATION: A report is given of the results of an investigation of the conditions and quality of work in machining gear wheels cut with the feed and against the feed of the gear cutter. A comparative evaluation of the precision of machining of the gears was carried out by considering three factors: the radial play (wobble) of the toothed rim, difference in basic pitch, and profile of working section, error. A table of comparative results of the measurements is presented, from which the following conclusions can be drawn: (1) In gears machined

Card 1/2

L 20939-65

ACCESSION NR: AR4047528

by the conventional method compared to gear cutting with the feed, there is observed an increase in radial play of the toothed rim by 1.5-2 times which, according to GOST 1643-56, establishes a decrease of one in degree of precision. (2) The precision of basic pitch in gears cut with and against the feed is almost identical. (3) Results of measurements of profile error demonstrate that cutting with the feed assures mainly the eighth degree of precision, while cutting against the feed assures the ninth and tenth degrees. (4) With the feed machining of straight toothed gears out of steels 12Kh2N4A, 40KhA and 40KhNMA with a normal gear cutter, compared to the conventional method, assures an increase in the life of the tool by 2-3 times. 2 tables.

SUB CODE: MM, IE

ENCL: 00

2/2

MEMORANDUM, P.I., Wash.

Green chamber separator for the cleaning of shot. Mt. 1965.
no. 7029 J1 165. (MIRA 12:2)

~~NIKOLAYEV, V.L. inst.~~

Physical nature of creep in concrete. Trudy NIIT no.101:260-269 '53.
(Concrete) (Creep of materials) (MIRA 11:6)

NIKOLAYEV, V.L., Cand Tech Sci — (diss) "Study of ~~the~~ ^{stress} deformation
properties of concrete ~~under~~ ^{upon} expansion." Mos, 1952, 6 pp
(Mos Order of Lenin and Order of Labor Red Banner Inst of Engineers
of Railroad Transport in I.V. Stalin) 150 copies (IL, 30-59, 11')

67950

8/097/59/000/09/004/013
E141/E264

15.3200

AUTHORS: Shevkin A. Ye., Doctor-Professor of Technical Sciences
and Nikolayev, V. L., Engineer

TITLE: Elastic and Plastic Properties of Tensioned Concrete¹⁵

PERIODICAL: Beton i zhelezobeton, Nr 9, 1959, pp 396-402 (USSR)

ABSTRACT: The authors describe the results of their work carried out in the MIIT Laboratory on the deformation properties of concrete and cement grout subjected to axial tensioning and bending. These experiments were carried out with high quality concretes as these are now being increasingly used with reduced water/cement ratio. Investigations were carried out to obtain experimental data to construct deformation curves of concrete subjected to bending under increasing loading. A detailed description of the preparation of testing beams and of testing itself are given. Table 1 gives mixes of concrete and other related values. The loading of test samples takes place in a testing apparatus (Fig 1) which was designed by the authors and based on the Mikhaelis' apparatus. Diagrams of total deformations are given in Fig 2. Deformation curves of compressed and tensioned concrete are given in Fig 3; they show that in both cases after

Card 1/4

67050

S/097/59/000/09/004/013
E141/E264

Elastic and Plastic Properties of Tensioned Concrete

repetitive loadings on concrete 3 to 7 days old residual deformation could be noted due to the accumulation of temporary deformations, whereas with concrete 28 and 19 days old the magnitude of residual deformation does not change. The theory of Freysson does not explain a number of experimental data; for example the presence of creep deformation in samples submerged in water and the fact that creep deformations are linear. The purely mechanical theory presented by Professor A. K. Malmeyster is only suitable for building up a physical theory of elastic deformations of solid poly-crystalline bodies. According to the structural theory, the deformation characteristics of concrete are primarily defined by the properties of cement grout. Gypsum-paraffin models were used to test the structural theory of concrete (Fig 6). To load these samples a 4-ton capacity press "IM-4A" was used. Fig 7 shows creep deformation curves of cement grout and of gypsum-paraffin samples. Experiments show that with increased rate of loading the strength of samples also increases; at the

Card 3/4

NIKOLAYEV, V.L., insh.

Strain characteristics of concrete in tension. Trudy MIIT 108:
253-268 '59 (MIRA 13:3)
(Strains and stresses) (Reinforced concrete)

31973
S/081/61/000/023/042/061
B138/B101

15 3200

AUTHORS:

Sheykin, A. Ye., Royak, S. M., Leybovich, Kh. M.,
Nikolayev, V. L.

TITLE:

Long-time strength gain of concrete

PERIODICAL:

Referativnyy zhurnal. Khimiya, no. 23, 1961, 355, abstract
23K380 (Tr. Gos. Vses. n.-i. in-ta tsementn. prom-sti,
1960, no. 14, 118-130)

TEXT: When C_3S and C_2S are hydrated, hydrosilicates of the same composition and structure are formed. In a cement brick they form an independent phase with a highly dispersed crystalline structure and a slight tendency to secondary crystallisation. According to Bernal this is due to crystals which have a lamellar structure, so that the interplanar spacings vary in dependence on water content. There are three components to the structure of cement brick: (a) a crystalline concretion formed by isomorphously crystallising compounds of $Ca(OH)_2$ and $3CaO \cdot Al_2O_3 \cdot 6H_2O$ and hydrosulfoaluminates of calcium; (b) a gelling structural component formed by the

Card 1/3

31973
S/081/61/000/023/042/061
B158/B101

Long-time strength gain ...

calcium hydroxides; (c) partially hydrated grains of portland cement clinker. The physicochemical properties vary in dependence on the quantitative ratio of the structural components and the degree of hydration of the cement grains. Strength variations with time are the result of two opposing processes: (a) thickening of the gel, which consolidates the structure and increases the strength of the cement brick; (b) ageing of the crystalline concretion, which is accompanied by a reduction in strength. In the initial stages of solidification, strength is determined mainly by the number of few formations able to produce crystalline concretions. This means that strength diminishes in the early stage of solidification as the belite concentration increases. Higher belite concentration causes the strength increase period to be extended. This is attributed both to the hydration of the cement and the thickening of the gel. Ageing of the crystalline concretion is the result of the disintegration of unstable mixed crystals to form a metastable multi-phase state, causing increased embrittlement and changing the physicochemical properties of the brick. Depending on the combined effect of these processes, the period of strength gain may be extended, the variation in time may be negligible, or strength may go completely. A method is proposed for the determination of the possibility of a long-time strength

Card 2/3

X

GRONOV, I.I., kand. tekhn. nauk, NIKOLAYEV, V.L., kand. tekhn. nauk;
KORAYEV, V.O., kand. tekhn. nauk

Crack resistance of concrete. Trudy MIIT no.191:144-151. '64.
(MIRA 18:6)

NIKOLAYEV, V. M.

Cand Geolog - Mineralog Sci

Dissertation: "Reduction of Sulfates and Hydrological Conditions for Preservation of Oil Deposits in the Terek-Sundzha Oil-Bearing Area." 27/5/50

Moscow Order of the Labor Red Banner Petroleum Inst imeni I. M. Gubkin.

ε
O Vecheryaya Moskva
um 71

NIKOLAYEV, V. M.

CHERCHENKO, G. V., NIKOLAYEV, V. M., BEZRUKOV, Ya. G. and BELOUSOV, V. I.

"The Determination of the Pressure of Saturated Petroleum Crudes in Strata."

report presented at the 6th Sci. Conference on the Application of Ultrasound
in the investigation of Matter, 3-7 Feb 1958, organized by Min. Education
PSFSR and Moscow Oblast Pedagogic Inst. im N. K. Krupskaya.

NIKOLAYEV, V.M.

Underground waters in Karaganka sediments of the Terek-Sunsha
petroleum province. Trudy Gos. NII no.8:164-191 '60.

(NIRA 13:8)

(Terek-Sunsha Upland--Water, Underground)

NIKOLAYEV, V. K.

Underground waters in Apsheron sediments of the trans-Terek Plain.
Trudy Gos. III no.8:192-199 '60. (MIRA 13:8)
(Terek Valley--Water, Underground)

NIKOLAYEV, V.M.

Underground waters in the Ozek-Sunt oil region in the trans-Terek
Plain. Trudy Oros. NII no.8:146-163 '60. (NIRA 13,8)
(Terek Valley--Water, Underground)

NIKOLAYEV, V.M.

Underground waters in Maikop sediments of the Terek-Sunzha
petroliferous province. Trudy Lab. gidrogeol. probl. 30:84-
98 '60. (MIRA 14:4)
(Groznyy Province—Water, Underground)

TSAREVSKIY, A.M.; NIKOLAYEV, V.M., inzh.

Hydraulic-fill construction of dams of a narrow cross section.
Gidr. 1 mel. 13 no.11:28-35 N '61. (MIRA 14:10)

1. Chlen-korrespondent Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk imeni V.I. Lenina (for TSarevskiy).
(Dams)

MELAMUT, D.L., kand.tekhn.nauk; NIKOLAYEV, V.M., inzh.

Method for calculating the stability of slopes for narrow-profile
hydraulic-fill dams. Oidr. i mol. 14 no.12:43-50 D '62.

(MIRA 16:5)

(Dams)

ACC NR: AP0033-93

SOURCE CODE: UR/0413/66/900/016/0115/0115

INVENTOR: Chashchin-Semenov, K. V.; Grigor'yev, V. G.; Nikolayev, V. M.; Shifrin, E. G.

ORG: none

TITLE: Axisymmetric, shaped nozzle for wind tunnels. Class 42, No. 186167

SOURCE: Izobret prom obraz tov zn, no. 18, 1966, 115

TOPIC TAGS: axisymmetric nozzle, wind tunnel, hypersonic wind tunnel, boundary layer suction

ABSTRACT: The proposed axisymmetric, shaped nozzle for wind tunnels with low density flow, such as hypersonic, is made of separate rings with adjustable slots between them for boundary layer suction. In order to simplify the design and to reduce it, the size of the nozzle is made with two female chambers. The chambers are insulated one from another by a movable partition and are connected by channels with the cavity of the working chamber. In addition to this, an ejector is mounted in the channel of the end chamber to increase the boundary layer suction.

SUB CODE: 21/4/SUBM DATE: 22Aug64
Card 1/1 UDC: 620.178

SOV/58-59-8-18513

Translated from: Referativny Zhurnal Fizika, 1959, Nr 8, p 211 (USSR)

AUTHOR: Nikolayev, V.M.

TITLE: On the Velocity Modulation of Relativistic Electrons in the High-Frequency Cavity of a Resonator During Large Signals

PERIODICAL: Izv. Leningr. elektrotekhn. i. -ta, 1958, Vol 36, pp 57-67

ABSTRACT: The article analyzes the limits of applicability of the theory of the velocity modulation of relativistic electrons, developed in the works of Chodorov, Ginston et al. (VZhF, 1954, Nr 9, 10552) and Zusmanovskiy and Khaplanova (RZhF, 1957, N. 8, 20617). It is noted that the formulae therein obtained for the total velocity v of electrons, the increase in velocity $v \sim$ and the inverse velocity $1/v$ at the output of the high-frequency cavity, hold rigorously only in case of a low modulation coefficient

$$\alpha = \frac{U_1}{U_0} \ll 1,$$

where U_1 is the amplitude of the voltage in the cavity and U_0 is the constant accelerating voltage. An estimate is made of the errors arising

Card 1/2

PHASE I BOOK REPRODUCTION 817/3116

Handwritten note: 817/3116

Средства спектроскопии (Structure of Matter and Spectroscopy) Moscow, Izd-vo AN SSSR, 1960. 113 p. Breaks ally inserted. 2,300 copies printed.

Dr. E. V. Antshap, Professor; Inst. M. I. P. Poltava. This collection of articles is intended for physicists and chemists interested in spectroscopic methods of research on the structure of molecules and related problems.

The articles contained in this collection come from the editorial files of the Journal of Physical Chemistry (Journal of Physical Chemistry) and are connected with spectroscopic methods in research on the structure of molecules, the synthesis and isotopic effects, problems in spectrochemistry, the structure of aqueous solutions of electrolytes, and the chemistry of complex compounds. In some necessary individual articles.

The authors thank the following for having participated in determining the quality of microreproductions: V. G. Solov, P. E. Kuznetsov, V. I. Zubovskiy, Ye. S. Zhuravlev, V. I. Shubin, and L. S. Kuznetsov. In thanks A. I. Zaslavskiy for his discussion of the results.

M. V. G. and M. I. Alshuler (Soviet Academy of Sciences, Institute of Physical Chemistry, Moscow) and V. I. Zubovskiy (Central State University, Leningrad) are thanked for their help in the preparation of the microreproductions.

1. V. G. Solov, V. I. Zubovskiy, Ye. S. Zhuravlev, and L. S. Kuznetsov. Multiple Effects on the Viscosity of Submicroscopic Systems. 69

2. V. I. Zubovskiy, V. I. Zubovskiy, and V. I. Zubovskiy. The Problem of Change in the Structure of Polymers at Phase Transitions. 73

3. V. I. Zubovskiy, V. I. Zubovskiy, and V. I. Zubovskiy. The Problem of Change in the Structure of Polymers at Phase Transitions of a Liquid-Liquid System. 78

4. V. I. Zubovskiy, V. I. Zubovskiy, and V. I. Zubovskiy. The Problem of Change in the Structure of Polymers at Phase Transitions of a Liquid-Liquid System. 83

5. V. I. Zubovskiy, V. I. Zubovskiy, and V. I. Zubovskiy. The Problem of Change in the Structure of Polymers at Phase Transitions of a Liquid-Liquid System. 88

6. V. I. Zubovskiy, V. I. Zubovskiy, and V. I. Zubovskiy. The Problem of Change in the Structure of Polymers at Phase Transitions of a Liquid-Liquid System. 93

7. V. I. Zubovskiy, V. I. Zubovskiy, and V. I. Zubovskiy. The Problem of Change in the Structure of Polymers at Phase Transitions of a Liquid-Liquid System. 98

8. V. I. Zubovskiy, V. I. Zubovskiy, and V. I. Zubovskiy. The Problem of Change in the Structure of Polymers at Phase Transitions of a Liquid-Liquid System. 103

9. V. I. Zubovskiy, V. I. Zubovskiy, and V. I. Zubovskiy. The Problem of Change in the Structure of Polymers at Phase Transitions of a Liquid-Liquid System. 108

10. V. I. Zubovskiy, V. I. Zubovskiy, and V. I. Zubovskiy. The Problem of Change in the Structure of Polymers at Phase Transitions of a Liquid-Liquid System. 113

AVAILABLE: Library of Congress
Card 676
10-20-60

Handwritten signature: Mikhaylov V.M.

AKROSTIKOV, B.M.

PHASE I BOOK EXPLOITATION SOV/5644

Vserossiyskaya konferentsiya professorov i prepodavateley pedagogicheskikh institutov

Primeneniye ul'trakustiki k issledovaniyu veshchestva. vyp. 10. (Utilization of Ultrasonics for the Investigation of Materials. no. 10) Moscow, Izd-vo MOPI, 1960. 321 p. 1000 copies printed.

Eds.: V. F. Nozdrev, Professor, and B. B. Kudryavtsev, Professor.

PURPOSE: This book is intended for physicists and engineers interested in ultrasonic engineering.

COVERAGE: The collection of articles reviews present-day research in the application of ultrasound in medicine, chemistry, physics, metallurgy, ceramics, petroleum and mining engineering, defectoscopy, and other fields. No personalities are mentioned. References accompany individual articles.

Card ~~140~~

24095

S/186/60/002/006/020/026

AG51/A129

26.2541

AUTHORS: Bagretsov, V. F.; Nikolayev, V. M.; Zolotavin, V. L.;
Kostina, N.P.; Skrova, L. V.

TITLE: The sorption of microquantities of strontium and cesium on
biotite

PERIODICAL: Radiokhimiya, v. 2, no. 6, 1960 734 - 738

TEXT: In a study of the sorption processes of strontium-90 and cesium-134 microquantities on biotite in the presence of macroquantities of alkali-earth metal and magnesium ions, the exchange equivalent and the applicability of the law of acting masses to the investigated system was established. The authors point out that the quantitative laws of ion exchange are expressed through the exchange isotherm. In deriving an equation for the ion exchange isotherm the activity coefficient of the microcomponent ion must be taken into consideration. The distribution coefficient concept (Ref. 12: S. Yu. Yelovich, ZhOKh, 3, 144, 660, 1933) is used. In case of sorption exchange of the microquantities of the element on the sorbent saturated by the macrocomponent, the ratio of the activity coefficients in the solid phase is a constant value, since the composition

Card 1/3

X

01093

S/186/60/002/006/020/026
A051/A129

The sorption of microquantities of

of the solid solution changes very little, although the ionic strength of the solution can change here. Thus, the exchange constants are calculated for the investigated systems by determining B_0 from experimental data. Biotite of the following composition was used in the experiments: SiO_2 -35.74, Al_2O_3 -13.92,

Fe_2O_3 -5.83, FaO -19.67, MnO -1.48, TiO_2 -3.89, BaO -0.18, CaO -0.74, MgO -5.93,

$K_2O + Rb_2O + Cs_2O$ - 4.03, Na_2O - 3.38. The activity coefficient of the ions were taken from literature data (Ref. 13: M. Kn. Karapet'yants, Khimicheskaya termodinamika. (Chemical thermodynamics). Goskhimizdat, M.-L., 1953). The given isotherms of distribution show that the experimental results coincide favorably with the calculations, i. e., the interaction of cesium¹³⁴ and strontium⁹⁰ with biotite follows the law of acting masses. The value of G was found to be $1.013 \cdot 10^{-5}$ mole Me^{2+} to 1 gram of sorbent. An anomalous bond strength was noted between the cesium ions and the sorbent. Finally, the following series of cation replacement on the biotite was derived from the calculated values of the exchange constants: $Cs^+ > Ba^{2+} > Sr^{2+} > Ca^{2+} > Mg^{2+}$. There are 2 tables, 2 figures and 16 references: 8 Soviet-bloc and 8 non-Soviet-bloc. The references to the four most recent English language publications read as follows: A. P. Vanselow, J. Am.

Card 2/3

MEGROV, Ye.V.; NIKOLAYEV, V.M.; KRYLOV, Ye.I.; TKACHENKO, Ye.V.

Possibility of using a mixture of isotopes of Sr⁸⁹ and
Sr⁹⁰ Y⁹⁰ in direct radiometry. Radiokhimiya 4 no.4:516-518
'62. (MIRA 15:11)

(Strontium—Isotopes)
(Yttrium—Isotopes) (Radiometry)

S/186/63/005/001/002/013
E075/E436

AUTHORS: Nikolayev, V.M., Bagretsov, V.F., Lebedev, V.M.
TITLE: Sorption of microquantities of strontium and cesium by vermiculite

PERIODICAL Radiokhimiya, v.5, no.1, 1963, 32-37

TEXT: The sorption of Sr^{90} and Cs^{134} by vermiculite from alkali and alkali-earth metal chloride solutions was studied. The sorption by cation exchanger KY-2 (KU-2) was investigated for comparison. The sorption on vermiculite did not depend on the pH of the solutions in the range of 3 to 11. The results of the experiments are satisfactorily expressed by S.Yu.Yelovich and L.G.Kuz'mina's equation (Kolloidn. zhurn., v.18, no.3, 1956, 268) made more accurate by the authors (Radiokhimiya, v.2, no.6, 1960, 734). The results for the sorption in the presence of ions belonging to group I and II confirm its ion-exchange character, the sorption being governed by the law of mass action. Ce was sorbed by vermiculite exceptionally strongly, which is explained by the high polarizability of Ce ion and the volume of hydrated Ce ion being similar to that of hexagonal voids in the vermiculite
Card 1/2

Sorption of microquantities ...

S/186/63/005/001/002/013
E075/E436

lattice. There are 5 figures and 5 tables.

SUBMITTED: December 6, 1961

Card 2/2

NIKOLAYEV, V.M.; KRYLOV, Ye.I.; BAGRETSOV, V.F.; YEGOROV, Yu.V.

Behavior of radiocolloids of cerium in sorption systems.
Radiokhimiya 5 no.5:622-626 '63. (MIRA 17:3)

MINOMATEV, V.M.

Stability of performance of resonator bunchers. *Elektrofiz.*
app. no. 2-31-42 '62.

7.8A 18-3.

YEGOROV, Yu.V.; NIKOLAYEV, V.M.

Radiocolloids in sorption systems. Part 2: Collective sorption isotherm
in a system with variable mass of sorbent. Radiokhimiya 7 no.3:273-280
'65. (MIRA 18:7)

BAGRETSOV, Y.F.; PUSHKAREV, V.V.; BEKETOV, A.R.; NIKOLAYEV, V.M.

Effect of roasting on the ion-exchange capacity of vermiculite.
Zhur.prikl.khim. 34 no.11:2558-2560 N '61. (MIRA 15:1)

1. Ural'skiy politekhnicheskiy institut imeni S.M.Karova.
(Vermiculite) (Ion exchange)

NIKOLAYEV, V.M.; BAGRETSOV, V.F.; BEKETOV, A.R.

Kinetics of ion exchange on vermiculite. *Zhur.prikl.khim.* 35 no.11:
2414-2420 N '62. (MIRA 15:12)

1. Ural'skiy politekhnicheskiy institut imeni S.M.Kirova.
(Ion exchange) (Vermiculite)

NIKOLAYEV, V.M.; BAGRETSOV, V.F.; KALMYKOV, Yu.A.

Effect of various methods of treatment on the ion-exchange properties
of vermiculite. Report No.1: Breakdown of vermiculite by acid solutions.
Trudy Ural.politekh.inst.no.121:30-34 '62.

(Vermiculite)

(MIRA 16:5)
(Ion exchange)

BAGRETSOV, V.F.; NIKOLAYEV, V.M.; KALMYKOV, Yu.A.; PUSHKAREV, V.V.

Effect of various methods of treatment on the ion-exchange properties of vermiculite. Report No.2: Reaction of vermiculite with solutions of alkalies and neutral salts. Trudy Ural.politekh.inst.no.121:35-38 '62.

(Vermiculite)

(Alkalies)

(MIRA 16:5)
(Salt)

NIKOLAYEV, V.M.; BAGHETSOV, V.P.; KALMYKOV, Yu.A.

Effect of multiple treatments with an acid on the cation exchange capacity of vermiculite. Zhur.prikl.khim. 36 no.3:692-693 My '63.
(MIRA 16:5)

1. Ural'skiy politekhnicheskiy institut imeni S.M.Kirova.
(Vermiculite) (Ion exchange)

NIKOLAYEV, V.M.; BAGRETSOV, V.P.; LEBEDEV, V.M.

Reaction of the substitution of magnesium and aluminum ions
for hydrogen ions in vermiculite. Pochvovedenie no.8:66-72
Ag '63. (MIRA 16:9)

1. Ural'skiy politekhnicheskiy institut imeni Kirova.

NIKOLAYEV, V.M.; BAGNETSOV, V.P.; KIKICH, Ye.I.; KIRIL, V.D.

Scruption of microquantities of cesium 134 by vermiculite under
dynamic conditions. Zhur.prikl.khim. 37 no.7:1235-1242 31 '64.
(MIRA 18:4)

ABSTRACT: The present work is an attempt to substantiate the recently published information on the ion exchange properties of vermiculite, L. L. Jacobs. (Nucl. Energy, C2, N 2, 295 1962). The capacity of vermiculite for various cations is shown as a function of pH, temperature, and concentration of the cations. The results are compared with those of other authors.

... ..

... ..

... .. 26Feb65

... .. IC, SC

00771

3/137/60/000/02/06/010

18.7200

Translation from: Referativnyy zhurnal, Metallurgiya, 1960, No 2, p 169 # 3246

AUTHORS: Dmitriyev, P.T., Nikolayev, V.M.

TITLE: Welding of Thin-Walled Small-Diameter 1Kh18N9T (1Kh18N9T) Steel Pipes

PERIODICAL: Tr. Vses. N.-I. i konstrukt. in-t khim. mashinost., 1958, No 26, pp 21 - 33

TEXT: Information is given on the АГН-8-26) (AON-8-26) automatic machine for welding in a fixed position thin-walled 1Kh18N9T pipes with non-fusing electrode in Ar atmosphere. Specially cut rings are used as welding material; they are manufactured either of 1Kh18N9T or 1Kh18N9T steel depending on the operational conditions of the installation. BT-15 (VT-15) type W-rods are used as welding electrodes; their diameter is 2 - 3 mm; Ar of I or II composition is used as shielding gas. Information is given on the technology of welding pipes of 1 - 1.5 mm wall thickness. It was established that the weld joints possessed high strength, vacuum density and were not prone to crystallite corrosion. A special АГ TP-1 (AOTR-1) welding head was designed
Card 1/2

DMITRIYEV, P.T., inzh.; NIRAYEV, V.M., inzh.; ROZANOV, G.A., kand.-
tekhn.nauk

AGM-6-26M automatic pipe-welding machine with a hoseless gas
feed. Sbor.st. NIIKHIMMASH no.33:85-98 '60. (MIRA 15:5)
(Welding—Equipment and supplies)

S/184/61/000/001/010/014
A104/A029

AUTHORS: Dmitriyev, P.T., Nikolayev, V.M., Engineers, Rozanov, G.A.,
Candidate of Technical Sciences

TITLE: Automatic Pipe Welding Apparatus АПН-8-28М (АСН-8-28М) With
Hoseless Gas Supply

PERIODICAL: Khimicheskoye Mashinostroyeniye, 1961, No. 1, pp. 43-45

TEXT: The new pipe welding apparatus was designed by N.P. Shalagin and I.P. Kus'min of the NIIKhIMMASH. The apparatus is equipped with a control panel for non-turning argon arc welding of pipes 8-26 mm in diameter made of 1X18H9T (1Kh18W9T) steel. Welding is performed with 1.5 - 2.0 mm tungsten electrodes. The apparatus is mobile and suitable for currents of up to 100 amp. Its dimensions are: 130 x 102 x 210 mm and the weight is 5.5 kg. The apparatus consists of a welding head (Fig. 2) which is suspended on one of the pipes which are preliminarily centered by a special device (Fig. 3). In order to insure accurate position of the electrode the head can be moved 6 mm in either direction. Argon is supplied by a special mechanism designed by V.M. Nikoayev (Patent No. 111460). ✓

Card 1/5

S/184/61/000/001/010/014
A104/A029

Automatic Pipe Welding Apparatus AFH-8-28M (AGN-8-28M) With Hoseless Gas Supply

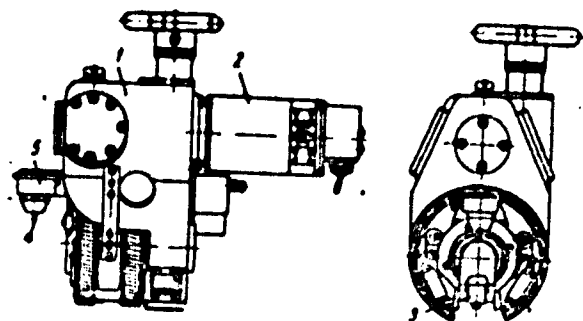


Fig. 2: AFH-8-28M (AGN-8-28M) welding head.

1. cone
2. MY-50 (MU-50) electrometer
3. fixture
4. electrode
5. torch

✓
1

Card 3/5

S/184/61/000/001/010/014
A104/A029

Automatic Pipe Welding Apparatus AFH-8-28M (ACW-8-28M) With Hoseless Gas Supply

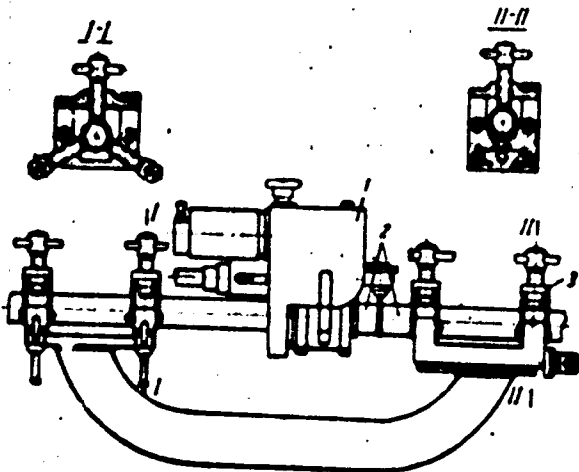


Fig. 3: Fixture for tubes with the welding head.
1. welding head
2. tube
3. fixing bolts

Card 4/5

KHABLOV, V.S., inzh., nauchn. sotr.; NIKOLAYEV, V.M., kand. tekhn. nauk, nauchn. sotr.; DOBSHITS, M.L., inzh., red.

[Practices in erecting small earthen structures by the method of hydromechanization] Opyt vozvedeniya zemlyanykh sooruzhenii nebol'shogo ob'ema metodom gidromekhanizatsii. Moskva, Gosstroizdat, 1962. 37 p. (FIRA 17:4)

- 1. Akademiya stroitel'stva i arkhitektury SSSR. Nauchno-issledovatel'skiy institut organizatsii, mekhanizatsii i tekhnicheskoi pomoshchi stroitel'stvu. 2. Laboratoriya mekhanizatsii zemlyanykh rabot Nauchno-issledovatel'skogo instituta organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu Akademii stroitel'stva i arkhitektury SSSR (for Khablov).
- 3. Laboratoriya gidromekhanizatsii Vsesoyuznogo nauchno-issledovatel'skogo instituta transportnogo stroitel'stva (for Nikolayev).

ABST. JOUR. : PZhSiel., No. 1962, No. 3, 50-56

AUTHOR : Khablov, V.S.; Nikolayev, V.M.
INSTIT. : Akademiya stroitel'stva i arkhitektury SSSR
TITLE : Opyt vozvedeniya zemlyanykh sooruzhenii nebol'shogo ob'ema metodom gidromekhanizatsii

ORIG. PUB. : Izv. AN Turkm SSR, 1962, No.3, 50-56

ABSTRACT : This article describes the experience of erecting small earthen structures by the method of hydromechanization. The author analyzes the process of hydromechanization and its application in the construction of earthen structures. The article also discusses the advantages and disadvantages of this method and provides a list of references.

CAPP: 1/1

NIKOLAYEV, V.N.

**Establishing a material base for technical education. Politekh.obuch.
no.2:25-27 P '59. (NIMA 12:3)**

- 1. Ibrsinskaya srednyaya shkola No.1 Chuvashskoy ASSR.
(Ibresi--Technical education)
(Workshops--Equipment and supplies)**

NIKOLAYEV, Vladimir Nikolayevich; MIKHAYLOVA, V., red.; BUGKOVA, A.,
tekh. red.

[The atom, men, ice] Atom, liudi, l'dy. Moskva, Molodaia
gvardiia, 1963. 271 p. (MIRA 17:1)

14-57-6-12550D
Translation from: Referativnyy zhurnal, Geografiya, 1957, "r 6,
p 115 (USSR)

AUTHOR: Nikolayev, V. N.

TITLE: Vegetation of Grazing Lands in the Western Zaunguz Plateau
(Rastitel'nost' i pastbishcha Zapadnogo Zaunguz'ya)

ABSTRACT: Bibliographic entry on the author's dissertation for
the degree of Candidate of Biological Sciences,
presented to AN TurkSSR (AS of the Turkmen SSR),
Ashkhabad, 1956

ASSOCIATION: AN TurkSSR (AS of the Turkmen SSR)
Card 1/1

NIKOLAYEV, V.N.

Ecology of black saxaul in the northwestern section of the Zaungus-
skoye Plateau. Izv.AN Turk.SSR no.2:33-36 '56. (MLRA 9:6)

1. Institut shivtnevodstva AN Turkmeneskey SSR.
(Zaungusskoye Plateau--Saxaul)

NIKOLAYEV, Y.N.

Effect of growth regulators on the survival rate of cuttings
of some desert shrubs. Izv. AN Turk. SSR no.2:26-31 '59.
(NIRA 12:6)

1. Turkmenskiy nauchno-issledovatel'skiy institut zhivotnovodstva
i veterinarii.

(Desert flora) (Growth promoting substances)

ACC NR: A7005437

SOURCE CODE: UR/0382/00/000/002/0213/0217

MIKEL'SON, A. E., NIKOLAYEV, V. N.

ORG: none

"Investigation of the Magnetic Field and Forces in an Electro-magnetic Crystallizer"

Riga, Magnitnaya Gidrodinamika. (Magnetohydrodynamics), No. 2, 1966, pp 143-147

TOPIC TAGS: magnetic field, tin, magnetic induction

Abstract: Molten tin in a stainless steel container was subjected to a magnetic field to determine the distribution of the tangential inductance component of the field. The field was produced by a ring-shaped inductor around the container. Inductance was measured with a five-turn coil; pressure, by a two-liquid pressure gauge with stearic acid.

The relative inductions were measured as functions of radial distance and plotted as a family of curves for various frequencies of the induced field. Curves are also plotted for the relative inductance as a function of vertical distance from the center of the molten metal. From these results the pressure distribution is determined inside the molten tin, as well as at the surface of the metal.

Card 1/2

UDC: 538.4

0926 5310

NIKOLAYEV, V.N., kapitan 1-ya ranga; YEFIMOV, Ye. S., kapitan 1-ya ranga

Some information on the West training experience of the naval
forces of the U.S.S.R. and NATO in 1964. Mar. 1965. 42 pp. 71
80-86 21 '65. (MIA 12 R)

L 14441-66

ACC NR: AP6002977

(A) SOURCE CODE: UR/0286/65/000/024/0169/0169

INVENTOR: Kovalev, N. G.; Mikel'son, A. E.; Nikolayev, V. N.; Saulite, U. A. 4/5
③

ORG: none

TITLE: An electromagnetic conveyor. Class 81, No. 177344

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 24, 1965, 169

TOPIC TAGS: conveyor transportation system, electromagnetic propulsion, magnetic field, magnetic circuit

ABSTRACT: This Author's Certificate introduces an electromagnetic conveyor which includes a conduit surrounded by induction coils. Cartridges inside the conduit are moved by a traveling magnetic field set up by the induction coils. A magnetic circuit in the form of a ferromagnetic insert is mounted inside each cartridge to increase the traction force acting on it.

Card 1/2

UDC: 621.067.030

S/010/61.5.01.005/02.01.01
A053/A026

AUTHORS: Aybulatov, N.A.; Nikolayev, V.P.

TITLE: Jubilee Conference of the Black Sea Experimental Scientific Research Station of the Institute of Oceanology of the AS USSR

PERIODICAL: Izvestiya Akademii nauk SSSR, seriya geograficheskaya, 1960, No. 4, pp. 139 - 142

TEXT: The year 1959 marks the 10th anniversary of ChENIS (Black Sea Experimental Scientific Research Station of the Institute of Oceanology). During this period a number of achievements contributed to the success of the Black Sea Station. In the Laboratoriya morskoy elektroniki (Laboratory of Naval Electronics) the first underwater TV sets were produced, with which the scientific research submarine "Severyanka" is equipped. The same laboratory designed a device for checking the filling up of the trawl net with fish. ChENIS has also developed an electromagnetic method of measuring currents while the ship is moving. Important works are being conducted on the problem of dynamics and morphology of sea coasts, on the subject of alluvium and of the processes of shifting-sand deposits. Highly valued are the investigations of the laboratory on the relief of

Card 1/4

S/010/60/000/004/005/006/XX
A053/A026

Jubilee Conference of the Black Sea Experimental Scientific Research Station of the Institute of Oceanology of the AS USSR

the sea bottom and the seismoacoustics, covering a number of problems pertaining to the geology of the Black Sea and the Mediterranean bottoms. The jubilee conference was opened by K.V. Neglyad, Director of the Station, which comprises at present 9 laboratories with a staff of 125 men. Three expeditionary ships are at their disposal. The following papers were presented: N.A. Aybulatov, on the results of 5 years of work by the station concerning the shift of alluvia (sand deposits) under natural conditions. Under the supervision of V.P. Zenkovich, a method of direct observation of the dynamics of alluvia had been elaborated by means of luminophores, enabling the author to measure the absolute speed of sand movements at different swells. Ye.N. Yegorov, on the dynamics of subaqueous sand banks and on the morphology of the Black and the Azov Seas, tracing back the origin of sand banks to 2 basic causes, viz. waves and undercurrents. B.A. Shulyak spoke on waves on the surface of quick sands, describing the relationship which exists between ripples on the bottom of the sea (ground deformations) and wave currents. Thus it is possible to analyze petrified ripples and determine the kind of waves which have created them. Great interest presented a proposed

Card 2/4

3/010/60/000/004/005/006/XX
A053/A026

Jubilee Conference of the Black Sea Experimental Scientific Research Station of
the Institute of Oceanology of the AS USSR

method of preventing hydrotechnical installation, viz. perts, channels, etc, from becoming obstructed by sand, which method consists in placing concrete blocks temporarily in the zones of obstruction. V.P. Goncharov dealt with problems concerning geomorphology and geology of the Black Sea, giving information on the results of the bathometric and geomorphological works carried out systematically with an echo sounding device M3N-5, MC-26 (MEL-5, MS-26) of the Kelvin and Hughes system. A bathometric map of the Black Sea was plotted giving hitherto unknown details about the relief of the bottom, and registering the deepest point of the sea as being 2,212 m. Yu.P. Neprochnov reported on "The geological structure and acoustic properties of the bottom of the Black Sea." M.S. Kornyshov spoke on "The dynamics of local vortex formations on the Caucasian coast of the Black Sea." The report of A.A. Vinovskiy was devoted to the methods of carrying out oceanographic investigations, developed by the station, especially in view of some new electric instruments. V.A. Yegorova reported on "The influence of state and direction of winds on the salt contents of atmospheric deposits." Investigations, supervised by S.V. Bruyevich, aimed at analyzing the specific characteristics of chemical composition of atmospheric deposits during sea and continental winds. ✓

Card 3/4

DAVIDENKOVA, Ye. F.; KELEK, N. N.; SAVEL'YEVA-VASIL'YEVA, Ye. A.;
NIKOLAYEV, V. P.

Clinical characteristics of serous meningitis caused by intestinal
viruses. *Pediatrics* no.6:3-8 '62. (MIRA 15:6)

1. Is kafedry nervnykh bolezney (sav. - prof. Ye. F. Davidenkova)
i virusologicheskoy laboratorii (sav. V. P. Nikolayev) Lenin-
gradskogo pediatricheskogo meditsinskogo instituta (dir. Ye. P.
Semenova).

(MENINGITIS) (VIRUS DISEASES)

L 12014-05 EWT(1) GA
ACQUISITION NR: AT4045962

8/2996/64/000/034/0219/0230

AUTHOR: Vadutin, V. P. (Mining engineer); Kropotov, V. A. (Mining engineer); Beketov, P. Ya. (Mining engineer); Nikolovay, V. P. (Mining engineer)
TITLE: Some results of an investigation into the effect of the explosion of shot-hole cumulative charges

SOURCE: Nauchno-tekhnicheskoye geroye obshchestvo. Vozryvnoye delo, no. 56/11, 1964. Upravleniye deystviyem vzryvva (Control of blasting operations), 219-230

TOPIC TAGS: blasting, mine blasting, cumulative charge, shot hole, blast hole, horizontal excavation

ABSTRACT: The authors discuss some results obtained in a detailed study of the effectiveness of shot-hole charges of cumulative effect in horizontal excavation work. The study was based on the use of a charge with lateral cumulative surface, the characteristic feature of such a charge being the location of the cumulative cut or gap not at the end of the charge, but along its side and running the full length of the charge. This makes it possible to obtain a greater active volume of explosive material and to employ it more rationally. In such charges, the cumulative stream forms along the entire length of the charge, while the direction of the effect of the stream promotes a more efficient formation of an additional gap surface. The study was conducted under laboratory and field conditions. In

L 12016-65

ACCESSION NR: AT4045962

the laboratory tests, a determination was made of the most suitable form and parameters of the charge. The diameter of the charge was 40 mm to be used in shot holes 46 mm in diameter. The cross sectional area of the cumulative cut was varied every 0.8 cm² in an interval from 0.8 to 5.6 cm². The charge length was 420 mm, the explosive used being detonite 6A. In the field tests, the work was conducted in excavations with a cross-sectional area of 4 m², with rock and ore strength readings of 14-18 on the scale devised by Prof. Protod'yakonov. In attempting to determine the optimal form for the cumulative cut-out, six forms were studied with a total of approximately 150 individual blasts on sheet metal. The maximum destructive effect was observed in the case of a cumulative surface of spherical form. Maximum efficiency was determined by the authors not only on the basis of the "volume of destruction" (total destructive effect), but also by using as a criterion the specific consumption of explosive material for the destruction of 1 centimeter of metal sheet. Tables and graphs are given illustrating the dependence of the specific explosive consumption on the cross-sectional area of the cumulative gap in order to establish the form and dimensions of the cumulative cavity which will ensure optimal results. The field tests were carried out at the "Kaz" and "Odra Bash" mines of the Kuznetukiy metallurgicheskiy Kombinat (Kuznets Metallurgical Combine), using the cumulative charge which had displayed the best results in the destruction of sheet metal. The tests were conducted in a m²-excava-

L 12016-55

ACCESSION NR: AT4045962

1 /
shown, with the charges in the shot holes located in such a way that the cumulative effect of their blast coincided with the direction of their line of least resistance (LLR). A total of 132 explosions of single charges was set off for different dimensions of the open surfaces, and the optimal LLR was determined for each of these. The authors found that, in all cases, the break-through distances (radius of effective destruction) were greater for cumulative charges than for conventional, with the destruction between charge holes being more intense than with conventional charges. On the basis of the optimal LLR values, three different arrangements for the shot holes were tested: with a prismatic cut, with a central circular cut and with a circular cut and combined charges. The practical effects of these different patterns and of the possible variations within each are considered in detail, particularly from the point of view of pressing and other efficiency-related factors. Orig. art. has: 4 tables and 7 figures.

ASSOCIATION: VostNIGRI

SUBMITTED: 00

ENCL: 00

SUB CODE: WA

NO REF SOV: 000

OTHER: 000

Card 3/3

NOVIKOV, A.K.; MASHUKOV, V.I.; CHERNOV, S.F.; NIKOLAYEV, V.P.;
VOLODARSKAYA, Sh.O.

Relation of the line of least resistance to the borehole
diameter in mining operations. Vsvyv. delo no.55/12:
239-244 '64. (MIRA 17:10)

ACC NR: AP5024975
SNT (g)/ZNA (d)/AMT (t)/SPT (k)/SMT (s)/SN (b)/SRR (h)/SRA (c)
SOURCE CODE: UR/0286/65/000/016/0039/00

INVENTOR: Sokolov, S. A.; Donda, L. I.; Nikolayev, V. P.; Rakhman, L. Ts.

ORG: none

TITLE: Method of manufacturing thin-wall, spring-steel shapes.
Class 18, No. 173789

SOURCE: Byulleten' izobretaniy i tovarnykh znakov, no. 16, 1965, 19

TOPIC TAGS: spring, steel spring, thin wall spring, shaped spring

ABSTRACT: This Author Certificate introduces a method of manufacturing thin-wall, spring-steel shapes. In order to obtain precise form and prescribed mechanical properties, the spring strip is heated above the AC₃ point, cooled to 300-320C, drawn through forming dies at this temperature, wrapped with a narrow steel band, air cooled, cut in pieces, tempered, put on the mandrel, wrapped in glass cloth, and retempered. (WW)

SUB CODE: MM/ SUBM DATE: 26Jul62/ ORIG REF: 000/ OTH REF: 000/

ATD PRESS: 4132

Card 1/1

UDC: 621.785.79-272.272

07012/30

SHIL'TOV, A.A., NIKOLAYEV, V.F.

**Underwater talking device. Truly Inst. obsn. 76:
82-84 '69. (MIRA 18:12)**

100 11/11 Y 100

AUTHOR ZHEVANDROV N.D., NIKOLAYEV V.P. 20-5-22/67

TITLE On the Problem of the Determination of the Volumes of the Molecules in Solutions With the Aid of the Method of the Polarized Luminescence. (K voprosu ob opredelenii ob'yemov molekul v rastverakh metodom poliarisirovannoy lyuminestsentsii.- Russian)

PERIODICAL Doklady Akademii Nauk SSSR 1957, Vol 113, Nr 5, pp 1025-1028 (USSR).

ABSTRACT The measurements of the polarisation of the fluorescence of one and the same fluorescent substance in different solvents permits us to draw conclusions with regard to the existence and the character of the solvate covers. A solvate cover is the monomolecular layer of the solvent which surrounds the molecule of the solvated substance and which has a more or less strong connection with it. The paper under review measures the polarisation of the fluorescence with the aid of a KAVRAYSKIY-polaroscope with compensating staple in the temperature interval between 20 and 60 degrees centigrade. In this interval the linearity of $1/p(T\eta)$ was well confirmed. Here p stands for the degree of polarisation, T for the temperature and η for the viscosity. In this temperature interval it was possible to use as solvents (which must have a sufficiently high viscosity) only glycerine, castor oil and vaseline oil. The concentration of the solutions amounted to 10^{-4} to 10^{-5} g/cm³. Three groups of fluorescent organic substances were investigated: Phthalimides, acridine

CARD 1/3

L 40002-66 EST(1) GW

ACC NR: AT6017051

(N)

SOURCE CODE: UR/2566/65/074/000/0055/0061

31
B+1

AUTHOR: Nikolayev, V. P.

ORG: none

TITLE: Angular radiance measuring device (M)

SOURCE: AM SSSR. Institut okeanologii, Trudy, v. 74, 1965. Elektronnyye pribory dlya okeanologicheskikh issledovaniy (Electronic instruments for oceanological research), 55-61

TOPIC TAGS: oceanographic instrument, photometer, angle measurement instrument, ocean dynamics

ABSTRACT: An underwater photoelectric differential photometer with a self-contained power supply is described. It consists of two photometers, vertical and horizontal graduated dials, rectifier, generator, power supply (accumulator) and scaled indicator. A block diagram of the system and a photograph of the instrument are given and the function of each component in the measurement operation is explained. The entire instrument is hermetically sealed in a cylindrical container. The source potential of the system can vary from 800 v to 1700 v. When the accumulator is charged with 1700v to 1300v, the instrument draws a current of 200 ma and operates for 75 hours without recharging. The device is able to measure angular distribution of underwater lighting

Card 1/2

1. 75072-66 EST(8)/ESS-2/EST(1) 75

ACC NR: AT6017054

(N)

SOURCE CODE: UR/2566/65/074/000/0082/0084

AUTHOR: Zhil'tsov, A. A.; Nikolayev, V. P.

27
B+1

ORG: none*

TITLE: Underwater voice communication system (6)

SOURCE: AN SSSR. Institut okeanologii. Trudy, v. 74, 1965. Elektronnyye pribory dlya okeanologicheskikh issledovaniy (Electronic instruments for oceanological research), 82-84

TOPIC TAGS: underwater communication, wire communication

ABSTRACT: A wire communication system for voice underwater-surface, surface-underwater communication with divers is described. The system consists of two loudspeakers and a low power, low frequency transistorized amplifier. The diver receives communications from the surface through the loudspeaker and uses the loudspeaker as a microphone for communicating with the surface. The diver can receive and send voice messages when he is within 10 m of the loudspeaker. The comprehensibility of the diver's messages to the surface is diminished by the fact that he must talk through his breathing mouth-piece. The submerged loudspeaker is protected against water pressure by an enclosure filled with castor oil, which reduces the sensitivity of the speaker. The speaker is connected by cable to the amplifier which is located on the surface. The authors sug-

Card 1/2

Card 2/2 vnb

ACC NR: AFG032078

SOURCE CODE: UR/0562/66/002/009/1000/1004

AUTHOR: Nikolayev, V. P.

1/1

ORG: Institute of Oceanology, AN SSSR (Institut okeanologii AN SSSR)

3

TITLE: Concerning one method of determining the spatial frequency-contrast characteristic of a water layer

SOURCE: AN SSSR. *Investiya. Fizika atmosfery i okeana*, v. 2, no. 9, 1966, 1000-1004

TOPIC TAGS: oceanographic research facility, optic measurement, optic resolution, image contrast, sea water, light scattering

ABSTRACT: The author describes the application of apparatus proposed by F. Perrin (*Uspekhi fiz. nauk* v. 78, no. 2, 1962) for the experimental determination of the spatial frequency-contrast characteristic of a real layer of water. The measurements were made at sea on a pontoon at the Black-Sea Station of the Institute of Oceanology AN SSSR. An immersed illuminator with several daylight bulbs was used as the test object, constructed in a way as to simulate the edge of a semi-infinite slit. The photographed image of the test object was analyzed with the aid of an optical scanning system (Fig. 1) that measured the distribution of the illumination in the image of the test object. A photomultiplier was used as the output device. Plots of the distribution of the illumination in the image are presented. The tests were made at different depths. The results show that the scattering function spreads out very rapidly with increasing distance, so that the frequency-contrast characteristics drop

Card 1/2

UDC: 551.463.5: 535.341

CHEKHOV, A.G.; NIKOLAYEV, V.R., red.

[Prevention of heart and vascular diseases] Profilaktika
boleznei serdtsa i sosudov. Moskva, Izd-vo "Znanie" 1965.
28 p. (Novoe v zhizni, nauke, tekhnike. VIII Seriya: Bio-
logiya i meditsina, no.16) (MIRA 18:8)

WINDWARD, V.I.; SHILOH, V.I.; FORT ST. V.I.

Polar radiance meter. Study cont. clear. 14:55-16:00. (1) p. 13 17

NIKOLAYEV, V.R.

Health rooms. Zdorov'ie 7 no.8:23 Ag '61.
(CLINICS)

(MIFA 14:9)

KOCHERGIN, Ivan Georgiyevich; NIKOLAYEV, V.R., red.

[~~Present-day~~ problems of medicine] Sovremennye problemy
meditsiny. Moskva, Znanie, 1964. 30 p. (Novoe v shizni,
nauke, tekhnike. VIII Seriya: Biologiya i meditsina, no.23)
(MIRA 17:11)

1. Chlen-korrespondent AMN SSSR (for Kochergin).

AVAKYAN, Arshaluys Aramovich, prof.; LARIN, Nikolay Vasil'yevich,
zhurnal'ist; NIKOLAYEV, V.R., red.

[In the depths of the microcosm] V glubiny mikrokozma. Mo-
skva, Znaniye, 1964. 31 p. (Novoe v khimii, nauke, tekhn-
nike. VIII Seriya: Biologiya i meditsina, no.24)
(MIRA 17:11)

PORTNOV, Poma Grigor'yevich, doktor med. nauk; NIKOLAYEV, V.A.,
red.; SOROKO, Ya.I., red.

[Aerions and the health] Aeriony i zdorov'ie. Moskva,
Znanie, 1964. 39 p. (Novoe v zhizni, nauke, tekhnike.
VIII Seria: Biologiya i meditsina, no.22)

(MIRA 17:12)

PREOBRAZHENSKIY, Nikolay Aleksandrovich; NIKOLAYEV, V.R., red.

[They hear again] Oni slyшат vnov'. Moskva, Izd-vo
"Znanie," 1965. 15 p. (Novos v zhisni, nauke, tekhnike.
VII Seria: Biologiya i reditsina, no.18)
(MIRA 18:8)

CHERNOV, A.G., NIKOLAYEV, V.R., red.

[Chemistry in the service of medicine. Participants in the discussion: A.A.Vishnevskii and others] Khimii na sluzhbu meditsiny. V besede uchastvuiut: A.A.Vishnevskii i dr. Moskva, Znanie, 1965. 29 p. (Novoe v shizni, nauke, tekhnike. VIII Seria: Biologiya i meditsina, no.15) (MIRA 18:7)

KOSILOV, Sergey Aleksandrovich. doktor biol. nauk; DENISOVA,
Irina Mikhaylovna; NICOLAYEV, V.R., red.

[Work and rest] Trud i otdykh. Moskva, Izd-vo "Znanie,"
1965. 29 p. (Novoe v zhizni, nauke, tekhnike. VIII Seriya:
Biologiya i meditsina, no.17) (MIRA 18:8)

BLOKHIN, N.N., VASIL'YEV, P.V., kand. biol. nauk; LEBEDINSKIY, I. A.V., prof. [deceased]; YAZDOVSKIY, V.I., doktor med. nauk, prof.; CHERNOV, A.G.; NIKOLAYEV, V.R., red.

[Man in a space ship. Eighth discussion. Participants in the discussion: N.N.Blokhin and others] Chelovek v kosmicheskom korable. Beseda vos'maia. V besede uchastvuiut: N.N.Blokhin i dr. Moskva, Znanie, 1965. 30 p. (Novoe v zhizni, nauke, tekhnike. VIII seria: Biologiya i medicina, no.7) (MIRA 1814)

1. Deystvitel'nyy chlen, president AMN SSSR (for Blokhin).
2. Deystvitel'nyy chlen AMN SSSR (for Lebedinskiy).

NISIN, Igor' Yevseyevich, kand. nau. nauk, NIN. 1955, 1956, 1957.

[According to the preprint "On the nature of natural
unifody. Moscow, Izd-vo "Znanie," 1956. 31 p. (Novoe v
zhizni, nauka, tekhnika. VIII seriya: Biologiya i meditsina,
no.1) (Vol. 18, 1)

SHOSTAKOVSKIY, Mikhail Fedorovich; VLASOV, Viktor Mikheylovich;
SHOSTAKOVSKIY, Zakhar'y Fedorovich; ISHEVSKIY, Konstantin
Mikhaylovich; NIKOLAEV, V.M., red.

[Curative polymers] Tselebnye polimery. Moskva, Izd-vo
"Znanie," 1965. 43 p. (Novoe v zhizni, nauke, tekhnike.
VIII Seriya. Biologiya i meditsina, no. 8) (MIA 1965)

1. Chlen-korrespondent AN SSSR (for Shostakovskiy).

SINATROVA, Valeriya Yevgenievna; NIKOLAEVA, N. I., ed.

[Psychopharmacology] i. izdatofarmakologiya. Moskva, izdat-vo "Znanie," 1975. 22 p. (Novoe v zhizni, nauke, tekhnike. VIII Seriya: psichologiya i psichiatriya, nos. 2)

(NIA 1211)

LIBERMAN, Yefim Arsent'yevich, kand. fiz.-matem. nauk; NIKOLAYEV,
V.R., red.

["Generators" and "pumps" of a cell] "Generator" 1
"nasosy" kletki. Moskva, Izd-vo "Znanie," 1965. 61 p.
(Novoe v zhizni, nauke, tekhnike. VIII Seriya: Biologiya
i meditsina, no.5) (MIRA 18:4)

Петров, Александр Петрович, доктор биол. наук, проф.; Наш Мир,
V.R. red.

[What is heredity?] Chto takoe nasledstvennost'? Moskva,
Znanie, 1966. 30 p. (Novoe v nauke, zhizni, tekhnike.
VIII seria: Biologiya i meditsina, no.2)

(MIRA 19.1)

ASATIANI, Vladimir Samsonovich, akademik; NIKOLAYEV, V.H., red.

[Taking medicine...] Prinimani lekarstva... Moskva,
Znanie, 1966. 31 p. (Narodnyi universitet: Fakul'tet
zdorov'ia, no.2) (MIRA 19:1)

1. AN Gruzinskoy SSR (for Asatiani).

CHERNOV, A.G.; NIKOLAYEV, V.R., red.

[Problems of biophysics. Participants in the discussion:
IU.A.Vladimirov and others] Problemy biofiziki. V besede
uchastvuiut: IU.A.Vladimirov i dr. Moskva, Znanie, 1965.
63 p. (Novoe v zhizni, nauke, tekhnike. VIII Seriya:
Biologiya i meditsina, no.12) (MIRA 18:7)

KARDASHENKO, Valentina Nikolayevna, NIKOLAYEV, Valera red.

[Health of the schoolchild] Zdorov'e shkol'nika. Moskva, Znanie, 1966. 31 p. (Narodnyi universitet: Fakul'tet zdorov'ia, no.1) (MIRA 19:1)

74

CA NIKOLAYEV, V. S.

Calculations of impulses in crossed induction chambers
 V. Nikolayev, B. Nishanov, and L. Ruzhkov. *Doklady
 Akad. Nauk S.S.S.R.* 69, 681-3 (1968).--Calculations
 of impulses in 4 fast induction chambers were started at
 2000 m. Each chamber was formed by a Cu cylinder with
 receive electrode 25 cm. long and diam. 11 cm., the 4 were
 placed with axis horizontal and at the corners of a 17-cm.
 square. Ion-collection time was less than 0.05 μ sec. Cal-
 culations with and without Al filter 2.5 cm. thick around
 every chamber were compared. Calculations between pairs
 are attributed to star, around in both chambers. The results
 agree with those of other authors (cf. C.A. 68, 16456).
 P. H. Murray

Phys. Inst. im. Liseider, AS USSR

NIKOLAYEV, V'S

1057 Absorption in Graphite and ARNOLD Effect of Particles Generating Pulses in the Ionization Chamber

at 2,000 and 4,700 m. G. Guro, V. Nikolayev, L. Ruzovskaya, and I. Chuvpik. Doklady Akad. Nauk S.S.S.R. 27, 620 (1960) (in Russian).

Abstract: Graphite and ARNOLD effect of particles generating pulses in the ionization chamber, filled to moderate pressures, are due mainly to heavy particles or to nuclear disintegrations in the chamber's walls and in the filling gas. In the present paper, experiments are described, carried out at 2,000 and 4,700 m altitude with a spherical chamber of 20 cm diameter, filled with argon to 4 atm; the brass walls were 1.5 mm thick. At 4,700 m measurements were taken with and without a 20 g/cm² graphite filter compensating for the air layer between 4,700 and 2,000 m. The pressure of chamber was accounted for by mean numbers. The results showed that at 4,700 m the filter did not bring the number of pulses down to the value observed at the lower altitude, and that the difference between pulse numbers counted with and without the filters was small. The latter phenomenon must be due to the so-called density effect, produced in the chamber by the cumulative action of secondary particles. The former phenomenon, although due to a small extent to density effect, is chiefly irreducible to the disintegration of the generating component in the graphite.

U.S. GOVERNMENT PRINTING OFFICE: 1960 O 170-010

U.S. GOVERNMENT PRINTING OFFICE: 1960 O 170-010

U.S. GOVERNMENT PRINTING OFFICE: 1960 O 170-010

U.S. GOVERNMENT PRINTING OFFICE: 1960 O 170-010

U.S. GOVERNMENT PRINTING OFFICE: 1960 O 170-010

U.S. GOVERNMENT PRINTING OFFICE: 1960 O 170-010

U.S. GOVERNMENT PRINTING OFFICE: 1960 O 170-010

001137120002-4

APPROVED FOR RELEASE: 08/23/2000

001137120002-4

AUTHOR: Nikolayev, V. G. (Moscow)

TITLE: Viscous hypersonic flow behind a parabolic axisymmetric shock wave

SOURCE: AN SSSR. Izvestiya. Mekhanika i mashinostroyeniya, no. 6, 1968, 18-62

TOPIC TAGS: entropy profile, entropy layer, hypersonic viscous flow, hypersonic inviscid flow, shock wave, boundary layer, small disturbances theory, boundary layer flow interaction, vortex interaction, entropy

ABSTRACT: The inverse problem of determining the flow field behind a parabolic axisymmetric shock wave is considered with boundary layer and flow interaction taken into account. The theory of small perturbations is used to describe the hypersonic flow over slender bodies and shock waves. Although the analytical solution of the problem of entropy distribution is not obtained, it is possible to determine the inviscid flow behind the shock wave, and the entropy effect by the Synch method. Prikladnaya matematika i mekhanika, v. 24, no. 6, 1968. The formulation of the problem makes it possible to take account of the interaction related to the displacement effect of the boundary layer and also the vortex interaction. The results

Cont 1/2

L 25374-65
ACCESSION NR: AP5005173

of numerical calculations of the flow between the body and shock wave are presented. The entropy and velocity profiles at various Reynolds numbers and at various cross sections are given in graphs. Orig. art. has: 2 figures and 13 formulas. AP

ASSOCIATION: none

SUBMITTED: 19Sep64

EECL: 00

SUB CODE: M5

NO REF SCV: 003

OTHER: 003

ATD PRESS: 3182

Card 2/2

NIKOLAYEV, V.S.

USSR/Physics - Cosmic Rays

"Spatial Distribution of Penetrating Particles in Atmospheric Showers of Cosmic rays," L. Kh. Aydin, N. I. Adamovich, I. A. Ivanovskaya, V. S. Nikolayev, N. S. Talyankina, Phys Inst imeni Lobachev, Acad Sci USSR

"Zhur Skoper i Teoret Fiz" Vol XIII, No 4, pp 440-447-1957

Investigates the spatial distribution of penetrating particles in atm showers by means of counters connected to hodoscopes. Shows that the percent of penetrating particles increases proportionally to the distance to the shower's axis. The total energy of penetrating particles exceeds half the total energy of the shower. Presents proofs of existence of showers with a complex spatial structure. Indexed to Acad D. V. Shobeltaya, N. A. Dabretin, G. T. Zatepin, Received 15 Dec 51.

215761

Approved for release pursuant to E.O. 13526, Section 1.4, dated 08-23-2000.
This document contains information that is exempt from release under E.O. 13526, Section 1.4, dated 08-23-2000.
If you have any questions regarding this document, please contact the appropriate agency or office.
This document is the property of the CIA and is loaned to your agency/office. It and its contents are not to be distributed outside your agency/office.
Approved for release pursuant to E.O. 13526, Section 1.4, dated 08-23-2000.

NIKOLAYEV, V.S.

56-5-6/55

AUTHOR:

TEPLOVA, Ya.A., ~~DMITRIYEV~~, I.S., NIKOLAYEV, V.S.

TITLE:

PATYKINA, L.N.
On the Interaction of Lithium Ions with Matter. (*veimodnyy*
ionov litiya s veshchestvom, Russian)
Zhurnal Eksperim. i Teoret. Fiziki, 1957, Vol 32, Nr 5,
pp 974 - 978 (U.S.S.R.)

PERIODICAL:

ABSTRACT:

In a 72 - cm cyclotron Li^7 ions were accelerated to 0.5 to 5 MeV and their specific ionization in air and hydrogen, the equilibrium distribution of charge after passage through celluloid and their ranges in hydrogen, air, and in the photoemulsion NIKFI-YA-2 were determined. From the curves of the energy loss of the Li^7 ions in air (expressed in MeV per 1 cm path) a maximum at about $7 \cdot 10^8$ cm/sec ion velocity can be observed, whereas for hydrogen a broad maximum between 4 and $8 \cdot 10^8$ cm/sec ion velocity is to be noticed.

As a result of the charge equilibrium distribution of the Li^7 ions, after they had entered into interaction with a celluloid foil of $\sim 20 \mu g/cm^2$ thickness, the corresponding curves for 4 different charge states are given

The range curves of the Li^7 ions in the emulsion NIKFI-YA-2 are compared with those of other photoemulsions.

Card 1/2

56-2-34/47

On the Cross Section of Electron Capture.

ASSOCIATION: Moscow State University.
 (Moskovskiy gosudarstvennyy universitet.)

SUBMITTED: May 7, 1957.

AVAILABLE: Library of Congress.

CARD 3/3

56-6-3/47

AUTHORS: Nikolayev, V. S., Dmitriyev, I. S.,
Fateyeva, L. N., Teplova, Ya. A.

TITLE: The Equilibrium Distribution of Charges in a Beam of Ions of Light Elements (Ravnovesnoye raspredeleniye zaryadov v puchke ionov legkikh elementov)

PERIODICAL: Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki, 1957.
 Vol. 33, Nr 6(12), pp. 1325-1334 (USSR)

ABSTRACT: The present paper determines the equilibrium distribution of the charges of the ions of light elements with nuclear charge numbers Z from 5 to 10 after their passage through hydrogen, air, argon, and through a cellloid film. These ions had velocities of from 3,5 to 11,10⁸ cm/sec, i.e. $v \sim 1,5 - 5 v_0$, where it holds that $v_0 = e^2/h$.

As a source of the fast particles a 72 cm cyclotron was used, by means of which the following ions were accelerated:

11_B^{+1,+2,+3}; 13_C^{+2,+3}; 14_N^{+2,+3}; 16_O^{+2,+3}

and 20_{Ne}^{+2,+3}. The ion beam emerging from the cyclotron was deflected by a magnetic field after which it entered a

Card 1/3

The Equilibrium Distribution of Charges in a Beam of
Ions of Light Elements

56-6-3/47

charge of ions after passage through the film increases much more rapidly than the average charge in air. The degree of ionization of the ions investigated here in air, hydrogen, and argon in the domain $0,2 \lesssim i \lesssim 0,6$ can be represented for every gas by a special function of the parameter $v/v_0 Z^a$ where $a \sim 0,4$ holds in the case of all gases. In conclusion the authors discuss the here obtained results and compare them with those obtained by other authors. There are 7 figures, 2 tables, and 20 references, 7 of which are Slavic.

ASSOCIATION: Moscow State University (Moskovskiy gosudarstvennyy universitet)

SUBMITTED: June 28, 1957

AVAILABLE: Library of Congress

Card 3/3

AUTHORS: Teplova, Ya. A., Nikolayev, V. S., Dmitriyev, I. S., Fateyeva, L. N. SOV/56-34-3-5/55

TITLE: Ranges and Specific Ionisation of Multi-Charged Ions in Gases
(Probegi i udelnaya ionizatsiya mnogozaryadnykh ionov v gazakh)

PERIODICAL: Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki, 1958,
Vol. 34, Nr 3, pp. 540-568 (USSR)

ABSTRACT: Measurements were made/and the specific ionisation of the ions of the path length from Be to Ne at velocities of from $1.5 \cdot 10^8$ to $12 \cdot 10^8$ cm/sec in argon, air, and hydrogen. The authors start with the description of the experimental method, they here use a focused ion beam from a 72 cm cyclotron. The method of the measurement is based upon that the recorder of the charged particles, which was mounted on a movable bar, was moved on the trajectory of the beam inside the slowing down chamber to measure the relative ionisation along the beam. Also the slowing down of the ions in a gas filled chamber is described. The specific ionisation and the ranges of the ions with velocities of from $4 \cdot 10^8$ to $12 \cdot 10^8$ cm/sec were measured by means of a calibrated counter with a linear amplifier. The ranges of the nitrogen ions at velocities of from

Card 1/3