L 5100-66 EWT(d)/EPF(n)-2/EWP(v)/EWP(k)/EWP(h)/EWP(l) LIP(c) WW/BC
ACC NR: AP5027882 SOURCE CODE: UR/0103/65/026/011/1889/1899

AUTHOR: Chernyatin, V. A. (Moscow) 44

ORG: none

41
B

TITLE: On solvability of the problem of analytic design of regulators for nonautonomous systems

SOURCE: Avtomatika i telemekhanika, v. 26, no. 11, 1965, 1889-1899

TOPIC TAGS: automatic control, optimum control regulator analytic design, Lyapunov transformation 14 9,44

ABSTRACT: A study is made of the problem of the analytic design of regulators for nonautonomous systems described by linear differential equations with variable coefficients

$$\dot{\eta} = B(t)\eta + m(t)u, \qquad (1)$$

where η is the u-vector, u is the scalar representing the control response of the regulator, and B(t) and m(t) are n x n and n x 1 matrices, respectively. From the class of allowable control functions u, a control function $u = u^{o}(\eta,t)$ is sought minimizing the quadratic performance functional. The solution of this problem is reduced to determining the Lyapunov function V(η,t) which satisfies the following

Card 1/2 UDC: 62-505

ACC NR: AP5027882

conditions: 1) V(η,t) is the solution of Bellman's functional equation, 2) V(η,t) is a positive-definite function with respect to η admitting an infinitesimal limit superior and an infinitely large limit inferior. It is stressed that solution of this problem in the general case is difficult. Therefore, the author looks for necessary and sufficient conditions under which the optimal control $u^{\circ}(\mu,t)$ exists. For determining such conditions, the system (1) and the performance functional are linearly transformed by means of Lyapunov's matrix D(t). It is shown that existence of the optimal control depends entirely on the asymptotic behavior of solutions of the transformed system. The relation between the asymptotic behavior of solutions and Lyapunov's transformation is established, and it is shown on the basis of this behavior that under certain constraints upon the matrices B(t) and m(t), it is possible to obtain the necessary and sufficient conditions for the existence of the optimal control $u^{\circ}(\eta,t)$. Moreover, the optimal control can be derived in a linear form with variable coefficients. Orig. art. has: 35 formulas. [LK]

SUB CODE: IE,MA/ SUBM DATE: 15Apr65/ ORIG REF: 010/ OTH REF: 000/ ATD PRESS: 4133

Card 2/2 mcb

CHERNYATIN, V.A. (Moskva)

Solvability of a problem in the analytical design of controllers for nonautonomous systems. Avtom. i telem. 26 no.11:1889-1899 N '65. (MIRA 18:12)

1. Submitted April 15, 1965.

ACC NR: AP6029514 SOURCE CODE: UR/0103/66/000/008/0023/0034

AUTHORS: Rutkovskaya, L. D. (Moscow); Chernyatin, V. A. (Moscow)

ORG: none

TITLE: On some methods of solving problems of analytic design of controllers

SOURCE: Avtomatika i telemekhanika, no. 8, 1966, 23-34

TOPIC TAGS: automatic control design, mathematic analysis, optimal control, digital computer, algebraic equation, characteristic equation / M-20 digital computer

ABSTRACT: The problem of analytic design of controllers for linear autonomous systems of any order is examined. The problem in vector form is

$$\dot{\eta} = An + mu,$$

where η is an n-vector; A and m are n X n and n X 1 constant matrices; and u is a scalar, the control action of the controller. Optimum control is defined as

$$u^0(\eta) = -\frac{1}{2}\sum_{k=1}^{n} m_k \frac{\partial \psi(\eta)}{\partial \eta_k}.$$

Reduction of the order of nonlinearity of algebraic equations is discussed. The linear transform $\eta = Dy$ reduces the initial system to the form

 UDC: 62-551.001.24

ACC NR: AP6029544

where $$\dot{y} = By + m'u,$$

$$B = \begin{pmatrix} 0\,0\,0\,0\cdots 0\,b_{1n} \\ 1\,0\,0\,0\cdots 0\,b_{2n} \\ 0\,1\,0\,0\cdots 0\,b_{3n} \\ 0\,0\,1\,0\cdots 0\,b_{4}^{n} \\ \cdots\cdots\cdots \\ 0\,0\,0\,0\cdots 1\,b_{nn} \end{pmatrix}, \qquad m' = \begin{pmatrix} 1 \\ 0 \\ \vdots \\ \vdots \\ 0 \end{pmatrix}.$$

The solution of algebraic equations with selection of an optimizing functional is considered. It is shown that $\alpha_j > 0$ $(j = 1, \ldots, n)$ is a necessary and sufficient condition for the solvability of the problem of selection of an optimizing functional for the initial system. A second-order system is solved as an example. The authors thank A. M. Letov for formulating the problem and for useful advice. Orig. art. has: 25 formulas, 2 tables, and 1 graph.

SUB CODE: 12, 09/ SUBM DATE: 08Jul65/ ORIG REF: 009

Card 2/2

GOLUTVINA, A.N., kandidat meditsinskikh nauk.,; IKONNIKOV, N.N.,; ARALOVA, Z.T.,; CHERNYATINA, A.N.,; SOTRAPINSKAYA, T.B.

Biomycin in the treatment of gonorrhea and nongonorrheal diseases of the urogenital system. Vest. ven.i derm. 6:46-48 N-D '55. (MLRA 9:5)

1. Iz Sverdlovskogo oblastnogo nauchno-issledovatel'skogo kozhno-venerologicheskogo instituta i oblastnogo dispansera (dir.-kandidat meditsinskikh nauk A.V. Bakhireva; i.o. glavnogo vracha oblastnogo dispansera N.P. Toporkov)

(ANTIBIOTICS, ther. use
biomycin, in
gonorrheal & non-gonorrheal dis. of urogenital system)
(UROGENITAL SYSTEM, dis.
ther., biomycin)
(GONORRHEA, ther.
biomycin))

CHERNYATINA, T.V.

Analysis of the treatment of jaw fractures. Stomatologiia 42 no.3:64-66 My-Je '63 (MIRA 17:1)

1. Iz kafedry khirurgicheskoy stomatologii (zav. - dotsent P.V.Naumov) Kalininskogo meditsinskogo instituta.

CHERNYATINA, T.V., assistent

Surgical treatment of fractures of the upper jaw. Trudy KGMI no.10:426-428 '63. (MIRA 18:1)

1. Iz kafedry khirurgicheskoy stomatologii (zav. kafedroy dotsent P.V.Naumov) Kalininskogo gosudarstvennogo meditsinskogo instituta.

CHERNYATINA, T.V.

Isolated fracture of the coronoid process of the mandible.
Stomatologiia 40 no.1:97-98 Ja-F '61. (MIRA 14:5)

1. Iz kafedry khirurgicheskoy stomatologii (zav. - dotsent P.V. Naumov) Kalininskogo meditsinskogo instituta (direktor - dotsent A.M.Kushnev).

(JAWS—FRACTURE)

CHERNYAUSKAS, G.I., ~~XXIX~~ Cand Agr Sci -- (diss) "Effect of certain agricultural engineering procedures on the yield of ~~the seeds of~~ red clover under conditions of the Lithuanian SSR." Kaunas, 1956, 18 pp (Min of Agr USSR. Lithuanian Agr Acad) 130 copies (KL, 27-58, 115)

PIROZHKOVA, V.P.; LITVINOVA, T.I.; CHERNYAVSKAYA, S.G.

Improvement of the local method of separation of nonmetallic inclusions. Zav. lab. 31 no.9:1106-1107 '65. (MIRA 18:10)

1. Ukrainskiy nauchno-issledovatel'skiy institut spetsial'nykh staley, splavov i ferrosplavov.

ZHALYBIN, V.I.; SINEL'NIKOV, M.I.; MININZON, R.D.; MOSHKEVICH, Ye.I.; MURINA, K.N.; CHERNYAVSKAYA, S.G.; KHRISTOFOROVA, L.I.; POTAPOVA, V.P.

Nature of spiderlike pitting corrosion cracks of steel, and ways for their elimination. Stal' 25 no.10:941-944 O '65. (MIRA 18:11)

1. Institut "UkrNIISpetsstal'" i zavod "Dneprospetsstal'".

L 11201-66 EWT(m)/EWP(j) RM

ACC NR: AP6002865 SOURCE CODE: UR/0286/65/000/024/0021/0021

INVENTOR: Grinblat, M. P.; Bartashev, V. A.; Klebanskiy, A. L.; Chernyavskaya, T. L.; Prons, V. N.; Sokolov, Ye. I.; Sharov, V. N.; Saratovkina, T. I.

29
B

ORG: none

TITLE: Preparative method for diaryl- or dialkyl-chlorophosphazobis(perfluoroalkyl)phosphines. Class 12, No. 176896 [announced by the All-Union Scientific Research Institute of Synthetic Rubber im. Academician S. V. Lebedev (Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 24, 1965, 21

TOPIC TAGS: organic phosphorus compound 44,55

ABSTRACT: An Author Certificate has been issued for a preparative method for diaryl or dialkyl-chlorophosphazobis(perfluoroalkyl)phosphines [sic]. Diaryl- or dialkyl-phosphorus trichlorides are reacted with bis(perfluoroalkyl)aminophosphines in the presence of tertiary amines at -60 to -40C in an inert solvent, such as benzene. [SM]

SUB CODE: 07/ SUBM DATE: 090ct64/ ATD PRESS: 4192

Card 1/1 UDC: 547.419.1.07

L 44350-66 EWT(m)/EWP(t)/ETI/EWP(k) IJP(c) JD/HW

ACC NR: AP6012610 SOURCE CODE: UR/0182/66/000/004/0017/0019

AUTHOR: Chernyavskaya, S. G.; Malinovskaya, T. I.; Moshkevich, L. D.; Lizhdvoy, R. A.

ORG: none

32
B

TITLE: Effect of the flowsheet of technological deformation, and of the regimes of heating and homogenizing on the structural banding of ShKh15 steel

SOURCE: Kuznechno-shtampovochnoye proizvodstvo, no. 4, 1966, 17-19

TOPIC TAGS: machine steel, metal grain structure, metal rolling, metal forging, homogenization heat treatment / ShKh15 machine steel

ABSTRACT: The problems of maximizing the homogeneity of the structure and properties of metal are particularly acute as regards the special steels used in the machine building industry: by way of an example, the authors consider the effect of various schemes of deformation (rolling, forging, etc.) on the development of coarse structural banding in ShKh15 steel (1.00% C, 0.018% P, 1.43% Cr, 0.006% S, 0.28% Si, 0.11% Ni, 0.35% Mn, 0.11% Cu), since such banding affects adversely the quality of this steel. Experimental investigation of various types of deformation and heat treatment and homogenizing established the following:

Card 1/2 UDC: 669.14.018.26

L 44350-66

ACC NR: AP6012610

structural banding of rolled stock is not reduced by forging it into a square shape or by its hot upsetting. On the other hand, the homogenizing of 140x140 mm billets in laboratory conditions at 1160°C for 10 hr reduces the extent of structural banding from 3.5-4.5 to 2.0, and for 20 hr, to 1.5. Homogenizing at 1160°C for 2 hr with respect to the ingots obtained from a vacuum arc furnace reduces the extent of structural banding from 3.5 to 1.5 in rolled stock of 38 mm diameter. Reheating of intermediate 180x180 mm billets during the forging of the ingot into 140x140 mm square shape reduces the extent structural of banding, but it is technically not as convenient as the homogenizing of ingots combined with their heating prior to forging. Orig. art. has: 4 figures, 2 tables.

SUB CODE: 11, 13/ SUBM DATE: none/

Card 2/2 blg

L 24517-66 EWT(l)/EWT(m)/EWP(j)/T IJP(c) WW/RO/RM

ACC NR: AP6009512 SOURCE CODE: UR/0413/66/000/005/0021/0022

AUTHOR: Grinblat, M. P.; Klebanskiy, A. L.; Bartashev, V. A.; Prons, V. N.; Chernyavskaya, T. L.; Sokolov, Ye. I.; Sharov, V. N; Markova, V. I.; Saratovkina, T.I.

ORG: none

TITLE: Preparation of phosphonitrile derivatives. Class 12, No. 179311 [Announced by the All-Union Scientific-Research Institute of Synthetic Rubber (Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 5, 1966, 21-22

TOPIC TAGS: phosphonitrile, phosphonitrile derivative

ABSTRACT: An Author Certificate has been issued describing a method for synthesizing phosphonitrile derivatives by the interaction of organophosphorus compounds with sodium azides in a solvent or with ammonia followed by treatment with chlorine and tertiary amine during cooling. To obtain phosphonitrile derivatives with alternating substituents at the phosphorus atom, dialkyl(diaryl)-chlorophosphazobis-(perfluoro alkyl)phosphines are suggested for use as initial organophosphorus compounds. [LD]

SUB CODE: 11/ SUBM DATE: 18Jan65

Card 1/1 BLG UDC: 547.419.1.07

ZUBAKOV, S.M.; ASPANDIYAROVA, S.G.; KORZHENEVSKIY, A.I.; CHERNYAVSKAYA, V.P.; OSIPOVA, L.Ya.

Using a treated Kimpersay chromite for the production of magnesia refractories. Ogneupory 30 no.12:33-37 '65.
(MIRA 18:12)

1. Institut metallurgii i obogashcheniya AN KazSSR (for Zubakov, Aspandiyarova). 2. Zavod "Magnezit" (for Korzhenevskiy, Chernyavskaya, Osipova).

(N) L 11775-66 EWT(1)/EWA(h)

ACC NR: AP6001574 SOURCE CODE: UR/0120/65/000/006/0097/0100

50
49
B

AUTHOR: Izokh, V. V.; Chernyavskiy, A. F.

ORG: Belorussian State University, Minsk (Belorusskiy gosudarstvennyy universitet)

TITLE: High-speed circuit for standarization and selection of photomultiplier signals for time converters

SOURCE: Pribory i tekhnika eksperimenta, no. 6, 1965, 97-100

TOPIC TAGS: time optimal control, time signal, multichannel analyzer, photomultiplier, pulse signal

ABSTRACT: A circuit is proposed for shaping and selecting photomultiplier pulses for multichannel time analyzers. The device provides optimum time information in a wide dynamic range (0.05—10 volts) at a high average photomultiplier prf (minimum time between pulses $\geq 2.5 \cdot 10^{-8}$ sec). The circuit is based on tunnel diodes and transistors. A block diagram of the unit is given (Fig. 1). In the initial state, gates 1 and 2 are closed by voltages from flip-flops F_1 and F_2, respectively. Gate 1 is opened when the signal indicating the end of the preceding information is fed from the control unit of the analyzer to the input

Card 1/3 UDC: 621.374

L 11775-66

ACC NR: AP6001574

Signal indicating end of information processing

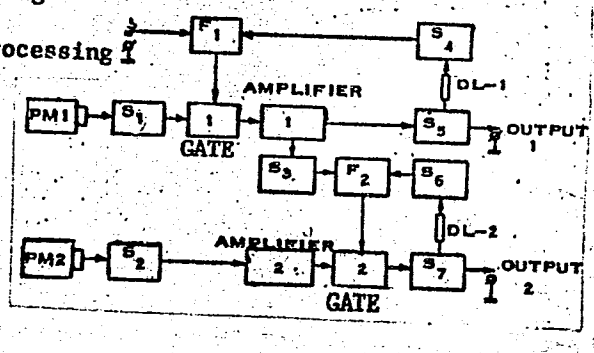


Fig. 1. Block diagram of the device

Card 2/3

L 11775-66
ACC NR: AP6001574

of F_1. A regular pulse from photomultiplier PM1, corresponding to the beginning of the time interval to be measured, appears at output 1 of the unit after passing through shaper S_1, amplifier 1, and shaper S_5. A pulse from S_5 passes through delay line DL-1 and shaper S_4 to reset F_1 and gate 1 to the initial position. Gate 1 is closed no more than $2 \cdot 10^{-8}$ sec after the circuit clamps the signal from PM1. The pulse from amplifier 1 is shaped by S_3 and triggers F_2, opening gate 2. There is no more than 10^{-9} sec between clamping of the signal from PM1 and release of gate 2. The next pulse from PM2, corresponding to the end of the time interval being measured, appears at output 2 of the circuit after passing through shaper S_2, amplifier 2, gate 2, and shaper S_7. The pulse from shaper S_7 is fed through delay line DL-2 and shaper S_6 to trigger F_2 and close gate 2. There is no more than $2 \cdot 10^{-8}$ sec between clamping of the signal from PM2 and shutoff of gate 2. The signals at outputs 1 and 2 have a constant amplitude of 0.6 volts and a duration of $2 \cdot 10^{-8}$ sec in a wide dynamic range of photomultiplier signals and may be used for direct triggering of time converters. A schematic diagram of the device is given, and the design and operation of the individual elements are briefly described. The authors thank A. N. Pisarevskiy for his interest in this work and for several valuable comments. Orig. art. has: 3 figures. [08]

SUB CODE: 09 / SUBM DATE: 01Oct64 / ORIG REF: 004 / OTH REF: 001/ ATD PRESS: 4180

Card 3/3 pw

L 1616-66

ACCESSION NR: AP5021372 UR/0120/65/000/004/0230/0232
621.374

AUTHORS: Yefimchik, M. K.; Izokh, V. V.; Chernyavskiy, A. F. 34 B

TITLE: Semiconductor digital vernier converter

SOURCE: Pribory i tekhnika eksperimenta, no. 4, 1965, 230-232

TOPIC TAGS: vernier converter, semiconductor equipment, transistorized circuit

ABSTRACT: The basic circuit for a nanosecond range vernier converter for nuclear electronics is presented. The use of semiconductor devices (tunnel diodes, etc) in the converter insures high accuracy, a high response rate, and a large range of measured times, as well as small dimensions, small power requirements, and simplicity of design. The resolving time of the converter can be selected in the range 10^{-10} to 10^{-9} sec, and measurements are made in the time range $5 \cdot 10^{-10}$–$2 \cdot 10^{-7}$ sec. Orig. art. has: 2 figures. [04]

ASSOCIATION: Belorusskiy gosudarstvennyy universitet, Minsk (Belorussian State University)

SUBMITTED: 06Jun64 ENCL: 00 SUB CODE: EC

NO REF SOV: 007 OTHER: 000 ATD PRESS: 4093

Card 1/1

L 35365-66 EWT(1)/EEC(k)-2/T IJP(c)
ACC NR: AR6017788 SOURCE CODE: UR/0058/66/000/001/A043/A043

AUTHOR: Chernyavskiy, A. F.; Izokh, V. V.; Shushkevich, S. S.; Yefimchik, M. K.

TITLE: Dynamic devices using tunnel diodes 15

SOURCE: Ref. zh. Fizika, Abs. 1A390 35 3

REF SOURCE: Tr. 6-y Nauchno-tekhn. konferentsii po yadern. radioelektron. T. 1. M., Atomizdat, 1964, 161-197

TOPIC TAGS: tunnel diode storage, multichannel analyzer, delay line, gallium arsenide, memory time

ABSTRACT: The authors consider the advantages of the vernier method of time transformation as compared with other methods which are used in multichannel time analyzers (start-stop method and the overlap method). It is noted that although at the present time the known vacuum-tube vernier converters provide high accuracy of measurement, they cannot satisfy many specific requirements, such as increased reliability, small power consumption, small dimensions, etc. Several time-conversion circuits of the vernier type using semiconductor elements which satisfy many of these requirements, have been developed. The circulation generators used in these devices are two types of dynamic memories with tunnel diodes. The operating principle of the generators is considered in detail; the schematic diagrams and time diagrams illustrating their operations are presented. Both circulation generator circuits were used in a time analyzer made up completely of semiconductor elements. With the aid of each of them,

Card 1/2

L 35365-66

ACC NR: AR6017788

reliable memorization of pulses with duration not longer than 30 nsec was obtained for gallium-arsenide tunnel diodes and a PC-400-7-12 cable used in the electromagnetic delay line. M. Lomanov. [Translation of abstract]

SUB CODE: 20, 09

Card 2/2

ACC NR: AR6021239 SOURCE CODE: UR/0271/66/000/003/B061/B061

AUTHOR: Chernyavskiy, A. F.; Izokh, V. V.; Shushkevich, S. S.; Yefimchik, M. K.

TITLE: Dynamic systems based on tunnel diodes

SOURCE: Ref. zh. Avtomat telemekh i vychisl tekhn, Abs. 3B509

REF SOURCE: Tr. 6-y Nauchno-tekhn. konferentsii po yadern. radioelektron. T. 1. M., Atomizdat, 1964, 161-197

TOPIC TAGS: time measurement, multichannel analyzer, tunnel diode, dynamic system

ABSTRACT: The authors examine multichannel time analyzers which use the vernier method of time interval to digital code conversion. Highly reliable, small, and low-power consuming converters based on semiconductor elements are described. Two types of tunnel diode dynamic memory units are used as cycling generators in these systems. The operation of the basic circuits is described and their corresponding timing diagrams are supplied. [Translation of abstract] 4 illustrations and bibliography of 5 titles. V. S.

SUB CODE: 09

Card 1/1 UDC: 681.142.621

Accession Nr L 45485-66 EWP(t)/ETI IJP(c) JD/WB

ACC NR: AT6033335 SOURCE CODE: HU/2504/65/051/03-/0361/0379

AUTHOR: Varga, J.--Varga, Y.; Sebestyen, Gy.--Shebesht'yen, D.; Shalnew, K. K.--Shal'nev, K. K.; Tschernawskij, B. A.--Chernyavskiy, B. A.

ORG: [Varga; Sebestyen] Technical University, Budapest; [Shalnew; Tschernawskij] Institute for Mechanics, AN SSSR, Moscow

TITLE: Investigation of the scale effect in cavitation corrosion

SOURCE: Academia scientiarum hungaricae. Acta technica, v. 51, no. 3-4, 1965, 361-379

TOPIC TAGS: corrosion, cavitation

ABSTRACT: This article is the Hungarian publication of an article published in Zh. Prikl. Mekh. i Tekh. Fiz. AN USSR, 1963, no. 3, pp. 122-129. The methodologies employed at the authors' Institutes for the investigation of the scale effect were described. This investigation covers the subject on the basis of an energetical parameters. The equipment used and the experimental conditions employed were discussed and an evaluation of the work is made. Orig. art. has: 11 figures, 2 formulas and 1 table. [Orig. art. in German] [JPRS: 33,732]

SUB CODE: 11, 20 / SUBM DATE: 23Nov63 / ORIG REF: 003 / SOV REF: 008
OTH REF: 018

Card 1/1

0920 1356

CHER[illegible] ..L., kand.tekhn.nauk, DORFMAN, Yu.I., inzh.; SHIMBERG, Ye.I., inzh.

Design of the coupling box and body of TE10 diesel locomotives for [illegible]. Vest.TSNII MPS 24 no.3:24-28 '65. (MIRA 18:8)

1. Khar'kovskiy politekhnicheskiy institut imeni V.I.Lenina i Khar'kovskiy zavod transportnogo mashinostroyeniya imeni V.A. Malysheva.

CHERNYAVSKIY, E.I., gornyy inzh.; ALEKHIN, A.S., gornyy inzh.; BEKETOV, V.N., gornyy inzh.

A method of controlling sulfide dust explosions in borehole firing. Gor. zhur. no.9:69-70 S '65. (MIRA 18:9)

1. Ural'skiy nauchno-issledovatel'skiy i proyektnyy institut mednoy promyshlennosti, Sverdlovsk.

L 23216-66 EWT(d)/EWP(k)/EWP(1)

ACC NR: AP6013582 SOURCE CODE: UR/0144/65/000/010/1181/1182

AUTHOR: Avilov-Karnaukhov, B. N.; Bogush, A. G.; Gikis, A. F.; Drozdov, A. D.; Malov, D. I.; Sinel'nikov, Ye. M.; Brusentsov, L. V.; Denisov, A. A.; Pal'shau, M. V.; Polyakov, B. A.; Chernyavskiy, F. I.; Burok, V. S.; Gordeyev, V. I.; Kazhdan, A. E.; Kovalev, V. Ye.; Kuranyy, E. G.; Potapenko, V. Ya.

ORG: none

TITLE: Professor G. M. Kayalov on the occasion of his 60th birthday and 37 years of pedagogical activities

SOURCE: Izvestiya vysshikh uchebnykh zavedeniy. Elektromekhanika, no. 10, 1965, 1181-1182

TOPIC TAGS: electric engineering personnel, academic personnel

ABSTRACT: Doctor of Engineering Sciences, Professor of RIIZhT [Rostovskiy institut inzhenerov zheleznodorozhnogo transporta; Rostov Institute of Railroad Engineers], Georgiy Mikhaylovich KAYALOV was born on 26 September 60 years ago. He began his working career as a standby electrical construction worker at the Novorossiysk cement factory. In 1929 he graduated from the Novocherkassk Polytechnical Institute, and between 1928 and 1947 worked in the designing section of the "Elektroprom" trust. Sub-

Card 1/2

L 23216-66
ACC NR: AP6013582

sequently, he joined the Rostov department of the GPI /Gosudarstvennyy proyektnyy institut; State Designing Institute/ "Tyazhpromelektroproyekt" where he advanced from a technician of the designing department to its chief engineer. From 1933 to 1962 he was docent of the department of electrification of industrial enterprises of the NPI /Novocherkasskiy politekhnicheskiy institut imeni Sergo Ordzhonikidze; Novocherkassk Politechnic Institute im. Sergo Ordzhonikidze/; he taught as professor until 1965 and presently is a professor of the RIIZhT. He published more than 70 scientific works, including studies of flywheel-containing electric motors, investigations of electrical loads of industrial enterprises, analyses of basic features of real load graphs, (including their probabilistic modeling), proposals for peak load calculation methods (based on the theory of mass servicing) and developments of methods for the calculation of extremal loads of heavy consumers, for the study of random graphs of reactive loads, for the evaluation of electric load fluctuations, and the like. G. M. KAYALOV was also active in the Party, professional, and scientific organizations. He is a holder of the "For Outstanding Work During the Great Patriotic War of 1941-1945 gg." medal and the "Badge of Honor" decoration. Orig. art. has: 1 figure. [JPRS]

SUB CODE: 09, 05 / SUBM DATE: none

Card 2/2 RB

L 33115-66

ACC NR: AP6024083 SOURCE CODE: UR/0144/66/000/002/0235/0236

AUTHOR: Zav'yalov, A. S.; Got'man, A. A.; Molchanov, V. D.; Kramyuk, N. P.; Agranovskiy, K. Yu.; Borgor, A. Ya.; Greyor, L. K.; Yesakov, V. P.; Miller, Ye. V.; Fyatman, K. I.; Abryutin, V. N.; Gubanov, V. V.; Oranskiy, M. I.; Yevseyev, N. Ye.; Merkin, G. B.; Sinol'nikov, Ye. M.; Avilov-Karnaukhov, B. N.; Bogush, A. G.; Belyayev, I. P.; Pekker, I. I.; Chernyavskiy, F. I.

ORG: none

TITLE: O. B. Bron (on his 70th birthday)

SOURCE: IVUZ. Elektromekhanika, no. 2, 1966, 235-236

TOPIC TAGS: electric engineering personnel, circuit breaker

ABSTRACT: Osip Borisovich Bron was born in 1896 in Klintsi. In 1920, he graduated from the physics-math faculty of Khar'kov Technological Institute. He became a professor in 1930. He defended his doctor's thesis in 1940. During the second world war, he was in the navy. After demobilization in 1950, Engineer Colonel Bron went to work teaching at the Leningrad Industrial Correspondence School. He became the head of the Chair of Theoretical Bases of Electrical Technology in 1958. He is closely associated with scientific and development work, and has cooperated closely in this area with the Leningrad "Elektrosila" plant since 1946. His work has been in the areas of spark-damping and high-power circuit breakers. He has published over 140 scientific works and 19 inventions. [JPRS]

SUB CODE: 05, 09 / SUBM DATE: none

Card 1/1

AVILOV-KARNAUKHOV, B.N.; BOGUSH, A.G.; GIKIS, A.F.; DROZDOV, A.D.; MALOV, D.I.; SINEL'NIKOV, Ye.M.; BRUSENTSOV, L.V.; DENISOV, A.A.; PAL'SHAU, M.V.; POLYAKOV, F.I.; CHERNYAVSKIY, F.I.; BUROK, V.S.; GORDEYEV, V.I.; KAZHDAN, A.E.; KOVALEV, V.Ye.; KURENNYY, E.G.; POTAPENKO, V.Ya.

Professor Georgii Mikhailovich Kaialov, 1905- ; on his 60th birthday and the 37th anniversary of his theoretical and educational work. Izv. vys. ucheb. zav.; elektromekh. 8 no.10:1181-1182 '65. (MIRA 18:11)

KABANOV, Ye., general-mayor aviatsii, Geroy Sovetskogo Soyuza;
CHERNYAVSKIY, N., polkovnik, voyennyy shturman, kand. tekhn. nauk

Young people on aviation professions. Kryl. rod. 16 no.10:18-21 O '65. (MIRA 18:12)

CHERNYAVSKIY, V. (Yaroslval')

Transducer for coded frames. Radio no.7:49 Jl '65. (MIRA 18:9)

KOBEZA, I.I.; GARCHENKO, V.T.; CHERNYAVSKIY, V.G.; ZAYTSEV, I.I.; TONKONOG, N.G.

Technical and economic indices of the operation of open-hearth furnaces with the use of intensifiers. Met. i gornorud. prom., no.3:15-22 My-Je '65. (MIRA 18:11)

KOBEZA, I.I.; BELOKUROV, E.S.; CHERNYAVSKIY, V.G.; POGORELYY, V.P.; KORKOSHKO, N.M.; VORONOV, Yu.F.; PRON'KIN, V.Ye.; BABENYSHEV, M.A.

Heating a 600-ton (mega-gram) single channel open-hearth furnace with self-carburetting natural gas. Stal' 25 no.12:1139-1143 D '65. (MIRA 18:12)

ACC NR: AR6021760 SOURCE CODE: UR/0275/66/000/003/B008/B009

AUTHOR: Chernyavskiy, V. P.

TITLE: Thermal conductivity and thermo-emf of solid solutions of the $CuInTe_2$-2CdTe system

SOURCE: Ref. zh. Elektronika i yeye primeneniye, abs. 3B66

REF SOURCE: Sb. Materialy dokl. 1-y Nauchno-tekhn. konferentsii Kishinevsk. politekhn. in-ta. Kishinev, 1965, 73-74

TOPIC TAGS: thermal conduction, thermoelectromotive force

ABSTRACT: The thermal conductivity and the thermo-emf of $CuInTe_2$-2CdTe solid solutions were investigated. Single-crystal specimens cut from large-crystal lumps were tested at room temperature. Experimental data is reported for $CuInTe_2$ (λ = 0.0074 cal/cm. degree.sec) and for CdTe (λ = 0.011 cal/cm.degree.sec). As the CdTe content increases, the thermal conductivity first decreases reaching a minimum (λ = 0.004 cal/cm.degree.sec) at $CuInTe_2$-2CdTe and then increases. A plot of differential thermo-emf vs. alloy composition has a local maximum (α = +470 μ v/degree) at this composition: $7CuInTe_2$-3(2CdTe). The sign of the thermo-emf of all tested alloys points up to a hole-type conductance. Values of z-parameter for the above alloys are reported. The maximum is: z = 0.0081 v.sec.degree/cm.cal for $CuInTe_2$. H. M. [Translation of abstract]

SUB CODE: 20, 09

Card 1/1 UDC: 539.293:541.412

CHERNYAVSKIY, V.V.

Electron device for measuring the width of tire cord. Kauch. i rez. 24 no.7:43-47 Jl '65. (MIRA 18:8)

1. Proyektno-tekhnologicheskiy i nauchno-issledovatel'skiy institut VVSNKh, g. Yaroslavl'.

CHERNYAVSKIY, Ya. (Kolomna)

Schoolchildren are waiting... Kryl. rod. 16 no.12:15 D '65.
(MIRA 18:12)

CHERNYAVSKIY, Ya.L., kand. tekhn. nauk

Increasing the durability of cam mechanisms of automatic machines. Trudy KHIIT no.76:54-58 '65. (MIRA 18:9)

SHLEYSNER, Rikhard Rikhardovich; CHERNYAYEV, B.I., retsenzent; MIKHAYLOVA, O.F., red.

[Repair of home magnetic tape recorders] Remont bytovykh magnitofonov. Moskva, Legkaia industriia, 1965. 160 p. (MIRA 19:1)

CHERNYAYEV, E.G. [Cherniaiev, IE.H.]

Characteristics of the azygos veins of some semiaquatic insectivores and rodents. Dop. AN URSR no.12:1638-1640 '65.
(MIRA 19:1)

1. Institut zoologii AN UkrSSR. Submitted December 30, 1964.

PALKIN, V.A.; KUZ'MINA, N.N.; CHERNYAYEV, I.I.

Heat capacities of chloroammonium compounds of bivalent platinum. Zhur. neorg. khim. 10 no.1:41-48 Ja '65.
(MIRA 18:11)

1. Institut obshchey i neorganicheskoy khimii imeni Kurnakova AN SSSR. Submitted April 20, 1964.

CHERNYAYEV, I.I.; MURAVEYSKAYA, G.S.; KORABLINA, L.S.

Effect of hydrochloric acid on nitrodiammines of bivalent platinum. Zhur. neorg. khim. 10 no.1:300-302 Ja '65.
(MIRA 18:11)

1. Institut obshchey i neorganicheskoy khimii imeni Kurnakova AN SSSR. Submitted May 20, 1964.

PALKIN, V.A.; KUZ'MINA, N.N.; CHERNYAYEV, I.I.

Enthalpies of the formation of platinum complex ammonium chloride compounds of platinum. Zhur.neorg.khim. 10 no.8:1792-1798 Ag '65. (MIRA 19:1)

1. Institut obshchey i neorganicheskoy khimii imeni N.S. Kurnakova AN SSSR.

CHERNYAYEV, I.I.; LEONOVA, T.N.

Some monocyano compounds of platinum (IV). Zhur.neorg.khim. 10 no.8:1935-1936 Ag '65. (MIRA 19:1)

1. Submitted June 8, 1964.

CHERNYAYEV, I.I.; MURAVEYSKAYA, G.S.; KORABLINA, L.S.

Reaction of methylamine and ethylenediamine nitrodiamines of Pt^{II} with HCl. Zhur. neorg. khim. 10 no.8:1950-1951 Ag '65. (MIRA 19:1)

1. Institut obshchey i neorganicheskoy khimii imeni N.S. Kurnakova AN SSSR. Submitted December 1964.

CHERNYAYEV, I.I.; ZEMSKOV, S.V.; PTITSYN, B.V. [deceased]

Oxidation-reduction properties of nitrite complexes of platinum. Zhur.neorg.khim. 10 no.11:2404-2410 N '65.
(MIRA 18:12)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR.
Submitted May 5, 1964.

NAZAROVA, L.A.; CHERNYAYEV, I.I.; KOLESNIKOVA, A.N.

Nitroso compounds of platinum and the reaction of bivalent platinum compounds with nitric acid. Zhur.neorg.khim. 10 no.12:2828-2830 D '65. (MIRA 19:1)

1. Institut obshchey i neorganicheskoy khimii AN SSSR imeni Kurnakova.

CHERNYAYEV, I.I.; ADRIANOVA, O.N.; FEDOTOVA, T.N.

Spectropolarimetric study of the inner-sphere chlorination reaction of amines in platinum (IV) complexes. Zhur.neorg. khim. 11 no.1:43-53 Ja '66.

(MIRA 19:1)

1. Submitted December 14, 1964.

KOZLOV, V.A.; CHERNYAYEV, N.V.; ZILOTIN, Yu.V., red.

[Goryachinsk Health Resort] Kurort Goriachinsk. Ulan-Ude, Buriatskoe knizhnoe izd-vo, 1965. 50 p.
(MIRA 18:11)

L 39815-66 EWI(m)/ETC(f)/EWG(m)/EWP(t) IJP(c) RDW/JD/GD-2

ACC NR: AP6011011 SOURCE CODE: UR/0080/66/039/003/0528/0537

AUTHOR: Chernyayev, V. N.; Kozhitov, L. V.; Pobedskaya, L. G.

ORG: Moscow Institute of Steel and Alloys (Moskovskiy institut stali i splavov)

TITLE: Study of high purification of tellurium oxide by fractional distillation

SOURCE: Zhurnal prikladnoy khimii, v. 39, no. 3, 1966, 528-537

TOPIC TAGS: tellurium, vacuum distillation, fractional distillation, metal purification

ABSTRACT: Fractional distillation of technical tellurium was carried out in apparatus used earlier for the distillation of mercury, cadmium, and zinc. The residual pressure at the exit from the bubble plate column was no higher than 1×10^{-5} mm Hg. A tellurium bar 1-1.5 m long was obtained after the experiment. Analyses of specimens taken from this bar at 5-10 cm intervals determined the composition of the various fractions and the behavior of the impurities during distillation. The metal obtained was spectroscopically pure with respect to the content of the impurities studied (Se, S, Fe, Mg, Al, Bi, Sb, Au, Pb, As, Sn, Cu, Si). Results of the

Card 1/2 UDC: 66.048 + 546.24

L 39815-66

ACC NR: AP6011014

analysis permit the recommendation of vacuum distillation for the preparation of high-purity tellurium. Zone refining was found to be ineffective in removing selenium and sulfur from tellurium. Orig. art. has: 4 figures and 4 tables.

SUB CODE: 11/ SUBM DATE: 31Mar65/ ORIG REF: 012/ OTH REF: 013

Card 2/2 MLP

CHERNYAYEV, Yu.S., starshiy prepodavatel'

Methods for transforming infrared images to video images. Izv. LETI no.52:115-140 '64. (MIRA 18:9)

CHEMOV, [illegible].

Underground waters of the cis-Ural portion of Orenburg Province and their structural association. Trudy Sver. gor. inst. no.43: 134-140 '63. (MIRA 18:7)

CHERNYAYEVA, V.A.

Spectral analysis of tantalum. Zav.lab. 31 no.4:443 '65.
(MIRA 18:12)

1. Moskovskiy elektrolampovyy zavod.

PSHENICHNYY, A.Ye., kand. sel'skokhoz. nauk; CHERNYKH, M.A.

Central Chernozem Region. Zemledelie 27 no.9:74-76 S '65. (MIRA 18:10)

1. Nauchno-issledovatel'skiy institut sel'skogo khozyaystva TSentral'no-chernozemnoy polosy.

CHERNYKH, N.A.

Lily of the valley and the problems connected with its study. Rast. res. 1 no.2:278-283 '65. (MIRA 18:11)

1. Khar'kovskiy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut.

CHERNYKH, N.I.

Some extremum problems for polynomials. Trudy Mat. inst. 78:48-89 '65. (MIRA 18:12)

L 28896-66 EWT(d)/T/EWP(1) LIP(c)
ACC NR: AP6019166 SOURCE CODE: UR/0020/65/162/002/0290/0293

AUTHOR: Chernykh, N. I. 21 B
ORG: Sverdlovsk Section, Mathematics Institute im. V. A. Steklov, AN SSSR (Sverdlovskoye otdeleniye Matematicheskogo instituta AN SSSR)
TITLE: Approximation of functions by related polynomials
SOURCE: AN SSSR. Doklady, v. 162, no. 2, 1965, 290-293
TOPIC TAGS: approximation, polynomial, analytic function
ABSTRACT: The problem of the approximation of functions by algebraic or trigonometric polynomials with coefficients related by a linear dependence was first studied by V. A. MARKOV. The present article is devoted to Jackson-type evaluations for the best approximations of a continuous function in the case of homogeneous, linear relationships of a certain special form. For this type of relationship the article indicates the exact order of the upper bound of the best approximations for a class of functions which are analytic and bounded in a given region. This problem was solved by N. A. AKHIYEZER for approximations without relationships. This paper was presented by Academician S. N. Bernshteyn on 2 December 1964. Orig. art. has: 11 formulas. [JPRS]

SUB CODE: 12 / SUBM DATE: 23Nov64 / ORIG REF: 007

Card 1/1 UDC

ACC NR: AR6035064 SOURCE CODE: UR/0282/66/000/008/0003/0003

AUTHOR: Molchanova, V. D.; Chernykh, N. P.

TITLE: Investigation of the hydrogen effect on the properties of welds in high-pressure equipment

SOURCE: Ref. zh. Khimicheskoye i kholodil'noye mashinostroyeniye, Abs. 8.47.14

REF SOURCE: KhISA. 2-y Mezhdunar. kongr. khim inzh. tekhn., khim. oborud. i avtomat., Marianske lazne, 1965 g. S. l., 1965, Ye. 4.6

TOPIC TAGS: high pressure equipment, metal welding, steel microstructure, hydrogen absorption, hydrogen absorption resistance

ABSTRACT: The results of investigations have shown that the resistance of welded joints to hydrogen absorption depends on the chemical composition of the deposited metal and on its microstructure. [Translation of abstract] [NT]

SUB CODE: 11/

Card 1/1 UDC: 66.02.001

L 22702-66 EWT(l)/T . IJP(c) JXT(CWW)/CW

ACC NR: AP6010439 SOURCE CODE: UR/0386/66/003/005/0219/0223

AUTHOR: Kokurin, Yu. L.; Kurbasov, V. V.; Lobanov, V. F.; Mozhzherin, V. M.; Sukhanovskiy, A. N.; Chernykh, N. S.

ORG: Physics Institute im. P. N. Lebedev, Academy of Sciences SSSR (Fizicheskiy Institut Akademii nauk SSSR)

TITLE: Measuring the distance to the moon by an optical method

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 3, no. 5, 1966, 219-223

TOPIC TAGS: moon, moon earth distance, distance measurement, moon location, optical location, laser application

ABSTRACT: A description is given of the experimental measurement of the distance to the moon by means of an optical locator. A schematic of the locator is shown in Fig. 1. Ruby laser 1 and photomultiplier 2 are fixed rigidly in the Kude focus of telescope 3. A tunable interference filter 4 is placed in front of the photomultiplier and behind diaphragm 5. Mirror 6 can be automatically switched from receiving to transmitting operations. Photomultiplier output amplifier and pulse shaper 7 follow 2, and the measurement of the time intervals between the emission and reflection (from the moon) of laser pulses is made by

Card 1/4

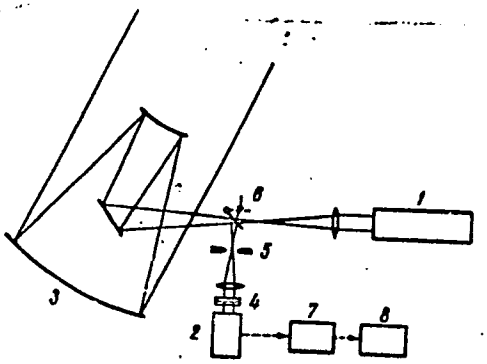


Fig. 1. Schematic of the locator

counter 8, which is activated by that portion of the laser pulse directed to the photomultiplier. The laser operated at 6943 Å, with a pulse energy and duration of 5—7 j and $5 \cdot 10^{-8}$ sec, respectively. The diameter of the main telescope mirror was 2.6 m and its focal length 104 m; the beam diameter was 13 mm, and the divergence of the beam reflected from the telescope mirror was ≥3 sec of arc. The filter passband was 10 Å, and the instrumental error in the measurement of time $\pm 10^{-7}$ sec. The observation of the lunar surface was confined to an area located at the bottom of the Flammarion crater with the selenographic

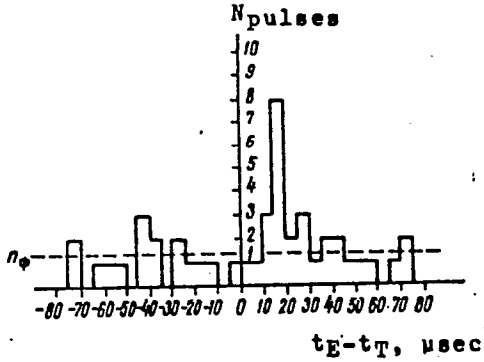


Fig. 2. Results of measurements

coordinates of λ—3°.57 and ϕ—2°.98. The results of observations are shown in Fig. 2, as a frequency distribution of the quantity $t_E - t_T$ in 10-μsec class intervals (t_E and t_T are the experimental and calculated times, respectively, required by a signal to complete the round trip). The signal-to-noise ratio was ~5 and the mean of the useful signal was found to be distributed within the 15—20 μsec class boundary, with a standard deviation of 1.2×10^{-6} sec. The total error in positioning the distribution center was $\pm 1.3 \times 10^{-6}$ sec, which corre-

L 22702-66

ACC NR: AP6010439

sponds to 200 m error in the measurement of distance. Orig. art. has: 2 figures. [YK]

SUB CODE: 20/ SUBM DATE: 22Jan66/ ORIG REF: 002/ OTH REF: 001
ATD PRESS: 4229

Card 4/4 BK

CHERNYKH, O.G., inzh.; SUMTSOV, V.F., kand. tekhn. nauk

Effect of the addition of the M45 cerium alloy on the properties of heat resistant aluminum-silicon cast iron. Lit. proizv. no.1:45-46 Ja '66. (MIRA 19:1)

CHERNYKH, O.G.

Improved apparatus for studying the resistance of alloys against abrasion at high temperatures. Zav. lab. 31 no.9:1140-1141 '65.
(MIRA 18:10)

1. Luganskiy mashinostroitel'nyy institut.

CHERNYKH, Ye.N. (Moskva)

Some methods for the determination of ore sources for an ancient metal. Izv. AN Arm. SSR. Nauki o zem. 18 no.3/4:111-126 '65. (MIRA 18:9)

L 45718-66 EWT(m)/EWP(t)/ETI IJP(c) JD
ACC NR: AP6025696 (A) SOURCE CODE: UR/0078/66/011/005/0971/0976

AUTHOR: Chernykh, V. Ya.; Talanov, N. D.

ORG: none

TITLE: Synthesis of high-purity indium phosphide

SOURCE: Zhurnal neorganicheskoy khimii, v. 11, no. 5, 1966, 971-976

TOPIC TAGS: indium compound, phosphide

ABSTRACT: A relatively simple and safe method of preparing indium phosphide from indium metal and phosphorus trichloride is described. The reaction is $2In + PCl_3 \rightarrow InP + PCl_3$. The InP is obtained in a highly pure form by using pure reactants and distilling off InP following the reaction. A study of all the possible factors which can affect the yield of InP showed that the highest yield of InP (77-78% of theoretical) is obtained under the following reaction conditions: vertical position of ampoule during and after the reaction; initial rate of heating of the reactants 500-600 deg/hr; rate of cooling of furnace with ampoule after the reaction 50-55 deg/hr; ratio of reactants $In:PCl_3 = 1.8:1$; duration of reaction 50-60 hr; temperature $700 \pm 0.5°C$. InP thus produced is in the form of a dense polycrystalline ingot consisting of a single phase. X-ray analysis showed the crystals to have a zinc-blende-type face-centered cubic lattice with $a_0 = 5.866$ Å. Orig. art. has: 5 figures and 4 tables.

SUB CODE: 07/ SUBM DATE: 17Oct64/ ORIG REF: 008/ OTH REF: 018
Card 1/1 UDC: 546.682'181.07

ROZOVA, Ye. A. and CHERNYAVKINA, M. K.

"The Earthquake of 2 November 1946 and the Epicentral Zone of Its After-Shocks," pp. 1-32, Symposium of Articles and Lectures (which is No. 5 (132) in the series entitled "Works of the Geophysical Inst.," AS USSR Press, Moscow and Leningrad, 1949.

U-1442, 28 Aug 51

CHERNYAVKINA, M.K.

"Investigation of the Basic Seismic Elements and Structure of the Earth's Crust in the Region of the Chatkal Earthquake on 2 November 1946 by It Successive Shocks." Thesis for degree of Cand. Physico-Mathematical Sci. Sub 17 May 50, Geophysics Inst, Acad Sci USSR

Summary 71, 4 Sep 52, Dissertations Presented for Degrees in Science and Engineering in Moscow in 1950. From Vechernyaya Moskva, Jan-Dec 1950.

CHERNYAVKINA, M.K.

Evaluation of errors in determining epicenters of subsequent shocks of the Chatkal earthquake. Trudy Geofiz. inst. no.30: 104-122 '55. (MIRA 9:6)
(Chatkal Range--Earthquake, 1946) (Seismometry)

POPOV, V.V.; CHERNYAVKINA, M.K.

Some results of observations on deformations of the earth's surface at the "Yalta" Geophysical Station. Izv.AN SSSR.Ser. geofiz. no.7:1005-1012 Jl '60. (MIRA 13:7)

1. Akademiya nauk SSSR, Institut fiziki Zemli.
(Earth—Surface)

L 09170-67 EWT(1) GW

ACC NR: AP7002299 SOURCE CODE: UR/0387/66/000/007/0057/0064

18

AUTHOR: Chernyavkina, M. K.

ORG: none

TITLE: Evaluation of the rate of slow movements of the earth's surface from the combined movements in a focal zone

SOURCE: Fizika zemli, no. 7, 1966, 57-64

TOPIC TAGS: earthquake, tectonics, seismology

ABSTRACT:

The author has evaluated crustal movements in focal regions for a group of earthquakes in a single seismic region. The seismically active Garm region was selected and all seismic phenomena during the period 1956-1957 were taken into account; this was a period of only relatively weak earthquakes. A table was compiled giving data on the number of earthquakes for each energy class for this two-year period. It was found that with a decrease of earthquake energy by one order of magnitude the focal displacements decrease by only a factor of two. Even such weak earthquakes as those in energy class 7 give a sum of displacements of 2 m. This sum is considerably greater than the sum of displacements of three earthquakes of energy class 13. Seismic

Card 1/2 UDC: 550.341/550.342

0725 0568

L 09170-67

ACC NR: AP7002299

observations show that the mean rate of displacement in this region (300-400 km in length) was 10-15 cm and the mean deformation was 10^{-7} -10^{-8} per year. Seismic data give values somewhat exceeding those obtained by geological methods. This was to be expected because the mean rate of tectonic movements was determined for a long interval of time and because the author selected a narrow zone, the most active zone of Central Asia.

Orig. art. has: 4 figures, 5 formulas and 5 tables.

[JPRS: 38,230]

SUB CODE: 08 / SUBM DATE: 06Jul65 / ORIG REF: 003 / OTH REF: 006

Card 2/2 nst

SERGEYEVA, P.A. [Serheieva, P.A.]; CHERNYAVS'KA, V.I. [Cherniavs'ka, V.I.]

Treatment of dacryocystitis in neonates depending on type of microflora isolated from the lacrimal sac. Ped., akush. i gin. 25 no.1:31-33 '63. (MIRA 16:5)

1. Ochne viddilennya (zav.-kand.med.nauk N.I.Pil'man) spetsializovanoi klinichnoi likarni m.Kiyeva (golovniy likar T.P.Novikova).
(DACRYOCYSTITIS) (INFANTS (NEWBORN)—DISEASES)

KAPTARENKO-CHERNOUSOVA, O.K.; BARASH, P.Ye.; CHERNYAVSKAYA, A.A.

Stratigraphy of Paleocene sediments in the northeastern part of the Ukrainian S.S.R. Sov.geol. 1 no.11:26-39 N '58. (MIRA 12:4)

1. Institut geologicheskikh nauk AN USSR.
(Ukraine--Geology, Stratigraphic)

BABAYEV, Ashot Grigor'yevich; AKRAMKHODZHAYEV, Abid Muratovich; MAVLYANOV, G.A., akademik, otv. red.; CHERNYAVSKAYA, A.B., red.; GOR'KOVAYA, Z.P., tekhn. red.

[Paleogeography of oil- and gas-bearing Cretaceous sediments in Uzbekistan] Paleogeografiia neftegazonosnykh melovykh otlozhenii Uzbekistana. Tashkent, Izd-vo Akad. nauk Uzbekskoi SSR, 1960. 177 p. (MIRA 14:8)

1. Akademiya nauk Uzbekskoy SSR (for Mavlyanov).
(Uzbekistan—Petroleum geology) (Uzbekistan--Gas, Natural—Geology) (Paleogeography)

CHERNYAVSKAYA, A.K.

CHERNIAVSKAIA, A. K.

Stantsii radiotransliatsionnykh uzlov. [Stations for radio rebroadcasting units.] Dopushcheno v kachestve uchebnogo posobiia dlia remeslennykh uchilisch. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1948/ 294 p. illus.
DLC: TK6560.C5

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress, Reference department, Washington, 1951, Unclassified

CHERNYAVSKAYA, A.K.

DOGADIN, Vladimir Nikolayevich; CHERNYAVSKAYA, Anastasiya Karpovna.

[Handbook for a collective farm radio technician] Posobie dlia kolkhoznogo radista. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio. 1954. 229 p. (MLRA 7:8)
(Radio--Receivers and reception)

AUTHORS: Vasenko, Ye. N., Chernyavskaya, A. P., Chernaya, N. V. SOV/48-22-9-31/40

TITLE: Infrared Spectra of Salt Solutions (Infrakrasnyye spektry solevykh rastvorov)

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1958, Vol 22, Nr 9, pp 1125 - 1125 (USSR)

ABSTRACT: This is an investigation of the influence of ions on the structure of fluids, which is determined by intermolecular hydrogen bindings. The authors used the vibration spectrum of the saturated solutions of potassium nitrate and of potassium bromide in formamide as a vehicle of their investigation, as the spectrum of formamide is well studied. Moreover, formamide exhibits a considerable similarity to water, as the nature of its intermolecular bindings leads to the formation of a spatial lattice structure spreading through the whole fluid. The C-N bond of the formamide was chosen for the reason that its position is noticeably altered at a formation or a rupture of the hydrogen

Card 1/2

bindings in which the amino group as well as the carbonyl group participate (Fig 1). It is besides rather intensive and is comparatively far removed from the others. The absorption spectrum was recorded of saturated potassium nitrate solution in formamide in the range of 1200 ÷ 1500 cm^{-1} and of saturated potassium bromide solution in formamide in the same spectral region with a IKS [illegible]-11 spectrometer with a common-salt prism. The absorption spectra which were recorded for the sake of comparison showed in the investigated range a noticeable absorption which is not characteristic for pure water (with potassium bromide - two bands). The origin of this absorption is at present under investigation as well as the dependence of the absorption spectra upon the concentration in the region already investigated and in the frequency range of the N-H, C = O in formamide and O-H in water. There are 2 references, 2 of which are Soviet.

ASSOCIATION: L'vovskiy politekhnicheskiy institut (L'vov Polytechnical Institute)

L 17695-63 EWP(j)/EPF(c)/EWT(m)/BDS Pc-4/Pr-4 RM/WW/AB 68 67

ACCESSION NR: AP3004247 S/0152/63/000/006/0061/0064

AUTHORS: Zelizny*y, A. M.; Prokopets, M. M.; Chernyavskaya, A. P.; Polatayko, R. I.

TITLE: Reaction of n-paraffinic and monocyclic aromatic hydrocarbons with dimethyl formamide in the extraction process

SOURCE: IVUZ. Neft' i gaz, no. 6, 1963, 61-64

TOPIC TAGS: paraffin, aromatic, hydrocarbon, moncyclic aromatic hydrocarbon, dimethyl formamide, acidity, spectroscopy, infrared spectroscopy

ABSTRACT: Authors studied the solubility of n-paraffinic hydrocarbons from C_6 to C_{16} with dimethyl formamide. Dimethyl formamide was used as a model solvent for study of interaction between hydrocarbons and extractant. The infrared spectra of dimethyl formamide and solutions of it in hydrocarbons were obtained for the carbonyl range with an IKS-12 instrument equipped with a sodium chloride prism. Normal paraffinic hydrocarbons do not shift the characteristic frequency of the carbonyl group. In the series benzene to

Card 1/2

L 17695-63

ACCESSION NR: AP3004247

butylbenzene, the shift to lower frequency is greatest for benzene (1706 to 1682 reciprocal cm.) and decreases by an average of 4.5 reciprocal cm. for each additional methylene group in the side chain. In the series benzene to pseudocumene, the shift decreases by 5 reciprocal cm. for each additional methyl substituent on the ring. These shifts parallel the acidic properties of the hydrocarbons. The solubility in dimethyl formamide of the normal hydrocarbons with 6 to 16 carbon atoms, was studied. Orig. art. has: 4 figures and 1 table.

ASSOCIATION: L'vovskiy politekhnicheskiy institut (Lvov Polytechnical Institute)

SUBMITTED: 29Jan63 DATE ACQ: 21Aug63 ENCL: 00

SUB CODE: FL, CH NO REF SOV: 003 OTHER: 003

Card 2/2

ZELIZNYY, A.M.; PROKOPETS, M.M.; CHERNYAVSKAYA, A.P.

Role of paraffin hydrocarbons as antisolvents in the reaction of alkyl benzenes with dimethylformamide. Izv. vys.ucheb.zav.:neft' i gaz 7 no. 1:47-51 '64. (MIRA 17:7)

1. L'vovskiy politekhnicheskiy institut.

L 8764-65 EWT(m)/EPF(c)/EWP(j) Pc-4/Pr-4/Pa-4 SSD/AEDC(b)/AFWL/ESD(gs)/
RAEM(i)/ESD(t)/ASD(a)-5 RM

ACCESSION NR: AP4045841 S/0152/64/000/008/0057/0061

B

AUTHOR: Zelizny*y, A. M., Prokopets, M.M., Chernyavskaya, A.P.

TITLE: The role of paraffin hydrocarbons as antisolvents in the interaction of alkylbenzenes with dimethylformamide (DMF) during the extraction process. 2. Spectroscopic study of the three-component system: DMF - alkylbenzenes - n-paraffin hydrocarbons

SOURCE: IVUZ. Neft' i gaz, no. 8, 1964, 57-61

TOPIC TAGS: alkylbenzene, paraffin hydrocarbon, dimethylformamide, antisolvent, petroleum refining, extraction, spectroscopy

ABSTRACT: This paper is a continuation of work carried out by the authors on mutual solubility in the binary systems of DMF-aromatic hydrocarbons and DMF-n-paraffin hydrocarbons. Using spectroscopic methods, two series of experiments were carried out to study the effect of n-paraffin hydrocarbons on the characteristic frequency of oscillations of the CO-group in DFM. The presence of aromatic hydrocarbons causes a shift to lower frequencies and the addition of n-paraffin causes a shift to higher frequencies. In the fatty acid-DFM system (to be reported separately), there was a larger

Card 1/3

shift toward higher frequencies. The effect of the molecular weight of the hydrocarbons on the frequency shift is noted. In the second series of experiments, the decrease in frequency in the extract phase with increasing molecular weight of the n-paraffin hydrocarbon could be explained by a lowering of solubility in DMF. The characteristic frequency of the CO-group in the refined phase does not change on increasing the molecular weight of the n-paraffin hydrocarbon. Correlation indices according to Smith's empirical equation are given for a number of hydrocarbons. The difference in the frequency of the CO-group in DMF decreases as the number of methyl groups increases, in parallel with a decrease in acidity. The results were in good agreement with studies of interactions between methyl derivatives of benzene, liquid sulfur dioxide and hydrofluoric acid. It was concluded that, in addition to the frequency shifts noted above, the acid properties of the benzene homologs increase with increasing molecular weight of n-paraffins introduced into the system; monoalkylbenzenes are extracted less effectively than the isomeric [illegible]benzenes, the chain length of the paraffin alkyl strongly affecting the solubility [illegible] the correlation index is linearly related to the degree of extraction. Orig. art. [illegible] tables and 1 figure.

L 8761-65
ACCESSION NR: AP4045841

ASSOCIATION: L'vovskiy politekhnicheskiy institut (L'vov Polytechnical Institute)

SUBMITTED: 13Sep63 ENCL: 00 SUB CODE: FP

NO REF SOV: 001 OTHER: 005

Card 3/3

CHERNYAVSKAYA, A. P. Cand Med Sci -- (diss) "The layer method of the X-ray examination of bones and joints (under normal and pathological conditions)."

Khar'kov, 1957. 13 pp (Khar'kov Med Inst), 225 copies (KL, 4-58, 86)

CHERNYAVSKAYA, A.P., nauchnyy sotrudnik

Multiple osteochondropathies of the heads of the metatarsal bones. Vest. rent. i rad. 35 no. 2:79-80 Mr-Ap '60. (MIRA 14:2)

1. Iz rentgenologicheskogo otdela (zav. - dotsent Ya.F. Levin) Khar'kovskogo instituta meditsinskoy radiologii (direktor - kand.med. nauk V.I. Shantyr').
(FOOT--DISEASES) (OSTEOCHONDROSIS)

LEVIN, Ya.F.; CHERNYAVSKAYA, A.P.

Use of telegamma therapy in malignant bone tumors. Med.rad. no.5: 41-46 '61. (MIRA 14:11)

1. Iz rentgenovskogo otdela Khar'kovskogo instituta meditsinskoy radiologii.
(BONES—CANCER) (GAMMA RAYS—THERAPEUTIC USE)

CHERNYAVSKAYA, F.P.

DYSENTERY

"The Immunological Condition of the Organism During Chronic Dysentery in Infants", by F.P. Chernyavskaya, Trudy 2-go S'yezda Vrachey-Pediatrov USSR, 1956, pp 57-61 (from Meditsinskiy Referationyy Zhurnal, Section 1, No 2, 1957, p 67).

The relationship between the character of immunobiological reactions and the clinical progress of dysentery was established by the author; he emphasizes the role played by such reactions in the pathogenesis of chronic dysentery in children. According to the author, the duration and impetus of the process of chronic dysentery are accompanied by a sharp and stable depression of the immunological reactions, and a considerable disturbance of the higher nervous activity. The author concludes that a series of measures must be included in the therapeutic complex so as to secure a mobilization of the physiological defense mechanisms.

Card 1/1

CHERNYAVSKAYA, F.P.

RODKIN, S.V.; CHERNYAVSKAYA, F.P.

Diagnosis of atypical, abortive forms of dysentery in infants. Pediatriia no.4:84 Ap '57. (MIRA 10:10)

1. Iz otdela profilaktiki i terapii detskikh bolezney Khar'kovskogo nauchno-issledovatel'skogo instituta okhrany materinstva i detstva imeni N.K.Krupskoy (kandidat meditsinskikh nauk A.I.Kornilova)
(DYSENTERY)

CHERNYAVSKAYA F.P.

CHERNYAVSKAYA, F.P.

Venous pressure in dysentery in children. Pediatriia no.8:77 Ag '57. (MIRA 10:12)

1. Iz Khar'kovskogo nauchno-issledovatel'skogo instituta okhrany materinstva i detstva imeni N.K.Krupskoy.
(DYSENTERY) (BLOOD PRESSURE)

CHERNYAVSKAYA, F.P.

BLITSHTEYN, I.I., kandidat biologicheskikh nauk; MOLDAVSKAYA, V.D., professor; RODKIN, S.V., dotsent; CHERNYAVSKAYA, F.P., kandidat meditsinskikh nauk; LEVITAN, R.B.; GRODZINSKAYA, A.I.; OSTROMUKHOVA, B.L.

The role of Lamblia and hymenolepis nana in dysentery of young children. Sov.med.21 no.3:22-26 Mr '57. (MLRA 10:7)

1. Iz Ukrainskogo instituta malyarii i meditsinskoy parazitologii imeni prof. V.Ya.Rubashkina (dir. I.A.Demchenko), Khar'kovskogo instituta okhrany materinstva i detstva (dir. - kandidat meditsinskikh nauk A.I. Kornikova), detskoy bol'nitsy No.24 (glavnyy vrach L.M.Poyarkova) i detskikh yasley No.81 (glavnyy vrach B.L.Ostromukhova) Khar'kov.

(DYSENTERY, BACILLARY, in inf. and child
in giardiasis & tapeworm infection, ther.)
(GIARDIASIS, in inf. and child
in bacillary dysentery, with tapeworm infect., ther.)
(TAPEWORM INFECTION, in inf. and child
in bacillary dysentery, with giardiasis, ther.

CHERNYAVSKAYA, F.P. [Chernyavs'ka, F.P.], kand.med.nauk

Phagocytic activity of leucocytes in chronic dusentery in younger children. Ped., akush. i gin. 20 no.2:15-18 '58. (MIRA 13:1)

1. Otdel profilaktiki i terapii detskikh bolezney (rukovoditel' - dots. S.V. Rodkin) Khar'kovskogo nauchno-issledovatel'skogo instituta okhrany materinstva i detstva im. N.K. Krupskoy (direktor - kand.med. nauk O.I. Kornilova).
(PHAGOCYTOSIS) (DYSENTERY)

SMIRNOVA-ZAMKOVA, S.Ye.; KORNEV, K.A.; CHERNYAVSKAYA, G.A.

Aminomethylation of some derivatives of benzene. Ukr. khim. zhur. 29 no.4:459 '63. (MIRA 16:6)

1. Institut khimii polimerov i monomerov AN UkrSSR.
(Benzene derivatives)
(Aminomethylation)

ACCESSION NR: AP4021981 S/0073/64/030/002/0211/0216

AUTHOR: Smirnova-Zamkova, S. Ye.; Kornev, K.A.; Chernyavskaya, G. A.

TITLE: Polyamides with aromatic and heterocyclic rings in the chain. VII. Polyamides based on di-(aminomethyl)-toluene and di-(aminomethyl)-xylene

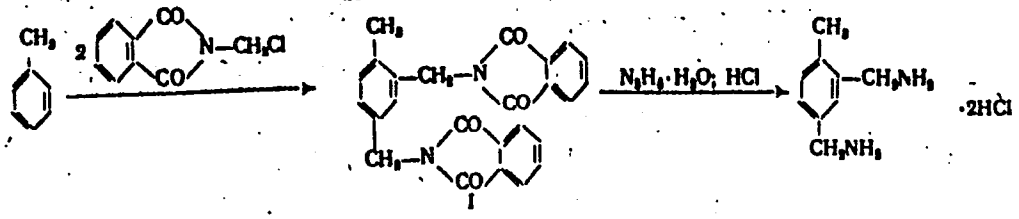
Source: Ukrainskiy khimicheskiy zhurnal, v. 30, no. 2, 1964, 211-216

TOPIC TAGS: polyamide, aromatic polyamide, heterocyclic polyamide, alkyl aromatic polyamide, aminomethylation, diamine synthesis, diamine characterization, melting point, steric hindrance, molecular symmetry, proof of structure, interphase polycondensation

ABSTRACT: Polyamides condensed from the chloranhydrides of certain dicarboxylic acids were characterized. 2,4-di-(aminomethyl)-toluene, 4,5-di-(aminomethyl)-o-xylene, 4,6-di-(aminomethyl)-m-xylene and 2,5-di-(aminomethyl)-p-xylene were synthesized by aminomethylating aromatic compounds:

Card 1/3

ACCESSION NR: AP4021981



These diamines were characterized by their dibenzoyl derivatives and their dipicrates. Their structure was proven by oxidation to the corresponding acid and identification of the methyl ester. Polyamides were prepared from these diamines by interphase polycondensation with the chloranhydrides of the following dicarboxylic acids: adipic, pimelic, azelaic, sebacic, isophthalic and terephthalic. the melting point of the polyamides depends little on the nature of the acid component. Introduction of the methyl groups into the aromatic diames of different structure has different effects on the melting point of the polyamides: it lowers

Card 2/3

ACCESSION NR: AP4021981

the melting point of p-xylylenediamine and raises that of the m-xylylenediamine. The causes for this are explained on the basis of symmetry and steric hindrance in the molecules. Orig. art. has: 1 figure, 7 tables, 1 equation and 3 formulas.

ASSOCIATION: Institut khimii polimerov i monomerov AN UkrSSR (Institute of Polymers and Monomers Chemistry, AN UkrSSR)

SUBMITTED: 29Mar63 DATE ACQ: 09Apr64 ENCL: 00

SUB CODE: CH NO. REF. SOV:007 OTHER: 019

Card 3/3

CHERNYAVSKAYA, G. L.

CHERNYAVSKAYA, G. L.: "Material on the histochemistry of ascorbic acid in tumors." Stalingrad State Medical Inst. Makhachkala, 1955. (Dissertation for the Degree of Candidate in Medical Sciences)

Source: Knizhnaya letopis' No. 28 1956 Moscow