BEREZINA, Mariya Pavlovna; VASILEVSKAYA, Natal'ya Yefimovna; AVERBAKH, Mikhail Solomonovich; VETYUKOV, Ivan Alekseyevich, dots.; GOLIKOV, Nikolay Vasil'yevich; GULYAYEV, Pavel Ivanovich; ZHUKOV, Yevgraf Konstantinovich; LAYMANIZOVA, Lyudmila Vladimirovna; MAKAROV, Petr Osipovich; NIKITINA, Iya Pavlovna; SPERANSKAYA, Yekaterina Nikolayevna; VASIL'YEV, L.L., prof., red.; PEREDEL'SKAYA, N.M., red.; PARSADANOVA, K.G., red. izd-va; GRIGORCHUK, L.A., tekhn. red.

[Comprehensive laboratory manual of human and animal physiology] Bol'shoi praktikum po fiziologii cheloveka i zhivotnykh. Izd.2., ispr. i dop. Moskva, Gos. izd-vo "Vyshaia shkola," 1961. 674 p. (MIRA 14:8)
(PHYSIOLOGY--LABORATORY MANUALS)

MAKAROV, P.O.; KROL', T.M.

Biophysics of excitation Sensomotor adequatometry in human subjects. Biul. eksp. biol i med. 50 no.12:48-51 D '60. (MIRA 14:1)

1. Iz laboratorii biofiziki organov chuvstv kafedry biofiziki (zav. - prof. P.O. Makarov) Leningradskogo ordena Lenina gosudarstvennogo universiteta imeni A.A. Zhdanova. Predstavlena akademikom V.N. Chernigovskim.

(NERVOUS SYSTEM)

MAKAROV, P.O. (Leningrad)

Problems in the biophysics of sense organs. Usp. sovr. biol. 50 no.3:337-348 N-D '60. (MIRA 14:3)
(SENSES AND SENSATION)

MAKAROV, P.O.; KROL', T.M.

Role of the intensity, duration and space (chronotope) factors in determining the excitability of the human visual analyzer. Biofizika 5 no. 6:691-696 '60. (MIRA 13:10)

1. Leningradskiy ordena Lenina gosudarstvennyy universitet imeni A.A. Zhdanova.

(VISION)

MAKAROV, P.O.

Effect of extremely stron optical stimuli on the visual, auditory, and cutaneous analyzers in man. Biofizika 5 no. 6:677-684 '60. (MIRA 13:10)

1. Leningradskiy gosudarstvennyy universitet imeni A.A. Zhdanova.
(LIGHT--PHYSIOLOGICAL EFFECT) (SENSES AND SENSATION)

MAKAROV, P.O.

Investigation of human visual dark adaptation in the chrontype (in the parameters of force, duration, and space). Nerv. sist. no.1: 144-155 '60. (MIRA 13:9)

1. Laboratoriya fiziologii analizatorov, Leningradskiy ordena Lenina gosudarstvennyy universitet im. A.A. Zhdanova.
(EYE--ACCOMODATION AND REFRACTION)

GULYAYEV, P.I.; MAKAROV, P.O., prof., nauchnyy red.; VOROB'YEV, G.S., red.izd-va; GURDZHIYEVA, A.M., tekhn.red.

[The brain and electronic machines] Mozg i elektronnaia mashina. Leningrad, Ob-vo po raspr. polit. i nauchn. znanii RSFSR, 1960. 45 p. (MIRA 13:12)

(BRAIN) (CYBERNETICS)

MAKAROV, P.O.

Problems in human adequatometry and neurodynamics. Vest. LGU 14 no.3:118-119 '59. (MIRA 12:5)
(VISION)

MAKAROV, Petr Osipovich

[Methods for neurodynamic investigations and a practicum on the physiology of human analyzers] Metodiki neirodinamicheskikh issledovanii i praktikum po fiziologii analizatorov cheloveka. Moskva, Vysshaia shkola, 1959. 268 p. (MIRA 13:9)
(NERVOUS SYSTEM)

MAKAROV, P. O. (DR.)

The preliminary program of the Electroretinography (ERG) Conference [illegible] international participation is as follows:

2. Prof. Dr. G. G. Demirchoglyan (Yerevan, USSR): Mechanics of ERG Registration.
3. Dr. V. Gäth (Münster, Western Germany): Forms and Conditions of the Leads of Intraretinal Potentials.
4. Dr. L. V. Khurodze (Tbilisi, USSR): Basic Mechanical Faults in Present clinical Elektroretinography and the Way to their Elimination.
2. Dr. M. Semenovskaya (Moscow, USSR): Central Regulation of Electroretinography.
4. Dr. I. M. Avakyan (Yerevan, USSR): On the Problem of Elektroretinography in X-rays.
8. Dr. L. V. Khurodze (Tbilisi, USSR): Functional Limits of the Retina in X-rays.
11. Dr. M. A. Allakhverdyan (Yerevan, USSR): Changes of the ERG Wave in Men.
2. Dr. B. I. Melik-Musyan (Yerevan, USSR): ERG in Glaucoma.
3. Dr. L. E. Henkes (Rotterdam, Netherlands): ERG in Chorioidemia.
4. Dr. M. Semenovskaya (Moscow, USSR): Electroretinography and Encephalography at the Ophthalmologic Clinic.
6. Prof. Dr. G. G. Demirchoglyan, Prof. Dr. B. I. Melik-Musyan (Yerevan, USSR): ERG in Diseases of the Retina.
2. Dr. F. O. Jakonov (Leningrad, USSR): Adequatometry of the Sight Analysator in Healthy and Ill Men.
7. Dr. M. Avakyan (Yerevan, USSR): Atrofia Nervi Optici in ERG.

MAKAROV, P.O.

Conference in memory of N.E. Vvedenskii. Usp.sovr.biol. 45 no.2:252-259 Mr-Ap '58 (MIRA 11:6)
(VVEDENSKII, NIKOLAI EVGEN'EVICH, 1852-1922)
(PHYSIOLOGY)

MAKAROV, P.O., KESAREVA, Ye.P., RAKHMILEVICH, L.S., TROFIMOV, I.G.,

Nikolai Aleksandrovich IUdenich; an obituary. Fiziol.zhur. 44 no.6:606 Je '58 (MIRA 11:7)

(IUDENICH, NIKOLAI ALEKSANDROVICH, 1900-1958)

MAKAROV, P.O.

Reflex variations in the excitability of the human visual analyser produced through cortical induction at fixed intervals. Probl. fiziol.opt. 12:100-111 '58 (MIRA 11:6)

1. Laboratoriya fiziologii analizatorov Fiziologicheskogo instituta im. akad. A.A. Ukhtomskogo pri Leningradskom ordena Lenina universitete im. A.A. Zhdanova.
(OPTICS, PHYSIOLOGICAL)
(CONDITIONED RESPONSE)

MAKAROV, P.O.

Microinterval analysis of individual differences in human higher nervous activity [with summary in English]. Vop. psikhol. 4 no.1: 77-86 Ja-F '58. (MIRA 11:3)

1. Fiziologicheskiy institut im. akad. A.A. Ukhtomskogo pri Leningradskom gosudarstvennom universitete.
(Psychology, Physiological)

MAKAROV, P.O.; VENSLAUSKAS, M.I.

Relation of the critical discretion interval of color vision in man to the strength, duration, and spatial distribution of stimulation; chronotope and functional lability of color vision [with summary in English]. Biofizika 3 no.6:693-697 '58. (MIRA 12:1)

1. Fiziologicheskiy institut im. A.A. Ukhtomskogo Leningradskogo universiteta.

(COLOR VISION, physiol.
relation of critical discretion interval to duration, force & spatial aspects of stimulus (Rus))

MAKAROV, Petr Osipovich, red.

[Adequatometry] Adekvatometriia. Leningrad, Medgiz, 1958.
255 p. (MIRA 13:7)
(PHYSIOLOGICAL APPARATUS)

MAKAROV, P.O.

Mechanical excitability of a nerve in the region of an electrotonus and perielectrotonus. Uch. zap. LGU no.222:43-60 '57. (MLRA 10:8)

1. Laboratoriya fiziologii analizatorov Fiziologicheskogo instituta Leningradskogo Gosudarstvennogo universiteta.
(NERVOUS SYSTEM) (ELECTROPHYSIOLOGY)

Adequacies in the Physiology of the Individual Development of 20-[illegible]-61/64
Man.

ASSOCIATION Not Given.
PRESENTED BY
SUBMITTED
AVAILABLE Library of Congress.
Card 2/2

MAKAROV, P.O.

20-1-61/64

AUTHOR MAKAROV, P.O.

TITLE Adequacies in the Physiology of the Individual Development of Man. (Adekvata v fiziologii individualnogo razvitiya cheloveka - Russian)

PERIODICAL Doklady Akademii Nauk SSSR, 1957, Vol 114, Nr 1, pp 220-222 (U.S.S.R.)

ABSTRACT During the ontogenetic development, the physiological functions of the human organism are subjected to changes- with respect to circulation, metabolism, secretion etc. The same applies to the activity of the so-called animal system of the organs(motive and nervous apparatus). The paper under review deals with the question how, during the above process of the individual development, the excitabilities change,i.e. the reactions of the organism to the so-called signals of its environment. The paper reaches very intersting conclusions,among others the following: the reactivity (irritableness) of the organism corresponds to the three stages of its age, namely from 0 to 2o years, from 2o to 3o years, and above 3o years. The sensitivity can be determined with the aid of the method of the optical adequatometry. The organism: the age level between 2o and 3o years shows the most intense reactivity. This capacity decreases below 2o years and above 3o years. The maximum sensitivity of the nervous centres of the human [illegible] was determined to lie between the 25th and 30th year. The excitability [illegible] differentiated and is closely connected with the metabolism. Metabolism [illegible] is influenced by the above-mentioned age levels in human life.

Card 1/2 (2 diagrams).

MAKAROV, P.O.

Critical interval of the discreteness of nerve centers of the human brain as observed by studying conditioned reflex changes in the electroence-phalogram and indications of the second signal system. Nauk zap. Kyiv. un. 16 no.17:151-160 '57.
(MIRA 13:2)

(BRAIN)

stimulated and the other is suppressed. Adequacy of the stimulus rests on the basis of the selective reaction. Arising from this, by apportionment of the electrical stimulus it is possible to selectively stimulate one or the other of the interbedded receptors, particularly the salivary or tactile receptors of the tongue of man. For a single fiber the minimum threshold of intensity starts at 100 imp/sec, for the visual analysor - 25, cutaneous - 80, acoustic - 60 - 80, for interoceptors of the stomach - 30 - 40. Determination of differential stimulation of analysors with the aid of adequate stimuli showed a decrease in excitability of the brain cortex in illnesses such as ulcerative conditions and the reoccurrence and recovery. -- A.M. Ryabinovskaya

USSR/Human and Animal Physiology - The Nervous System. T

Abs Jour : Ref Zhur Biol., No 3, 1959, 13167

Author : Makarov, P.O.

Inst : AS USSR

Title : Adequacy and the Act of Inhibition in Reflex Activity of Man

Orig Pub : V sb.: Probl. fiziol. tsntr. nervn. sistemy M.-L., AN SSSR, 1957, 352-359

Abstract : For stimulation of the substrate in a given functional state stimuli of a definite character (force and rhythm) are adequate. Stimuli inadequate for a given condition elicit inhibition. Adequate stimuli evoke a responsive reaction with a minimum of energy consumption. Every unconditioned and conditioned reflex is a selection reaction of the nervous system where one of its elements is

Card 1/2

MAKAROV, P.O.

Conference devoted to the problems of inhibition and sleep therapy.
Vest.Len.un.11 no.9:113-114 '56. (MLRA 9:8)
(Inhibition) (Sleep--Therapeutic use)

MAKAROV, P.O.

The problem of inhibition; according to materials of the Second Sagry Conference. Vest.Len.un.11 no.9:91-97 '56. (MLRA 9:8)
(Inhibition)

MAKAROV, P.O.

[Neurodynamics of man; excitability, lability, and adequacy of internal analysors] Neyrodinamika cheloveka; vozbudimost', labil'nost' i adekvatnost' vnutrennikh analizatorov. Leningrad, Medgiz, 1956. 213 p. (MLRA 10:5)
(Psychology, Physiological)

USSR / Human and Animal Physiology. The Nervous System. T

Abs Jour: Ref Zhur-Biol., No 9, 1958, 41746.

Abstract: with a conditioned mechanical or electrocutaneous stimulus, the author observed a condition "attuned" reflex which consisted in the alteration of the excitability of the optic analyzer in answer to the action of the conditioned stimulus. There, alterations in the optic analyzer were characterized by selectivity, as a result of which the effects of those stimuli possessing a definite correlation of intensity and duration were the most markedly affected. Conditioned reflex reactions were observed as a feature of "attuned reflexes" in view of the depression of the α-rhythm observed by the association of a jet of air, causing blinking, with the illumination. -- Ye. N. Sokolov.

Card 2/2

USSR / Human and Animal Physiology. The Nervous System. T

Abs Jour: Ref Zhur-Biol., No 9, 1958, 41746.

Author : Makarov, P. O.
Inst : Not Given.
Title : Conditioned Reflex Alterations of the Functional State of the Optic Analyzer and the Electroencephalograms in Man.

Orig Pub: Probl. sovr. fiziol. nervn. i myshechn. sistemi. Tbilisi. AN GruzSSR, 1956, 361-371.

Abstract: By associating in experiments in man of a brief light stimulus, measured by its intensity, duration and area and producing changes in the excitability in the illuminated and nonilluminated eye,

Card 1/2

USSR/Medicine - Physiology FD-2695

Card 1/1 Pub. 33-4/28

Author : Makarov, P. O.

Title : Thirst as a complex unconditioned reflex and changes in the excitability of the brain centers

Periodical : Fiziol. zhur. 41, 25-30, Jan-Feb 1955

Abstract : Recorded EEG during chemical stimulation of the receptors of the human stomach with NaCl. Established the time of onset of thirst and its development, comparing the amount of water required to quench the thirst of the human being experimented on, and the amount actually drunk by him. Determined changes in the excitability of the nerve centers of the brain by the method of adequate optical chronaximetry during development of thirst and during slaking of thirst. Diagram; graphs. Eleven references, 8 of them USSR (7 since 1940)

Institution : Laboratory of Analysor Physiology of the Physiologic Institute imeni A. A. Ukhtomskiy of the Leningrad State University imeni A. A. Zhdanov

Submitted : July 5, 1953

MAKAROV, P.O.

Reports on biophysics at the eighth All-Union Congress of Physiologists Biochemists, and Pharmacologists. Usp. sovr. biol. 40 no.3:379-383 N-D '55. (MLRA 9:4)

(BIOPHYSICS--CONGRESSES)

MAKAROV, P.O.

USSR/Optics - Physiological Optics. K-9

Abs Jour : Referat Zhur - Fizika, No 3, 1957, 8057

Author : Gol'dburt, S.N., Makarov, P.O.
Inst : Leningrad State University, USSR.
Title : Investigation of Dark Adaptation to Short Light Stimuli.

Orig Pub : Probl. fiziol. optiki, 1955, 11, 236-254

Abstract : The curve of dark adaptation was plotted with the aid of short light flashes, which were projected at a distance from 5 to 10° from a central hole in the form of a spot 3° and 16 minutes in diameter. The measurements were carried out by two methods: (1) At fixed intensity of flash, the threshold of visibility was reached by changing its duration; (2) At a fixed duration of flash, bringing it to the visibility threshold by reducing the intensity.

Card 1/1

MAKAROV, P.O.

Dynamics of reflex transformation in the excitability and lability of human analysors. Uch.zap.Len.un.no.176:297-318 '54.(MLRA 9:9)
(REFLEXES) (CONDITIONED RESPONSE) NERVOUS SYSTEM)

MAKAROV, P.O.

Functional lability and the chronotope of human analysors. Uch.zap. Len.un. no.164:151-174 '54. (MLRA 10:3)
(SENSES AND SENSATION)

MAKAROV, P.O.

USSR/Medicine - Neurology

Card 1/1 : Pub. 77 - 13/22

Authors : Makarov, P. O., Doctor of Biological Sce.

Title : Pain and anesthetization

Periodical : Nauka i Zhizn' 8, 30-32, Aug 1954

Abstract : Analysis of the sensation of pain and its causes is given. Methods for pain elimination (anesthetization, local or general), are described. Illustrations.

Institution : .....

Submitted : .....

MAKAROV P.O.

VVEDENSKIY, N.Ye.; VASIL'YEV, L.L., professor, redaktor; VINOGRADOV, M.I., professor redaktor; VETYUKOV, I.A., dotsent, redaktor; GOLIKOV, N.V., professor, redaktor; SHUKOV, Ye.K., professor, redaktor; MAKAROV, P.O., professor, otvetstvennyy redaktor; MEL'NIKOVA, G.G., redaktor; VODOLAGINA, S.D., tekhnicheskiy redaktor

[Complete collected works] Polnoe sobranie sochinenii. Leningrad, Izd-vo Leningradskogo gos. univ. im. A.A.Zhdanova. Vol.5. [A course of lectures on animal and human physiology delivered at St.Petersburg University from 1911-1913] Kurs lektsii po viziologii zhivotnykh i cheloveka chitannykh v Peterburgskom universitete v 1911-1913 g.g. 1954. 380 p. (MLRA 10:1)

(PHYSIOLOGY)

MAKAROV, P.O.

Electrosensibility of the healthy and sick human stomach. Uch.zap.Len.un. no.138:275-287 '52. (MLRA 9:6)

1.Iz Laboratorii fiziologii organov chuvst Fiziologicheskogo instituta Leningradskogo gosudarstvennogo universiteta imeni A.A.Zhdanova.
(STOMACH) (DIGESTIVE ORGANS--DISEASES) (ELECTROTHERAPEUTICS)

MAKAROV, P.O., professor; MOLOTKOV, A.G., professor [deceased]

Diapasonometry of conductivity disturbances in injured human nerves exposed during operation and surgical treatment for some kinds of pain. Uch.zap.Len.un.no.138:267-274 '52. (MLRA 9:6)

1. Iz Laboratorii elektrofiziologii Leningradskoge filiala Vsesoyuznogo instituta eksperimental'noy meditsiny i Otdeleniya khirurgii periphericheskoy nervnoy sistemy Leningradskogo neyrokhirurgicheskogo instituta imeni professora A.L. Polenova.

(NERVES--SURGERY) (PAIN)

MAKAROV, P.O.

Effect of interoceptive gastric signals on electroencephalography in man, Fiziol. zh. SSSR 38 no.3:281-287 May-June 1952. (CIML 23:2)

1. Laboratory of the Physiology of Analysors of the Physiological Institute imeni A. A. Ukhtomskiy, Leningrad State University imeni A. A. Zhdanov.

MAKAROV, P. O.

Neurodynamic investigation on the visual analysor in men according to Vvedenskii's theory. Vest. oft., Moskva 31 no.3:13-16 May-June 1952. (CLML 22:2)

1. Professor for Polyak.

MAKAROV, P. O.

Neurodynamic investigation according to Vvedenskii's theory.
Klin. med., Moskva 30 no.4:42-48 Apr. 1952. (CLML 22:2)

1. Professor. 2. Leningrad.

MAKAROV, P.O.

[Neurodynamics of the visual system in man; adequate optical chronaximetry in physiology and in clinical practice] Neirodinamika zritel'noi sistemy cheloveka; adekvatnaia opticheskaia khronaksimetriia v fiziologii i klinike. Leningrad, 1952. 166 p.
(Sight) (Chronaxy) (MLRA 8:7)

1. MAKAROV, P. O., Prof.

2. USSR 600

4. Reflexes

7. Movable ocular chronaximeter, Nauch. biul. Len. un, No. 28, 1951.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

MAKAROV, P. O.

52/49166

USSR/Medicine - Interoceptive Perceptions May 49
Medicine - Receptors

"Latent Period of Interoceptive Perception,"
P. O. Makarov, Physiol Inst, Leningrad State U imeni A. A. Zhdanov, 4 pp

"Dok Ak Nauk SSSR" Vol LXVI, No 3

This study determines latent period for interoceptive perception of human esophagus and stomach as equal to 0.3 - 0.6 sec. It is longer than latent period for exteroceptive perception. Submitted by Acad L. A. Orbeli, 22 Mar 49.

52/49166

MAKAROV, P.O., professor; NEKRYLOV, F.P.

Electrotonus of the human visual apparatus studied at microintervals of time. Nauch.biul.Len.un. no.23:45-47 '49. (MLRA 10:4)

1. Fiziologicheskiy institut im. A.A.Ukhtomskogo, Laboratoriya fiziologii organov chuvstv.
(ELECTROPHYSIOLOGY) (SIGHT)

MAKAROV, P.O., professor.

Studying visceral sensitivity in man at macro- and microintervals of time. Nauch.biul.Len.un. no.23:42-45 '49. (MLRA 10:4)

1. Fiziologicheskiy institut im. A.A.Ukhtomskogo, Laboratoriya fiziologii organov chuvstv.
(VISCERA--INNERVATION)
(ELECTROPHYSIOLOGY)

MAKAROV, P.O.

GOL'DBURT, S.N.; MAKAROV, P.O.

Dynamic chronaximetry and the interval of functional switching in the auditory system of man. Probl.fiziol.akust. 1:32-44 '49.
(MIRA 10:11)

1. Iz laboratorii fiziologii organov chuvstv Fiziologicheskogo instituta Leningradskogo gosudarstvennogo universiteta.
(HEARING)

MAKAROV, P. O.

"Pendulum for Investigation and Registration of Physiological and Psychological Processes in Microintervals of time,"

SO: Dok. AN, 61, No. 5, 1948. A. A. Ukhtomskiy Institute of Physiology, Leningrad State University, -c1948-.

MAKAROV, P.O., prof.

Functional mobility of the human sensory systems. Vest. LGU 3 no.9:30-43 S '48. (MIRA 12:9)
(Senses and sensation)

MAKAROV, P.

Makarov, P. - "On the effect of interoceptive signaling on the cardio-vascular system of man (On the problem of hypertonic affection)," In symposium: VIII Sessiya Neyrokhirurg. soveta i Leningr. in-ta neyrokhirurgii (Akad. med. nauk SSSR), Moscow,. 1948, p. 69-77

SO: U-3600, 10 July 53, (Letopis 'Zhurnal 'nykh Statey, No. 6, 1949).

MAKAROV, P. O.

PA 16T95

USSR/Medicine - Physiology Apr 1947
Medicine - Sounds - Perception

"Diapasonometry in Physiology, Psychophysiology, and the Clinic," P. O. Makarov, 24 pp

"Vestnik Leningradskogo Universiteta" No 4

General description of diapasonometry. Skin reception of humans, sensory and motor (system) ranges, change in ranges of skin reception and the sensory motor (system) due to traumas and the range of motor and sensory reflection.

16T95

MAKAROV, P. O.

"Das Problem der Gradation von Erregbarkelt und Erregung in der Mikrophysiologie. II", Zhur. Fiz., Vol.28, No.1, pp 34-42, 1940

MAKAROV, P. O.

"Interaction Between the Organ of Vision and the Organs of Hearing, Taste, and Smell", Trudy I-i Konferentsii po Fiziolog. Optike, Izu. Akademii Nauk, 1936.

MAKAROV, P. O.

"Changes of nerve chronaxie due to the passage of the excitation wave"

XV Intern. Physiol. Congr., Summaries of Communication, 257-258, M., 1935

Report on the Research Work of the All-Union Inst. of Experimental Medicine imeni A. M. Gor'kiy for 1933-1937, "Medgiz", Moscow-Leningrad, 1939, p 253 N/5 640 M8 (in Russian)

MAKAROV, P. O.

"Influence of the Nervous and Cerebral Fatigue on the Excitability of the Visual Nerve Centers in Man", Sovietskaya Nevropatologhia, Psikhiatria i Folkhogighiena, Vol. 3, 1st ed., 1934.

MAKAROV, P. O.

"Adequate Optical Chronaxia in Man and Its Variations in Neurocereoral Activity and Fatigue", Sovietskaya Nevropatologhia, Psikhiatria i Polkhogbighiena, Vol. 3, 1st ed., 1924.

MAKAROV, P.M., kand. tekhn. nauk

Analyzing systems with nonlinear elements in agricultural mechanics.
Izv. TSKHA no.5:145-152 '62. (MIRA 16:7)

(Dynamometry)

32878

S/044/61/000/012/034/054
C111/C333

16.4400

AUTHORS: Pak, K. A., Makarov, P. M.

TITLE: The original of the image of a function

PERIODICAL: Referativnyy zhurnal, Matematika, no. 12, 1961, 72, abstract 12B320. ("Sb. nauchn. rabot Mosk. s.-kh. akad. im. K. A. Temiryazeva", 1961, 14, 215-218)

TEXT: The original $f(\tau)$ of the function

$$F(s) = \frac{1}{s^{\frac{1}{2}}} \exp\left(-x\sqrt{s/a + k^2}\right)$$

under the transformation

$$F(s) = \int_0^{\infty} f(\tau)\, e^{-s\tau}\, d\tau$$

is exhibited.

[Abstracter's note: Complete translation.]

Card 1/1

MAKAROV, P. M., Cand Tech Sci -- "Problems in the theory of dynamometric agricultural machines by spring and hydr ulic dynamographs." Mos, 1961. (Mos Order of Lenin Agri Acad im K. A. Timiryazev) (KL, 8-61, 246)

TURBIN, B.I., prof.; MAKAROV, P.M., inzh.

Theory of the dynamometric testing of agricultural machinery with spring dynamographs. Trudy MIMESKH 9:173-195 '59. (MIRA 13:11)
(Agricultural machinery--Testing)
(Dynamometer)

MAKAROV, P.M., insh.

Errors in the kinetics chains of dynamographs. Trudy MIMESKH 9:114-128 '59. (MIRA 13:11)

(Agricultural machinery--Testing)
(Dynamometer)

MAKAROV, P.M., inzh.

Method of plotting graphs of speeds and accelerations for plane mechanisms having higher kinematic pairs. Trudy MIMESKH 9:53-73 '59. (MIRA 13:11)

(Machinery, Kinematics of)

MAKAROV, P.M., inzh.

Evaluating the accuracy of dynamographs by using calibration equipment. Trudy MIMESKH 6:365-377 '59. (MIRA 14:5)
(Dynamometer)

ZAYDENVARG, Viktor Aleksandrovich; MAKAROV, Petr Ivanovich; NADEZHDINA, A., red.; LEBEDEV, A., tekhn. red.

[Analysis of the economic and financial operations of trade organizations] Analiz khoziaistvenno-finansovoi deiatel'nosti torgovykh organizatsii. Moskva, Gosfinizdat, 1961. 169 p. (MIRA 14:9)
(Russia—Commerce)

DENISENKO, I.I. [Denysenko, I.I.]; MAKAROV, P.G. [Makarov, P.H.]

New machinery in collective farm fields. Mekh. sil'. hosp. 13 no.7: 10-12 Jl '62. (MIRA 17:3)

1. Zaveduyushchiy otdelom mekhanizatsii Ternopol'skoy sel'skokhozyaystvennoy opytnoy stantsii (for Denisenko). 2. Predsedatel' kolkhoza "Ukraina", Skalatskogo rayona, Ternopol'skoy oblasti (for Makarov).

MAKAROV, P.G.; DMITRIYEV, M.A., professor, zaveduyushchiy.

Case of application of retrobulbar injection of novocaine and of therapeutic sleep in iridocyclitis. Vest.oft. 32 no.2:32-33 Mr-Ap '53. (MLRA 6:5)

1. Kafedra glaznykh bolezney Krasnoyarskogo meditsinskogo instituta.
(Eye--Diseases) (Novocaine) (Sleep)

USSR / General Biology. Cytology. B-2

Abs Jour: Ref Zhur-Biol., No 10, 1958, 42720.

Abstract: in the prophase, synthesis of DNA occurs due to activity of cafyoplasm, but in the telephase DNA is consumed in formation of nuclear protein, and the nuclear framework, found on fixed preparations, does not form any skeletal threads of chromosomes.

Card 4/4

USSR / General Biology. Cytology. B-2

Abs Jour: Ref Zhur-Biol., No 10, 1958, 42720.

Abstract: period. The quantity of DNA changes cyclically in the course of subsequent embryonic development. The DNA quantity concentrated in the developing chromosomes increases in the prophase and is consumed during telephase as the daughter nuclei are formed. Interphase nuclei contain no DNA. In the prophase of each subsequent fission the appearance of DNA is observed anew, which completely disappears in the telephase. Such cyclic changes of DNA occur down to the late blastula and at times also the gastrula, when the DNA content is stabilized at an established high level. The author considers that at the early stages of embryogenesis,

Card 3/4

USSR / General Biology. Cytology. B-2

Abs Jour: Ref Zhur-Biol., No 10, 1958, 42720.

Abstract: number of chromosomes in fission at maturity (using the method of identification of DNA and RNA), there were significant deviations from the commonly accepted scheme. It was observed that the intact chromosomes did not move toward the poles in the anaphase. The author suggests that the reduction in chromosome numbers is due to a decreased number of chromatin elements formed in the prophase. In the course of gametogenesis established alterations in the content of RNA and DNA were found. The author finds that RNA is the energy source in the synthesis of cell proteins and is consumed during the growth period of oocytes and spermatocytes. At the same time also a weakening of intensity in the nucleus reaction to DNA occurs, and the nuclei appear achromatinized toward the end of the growth

Card 2/4

USSR / General Biology. Cytology. B-2

Abs Jour: Ref Zhur-Biol., No 10, 1958, 42720.

Author : Makarov, P. B.
Inst : Not given.
Title : Cytological and Cytochemical Studies of Gametogenesis, Fecundation and Early Stages of Embryonic Development.

Orig Pub: V sb. Probl. sovrem. embriologii, L., Un-t, 1956, 5-11.

Abstract: In cytological and cytochemical studies of gametogenetic processes, fecundity and early stages of embryonic development in horse ascarides, it was established that in the course of reducing the

Card 1/4

POPOV, A.N.; MAKAROV, P.A.; KOROLEV, N.Ye., inzh., retsenzent

[Equipment for the production of concrete and reinforced concrete pipe] Oborudovanie dlia proizvodstva betonnykh i zhelezobetonnykh trub. Moskva, Mashinostroenie, 1965. 183 p. (MIRA 18:8)

KRIVITSKIY, M. Ya.; MAKAROV, P.A.; SCHASTNYY, A.N.

Device for determining the change in moisture content of materials in the process of autoclave treatment. Zav. lab. 30 no.11:1417-1418 '64 (MIRA 18:1)

1. Nauchno-issledovatel'skiy institut betona i zhelezobetona Gosstroya SSSR.

MAKAROV, Petr Aleksandrovich; TSEYTLIN, Yefim Solomonovich; LAPIR, F.A., inzh., retsenzent; DUBASOV, A.A., inzh., red.; SMIRNOVA, G.V., tekhn. red.

[Modling units for the manufacture of multihollow reinforced-concrete articles] Formovochnye ustanovki dlia proizvodstva mnogopustotnykh zhelezobetonnykh izdelii. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1961. 172 p. (MIRA 14:9)
(Reinforced concrete)

MAKAROV, P.A., inzh.

Determining engine power used for actuating the vibrating equipment. Stroi.i dor.mashinostr. 4 no.5:27-29 My '59.
(MIRA 12:7)

(Vibrators)

MAKAROV, P.A., inzh.

Basic calculations in manufacturing machines for centrifugal forming of reinforced-concrete pipes. Stroi. i dor.mashinostr. 4 no.2:19-22 F '59. (MIRA 12:2)
(Pipe, Concrete)

MAKAROV, P.A., inzhener.

Designing ball clutches having limited torque. Stroi. i dor. mashinostr. 2 no.5:22-25 My '57. (MLRA 10:6)
(Clutches (Machinery))

SOV/137-57-10-19188

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 10, p 107 (USSR)

AUTHOR: Makarov, P.A.

TITLE: Production of Bent Sections at the im. Molotov Plant (O proizvodstve gnutykh profiley na zavode im. Molotova)

PERIODICAL: V sb.: Ratsionalizatsiya profiley prokata. Moscow, Profizdat, 1956, pp 226-227

ABSTRACT: A communication is presented on the functioning of a mill to manufacture bent sections (S) from strip up to 130 mm wide and ≤ 3 mm thick. The great possibilities inherent in the application of bent S are noted. It is recommended that a GOST government standard and a catalog of these S be issued

M.Ts.

Card 1/1

MAKAROV, P.A.; POLYANSKAYA, T.M.

Determination of the unit consumption of fuel of the rural districts for heating. Obshch.energ. no.4:40-44 '61. (MIRA 14:8)
(Fuel) (Heating)

Fuel Abstracts

Steam Raising & Steam Engines

MAKAROV, P.A.

4655. ACCEPTANCE TEST OF FURNACE WITH MECHANICAL UNDERFEED STOKING UNDER SMALL BOILER. Mud'yugin, M.N. and Makarov, P.A. (Za Ekon. Topliva (Fuel Econ.), July 1952, 12-16). (L)

BRAGINSKIY, O.B.; MAKAROV, O.V.

Economics of straight-run gasoline pyrolysis under pressure in a pipestill. Nefteper. i neftekhim. no.7, 37-39 '65.
(MIRA 18:12)

1. Nauchno-issledovatel'skiy institut sinteticheskikh spirtov i organicheskikh produktov.

MUKHINA, T.N.; BRAGINSKIY, O.B.; MAKAROV, O.V.; MAYOROV, V.I.

Effect of pressure on the pyrolysis of straight-run gasoline in a current of super-heated water vapor. Nefteper. i neftekhim. no.3:10-12 '65. (MIRA 18:5)

1. Nauchno-issledovatel'skiy institut sinteticheskikh spirtov.

MAKAROV, O.V., inzh.-mekhanik

In order to prevent the crushing of peas. Zashch. rast. ot vred. i bol. 9 no.9:24-25 '64. (MIRA 17:11)

1. Kirovogradskaya oblastnaya sel'skokhozyaystvennaya opytnaya stantsiya.

MAKAROV, O.V., inzh.

Basis for the dimensions of a screw leveler for a sugar beet combine. Trakt. i sel'khozmash. no.1:33-35 Ja '64. (MIRA 17:4)

1. Kirovogradskaya oblastnaya sel'skokhozyaystvennaya opytnaya stantsiya.

SOV/58-59-12-28091

Translation from: Referativnyy zhurnal, Fizika, 1959, Nr 12, p 230 (USSR)

AUTHOR: Makarov, O.V.

TITLE: On the Computation of Conical Spiral Antennae

PERIODICAL: Tr. Leningr. elektrotekhn. in-ta svyazi, 1958, Nr 3 (36), pp 25 - 34

ABSTRACT: The effect of the size of conical spiral antennae, with a constant helix pitch angle, on the diagram of the antenna's directivity and its range, is investigated both theoretically and experimentally. Calculations of the dimensions and the directivity diagrams are submitted.

Author's résumé

Card 1/1

MAKAROV, O.K.

Strengthen and improve material and technical resources in postal service. Vest. sviazi 24 no.11:15-17 N '64. (MIRA 18:2)

1. Nachal'nik Glavnogo pochtovogo upravleniya Ministerstva svyazi SSSR.

MAKAROV, O.K.

Utilize all hidden potentials in developing and improving postal service. Vest. sviazi 23 no.3:4-7 Mr '63. (MIRA 16:3)

1. Nachal'nik Glavnogo pochtovogo upravleniya Ministerstva svyazi SSSR.

(Postal service)

MAKAROV, O.K.

Perfect postal service for the population. Vest.sviazi 21 no.10:8-11 O '61. (MIRA 14:10)

1. Nachal'nik Glavnogo pochtovogo upravleniya Ministerstva svyazi SSSR.

(Postal service)

aircraft engine. One of the prominent examples of new modern postal buildings will be the building near the Kazanskiy Station in Moscow, construction of which will be started by "Glavmosstroy" in 1959 (Figure 1). It will cover 220,000 cubic m and have a heliport on its roof. A crew of 1,500 workers will be able to handle a 24-hour maximum of 140,000 parcels, about 1,000,000 letters, 2,000,000 copies of periodicals, and over 50,000 bags with letters and printed matter. Underground tunnels will connect the office directly with the railway platforms. There are 4 photographs.

ASSOCIATION: Glavnoye pochtovoye upravleniye Ministerstva svyazi SSSR (The Main Post Administration of the USSR Communications Ministry)

Prospects for the Development of Postal Communications from 1959 to 1965

ed in 1960. A portable stamping machine handling 8,000 letters an hour will soon be in production and distributed to all postal offices where they are needed. The Gosudarstvennoye soyuznoye konstruktorsko-tekhnologicheskoye byuro Leningradskogo sovnarkhoza (State Union Designing and Technological Office of the Leningrad Sovnarkhoz) and the postal laboratories of TsNIIS are at present developing a method and a control device for diverse kinds of money orders. Further mechanization includes the installation of over 10,000 automatic and semi-automatic machines at post offices to simplify numerous tedious and time-consuming operations. It is estimated that by the introduction of complex mechanization and automation wherever possible, the work load of the post office workers will be reduced by 20 to 25% within the current 7-year plan period. Mailmen will obtain motor scooters and three-wheel V-100 bicycles. In the districts of the Far North of the RSFSR and the northern districts of Kazakhstan, the special "Sever" aerosleigh (Figure 2) will be introduced for postal requirements. It has a load capacity of 0.5 tons and is equipped with a 260 HP

operations), delivery delays will be greatly reduced. About 10,000 new stationary communication branches will be opened, mainly in rural areas, and 4,000 mobile communication branches on specially-equipped automobiles added. About 10,000 part-time assistants will be added to the regular staff of postal workers and the number of subsidiary agencies will be brought to over 30,000. TsNIIS and TsKB Upravleniya promyshlennykh predpriyatiy Ministerstva svyazi SSSR (Central Designing Bureau of the Administration of the Industrial Enterprises of the USSR Communications Ministry) by 1960 must develop a machine for the preliminary processing of mail. From 1959 on, the principal post offices will obtain letter-sorting machines of type PSM for sorting letters going in 70 different directions. During 1959, this type will be further developed. Serial production of a newspaper-bundling machine will be started in 1959, that of a parcel-tying machine in 1960. Mechanization of the mail dispatching service to the 50 largest enterprises of the country is being prepared. Serial production of the improved USP-1 machine for handling parcels going in many directions will be start-

of the capital and other republic major cities are available on the day of their appearance in 69 oblast', kray and republic centers, in 76 on the second day, and in 14, chiefly Soviet Far East, on the third. But mail and parcel delivery to remote regions still need considerable improvement. By 1965, papers, journals, letters, and parcels addressed to points over 250 km distant from the place of origin will be delivered by air. This, in addition to the projected sixfold increase in air passengers, will necessitate the construction and reconstruction of 90 airfields. In addition to the 300 all-metal mail cars added during the past 3 years, 1,000 more will be put into operation. Since present train schedules will be drastically revised and improved (including briefer stops at the stations, mechanized mail classification and reduction of labor and time-consuming

AUTHOR: Makarov, O.K., Chief of the Main Post Office Administration SOV/111-59-1-6/35

TITLE: Prospects for the Development of Postal Communications from 1959 to 1965 (Perspektivy razvitiya pochtovoy svyazi v 1959 - 1965 gg.)

PERIODICAL: Vestnik svyazi, 1959, Nr 1, pp 4 - 6 (USSR)

ABSTRACT: The article reviews achievements on the Soviet postal sector since 1955 and outlines major projects to be materialized between now and 1965 in this sector. Between 1955 and now 4,200 new postal enterprises have been opened. More new post offices will start operating in 1959 in Kishinev, Yerevan, Chernigov, Nukus, etc. Fifteen buildings connected with the transportation of mail to railways were built in Sverdlovsk, Vil'nyus, Belgorod, Kishinev, and Gor'kiy. Eighty-three regional communication office buildings and over 400 branch office buildings were set up by the Ministerstvo svyazi (Communications Ministry). Mechanization of labor consuming processes included general introduction of 7-ton electric (battery-type) TA-1 truck tractors and 6,540 new UAz-450 special cars for postal service. In 1958, eighty thousand tons of air mail were handled. Newspapers

Card 1/5

MAKAROV, O.K.

The most widely used branch of communication. Vest.sviazi 17 no.10:11-14 O '57. (MIRA 10:11)

1. Nachal'nik Glavnogo pochtovogo upravleniya Ministerstva svyazi SSSR.
(Postal service)

MAKAROV, O.K.

Development of facilities of the postal service. Vest.sviazi 16 no.5:3-4 Je '56. (MLRA 9:8)

1. Nachal'nik Glavnogo pochtovogo upravleniya Ministerstva svyazi SSSR.

(Postal service)

of a two-point boundary problem. Since the system (1) is unstable in this particular case, to ensure the stability of the system simulated on the analog computer, the original system (1) is transformed by substitution of

$$\rho = \frac{1}{r}, \quad z = \frac{d\rho}{d\varphi}, \quad \omega = \frac{1}{r\dot{\varphi}^2}$$

into

$$\rho' = z, \quad z' = \omega - \rho - \frac{a\omega\cos\gamma}{\rho^3} - \frac{az\omega\sin\gamma}{\rho^3}, \quad \omega' = -2\frac{a\omega^2\sin\gamma}{\rho^3}.$$

Hence the problem amounts to finding of optimal control, which transfers the point m from the position ρ_0, z_0, ω_0 where $\varphi = 0$

for ϕ=0 into position ρ_k, z_k, ω_k where $\varphi = \varphi_k$

and the minimizing functional

$$I = \int_0^{\varphi_k} \frac{\gamma\omega}{\rho^2}\, d\varphi.$$

The authors set up the necessary equations and provide a block diagram for system simulation on an analog computer. The feasibility of solving problems of this type on an analog computer is proven and an example is included. Orig. art. has: 10 formulas, 3 figures.

SUB CODE: 09,13 / SUBM DATE: 29Mar65

Card 3/3

L 05697-67

ACC NR: AP6011364

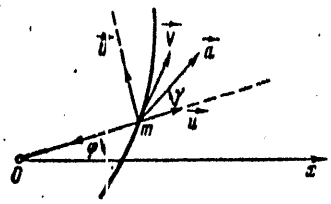

Fig. 1.

or in the radial and transverse projections as

$$\dot{r} = u, \quad \dot{\varphi} = \frac{v}{r}, \quad \dot{u} = \frac{v^2}{r} - \frac{1}{r^2} + a\cos\gamma, \quad \dot{v} = -\frac{uv}{r} + a\sin\gamma, \qquad (1)$$

where r is the polar radius of the point, ϕ is the polar angle, a is the pulling force modulus, u and v are radial and transverse velocity components and γ is the angle formed by the direction of the pulling force and the polar radius. The problem is to find an optimum control $\gamma = \gamma(t)$ which will transfer the point m in a minimum of time from the position r_0, φ_0, u_0, v_0 where $t = 0$

into position r_k, φ_k, u_k, v_k where $t = t_k$.

Applying Pontryagin's maximum principle, this problem can be reduced to the solution

Card 2/3

L 05697-67 EWT(d)/EWP(1) IJP(c) MJ

ACC NR: AP6011364 SOURCE CODE: UR/0208/66/006/002/0386/0389

AUTHOR: Klikh, Yu. A. (Odessa); Makarov, O. F. (Odessa); Plotnikov, V. A. (Odessa)

ORG: none

TITLE: The use of an analog computer to calculate the initial conditions for a system in an optimal motion control problem

SOURCE: Zhurnal vychislitel'noy matematiki i matematicheskoy fiziki, v. 6, no. 2, 1966, 386-389

TOPIC TAGS: optimal control, optimal automatic control, time optimal control, control theory, motion equation, analog computer, computer application, computer simulation

ABSTRACT: The authors describe analog computer simulation of a simple motion equation with the objective of finding the optimum control parameters of a system. The work was designed to prove the feasibility of using analog computers in the solution of optimization problems of this type. Consider the motion of a point m (figure 1) in a force field. The point is acted upon by the field and by a constant magnitude pulling force. The equation of motion may be written as

$$\ddot{\mathbf{r}} = -\frac{1}{r^3}\mathbf{r} + \mathbf{a}$$

UDC: 518.51:62-50

Card 1/3

L 4437-66

ACC NR: AP5021960

SUBMITTED: 16Jun64 ENCL: 00 SUB CODE: ME, MA

NR REF SOV: 001 OTHER: 001

Card 2/2

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031500044-6

L 4437-66
ACC NR: AP5021960 UR/0021/65/000/008/1016/1020

AUTHOR: Klikh, Yu. O.; Makarov, O. F.

TITLE: Investigation of the trajectory of a material point with low traction on an analog computer

SOURCE: AN UkrRSR. Dopovidi, no. 8, 1965, 1016-1020

38
B

TOPIC TAGS: electric analog, particle motion, approximation method

ABSTRACT: The Krylov-Bogolyubov method is used to obtain the first approximation of the system of equations describing the motion of a material point under the influence of small traction force of constant magnitude and direction in a central force field. Simulation of the first-approximation equations yields the trajectory of the perturbed motion. The cartesian coordinates of the moving point were fed to the horizontal and vertical input of a cathode ray oscilloscope (I-6M) on whose screen the trajectory was observed and photographed for two values of the traction. Orig. art. has: 7 formulas and 4 figures. This report was presented by Yu. A. Mitropol'skiy (Yu. O. Mytropol's'kyy).

ASSOCIATION: Odes'kyy politekhnichnyy instytut [Odesskiy politekhnicheskiy institut] (Odessa Polytechnic Institute)

Card 1/2

L 29913-66 EWP(m)/EWT(l)/EWT(m)/T WW/JW/JWD/WE

ACC NR: AP5019410 SOURCE CODE: UR/0021/65/000/007/0850/0852

56
B

AUTHOR: Makarov, O. F.

ORG: Odessa Polytechnic Institute (Odes'kyy politekhnichnyy instytut)

TITLE: Optimum variation in the rate of outflow for a point of variable mass

SOURCE: AN UkrSSR. Dopovidi, no. 7, 1965, 850-852

TOPIC TAGS: fluid flow, flow velocity, fuel consumption

ABSTRACT: The optimum rate of outflow c during the movement of a point of variable mass with a given energy reserve in a resisting medium is expressed by $c=c_0+v+gt$, where v is the speed of the point. The optimum consumption of the mass is given by

$$m = \frac{1}{c}\left(\int c\frac{\partial Q}{\partial v}dt + A\right),$$

where m is the mass and Q is the resistance of the medium. The constant A is determined from the initial conditions. Initial speed is taken as zero. Presented by Yu. O. Mytropol'skyy, Academician AN UkrSSR. Orig. art. has: 4 formulas.

SUB CODE: 20/ SUBM DATE: 17Jun64/ ORIG REF: 001/ OTH REF: 001

Card 1/1 UC

L 15758-63

ACCESSION NR: AR3002641

motion under a linear law of resistance of a medium, and then the case of the horizontal motion under the square law, assuming that the mass is varied according to the law: $m = m_0(1+\alpha t)^{-1}$ and the relative velocity of the ejected particles. In all cases the expression for the velocity law as the solution of the corresponding Meshcherskiy equation is found. M. I. Yefimov.

DATE ACQ: 14 Jun 63 SUB CODE: PH ENCL: 00

Card 2/2