

MAKHONOVA, L.A.

Case of rare hemorrhagic syndrome in infectious mononucleosis.
Pediatriia 39 no.4:69-70 Ap '61. (MIRA 14:4)

1. Iz Detskoy gorodskoy klinicheskoy bol'nitsy No.1 (glavnyy
vrach - zasluzhennyy vrach RSFSR Ye.V. Prokhorovich).
(MONONUCLEOSIS)

KISLYAK, N.S.; MAKHONOVA, L.A. (Moskva)

Treatment of children with acute leukemia according to
current trends. *Pediatrics* 41 no.10:80-85 0 '62.
(MIRA 17:2)

MELINKOV, S.A., MAKHON'KOVA, A.G.

Pathomorphological study of the western variant of spring and summer
encephalitis [with summary in French]. Zhur.nevr. i psikh. 85
no.11:1349-1353 N'58
(MIRA 12:1)

1. Kafedra nervnykh bolezney (zav. - prof. Ye K. Sepp [deceased])
I Moskovskogo ordena Lenina meditsinskogo instituta im. I.M. Sechenova.
(ENCEPHALITIS, EPIDEMIC, pathology
histopathol. of western types of spring & summer
encephalitis (Rus))

KOLOMOYTSEVA, I.P., MAKHON'KOVA, A.G., (Moskva)

Neural affections in leukemia. Klin.med. 36 no.9:67-71 8'58 (MIRA 11:10)

1. Iz kliniki nervnykh bolezney (zav. prof. Ye.K. Sepp [deceased])
I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.
Sechenova.

(BRAIN, pathol.
in leukemia (Rus))

(LEUKEMIA, pathol.
brain (Rus))

MAKHON'KOVA, A.G.; SOLOV'YANVA, I.P. (Moskva)

Fibrolipoma of the cauda equina and the conus medullaris [with summary in English]. Arkh.pat. 20 no.2:76-81 '58. (MIRA 11:4)

1. Iz kafedry nervnykh bolezney (zav. - deystvitel'nyy chlen AMN SSSR prof. Ye.K.Sepp [deceased]) i kafedry patologicheskoy anatomii (zav. - chlen-korrespondent AMN SSSR prof. A.I.Strukov) i Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.Sechenova.

(FIBROMA, case reports

intradural of spinal cord, cauda equina & conus (Rus))

(CAUDA EQUINA, neoplasm

fibrolipoma, case report (Rus))

(SPINAL CORD, neopl.

fibrolipoma of spinal cord, cauda equina & conus,
case report (Rus))

SKICKIN, N.F.; ZHARKOVA, V.A.; MAKHON'KO, Yu.A.; SHAPOVALOV, Yu.S.

Prospective consolidated standards for the consumption of the materials, fuel, electric power, and other materials in the production of ferrous metals in the U.S.S.R. Sbor. truz.
TSNIICHM no.45:172-181 '65. (MIRA 12:9)

AZAROVA, M.M., kand. ekon. nauk, dots.; BAUTINA, N.V., kand. ekon. nauk, dots.; DOBRUSHIN, I.M., kand. ekon. nauk; MAKHON'KO, T.P., kand. ekon. nauk, dots.; TOLYPIN, Yu.M., kand. ekon. nauk, dots.; KOZODOYEV, I.I., doktor ekon.nauk, prof., red.; GARSIA, L., red.; MITINA, M., red.; DARONYAN, M., mladshiy red.; KRYLOVA, I., mladshiy red.; NOGINA, N., ~~tekhn.~~ red.

[Chrestomathy in economics] Khrestomatia po politicheskoi ekonomii. 2., perer. i dop. izd. Moskva, Sotsekgiz, 1963.
798 p. (MIRA 16:4)

(Economics)

Experience in the Organization of Work for the Position- SOV/6-59-7-13/25
and Altitude Preparation of Aerial Surveys

section is applied, the observations are made in the position fixed point. In 1958, the theodolite TT-50 was used for determining the position- and altitude fixed points. The authoress herself makes the entries in the journal. She computes the superelevations on the standpoint of the apparatus. The topographic identification is carried out by the authoress simultaneously with the laying of the altitude traverse; the intermediate sections are investigated in special inspections. Only after finishing her work, the authoress returns to the triangulation station. The foreman is sent there in case of need. In the Taiga regions, at least 3 km daily of altitude traverses were laid in the continuous cutting of lines of sight through the forest, and in steppe areas, 12 to 20 km. In 1958, the authoress carried out such work of position- and altitude preparation, and identification of aerial photographs, on an area of 10 trapezes on a scale of 1:25000. The standard fulfilled was 223%.

Card 2/2

3(4)

AUTHOR: Makhon'ko, N. A.

SOV/6-59-7-13/25

TITLE: Experience in the Organization of Work for the Position- and Altitude Preparation of Aerial Surveys (Opyt organizatsii rabot po planovo-vysotnoy podgotovke aerosnimkov)

PERIODICAL: Geodeziya i kartografiya, 1959, Nr 7, pp 42 - 43 (USSR)

ABSTRACT: The ~~author~~ gives a short report on the experience made. After receiving the order, she studies the geographical characteristics of the working area and the data of the technical working project. Then she outlines the best variants of organization and the order of work. On the triangulation station of the party, she inspects and checks the theodolite, determines the coefficient of the range finder, and compiles a distance table for the coefficient obtained. Then she informs the workers of their duties. Special attention is paid to the correct setting-up of staffs and the fastening of position- and altitude fixed points. The work of position junction of aerial photographs is started from the most difficult section. In laying the altitude theodolite traverses, the field rods are set up on the way for determining the position fixed points by intersection. If re-

Card 1/2

GONCHUKOV, V.S.; IVAN'KO, T.Ya.; KRASHYANSKIY, I.I.; LARIN, L.A.; MAKHON'KO,
M.S.; RAKITO, N.I.; SAVEL'YEV, V.A.; SMLIVON, V.A.; KHOKHORIN, A.I.;
ZHELEVICH, P.M., inzhener, redaktor; VERINA, G.P., tekhnicheskij
redaktor

[Manual for builders of narrow-gauge railroads] Spravochnik stroitel'stva
usukoleinykh zheleznykh dorog. Moskva, Gos. transp.zhel-dor. izd-vo,
1956. 438 p.
(Railroads, Narrow-gauge) (MIRA 10:1)

FAYNZIL'BERG, E.M., doktor tekhn. nauk, prof.; REZNIKOV, B.L., dots.,
retsenzent; MAKHON'KO, M.G., dots., retsenzent; SOLOV'YEVA,
N.P., red.; KLEYMAN, L.G., tekhn. red.

[Internal combustion engines (fundamentals of the theory and
their parts); lecture course] Dvigateli vnutrennego sgoraniia
(osnovy teorii i elementy konstruktsii); kurs lektsii. Mo-
skva, Vses. zaochnyi in-t inzhenerov zhel-dor. transporta,
1961. 74 p.
(MIRA 15:8)

1. Moskovskiy institut inzhenerov zheleznodorozhnogo tran-
sporta im. I.V.Stalina (for ~~Reznikov~~, Makhon'ko).
(Gas and oil engines)

ACC NR: AP6011371

SOURCE CODE: UR/0362/66/002/003/0297/0304

AUTHOR: Makhon'ko, K. P.; Dmitriyeva, G. V.

ORG: Institute of Applied Geophysics (Institut prikladnoy geofiziki)

TITLE: Ability of various types of precipitation to wash fission products out of the atmosphere

SOURCE: AN SESR. Izvestiya. Fizika atmosfery i okeana, v. 2, no. 3, 1966, 297-304

TOPIC TAGS: atmospheric radioactivity, atmospheric precipitation, fission product

ABSTRACT: The processing of data of the International Geophysical Year and of the International Geophysical Association on the radioactivity of the atmospheric surface layer and of precipitation allowed the conclusion that mist and drizzle have the best washout capacity for a given amount of precipitation. The rate of washout of fission products by precipitation is estimated to be about 0.9 km/day. Washout characteristics for different geographical regions are compared. Orig. art. has: 3 figures and 2 tables. [Based on authors' abstract.] [NT]

SUB CODE: 04/ SUBM DATE: 16Jun65/ ORIG REF: 009/ OTH REF: 002/

Card 1/1

UDC: 551.510.721

L 09168-67 EWT(1) GW

ACC NR: AP7002305

SOURCE CODE: UR/0362/66/002/005/0508/0522

AUTHOR: Makhori'ko, K. P.

14

ORG: Institute of Applied Geophysics (Institut prikladnoy geofiziki)

TITLE: Self-scavenging of the lower troposphere of radioactive dust

SOURCE: AN SSSR. Izvestiya. Fizika atmosfery i okeana, v. 2, no. 5, 1966, 508-522

TOPIC TAGS: wind velocity, atmospheric wind

ABSTRACT: This paper describes the results of prolonged measurements of wind velocity profiles, the temperature gradient, the vertical turbulent heat flux and frictional stress. Measurements were made on a 13-m mast and a 70-m tower in July and August 1963 and 1964 on expeditions of the Institute of Physics of the Atmosphere near Tsimlyansk in Rostovskaya Oblast. Remote-control anemometers were used for measuring the wind velocity gradient and aspiration resistance thermometers were used for measuring the temperature gradient. Measurements were made at heights of 0.5, 1, 2, 4, 8, 12, 15, 25, 38, 58 and 70 m. It was found for a number of different stratification conditions that the optimum averaging periods are 14-18 minutes for the surface layer to heights of about 10 m and 18-24 minutes for heights of 40-70 m. Orig. art. has: 2 figures, 8 formulas and 2 tables. [JPRS: 37,397]

SUB CODE: 04 / SUEN DATE: 25Dec65 / ORIG REF: 026 / OTH REF: 032

not

UDC: 551.510.721

0925

0577

L 2652-66

ACCESSION NR: AT5023940

urements were averaged for different periods of time (by day, month, and year) and compared with results obtained by non-Soviet scientists. Orig. art. has: 5 figures, 4 formulas, and 2 tables. [ER]

ASSOCIATION: none

SUBMITTED: 28Apr65

ENCL: 00

SUB CODE: ES, NP

NO REF SOV: 007

OTHER: 007

ATD PRESS: 4101

Card 2/2

L 2652-66 EWT(1)/EWT(m)/FCC/EWA(h) GS/GW
 ACCESSION NR: AT5023940 UR/0000/65/000/000/0230/0243

AUTHOR: Makhon'ko, K. P.; Malakhov, S. G.; Nekhorosheva, M. P. 36
 44,55 44,55 Bst1

TITLE: Washout of fission products from the atmosphere

SOURCE: Nauchnaya konferentsiya po yadernoy meteorologii. Obninsk, 1964. Radio-
 aktivnyye izotopy v atmosfere i ikh ispol'zovaniye v meteorologii (Radioactive
 isotopes in the atmosphere and their use in meteorology); doklady konferentsii.
 Moscow, Atomizdat, 1965, 230-243.

TOPIC TAGS: nuclear meteorology, atmospheric pollution, radioactive fallout, 19
 radioactive particle washout, radioactive aerosol, hot particle, nuclear fission
 product

ABSTRACT: Regular daily observations of the amount, intensity, direction, and
 types of precipitation were made simultaneously with measurements of the specific
 radioactivity of precipitation C in the period 1960-1962 (immediately after nuclear
 testing and during the moratorium) to determine the relationship of C to the above
 precipitation parameters and to the concentration of radioactive materials q in
 atmospheric air, and of the dependence of C on the amount of precipitation h. Meas-

Card 1/2

L 3105-66

ACCESSION NR: AT5023937

ASSOCIATION: none

SUBMITTED: 28Apr65

NO REF SOV: 008

ENCL: 00

OTHER: 009

SUB CODE: ES, NP

ATD PRESS: 4101

PC

Card 2/2

L 3108-66 EWT(1)/EWT(m)/FCC/EWA(h) GS/CW

ACCESSION NR: AT5023937

UR/0000/65/000/000/0193/0206

AUTHOR: Makhon'ko, K. P.; Malakhov, S. G.

TITLE: Results of systematic observations of hot particles in the surface boundary layer of the atmosphere in the Moscow region from 1961 through 1963

SOURCE: Nauchnaya konferentsiya po yadernoy meteorologii. Obninsk, 1964. Radioaktivnyye izotopy v atmosfere i ikh ispol'zovaniye v meteorologii (Radioactive isotopes in the atmosphere and their use in meteorology); doklady konferentsii. Moscow, Atomizdat, 1965, 193-206TOPIC TAGS: nuclear meteorology, atmospheric pollution, radioactive aerosol, hot particle, atmospheric boundary layer, nuclear fission product

ABSTRACT: This paper presents the results of systematic observations of hot aerosol particles measured in the surface boundary layer of the atmosphere over the Moscow region for the period from September 1961 to December 1963 (hot particles are defined as having a radioactivity of $A > 10^{-10}$ cu and $5 \cdot 10^{-12}$ cu). Descriptions are given of the methods of measurement. The ratios of hot particles to fission-product concentrations, the sizes of the hot particles, and hot-particle washout by precipitation are calculated and reported. Orig. art. has: 6 figures and 5 tables.

Card 1/1

[ER]

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031500003-6

ZAKHAROV, Pavel Sergeyevich; TSUBERBILLER, Ye.A., otv. red.;
MAKHON'KO, K.P., otv. red.; YASNOGORODSKAYA, M.M., red.
[Dust storms] Pyl'nye buri. Leningrad, Gidrometeorizdat,
1965. 163 p. (MIRA 19:1)

ACCESSION NR: AP4041455

ENCLOSURE: 01

Month	a Концентрация горячих частиц в 1000 м ³				Доля активности частиц A > 5 · 10 ⁻¹² с
	всех частиц b	5 · 10 ⁻¹² ≤ A < 10 ⁻¹¹	10 ⁻¹¹ ≤ A < 10 ⁻¹⁰	10 ⁻¹⁰ ≤ A	
1961					
Sep(20-30)	70	—	—	—	7,
Oct	20	18,7	0,0	0,4	8,
Nov	10	9,4	0,5	0,1	5,
Dec	18,0	18,1	0,4	0,00	5,
1962					
Jan	24,0	24,5	0,4	—	4,
Feb	11,4	11,3	0,14	—	2,
Mar*	8,3	8,2	0,08	—	1,
May	5,5	5,3	0,2	—	1
Jun	4,1	3,9	0,08	0,08	1
Jul	3,3	2,7	0,4	0,2	2
Aug	7,2	6,2	0,7	0,3	4,
Sep	51,2	45,2	6,0	2,5	20
Oct	46,4	44,1	2,3	1,5	23
Nov	61,3	56,8	5,0	2,2	5
Dec	78,7	68,7	10,0	0,8	20

* No measurements
in April

Card 4/4

ACCESSION NR: AP4041455

particles. The gamma-ray spectrum of some of the most active hot particles was also measured, and found to agree with earlier data by the authors (Atomnaya energiya v. 15, 238, 1963). It is concluded that systematic registration of hot particles is essential in order to estimate their potential radiation danger. Orig. art. has: 3 tables and 1 figure.

ASSOCIATION: None

SUBMITTED: 08Jul63

ENCL: 01

SUB CODE: CB, NP

NR REF SOV: 003

OTHER: 002

Card 3/4

ACCESSION NR: AP4041455

the half-life of the remainder of the corresponding sample. The average value was 30--40 days, and in seven out of nine cases the half-lives of the hot active particles were shorter than the half-lives of the total samples. Other quantities estimated were the fraction of atmospheric radioactivity of the fission particles carried by particles with activity $>5 \times 10^{-12}$ Curie/particle, and the dependence of the concentration of the radioactive fission products in the atmosphere on the counted concentration of the hot particles, which was found to be proportional to $n^{1/6}$ (n -- counted concentration). The dependence was calculated for the time between nuclear tests and the periods of the nuclear tests themselves. The chronological maximum of the concentration (q) of the radioactive fission products was found to have a maximum about 10--14 days ahead of the maximum of the hot-particle concentration. The correlation between q and n was found to be much stronger during the period of nuclear tests, thus evidencing that the hot particles have in the atmosphere a different behavior than the bulk of the smaller fission-product

Card 2/4

ACCESSION NR: AP4041455

S/0089/64/016/006/0530/0533

AUTHORS: Malakhov, S. G.; Makhon'ko, K. P.

TITLE: Hot aerosol particles in the vicinity of Moscow near the earth's surface

SOURCE: Atomnaya energiya, v. 16, no. 6, 1964, 530-533

TOPIC TAGS: aerosol, fallout, alpha contamination, gamma spectrum, half life, nuclear weapons test

ABSTRACT: Results are reported of systematic measurements of the concentration of hot aerosol particles at the earth's surface, made near Moscow from September 1961 through December 1962. A combined photographic and autoradiographic technique was used to count the particles and to estimate their activities. The bulk of the particles had an activity on the order of 10^{-12} Curie/particle. The half-lives of the most active particles were determined and compared with

Card 1/4

MAKHON'KO, K.P.

Determining the parameters of the washout of fission products
from the atmosphere. Izv. AN SSSR. Ser. geofiz. no.9:1434-1439
S '64. (MIRA 17:10)

ACCESSION NR: AP4033024

assistance in the expeditionary work and to S. G. Malakhov for valuable critical remarks during his reading of the manuscript." Orig. art. has: 2 figures and 8 formulas.

ASSOCIATION: none

SUBMITTED: 06May63

DATE ACQ: 13May64

ENCL: 00

SUB CODE: ES, NP

NO REF SOV: 012

OTHER: 011

Card 2/2

ACCESSION NR: APL033024

8/0049/64/000/004/0596/0603

AUTHOR: Makhon'ko, K. P.

TITLE: Washing radioactive dust out of the atmosphere

SOURCE: AN BSSR. Izvestiya. Seriya geofizicheskaya, no. 4, 1964, 596-603

TOPIC TAGS: radioactive dust, atmosphere, nuclear test, radioactive fallout, rain, rain cloud

ABSTRACT: The author offers a semi-empirical formula defining the change with time of long-lived specific radioactivity in cumulus and stratus rain clouds. Variations are offered for the different types of clouds. The author concludes that the radioactivation of rain takes place chiefly in clouds. The washing-out process as a result of capture of dust particles by rain drops is of much less significance. When the numbers of nuclear tests were decreased and then stopped, radioactive fallout with rainfall declined, and in 1960 it became equal to dry fallout. This decline may be explained by exhaustion of extreme sizes of particles of radioactive dust as a result of the washing-out process. "The author expresses his sincere thanks to S. P. Belyayev, S. T. Mashkov, and V. B. Chumichev for their active

Card 1/2

MALAKHOV, S.G.; MAKHON'KO, K.P.

Hot aerosols in the atmosphere. Atom. energ. 15 no.3:238-
245 S '63. (MIRA 16:10)

(Aerosols)

ACCESSION NR: AP4000423

S/0049/63/000/011/1709/1717

AUTHOR: Makhon'ko, K. P.

TITLE: Determination of the absorption factor of rain containing radioactive dust

SOURCE: AN SSSR. Izvestiya. Seriya geofizicheskaya, no. 11, 1963, 1709-1717

TOPIC TAGS: radioactive dust, radioactive dust absorption, air pollution, radioactive dust concentration, radioactive aerosol, dust precipitation

ABSTRACT: Investigations based on observations of changes in aerosol concentrations in a zone of precipitation and on IGY data were carried out to improve current estimates of the ratio of "dry" and "wet" precipitation of radioactive dust from the atmosphere (1:6—9). Results of these studies indicated that particles having a radius of 10^{-2} — 1μ have the highest coefficient of entrapment and that the average coefficient of entrapment for particles one year old is about 10^{-2} . Orig. art. has: 2 figures, 1 table, and 12 formulas.

Card 1/1

MAKHON'KO, K.P.

Character of the size distribution of particles of natural radioactive dust. Izv. AN SSSR. Ser. geofiz. no. 1:16-197 Ja '63. (MIRA 16:2)

(Radioactive fallout)

Problems in Nuclear Meteorology (Cont.)

SOV/6277

Bekoryukov, V. I., and L. L. Karol'. Theoretical Evaluation of the Effectiveness of Capturing Aerosols With Gummed-Paper Collectors in the Surface Layer of the Atmosphere 221

Bekoryukov, V. I. On the Evaluation of the Effectiveness of Capturing Aerosols With Gummed-Paper Collectors in the Surface Layer of the Atmosphere 249

Makhon'ko, K. P. Daily Variation in the Dust Contamination of the Atmospheric Surface Layer 253

Sereda, G. A. Contamination of Seas and Oceans With Artificial Radioactive Substances 259

AVAILABLE: Library of Congress

SUBJECT: Meteorology

Card #6 *3/3*

MM/jhc/mas
5-7-63

Problems in Nuclear Meteorology (Cont.)

SOV/6277

with a great degree of accuracy. This again made it possible to use radioactive isotopes in various fields of science, including meteorology. Tests of nuclear arms and the dispersion into the atmosphere of the waste of atomic industry necessitated a thorough investigation of the patterns of the spread of aerosols and gases, sometimes throughout almost the entire atmosphere. Such investigation is connected with the wide use of the newest methods and results of meteorology and the physics of the atmosphere in general. On the other hand, the distribution in the atmosphere of air masses, labeled with radioactive atoms, gives the meteorologists a new method for the study of atmospheric processes. The entire complex of problems related to the study of the distribution of radioactive impurities in the atmosphere and the use of radioactive atoms as labels in air masses or clouds has lately received the name of "nuclear meteorology" and is regarded as a branch of the physics of the atmosphere. The present collection contains some general articles, as well as articles reporting on the results of special investigations of certain problems of nuclear meteorology conducted in 1960-1961. It is divided in three sections, each dealing with a certain type of problem of nuclear meteorology. Bibliographic references are included at the end of individual articles.

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MAKHONIKO, K.P.

PHASE I BOOK EXPLOITATION

SOV/6277

Karol', I. L., and S. G. Malakhov, Candidates of Physics and Mathematics, eds.

Voprosy yadernoy meteorologii; sbornik statey (Problems in Nuclear Meteorology; a Collection of Articles) Moscow, Gosatomizdat, 1962. 271 p. Errata slip inserted. 2600 copies printed.

Ed.: A. I. Zavodchikova; Tech. Ed.: Ye. I. Mazel'.

PURPOSE: The book is intended for meteorologists and physicists specializing in the physics of the atmosphere. It may also be of interest to oceanographers concerned with the contamination of seas and oceans with radioactive waste products.

COVERAGE: This is a collection of 15 articles dealing with various problems of nuclear meteorology. The rapid development of the methods of radiometry opened the possibility of measuring minute particles of radioactive substances

Card 1/6

1/3

MAKHON'KO, E.P.

Studying the transport of atmospheric dust. Izv. AN SSSR. Ser.geofiz.
no.11:1679-1683 N'60. (MIRA 13:11)

1. AN SSSR, Institut prikladnoy geofiziki.
(Dust) (Winds)

30V/169-59-3-2657

Translation from: Referativnyy zhurnal, Geofizika, 1959, Nr 3, p 87 (USSR)

AUTHOR: Malkhon'ko, K.P.

TITLE: On the Limits of Using the Microphotometer for the Analysis of
Fine-Dispersed Aerosols

PERIODICAL: Uch. zap. Rostovsk.-n/D.un-ta, 1958, Vol 68, Nr 8, pp 105-109

ABSTRACT: The application of the microphotometer for determining the aerosol concentration is based on measuring the intensity of the light scattered by the particles distributed on the sampling plate. The microphotometer can be used for the analysis of monodispersed aerosol with particles of an arbitrary diameter (d), except in the range of $d \leq 0.02\mu$. The photometer can be used merely for purely monodispersed systems in ranges where the function i_0/d_0^2 sharply varies (i_0 is the intensity of the scattered light). In case of a polydispersed aerosol, only the coarse fraction ($d > 0.1\mu$) can be measured, using a conventional optical microscope.

Card 1/1

N.T.



Application of a micro-photometer for numerical analysis of the atmospheric dust. 49-9-7/13

formula a recording instrument can be built which will indicate on the recording strip the changes in the dust content of the air.

There are 2 figures and 1 Slavic reference.

SUBMITTED: October 22, 1956.

ASSOCIATION: Rostov/Don State University. (Rostovskiy na Donu Gosudarstvennyy Universitet).

AVAILABLE: Library of Congress

Card 2/2

MAKHON'KO, K. P.

49-9-7/13

AUTHOR: Makhon'ko, K. P.

TITLE: Application of a micro-photometer for numerical analysis of the atmospheric dust. (Primeneniye mikrofitometra k schetnomu analizu atmosferno pyli).

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Geofizicheskaya, 1957, No.9, pp.1164-1172 (USSR)

ABSTRACT: It is shown that it is possible to apply a micro-photometer for calculating the number of microscopic particles. The method was developed for dust particles but it is also applicable to any other particles of microscopic dimensions. The dust was precipitated from the air onto a polished metallic plate of 70 x 26 x 0.7 mm by means of an electro-precipitator. Examples are described of applying the micro-photometer to elucidating the picture of dust distribution on precipitation surfaces of dust catching apparatus (see above), to determining the coefficient of conversion from weight to numerical indices of dust contamination of the air and to an objective colorimetric method of determining the concentration of particles in the atmosphere. A formula is derived, eq.(15), p.1172, which provides a possibility for automatic

Card 1/2 recording of the dust contamination; on the basis of this

Translation from: Referativnyy zhurnal. Metallurgiya, 1958, Nr 12, p 163 (USSR) SOV/137-58-12-25180

AUTHORS: Studenok, Yu. A., Makhon'ko, E. P.

TITLE Nature of the "White Layers" on the Rolling Surface of Railroad Car Wheels (Priroda "belykh sloyev" na poverkhnosti kataniya vagonnykh koles)

PERIODICAL Dokl. 7-y Nauchn. konferentsii, posvyashch. 40-letiyu Velikoy Oktyabr'sk sots. revolyutsii. Nr 2. Tomsk, Tomskiy un-t, 1957, pp 52-53

ABSTRACT The nature of the "white layers", which appear on the rolling surface of railroad car wheels upon braking, was studied by X-ray diffraction and metallographic analyses and also by testing for microhardness. It is shown that the "white layers" appear not to be the usual martensite caused by hardening through friction, but are formed as a result of complex processes, among which plastic deformation is the principal one. To decrease the amount of surface damage of the wheels an increase in the amount of C in steel is recommended with a view of impeding the process of development of plastic deformations.

Card 1/1

A. N.

1. MAKHON'KO, A. A.; SINEL'NIKOV, P. I.
2. USSR (600)
4. Plastering
7. Mechanization of plastering work by using gypsum solutions.
Biul. stroi. tekhn. 10 No. 8, 1953.
9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

SHTEYNVOL'F, L. I.; MAKHONKIN, A. A.

Dynamic balancing of machine rotors. Trudy Inst. mash. Sem. po
teor. mash. 17 no. 68:5-19 '58. (MIRA 11:7)
(Rotors) (Balancing of machinery)

MAKHONINA, V.A.

Rare foreign body in the laryngopharynx. Zhur. ush., nos. 1 gorl.
bol. 21 no.5:73 S-0 '61. (MIRA 15:2)

1. Iz kliniki bolezney ukha, gorla i nosa (zav. - dotsent Ya.D.
Missionzhnik) Zaporozhskogo instituta usovershenstvovaniya vrachey.
(PHARYNX...FOREIGN BODIES)

MAKHONINA, T.M., kand.tekhn.nauk

Experimental investigation of press fits. Rasch.na prochn.
no.11:385-395 '65.

(MIRA 19:1)

MAKHONINA, T.M., inzh.

Calculating press fits of washers beyond elastic limit taking the compressibility of materials into consideration. Raschena proch. no. 10:263-172 '64.
(MIRA 18:1)

MAKHONINA, T.M., inzh.

Using Tresk-Saint Venant criterium and associated with it
flow lay for the calculation of washers beyond the elastic
limit. Rasch. na prochn. no.9:219-230 '63 (MIRA 16:12)

Calculating pressure setting ...

S/572/60/000/006/006/018
D224/D304

expressions are derived for extension corresponding to a given contact pressure for concentric washer setting for three different combinations (elastic deformation of internal washer, plastic deformation of external washer, etc.). The case of elastic-plastic deformation of the tight fit washer on a shaft having an elastic deformation, is also considered. A numerical example is given with the conclusion that an error in calculation of stresses due to ignoring the strengthening of material may attain 39%. There are 5 figures and 5 Soviet-bloc references. ✓

Card 2/2

S/572/60/000/006/006/018
D224/D304

AUTHOR: Makhonina, T. M., Engineer

TITLE: Calculating pressure setting of washers beyond the limits of elasticity if the strengthening of the material has a power form

SOURCE: Raschety na prochnost'; teoreticheskiye i eksperimental'nyye issledovaniya prochnosti mashinostroitel'nykh konstruktsiy. Sbornik statey. No. 6, Moscow, 1960, 97-106

TEXT: The material of washers was assumed to be incompressible at both elastic and plastic deformations. The dependence of the stress intensity σ on the deformation intensity ϵ is approximated as follows: $\sigma = E\epsilon$ for $0 \leq \epsilon \leq \epsilon_T$, $\sigma = \sigma_T(\epsilon/\epsilon_T)^m$ for $\epsilon > \epsilon_T$ where σ_T is the yield limit of material, ϵ_T the deformation corresponding to this limit. The author quotes formulae deduced in a previous paper. The

Card 1/2

MAKHONINA, T.M.

1A(10)

PHASE I BOOK EXPLOITATION

80V/1377

Rascheti na prochnost'; teoreticheskiye i eksperimental'nyye issledovaniya prochnosti mashinostroitel'nykh konstruktov, Sbornik statey, vyp. 3. (Calculations for Strength; Theoretical and Experimental Research on the Strength of Elements Used in Machine Construction. Collection of Articles, Vol. 3) Moscow, Mashgiz, 1978. 353 p. 4,000 copies printed.

Ed.: Tarabasov, N.D., Doctor of Technical Sciences; Editorial Board: Tikhomirov, Ye.N., Honored Worker of the RSFSR in Science and Technology, Professor (Chairman); Serensen, S.V., Active Member, Ukrainian SSR Academy of Sciences, Doctor of Technical Sciences, Professor; Glushkov, G.G., Doctor of Technical Sciences, Professor; Ponomarev, S.D., Doctor of Technical Sciences, Professor; Sokolov, S.N., Doctor of Technical Sciences, Professor; Tarabasov, N.D., Doctor of Technical Sciences, Professor; and Makushin, V.M., Candidate of Technical Sciences, Docent (Secretary); Tech. Ed.: Tikhonov, A.Ya.; Managing Ed. for Literature on General Technical and Transport Machine Building (Mashgiz): Ponomareva, K.A., Engineer.

PURPOSE: This collection of articles is intended for engineers and designers working in the field of machine construction, for research fellows, and scientific workers.

COVERAGE: The collection is an inter-vus publication of transactions concerning strength problems. It contains original reports on calculations for a number of structures used in machine building and their components. Considerations are given to calculations of the columns of hydraulic presses, the nonlinear theory of spiral springs, problems in the calculation of rubber components, theoretical and experimental investigations of circular plates of constant and variable stiffness, investigations of conical shells and of stressed assemblies of machine components. Calculations in the elasto-plastic domain are represented by an investigation of forced fits of discs and the creep of operating turbine blades. Problems of contact in the case of impact and the stability theory of elastic systems "in general terms" are considered. There are 114 references, 99 of which are Soviet, 9 English, 4 German, 1 French, 1 Polish.

Makhonina, T.M., Engineer. Analysis of Forced Fits of Discs Beyond the Elastic Limit

837

Mel'nik, N.N., Doctor of Technical Sciences, Docent. Analysis of the Creep of Operating Turbine Blades

838

PART III. DYNAMIC CALCULATIONS AND CALCULATIONS FOR STABILITY

Tikhomirov, Ye.N., Honored Scientific and Technical Worker of the Russian Socialist Federated Soviet Republic. Professor

Makushin, V.V., Doctor of Technical Sciences

MAKHONINA, T.M., inzh.

Graphic method for designing thin-walled pipes beyond elastic
limit. Rasch.na prochn. no.2:213-221 '58. (MIRA 12:2)
(Pipe--Graphic methods)

MAKHONINA, T. M., Engineer

"Graphical Method for the Analysis of Thickwalled Tubes Beyond the Elastic Limit"

Calculations for Strength, Elongation and Experimental Research on the
Strength of Elements Used in Machine Construction. Collection of Articles,
Vol. 2, Moscow, Machine, 1970, 240pp.

LIVERGANT, Yu.E.; MAKHONINA, M.S.

Combination of chronic myeloleukemia with thyrotoxicosis treated
with radioactive iodine. Med. rad. 10 no. 12:26-29 D '65
(MIRA 19:1)

1. Otdeleniye vnutrennikh i sistemnykh zabolevaniy (zav. - kand.
med. nauk Yu. Ye. Lantodub) i otdeleniye luchevoy patologii
(zav. - kand. med. nauk S.A. Peredel'skiy) Khar'kovskogo instituta
meditsinskey radiologii.

MAKHONINA, M.S. (Khar'kov)

Case of lymphogranulomatosis with cutaneous fistulae. Klin.
med. 39 no.4:139-140 '61. (MIRA 14:4)

1. Iz terapevticheskogo otdeleniya (zav. - dotsent S.D. Kogan)
Khar'kovskogo nauchno-issledovatel'skogo instituta meditsinskoy
radiologii (dir. - kand.med.nauk V.I. Shantyr')
(HODGKIN'S DISEASE) (SKIN--DISEASES) (FISTULA)

MAKHONINA, M.S.

Case of primary tumor of the heart. Vrach. delo no.11:147-148 N
161. (MIRA 14:11)

1. Terapevticheskoye otdeleniye Khar'kovskogo instituta meditsinskoy
radiologii.

(HEART--TUMORS)

I 16509-66

ACC NR: AP6001492

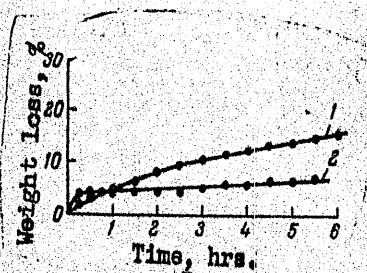


Fig. 2. Effect of the addition of thermally treated VI upon the thermo-oxidative decomposition of I, type MEF-1: 1 - no additive; 2 - 5% of VI.

It was established that addition of 5% of either of the tested thermal stabilizers completely retarded destruction of I. In lower concentrations (up to 1%), thermally treated IV was most effective. It is concluded that deactivating ability of this type of thermal stabilizers increases with temperature, which is in contrast to the behavior of other known stabilizers. Orig. art. has: 4 figures.

SUB CODE: 07/ SUBM DATE: none/ ORIG REF: 010/ OTH REF: 001
Card 3/3 SM

L 16509-66

ACC NR: AP6001/92

obtained by heating at 200C in air on automatic thermal scales ATV-2 constructed by IKhF AN SSSR. Specimens were 0.70 ± 0.02 mm thick and weighed 70 mg. The data obtained are summarized in Figs. 1 and 2.

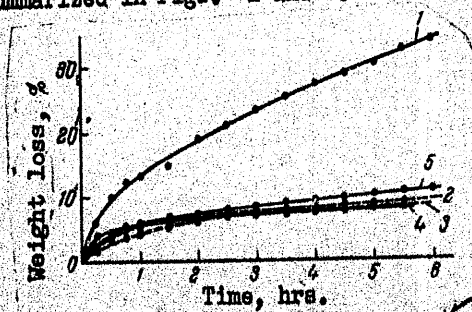


Fig. 1. Effect of the addition of thermal stabilizers upon the thermo-oxidative decomposition of I, type MDF-2: 1 - no thermal stabilizer; 2 - thermally treated IV; 3 - yellow IV; 4 - IV, II; 5 - V.

Card 2/3

L 16509-66 EWT(m)/EWP(j)/T/ETC(m)-6 WW/RM

ACC NR: AP6001492

(A) SOURCE CODE: UR/0191/65/000/012/0008/0010

AUTHORS: Berlin, A. A.; Korolev, G. V.; Makhonina, L. I.; Sel'skaya, O. G.; Belova, G. V.

ORG: none

TITLE: Effect of conjugated polymers upon polymerization of oligoesteracrylates and thermal stability of the produced polymers

SOURCE: Plasticheskiye massy, no. 12, 1965, 8-10

TOPIC TAGS: oligomer, thermal decomposition, stabilizer additive, conjugated polymer, polyester plastic, polymerization kinetics / ATV-2 thermal scales, ~~AN-SSSR construction~~, MDF-2 polyesteracrylate, MBF-1 polyesteracrylate

ABSTRACT: Thermal stability of three-dimensional polyesteracrylate (I) was studied by using conjugated thermostabilizers: polyphenylene (II), polyazophenylene (III), polyphenylacetylene (IV), polytolane (V), anthracene (VI), and thermally treated (IV) and (VI). Kinetic study of polymerization of I was performed according to the method described by G. V. Korolev (Plast. massy, No. 3, 51, 1963). Kinetic curves of the thermal-oxidative decomposition of cured I were

Card 1/3

UDO: 678.01:335

KOROLEV, G.V.; SMIRNOV, B.R.; MAKHONINA, L.I.

Use of the electron paramagnetic resonance method for determining the rate constant of chain growth in the polymerization of polyacrylic esters. Vysokom. soed. 7 no.8:1417-1421 Ag '65. (MIRA 18:9)

1. Institut khimicheskoy fiziki AN SSSR.

KOROLEV, G.V.; MAKHONINA, L.I.; BERLIN, A.A.

Polymerization in highly viscous systems and three-dimensional polymerization. Part 1: Kinetic characteristics of the polymerization of some polyacrylates. Vysokom. soed. 3 no.2:198-204 F '61. (MIRA 14:5)

1. Institut khimicheskoy fiziki AN SSSR.
(Acrylic acid) (Polymerization)

MAKHOMINA, K.I.

Effect of different doses of hydrocortisone on arterial pressure
in healthy dogs. Trudy Uz.gos.nauch.-issl, inst.kur. i fizioter.
13:139-172 '55. (MIRA 18:2)

MAKHONINA, K.A., mladshiy nauchnyy sotrudnik

Effect of Chartak mineral water on certain gastric functions in dogs.
Med. zhur. Uzb. no.6:29-32 Je '61. (MIRA 15:1)

1. Iz otdela eksperimental'noy kurortologii (zav. - dotsent N.Ye.
Kuznetsov [deceased]) Uzbekskogo gosudarstvennogo nauchno-issledovatel'-
skogo instituta kurortologii i fizioterapii imeni N.A.Semashko.
(CHARTAK MINERAL WATERS) (DIGESTION)

MAKHONINA, K. A.

36842. Vliyaniye otritsatel'noy ionizatsii na arterial'noye davleniye zdorovykh sobak. Trudy Uzbek. gos. nauch.-issled. in-ta kurortologii i fizioterapii im. Semashko, sb. 11, 1949, c. 39-55

SO: Letopis' Zhurnal'nykh Statey, Vol. 50, Moskva, 1949

MAKHONINA. K.A.

42644. O Vliyani Vorochnikovoy Ul'trafiol'etovoy Eriteny Na Gemato-Entsefalicheskiy Bar'yer.
Trudy Uzbek, Gos. Nauch.--Issled. Instituta Fizioterapii i Kurortologii Im. Semashko,
Sb. 10, 1948, S. 30-42.

L 32169-66 EWP(j)/EWT(m)/T LJP(c) RM/WW
 ACC NR:AP6012139 (A)

SOURCE CODE: UR/0413/66/000/007/0057/0057

40

INVENTOR: Berlin, A. A.; Kefeli, T. Ya.; Filippovskaya, Yu. M.; Sivergin, Yu. M.;
 Korolev, V. V.; Makhonina, L. I.; Leonov, B. I.

B

ORG: none

TITLE: Preparation of polyacrylate esters. Class 39, No. 180335

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 7, 1966, 57

TOPIC TAGS: polyester, acrylate, polymerization

ABSTRACT: An Author Certificate has been issued describing a method of preparing polyacrylate esters by low-temperature polymerization in bulk of monomeric and oligomeric acrylate esters in the presence of peroxide initiators. To speed up the process the system benzene peroxide plus polyazophenylene plus filler with a developed surface such as PK-3, K-40 is suggested as the initiator. The polymerization is carried out in the presence of an inhibitor of medium potency, for instance benzoquinone or diphenylamine. [LD]

SUB CODE: 11,07/SUBM DATE: 22Aug62

Card 1/1

UDC: 678.674.2'0

MAKHONINA, G.I.

Distribution of Fe^{56} , Co^{60} , Zn^{65} , Sr^{90} and Cs^{137} radioisotopes
in pine, larch, aspen and birch. Biul. MOIP. Otd. biol. 70 no.2:
120-123 Mr-Apr '65. (MIRA 18:5)

VOLKOVA, M.Ya.; MAKHONINA, G.I.; TITLYANOVA, A.A.

Effect of natural extracts on the adsorption of some radioisotopes
by soil. Pochvovedenie no.3:52-57 M^r '64.

(MIRA 17:4)

1. Institut biologii Ural'skogo filiala AN SSSR.

MAKHONINA, G.I.; YUSHKOV, P.I.; VOLKOVA, M.Ya.; TIMOFEYEV-RESOVSKIY, N.V.

Distribution of Sr^{90} and Ru^{106} in the basic organs of pine. Dokl.
AN SSSR 151 no.6:1456-1457 Ag '63. (MIRA 16:10)

1. Institut biologii Ural'skogo filiala AN SSSR. Predstavleno
akademikom V.N.Sukachevym.

MAKHONINA, G.I.; TIMOFEEV-RESOVSKIY, N.V.; TITLYANOVA, A.A.;
TYURYUKANOV, A.N.

Distribution of strontium-90 and cesium-137 among the components
of a biogeocenose. Dokl. AN SSSR 140 no.5:1209-1212 0 '61.
(MIRA 15:2)

1. Laboratoriya biofiziki Ural'skogo filiala AN SSSR.
Predstavleno akademikom V.N.Sukachevym.

(STRONTIUM--ISOTOPES)

(CESIUM--ISOTOPES)

(PLANTS--CHEMICAL ANALYSIS)

MAKHONINA, G.I.; MOLCHANOVA, I.V.; Prinimali uchastiye: TITLYANOVA, A.A.;
TYURYUKANOV, A.N.

Investigating the behavior of very small quantities of iron and zinc
in soils. Nauch. dokl. vys. shkoly; biol. nauki no.4:218-225 '61.
(MIRA 14:11)

1. Rekomendovana kafedroy pochvovedeniya Moskovskogo gosudarstvennogo
universiteta im. M.V.Lomonosova.
(SOILS--IRON CONTENT) (SOILS--ZINC CONTENT)

MAKHONINA, G.I.; MOLCHANOVA, I.V.; SUBBOTINA, Ye.N.; TIMOFEEV-RESOVSKIY
N.V.; TITLYANOVA, A.A.; TYURYUKANOV, A.N.

Experimental investigation of radioisotope distribution in
natural biogeocoenoses. Dokl.AN SSSR 133 no.2:484-487
J1 '60. (MIRA 13:7)
(Radioactive substances) (Forest ecology)

3 (5), 30 (1)
AUTHORS:

ИЗДАТЕЛЬСТВО, Л. А., Таруков, А. М., SOV/20-126-6-55/67
Коллекция, Г. И.

TITLE: On the Descriptive Effect of Natural Extracts (O desorbirovanií shchesh desyatvii prirodnykh ekstraktov)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 126, Nr 6, pp 1346 - 1349 (USSR)

The effect of the presence of organic substances in natural waters is discussed. This effect is very different (Refs. 1-5). Especially important is the formation of complexes with different metals. In recent years the interest in these natural compounds has considerably increased. The crystalline mineral lattices or from the soil-absorption-complexes (pochevnyy pogloshcheniya) and their transformation into the soil solutions (Refs. 6-9). Each complex mixture, also in living organisms can be excreted by water after the death of the latter or they can regenerate in the authors' opinion. The effect mentioned in the literature in the case of zinc, The following elements were investigated: iron, zinc, cobalt, and yttrium (which are considered

Card 1/3

[illegible]

Case 2/3

leaves and Artemisia vulgaris is more strongly than birch-*Betula*, alder-*Alnus*, and pine. The description proceeds differently in different soils. In the kind of the humus content increases in the description-%. In the kind experimental series Cs was very little affected by NPK-solution as well as by extract. It was influenced by a complex formation. Experiments with zinc which were conducted to confirm this assumption showed that the effect of the investigated extracts is not directly connected with their action on the soil. The effect of the natural extracts on the processes of humification in the soil is in many cases strong. There is no great attraction in waters and soils in many cases strong. There are

ASSOCIATION:

ASSOCIATION: Institut biologii Ural'skogo filiala Akademii nauk SSSR (Institute of Biology of the Ural's Branch of the Academy of Sciences, USSR) Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University named M. V. Lomonosov)

PREPARED:
SUBMITTED:
Card 3/3

MAKHONINA, G. F.

Makhonina, G. F.

"Methods of improving the Breit breed of swine on the example of the swine-breeding farm at the 'Luch kommunizma' kolkhoz." Moscow Order of Lenin Agricultural Academy imeni K. A. Timiryazev. Moscow, 1956. (Dissertation for the Degree of Candidate in Agricultural Sciences.)

Knizhnaya Letopis'
No. 25, 1956. Moscow.

ORAZYMBETOV, Nurgazy Orazymbetovich, inzh.; MAKHONIN, Vladimir Vasil'yevich, inzh.; MUKMANOV, Nasyr Lukmanovich, inzh.; TAKEZHANOV, F.Kh., inzh., red.; IL'YASHENKO, L.V., red.; BAIMBETOV, M., red.; TURABAYEV, B., tekhn.red.

[Handbook on local building materials and their use] Spravochnik po mestnym stroitel'nyim materialam i ikh primenenie. Pod red. F.Kh. Takezhanova. Alma-Ata, Kazakhskoe gos.izd-vo, 1959. 510 p.

(MIRA 13:4)

(Building materials)

MAKHONIN, V.M., GEGUZIN, Ya.Ye., PINES, B.Ya.

* "Laws Governing the Sintering of Compact Metallic Powders," Uch. zap. KhGU,
v. 48, Tr. Fiz. otd., No. 4, Kh. St. Univ. publications. 1953

ACC NR: AP6035698

is directly connected to the horizontal deflection plates of the beam. This signal source output is also connected through a differentiating circuit to the vertical deflection plates. The slit in the mask of the decoding tube is made in the form of the phase profile of the specified function. Orig. art. has: 1 figure.

SUB CODE: 09/

SUBM DATE: 30Oct63

Card 2/2

ACC NR: AP6035698

(A, N)

SOURCE CODE: UR/0413/66/000/019/0045/0046

INVENTOR: Makhonin, V. A.

ORG: none

TITLE: A device for detecting a section of a specified function in an electrical signal. Class 21, No. 186534

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 19, 1966, 45-46

TOPIC TAGS: detection system, electric measuring instrument, signal detection, signal identification, complex function

ABSTRACT: This Author Certificate presents a device for detecting a section of a specified function in an electrical signal. The device includes a decoding electron-beam tube with a mask (see Fig. 1). The design provides for the detection of the signal section, independent of the moment of its occurrence. The signal source output

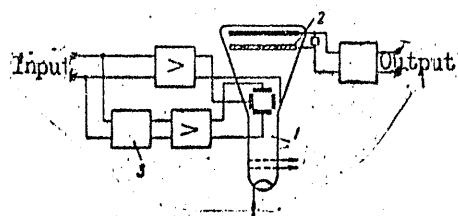


Fig. 1. 1 - electron-beam tube; 2 - mask; 3 - differentiating circuit

Card 1/2

UDC: 621.396:621.59

L 36251-66

ACC NR: AT6012896

at $x \in l$. This principle becomes stronger the more rapid the growth of the weights w_l from the length of coincidence l ; n_l is the number of sections where length l coincides with the interval of observation L . Simulation of continuous recognition based on reaching the threshold S_{min} of a similarity function is not complex. It is necessary to combine the characteristics of constancy and continuity. This is done by using local invariants. A recognition circuit is described. The local invariants serve as the coordinates of the mapping space. Each point of this space represents all the corresponding points of the descriptive variants, generated by the group and one element of the pattern. The following relationship is established: coordinates of the object point $\rightarrow$ coordinates in the space of local invariants $\rightarrow$ coordinates of the point of the pattern. Proximate points of the object are scanned and the coordinates of the object and pattern determine the transformation parameters. If the object corresponds to the pattern, proximate values of each parameter of all points are obtained. The points are defined by the object in the field of observation. By satisfying this condition, which was calculated assuming conformity with the rules determining S , continuous and constant estimate of similarity between object and pattern is established. Orig. art. has: 2 figures.

SUB CODE: 09 / SUBM DATE: 02Aug65

rw
Card 2/2

L 36251-66 EWT(d)/T/EWP(1) IJP(c) GG/BB/GD

ACC NR: AT6012896

SOURCE CODE: UR/0000/65/000/000/0182/0184

AUTHOR: Makhonin, V. A.

ORG: None

TITLE: The use of perception characteristics for electronic pattern recognition

SOURCE: Sistema chelovek i avtomat (Man-automaton systems). Moscow, Izd-vo Nauka, 1965, 182-184

TOPIC TAGS: pattern recognition, information theory, bionics

ABSTRACT: The author studies electronic pattern recognition. Continuity of pattern recognition in recognizing solid bodies constitutes the main problem under study. The principle of estimating the similarity of S, which insures continuity can be formulated simply: strong coincidence does not occur by chance. When $f(x)$ is described by one variable then its congruence with the image of $f^*(x)$ is given by

$$S_{f, f^*} = \frac{1}{w_L} \sum_{l=0}^L n_l w_l$$

l is the length of a segment where

$$|f(x) - f^*(x)| \leq \varepsilon$$

Card 1/2

L 16911-66

ACC NR: AT6004684

the description and the reduced pattern. This is followed by a study of some of the possible criteria for the similarity between the description and the pattern. The article concludes with a discussion of the joint properties of the invariant recognition approach and visual perception. Orig. art. has: 1 formula. 0

SUB CODE: 09 / SUBM DATE: 25Sep65 / ORIG REF: 005

Card 2/2 *Jo*

L 16911-66 EWT(d)/T/EWP(1) IJP(c) GG/BB/GS

ACC NR: AT6004684

SOURCE CODE: UR/0000/65/000/000/0011/0015

AUTHOR: Makhonin, V. A.

ORG: none

16C44
TITLE: Invariance during recognition by comparison between the description and the pattern [Paper presented at a seminar of IPPI AN SSSR on 23 March 1964]

SOURCE: AN SSSR, Institut problem peredachi informatsii. Opozvaniye obrazov. Teoriya peredachi informatsii (Pattern recognition. Theory of information transmission) Moscow, Izd-vo Nauka, 1965, 11-15

TOPIC TAGS: recognition process, pattern recognition

ABSTRACT: The modern approach to recognition utilizes an indirect recognition by means of characteristics rather than by direct superposition comparison with the standard pattern. The recognizing characteristics are description functionals which are invariant regarding the permissible transformation of the object. The present author discusses all the elements needed for the establishment of the invariant recognition: the definition of a pattern, the methods for the transformation of such a pattern making the pattern suitable for the description, and the method for the comparison between

Card 1/2

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Br1

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BRAMMER, Yuriy Aleksandrovich; PASHCHUK, Inna Naumovna;
~~MAKHONIN, V. A.~~, kand. tekhn. nauk, ~~retsensent~~; REYFMAN,
L.L., преподаvatel', retsenzent: BASAVINA, Ye.V., red.

[Pulse techniques] Impul'snaia tekhnika. Moskva, Vysshaya
shkola, 1965. 283 p. (MIRA 18:7)

1. Institut problem peredachi informatsii AN SSSR (for
Makhonin). 2. Moskovskiy radiomekhanicheskiy tekhnikum
(for Reyfman).

1. SUMMARY

ALGORITHM NO. 10408773

DESCRIPTION: It is noted that the described method of reducing the description of objects in a field can be extended to the case of affine transformations and when the number of measurements is large. Orig. Art. 186, 22 formulas.

ASSOCIATION: 000

ENCRYPTED: 000

ENCL: 00

SUB CODE: DP

NO REF: 000

OTHER: 001

100-130747-100-130748

specified class transformation. In the first case, the limiting case is reached when the descriptions are integrated by a group transformation from one class to another. One standard representation is then associated with each class. (b) There are no limitations on the sets of objects, but, depending on conditions, the description is subjected to group transformation. Standardization is achieved by a transformation from this group, and each object receives its own standard description. The second case can occur in the recognition of visual patterns when the object and the sensor are not known. Then, transformations of the properties of the group or of its affine subgroup will take place. The paper also presents the results of a investigation to improve the process of standardization in order to decrease the partitioning space, increase the noise immunity of this operation and extend the range of the description of planar half-tone figures. The obtained partitioning space is close to the limiting value and, therefore, the authors intend to continue the search for other methods of decreasing the

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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031500003-6

PLANNING, V. 100

Use of television methods for the increase of the visual sharpness of
photographic images. Usp. nauch. fot. 196142-145 '64.

(MIRA 17-10)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031500003-6

MAKHONIN, V.A.; SAVEL'YEV, V.P.

Work carried out in cooperation with the Academy of Sciences of the USSR

Decrease in the volume of sorting and increase of interference
rejection in affine cognition. Probl. pered. inform. no.16:
42-47 '64. (MIRA 17:12)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031500003-6

MAKHONIN, V.A.; STEPANOV, V.G.

Method for studying cognition using artificial acceptance
hampering. Probl. pered. inform. no.15:75-76 '63 (MIRA 17:8)

MAKHONIN, V.A. (Moskva)

Affine identification of plane figures. Izv. AN SSSR, Otd. tekhn.
nauk. Tekh. kib. no.1:199-200 Ja-F '63. (MIRA 16:7)

(Geometry)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031500003-6

MAKHONIN, V.A.

Technical models of the visual analyzer. Uch. zap. MGPI no.94:
336-367 '63. (MIRA 18:6)

41041

S/019/62/000/017/042/054
A154/A126

9.11.50

AUTHORS: Khyupfer, A.P., Makhonin, V.A.

TITLE: A pulse-coding device

PERIODICAL: Byulleten' izobreteniy, no. 17, 1962, 45 - 46

TEXT: Class 42m, 14. No. 149950 (757740/26-24 of December 29, 1961). This pulse-coding device, containing an electron-beam tube, horizontal- and vertical-scanning generators, and an amplifier, is distinguished by the fact that, to make it simpler, a signal plate is placed on the outer surface of the tube screen; this signal plate consists of insulated rectangular cells connected up to the positive or negative output of a pulse generator in accordance with the code table.

[Abstracter's note: Complete translation]

Card 1/1

28582

S/562/61/000/010/001/007
E140/E435

Some questions of multichannel ...

spectrum providing maximum channel utilization remains an open question. The transmission of signals with a finite number of states is next considered. The attempt is made to propose a new packing method, which the author terms "amplitude packing" ("packing with respect to level"). In this proposal, each channel is assigned a set of levels differing by magnitudes separated by orders of magnitude (Fig.2, $U_{bx} = U_{outp}$; $U_{bx} = U_{inp}$). In the example illustrated there are two signals of three states each and one signal of two states. It is seen that S_1 is carried by the amplitudes 0, 1, 2, S_2 by 0, 0.5 and S_3 by the amplitudes 0, 1/6, 1/3. Then any instantaneous combination of S_1, S_2, S_3 is separable. The author is well aware that the noise properties of the three channels differ, as a result of the varying modulation energies employed. The article concludes with a consideration of a statistical packing method, in which channel capacity is economized by utilizing the statistical properties of the channel signals. The line signal is available to a given channel only when a quantized change in the channel signal from the value previously transmitted has occurred. Channel identification is proposed by the amplitude method discussed above.

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there correspond one and only one combination of channel signals $s_1, s_2, \dots, s_1, \dots, s_n$. The author defines an "ideal" redistribution as follows: The set of all s_i is compared simultaneously with the s_i actually received in the presence of noise and the one agreeing most closely is adopted, after which the values of the channel signals are distributed. It is recognized that this method is not practicable for the case of large numbers of channels or with s_i taking values from a continuous set S_i . The author then proceeds to define linear and nonlinear packing and redistribution operations. An operator is linear if it satisfies the distributivity condition and remains bounded. Boundedness is automatically satisfied for physical signals and the fundamental condition is distributivity, which is also known as the superposition principle. For distribution to be realized by linear devices, the packing operator must be linear. Nonlinear operators may be employed if the inverse operation is physically realizable. Nonlinear packing may be of interest for combating noise. The author proceeds to an examination of bandwidth considerations for the case of continuous channel signals of bounded spectrum. According to the author, the problem of carrier

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AUTHOR: Makhonin, V.A.

TITLE: Some questions of multichannel communications

SOURCE: Akademiya nauk SSSR. Laboratoriya sistem peredachi informatsii. Problemy peredachi informatsii, no.10, 1961, 5-23

TEXT: This paper was presented at the Seminar of the Laboratory held on March 26, 1957.

The author considers the problem of formation of a single "line" signal from a number of individual "channel" signals. In the general case, each of n channel signals s_i modulates a given parameter of a prescribed carrier φ_i according to a modulation operator $M_i(s_i, \varphi_i)$. The ensemble of modulated carriers is combined into a single line signal by a "packing" operation. A necessary and sufficient condition for the line signal to be capable of being redistributed to the individual receivers in each channel is that to each line signal

$$s_l = F \{s_1, s_2, \dots, s_n\}$$

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MAKHONIN, V. A.

Cand Tech Sci - (diss) "Superfluous information in television and methods for reducing it." Moscow, 1961. 15 pp; (Ministry of Communications USSR, Moscow Electrical Engineering Inst of Communications); 150 copies; price not given; (KL, 6-61 sup, 221)

IGNAT'YEV, Ye.I.; MAKHONIN, V.A.

Experimental electronic installation for studying visual
perception. Vop.psikhol. 6 no.2:147-151 Mr-Ap '60.
(MIRA 13:7)

1. Moskovskiy gosudarstvennyy pedagogicheskiy institut im.
V.I.Lenina (for Ignat'yev). 2. Laboratoriya sistem peredachi
informatsii AN SSSR (for Makhonin).
(Psychological apparatus)
(Perception)

MAKHONIN, V.A.

System for partial statistical matching by conversion of
duration. Probl.pered.inform. no.5:83-86 '60.
(Information theory) (MIRA 13:7)

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MAKHONIN, V. A.

PHASE I BOOK EXPLOITATION

SOV/4480

Akademiya nauk SSSR. Laboratoriya sistem peredachi informatsii

Problemy peredachi informatsii, Vyp. 5: Statisticheskoye kodirovaniye
(Problems in the Transmission of Information, No. 5: Statistical Coding)
Moscow, 1960. 125 p. 4,000 copies printed.

Resp. Eds. for this volume: E.L. Blokh (Resp. Ed.), and V.G. Solomonov
(Deputy Resp. Ed.); Ed. of Publishing House: G.Yu. Shteynbok; Tech. Ed.:
O.G. Ul'yancva.

PURPOSE: This book is intended for readers interested in systems and methods
of coding.

COVERAGE: This collection of 14 articles on statistical coding written by staff mem-
bers of the Laboratoriya sistem peredachi informatsii Akademii Nauk SSSR (Laboratory
of Information Transmission Systems of the Academy of Sciences USSR). The articles
were presented as lectures and discussed at the enlarged session of the Scien-
tific Council of the Laboratory, April 16 and 17, 1959. No personalities are men-
tioned. References accompany 13 of the articles.

Card ~~17~~

AUTHOR: None Given

PERIODICAL: Conference on Problems of Statistical Coding

ABSTRACT: This Conference was held at Akademiya nauk SSSR, Otdeleniye tekhnicheskikh nauk, Energetika i avtomatika, 1959, Nr 3, pp 191-192 (USSR).

This Conference was held on April 16-17, 1959, in Moscow. The report contains little more than the titles of the papers and the names of the authors, which are listed below. The papers by V.A. Gerasimov and A.I. Kirillov, which are listed below, contain symbols by means of which Kirillov's "Coding sequences of two symbols" and Gerasimov's "Transmission coding by Shannon's method" can be transformed into codes with separating signs." (A discussion of the effectiveness of coding by Shannon's method.)

X.L. Blokh, "Transmission coding by Shannon's method," a uniform code" (with reference to binary sequence by means of a simple Markov sequence).

D. S. Lebedev, "Statistical coding by transmitting the positions (coordinates) of rare symbols".
M. Ye. Kirillov, "Use of multi-program codes for statistical coding".

D. S. Lebedev, "Tests of multi-program codes for statistical coding".

strong probability relations between the presence of

A. L. Blokh, "Sequential coding" (a variant of the

relative coding procedure until the length of the coded

sequence ceases to become any shorter).

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V. A. Garmash, N. Ye. Kirillov and D. S. Lebedev, "An experimental study of the statistical aspects of information sources" (a study of frequency distributions of various types of communication).
V. A. Garmash, "Variable delay in statistical coding systems".
V. A. Garmash, "Transmission of facsimile data by statistical coding".
A. A. Markovskiy, "A simple system for partial statistical compression in which the lengths of signal symbols are transformed".
N. Ye. Kirillov, "Statistical coding for use in conditions of low noise level".
A. A. Markovskiy, "Statistically noise-stable coding".
V. A. Garmash, "A method of constructing an optimal binary code".
V. B. Blokh, "Codes with elements whose lengths differ".

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SOV/24-59-3-8/33

An Approximation to a Television Signal Using Some Properties of the Eye

threshold value. Fig 4, part 4, shows the result of applying these circuits to the original signal of part 5. It is pointed out that all the parts of the circuits are well-known in the automatic control and computing fields, and that the system is therefore simple to engineer. It is claimed that the gain in channel space is very substantial (the bandwidth is reduced by about a factor 4 without much loss). The paper contains 7 figures and 3 references, 1 of which is Soviet and 2 English.

SUBMITTED: March 3, 1959.

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SOV/24-59-3-8/33

AUTHOR: Makhonin, V. A. (Moscow)

TITLE: An Approximation to a Television Signal Using Some Properties of the Eye.

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Energetika i avtomatika, 1959, Nr 3, pp 50-54 (USSR)

ABSTRACT: The paper describes a simple system for removing some of the excess information in a television signal; the system employs the observed fact that the eye stores the large-scale features of the image for an appreciable time. The statistics of a television signal are very much those of a uniform Markov chain, and it is possible to use stepwise (pulse) approximations to the signal. The width of a step is controlled by the local contrast threshold of the eye, and Fig 1 illustrates the block diagram of a simple system for the purpose, in which the error between the actual signal and the approximation is compared with the threshold for the corresponding brightness level, and any discrepancy in excess of the threshold is used to alter the actual signal. (The system is in effect a relay servo). The threshold is time-dependent; Fig 5 shows the best form for use. Fig 6 shows the circuit that establishes approximation error, and Fig 7 shows a simplified circuit for deriving the appropriate

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