BONEV, N.

"The Rotation of Venus." In French. p.167 (GODISHNIK, MATEMATIKA I FIZIKA, Vol. 47, no. 1, pt. 2, 1950/51-1951/52, Sofiya.)

SO: Monthly List of East European Accessions, Vol. 3, No. 3, Library of Congress, March 1954, Uncl.

BONEV, N.

"The Law of Titius-Bode." p.183 (GODISHNIK, MATEMATIKA I FIZIKA, Vol. 47, No. 1, 1950/51-1951/52, Sofiya.)

SO: Monthly List of East European Accessions, Vol. 3, No. 3, Library of Congress, March, 1954, Uncl.

BONEV, N. Astrofizika. (Sofiya)

Nauka i izkustvo (1953) 162 p. (Universitetska) (Astrophysics. illus., tables)

SO: Monthly list of East European Accession, (EEAL), LC, Vol. 4, No. 9, Sept. 1955
Uncl.

BONEV, N.

Rotation of Venus. Biul. VAGO no.15:41-46 '54. (MLRA 8:4)

1. Astronomicheskiy institut pri Sofiyskom universitete.
(Venus (Planet))

BONEY N.

Distribution of lunar craters in connection with their origin; a new argument against the meteoritic hypothesis. In French. p. 177.

GODISHNIK. MATEMATIKA I FIZIKA. Sofiia, Bulgaria, Vol. 50 No. 1 1955/56 (Published 1957)

Monthly List of East Accession (EEAI) LC, Vol. 9, No. 1 January 1960

Uncl.

BONEV, N.

New meteoritics center in Bulgaria. Meteoritika no.16:143 '58.
(MIRA 11:8)

1.Chlen-korrespondent Bolgarskoy Akademii nauk.
(Bulgaria--Meteorites)

Bonev, N.

PHASE I BOOK EXPLOITATION SOV/2237 SOV/57-2-15

Akademiya nauk SSSR. Komitet po meteoritam

Meteoritika; sbornik statey, vyp. 16 (Meteoritics; Collection of ...) Moscow, 1958. 209 p. Errata slip inserted. ... 1,500 copies printed.

Ed.: V.G. Fesenkov, Academician; Deputy ...; Tech. Ed.: ... ing House: L.K. Zibulyeva; ...

PURPOSE: This publication is intended for ... physicists, and other specialists ...

COVERAGE: This collection contains ... meteorites, and 23 abstracts of ... ferences on Meteoritics organized by ... Sciences USSR, held in Moscow, ... deal with the origin and ... elements in the solar system, ... craters on the earth and the moon, ... fell in the Ukraine and in Mongolia. ... Sikhote-Alin' meteorite shower, ... tion, structure, and the ... scribes the activities of the Center for ... ogy, Institute of Physics, Bulgarian Academy of ... are mentioned.

TABLE OF CONTENTS:

TRANSACTIONS OF THE ... CONFERENCE ON METEORITICS

2/

BONEY, N.

On the contour of the terrestrial continents; probable influence of the moon. In French. p. 165.

GODISHNIK. MATEMATIKA I FIZIKA. Sofiia, Bulgaria, Vol. 50 No. 1 1955/56 (Published 1957)

Monthly List of East Accession (EEAI) LC, Vol. 9, No. 1 January 1960

Uncl.

BONEV, N.

Distribution of the lunar craters in relation to their origin; a new argument against the meteoritic hypothesis. In French. p. 121.

GODISHNIK. MATERMATIKA I FIZIKA. Sofiia, Bulgaria, Vol. 50, no. 1 pt. 2 1955/56 (published 1958)

Monthly List of East Accession (EEAI) LC, Vol. 9, No. 1 January 1960

Uncl.

BONEV, N.

Distribution of moon craters in relation to their origin (possible influence of the earth). In French. p. 97. (GODISHNIK. MATEMATIKA I FIZIKA, Vol. 49, No. 1, 1954/55 (published 1956), Sofia, Bulgaria)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 9, Sep 1957. Uncl.

BONEV, N.

On the origin of asteroids and meteorites. Izv mat inst BAN 4 no.2: 147-151 '60. (EEAI 10:9)

(Planets) (Meteorites)

20499
S/025/61/000/003/011/012
A166/A127

3.1550 (1057, 1062, 1129)

AUTHOR: Bonev, N., Member; Director (see Associations)

TITLE: The Newcomer from space

PERIODICAL: Nauka i zhizn', no. 3, 1961, 32

TEXT: N. Bonev, Member of the Bulgarian Academy of Sciences and Director of the Astronomical Observatory at Sofia, recently advanced an original hypothesis at the Mezhdunarodnyy simpozium "Luna" (International Symposium "The Moon"). Bonev points out that the Moon is a disproportionately large satellite for a body the size of the Earth. Secondly, craters can be observed on the Moon such as have been detected on no other satellite. These are probably of volcanic origin. From this assumption the author concludes that the Moon may once have been an independent planet in the solar system whose orbit approached that of the Earth. Perhaps due to a colossal volcanic eruption it had lost much of its original large mass and greatly increased its velocity so that it was drawn into the Earth's orbit. There is 1 drawing.

Card 1/2

20499
S/025/61/000/003/011/012
A166/A127

The Newcomer from space

ASSOCIATIONS: Academy of Sciences of Bulgaria; Astronomical Observatory at Sofia

Card 2/2

BONEV, N., prof. (Bolgariya)

Origin of the moon. IUn.tekh. 5 no.8:66-67 Ag '61. (MIRA 14:12)
(Moon, Theory of)

BONEV, Nikola

Certain preliminary results from the observation of the total eclipse. Spisanie BAN 6 no.2:114-118 '61.

1. Chl.-kor. na Bulgarskata akademiia na naukite.

BONEV, Nikola, prof.

Problem of the twins in the theory of relativity and in astronautics. Godishnik fiz mat 55 no.2:1-6 '60/'61 [publ. '62].

1. Redaktor, "Godishnik na Fiziko-matematicheskiia fakultet."

BONEV, N.

The 12th International Congress of Astronautics, held in Washington Oct. 1-6, 1961. Spisanie BAN 7 no.1/2:108-112 '62.

1. Chlen-korrespondent na Bulgarskata akademiia na naukite.

BONEV, N.

The Thirteenth Congress of the International Federation of Astronautics. Spisanie BAN 7 no.4:125-127 '62.

1. Chl.-kor. na Bulgarskata akademiia na naukite.

L 27263-65 EED-2/EWT(d)/FBD/FSF(h)/FSS-2/EWT(l)/FS(v)-3/EEC(k)-2/EMG(v)/EWA(d)/FCS(f)/T/EEC(c)-2/EED-2/EED(b)-3 Pn-4/Po-4/Pe-5/Pq-4/Pac-4/Pg-4/Pae-2/Pk-4/Pl-4 IJP(c) GW/WR

ACCESSION NR: AT5003485 S/3126/62/000/001/0057/0068

AUTHOR: Bonev, N. (Professor)

TITLE: Activity of Bulgarian stations in observing artificial earth satellites

SOURCE: Nablyudeniya iskusstvennykh sputnikov Zemli, no. 1, 1957-1962. Moscow, 1962. Byulleten' stantsiy opticheskogo nablyudeniya iskusstvennykh sputnikov Zemli; spetsial'nyy vypusk, 67-68

TOPIC TAGS: artificial satellite, satellite tracking, AT 1 telescope, NAFA 3s/25 camera, Zeiss binocular

ABSTRACT: The Bulgarian station No. 1101 was set up at Sofiya immediately after launching of the first Soviet artificial satellite. N. Bonev, corresponding member of the Bolgarskiy Akademii nauk (Bulgarian Academy of Sciences), became the director of the station. At first only a comet finder and five Zeiss binoculars were available, but in November 1957 the Academy of Sciences SSSR supplied standard astronomical AT-1 telescopes. As many as 40 students were employed for observation under the direction of Bonev. In May 1958 a NAFA-3s/25 camera was obtained from the Academy of Sciences SSSR, and photographic observations were then made. Since 1961 only state workers have participated in the work. Close cooperation has been effected with the Soviet center and with the Chinese observatory Purple Mountain in

Card 1/2

L 27263-65

ACCESSION NR: AT5003485

Nanking. On 6 June 1961 a second Bulgarian station, No. 1102, was installed at Stara Zagora, in the Narodnaya astronomicheskaya observatoriya (People's Astronomical Observatory). Five AT-1 telescopes, one marine chronometer, and much advice were obtained from Station No. 1101. This station now employs 25 volunteer workers and 4 state employees. A special course is given here for training observers.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: SV, DC

NO REF SOV: 000 OTHER: 000

Card 2/2

ACCESSION NR: AT4017780 B/2503/63/011/01-/0139/0144

AUTHOR: Bonev, N.

TITLE: Forces, proportional to distance, appearing in the basic equations of the relativity theory

SOURCE: B"lgarska Akademiya na Naukite. Fizicheski institut. Izvestiya na Fizicheskiya institut s ANEB (News of the Institute of Physics and the Atomic Energy Scientific Research Foundation), v. 11, no. 1-2, 1963, 139-144

TOPIC TAGS: relativity, Einstein equation, repulsive force, equilibrium, expanding universe, causality, Painlevé, mechanics

ABSTRACT: The author studied the Bertrand problem relating to binary stars thirty years ago and demonstrated that the solution $F_2 = -kr$ in this problem must be rejected a priori because it does not comport with the principle of causality (Painlevé's appendix, viz. that the farther away one material body is from another material body, the less the influence of the former on the movements and transformations of the latter). Here the author demonstrates that the appearance of repulsive forces, proportional to distance, in Einstein's fundamental equations can be brought into conformity with the causal principle either by means of equilibrium effected

Card 1/2

ACCESSION NR: AT4017780

in a homogeneous medium (repulsive forces) or by means of expansion of the Universe. On the other hand, the relative movement of a satellite vis-a-vis its planet is not influenced by the action of remote masses. At the end of the article the author switches from his discussion of the influence of remote masses in space and takes up the influence of the distant past (remoteness in time) on the future.

ASSOCIATION: none

SUBMITTED: 05Dec62 DATE ACQ: 04Mar64 ENCL: 00

SUB CODE: PH, AS NO REF SOV: 000 OTHER: 003

Card 2/2

[redacted], Inzh.

For a more rational use of the installed power in arc welding transformers. Mashinostroenie 15 no.5:11-12 '66

B[illegible], [illegible]; [illegible], [illegible]; [illegible], [illegible] [illegible]its [illegible],
[illegible]; [illegible] A, M.; [illegible], S.; [illegible], E.; TODOROVA, M.

Study of the chemical composition of human milk in deficient and normal lactation during the 1st 4 months. Akush. ginek. (Sofiia) 4 no.3:1-6 '65.

1. Nauchno-izsledovatelski institut po akusherstvo i ginekologiia (Direktor prof. Br. Papazov).

DOBROKHOTOVA, L.P.; BONFITTO, M.

Effect of seizures of the auditory reflex epilepsy on the activity of the heart. Nauch. dokl. vys. shkoly; biol. nauki no.1:58-61 '66. (MIRA 19:1)

1. Rekomendovana kafedroy fiziologii vysshey nervnoy deyatel'nosti Moskovskogo gosudarstvennogo universiteta. Submitted September 30, 1964.

BONGARD, E.M.

Late results of acute intoxication with tetraethyllead. Trudy GIGT no.9:88-100 '62. (MIRA 17:9)

L 37255-66

ACC NR: AP6028238 (N) SOURCE CODE: UR/0392/66/000/002/0079/0080

AUTHOR: Bongard, E. M.; Geller, L. I.; Karimova, A. Kh.; Podrez, Z. G.

ORG: Ufa Scientific Research Institute of Hygiene and Occupational Diseases (Ufimskiy NII gigiyeny i professional'nykh zabolevaniy)

TITLE: Vibration sickness of polishers

SOURCE: Kazanskiy meditsinskiy zhurnal, no. 2, 1966, 79-80

TOPIC TAGS: biologic vibration effect, physiological parameter, industrial medicine, drug treatment, metal polishing, nervous system

ABSTRACT: Workers occupied in polishing metal parts by pressing the parts manually onto a rotating abrasive disc were affected by vibration sickness. The disc rotated at a velocity of 5,700 rpm, the vibration frequency was 96 cycles, and the amplitude of vibrations 0.33 mm; the polishers were thus exposed to the action of high-frequency vibrations with unfavorable characteristics. The clinical symptoms exhibited by the workers corresponded to those described in the literature. In addition to general symptoms (tiredness, irritability, headaches), the workers exhibited local symptoms affecting principally the hands and arms, which included anesthesia, spastic vascular disturbances, lowering of the temperature of the skin, etc. Depending on the severity of the vasovegetative and angiospastic distrubances, the patients developed a mild or pronounced pain syndrome. Clinical treatment of the patients comprised

Card 1/2

UDC: 616-057-613.644

0917 1820

L 32755-66
ACC NR: AP6028238

administration of nicotinic acid, pachycarpine, and vitamine B_1 as well as application of novocain, galvanodiathermy, therapy with paraffin, and treatment with ultra-high frequency current. In the majority of cases the workers could not resume employment as polishers even after treatment without recurrence and aggravation of vibration sickness. [JPRS: 36,932]

SUB CODE: 06 / SUBM DATE: none / ORIG REF: 002

LS
Card 2/2

BONGARD, E.M.; FAYERMAN, I.S.; RUMYANTSEVA, Ye.P.

Chronic intoxication with methyl chloride. Trudy GIGT no.9:101-109 '62. (MIRA 17:9)

BONGARD, E.M.; LASHCHENKO, N.S.

Characteristics of the course of food poisoning caused by granosan. Vop. pit. 22 no.6:46-52 N-D '63. (MIRA 17:7)

1. Iz klinicheskogo otdela (zav. - prof. S.I. Ashbel') Gor'kovskogo nauchno-issledovatel'skogo instituta gigiyeny truda i professional'nykh bolezney.

BONGARD, M. M.

Presented by Academician K. M. Bykov [illegible]
Institute of Physiology of the Academy of Sciences [illegible]

(1)

Relation between flicker fusion frequency and simultaneous contrast in the visual analyser. M. M. Bongard (*C. R. Acad. Sci. U.R.S.S.*, 1953, 90, 175—178).—The experimental result of Sherrington, that on a rotating disc, half black and half white, a ring of which the half on the black background is white and the other half black has a higher flicker fusion than its background is shown to be due to eye movement, so that the argument from it that simultaneous contrast arises and disappears almost instantaneously is invalid. Experiments in which a white field and its coloured background are flashed on and off alternately show that the processes concerned in simultaneous contrast do not cease immediately the coloured background is extinguished. G. S. BRINDLEY.

Comments B-83873, 28 Mar 55

BONGARD, M.M.

Category : USSR/Optics - Physiological Optics K-9

Abs Jour : Ref Zhur - Fizika, No 2, 1957, No 5307

Author : Smirnov, M.S., Bongard, M.M.
Title : Concerning the Clusters of Color-Sensitive Photo-Receptors.

Orig Pub : Tr. In-ta biol. fiz. AN SSSR, 1955, 1, 158-161

Abstract : An opinion exists that the human retina contains bulbs of serveral types with different spectral-sensitivity curves and that bulbs of the same type are arranged in clusters with a diameter of approximately 15 microns. A series of experiments, confirming this opinion, is described. It was shown experimentally that persons with good sharpness of vision distinguish between the red and green bright points separated from each other at a distance such that their images are only 1 micron apart on the retina. The visual separation was determined by experimenter from the ability of the subject to determine correctly the mutual placement of points, which the experimenter could change in each experiment. Such a high resolving power on the part of the eye for objects of different color contradicts the existence of the clusters. Using A.L. Yarbus'es method for recording the motion of the observer's eye, it was shown that points of different color are

Card : 1/2

Category : USSR/Optics - Physiological Optics K-9

Abs Jour : Ref Zhur - Fizika, No 2, 1957, No 5307

seen by the same regions on the retina. Experiences with short flashes of a small yellow dot have shown that the observer never sees the flash to appear red or green. A red or a green flash was sometimes used instead of a yellow one for control purposes. The observer always identified their color correctly. The authors believe that their experiments prove the absence of clusters measuring 5 x 5 microns or more from the central portion of the human retina.

Card : 2/2

BONGARD, M. M.

2

3897. Determination of spectral sensitivity of receptors of the eye by the addition curve. M. M. Bongard and M. S. Smirnov *Dokl. Akad. Nauk, S.S.S.R.*, 1955, 102, 1111–1114; *Referat. Zh. Biol.*, 1956, Abstr. No. 51375.—The method is based on the following assumptions. The colour range of a creature is n-dimensional if for it there exist n linearly-independent colours, but between any n + 1 colours there is a linear relation. Any colour of monochromatic light of unit intensity with spectral λ can be represented by $E_\lambda = \sum_{i=1}^{n} a_i(\lambda)A$, where $A_1 \ldots A_n$ are the linearly-independent colours (basis of the field); the function $a_i(\lambda)$ represents the addition curves relating to the basis $A_1 \ldots A_n$. If the region of the spectrum is limited, any given colour can be represented by a combination of only l linearly independent colours (l-dimensional portion of the spectrum). The number of receptors is regarded as coincident with the divisibility of the colour field. The spectral sensitivity of the i receptor is expressed by $f_i(\lambda)$, equal to the ratio of the energies of the monochromatic light of wave-lengths λ_0 and λ at which the i-receptor is brought to identical states. If the creature possesses an n-dimensional colour range, but the basic colours $A_1, A_2 \ldots A_{n+1}$ are chosen in an (n—1)-dimensional portion of the spectrum then $f_n(\lambda) = Ka_n(\lambda)$, where K is an arbitrary positive number. Proceeding on the basis of this possibility, and starting from the addition curves accepted by the International Commission on Illumination, the spectral curves of sensitivity of the receptors of trichromats have been calculated. The curves obtained coincide with the results of Iustova's measurements on dichromats, and differ from the results of Fedorov's measurements. The reason for the mistake in Fedorov's results is pointed out. (Russian)

T. R. PARSONS

Inst. Biological Physics, Acad. Sci. USSR.

Bongrad, M. M.

USSR/Biology - Colorimetry

Card 1/1 Pub. 22 - 18/45

Authors : Bongrad, M. M.

Title : Colorimetry on animals

Periodical : Dok. AN SSSR 103/2, 239-242, Jul 11, 1955

Abstract : The electro-neuro-graphic method for studying colorimetry on animals is described. One USSR reference (1955). Diagrams; oscillograms; graph.

Institution : The Acad. of Sc., USSR, Institute of Biological Physics

Presented by : Academician A. N. Terenin, April 25, 1955

BONGARD, M. M. and Smirnov, M. S.

Concerning the Hypothesis in Regard to Clumps of Color-Sensitive Photoreceptors

Trudy Instituta Biologicheskoy Fiziki, No 1, 1956
S916, 5 Mar 1956, page 49

USSR/Optics K

Abs Jour: Referat Zhur-Fizika, 1957, No 4, 10592

Author : Smirnov, M.S., Bongard, M.M.
Inst : Institute of Biophysics, Academy of Sciences, USSR, Moscow, USSR
Title : Threshold and Colorimetric Methods of Studying Color Vision.

Orig Pub: Biofizika, 1956, 1, No 2, 158-162

Abstract: An analysis of the possibilities and the limits of applicability of threshold and colorimetric methods for the determination of the number of receivers participating during the act of color vision and to investigate the spectral and time characteristics of their sensitivity. Considerable advantages of the colorimetric method over the threshold method are noted, in the sense of accuracy and variety of the information obtained.

Card : 1/1

BONGARD, M.M.

SMIRNOV, M.S.; BONGARD, M.M.

On contrasting colors. Biofizika 1 no.2:174-177 '56. (MLRA 9:9)

1.Institut biologicheskoy fiziki Akademii nauk SSSR, Moskva.
(COLOR)

BONGARD, M.M.; SMIRNOV, M.S.

N.T.Fedorov's theory of color contrast. Biofizika 1 no.8:754-758 '56. (MLRA 9:12)

1. Institut biologicheskoy fiziki Akademii nauk SSSR, Moskva. (COLOR)

612.843.31

9152. FOUR-DIMENSIONAL NATURE OF COLOUR SPACE IN HUMANS. M.M.Bongard and M.S.Smirnov. Dokl. Akad. Nauk SSSR, Vol. 108, No. 3, 447-9 (1956). In Russian.

Since twilight vision, in frogs and humans, is based on the presence of rhodopsin, and the twilight receiver of the frog operates not only near the threshold, but also at brightness values > 100 apostilbs, an investigation was carried out to determine whether the same applies to humans. The operation of the twilight receiver was studied in the presence of three daylight receivers, using colorimetric method; the compared fields were presented successively to the observer. It was found that, even for very high brightness values (up to 1000 apostilbs), the twilight receiver operates simultaneously with the daylight receivers.

F.Lachman

BONGARD, M. M., Cand Phys-Math Sci -- (diss) "Study of the Retina's color-differentiating functions." Len, 1957. 10 pp. (State Order of Lenin Optic Inst im S. I. Vavilov), 150 copies. (KL, 9-58, 112)

USSR / Human and Animal Physiology. Sonso Organs.

Abs Jour : Ref Zhur - Biol., No 15, 1958, No. 70594

Author : Bongard, M. M.; Smirnov, M. S.

* Inst : [redacted]

Title : Visual Colorimetry by the Method of Substitution (A New System of Colorimetry for the Study of Human Color Perception)

Orig Pub : Biofizika, 1957, Vol 2, No 1, 119-123

Abstract : With the method of substitution the fields are divided not in space but in time. The authors constructed a four-colored "substitution colorimeter" (the theoretical scheme is presented in the article), which permits studies of color vision both of the center and of the periphery of the retina. Experiments were conducted over a wide range of brightness, with different lambda of basic illumination, with different-sized fields, and with light and

Card 1/2

150

* Institut biologicheskoy fiziki AN SSSR, Moskva.

dark backgrounds for the field. In working with the apparatus, it is possible to measure the power of all color fluxes participating in the experiment, which eliminates the necessary of "diluting the color" and increases the precision of the results. -- L. C. Saksonova

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206310005-4"

USSR/[illegible]
Sense Organs. Vision.

Abs Jour : Ref Zhur - Biol., No 11, 1958, 51335

Author : Bongard, M.M., Smirnov, M.S.

* Inst : ---

Title : The Curves of Spectral Sensitivity Obtained from Receivers Connected with Single Fibers of the Optic Nerve in Frogs.

Orig Pub : Biofizika, 1957, 2, No 3, 336-341.

Abstract : With the aid of a colorimeter, the composition curves of r receivers measuring retina impulses in frogs were determined. The impulses were transmitted by microelectrodes of 20-30 μ in diameter. The obtained curves coincided well with curves established when signals from the entire nerve were transmitted. Along a single fiber of the optic nerve information is transmitted from two receivers with different curves of spectral sensitivity. The authors are of the opinion that the retina of frongs contains two receivers only. -- M.M. Bongard.

Card 1/1

* INSTITUT BIOLOGICHESKOY FIZIKI AN SSSR, MOSKVA.

BONGARD, M.M.; SMIRNOV, M.S.

Color adaptation and limits in applying the concept of the "photosensitive receptor of the eye" [with summary in English]. Biofizika 3 no.2:184-189 '58. (MIRA 11:4)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.
(COLOR SENSE)

SMIRNOV, M.S.; BONGARD, M.M.

Hypothesis of the mechanism of photoreception in the retina; analogy between retinal receptors and semiconductor photocell [with summary in English]. Biofizika 4 no.2:181-186 '59. (MIRA 12:4)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.
(RETINA, physiol.
photoreceptors, analogus characteristics with semiconductor photoelements (Rus))

SMIRNOV, M.S.; BONGARD, M.M.

Model studies of color vision. Biofizika 4 no. 6:702-707 '59.
(MIRA 14:4)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.
(COLOR SENSE)

17(1) SOV/26-59-5-3/47

AUTHORS: Bongard, M.M., Smirnov, M.S.

TITLE: Color Vision in Man and Animals

PERIODICAL: Priroda, 1959, Nr 5, pp 13 - 20 (USSR)

ABSTRACT: The author describes the structure of the human eye and the process of perception by sight, some parts of which, he says, are still unexplained, more especially the number and position of the receptors of light, their spectral sensitiveness and the conveyance of light signals from the receptors to the brain. The author then examines visual sight with one receptor (in guinea pigs), with two receptors (in turtles) and with more than two receptors. The human retina has three receptors. More difficult, he considers, is the problem of spectral sensitiveness with which is connected the problem of daltonians, (two receptors only). The disposition of the receptors in the retina depends on the type of cone (kolbochka). The conveyance to

Card 1/2

the brain by optical nerves has been investigated in the human eye with the aid of colorimetric experiments. To investigate this process in animals appears to be more difficult, and the author describes experiments carried out with frogs. It was established from the experiments with human sight, that one nerve can carry signals from several receptors. Finally the author speculates on possible future research. There are 6 sets of drawings, 5 graphs and 1 diagram.

ASSOCIATION: Institut biologicheskoy fiziki Akademii nauk SSSR (Moskva) (Institute of Biological Physics, Academy of Sciences of the USSR - Moscow)

BYZOV, A.L.; BONGARD, M.M.

Cathode follower for experiments with microelectrodes. Fiziol.zhur. 45 no.1:110-114 Ja '59. (MIRA 12:2)

1. From the Insitute of Biophysics, U.S.S.R. Academy of Sciences, Moscow.

(ELECTROPHYSIOLOGY, appar. & instruments, cathode repeater for micro-electrodes (Rus))

BONGARD, M.M.

Model studies on the process of recognition by the use of a digital computer. Biofizika 6 no. 2:129-141 '61. (MIRA 14:4)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.
(ELECTRONIC DIGITAL COMPUTERS--PROGRAMMING)
(RECOGNITION (PSYCHOLOGY))

BONGARD, M.M.; SMIRNOV, M.S.

Essence of some new experiments on color vision. Fiz.v shkole 22 no.6:5-14 N-D '62. (MIRA 16:2)

1. Institut biofiziki AN SSSR.
(Color sence)

L 759-64 EWT(d)/FCC(w)/BDS AFFTC/IJP(C)
ACCESSION NR: AT3002330 S/2582/63/000/009/0071/0102

AUTHOR: Bongard, M. M. (Moscow)

TITLE: Concept of "useful information"

SOURCE: Problemy kibernetiki, no. 9, 1963, 71-102

TOPIC TAGS: information, useful, usefulness, redundancy, redundant, channel, location, memory, algorithm, resolving, power, indeterminacy, entropy, coding, decoding, signal, probability, error, carrying capacity, traffic capacity, feedback, language

ABSTRACT: This paper evaluates the concept of the "usefulness" of information transmitted not only in terms of the number of bits transmitted but also in terms of the "difficulty" of the problem which depends not alone on the number of bits transmitted but on the relationship of the observer to the communication thus received also. A system is examined which in the course of the solution of a problem performs experimental work (by the trial-and-error method) and which, thus, acquires certain information which it had not possessed previously. The "difficulty" of the problem for that system is then characterized by some function of the number of trials required for the finding of the solution. In addition, the system can obtain

Card 1/3

L 759-64
ACCESSION NR: AT3002330

information on the problem through the communications channel. The number of trials and, consequently, the difficulty of the problem is thereby reduced. In the present paper a measure of the difficulty is the logarithm of the mean number of trials. This method yields the simplest relations between the carrying capacity of the communications channel (or the memory capacity) and the maximal reduction of the difficulty that can be had by using that channel (or memory). The problem is posed, the resolving algorithm is set forth, and the "indeterminacy," that is, the logarithm of the mathematical expectancy of the number of probes for a given resolving algorithm in a particular problem. The relationship between the indeterminacy and the entropy is analyzed. The decoding of the signal, that is, the action of the supplementary algorithm connecting the output end of the channel with the resolving algorithm, and the usefulness of the information are discussed. The carrying (or traffic) capacity of a communications channel for useful information and the reserve of useful information in the decoding algorithm are explored. The construction of decoding algorithms is set forth, and the possible existence of problems with one or more solutions is analyzed. Systems with feedback are reviewed. The concepts of "difficulty" and "indeterminacy" are entertained, and an ordinary problem is fully discussed. It is concluded that the usefulness of information is not only a matter of the interrelation of the signal with the communications channel, but also of the alterations introduced by the nature and knowledge of the recipients.

Card 2/3

L 759-64

ACCESSION NR: AT3002330

For example, one and the same "text" or body of information has a different degree of redundancy with respect to persons of different educational and cultural backgrounds. The author endeavors to measure and define the concept of mean useful information and, hence, redundancy of given information for a given observer. "The author expresses his intense gratitude to M. N. Vayntsvayg, R. S. Guter, A. N. Kolmogorov, A. A. Lyapunov, N. D. Nyuberg, Ya. G. Sinai, M. S. Smirnov, and A. M. Yaglom, who reviewed the manuscript and expressed a number of advices and comments which the author has endeavored to take into consideration." Orig. art. has 4 tables and 77 equations.

ASSOCIATION: 00

SUBMITTED: 01Jul61 DATE ACQ: 06Jun63 ENCL: 00

SUB CODE: CO, CG NO REF SOV: 005 OTHER: 001

Card 3/3

L 29099-66 EWT(1) SCTB DD

ACC NR: AP6015179 SOURCE CODE: UR/0217/65/010/001/0148/0154

AUTHOR: Bongard, M. M.; Smirnov, M. S.

ORG: Institute of Biophysics, AN SSSR, Moscow (Institut biofiziki AN SSSR); Institute of Problems of Information Transmission, AN SSSR, Moscow (Institut problem peredachi informatsii AN SSSR)

TITLE: "Skin vision" of R. Kuleshova

SOURCE: Biofizika, v. 10, no. 1, 1965, 148-154

TOPIC TAGS: skin physiology, vision

ABSTRACT: Tests and observations carried out at the Institute of Biophysics to verify R. Kuleshova's capacity for vision by means of the skin of her fingertips are described. The tests were carried out under conditions in which the possibilities of suggestion, telepathy, and peeping (although Kuleshova had a tendency to peep) were eliminated. Sensational reports in the popular press to the effect that Kuleshova could see in the dark were disproved and explanations based on sensitivity to infrared, X-rays, or an electrostatic field capacity for skin vision with an ability to see colors with her fingertips by means of three types of receptors with color sensitivity curves corresponding to those of the cones of the eye retina or similar to them. She had color vision on her right hand only, but could see with either hand. Determinations

Card 1/2 UDC: 577.3

L 23853-66

ACC NR: AP6015179

of the resolution capacity of her fingertip vision (she could read small print rapidly by means of her fingertips) indicated a resolution corresponding to at least ten independent light signals per mm^2 of skin area. N. D. Nyuberg, O. Yu. Orlov, D. B. Bogoyavlenskaya, M. L. Shik, and others participated in the discussion of the arrangements and results of the first series of experiments. [JPRS]

SUB CODE: 06 / SUBM DATE: 07Apr64 / ORIG REF: 031 / OTH REF: 002

Card 2/2

Bo[illegible], P. I.

29762

K myetodikye bronkhoskopii. Vyestnik otorino laringologii. 1949, No. 4, s. 70-72.

SO: LETOPIS' NO. 40

SR. Sci Assoc, OTO-RHINO-LARYNGOL. Dept,
Moscow Oblast Sci-Res TB INST.

BONGARD, P. I.

Clinical significance of bronchoscopy in pulmonary tuberculosis. Sovet. med. no. 12:22-25 Dec. 1951. (CLML 21:3)

1. Candidate Medical Sciences. 2. Of the Phthisio-Laryngological Division (Head -- Prof. A. N. Voznesenskiy), Moscow Oblast Scientific-Research Tuberculosis Institute (Director -- Prof. F. V. Shebanov).

BONGARD, S.A.; VINITSKAYA, M.I.

Effect of light absorption by the matrix film on the gradation of the washed off relief. Usp. nauch. fot. 8:92-96 '62.
(MIRA 17:7)

BONGART, A.G., kand. ekonom. nauk

Summarizing the revision of wholesale prices for pipe. Proizv. trub no.12:141-143 '64.

(MIRA 17:11)

ARTYUSHIN, L.F.; BONGARD, S.A.

Determining the parameters of the nonlinear color-separation correction. Zhur. nauch. i prikl. fot. i kin. 9 no.3:174-183 My-Je '64. (MIRA 18:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy kinofotoinstitut (NIKFI). Submitted March 20, 1963.

"Investigation of the Dye Yield During the Colored Development of the Photographic Image." Sub 8 Feb 51, Sci Res Cinephotographic Inst (NIKFI).

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55

Cand. Chemical Sci.

~~CHEETSOV, V. S.~~

S. A. BONGARD, A. N. IORDANSKIY, V. S. CHELTSOV

"Yield of Dyes During Color Development," Doklady Akad Nauk (USSR) 84: 81-84, No. 1, 1952

One of the authors, Iordanskiy, has worked extensively in the color developer field. This publication, like most of his earlier ones, contributes very little, if any, to existing knowledge. All it does is add some more evidence to the already well-established stoichiometric relationships of dye formation by color development. Like all of the earlier papers by this author, this one is woefully inadequate in that most of the experimental details are missing, so the reliability of the conclusions cannot be assessed. Specifically, the conclusions in this paper are based on a molar dye-to-silver ratio, which can be determined only if the pure dyes are at hand for calibration purposes. Nowhere in the paper is mention made of the pure dyes and their characteristics.

IX

CHEL'TSOV, V.S.; BONGARD, S.A.

Chemical nature of color development. Uspekhi Khim. 22, 482-98 '53.
(CA 47 no.19:9829 '53) (MLRA 6:4)

BONZARD, S. A.

USSR/Chemistry - Photographic Jan 53

"Quantitative Relationships in the Reaction of the Formation of the Blue Dyestuff in Color Development," Yu. B. Vilenskiy and S. A. Bonzard, All-Union Sci-Res Cine-Photo Inst, Movie Film Factory No 3

Zhur Prik Khim, Vol 26, N 1, pp 89-95

Demonstrated that solns of 4-p-diethylaminoanil octadecylamide of 1,4-naphthoquinone-2-carboxylic acid in some organic solvents obey Buger's rule within the concn range of 10^{-3} to 10^{-5} moles/liter.

257T38

Established that the dyestuff in the developed photographic image in the gelatin layer follows Buger's rule. Detd the relationship between surface concn of the dyestuff and the optical density of the colored image. Demonstrated that the yield of blue dye during light development reaches 94% of theoretical.

BONGARD, S.A.

USSR

—Yield of dye in color development. V. S. Chel'tsov, A. N. Iordanskii, M. V. Krasheninnikova, and S. A. Bongard. *Uspekhi Nauch. Fot., Akad. Nauk S.S.S.R., Otdel. Khim. Nauk* 2, 48-55(1954).—The relative photographic yield of the dye was detd. rather than the mol. yield. The yield was expressed as D_A/D_{As}, the ratio of optical d. of the dye (found for monochromatic light with wave length corresponding to max. of absorption) to optical d. of corresponding Ag image. The influence of concns. of developing agents, diffusing components, and Na_2SO_3 was studied. The effect of different components and influence of developing were studied. With increase of developing time, the coeff. of contrast of the dye image increased faster than that for the Ag image. Relative photographic yield depended on the properties of the emulsion and developing conditions of the Ag image.

Eurilla Mayerle

BONGARD, S. A.

USSR/Chemical Technology - Chemical Products and Their Application. Photographic Materials, I-19

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 63030

Author: Bongard, S. A.

Institution: None

Title: Use of Multiple-Layer Color Films in the Technicolor Method of Color Motion Picture Photography

Original Periodical: Zh. nauch. i prikl. fotografii i kinematogr., 1956, 1, No 1, 67-69

Abstract: The Technicolor Company in the United States produces color motion picture films by recording on a multilayer film and positive printing by the hydrotype method. Quality of the films is continuously improved as a result of perfectioning of color films and use of masking. At the present time technicolor prints directly on a master film from color negative. The set of Tricolor films manufactured by the Kodak Company includes 3 master films sensitized for different regions of the spectrum. In the emulsion layer of each film is included a dye

Card 1/2

USSR/Chemical Technology - Chemical Products and Their Application. Photographic Materials, I-19

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 63030

Abstract: which absorbs the radiation of that zone of the spectrum to which the film is sensitive. Printing of master positives directly from color negative permits greatly to improve sharpness of images. Use of a set of Tricolor films and improvement of hydrotype transfer process make it possible to produce films which meet the requirements of projection upon a wide screen.

Card 2/2

KILINSKIY, I.M.; VILENSKIY, Yu.B.; BONGARD, S.A.

The structure of color motion-picture films and the clarity of the photographic image. Zhur. nauch. i prikl. fot. i kin. 2 no.3:198-201 My-Je '57. (MLRA 10:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy kino-fotoinstitut i fabrika No.3 GUPP.

(Color cinematography)

BOWGARD, S. A.

CHEL'TSOV, Vsevolod Sergeyevich; BOWGARD, Solomon Aleksandrovich; ZHERDETSKAYA, N.N., red.; IVANOVA, L.A., tekhn. red.

[Color developments of three-layer photosensitive materials] TSvetnoe proiavlenie trekhsloinykh svetochuvstvitel'nykh materialov. Moskva, Gos. izd-vo "Iskusstvo," 1958. 247 p. (MIRA 11:7)
(Color photography--Developing and developers)

CHEL'TSOV, V.S., kand.khim.nauk; BONGARD, S.A., kand.khim.nauk;
IORDANSKIY, A.N., kand.tekhn.nauk

Present-day methods of producing color photographs. Khim.nauk i prom. 3 no.5:576-587 '58. (MIRA 11:11)
(Color photography--Three-color process)

23(0)
AUTHOR: Bongard, S. A.

SOV/30-59-9-27/39

TITLE: Theory and Technology of Processes of Colored Photography

PERIODICAL: Vestnik Akademii nauk SSSR, 1959, Nr 9, p 104 (USSR)

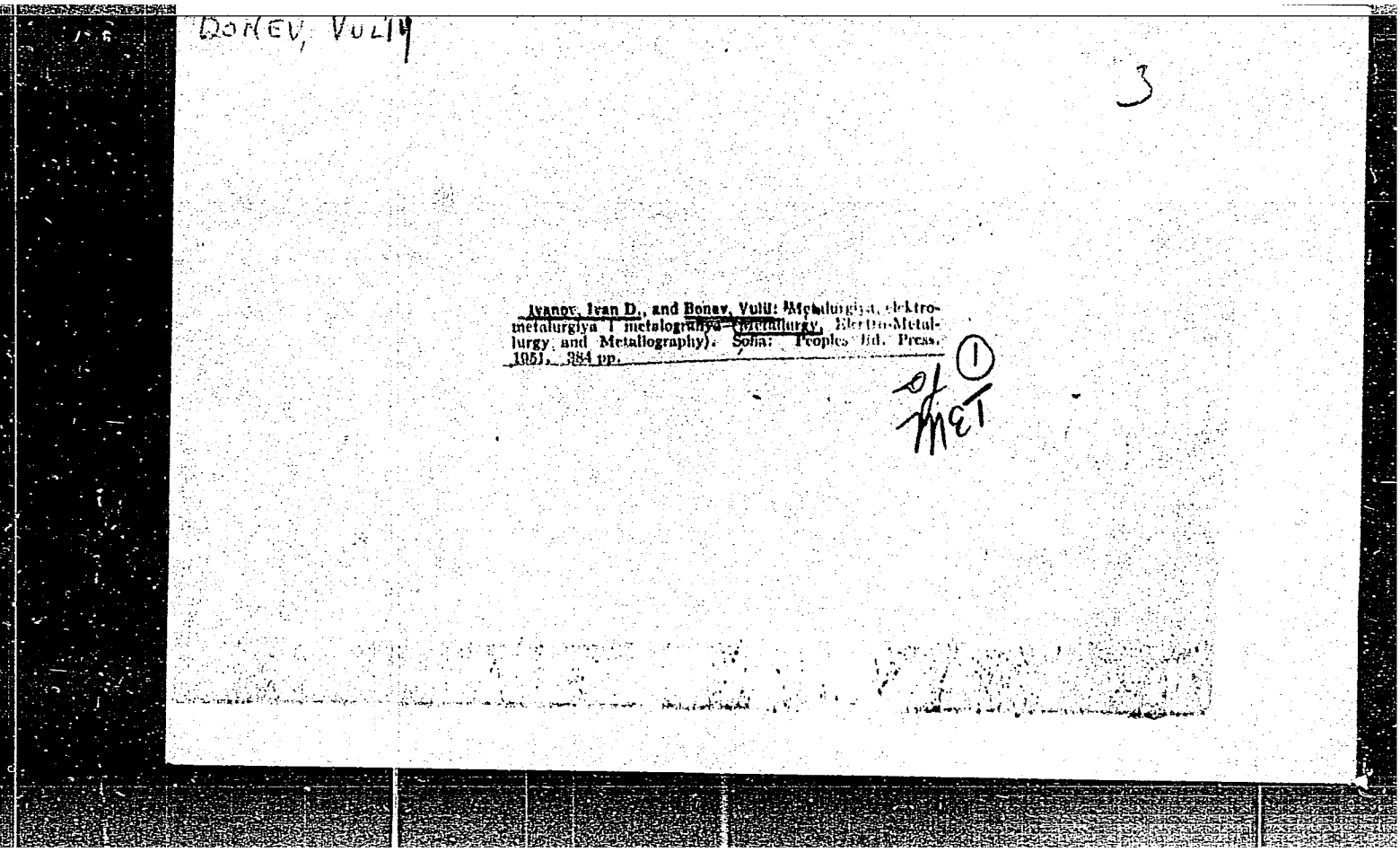
ABSTRACT: The Komissiya po nauchnoy fotografii i kinematografii Akademii nauk SSSR (Commission for Scientific Photography and Cinematography of the Academy of Sciences, USSR), the Vsesoyuznyy nauchno-issledovatel'skiy kino-fotoinstitut (All-Union Scientific Cinema- and Photography Research Institute) and the factory Nr 3 of the Khar'kovskiy sovnarkhoz (Khar'kov Council of National Economy) convened a conference at Shostka between May 29 and June 1. Theoretical and technological problems of the processes of colored photography were discussed by numerous representatives of 35 scientific- and training institutes, as well as of industrial enterprises. Comparatively little attention was

Card 1/2

paid to the chemico-photographic treatment of colored films. Research work in this field should be considerably intensified.

BONEV, S., inzh.

Achievements of the V. Kolarov Plant for Heavy-Current Equipment. Mashinostroene 11 no.7/8:27-32 Jl-Ag '62.



DONEV, VULI

3

Ivanov, Ivan D., and Donev, Vuli: Metalurgiya, elektrometalurgiya i metalografiya (Metallurgy, Electro-Metallurgy and Metallography). Sofia: Peoples Ed. Press, 1951. 384 pp.

(1)

BONEV, YE.

BULGARIA/Cultivated Plants - Grains. M.

Abs Jour : Ref Zhur - Biol., No 4, 1958, 15531

Author : Ye. Bonev
Inst : -
Title : Valuable Hybrid Corn Seeds.
(Tsennyye gibridnyye semena kukuruzy).

Orig Pub : Kooperat. zemledeliye, 1957, No 2, 14-15

Abstract : Hybrid corn seeds from intervarietal crossings were widely introduced in Bulgaria in production sowings in 1954. Sowings with hybrid seeds covered in 1955 3,400 hectares, 1956 had 24,480 hectares and the sowing plan for 1957 comprises 230,000 hectares. A large number of yield comparisons have been made of harvests coming from the hybrid seeds and those from local corn variety sowings. The boosted harvest obtained from hybrid seed sowings varied according to the individual rayons from 1 to 12 centners per hectare.

Card 1/2

BULGARIA/Cultivated Plants - Grains. M.

Abs Jour : Ref Zhur - Biol., No 4, 1958, 15531

In rayons where there are local varieties, it is necessary to make similar evaluations of the local varieties and intervarietal hybrids.

Card 2/2

3/

BONEVA, A.

Determining and utilizing the productive forces of the rolling mill at the Lenin Metallurgic Plant.

p. 5 (TEZHKA PROMISHLENOST) Vol. 6, no. 7, July 1957, Sofiia, Bulgaria

SO: Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 3, March 1958

ZAPRIANOV, T., Prof.; VANTOV, M.; BONEVA, A.

Thermal effects on cerebral blood circulation. Suvrem. med., Sofia 9 no.1:43-49 1958.

1. Iz katedrata po nervni bolesti pri VMI I. P. Pavlov - Plovdiv (Zav. katedrata: prof. T. Zaprianov) i Katedrata po Fiziologiia pri VMI I. P. Pavlov - Plovdiv (Zav. katedrata: dots. N. Boshev).

(TEMPERATURE, effects,
on cerebral blood circ. (Bul))
(BRAIN, blood supply,
eff. of temperature on circ. (Bul))

IVANOV, N.; GYUZELEV, M. [Giuzelev, L.]; BONEVA, A.

Objective indices on tobacco combustibility. Doklady BAN 16 no.1:77-80 '63.

1. Submitted by Academician D. Ivanov.

BONEVA, L.

Visit of Academician N. Teodorescu to Sofia. Fiz mat spisanie BAN 6 no. 3:219 '63.

BOEV, Petur; ENUKESKU, T. [Enachescu, T.]; POP, S.; DZHORDZHESKU, Vl. [Georgescu, Vl.]; BONEVA, L.

Anthropologic study of the Bulgarians of the village of Vinga (Banat). Izv inst morf BAN 7:109-147 '63.

1. Sekretar i chlen na Redaktsionnata kolegiia, "Izvestiia na Instituta po morfologiia" (for Boev).

BONEVA, L.

"Mathematical statistics for biologists and physicians" by V.Yu.Urbakh. Reviewed by L.Boneva. Fiz mat spisanie BAN 7 no.1:78 '64.

BONEVA, L. A.

USSR

Investigation of the colloids of grape juice. A. T. Markh and L. A. Boneva (Technol. Inst. Food. Refrigeration Ind., Odessa). *Vinodelie i Vinogradarstvo S.S.S.R.* 12, No. 8, 14-17(1952).—To a 200-ml. conical flask add 10 ml. grape juice, 120 ml. rectified 96% (vol.) alc., and 10 ml. ether; heat the mixt. on a water bath at 55-60° for 30 min. Collect the coagulated colloids on a filter paper, wash with the same coagulating soln., and dry to a const. wt., to give the total amt. of the colloids in the juice. The amt. of colloids in different grape juices freshly prepd. varies from 0.4 to 1.12% depending on the variety. The colloids contain ash 20–7, proteins 10–13, and pectins 9–13%, resp.; the remainder consists of mucins, tannins, grape pigments, and melanoides. Clarification (by using 15 g. tannin and 15 g. gelatin/100 l. of juice) decreases the amt. of the colloids in the juice about 25%. In the clarified juice the amt. of nitrogenous substances is greatly reduced, mainly at the expense of the proteins. By heating the juice to 80–90° followed by an immediate chilling, much less of the colloids is pptd. than on a delayed chilling. In the nonclarified juices the amt. of the irreversibly pptd. colloids (which cannot be redissolved by water at 45–50°) is in the range of 3.66–21% of the total colloids; a relatively smaller amt. of this fraction of the colloids is present in the juices which are chilled rapidly after their pasteurization. In the clarified grape juices the amt. of these colloids is slightly lower (2.5–12.9% of the total).

E. Wierbicki

TSVILING, A.Ya.; BONEVA, L.A.

Objective methods of quality inspection of tomato products. Kons.i ov.prom. 17 no.6:39-41 Je '62. (MIRA 15:5)

1. Odesskiy tekhnologicheskiy institut pishchevoy i kholodil'noy promyshlennosti.

(Tomato products--Testing)

BONFEL'D, Semen Markovich, uchitel' fiziki, izobretatel'; SVERDLOVA, O.G., red.; NAZAROVA, A.S., tekhn.red.

[Start of the future innovators in industry; from the practice of teaching physics] Nachalo puti budushchikh novatorov proizvodstva; iz opyta prepodavaniia fiziki. Moskva, Izd-vo "Znanie," 1962. 47 p. (Novoe v zhizni, nauke, tekhnike. XI seriia: Pedagogika, no.5) (MIRA 15:5)
(Physics—Study and teaching)

BONFEL'D, S.M.

Systematization of knowledge during the teaching of physics in the schools for working youth. Fiz.v shkole 22 no.5:91-93 S-O '62. (MIRA 15:12)

1. 21-ya vechernyaya srednyaya shkola, Moskva.
(Physics--Study and teaching)
(Evening and continuation schools)

KUDRYASHOV, B.A.; BAZAZ'YAN, G.G.; BONFITTO, L.L.

Blood lipoprotein lipase and its properties as a component of the physiological anticoagulant system. Vop. med. khim. 9 no.5:533-535 S-O '63. (MIRA 17:1)

1. Laboratoriya fiziologii i biokhimii svertyvaniya krovi (zav. - prof. B.A. Kudryashov) Moskovskogo gosudarstvennogo universiteta imeni M.V. Lomonosova.

HUNGARY / Physical Chemistry. Kinetics. Combustion. B
Explosions. Topochemistry. Catalysis.

Abs Jour: Ref Zhur-Khimiya, No 24, 1958, 80705.

Author : Bongar J., Sarosi S.
Inst : Not given.
Title : Kinetics of Autooxidation of Iodine in the Solutions of Divalent Mercury Salts. Potenciometric Titration of Arsenic and Antimony with Potassium Iodate.

Orig Pub: Magyar. kem. folyoirat, 1957, 63, No 2-3, 46-52.

Abstract: The reaction equilibrium $I_2 + H_2O = IOH^- + H^+$ in solutions of Hg(2 +) salts is shifted to the right as the result of I^- consumption in the formation of HgI_2. Action of the Hg ions is anological to that of Ag ions. IOH formed in the solutions of $Hg(NO_3)_2$ or $Hg(ClO_4)_2$ (0.001

Card 1/2 19

Physical Chemistry. Kinetics. Combustion. Explosions. Topochemistry. Catalysis.

Abs Jour: Ref Zhur-Khimiya, No 24, 1958, 80705.

Abstract: n concentration) is converted into iodate in accordance with the 2d order reaction. Conversely, at high concentrations (in solutions of $HgSO_4$ or $HgCl_2$) an order of the reaction becomes more difficult to establish. It is noted that As (3+) and Sb (3+) salts may be titrated directly with iodates (formation of I_2) in the presence of Hg(2+) salts. Analogically, it is possible to conduct determination of As and Sb in the presence of Ag salts. The most suitable concentration of salts for Sb is 0.5-1.5 n.

Card 2/2

BONGARD, E.M.; SHLYAPIN, V.F. (GOR'KIY)

Clinical aspects of ethylene oxide poisoning. Gig. truda i prof. zab. 4 no.2:9-13 F '60. (MIRA 15:3)

1. Institut gigiyeny truda i professional'nykh zabolevaniy.
(ETHYLENE OXIDE--TOXICOLOGY)

BONGARD, E.M., dotsent

Vascular disorders in chronic intoxication with tetraethyllead.
Kas. med. zhur. no.6:72-73 N-D '61. (MIRA 15:2)

1. Klinicheskiy otdel (zav. - prof. S.I.Ashbel') Gor'kovskogo nauchno-issledovatel'skogo instituta gigiyeny truda i profzabolevaniy.
(LEAD_POISONING) (BLOOD VESSELS__DISEASES)

FAYERMAN, I. S.; BONGARD, E. M.; ZHALNINA, L. V.; SHAPKINA, T. G.; SOINA, A. Ya. (Gor'kiy i Volgograd)

Some characteristics of the clinical course of acute mercaptophos intoxication. Gig. truda i prof. zab. no.12:45-47 '61. (MIRA 14:12)

1. Gor'kovskiy institut gigiyeny truda i profbolezney, Volgogradskaya bol'nitsa No. 13.

(MERCAPTOPHOS—TOXICOLOGY) (POISONING)

BONGARD-LEVIN, G. M.

"O soslovnoy organizatsii v ganakh i sangkhakh Drevney Indii."

report submitted for 7th Intl Cong, Anthropological & Ethnological Sciences, Moscow, 3-10 Aug 64.

PRUGLO, N.V.; SPASOKUKOTSKIY, N.S.; BONGARD, S.A.

Effect of the introduction of polymer bases on the fixation of acid dyes in gelatine layers. Part 2: Microscopic study of matrix prints on layers with various polymeric bases. Zhur. nauch. i prikl. fot. i kin. 10 no.5:360-365 S-O '65. (MIRA 18:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy kinofotoinstituta (NIKFI).

S/137/61/000/011/051/123
A060/A101

AUTHORS: Nikolayevskiy, Yu. I., Spivakovskiy, L. I., Bongart, A. G.

TITLE: Determination of the heat-treated steel pipe demand by the USSR national economy for 1959 - 1965

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 11, 1961, 35, abstract 11D205 ("Sb. nauchn. tr. Vses. n.-i. in-t organiz. proiz-va i truda v chern. metallurgii", 1960, no. 1, 71-78)

TEXT: The demand for heat-treated pipes was determined according to the nomenclature adopted by the Gosplan of the USSR and by the Soyuzglavmetal. All pipes are divided into three groups of steel grades (carbon, alloy, and stainless) and each of the groups of steel grades - is again subdivided into groups according to the GOST and the TU classifications on the basis of the principle of uniformity of heat-treatment. From the capacities extant in 1957-1958, the amount of heat-treated pipes in the total production by the end of the seven-year plan will constitute (by weight percentage for various types of pipe): thin-walled seamless 100, electric-welded thin-walled 87, drawn 100, rolled 24, oil assortment 16.5, electric-welded large-diameter 50. In all, 18.3 % of the total pipe

Card 1/2

produced will be subjected to heat-treatment, i. e. their proportion exceeds that of 1957 by a factor of 3.8. The increase in the means of pipe heat-treatment will make it possible to ensure the substitution of electrically welded pipe for mechanically welded manufacture, and will, in large measure, provide the oil industry with high-strength and economically convenient drilling and casing pipes. Besides, this will make it possible to produce welded pipes of larger diameters, high reliability and a thinner wall (thus effecting a considerable metal economy) and to master the production of new types of high strength pipe from low-alloy steels (in particular with σ_s 65 - 75 kg/mm^2), and also from new materials.

Ye. Trifonov

[Abstracter's note: Complete translation]

ZIL'BERSHTEYN, L.I., kand. tekhn. nauk; BONGART, A.G., kand. ekonom. nauk; SHKABATUR, K.I., inzh.; MIZERA, V.I., inzh.; VOL'PER, Yu.D., inzh.

Metal consumption coeffficients in the production of small and medium diameter, electrically welded pipe. Proizv. trub no.10:62-66 '63. (MIRA 17:10)

SPIVAKOVSKIY, L.I., kand. tekhn. nauk; BONGART, A.G.

Some shortcomings in the current wholesale prices for pipe, and ways of eliminating them. Proizv. trub no.10:127-130 '63.
(MIRA 17:10)