

DMITRIYEV, A.S.

Characteristics of the formation of conditioned response to time  
in pigeons. Nauch. dokl. vys. shkoly; biol. nauki no.3:91-96 '60.  
(MIRA 13:8)

1. Rekomendovana kafedroy fiziologii cheloveka i zhivotnykh  
Bashkirskogo gosudarstvennogo universiteta.  
(CONDITIONED RESPONSE)

DMITRIYEV, A.S.; SHIKHOVA, R.Ye.

Conditioned reflex changes in human pressure in response to temporary stimulus of muscular work. Nauch. dokl. vys. shkoly; biol. nauki no.2:93-97 '61. (MIRA 14:5)

1. Rekomendovana kafedroy fiziologii cheloveka i zivotnykh Bashkirskogo gosudarstvennogo universiteta im. 40-letiya Oktyabrya.  
(BLOOD PRESSURE)      (CONDITIONED RESPONSE)

DMITRIYEV, A.S.; TUSHNOVA, T.V.; SHIKHOVA, R.Ya.

Conditioned reflexes to time in children of different school age.  
Nauch. dokl. vys. shkoly; biol. nauki no.4:77-84 '61.

(MIRA 14:11)

1. Rekomendovana kafedroy fiziologii cheloveka i zivotnykh  
Bashkirskogo gosudarstvennogo universiteta.

(CONDITIONED RESPONSE)      (TIME PERCEPTION)

(CHILD STUDY)

DMITRIYEV, A.S.

Motor method in verbal reinforcement. Vop.psikhol. 7 no.3:70-80  
My-Je '61. (MIRA 14:6)

1. Bashkirskiy universitet, kafedra fiziologii cheloveka i  
zhivotnykh.

(Conditioned response)

DMITRIYEV, A.S.; SEMENOV, V.N.

Age-related characteristics of conditioned reflexes to time.  
Zhur. v'ys. nerv. deiat. 11 no.4:723-729 J1-Ag '61.      (MIRA 15:2)

1. Chair: of Human and Animal Physiology, Bashkirian University, Ufa.  
(CONDITIONED RESPONSE)

DMITRIYEV, A.S.

Character of the interrelationship between signaling systems  
in school children. Zhur. vys. nerv. deiat. 11 no.6:969-978  
N-D '61. (MIRA 15:3)

1. Chair of Human and Animal Physiology, Bashkir University,  
Ufa.

(CONDITIONED RESPONSE)

DMITRIYEV, A.S.; TUSHNOVA, T.V.; SHIKHOVA, R.Ya.

Conditioned reflexes to time established by the prevalent participation of the second signal system. Nauch. dokl. vys. shkoly; biol. nauki no.3:78-82 '63. (MIRA 16:9)

1. Rekomendovana kafedroy fiziologii cheloveka i zivotnykh Bashkirskogo gosudarstvennogo universiteta im. 40-letiya Oktyabrya.  
(CONDITIONED REPOSE) (CHILD STUDY)

ACCESSION NR: AT4042677

S/0000/63/000/000/0169/0172

AUTHOR: Dmitriyev, A. S.; Burko, Ye. V.

TITLE: Vestibular influence on smooth musculature and vessels of the small intestine following resection of the spinal cord, vagus, cervical sympathetic and splanchnic nerves

SOURCE: Konferentsiya po aviatsionnoy i kosmicheskoy meditsine, 1963. Aviatsionnaya i kosmicheskaya meditsina (Aviation and space medicine); materialy\* konferentsii. Moscow, 1963, 196-172  
/ 64-

TOPIC TAGS: vestibular apparatus, intestinal function, rotation effect, acceleration, dog, vestibular effect

ABSTRACT: The investigation was designed to determine how the vestibular apparatus influences smooth muscle and vascular complexes of the small intestine in dogs subjected to rotational forces and to observe the effects of resecting the spinal cord and some vegetative nerves. The dogs were

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ACCESSION NR: AT4042677

anesthetized with morphine and ether and were subjected to moderate accelerations. Intestinal motor activity was registered on an oscillograph. Resection of the spinal cord and the vagus, cervical sympathetic, and splanchnic nerves changed the character of intestinal motor activity but did not eliminate the effects of acceleration. Removal of both labyrinths, however, eliminated intestinal motility during accelerations. The authors conclude that the reaction of intestinal smooth muscle to moderate acceleration has a vestibular origin and is accomplished by means of nerve mechanisms in the brain stem. The vestibular reaction is therefore a nervous and humoral mechanism.

ASSOCIATION: none

SUBMITTED: 27Sep63

ENCL: 00

SUB CODE: LS

NO REF SOV: 000

OTHER: 000

Card 2/2

DMITRIYEV, Aleksandr Semenovich; CHERKASOVA, V.I., red.

[Physiology of higher nervous activity] Fiziologiya  
vyssshei nervnoi deiatel'nosti. Moskva, Vyssnaia shkola,  
1964. 465 p. (MIRA 17:9)

DMITRIYEV, A.S.; GZHIGOVA, A.P.; TUSHNOVA, T.V.

Problem of the effect of the school day on time perception.  
Zhur. vys. nerv. deiat. 14 no.3:417-426 My-Je '64.

(MIRA 17:11)

1. Chair of Human and Animal Physiology, Bashkir University,  
Ufa.

DIMITRIYEV, A.S.

Analysis of the formation of conditioned response to time.  
Zhur. vys. nerv. deiat. 14 no. 4:618-625 J1-Ag '64.  
(MIRA 17:12)

1. Chair of Human and Animal Physiology, Bashkir University,  
Ufa.

ACCESSION NR: AP4035363

S/0221/64/057/002/0245/0268

AUTHOR: Dmitriyev, A. S. (Ufa)

TITLE: The physiological basis of human time perception

SOURCE: Uspekhi sovremennoy biologii, v. 57, no. 2, 1964, 245-268

TOPIC TAGS: time perception, conditioned reflex development, cortex, first signal system, second signal system, motor conditioned reflex, exteroceptive excitation, proprioceptive excitation

ABSTRACT: The present study surveys the development of conditioned reflexes to time, representing the physiological basis of time perception. From the earliest stages of infancy, conditioned reflexes start to form as a superstructure over the basic system of innate automatic and self-regulatory cyclic processes responsible for the periodicity of vegetative functions. As a child develops, various types of motor conditioned reflexes related to work activity are added. In childhood when the second signal system has not yet developed, the conditioned reflex formation process appears comparable to that of animals. At this stage the motor conditioned reflex produced by an external stimulus represents a synthesis of exteroceptive  
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ACCESSION NR: AP4035363

eptive cortical excitation and of proprioceptive cortical excitation, which form a "single functional combination center." Rhythmic repetition of a given stimulus produces a reaction coinciding with a certain level of excitation associated with a certain time. Eventually a conditioned stimulus produces an associated reaction, thus forming a conditioned reflex to time. With the development of a second signal system when a spoken word may act as a stimulus, a "second functional combination center" is added to the first. From the age of 12 to 13 years, conditioned reflexes to time appear to be expressed almost entirely through the second signal system which independently reproduces the rhythmic movements of the extremities, head, body, or speech apparatus (counting out loud or to one's self). Mental counting together with voluntary rhythmic movements is often used as a supplementary method in developing new conditioned reflexes. These reflexes are formed much faster with development of the second signal system as observed in older children and adults. Psychophysiological research is needed to test the general theories of time perception and to gain a better understanding of its physiological mechanism. Orig. art. has: 5 figures.

Card 2/3

ACCESSION NR: AP4035363

ASSOCIATION: None

SUBMITTED: 00

ENGL: 00

SUB CODE: LS

NR REF SOV: 052

OTHER: 063

Card 3/3

BULYGIN, I.A., otv. red.; GOLUB, D.M., red.; DMITRIYEV, A.S., red.

[Afferent link of the interoceptive reflexes] Afferentnoe  
zveno interotseptivnykh reflektsov. Minsk, Nauka i tekhnika,  
1964. 221 p. (MIRA 18:3)

1. Akademiya nauk BSSR, Minsk. Instytut fizologii.

L 2910-66

AM5001440

BOOK EXPLOITATION

UR/

17  
B+1

Dmitriyev, Aleksandr Semenovich

Physiology of higher nervous activity (Fiziologiya vysshay nervnoy deyatel'nosti)  
Moscow, Izd-vo "Vysshaya shkola", 1964. 465 p. illus., biblio., index. 6500  
copies printed.

TOPIC TAGS: human physiology, animal physiology, autonomic nervous system,  
cerebral cortex, reflex activity, central nervous system, neurology

PURPOSE AND COVERAGE: A textbook for students who wish to deepen their studies  
and research in physiology of higher nervous activity. Hence, the book  
presents in detail the methods used in investigation of human and animal higher  
nervous activity. Basic problems of modern physiology of higher nervous  
activity and the major research trends are described. Five chapters of the  
book analyze the human higher nervous activity. Specially the higher nervous  
activity problems during mental and physical work are examined.

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Ch. 16. Changes in higher nervous activity under the influence of various factors in the organism internal and external media

Recommended bibliography -- 453

Subject index -- 459

SUB CODE: LS

SUBMITTED: 29May64

NO REF SOV: 094

OTHER: 001

BVK  
Card 3/3

ACC NR: AT6036551

SOURCE CODE: UR/0000/66/000/000/0153/0154

AUTHOR: Dmitriyev, A. S.; Burko, Ye. V.

ORG: none

TITLE: Electrophysiological analysis of the role of the phrenic nerves in the mechanism of the vestibular reaction of the ileum [Paper presented at the Conference on Problems of Space Medicine held in Moscow from 24 to 27 May 1966]

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966, 153-154

TOPIC TAGS: biologic acceleration effect, vestibular analyzer, coriolis acceleration, digestive system, biologic secretion, labyrinthectomy

ABSTRACT: The authors earlier established that rotational stress (1.7 and 1.25 G), causes shifts in the frequency characteristics of the bioelectrical activity of the intact phrenic nerve characterized by increased impulse amplitude in dogs under morphine-chloroform-ether narcosis in an acute experiment. As a rule, intensified phrenic nerve impulses caused by rotation are concurrent with a depression in the motor activity of the ileum. In most cases (76%), this depression is almost entirely eliminated when both phrenic nerves are cut at the level of the neck.

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ACC NR: AT6036551

In animals with intact labyrinths, relatively low stress (1.07 G) caused an intensification of impulsion in the central segment of the phrenic nerve during rotational and postrotational periods but did not cause substantial shifts in the bioelectricity of its peripheral segment. At a somewhat higher value (1.25 G) these shifts were more pronounced and statistically reliable. In labyrinthectomized animals, no statistically reliable shifts were observed in the bioelectrical activity of both central and peripheral segments of the phrenic nerve.

An analysis of the data indicates the vestibular nature of rotational and postrotational shifts in phrenic bioelectricity and also implies that these nerves play a significant role in the efferent pathway complex, which is responsible for a vestibular influence on ileum motor activity at relatively low rotational stresses. At higher rotational stresses (greater than 1.3 G), extralabyrinthine systems participate in these reactions. [W.A. No. 22; AT'D Report 66-116]

SUB CODE: 06 / SUBM DATE: 00May66

Card 2/2

ACC NR: AT6036552

SOURCE CODE: UR/0000/66/000/000/0154/0155

AUTHOR: Dmitriyev, A. S.; Pushkarchuk, A. A.

ORG: none

TITLE: The problem of the neurohumoral mechanism of vestibular effects on the motor function of the ileum [Paper presented at the Conference on Problems of Space Medicine held in Moscow from 24 to 27 May 1966]

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966, 154-155

TOPIC TAGS: biologic acceleration effect, coriolis acceleration, digestive system, biologic secretion, vestibular analyzer, blood chemistry

ABSTRACT: The authors have established that rotation of animals with intact nervous systems causes a statistically reliable increase in blood adrenalin content, which is accompanied by a simultaneous depression of the motor activity of the ileum. At higher rotational values (from 1.16 to 1.6 G) a greater incidence of motor depression of the ileum and a more pronounced shift in adrenalin content is observed; a statistically reliable increase in blood norepinephrin is noted only at 1.6 G.

At 1.16 G, animals with intact labyrinths and several splanchnic nerves

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ACC NR: AT6036552

showed a 30% decrease in the incidence of inhibitory reactions of the ileum; at 1.6 G, there was a 6% decrease compared to animals with intact splanchnic nerves. Both rotational parameters led to a statistically reliable increase in blood norepinephrin but did not substantially affect adrenalin content.

Rotational stress (1.16 and 1.6 G) caused a noticeable increase in blood norepinephrin content in labyrinthectomized animals with intact splanchnic nerves and an unconfirmable change in adrenalin content. Here, the nature of ileum motor activity at 1.16 G was almost equivalent to control activity. At 1.6 G a normal inhibitory reaction of the ileum was noted.

Based on these data, it was concluded that humoral shifts occurring in the blood of animals and reactions of the ileum to 1.16 G are of vestibular nature. At a greater value (1.6 G), extra-labyrinthine systems play a substantial role. [W.A. No. 22; ATD Report 66-116]

SUB CODE: 06 / SUBM DATE: 00May66

Card 2/2

SKLADOV, Dmitry Nikolayevich; IMENINYEY, Aleksey Gerguyevich;  
CHERESHKOVA, M.M., red.

[Automatic dispensing of reagents in the processing of  
industrial wastes and in water preparation] Avtomati-  
cheskoe dozirovanie reagentov pri obrabotke stekhnnykh  
vod i vodopodgotovke. Moskva, Stroiizdat, 1965. 222 p.  
(MIRA 18:5)

DMITRIYEV, Anatoliy Vasil'yevich; FIRSTOV, A.N., kand.tekhn.nauk, retsenzent;  
ONISHCHENKO, N.P., inzh., red.; GORNOSTAYPOL'SKAYA, M.S., tekhn.red.

[Guide for workers in foundry chipping and cleaning departments]  
Pamiatka dlia rabochikh obrubnykh i ochistnykh otdelenii liteinykh  
tsekhov. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry,  
1960. 50 p. (MIRA 14:3)  
(Foundries--Safety measures)

1957, No 2-3, 17-19

COUNTRY : USSR  
CATEGORY :

M-4

ABS. JOUR. : RZBiol., No. 19, 1959, No. 87001

AUTHOR : Krutyy, R.S.; Piven', N.I.; Dmitriyev, A.V.\*  
INST. : L'vov Institute of Commerce Economics  
TITLE : Variability of Chemical Composition of  
Wheat Grain Within the Same Ear.

ORIG. PUB. : Zap. nauchn. stud. o-va L'vovsk. torgovo-ekonom. in-t, 1957, No 1, 48-51

ABSTRACT : A study was made of variations in weight of wheat grains, and in their contents of moisture, ash, and crude protein, within the same ear. Grains in the middle part of the ear have the highest weight, those in the top part -- the lowest. Differences within the same ear were also observed in the other indices, but these differences vary in the different varieties.

CARD: //

\*Bunik, O.D.; Stadnik, Ye.I.

DMITRIYEV, Anatoliy Vasil'yevich; YEKTOV, I.M., inzhener, retsenzent;  
SUROKA, M.S., redaktor izdatel'stva; LUKHOTA, M.A., tekhnicheskii  
redaktor

[Safety manual for founders, smelters and steel workers] Pamiatka  
po tekhnike bezopasnosti dlia zaval'shchikov, plavil'shchikov i  
stalevarov. Kiev, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry,  
1956. 63 p. (MLRA 10:3)  
(Founding--Safety measures)

Dmitriyev, A.V.

AUTHORS: Dmitriyev, A.V., Ionov, V.A.

132-58-4-3/17

TITLE: Automated Reduction in Gamma-Ray Aerial Survey (Automatizatsiya privedeniya pri aerogrammas'yemke)

PERIODICAL: Razvedka i Okhrana Nedr, 1958, Nr 4, pp 31-36 (USSR)

ABSTRACT: In gamma-ray aerial surveys, the intensity of the gamma radiation decreases sharply when the gamma rays pass through the atmospheric layers. Therefore, it is necessary to take into consideration the height at which the aerial survey is carried out. Up until now, the registration of the height and of the gamma radiation have been conducted separately, and only by joint laboratory processing could the reduction of the field be ascertained. The introduction of 2 devices, which can be easily installed in existing radiometers, is proposed: an automatic height corrector, by which the variation of the intensity of gamma radiation at varying heights can be calculated by the King Function, and a device for the automated reduction of the field. These devices will increase the effectiveness of aerial surveying and eliminate complicated laboratory calculations and adjustments.

Card 1/2

Automated Reduction in Gamma-Ray Aerial Survey

132-58-4-8/17

There are 3 graphs.

ASSOCIATION: Institut prikladnoy geofiziki AN SSSR (Institute of Applied Geophysics AS USSR)

AVAILABLE: Library of Congress

Card 2/2 1. Gamma rays-Measurement 2. Radiometers-Applications

I. 17742-63

EWP(a)/EWT(m)/BIS AFPTC/ASD RDW/JD

ACCESSION NR: AP3006806

8/0078/63/008/009/2136/2139

63  
60

AUTHOR: Kuznetsov, V. G.; Palkina, K. K.; Dmitriyev, A. V.

TITLE: Electrical conductivity and thermoelectric power of the bismuth selenide-antimony telluride and bismuth telluride-antimony selenide solid solutions

27 27 27

SOURCE: Zhurnal neorganicheskoy khimii, v. 8, no. 9, 1963, 2136-2139

TOPIC TAGS: antimony bismuth selenide telluride ternary system, bismuth selenide, antimony telluride, bismuth telluride, antimony selenide, solid solution, electrical conductivity, thermoelectric power, metallic type conductivity, semiconductor type conductivity, bismuth selenide antimony telluride system, bismuth telluride antimony selenide system

ABSTRACT: Variations in electrical conductivity ( $\sigma$ ) and thermoelectric power ( $\alpha$ ) with solid-solution composition have been studied in the  $\text{Bi}_2\text{Se}_3\text{---Sb}_2\text{Te}_3$  and  $\text{Bi}_2\text{Te}_3\text{---Sb}_2\text{Se}_3$  sections of the composition square representing the  $\text{Sb}_x\text{Bi}_{2-x}\text{Te}_{3-y}\text{Se}_y$  ternary system. Data for

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L 17742-63

ACCESSION NR: AP3006806

the sections are not available in the literature, but phase diagrams have been established (V. G. Kuznetsov, K. K. Palkina, Zh. neorgan. khimii, 8, 1204 (1963)). Measurements of  $\sigma$  and  $\alpha$  were carried out at room temperature on hot-pressed specimens prepared by melting mixtures of the high-purity compounds in evacuated sealed quartz ampuls. The hot-pressed specimens were vacuum annealed and water quenched. It was shown that 1) minimum  $\sigma$  corresponds to 70 mol%  $\text{Sb}_2\text{Te}_3$  in the  $\text{Bi}_2\text{Se}_3$ — $\text{Sb}_2\text{Te}_3$  system, while the n-type  $\sigma$  in the  $\text{Bi}_2\text{Te}_3$ — $\text{Sb}_2\text{Se}_3$  system decreases continuously with an increase in  $\text{Sb}_2\text{Se}_3$  concentration in the solid solution; and 2) the sign of  $\alpha$  of  $\text{Bi}_2\text{Se}_3$  in the  $\text{Bi}_2\text{Se}_3$ — $\text{Sb}_2\text{Te}_3$  system changes from minus to plus at 60 mol%  $\text{Sb}_2\text{Te}_3$  and reaches a maximum at 70 mol%  $\text{Sb}_2\text{Te}_3$ , while  $\alpha$  in the  $\text{Bi}_2\text{Te}_3$ — $\text{Sb}_2\text{Se}_3$  system shows a maximum at 50 mol%  $\text{Sb}_2\text{Se}_3$ . In the 18—227°C range, a metallic-type temperature dependence of  $\sigma$  was found for pure  $\text{Bi}_2\text{Te}_3$ ,  $\text{Bi}_2\text{Se}_3$ , and  $\text{Sb}_2\text{Te}_3$ , and a semiconductor-type dependence, for  $\text{Sb}_2\text{Se}_3$ . Discrepancies between experimental and literature data on  $\sigma$  and  $\alpha$  for n-type  $\text{Bi}_2\text{Te}_3$  and n-type  $\text{Bi}_2\text{Se}_3$  are caused by differences in the purity of the starting materials and in the preparation of

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L 17742-63

ACCESSION NR: AP3006806

the specimens. Orig. art. has: 1 table, and 3 figures.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii im. N. S. Kurnakova AN SSSR (Institute of General and Inorganic Chemistry, AN SSSR)

SUBMITTED: 30Oct62

DATE ACQ: 30Sep63

ENCL: 00

SUB CODE: MA, PH

NO REF SOV: 012

OTHER: 005

Card 3/3

KUZNETSOV, V.G.; PALKINA, K.K.; DMITRIYEV, A.V.

Electric conductivity and thermoelectromotive force of solid solutions  
in the systems  $\text{Bi}_2\text{Se}_3 - \text{Sb}_2\text{Te}_3$  and  $\text{Bi}_2\text{Te}_3 - \text{Sb}_2\text{Se}_3$ . Zhur.neorg.khim.  
8 no.9:2136-2139 9 '63. (MIRA 16:10)

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

ACCESSION NR: AT4017564

S/3074/62/000/047/0370/0387

AUTHOR: Dmitriyev, A. V. (Candidate of technical sciences, Docent)

TITLE: Theory of gas discharge in the presence of a dielectric barrier

SOURCE: Leningrad. Elektrotekhnicheskiy institut. Izv., no. 47, 1962, 370-387

TOPIC TAGS: gas discharge, discharge in cavity, resonator discharge, dielectric resonator discharge, image method, equivalent circuit method, discharge gap, slot reactor, high voltage discharge phenomena

ABSTRACT: The article deals with the processes occurring in a gas-filled cavity in which one or two walls are lined with a solid dielectric, a theory is developed for the gas discharge at commercial frequency or higher, at a cavity width from a fraction to several

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ACCESSION NR: AT4017564

millimeters, and at atmospheric pressure, on the basis of the cathode voltage drop of a gas discharge in a cavity surrounded by a dielectric or bounded by a dielectric and a conductor. Existing analysis methods cannot be applied to such a gap since the effective value of the current is not a specific characteristic of the discharge, and different forms of the discharge can correspond to the same value of the current. The effect of a dielectric barrier on the discharge in the cavity is analyzed theoretically by the image method and by the equivalent-circuit method. It is shown that the phenomena occurring under these conditions resemble a glow discharge. Practical applications of the theory are discussed in connection with high-voltage equipment, where a discharge is harmful, and with electrochemistry, where discharge in narrow gaps is used to produce active complexes (slot reactor). It is also shown that the most effective method to study the discharges in narrow cavities or gas inclusions of different shapes is to display cyclic plots of the charge as a function of the voltage or of the current.

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ACCESSION NR: AT4017564

as a function of the voltage. Orig. art. has: 6 figures and 22 formulas.

ASSOCIATION: Leningradskiy elektrotekhnicheskiy institut (Leningrad Electrotechnical Institute)

SUBMITTED: 00Dec61      DATE ACQ: 20Mar64      ENCL: 00

SUB CODE: PH, EE      NR REF SOV: 006      OTHER: 004

Card 3/3

DMITRIYEV, A.V.

Studying a discharge in a narrow cavity bounded on one or both sides by a dielectric. Zhur. tekhn. fiz. 33 no.9:1104-1115 S '63. (MIRA 16:11)

L. Leningradskiy elektrotekhnicheskiy institut imeni V.I. Ul'yanova (Lenina).

1. 25754-65

ACCESSION NR: AP500204E

S/0142/64/007/005/0640/0643

AUTHOR: Dmitriyev, A. V.

TITLE: Approximating the current-voltage characteristics of tunnel diodes

SOURCE: IVUZ. Radiotekhnika, v. 7, no. 5, 1964, 640-643

TOPIC TAGS: tunnel diode, current voltage characteristic

ABSTRACT: A formula for the negative resistance  $\rho$  in terms of the bias voltage  $V$ , which is needed for analyzing nonlinear distortion and gain stability of tunnel-diode amplifiers, can be obtained by differentiating a relation that approximates the current-voltage characteristic  $I = F(V)$ . Four published theoretical formulas that approximate the  $1/V$  characteristic were experimentally checked and found to be inadequate for the above purposes. A new, purely empirical formula (5) is suggested. For calculating the transients in tunnel-diode switching circuits, A. Ferendeci's formula (PIRE, 1962, no. 8, 1852) is recommended. Orig. art.

Card 1/2

L 25754-65

ACCESSION NR: AP5002048

has: 5 figures, 3 formulas, and 1 table.

ASSOCIATION: none

SUBMITTED: 23Mar64

SUB CODE: EC

NO REF SOV: 004

ENCL: 00

OTHER: 005

Card 2/2

ACCESSION NR: AP4042940

S/0057/64/034/008/1494/1503

AUTHOR: Dmitriyev, A.V.

TITLE: Investigation of the discharge in a narrow gap bounded on one or both sides by a dielectric

SOURCE: Zhurnal tekhnicheskoy fiziki, v.34, no.8, 1964, 1494-1503

TOPIC TAGS: electric discharge, electric breakdown, glow discharge, dielectric

ABSTRACT: This paper reports a continuation of earlier work of the author (ZhTF 33, 1104, 1963) on low frequency (50 cycle/sec) discharges in the short air gap between dielectric plates backed by metal electrodes. The basic experimental technique is described in the earlier paper, and the present exposition also leans heavily on the earlier discussion for theoretical matters developed there. The electrode diameter was changed to 2 cm for the present experiments, and the dielectric was bonded to the metal and its surface polished with greater care than before in an effort to minimize the pulse type discharge observed in the earlier work. In some experiments a small high-frequency (1 to 2 kc/sec) potential was applied in addition to the low-frequency excitation in order to measure the cathode drop and the field

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ACCESSION NR: AP4042940

strength in the outer region of the discharge. Experiments were also performed in which distilled water replaced the metallic electrode. The dielectrics investigated were polyethelene, teflon, mica and a commercial paper dielectric intended for capacitor manufacture. The value of the cathode drop at the surface of the mica dielectric was found to be between 150 and 200 V. The electric field in the remainder of the discharge was close to the breakdown strength of air, and the current is assumed to be carried by electron avalanches. No cathode drop was found at the paper dielectric; the self-sustaining discharge is ascribed in this case to unknown secondary processes. Spots at which destructive action had occurred were found on the surfaces of the dielectrics. These are assumed to mark the locations of emission centers, or cathode spots. The occurrence of the pulse type discharge was associated with a nonuniform distribution of these emission centers. The pulse discharge was strongly inhibited by the use of distilled water in place of metal as the conductive portion of the electrode. This is ascribed to the very high resistance of the water. The shape of a single current pulse was found to be similar to those observed by H.W.Bandel (Phys.Rev.95,117,1954) and H.Mielke (Zs.angew.Phys.11,409, 1959) in the transition from a self-sustaining to a spark discharge, and the author concludes that the pulse type discharge represents the first stage in the formation

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ACCESSION NR: AP4042940

of spark discharge channels. "The author tenders his deep gratitude to Prof. L.A. Sena, Doctor of Physical and Mathematical Sciences, for discussing the results of this work." Orig.art.has: 6 formulas, 9 figures and 2 tables.

ASSOCIATION: Leningradskiy elektrotekhnicheskiy institut im.V.I.Ul'yanova (Lenina)  
(Leningrad Electrotechnical Institute)

SUBMITTED: 18May63

ENCL: 00

SUB CODE: EM

NR REF SOW: 002

OTHER: 006

3/3

ACCESSION NR: AP4042941

S/0057/64/034/008/1504/1510

AUTHOR: Dmitriyev, A.V.

TITLE: Contribution to the statistical theory of the breakdown of air at atmospheric pressure and with small electrode spacing

SOURCE: Zhurnal tekhnicheskoy fiziki, v.34, no.8, 1964, 1504-1510

TOPIC TAGS: electric discharge, glow discharge, cathode spot, electric breakdown, cathode drop

ABSTRACT: Two phases are distinguished in the breakdown process of short high-pressure air gaps: the development of a self-sustaining glow discharge, and the subsequent establishment of a highly conductive channel. The latter process involves considerable power and is accordingly sensitive to external circuit conditions. The former process is discussed in the present paper. Current statistical theories of the development of a self-sustaining discharge from the Townsend discharge in a gas are criticized as providing no natural qualitative criterion for the onset of the self-sustaining regime, and as incapable of accounting for breakdown at a finite field strength. Basing his argument on his own experimental results concerning the

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ACCESSION NR: AP4042941

formation of a subnormal glow discharge in a cavity with dielectric walls (ZhTF 33, 1104, 1963), the author proposes the establishment of a cathode drop as the criterion for the initiation of the self-sustaining phase. The cathode drop results from the formation of cathode spots at locations where the probability of surface ionization is enhanced by the presence of surface defects. This mechanism is more important in short high-pressure gaps than elsewhere, because the ionic remnant of an avalanche suffers in this case less diffusion on its journey to the cathode, and, consequently, arrives in a more compact form, in which it is more capable of producing secondary effects. A simple statistical theory is developed for the formation of cathode spots in a Townsend discharge, and the inevitable exponential time dependence of the probability is derived. It is suggested that this theory might be improved with the aid of considerations similar to those brought to bear on the question of the mechanical strength of real crystals by T.A.Kontorova and Ya.I.Frenkel' (ZhTF 11, 173, 1941). In the author's opinion the significant inference is that under conditions in which the presence of surface defects appreciably influences the initiation of the discharge (and these conditions are met in the case of a short gap), the statistical mean value of the breakdown potential is not constant, and the concept "breakdown potential of the gas" loses its meaning. This means in practice that

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ACCESSION NR: AP4042941

under otherwise similar conditions, the average breakdown potential will be different for electrodes that have different areas or the surfaces of which have been differently treated. Orig.art.has: 13 formulas.

ASSOCIATION: Leningradskiy elektrotekhnicheskii institut im.V.I.Ul'yanova (Lonina)  
(Leningrad Electrotechnical Institute)

SUBMITTED: 06Jun63

ENCL: 00

SUB CODE: EM

NR REF SOV: 006

OTHER: 022

3/3

DMITRIYEV, A.V., inzh.

~~DMITRIYEV, A.V., inzh.~~  
New automatic regulator for lever transmissions. Biul.tekh.-ekon.inform.  
Nauch.-tekh.sov.Min.putei soob. no.1:40-46 '63. (MIRA 17:1)

VASILENKO, V.N.; DMITRIYEV, A.V.; IONOV, V.A.; KOGAN, R.M.; NAZAROV, I.M.;  
FRIDMAN, Sh.D.

Using the gamma-ray spectrum surveying method in geology.  
Sov. geol. 6 no.10:47-62 O. '63. (MIRA 17:1)

1. Institut prikladnoy geofiziki AN SSSR.

DMITRIYEV, A. V.

PA 15/49T18

USSR/Electricity  
Insulators, High Frequency

Jul 48

"High-Voltage Insulation for High-Frequency Installations," Prof N. P. Bogoroditskiy, Dr Tech Sci and A. V. Dmitriyev, Engr, Leningrad Elec Eng Inst imeni Ul'yanov, 4 pp

"Elektrichestvo" No 7

Treats subject under: (1) discharge in air at high frequencies; (2) construction of high-voltage, high-frequency insulators; (3) utilization of industrial frequency for testing high-frequency insulators.

15/49T18

DMITRIYEV, A. V.

A. V. Dmitriyev will defend his thesis on "Electrometer of Piezo-electric Converter" for a degree of candidate of technical sciences on 20 June 1953; at the Institute of Automatics and Telemechanics, USSR Academy of Sciences.

Vechernyaya Moskva, No. 143, 20 June 1953, p. 4

SOV/112-57-9-18298

Translation from: Referativnyy zhurnal, Elektrotehnika, 1957, Nr 9,  
pp 21-22 (USSR)

AUTHOR: Dmitriyev, A. V.

TITLE: ~~Device for Automatic Stopping of a Braiding Machine.~~ A Suggestion by  
L. B. Grabin and N. I. Beregovoy (Mekhanizm dlya avtomaticheskogo  
ostanovki opletochnogo stanka. Predlozheniye L. B. Grabina, N. I. Beregovogo)

PERIODICAL: Sb. rats. predlozh. M-vo elektrotekh. prom-sti SSSR, 1956,  
Nr 2 (60), pp 12-14

ABSTRACT: A new device is described for stopping a braiding machine by inserting an electric block in the motor supply circuit. The device is mounted on the nipple plate, close to the wire being braided, and consists of a textolite piece, two roller levers, and a spring. A wire-break block is embedded in the piece. When the wire slips off the rolls, or the wire diameter changes, a movement of one of the roller levers interrupts the motor supply circuit, thereby stopping the machine. Such a device has been mounted and operated successfully at the "Ukrkabel" plant.

A. O. M.

Card 1/1

*DMITRIYEV, A.V.*

SHAPOVALENKO, A.M., mladshiy nauchnyy sotrudnik; DMITRIYEV, A.V.; OZOLIN,  
A.K., inzh.

Diesel compressors used in diesel locomotives. Elek. i tepl. tiaga  
2 no.1:16-17 Ja '58. (MIRA 11:3)

1. Tsentral'nyy nauchno-issledovatel'skiy institut Ministerstva  
putey soobshcheniya (for Shapovalenko). 2. Glavnyy konstruktor  
Pervomayskogo tormoznogo zavoda (Dmitriyev).  
(Diesel locomotives)

DMITRIYEV, Anatoliy Vasil'yevich; SHPARAGA, I.I., inzh., retsenzent;  
SERDYUK, V.K., inzh., red.

[Safety rules for operators of sand preparation machinery  
casting shops] Pamiatka po tekhnike bezopasnosti dlia  
rabochikh zemleprigotovitel'nykh mashin liteinykh tsekhov.  
Kiev, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1958.

57 p.

(MIRA 12:4)

(Founding--Safety measures)      (Sand, Foundry)

NESTERENKO, Semen Leont'yevich; DNITRIYEV, A.V., inzhener, retsenzent;  
RIKBERG, D.B., red.

[Guide to safety measures in laying, repairing, and lining  
steel-smelting furnaces] Pamiatka po tekhnike bezopasnosti  
dlia kamenshchikov po kladke, remontu i obmurovke staleplavil'-  
nykh pechei. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.  
lit-ry, 1959. 101 p.

(MIRA 14:5)

(Smelting furnaces) (Metallurgical plants--Safety measures)

DMITRIYEV, A.V.

3

S/576/61/000/000/020/020  
E021/E120

AUTHORS: Kuznetsov, V.G., Yeliseyev, A.A., Shpak, Z.S.,  
Palkina, K.K., Sokolova, M.A., and Dmitriyev, A.V.

TITLE: Study of the phase diagram and the electrical  
conductivity of the phases of the Ni-S, Ni-Se and  
Co-S systems

SOURCE: Soveshchaniye po poluprovodnikovym materialam, 4th.  
Voprosy metallurgii i fiziki poluprovodnikov;  
poluprovodnikovyye soyedineniya i tverdyye splavy.  
Trudy soveshchaniya. Moscow, Izd.-vo AN SSSR, 1961.  
Akademiya nauk SSSR. Institut metallurgii imeni  
A.A. Baykova. Fiziko-tehnicheskii institut. 159-173.

TEXT: Information on the phase diagram and electrical  
conductivity of the phases of the systems Ni-S, Ni-Se and Co-S  
is important for the technology of extraction of nickel, cobalt,  
selenium and sulphur from their ores and also for the search for  
new semiconducting materials. The present investigation was  
therefore carried out. Detailed X-ray analysis, differential  
thermal analysis and measurements of density were carried out.

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3

Study of the phase diagram and the ... S/576/61/000/000/020/020  
E021/E120

Electrical conductivity in the range 20 to 440 °C was measured, and in general showed a steady fall as the temperature increased. The results showed that in solid solutions based on  $\beta$ -NiSe or  $\beta$ -CoS with a defect nickel arsenide structure and a content of selenium or sulphur greater than 51.6 atomic %, a superlattice is formed. This is explained by ordering of defects in the lattice in Ni or Co positions. The following structures were found to exist:  $\text{Ni}_4\text{S}_{3+x}$  - hexagonal with parameters at 650° of  $a = 5.43 \pm 0.01\text{kX}$ ,  $c = 12.02 \pm 0.01\text{kX}$  and  $c/a = 2.211$ ;  $\text{Ni}_9\text{S}_8$  - hexagonal with  $a = 12.10 \pm 0.1\text{kX}$ ,  $c = 11.28 \pm 0.01\text{kX}$ ,  $c/a = 0.932$  in a lattice of six  $\text{Ni}_9\text{S}_8$  groups;  $\text{Ni}_6\text{Se}_5$  - hexagonal with  $a = 3.77 \pm 0.01\text{kX}$ ,  $c = 15.86 \pm 0.02\text{kX}$ ,  $c/a = 4.202$ ;  $\text{Ni}_{21}\text{Se}_{20}$  - hexagonal with  $a = 7.95 \pm 0.01\text{kX}$ ,  $c = 9.76 \pm 0.01\text{kX}$ ,  $c/a = 1.227$ ;  $\beta$   $\text{Ni}_3\text{Se}_{20}$  - tetragonal with parameters at 650 °C of  $a = 7.60 \pm 0.01\text{kX}$ ,  $c = 6.22 \pm 0.01\text{kX}$ ,  $c/a = 0.818$ .

It was shown that  $\text{NiS}_2$  has semiconducting properties. The phases  $\beta$   $\text{NiS}$ ,  $\beta$   $\text{NiSe}$  and  $\beta$   $\text{CoS}$  with a nickel-arsenide structure and  $\beta$   $\text{CoS}$ ,  $\beta$   $\text{NiSe}$  with a nickel-arsenide superlattice, and also

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3

Study of the phase diagram and the ... S/576/61/000/000/020/020  
E021/E120

$\alpha$  NiS with a millerite-type structure, behave below 300 °C as semi-metals, but  $\beta'$  CoS with 55.22 at.% S and  $\beta'$  NiSe with 52.3 at.% Se have a tendency to semiconducting type of conductivity. The phases  $\alpha$  Ni<sub>3</sub>S<sub>2</sub>,  $\alpha$  Ni<sub>3</sub>Se<sub>2</sub>, Co<sub>9</sub>S<sub>8</sub>, NiSe<sub>2</sub> and mixtures of  $\alpha$  Ni<sub>3</sub>S<sub>2</sub> with Ni,  $\alpha$  Ni<sub>3</sub>Se<sub>2</sub> with Ni and Ni<sub>6</sub>Se<sub>5</sub>, Co<sub>9</sub>S<sub>8</sub> with Co, have metallic conductivity. The c/a ratio is close to the ideal nickel-arsenide structure in the case of  $\beta$  NiS (c/a = 1.555) but the tendency to semiconducting properties is greater for  $\beta'$  CoS (c/a = 1.534) and  $\beta'$  NiSe (c/a = 1.463). This is a deviation from the prediction by W.B. Pearson (Ref.20: Canadian J. of Physics, 1957, v.35, 8, 886) that phases with nickel-arsenide structure would have semiconducting type of electrical conductivity. Detailed information is given on the limits of homogeneity and phase structure of Ni-S, Ni-Se and Co-S systems and also the inter-atomic distances in sulphides and selenides of nickel and cobalt selenide.  
There are 2 figures, 2 tables and 32 references: 7 Soviet-bloc and 25 non-Soviet-bloc.  
Card 3/4

Study of the phase diagram and the ... S/576/61/000/000/020/020  
E021/E120

The four most recent English language references read as follows:

- Ref. 7: T. Rosenqvist, J. Iron Steel Inst., 1954, v.176, 37.
- Ref.16: M. Hanash. Constitution of Binary Alloys, 1958,  
2nd publication.
- Ref.20: W.B. Pearson, Canadian J. of Physics, 1957, v.35, 8, 886.
- Ref.23: M.A. Peacock, Amer. Mineralog., 1947, v.32, 484.

Card 4/4

S/089/61/010/006/007/011  
B136/B201

AUTHORS: Balyasnyy, N. D., Boltneva, L. I., Dmitriyev, A. V.,  
Ionov, V. A., and Nazarov, I. M.

TITLE: Determination of the content of radium, thorium, and  
potassium in rocks from an aircraft

PERIODICAL: Atomnaya energiya, v. 10, no. 6, 1961, 626-629

TEXT: A three-channel analyzer allowing measurements to be made in three energy ranges with automatic subtraction of the background has been used for effecting spectroscopic gamma measurements. The integral sensitivity was 350 pulses/sec per microroentgen/hour. The channels worked (1) in integral operation with a cut-off of 0.5 Mev to eliminate the effect of the soft scattered gamma radiation; (2) in the 1.6-1.9 Mev energy range; (3) in the 1.9-2.7 Mev energy range. The contents of the individual elements were determined by equations

$$n_1(h) = n_{11}Ra + n_{12}Th + n_{13}K$$

$$n_2(h) = n_{12}Ra + n_{22}Th$$

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Determination of the content of ...

S/089/61/010/006/007/011  
B136/B201

$$n_{31}\varphi(h) = n_{31}\text{Ra} + n_{32}\text{Th}$$

Here, Th and K denote the percentual thorium and potassium contents, Ra the percentual radium content of equilibrated uranium,  $n_{1,2,3}$  the counting rates,  $\varphi(h)$  the reference coefficient to the earth's surface;  $n_{11} = 8 \cdot 10^5$ ,  $n_{12} = 3.6 \cdot 10^5$ ,  $n_{13} = 1.6 \cdot 10^2$ ,  $n_{21} = 4.8 \cdot 10^4$ ,  $n_{22} = 2.6 \cdot 10^4$ ,  $n_{31} = 2.7 \cdot 10^4$ ,  $n_{32} = 4.6 \cdot 10^4$ .  $\varphi(h)$  is independent of the content of elements, and for altitudes of 10, 25, and 50 m equal to 1.08, 1.24, and 1.55. The coefficients  $n_{ij}$  were determined by a direct method which, however, proved not to be very accurate. Since the spectra of the standard specimens and of the semi-space differ, the standard spectra were taken without and with a 25-cm water screening. The root-mean-square error in the determination of the elements was calculated after the fourth control flight and was found to amount to 25 %. The flights covered an area of  $5.5 \cdot 10$  km

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Determination of the content of ...

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B136/B201

at intervals of 100 m at an altitude of 25 m. A clear relationship was found between the radium and thorium contents and the geological structure. The highest radium and thorium contents ( $7 \cdot 10^{-4}\%$ , and  $11 \cdot 10^{-4}\%$ , respectively) calculated according to aerial survey results are found in such regions where effusive rocks of a medium composition appear in granite outcrops on the surface; the lowest, on the other hand ( $1.5 \cdot 10^{-4}\%$  for radium and  $4.0 \cdot 10^{-4}\%$  for thorium) are found where effusive rocks of a basic composition appear. The radium content determined from the aircraft is, on the average, by 28%, and the thorium content by 21%, less than the contents determined by radiochemical analysis. The introduction of a correction factor  $K=1.1$  in  $n_3$  improves results considerably. As, however, the number of analyses performed is small, their accuracy is insufficient. The conclusion is drawn that errors caused by tolerances in prematurely introduced coefficients can be eliminated by this correction. The potassium content in effusive-sedimentary rocks fluctuated between 1 and 2% and attained 2.5% in granite, which agrees with data available in the literature. V. N. Vasilenko, Z.V. Kuznetsova and I. V. Yagodovskiy ✓

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Determination of the content of ...

S/089/61/010/006/007/011  
B136/B201

are thanked for having supplied geological material. There are 2 figures,  
1 table, and 3 Soviet-bloc references. ✓

SUBMITTED: July 14, 1960

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Card 4/4

BALYASNIY, N.D.; BOLTNEVA, L.I.; DMITRIYEV, A.V.; IONOV, V.A.; NAZAROV, I.N.

Determining the radium, thorium and potassium content of rocks  
from an airplane. Atom.energ. 10 no.6:626-629 Je '61. (MIRA 14:6)

(Aeronautics in geology) (Radioactive substances)

FEDOROV, N.A.; ~~DMITRIYEV, A.V.~~; LUK'YANOV, S.V.; KORNIYENKO, P.P.

Studying the process of the hydraulic fracturing of  
coal seams. Nauch. trudy VNII Podzemgaza no.6:66-78  
'62. (MIRA 15:11)

1. Laboratoriya gazifikatsii kamennykh ugley Vsesoyuznogo  
nauchno-issledovatel'skogo instituta podzemnoy gazifikatsii  
ugley.

(Coal gasification, Underground)  
(Hydraulic mining)

BOLTNEVA, L.I.; VASILENKO, V.N.; DMITRIYEV, A.V.; IONOV, V.A.; NAZAROV,  
I.M.; YAGODOVSKIY, I.V.

Experimental determination of radium, thorium, and potassium in  
rocks from an airplane by means of a NaJ(Tl) crystal pickup.  
Atom. energ. 13 no.3:280-282 S '62. (MIRA 15:9)  
(Gamma-ray spectrometry) (Radioactivation analysis)

S/874/62/000/002/002/019  
D218/D308

**AUTHORS:** Balyasnyy, N.D., Dmitriyev, A.V., Ionov, V.A. and Nazarov, I.M.

**TITLE:** Spectrometric studies of natural emitters using large-volume scintillators

**SOURCE:** Akademiya nauk SSSR. Ural'skiy filial. Institut geofiziki. Trudy. no. 2, 1962. Geofizicheskiy sbornik, no. 3, 57-62

**TEXT:** A determination is reported of the ratio of the amounts of thorium and uranium in natural rocks. The apparatus employed incorporated a cylindrical plastic scintillator with a  $\phi$ BY-24 (FEU-24) photomultiplier at each end. The plastic phosphor (20 cm diameter, 40 cm long) consisted of two equal parts in optical contact with each other. It was surrounded by a cotton wool reflector in order to improve light collection. The outputs of the two photomultipliers were added together which ensured that the pulse amplitude was independent of the position of the scintillation within the phos-

Card 1/2

Spectrometric studies ...

S/874/62/000/002/002/019  
D218/D308

phor. The resolution of the  $Cs^{137}$  photopeak was found to be 22%. The scintillation pulses were examined with a fixed channel covering a pulse-height range corresponding to 2 - 2.6 MeV and a further channel which corresponded to one of the following four possible energy regions: 0.3 - 2.6, 1.0 - 1.5, 1.0 - 2.0 and 1.5 - 2.0 MeV. Analysis of the results obtained with these channels showed that the error in determination of the Th/U ratio from the counting rate ratio for the two channels is a minimum when channel No. 2 covers the range 2.0 - 2.6 MeV. There are 3 figures and 1 table.

Card 2/2

L 1268-66 EWT(1)

ACCESSION NR: AR5008450

UR/0271/65/000/002/A091/A092  
62-5:629.135

46  
B

SOURCE: Ref. zh. Avtomatika, telemekhanika i vychislitel'naya tekhnika.  
Svodnyy tom, Abs. 2A523

AUTHOR: Balyasnyy, N. D.; Dmitriyev, A. V.; Ionov, V. A.

TITLE: Device for automatic subtraction of background (noise)

CITED SOURCE: Sb. Geofiz. priborostr. Vyp. 18, L., Nedra, 1964, 17-25

TOPIC TAGS: background subtraction, automatic background subtraction, air gamma survey

TRANSLATION: In automating the processing of air-gamma-survey materials (intensity-flight-altitude calculations, channel rate-of-counting division, etc.), a special device must be used for presubtracting the background components during the flight. A device is described which automatically subtracts the background rate-of-counting in the pulse form. The advantage of this method of isolating the desirable signal lies in the fact that the background is subtracted right at the radiometer input; hence, the automatic-stabilization circuit in the air-survey

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L 1268-66  
ACCESSION NR: AR5008450

system is simplified, the background compensation with sensitivity-scale switching becomes unnecessary, and the possibility of count recording in the pulse form with an accuracy of one pulse is retained. The equipment includes a two-position subtracting unit, an electronic delay circuit, a logical unit, and a memory unit. The subtracting-unit error is investigated for the particular case when the pulse sequence is set by a separate background frequency-stabilized generator, and the input pulses are statistically distributed according to the Poisson law. If the subtracting unit switch has more than two positions, missing of a pulse of the background generator will depend not only on the number of the arrived input pulses but also on the switch position at the start of the period; therefore, in this case, the operation would be described by a Markov-type-circuit probabilistic process. A table and a recurrent formula set up for various sequences of the input pulses are analyzed. A principal circuit realizing the simplest switch is described. Bibl. 3, figs. 3.

SUB CODE: DP, EC

ENCL: 00

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Card 2/2

BOLTNEVA, L. I.; VASILENKO, V. N.; DMITRIYEV, A. V.; IONOV, V. A.; KOGAN,  
R. M.; KUZNETSOVA, Z. V.; NAZAROV, I. M.; YAGODOVSKIY, I. V.

Use of the method of air-borne gamma-spectrometry in studying  
the radioactivity of granitoid intrusives. Izv. AN SSSR. Ser.  
geofiz. no.6:858-871 Je '64. (MIRA 17:7)

DMITRIYEV, A.V.; NIKIFOROV, M.V.; KOGAN, R.M., kand. tekhn. nauk;  
FRIDMAN, Sh.D., kand. tekhn. nauk

Determining moisture of soils by their gamma-radiation. Meteor.  
i gidrol. no.7:56-58 J1 '65. (MIRA 18:6)

1. Institut prikladnoy geofiziki AN SSSR.

BOLTNEVA, L.I.; BUYANOVA, L.I.; DMITRIYEV, A.V.; IONOV, V.A.; KOGAN, R.M.;  
NAZAROV, L.M. }

Radioactivity of sands in Central Asia. Dokl. AN SSSR 165  
no.1:183-186 N '65.

(MIRA 18:10)

1. Submitted March 16, 1965.

L 31131-66 EWT(1) IJP(c) GG

ACC NR: AP6013131 SOURCE CODE: UR/0057/66/036/004/0739/0745

AUTHOR: Dmitriyev, A. V.; Tszyan Tsze-tsyang <sup>31</sup>  
<sub>B</sub>

ORG: Leningrad Electrotechnical Institute im. V. I. Ul'yanov (Lenin)  
(Leningradskiy elektrotekhnicheskii institut)

TITLE: Variation of dielectric surface properties under the influence  
of gas discharge <sup>21</sup>

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 4, 1966, 739-745

TOPIC TAGS: dielectric property, dielectric surface property, gas  
discharge

ABSTRACT: An investigation was made of the influence of gas discharge on the surface resistance of dielectrics coated with polyethylene films 40—75  $\mu$  thick. Initially, it was established that the resistance decreased sharply under the influence of the gas discharge. This was explained by the appearance of a space charge in the boundary layer of the dielectric. The space charge consisted of electrons from the gas discharge. If the ionization processes are stopped the surface resistance rises and approaches the initial value. After the first minute the resistance rises according to  $At^n$ , where A is a constant determined by the intensity of the gas discharge and the duration of

Card 1/2

I. 31131-66

ACC NR: AP6013131

its action. A relationship between the surface resistance and the peculiarity of spectral lines of the ionization current pulses was established. Orig. art. has: 1 formula and 8 figures.

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[BD]

SUB CODE: 09, 11/ SUBM DATE: 19Nov64/ ORIG REF: 005/ OTH REF: 003  
ATD PRESS: 4239

Card 2/2 CC

DMITRIYEV, A.V.; LEBEDEV, V.L.; NAZARENKO, A.A.

Testing methods of connection linking by hydraulic fracturing  
of the coal seam at the Kamensk "Podzemgaz" Plant, Trudy  
VNIIPodzemgaza no.12:46-52 '64. (MIRA 18:9)

1. Laboratoriya gazifikatsii kamennykh ugley Vsesoyuznogo  
nauchno-issledovatel'skogo instituta podzemnoy gazifikatsii  
ugley.

DMITRIYEV, S.V.; KORNYEIKO, P.P.; LUK'YANOV, S.V.; LEBEDEV, V.S.

DM-2001 portable station for the control and regulation of hydraulic fracturing processes. Trudy VNIIPodzemgaza no.12: 133-134 '84. (MIRA 18:9)

1. laboratoriya gazifikatsii kamennykh ugley Vsesoyuznogo nauchno-issledovatel'skogo instituta podzemnoy gazifikatsii ugley.

DMITRIYEV, A. V.

Oysters from Suzak layers of the Manysh syncline. Trudy Inst.  
geol. AN Turk. SSR 3:5-26 '60. (MIRA 16:1)

(Ashkhabad—Oysters, Fossil)

DMITRIYEV, A. V.

Paleogene oysters in the Badkhyz region. Trudy Inst. geol.  
AN Turk. SSR 3:27-74 '60. (MIRA 16:1)

(Badkhyz region--Oysters, Fossil)

KALUGIN, P.I.; DMITRIYEV, A.V.

Upper Cretaceous in the Badkhyz highland. Trudy Inst. geol. AN  
Turk. SSR 4:362-415 '62. (MIRA 16:7)  
(Badkhyz region--Geology, Stratigraphic)

DMITRIYEV, A.V.; KOZHEVNIKOVA, G.Ye.

Paleogene of the central Kopetdag. Izv. AN Turk.SSR. Ser. fiz.-  
tekh., khim. i geol. nauk no.2:99-107 '63. (MIRA 17:8)

1. Institut geologii AN Turkmenskoy SSR.

KALUGIN, P.I., akademik; DMITRIYEV, A.V.; KOZHEVNIKOVA, G.Ye.;  
ALIYEV, M.M., akademik; red.; MIROYEDOVA, A., red.

[Stratigraphy of Upper Cretaceous and Paleocene sediments  
in the Kopetdag and Badkhyz] Stratigrafiia verkhnemelovykh  
i paleotsenovykh otlozhenii Kopet-Daga i Badkhyza. Ashkhabad,  
Turkmenizdat, 1964. 342 p. (MIRA 18:3)

1. Akademiya nauk Turkmenskoy SSR (for Kalugin). 2. Akademiya  
nauk Azerbaydzhanskoy SSR (for Aliyev).

DMITRIYEV, A.V.; KOZHEVNIKOVA, G. Ye.

Eocene sediments in the region of the Gayaurdag anticline. Izv.  
AN Turk. SSR. Ser. fiz.-tekhn., khim. i geol. nauk no.3:91-96 '64  
(MIRA 18:1)

1. Institut geologii Gosudarstvennogo geologicheskogo komiteta  
SSSR.

DMITRIYEV, A.V.; LEPESHV, V.I.

Stand testing of abrasive rock drills for hydraulic breaking of coal seams. Trudy VNIIPodzornogo no.13004-85 '85. (MIRA 18:8)

1. Laboratoriya geotekhnologicheskogo Vsesoyuznogo nauchno-issledovatel'skogo instituta podzemnykh rabot Gostekhizoblyad.

TOPIC TAGS: glow discharge, cathode drop, cascade discharge,  
Townsend discharge, self-maintaining discharge

TRANSLATION: The author investigates a self-maintaining electric discharge in a narrow gas region bounded by a dielectric, at a voltage of commercial or increased frequency, and at low current densities. A theoretical analysis is made of the elementary processes in the region of the cathode drop and of the cascade dis-

Card 1/2

L 31837-65

ACCESSION NR: AR5005654

charge, and some experimental results are reported. It is shown that the subnormal glow discharge is close to the normal glow discharge on the voltage-current characteristic of the gas gap, but is realized under very special conditions, namely in a narrow gap surrounded by a dielectric, when the emission processes on the cathode are uni-<sup>2</sup>

SUB CODE: EM, ME

ENCL: 00

Card 2/2

DMITRIYEV, A.V.

Approximation of the voltampere characteristics of tunnel diodes.  
Izv.vys.ucheb.zav.; radiotekh. 7 no.5:640-643 Ser.0 '64.  
(MIRA 18:4)

ACCESSION NR: AR5006547

S/0274/64/000/012/A075/A075  
621.372.413

SOURCE: Ref. zh. Radiotekhnika i elektrosvyaz'. Sv. t., Abs. 12A409

AUTHOR: Alekseyev, A. V.; Dmitriyev, A. Ya.

TITLE: Coupling of coaxial resonators via small holes

CITED SOURCE: Izv. elektrotekh. in-ta, vyp. 52, 1964, 57-73

TOPIC TAGS: coaxial resonator, coaxial resonator coupling, small hole coupling

TRANSLATION: An approximate solution is given of the internal electrodynamic problem for two coaxial resonators coupled via holes. Assuming that the gap width of the both coaxial resonators is small, their fields are decomposed into their natural (axial) oscillations. The coupling hole size is much smaller than the wavelength and the radius of curvature of the surface carrying the holes. The coefficients of excitation of the resonators, at near-natural frequencies, are recorded. The problem is reduced thereby to an equivalent circuit with concentrated parameters. An experimental verification, at 1250--2000 Mc, of the effect of the external resonator voltage upon the internal resonator voltage showed good agreement with calculated values. Ill. 7. Bibl. 6.

Card 1/1

SUB CODE: EC

ENCL: 00

L 42163-66 EWT(d)/FSS-2

ACC NR: AR6013875	SOURCE CODE: UR/0274/65/000/011/BO09/BO10
AUTHORS: <u>Dmitriyev, A. Ya.; Odnol'ko, V. V.</u> <span style="float: right;">42 B</span>	
TITLE: <u>The possibilities of reducing the volume of information associated with the transmission of motionless color images</u> <i>q</i>	
SOURCE: Ref. zh. Radiotekhnika i elektrosvyaz', Abs. 11B72	
REF SOURCE: Tr. Nauchno-tekhn. konferentsii Leningrad. elektrotekhn. in-ta svyazi, vyp. 2, 1964, 17-25	
TOPIC TAGS: colorimetric analysis, telecommunication, telegraphy, image contrast, image projection, information processing	
ABSTRACT: The characteristics of color phototelegraphy (CFT) were investigated. It was pointed out that with CFT it is necessary to transmit color information concerning all the elements including also the fine elements (as distinct from color TV). The quantity of information $I$ transmitted along a CFT channel is proportional to $\log_2 \mathcal{V}_0$ , where $\mathcal{V}_0$ is the number of colors which are distinguished both by brightness and by chromaticity. For motionless colored images $\mathcal{V}_0 = m\mu$ , where $m$ and $\mu$ are the number of gradations of brightness and chromaticity respectively, in which $m \leq 25-30$ ; $\mu$ is determined by the gradations of the color current $n_{\Delta\lambda}$ and the color saturation $n_{\Delta p}$ . For polygraphic hues $n_{\Delta p} = 10$ . With the reproduction of high quality images	
Card 1/2	UDC: 621.397.7-2:612.843.7

ACC NR: AR6013875

$n_{\Delta \lambda} = 30$ . Thus, for good images the total number of gradations of chromaticity 0  
 $\mu \approx \frac{n_{\Delta \lambda} n_{\Delta p}}{2} = 150$ , and  $\nu_0 = 4500$ . However, for low color originals with clear gradations  
between colors (documents, maps), transmission of which by CFT presents the most  
promise, one can consider  $\mu \approx n_{\Delta \lambda}$ , thus the color saturation in this case is  
inseparably connected with the color tone. In order to make possible the transmission  
also of images of good quality by CFT it is necessary to provide for a change of  
transmission speed. For this requirement the most satisfactory method of transmission  
is by signals of brightness ( $U_y$ ), of color tone ( $U_\lambda$ ), and saturation ( $U_p$ ). Single  
color and low color images are transmitted by signals  $U_y$  and by the sum  $U_y$  and  $U_\lambda$   
respectively. By reducing the transmission speed, 3 signals can be transmitted at  
once. The preparation of a model of the CFT equipment is reported, operating in the  
band 300--3400 hz on the principle of simultaneous transmission of the signals  $U_R$ ,  $U_G$ ,  
and  $U_B$ . 6 illustrations. Bibliography of 8 citations. A. M. Translation of  
abstract/

SUB CODE: 17

Card 2/2

DMITRIYEV, A. YE.

Dmitriyev, A. Ye.

"Teaching Skills and Habits through the Lesson System." Moscow State Pedagogical Inst imeni V. I. Lenin. Moscow, 1955. (Dissertation for the Degree of Candidate in Pedagogical Science)

So: Knizhnaya letopis', No. 27, 2 July 1955

DMITRIYEV, A.Ye.; BRONEVICH, B.A.

Parents' role in preparing students for socially useful work.  
Politekh.obuch. no.12:44-47 D '59. (MIRA 13:5)

1. Srednaya shkola No.21, Taganrog.  
(Home and school)

BESPALOV, Vladimir Matveyevich[deceased]; DMITRIYEV, Aleksandr  
Yefimovich; YERSHOVA, I., red.; IVANOV, N., tekhn. red.

[Maloyaroslavets]Maloiaroslavets. Kaluga, Kaluzhskoe  
knizhnoe izd-vo, 1962. 218 p. (MIRA 15:11)  
(Maloyaroslavets)

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Productive activity of the Marti state cotton farm, Khlopkovodstvo No 3, 1952.

DMITRIYEV, B.  
DMITRIYEV, B.

More production with the same capacity. Grazhd.av. 18 no.4:15  
'61. (MIRA 14:4)

1. Nachal'nik tsekha aviaremontnogo predpriyatiya Vostochno-Sibirskogo upravleniya Grazhdanskogo vozdushnogo flota.  
(Siberia, Eastern--Airplanes--Maintenance and repair)

DMITRIYEV, B. (Moskva)

Some problems in the statistical evaluation of the mental health  
of the population. Zhur. nevr. i psikh. 65 no.2:296-302 '65.

(MIRA 18:9)

DMITRIYEV, B. (Moskva)

International classification of mental diseases. Zhur. nevr. i  
psikh. 65 no.9:1404-1407 '65. (MIRA 18:9)

DMITRIYEV, B. (Moskva)

Some materials on the characteristics of the distribution of  
psychic diseases in the world; a brief social-hygiene and statisti-  
cal analysis. Zhur. nevr. i psikh. 65 no.11:1733-1741 '65.  
(MIRA 18:11)

KOCHETKOV, N.K.; DMITRIYEV, B.A.

Wittig reaction in the carbohydrate series. Dokl. AN SSSR 151  
no.1:106-109 J1 '63. (MIRA 16:9)

1. Institut khimii prirodnykh soyedineniy AN SSSR. 2. Chlen-  
korrespondent AN SSSR (for Kochetkov).  
(Carbohydrates) (Wittig reaction)

ZOLOTAREV, Ye.Kh.; FEDDER, M.L.; KALAKUTSKAYA, T.V.; YUDIN, L.G.; DMITRIYEV,  
B.A.

A study of repellents. Report No.2: Acyltetrahydroquinolines as  
mosquito repellents. Nauch. dokl. vys. shkoly; biol. nauki no.2:  
37-40 '58. (MIRA 11:10)

1. <sup>P</sup>redstavlena kafedrami entomologii i organicheskoy khimii  
Moskovskogo gosudarstvennogo universiteta imeni M.V. Lomonosova i  
TSentral'nym nauchno-issledovatel'skim dezinfektsionnym institutom  
Ministerstva zdravookhraneniya SSSR.  
(Quinoline) (Mosquitoes) (Insect baits and repellents)

KOCHETKOV, N.K.; DMITRIYEV, B.A.

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1. Institut khimii prirodnykh soyedineniy AN SSSR.  
(Monosaccharides) (Heptanoic acid)

KOCHETKOV, N.K.; DMITRIYEV, B.A.; USOV, A.I.

Chromatography of monosaccharide derivatives in a thin layer  
of aluminum oxide. Dokl. AN SSSR 143 no.4:863-866 Ap '62.  
(MIRA 15:3)

1. Institut khimii prirodnykh soyedineniy AN SSSR.
2. Chlen-korrespondent AN SSSR (for Kochetkov).  
(Monosaccharides) (Chromatographic analysis)

KOCHETKOV, N. K.; DMITRIYEV, B. A.

Monosaccharides. Report No. 7: New synthetic path to higher  
sugars. Izv AN SSSR Ser Khim no. 4: 669-677 Ap '64. (MIRA 17:5)

1. Institut khimii prirodnykh soyedineniy AN SSSR.