

NAKHODKINA, L.G.; YEVDOKIMOV, S.A.

Apparatus for the intracellular lead off of electrical potentials.
Fiziol.zhur.. 45 no.6:716-717 Ja '59. (MIRA 12:8)

1. From the department of physiology and anatomy, A.I.Herzen
Pedagogical Institute, Leningrad.

(NEUROPHYSIOLOGY, appar. & instruments
appar. for intracellular derivation of
electrical potentials (Rus))

YEVDOKIMOV, S.A.; TRUBITSYNA, G.A.

Method for the determination of gas exchange in small animals.
Fiziol. zhur. 46 no. 5:631,633 My '60. (MIRA 13:12)

1. From the Laboratory for Neurophysiological Problems, Pavlov
Institute of Physiology, Leningrad.
(RESPIRATION) (PHYSIOLOGICAL APPARATUS)

35337

S/194/62/000/001/034/066
D201/D305

27.1200

AUTHORS: Yevdokimov, S. A., Semenov, V. V., Sokolov, G. N.
and Tarasov, V. A.

TITLE: Electronic instruments for analysis of bio-currents

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika,
no. 1, 1962, abstract 1-5-8 ye (Sb. rabot po vopr.
elektromekhan. In-t elektromekhan. AN SSSR, 1961,
no. 5, 276-281)

TEXT: Amongst the aperiodic electric oscillations generated by the
human brain the following, more or less stable, components may be
isolated: e.g. α -rhythm (8-12 c/s, 10 - 25 μ V), β -rhythm (15 - 25
c/s, 5 - 15 μ V) or γ -rhythm (50 - 70 c/s). During brain illnesses
the character of these rhythms changes. A set of instruments for
amplifying, analysis and recording of bio-potential has been de-
veloped, consisting of: 1) 4 amplifiers having a frequency range
of 0.5 - 1500 c/s and a sensitivity threshold of about 1 μ V; 2)
2 filters for the α - and β -rhythms, in the form of double-T bridge

Card 1/2

Electronic instruments for ...

S/194/62/000/001/034/066
D201/D305

selective amplifiers, with a slope of cut-off characteristics of about 24 db per cycle; 3) integrators of the rhythm activity with electro-mechanical recorders at the output; 4) a 10 and 18 c/s calibrated generator with output signal voltage of 5 - 500 μ V; 5) a programming arrangement and a relay bank which make it possible to switch-in the instruments in the required order and combinations. The equipment is in use at the Institut fiziologii im. I.P. Pavlova (Institute of Physiology im. I. P. Pavlov). An example of an 8-channel recording (bio-currents of the head, α -rhythm, the α -rhythm activity, pulse, muscle bio-currents, etc.) is given. 2 references. [Abstracter's note: Complete translation.]

Card 2/2

YEVDOKIMOV, S.A.; SEMENOV, V.V.; SOKOLOV, G.N.; TARASOV, V.A.

Program control in experiments with conditioned reflexes. Fiziol.
zhur. 47 no.4:522-524 Ap '61. (MIRA 14:6)

1. From the Pavlov Institute of Physiology and the Institute of
Electromechanics, U.S.S.R., Academy of Sciences, Leningrad.
(CONDITIONED RESPONSE)

YEVDOKIMOV, S.A.; FEDOROVA, A.Ye.

Electronic stimulator for excitation with paired square impulses.
Fiziol. zhur. 48 no.3:360-362 Mr '62. (MIRA 15:4)

1. From the I.P.Pavlov Institute of Physiology, Leningrad.
(PHYSIOLOGY, EXPERIMENTAL—EQUIPMENT AND SUPPLIES)

YEVDOKIMOV, S. A.

A 4-channel amplifier for electrophysiological studies. Biofizika 7
no.1:93-95 '62. (MIRA 15:5)

1. Institut fiziologii imeni I.P.Pavlova AN SSSR, Leningrad.
(ELECTROPHYSIOLOGY--EQUIPMENT AND SUPPLIES)

YEVDOKIMOV, S.A.; ZAKLYAKOVA, V.N.

Device for the registration of blinking reflexes in children.

Zhur. vys. nerv. deiat. 12 no.2:354-357 18-Apr '62.

(MIRA 17:12)

1. Institut fiziologii imeni I.P. Pavlova AN SSSR, Leningrad.

AID Nr. 997-9 25 June

TRIAL USE OF ELECTRONIC EQUIPMENT WITH PROGRAMMED CONTROL
IN A PHYSIOLOGICAL EXPERIMENT (USSR)

Yevdokimov, S. A., R. P. Ol'nyanskaya, V. V. Semenov, V. A. Tarasov,
and G. A. Trubitsyna. IN: Konferentsiya po metodam fiziologicheskikh
issledovaniy cheloveka. Materialy (Materials of the conference on methods
of investigating human physiology), Moskva, 1962. 72-73.

S/926/62/000/000/002/004

A programmed control device which assures the maintenance of strictly constant conditions during the simultaneous recording of a number of physiological processes (e.g., gas metabolism, bioelectric activity of brain and muscles, pulse and respirations rates) has been designed by a research team from the Institute of Physiology imeni I. P. Pavlov, Academy of Sciences USSR, and the Electromechanical Institute of the State Committee on Automation and Machine Building, Council of Ministers USSR. The use of programmed control has several advantages: it affords great accuracy in the

Card 1/2

25 June

TRIAL USE OF ELECTRONIC EQUIPMENT (Cont'd)

S/926/62/000/000/002/004

conduct of experiments, significantly simplifies experimental procedure, and reduces the chance of human error introduced by the investigator. The device consists of a central panel into which the inputs and outputs of all the instruments and the circuit of the oscillograph vibrators are connected; a commutator for switching the integrator outputs to the various groups of electromechanical counters, for stopping and starting the oscillograph, and for feeding excitation pulses; and a circuit for reading and writing magnetic tape-recorded signals. Magnetic recording makes immediately available a reserve of carefully prepared programs. The switching circuit has been provided with several switches permitting partial modification of the experimental program (e.g., suspending the feeding of audio signals and oscillograph recording of a supplementary record of parts of the experiment without changing tapes). The device can be used in human conditions for studying work and sport activity

[DMP]

Card 2/2

YEVDOKIMOV, S.A.; ISAAKYAN, L.A.; MASLENNIKOVA, L.S.

Electrometric method for determining the oxygen concentration in the expired air of small animals. Fiziol. zh. SSSR Sechenov 49 no.6:767-770 '63 (MI A 17:1)

1. From the Unit for Gas- and Thermal exchange Physiology, Pavlov Institute of Physiology, Leningrad.

ARON, M.D.; BAZANOVA, I.S.; YEVDORIMOV, S.A.; MAYOROV, V.N.; MERKULOVA, O.S.

Methodology for morphological and electrophysiological studies on
in interneuronal synapses in a living object. Fiziol. zhur. 50 no.3:
578-380 Mr '64. (MIRA 18:1)

1. Laboratoriya obshchey fiziologii Instituta fiziologii imeni
I.P. Pavlova AN SSSR, Leningrad.

BAZANOVA, I.S.; YEVDOKHINOV, S.A.; MAYOROV, V.N.; MERKULOVA, O.S.;
CHERNIGOVSKIY, V.N.

Morphoelectrophysiological study of the interneuronal synapse in
a live preparative of a parasympathetic ganglion of the urinary
bladder in frogs. Fiziol.zhur. 51 no.3:309-317 Mr '65.

(MIRA 18:5)

1. Laboratoriya obshchey fiziologii Instituta fiziologii imeni
Pavlova AN SSSR, Leningrad.

BAZANOVA, I.S.; YEVDOKIMOV, S.A.; MAYOROV, V.N.; MERKULOVA, O.S.;
CHERNIGOVSKIY, V.N.

Morphological and bioelectrical changes in the interneuronal
synapsis during the transmission of rhythmical impulses. Fiziol.
zhur. 51 no.4:457-462 Ap '65. (MIRA 18:6)

1. Laboratoriya obshchey fiziologii Instituta fiziologii imeni
Pavlova AN SSSR, Leningrad.

L 25803-66

ACC-NR: AP6015931

SOURCE CODE: UR/0239/65/051/003/0309/0317

AUTHOR: Bazanova, I. S.; Yevdokimov, S. A.; Mayorov, V. N.; Merkulova, O. S.;
Chernigovskiy, V. N.—Chernigovskiy, V. N.

ORG: Laboratory of General Physiology, Institute of Physiology im. I. P. Pavlov,
Leningrad, U.S.S.R.

TITLE: Morpho-electrophysiological investigation of the interneuron synapse on a
living preparation of the parasympathetic ganglion of the urinary bladder of the frog

SOURCE: Fiziologicheskii zhurnal SSSR, v. 51, no. 3, 1965, 309-317

TOPIC TAGS: electrophysiology, autonomic nervous system, experiment animal

ABSTRACT: Parallel morphological and electrophysiological study of interneuron synapses of the parasympathetic ganglion of the urinary bladder of the frog was carried out on living histological preparations at +2°. It was established that in the process of irritation of a synapse with electric currents of various frequencies, a hypotonic solution (Leningrad city water), and a solution of methylene blue, morphological and functional changes took place in the synapse. Conduction of nerve impulses through the synapse was retained in all stages of morphological change, although it was altered in magnitude and type. The morphological

Card 1/2

UDC: 612.815

I. 25803-66

ACC. NR. AP6015931

and structural changes (which involved enlargement of the synapse contact plates) as well as the functional changes were reversible. The structural changes lagged behind the functional shifts both during their development and regression. The dynamics of stages of the structural changes observed were similar to those of stages of paraneurosis. Orig. art. has: 4 figures. [JPRS]

FILE CODE: 06 / NORM DATE: 19Nov63 / ORIG REF: 011 / OTH REF: 002

Card 2/3

YEVDOKIMOV, S.G.

laboratory plate columns operating continuously. Zav. lab. 30
no.11:1419 '64 (MIRA 18:1)

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

YEVDOKIMOV, S.M.; RUBTSKOY, L.S.

Experimental study of the reversability of amyloidosis of
the internal organs. Eksper. khir. i anest. 9 no.6:44-47
N-D '64. (MIRA 18:7)

1. Otdel patologicheskoy anatomii (zav. - prof. D.S.Sarkisov)
Instituta khirurgii imeni A.V.Vishnevskogo (direktor -
deystvitel'nyy chlen AMN SSSR prof. A.A.Vishnevskiy) AMN SSSR,
Moskva.

ARKHIPOVA, L.I.; BARABANSHCHIKOV, V.V.; BAKHVALOVA, Z.M.;
BOROVINSKAYA, M.A. COLOVCHINER, I.Ye.; DZHANGAROVA, P.G.;
YEVDOKIMOV, S.V.; KABANOV, M.M.; KNYAZEVA, T.D.; KOBOZEVA,
N.V.; KOLEGOV, N.I.; LOPOTKO, I.A.; NEGUREY, A.P.;
POLYAKOVA, Z.P.; ROMM, S.Z.; SVETLICHNIY, V.A.; STRAKUN,
I.M. TYAGUN, V.N.; FREYDLIN, S.Ya., prof.

[Dispensary service for the urban population] Dispanseriza-
tsiia gorodskogo naseleniia. Leningrad, Meditsina. 1964.
349 p. (MIRA 17:8)

YEVDOKIMOV, S.Ye.; TSYBUL'SKIY, G.P.

Determining the parameters of a layer from pressure change curves
in oil wells. Trudy KF VNII no.5:84-91 '61. (MIRA 14:10)
(Oil reservoir engineering)

YEVDOKIMOV, S.Ye.

Determining the parameters of a layer from remote measurements
of pressure changes. Izv. vys. ucheb. zav.; neft' i gaz 4
no.8:59-62 '61. (MIRA 14:12)

1. Krasnodarskiy gosudarstvennyy pedagogicheskiy institut.
(Oil reservoir engineering)

MURAV'YEV, I.M.; YEVDOKIMOV, S.Ye.; TSYBUL'SKIY, G.P.;
CHERNOV, B.S.

Analysis of methods of processing pressure change curves in
oil wells. Neft. khoz. 39 no.3:35-40 Mr '61. (MIRA 16:7)

(Oil reservoir engineering)

YEVDOKIMOV, S.Ye.; TSYBUL'SKIY, G.P.; CHERNOV, B.S.

Hydrodynamic investigations of a group of injection wells. Trudy
KF VNIИ no.11:121-146 '63. (MIRA 17:3)

L 38994-66 EMP(m)/EMP(1) VN

ACC NR: AP6021359 (N) SOURCE CODE: UR/0207/66/000/003/0121/0123

AUTHOR: Yevdokimov, S. Ye. (Khar'kov); Rvachev, V. L. (Khar'kov)

ORG: none

TITLE: Coefficient of apparent mass during the horizontal hydrodynamic impact of a floating sphere

SOURCE: Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki, no. 3, 1966, 121-123

TOPIC TAGS: mathematic analysis, mathematic transformation, hydrodynamics, *incompressible fluid, ideal fluid*

ABSTRACT: The three-dimensional problem of a horizontal hydrodynamic impact of a floating body, which was investigated by E. L. Blokh, V. I. Mossakovskiy, and V. L. Rvachev for the special case of a body half-immersed in an incompressible fluid, is analyzed for the case of an arbitrary immersion depth under the assumption that the fluid does not tear away from the wetted surface. The motion of an ideal fluid filling a half-space $z \geq 0$, after a sudden impact on a floating sphere having a unit radius of $x^2 + y^2 + (z - h)^2 = 1$, is uniquely defined by the velocity potential ϕ^* which is a harmonic function associated with the impulse pressure p_t , and the fluid's density ρ by the relation

Card 1/2

L 38994-66

ACC NR: AP6021359

$P_t = -\rho\phi^*$. Introducing toroidal coordinates for the condition $|h| < 1$ and bispherical coordinates for the condition $h > 1$, and modifying integral transforms into a generalized integral using associated Legendre functions, solutions are derived for the velocity potentials on the wetted spherical surface. Equations are given for the coefficient of the apparent mass of the sphere dx acting along the x axis, for $\lambda_x(h)$ in the case of partial immersion, and for $\lambda_x(h)$ in the case of $h > 1$. In an unlimited fluid, $\lambda_x(\infty) = 1/2$. Results of λ_x calculations (error $< 2\%$) are shown. Orig. art. has: 11 formulas. [GE]

SUB CODE: 2012/ SUBM DATE: 08Jul65/ ORIG REF: 005/ OTH REF: 001
ATD PRESS: 5850

Card 2/2 | 5

GOGOLITSYN, M., kand. tekhn. nauk; YEVDOKIMOV, V., inzh.; MOSHENSKIY, Yu., inzh.;
PAVLICHKOV, H., inzh.

Reconditioning crankshafts of the GAZ-51 engines. Avt. transp.
41 no.5:25-27 My '63. (MIRA 16:10)

(Crankshafts and crankshafts--Repairing)

YEVDOKIMOV, V., inzh.

Changing the compression rate of the engine in overhauling.
Avt. transp. 43 no.1:23-25 Ja '65. (MIRA 18:3)

YEVDOKIMOV, V., kand. tekhn. nauk; KHERSONSKIY, I., prepodavatel';
IVANIKOV, N., master proizvodstvennogo obucheniya.

Device for measuring the cutting forces in turning. Prof.-tekh.
obr. 21 no.12:23 D '64. (MIRA 18:2)

YEVDOKIMOV, V.; BAKANOV, P.; LEMPERT, A.

Horizontal vacuum kettle for rendering fat in the "Progress"
Factory. Mias.ind.SSSR 27 no.1:23 '56. (MIRA 9:6)
(Oils and fats) (Vacuum apparatus)

~~YEVDOKIMOV, V.~~ ROZANTSEV, S.

Important objectives of apartment-house management workers. Zhil.-
kom. khoz. 10 no.5:3-4 '60. (MIRA 13:10)
(Children--Management)

YEVDOKIMOV, V.A., inzh.

Expand the over-all mechanization and automatization of precast
concrete products plants. Biul.tekh.inform. 4 no.11:14-17 N '58.
(MIRA 11:12)

(Automatic control) (Precast concrete)

YEVDOKIMOV

Effect of radioactive water on the composition of gas and oil
under natural conditions. Geol. nefti i no.2:51-54 F '57.
(Radioactivity) (Petroleum) (Gas, Natural) (MLRA 10:8)

YEVDOKIMOV, V.A.

Characteristics of gases and petroleum. Trudy VNIGRI no.133:
353-372 '59. (MIRA 13:1)

(Timan Ridge--Gas, Natural--Analysis)

(Timan Ridge--Petroleum--Analysis)

YEVDOKIMOV, V.A.

POPOV, P.I., Prof., ABDULLIN, M.G., YEVDOKIMOV, V.A., #

Popov, P.I., Prof., Abdullin, M.G., YEVDOKIMOV, V.A., Junior Co-workers, Dept. of
Protozoology, Kazan Scientific Research Veterinary Institute.

"LP2- a new Chemotherapeutic Agent in Hemosporidiosis of horses"

SO: Veterinariya Vol. 24, No.3, p.23, 1947, Unclassified

YEVDOFEROV, V. A.

"Acaricidal Action of Organophosphorous Compounds on
Dermacentor"
paper presented at Nn First Conference on Phosphorous Compounds, Kazan,
8-10 Dec 56

SO: B-3,084,841

USSR / Zooparasitology. Acarina and Insects. Vectors G
of Pathogenic Agents. Acarina.

Abs Jour: Ref Zhur-Biol., No 6, 1959, 24282.

Author : Yevdokimov, V. A.

Inst : Kazan Scientific Research Veterinary Institute.

Title : Experiments in the Study of the Acaricidal Action of Organophosphoric Preparations upon Pasture Ticks of the Genus Dermacentor. (Author's Report).

Orig Pub: Byul. nauchno-tekhn. inform. Kazansk. n.ii. vet. in-ta, 1957, No 1, 26-28.

Abstract: In the laboratory and in gardens with grassy vegetation higher than 30-36 cm, the action of tetraethyldithiopyrophosphate (I) and tetraethylmonothiopyrophosphate (II) on hungry sexually mature ticks *Dermacentor marginatus* was studied. Aque-

Card 1/2

USSR / Zooparasitology. Acarina and Insects. Vectors G
of Pathogenic Agents. Acarina.

Abs Jour: Ref Zhur-Biol., No 6, 1959, 24282.

Abstract: ous suspensions of I and II, prepared with the addition of the emulgator OP-7, were utilized. In summer, under 12-33° and with utilization of 100 ml. of a 0.5% emulsion or in utilization of 50 ml. of a 0.2% emulsion of I, all ticks perished, after 2 and 6-7 days respectively. In November, under 7.5° and application of 25 ml. of a 0.1% emulsion of I per breeding place (0.25 m²), only 23% of the ticks perished, but the surviving ticks did not attach themselves when placed on rabbits and perished 8-10 days after sprinkling. Thus, under low temperatures, 0.1-0.5% aqueous suspensions of I did not exert a harmful effect on the grasses. In fall experiments in breeding places, insignificant doses of II caused death of ticks. -- M. Ye. Krol'.

Card 2/2

YEVDOKIMOV, V. A.

USSR / Zooparasitology. Acarina and Insect-Vectors of
Disease Pathogens.

G-3

Abs Jour : Ref Zhur - Biol., No. 8, 1958, No 33981

Author : Evdokimov, V. A.

Inst : Not given

Title : Acaricidal Action of Organic Phosphorus Preparations on
Pasture Ticks of Dermacentor Species. -- Akaritsidnoe
deystvie fosfororganicheskikh preparatov na pastbishch
nykh kleshchey roda Dermacentor.

Orig Pub : V sb.: Khimiya i primeneniye fosfororgan. soedineniy. M.,
AN SSSR, 1957, 431-437.

Abstract : Ticks placed in small cups were sprayed by an aqueous
emulsion of tetraethyldithiopyrophosphate (dithio).
50% of the ticks were destroyed by an 0.02% concentration
in 5 days; 80% by 0.05% concentration in 42 hours, and
100% in 72 hours. 100 ticks were placed in breeders in

Card 1/2

Kazan Sci Res. Vet. Inst.

USSR / Zooparasitology. Acarina and Insect-Vectors of
Disease Pathogens.

G-3

Abs Jour : Ref Zhur - Biol., No. 8, 1958, No 33981

Author : Evdokimov, V. A.

Inst : Not given

Title : Acaricidal Action of Organic Phosphorus Preparations on
Pasture Ticks of Dermacentor Species.

Abstract : an open space with a sod bottom and sprayed together
with the sod-grass by a dithio emulsion. During August
(air temperature 12-33°) 100% of the ticks died in 2 days
when the solution strength was 0.5% and 100 ml per breeder
was used; in 4 days when 0.5% and 50 ml was used; in 5-6
days when 0.2% and 50 ml was used; in 6-7 days when 0.2%
and 25 ml was used. During November (temperature 7.5-7.7°),
using 25 ml in strengths of 0.1 and 0.2%, 16 and 23% died
in 6 hours and 100% after 9-11 days. A preliminary test of
dithio against ticks on pasture yielded favorable results.
When sprayed by 0.1-0.5% dithio emulsion no damage was done
to grass growth. (Concentration of insecticides is indi-
cated on the preparations.)

Card 2/2

YEVDOKIMOV, V.A.

Experiment in biochemical production of methane. Mikrobiologiya 28
no.4:594-597 J1-Ag '59. (MIRA 12:12)

1. Tsentral'naya nauchno-issledovatel'skaya laboratoriya Ukhtin-
skogo kombinata.

(YAREGA REGION--PETROLEUM--BACTERIOLOGY)
(METHANE)

LIPOVSKIY, V.M., kand.tekhn.nauk; YAVDOLETOV, V.A.; KURSHIN, A.S.;
MALKEVICH, P.P.

The E-15-14 excavator. Mekh. stroi. 18 no. 2:25 F '61.
(MIRA 14:2)

1. Glavleningradskoy.
(Excavating machinery)

YEVDOKIMOV, V. B.

USSR/Chemistry - Catalysts

Jan 52

"Problem of the Paramagnetic State of Catalytically Active Iron Layers (Errors in S. I. Kiperman and M. I. Temkina's Article 'Investigation of the Magnetic Properties of Iron-Carbon Catalysts')," V. B. Evdokimov, I. N. Ozeretskovsky, N. I. Kobolev, Moscow State U imeni M. V. Lomonosov

"Zhur Fiz Khim" Vol XXVI, No 1, pp 135-144

Sufficiently all layers of Fe on carbon are completely paramagnetic, i.e., the Fe is atomic rather than cryst. Catalytic activity of ammonia

211944

Fe catalysts, etc., is due to atomic "ensembles" rather than Fe or any other element in the crystal state. There is a sharply lowered ferromagnetism in comparison with ordinary iron even in highly coated Fe layers on carbon. Dilm of the Fe adsorption layer on carbon leads to a strong increase of paramagnetism due to Fe atoms. The same phenomenon was observed with adsorbed $Ni(NO_3)_2$. Increase of magnetic susceptibility and ferromagnetism in the samples after oxidation were observed.

211944

USSR/Chemistry - Magnetochemistry,
Catalysts

Sep 58

"Magnetochemistry of Active Centers: I. Magnetic
and Catalytic Properties of Dilute Films," N.I.
Kobozev, V.B. Yevchukitov, I.A. Zubovich, and
A.N. Mel'tsev, Moscow State U

Zhur Fiz Khim, Vol 26, No 9, pp 1349-1373
Investigated catalytic and magnetic properties
of dil films of Pt, Ag, and other paramagnetics
on various carriers as a function of the degree
of filling of the surface. Found that all
(1)

261T39

these paramagnetics on all carriers (Pt/silica
gel, Fe/carbon, $\text{CoCl}_2 \cdot 6\text{H}_2\text{O}$ /silica gel, $\text{Ni}(\text{NO}_3)_2$
 $26\text{H}_2\text{O}$ /carbon, $\text{Ag}_2/\text{BaSO}_4$, $\text{Ag}_2/\text{BaCO}_3$) show an
abnormally high paramagnetism ("superparamag-
netism") in dil films equal to several times
10 Bohr magnetons per atom. Ascribe this
paramagnetism to a change in the statistics
of the Langevin "paramagnetic gas" in adsorp-
tion films. Found that Fe on C in respect to
magnetism behaves analogously to paramagnetic
Pt. This acc to the authors, demonstrates
the purely paramagnetic, i.e., atomic and not
cryst character of these films. Also studied
the susceptibility of dil films of a normally
diamagnetic metal, Ag, on C, BaSO_4 , and BaCO_3 , es-
tablishing emergence of a paramagnetic form of Ag,
which passes through a max with increasing density
of the film. In films of high concn, Ag is diamag-
netic. This indicates the formation of atomic
ensembles of Ag. The paramagnetic form of Ag in
films also exhibits "superparamagnetism." In the
catalytic hydrogenation of ethylene on dil films of
Pt, authors established clear parallelism bet para-
magnetism and hydrogenation activity. This was also
true of the catalytic activity of Ag. Catalytic
activity did not depend on the magnetic properties of
the carriers.

261T39

YEVDOKIMOV, V. B.

"Atomization of Adsorptive Catalysts After a Small Degree of Filling." Cand Chem Sci, Moscow Order of Lenin State U imeni M. V. Lomonosov, 17 Sep 54, (VM, 1 Sep 54)

SO: Sum 432, 29 Mar 55

USSR/Physics - Book review

Carding, J. R. - 1954 - 16/54

Author: Kuznetsov, V.P., and Kobzarev, N.I.

Title: The theory of the structure of tilted ion layers

Periodical : Zhur. fiz. khim. 28/2, 362-367, Feb 1954

The authors consider the problem of the structure of tilted ion layers in a plasma. The problem is solved for the case of a plasma with a uniform magnetic field and a uniform electric field. The results of the calculations are compared with the results of the experiment. The authors also discuss the problem of the structure of tilted ion layers in a plasma with a non-uniform magnetic field.

Translation from the Russian by the author

By the author

SOV/156-58-3-15/

AUTHORS: Zelentsov, V. V., Savich, I. A., Yevdokimov, V. B.

TITLE: The Investigation of the Magnetic Susceptibility of Internal Complex Salts of Copper With o-Oxy Aldehydes and Their Azometino Derivatives (Izucheniye magnitnoy vospriimchivosti vnutrikslozhnykh soley medi s o-oksal'degidami i ikh azometinovymi proizvodnymi)

PERIODICAL: Nauchnyye doklady vysshey shkoly, Khimiya i khimicheskaya tekhnologiya, 1958, Nr 3, pp. 465-469 (USSR)

ABSTRACT: Ten new complexes of copper were produced and some of their properties are described. In table 1 the formula, the external properties, and the content of copper and nitrogen (found and calculated) are given. Three of the 13 described complexes were synthesized according to the method of Pfeiffer (Ref 1). The magnetic susceptibility of the 13 copper complex compounds was measured; the results are given in table 2. The effective magnetic moment of these compounds is between 1.73 and 2.08 Bohr's magnetons; this agrees well with the theoretical value of 1.73, as the latter was calculated by taking

Card 1/2

SOV/156-58-3-15/52

The Investigation of the Magnetic Susceptibility of Internal Complex Salts
of Copper With o-Oxy Aldehydes and Their Azometine Derivatives

only the spin into account.

Considering the magnitude of the magnetic moment the authors assume that all the complex compounds of copper they investigated have the same structure with sp^2d bonds.

The magnetic susceptibility was determined by Faraday's method using a magnetic torsion balance. The latter was constructed at the Laboratory for Catalysis and the Electrochemistry of Gases of Moscow State University (Laboratoriya kataliza i gazovoy elektrokhemii MGU). There are 2 tables and 13 references, 1 of which is Soviet.

ASSOCIATION: **Kafedra** neorganicheskoy khimii Moskovskogo gosudarstvennogo universiteta imeni M. V. Lomonosova
(Chair of Inorganic Chemistry at Moscow State University imeni M. V. Lomonosov)

SUBMITTED: March 3, 1958

Card 2/2

AUTHORS: Zelentsov, V. V., Savich, I. A., SOV/156-58-4-15/49
Yevdokimov, V. B.

TITLE: The Magnetic Susceptibility of the Inner Complex Salts of Nickel
(Magnitnaya vospriimchivost' vnutrikompleksnykh soley nikelya)

PERIODICAL: Nauchnyye doklady vysshey shkoly. Khimiya i khimicheskaya
tekhnologiya, 1958, No. 4, pp 672-675 (USSR)

ABSTRACT: In the present paper the change of the magnetic properties,
and the structure of the inner complex salts of nickel in
dependence on the nature of the addenda was investigated. An
inner complex salt of nickel was synthesized with an o-oxy-
aldehyde for the first time. These compounds possess tetra-
hedral structure and are paramagnetic. All complex compounds
of nickel with Schiff's bases are either paramagnetic or
diamagnetic. It was shown that the differences of paramagnetic
and diamagnetic properties of complex compounds are not always
characterized undoubtedly by colors. The addenda do not exert
any decisive influence upon the magnetic properties and
coloring. There are 2 tables and 7 references, 2 of which are
Soviet.

Card 1/2

The Magnetic Susceptibility of the Inner Complex Salts of
Nickel

SOV/156-58-4-15/49

ASSOCIATION: Kafedra neorganicheskoy khimii Moskovskogo gosudarstvennogo
universiteta im. M. V. Lomonosova (Chair of Inorganic Chemistry
at the Moscow State University imeni M. V. Lomonosov)

SUBMITTED: April 23, 1958

Card 2/2

KUKINA, A.I.; YEVDOKIMOV, V.B.; BARSOVA, D.I.

Contact transformation of n-butane and dehydrogenation of
isopropyl alcohol on α -iron. Vest.Mosk.un.Ser.mat., mekh., astron.,
fiz., khim. 14 no.1:171-185 '59. (MIRA 13:8)

1. Kafedra organicheskogo kataliza i laboratoriya kataliza i
gazovoy elektrokhemii Moskovskogo universiteta.
(Butane) (Isopropyl alcohol) (Iron)

53400

AUTHORS:

Golubev, V. B., Boyarchuk, Yu. M.,
Yevdokimov, V. B.

69141

S/076/60/034/03/036/038
B005/B016

TITLE:

Magnetochemistry of Active Centers. Stabilization of Free Radicals
on a Surface and Electron Paramagnetic Resonance in Quinhydrone
Salts

PERIODICAL:

Zhurnal fizicheskoy khimii, 1960, Vol 34, Nr 3, pp 696-697 (USSR)

TEXT: In the adsorption of quinhydrone from its solutions onto crystalline barium hydroxide the latter turns blue. According to reference 1 the electron paramagnetic resonance spectrum of this system consists of a line which is some oersteds wide, and for which $g = 2.003 \pm 0.001$. Although the characteristic hyperfine structure of the resonance spectrum line of p-benzosemiquinone could not be detected, the authors of reference 1 assigned this line to the radical ion of semiquinone which is formed on the surface of $Ba(OH)_2 \cdot 8H_2O$ and stabilized by the surface. The authors of the present paper refer to the paper mentioned. They took the electron paramagnetic resonance spectra of the salt of quinhydrone (I) and of the system quinhydrone - $Ba(OH)_2 \cdot 8H_2O$ (II). The two spectra proved to be identical and consisted of one single peak with $g = 2.0040 \pm 0.0002$ and a half-width of 4.5 oersteds. The reflection spectra of the two systems in the visible region

Card 1/3

Magnetochemistry of Active Centers. Stabilization of
Free Radicals on a Surface and Electron Paramagnetic
Resonance in Quinhydrone Salts

69711
S/076/60/034/03/036/038
B005/B016

of the spectrum are also identical. The concentration of free radicals in the two systems was determined in two ways. At room temperature, it is about 2% of the total weight of the salt for system (I) and about 4% of the quantity of the adsorbed quinhydrone for system (II). The concentration of the free radicals rises monotonely with an increase in temperature from 77 up to 273°K (Fig). Side reactions occur in system (II) at high temperatures, which are due to liberation of crystallization water. An irreversible steep decrease of the free radical concentration sets in in system (I) at 326°K which is ascribed to resinification. The following results were obtained: (1) the semiquinone surface is stabilized by a chemical reaction similar to the homogeneous formation reaction of the quinhydrone salt; (2) under standard conditions the quinhydrone salt is the diamagnetic dimer of semiquinone. The authors determined the degree of dissociation for the free salt of quinhydrone, for its alcoholic solution, and for system (II), as well as the dissociation heats of the dimeric form. The authors further investigated the kinetics of semiquinone polymerization in alcoholic solution. This polymerization proved to be a second-order reaction with an activation energy of 14000 calories/mole. The authors expressed their

Card 2/3

69141

Magnetochemistry of Active Centers. Stabilization of
Free Radicals on a Surface and Electron Paramagnetic
Resonance in Quinhydrone Salts

S/076/60/034/03/036/038
B005/B016

gratitude to Professor N. I. Kobozev for his interest in the present work. There
are 1 figure and 3 references.

SUBMITTED: November 22, 1959

Card 3/3

NESTEROV, O.V.; YEVDOKIMOV, V.B.

Thermomagnetic method of investigating the dispersity of catalysts.
Dispersity of nickel adsorbed on carbon. Zhur. fiz. khim. 35
no.2:376-383 F '61. (MIRA 16:7)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.
(Nickel) (Particle size determination)
(Magnetochemistry)

KOROVKIN, K.N.; OKS, N.A.; BYLYNA, E.A.; YEVDOKIMOV, V.B.

Magnetic torsion balance. Zhur. fiz. khim. 35 no.3:677-681 Mr '61.
(MIRA 14:3)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonsova.
(Torsion balance)

KOBOZEV, N.I.; YEVDOKIMOV, V.B.

A few comments on the paper by W. Trzebiatowski and H. Kubicka.
Zhur. fiz. khim. 35 no.3:684-686 Mr '61. (MIRA 14:3)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.
(Magnetism) (Platinum) (Palladium)

TRAILINA, Ye.P.; ZELENTSOV, V.V.; SAVICH, I.A.; BYLYNA, E.A.;
YEVDOKIMOV, V.B.

Magnetic susceptibility of the chelate compounds of divalent copper,
nickel, and cobalt with Mannich bases. Zhur. fiz. khim. 35
no. 4:960-962 Ap '61. (MIRA 14:5)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.
(Chelates—Magnetic properties)

YEVDOKIMOV, V.B.

Possibility of applying Faraday's method as an absolute method.
Zhur.fiz.khim. 35 no.6:1362-1366 Je '61. (MIRA 14:7)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.
(Materials—Magnetic properties)

LI FEN'-I [LI Hen-1]; YEVDOKIMOV, V.B.

Possibility of using Faraday's method as an absolute method.
Zhur. fiz. khim. 35 no.7:1636-1637 J1 '61. (MIRA 14:7)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
(Materials—Magnetic properties)

YEVDOKIMOV, V.B.

32637

S/076/62/036/001/007/017
B107/B110

11.1510

AUTHORS: Skorokhodov, I. I., Golubev, V. B., Nekrasov, L. I.,
Yevdokimov, V. B., and Kobozev, N. I.

TITLE: The higher hydrogen peroxide in frozen radicals. V. Electron
paramagnetic resonance study of peroxide radical condensates

PERIODICAL: Zhurnal fizicheskoy khimii, v. 36, no. 1, 1962, 93 - 97

TEXT: The synthesis of the radical HO_2 either from dissociated water vapor or on reaction between pure ozone and atomic hydrogen at -196°C has been studied by the e.p.r. method. The purpose of the investigation was to check published data (Ref. 1, see below; Ref. 2: A. I. Gorbanev, S. D. Kaytmazov, A. M. Prokhorov, A. B. Tsentsiper, Zh. fiz. khimii, 31, 515, 1957; Ref. 3, see below; Ref. 9: S. D. Kaytmazov, A. M. Prokhorov, Zh. fiz. khimii, 34, 227, 1960) and to establish the maximum HO_2 concentration possible. The resonance spectra of both peroxide-radical condensates exhibit asymmetric maxima at 9000 Mc/sec, irrespective of the method of synthesis. The asymmetry is due to the anisotropy of the g -factor which

Card 1/4

32637
S/076/62/036/001/007/017
B107/B110

The higher hydrogen peroxide...

amounts to 2.009. The line width is about 75 oe. Synthesis from dissociated water vapor has shown that the ratio of unpaired electrons to the number of H_2O_2 molecules remaining after the decomposition of the condensate varies from 0 to 0.007, which agrees well with Ref. 1 (0.0065). The divergence from the value given in Ref. 2 (0.004) is explained as follows: The condensate is separated in the cooling trap in the form of two rings, one slightly above the level of liquid nitrogen, which is white and contains about 52% H_2O_2 but no HO_2 , while the other below the level is yellowish and contains about 54% H_2O_2 and the radical HO_2 . At $-110^\circ C$, the second ring turns white and the paramagnetic absorption diminishes. Synthesis from pure ozone and atomic hydrogen has shown that the ratio of unpaired electrons to the number of H_2O_2 molecules remaining after the decomposition of the condensate varies from 0.007 to 0.009. From the paramagnetic resonance spectrum alone it is not possible to decide whether the radical HO_2 or the hydroxyl OH is present. The presence of the perhydroxyl HO_2 is, however, supported by the following facts: The gamma spectrum of ice contains a symmetric doublet at $-196^\circ C$ (Ref. 13, see Card 2/4).

32637

S/076/62/036/001/007/017

B107/B110

The higher hydrogen peroxide...

below); the resonance spectrum of the condensate in question resembles the gamma spectra of organic compounds, such as Teflon, polyethylene, etc., which contain the radical $C-O-O\cdot$, as well as the spectrum of the potassium peroxide $K-O-O\cdot$; when the yellow ring becomes colorless between -110 and $-100^\circ C$, 3 - 4% by weight of oxygen is separated. The value calculated for the recombination of the radical OH to H_2O and O_2 is 1 - 1.5% by weight, while that for $HO_2 \rightarrow H_2O_2 + O_2$ is 2.5 - 3% by weight.

The presence of HO_2 is therefore very probable. The maximum concentration obtained from the measurements amounts to 0.4% by weight. There are

18 references: 10 Soviet and 8 non-Soviet. The four most recent references to English-language publications read as follows: Ref. 1: R. L. Livingston, J. A. Ghormley, H. Zeldes, J. Chem. Phys., 24, 483, 1956; Ref. 3: C. K. Jen, S. N. Foner, E. L. Cochran, V. A. Bowers, Phys. Rev., 112, 1169, 1958; Ref. 13: J. M. Flournoy, L. H. Baum, S. Siegel, S. Scolnik, The fourth international Symposium of free radical stabilization, V, 1958; H. N. Rexroad, W. Gordy, Bull. Amer. Phys. Soc., 1, 200, 1956.

Card 3/4

32637

S/076/62/036/001/007/017
B107/B110

The higher hydrogen peroxide...

ASSOCIATION: Moskovskiy gos. universitet im. M. V. Lomonosova (Moscow
State University imeni M. V. Lomonosov)

SUBMITTED: April 5, 1960

Card 4/4

11.1120

11.1310

11.1190

33691

S/076/62/036/002/002/009
B119/B101

AUTHORS:

Skorokhodov, I. I., Nekrasov, L. I., Kobozev, N. I., and
Yevdokimov, V. B. (Moscow)

TITLE:

Problem of higher peroxides of hydrogen and frozen radicals.
VI. Investigation of the magnetic properties of peroxide
radical condensates

PERIODICAL: Zhurnal fizicheskoy khimii, v. 36, no. 2, 1962, 274 - 281

TEXT: The authors studied the magnetic properties of peroxide radical condensates synthesized both from dissociated water vapors and from the reaction of atomic hydrogen with liquid 100% ozone by methods already described (Zh. fiz. khimii, 31, 1843, 1957; ibid., 32, 87, 1958). The magnetic susceptibility was determined by the method of comparison with water as gauge substance (measurement of weight increase in the magnetic field) between -150 and $+20^{\circ}\text{C}$. Below -110°C , peroxide radical condensates are weakly diamagnetic; their susceptibility is $-0.1 - -0.2 \cdot 10^{-6}$ cgs. The paramagnetism of the system increases with the temperature owing to free oxygen (neither adsorbed nor occluded) forming from

Card (1/2)

33691

S/076/62/036/002/002/009
B119/B101

Problem of higher peroxides...

unstable H_2O_4 by condensate decomposition. The magnetic susceptibility of H_2O_4 is estimated to be $(-0.4 - 0) \cdot 10^{-6}$ cgs. From the value mentioned, H_2O_4 (H-O-O-O-O-H) is assumed to be a compound saturated with respect to its valence. A paper by A. B. Neyding, I. A. Kazarnovskiy (Dokl. AN SSSR, 74, 735, 1950) is mentioned. There are 3 figures and 18 references: 11 Soviet and 7 non-Soviet. The four most recent references to English-language publications read as follows: R. L. Livingston, J. A. Gormley, H. Zeldes, J. Chem. Phys., 24, 483, 1956; C. K. Jen, S. N. Foner, E. L. Cochran, V. A. Bowers, Phys. Rev., 112, 1169, 1958; P. A. Giguere, D. Chin, J. Chem. Phys., 31, 1685, 1959; M. A. P. Hogg, J. E. Spice, J. Chem. Soc., 3971, 1957. (Zh. fiz. khimii, 31, 1843, 1957; ibid., 32, 87, 1958).

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova
(Moscow State University imeni M. V. Lomonosov)

SUBMITTED: April 5, 1960

Card 2/2

BYLINA, E.A.; YEVDOKIMOV, V.B.; KOBOZEV, N.I.

Magnetic susceptibility of platinum catalysts. Zhur. fiz.
khim. 36 no.11:2552-2556 N'62. (MIRA 17:5)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

YEVDOKIMOV, V.B.; ZELENTSOV, V.V.; KOLLI, I.D.; TAM VEN'-SYA; SPITSYN,
Vikt.I., akademik

Magnetic susceptibility and stereochemistry of complex compounds
of Mo (III) with urea, thiourea, and their derivatives. Dokl.AN
SSSR 145 no.6:1282-1284 Ag '62. (MIRA 15:8)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
(Molybdenum compounds—Magnetic properties) (Urea)

KAVALEROVA, Yo.V.; GOLUSEV, V.B.; YEVDOKIMOV, V.B.

Electron paramagnetic resonance of copper acetylacetonate adsorbed
on aluminosilicates. Zhur.fiz.khim. 37 no.1:226-227 Ja '63.
(MIRA 17:3)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

L 18305-63

EWI(1)/BDS/ES(s)-2

AFFTC/ASD/IJP(C)/SSD Pt-4

ACCESSION NR: AF3004987

S/0076/63/037/008/1880/1883

AUTHOR: Yevdokimov, V. B.

TITLE: Magnetic interaction of superparamagnetic particles

SOURCE: Zhurnal fiz. khimii, v. 37, no. 8, 1963, 1880-1883

TOPIC TAGS: superparamagnetic particle, Langevin equation,
paramagnetic particle, ferromagnet

ABSTRACT: Author studied supermagnetic particles which are ferro-
magnets with sizes below that of critical. Main feature of the
supermagnetic particles is that their magnetization can be described
by the classical Langevin equation for paramagnets:

$$\bar{I} = nM \left\{ \coth \left(\frac{MH}{kT} \right) - \frac{kT}{MH} \right\}$$

wherein the magnetic moment of a supermagnetic particle equal to
 $M = vI_s$ must be substituted for the magnetic moment of the para-
magnetic particle. Here, v is the volume of the particle in cms,

Card 1/2

L 18305-63

ACCESSION NR: AP3004987

I_B is the magnetization capacity of the ferromagnet, and n is the number of particles in cm^3 . Supermagnetic particle size can be evaluated by the above formula. Supermagnetic particles with a magnetic moment of $M = vI_B$ must interact with the magnetic dipole of the paramagnetic substance. Superparamagnetic particles can act as either paramagnets or ferromagnets, depending upon the concentration. Langevin equation is used in measuring granules in heterogeneous catalysts and is valid only with small concentrations of the deposited substance (less than 1% by weight). Orig. art. has: 7 equations.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University) Khimicheskiy fakul'tet (Chemical faculty)

SUBMITTED: 21Nov62

DATE ACQ: 06Sep63

ENCL: 00

SUB CODE: PH

NO REF SOV: 014

OTHER: 008

Card 2/2

YEVDOKIMOV, V.B.

Gouy's method and its particular features. Part 3. Zhur.fiz.khim.
37 no.8:1910-1912 Ag '63. (MIRA 16:9)

1. Khimicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta
im. Lomonosova.

(Materials--Magnetic properties)

L 18971-63

BDS

ACCESSION NR: AP3006632

S/0076/63/037/009/2138/2138

AUTHORS: Bylina, E. A.; Yevdokimov, V. B. 50

TITLE: Device for magnetic measurements in the temperature range 110-573K. 10

SOURCE: Zh. fizicheskoy khimii, v. 37, no. 9, 1963, 2138

TOPIC TAGS: magnetism, magnetic measurement, magnetic property

ABSTRACT: Authors describe a simple device which can be used for measuring magnetic properties in the temperature interval 110-573K without any automatic attachments. Diagram is shown in Figure 1 of the enclosure. Orig. art. has: 1 figure.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University)

SUBMITTED: 15Nov62

DATE ACQ: 30Sep63

ENCL: 01

SUB CODE: SD

NO REF SOV: 001

OTHER: 000

Card 1/2/

YEVDOKIMOV, V.B.

Some characteristics of the magnetization of a system of super-magnetic particles. Part 2. Zhur. fiz. khim. 37 no.9:2128-2130 S '63. (MIRA 16:12)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

BYLINA, E.A.; YEVDOKIMOV, V.B.

Device for magnetic measurements in the temperature range 110-
573° K. Part 4. Zhur. fiz. khim. 37 no.9:2138 S '63.
(MIRA 16:12)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova,
khimicheskiy fakul'tet.

YEVDOKIMOV, V.B.; LI FEN'-I [Li Fên-1]

Apparatus for measuring magnetic susceptibility by the absolute method. Zhur. fiz. khim. 37 no.12:2791-2794 D '63.

(MIRA 17:1)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

GOLUBEV, V.B.; KUZNETSOVA, M.N.; YEVDOKIMOV, V.B.

Transformations in the quinone-semiquinone-hydroquinone series
in alkaline medium. Part 1. Zhur. fiz. khim. 37 no.12:2795-
2796 D '63. (MIRA 17:1)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

GULUBEV, V.B.; KUZNETSOVA, M.N.; YEVDOKIMOV, V.B.

Process of conversions in the quinone - semiquinone - hydroquinone series. Zhur. fiz. khim. 38 no.1:230-231 Ja'64. (MIRA 17:2)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

GOLUBEV, V.B.; YEVDOKIMOV, V.B.

Electron paramagnetic resonance in zinc oxide subjected to
mechanical treatment. Zhur. fiz. khim. 38 no.2:477-478 F 64.
(MIRA 17:8)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

YEVDOKIMOV, V.B. (Moscow)

Temperature dependence of the magnetization of a monodisperse super-
paramagnetic. Zhur.fiz.khim. 35 no.2:1990-1995 Ag '64.

(MIRA 18:1)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.

GOLUBEV, V.B.; YEVDOKIMOV, V.B.; KIREYENKO, G.M. (Moscow)

Physical state of β -diphenyl- β -picrylhydrazyl on various carriers
studied by the electron paramagnetic resonance method. Zhur. fiz.
khim. 39 no.2:381-385 F '65.
(MIRA 184)

1 Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

GOLUBEV, V.B.; YEVDOKIMOV, V.B.

Interaction of α,α -diphenyl- β -picrylhydrazyl with solid surfaces.
Zhur. fiz. khim. 39 no.2, 493-495 F '65. (MIRA 184)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

AMINOV, T.G.; ALLENOV, V.M.; ZELENTOV, V.V.; YEVDOKIMOV, V.B.

Magnetic susceptibility of the oxalates of bivalent chromium, iron, and copper. Zhur fiz khim. 39 no. 3-004-009 Apr '65. (MIRA 18:7)

1. Moskovskiy fiziko-tekhnicheskii institut i Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

YEVDOKIMOV, V.B.

"Spreading out" of Curie points. Zhur. fiz. khim. 39
no.9:2085-2096 S '65. (MIRA 18:10)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.
Lomonosova.

YEVDOKIMOV, V. D., GUBAREVICH, Ya. G., and YEVDOKIMOV, P.D.

"Use of sulfidine and streptocide in the treatment of suppurative endometritis in mares,"
Trudy Buryat-Mongol. zoovet. in-ta. Issue 4, 1948, p. 43-45

SO: U-3850, 16 June 53, (Letopis 'Zhurnal 'nykh Statey, No. 5, 1949).

YEVDOKIMOV, V.D.

Determining forces involved in pressing tablets by a method
involving the use of powdered carbon capsules. Med.prom.SSSR 12
no.5:40-43 My '58. (MIRA 11:5)

1. Odesskiy gosudarstvennyy farmatsevticheskiy institut.
(TABLETS (MEDICINE))

YEVDOKIMOV, V.D.

Determination of stresses involved in tablet making. Med.
prom. 13 no.3:37-38 Mr '59. (MIRA 12:5)
(TABLETS (MEDICINE))

YEVDOKIMOV, V.D.

Determining stresses caused by the friction of thin plates.
Nauch. zap. Od. politekh. inst. 48:66-72 '62. (MIRA 17:5)

KURITSYN, Ivan Vasil'yevich; YEVDOKIMOV, V.D., red.; SALAZKOV,
N.P., tekhn.red.

[Labor productivity in repair and construction work;
methods for measurement and planning] Proizvoditel'nost'
truda na remontno-stroitel'nykh rabotakh; metodika izme-
renia i planirovaniia. Moskva, Izd-vo M-va kommunal'nogo
khoziaistva RSFSR, 1963. 58 p. (MIRA 16:11)
(Building--Repair and reconstruction)
(Labor productivity)

YEVDOKIMOV, V.D., kand. tekhn. nauk; KOZUBSKIY, I.V., inzh.

Surface hardening and wear testing of parts. Mashinostroenie
no.4:34-36 J1-Ag '64. (MIRA 17:10)

YEVDOKIMOV, V. D.

AUTHOR: Yevdokimov, V. D.

120-2-36/37

TITLE: A Multiplug. (Knogopozitsionnaya Shtepsel'naya Rozетка)

PERIODICAL: Pribory i Tekhnika Eksperimenta, 1957, No. 2, page 120 (USSR).

ABSTRACT: The author describes very briefly a new 8-position multi-plug, with sockets arranged on the periphery of a cylinder; the mechanical drawing and the photograph of the plug are given. There are no references.

SUBMITTED: December, 10, 1956.

ASSOCIATION: Odessa Polytechnic Institute. (Odesskiy Politekh-nicheskiy Institut)

AVAILABLE: Library of Congress.

Card 1/1

YEVDOKIMOV, V.D.

YEVDOKIMOV, V.D.

High-speed method and instruments for determining the shrinkage
of cutting. Stan. 1 instr. 28 no.12:29-30 D '57. (MIRA 10:12)
(Metal cutting)

15(5)
AUTHORS:

Yevdokimov, V. D., Radchik, A. S.

SOV/20-128-4-21/65

TITLE:

Estimation of the Effects of Surface-active Lubricants on
the Friction Deformation of Surfaces

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 128, Nr 4,
pp 713-714 (USSR)

ABSTRACT:

The difficulty and relatively low sensitivity of various methods of estimation of the influence mentioned in the title is first described. The elastoplastic deformations occurring at friction are the main reasons for the change of the friction coefficient and of wear. These deformations characterize quantitatively and qualitatively the variations in the outside factors. The authors applied for their investigations the method of friction on thin plates. This method differs favorably from other methods by modulating the surface layer and by separating the elastoplastic deformations from the friction. The method is fairly simple and very sensitive. A thin plate of the material to be investigated is clamped to a solid flat underlay. A sliding member, which is weighed down, glides against the free end and causes elastic and plastic deformations on the surface, i.e. bending upward the

Card 1/3

Estimation of the Effects of Surface-active Lubricants SOV/20-128-4-21/65
on the Friction Deformation of Surfaces

free end of the strip. The varying degree of plastic deformation causes differently strong remanent deflections. In case of otherwise identical conditions the remanent deflection depends on the lubricating properties of the oil and on the activity of the substance which was present during the friction process. A diagram illustrates a series of curves obtained in the coordinates of the deflection A , and number of passes n , at the friction with a sliding member of steel 45 on a $0.3 \times 5 \times 100$ mm red copper plate and at a sliding rate of 0.72 m/minute in the presence of various lubricating agents. The sum of the deflection and the position of the curves change considerably with insignificant physical-chemical variations in the surface layer (due to additions of small quantities of surface-active material to the lubricants). The slightest inclination of the plate to increase the deflection may be recognized in a surface-active medium. The character of the curve of the micro-hardness is in opposition to the character of the curve of the deflection. A larger deflection is corresponding to a lower micro-hardness and vice versa. The surface-active substances can increase and decrease (according

Card 2/3

Estimation of the Effects of Surface-active Lubricants on the Friction Deformation of Surfaces SOV/20-128-4-21/65

to the conditions) the strength of the surface. The results obtained by the authors with the method of friction of thin plates confirm the conclusions by P. A. Rebinder and his school (Ref 3) on the above-mentioned two-fold effect of a surface-active substance on metal. The described method is suitable for examination of oils and oils with different active additions, directly during the friction without having to abstract their physical-chemical properties from the friction dynamics and from the material of the pairs rubbing each other. There are 3 figures and 3 Soviet references.

ASSOCIATION: Odesskiy politekhnicheskii institut (Odessa Polytechnic Institute)

PRESENTED: May 22, 1959, by P. A. Rebinder, Academician

SUBMITTED: May 20, 1959

Card 3/3

~~18 (3), 18 (1), 18 (4)~~ 17. P200

66163

AUTHORS: Yevdokimov, V. D., Radchik, V. S.,
Radchik, A. S.

SOV/20-128-5-15/67

TITLE: The Force of Friction and the Deformation of Surfaces

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 128, Nr 5, pp 921-923 (USSR)

ABSTRACT: V. D. Kuznetsov (Ref 3) does not believe that frictional forces in regions in front of the contact (compression) and behind the contact (elongation) can produce noticeable deformations. The existence of such deformations is verified in the present paper, not only for friction of unlubricated surfaces, but also in the presence of a thin layer of lubricant. Moreover, a new possibility of investigating the frictional properties of thin lubricant films was detected. This method consists in measuring the deformation of surfaces by means of wire tensimeters (Ref 4). The experimental arrangement is illustrated in a figure. Deformations measured thereby were deformations adjoining the region of direct contact. The following materials were investigated: steel U-8, bronze OTsS-6-6-3, cast iron SCH-15-32, aluminum, and textolite. The initial purity of the sample surfaces was of the order

Card 1/3

66163

The Force of Friction and the Deformation of Surfaces SOV/20-128-5-15/67

▽▽▽⁹. One experimental series was made with spindle oil, another (steel on steel) with the following oils: spindle oil 2, avtol 10, avtol 18, MS 20, and castor oil. The sample and the ring were carefully cleaned before beginning the experiment. Five different stresses were used for these measurements. In every experiment the loop returned to the zero point after removal of stress, which indicates the elastic character of the deformation. Herefrom the following conclusions, among others, may be drawn: (1) In the case of sliding friction elastic deformations are observed, which spread over a considerable region beyond the contact. (2) For most of the materials investigated, the lubricant reduces the absolute value of the deformation, and the frictional force within the layer of a specific oil depends on the nature of the correlated surfaces. Aluminum forms an exception, since deformation in this case was increased by oil, even though the coefficient of friction is lowered. (3) For unlubricated surfaces the degree of increase in deformation with increasing frictional force is connected with the moduli of elasticity. For mineral oils, the degree of deformation for a

Card 2/3

66163

The Force of Friction and the Deformation of Surfaces SOV/20-128-5-15/67

given frictional force decreases with increasing oil viscosity in the case of steel-on-steel friction. From a change in deformation conclusions may be drawn concerning the change in the frictional force within the layer as a function of viscosity. (5) A reduction in viscosity on application of highly active castor oil (which has a low viscosity) is explained by the Rebinder effect, i.e. the plasticizing of a thin surface layer of metal caused by adsorption. There are 4 figures and 5 Soviet references.

ASSOCIATION: Odesskiy politekhnicheskii institut (Odessa Polytechnic Institute)

PRESENTED: May 22, 1959, by P. A. Rebinder, Academician 4

SUBMITTED: May 20, 1959

Card 3/3

YEVDOKIMOV, V.D.

Current-collecting head. Stan.1 instr. 31 no.4:35 Ap '60.
(Electric current collectors)

YEVDOKIMOV, V.D.; RADCHIK, A.S.

Device for investigating friction processes by the method of "thin plates." Izv.vys.ucheb.zav.; prib. 3 no.4:48-52 '60. (MIRA 13:9)

1. Odesskiy politekhnicheskiy institut. Rekom. kafedroy detaley mashin.

(Friction)

82076

S/190/60/002/01/04/021

B004/B061

5.3830A

AUTHORS:

Ivanov, V. S., Sokolova, M. A., Aver'yanov, S. V.,
Yevdokimov, V. F., Gurlyand, I. S.

TITLE:

Radiation Polymerization of Isoprene. I.

PERIODICAL:

¹⁹ Vysokomolekulyarnyye soyedineniya, 1960, Vol. 2, No. 1.
pp. 35-37

TEXT: The aim of this work was to obtain data on the action of the conditions of irradiation with gamma rays of Co⁶⁰ on the polymerization of isoprene. Pure isoprene was irradiated in glass ampoules in an experiment in the apparatus PVT-400 (GUT-400, 142 gram equivalent of radium), in further tests in the apparatus K-1400 (K-1400, 1400 gram equivalent of radium) at room temperature in a nitrogen atmosphere. The molecular weight of the polymers was determined viscometrically, and the microstructure (containing 1,2-, 3,4-, and 1,4-bonds) by infrared spectra (taken with a MKC-6 (IKS-6) spectrometer). The results are given in a Table. One polymer was obtained by the action of

Card 1/2

②