

LEONTOVICH, M.A., akademik, redaktor; GREKHOVA, M.T., professor, redaktor;
AYZERMAN, M.A., doktor tekhnicheskikh nauk, redaktor; GINZBURG, V.A.,
professor, redaktor; GORELIK, G.S., professor, redaktor; LEONTOVICH-
ANDRONOVA, Ye.A., dotsent, redaktor; ZHELETSOV, N.A., dotsent, redak-
tor; PETROV, V.V., kandidat tekhnicheskikh nauk, redaktor; NIKOLAYEV,
Ya.N., dotsent, redaktor; AGITOVA, N.A., redaktor; BRYLEYEV, A.M.,
redaktor; ALEKSEYEV, T.V., tekhnicheskij redaktor.

[Dedicated to the memory of Aleksandr Aleksandrovich Andronov] Pamiati
Aleksandra Aleksandrovicha Andronova. Moskva, 1955. 718 p.

(MIRA 2:4)

1. Akademiya nauk SSSR.
(Mathematical physics)(Automatic control)(Astrophysics)

ANDRONOV, Aleksandr Aleksandrovich, 1901-1951; LEONTOVICH, M.A., redaktor

[Collected works] Sobranie trudov. Otv. red. M.A. Leontovich.
[Moskva] Izd-vo Akademii nauk SSSR, 1956. 537 p. (MLRA 10:1)
(Mechanics--Collected works)

Leon Zovich, M.A.

Category : USSR/Nuclear Physics - Nuclear Reactions

C-5

Abs Jour : Ref Zhur - Fizika, No 3, 1957, No 6074

Author : ~~Leon Zovich~~ Osovets S.M.

Title : On the Mechanism of Compression of Current in a Fast and Powerful Gas Discharge.

Orig Pub : Atom. energiya, 1956, No 3, 81-83

Abstract : A study is made of the compression of a column of gas, carrying a current that increases rapidly with time. It is indicated that the fundamental role is played in this case by the magnetic forces that compress the gas (mutual attraction of parallel currents), charge distribution, and the inertia of the gas. The time variation of the radius of the gas column a is determined from the equation

$$\frac{d}{dt} \left(\frac{1}{3} \right) \mu \frac{da}{dt} = - \frac{I^2}{ac^2} + 2\pi a \bar{p}$$

where μ is the mass of the gas per unit length of column, p the average gas pressure, and I the current. The coefficient $1/3$ must be introduced, because the mass of the gas is not concentrated in a circle of radius a , but is distributed over

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ON THE MECHANISM BY WHICH THE CURRENT CON-
TRACTS IN FAST AND INTENSE GAS DISCHARGE M. A.
Leontovich and S. M. Osorets. Soviet J. Atomic Energy,
No. 5, 871-4(1954).

The mechanism of the processes which take place as the
current contracts under the influence of electrodynamic
forces is described. (auth) 21

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PHASE I BOOK EXPLOITATION

SOV/1241

Akademiya nauk SSSR. Institut atomnoy energii

Fizika plazmy i problema upravlyayemykh termoyadernykh reaktsiy, t.I.
(Plasma Physics and the Problem of Controlled Thermonuclear
Reactions, v. 1) [Moscow] Izd-vo AN SSSR, 1958. 300 p.
3,000 copies printed.

Resp. Ed.: Leontovich, M.A., Academician.

PURPOSE: This collection contains previously unpublished work of members of the Institut atomnoy energii (Institute of Atomic Energy) of the Academy of Sciences of the USSR. It is intended for scientists interested in this field.

COVERAGE: This book is the first of four volumes of a collection of articles on theoretical and experimental investigations of problems of controlled thermonuclear reactions and associated questions of plasma physics. The research reported on was conducted during 1951-1958 at the Institute of Atomic Energy. Only papers not previously

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Plasma Physics and the Problems (Cont.)

SOV/1241

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Zubarev, D.N., and V.N. Klimov. Stationary Regimes of a
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AVAILABLE: Library of Congress (QC794.A38)

IS/ksv
3-6-59

Card 6/6

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PHASE I BOOK EXPLOITATION SOV/1242

Akademiya nauk SSSR. Institut atomnoy energii

Fizika plazmy i problema upravlyayemkh termoyadernykh reaktsiy,
t. II. (Plasma Physics and the Problem of Controlled
Thermonuclear Reactions, t. 2) [Moscow] Izd-vo AN SSSR, 1958.
355 p. 3,000 copies printed.

Resp. Ed.: Leontovich, M.A., Academician.

PURPOSE: This collection contains previously unpublished work of members of the Institut atomnoy energii (Institute of Atomic Energy) of the Academy of Sciences of the USSR. It is intended for scientists interested in this field.

COVERAGE: This book is the second of four volumes of previously unpublished work of members of the Institute of Atomic Energy during the period 1951-58. The exploitation cards on the other volumes in this series have been released under the numbers 1241, 1243, and 1244.

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LEONTOVICH, M.A.

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PHASE I BOOK EXPLOITATION

SOV/1244

Akademiya nauk SSR. Institut atomnoy energii

Fizika plazmy i problema upravlyayemykh termoyadernykh reaktsiy,
t. IV. (Plasma Physics and the Problem of Controlled
Thermonuclear Reactions, v. 4) [Moscow] Izd-vo AN SSSR, 1958.
439 p. 3,000 copies printed.

Resp. Ed.: Leontovich, M.A., Academician.

PURPOSE: This collection contains previously unpublished work of
members of the Institut atomnoy energii (Institute of Atomic
Energy) of the Academy of Sciences of the USSR. It is intended
for scientist interested in this field.

COVERAGE: This book is the last of four volumes of previously
unpublished work of members of the Institute of Atomic Energy
during the period of 1951-58. The exploitation cards on the
other volumes in this series have been released under the
numbers 1241, 1242, and 1243.

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List of Previously Published Reports on Plasma Physics and
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Members of the Institute of Atomic Energy of the Academy of
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KHAYKIN, S.E., KALASHNIKOV, A.G., ISAKOVICH, M.A., LEONTOVICH, M.A.,
SAKHAROV, D.I.; LANDSBERG, G.S., akad., red.; STAROKADOMSKAYA, Ye.L., red.;
MURASHOVA, N.Ya., tekhn. red.

[Elementary textbook in physics] Elementarnyy uchebnik fiziki. Izd. 2.,
Moskva, Gos. izd-vo fiziko-matematicheskoi lit-ry. Vol. 1 [Mechanics,
heat, and molecular physics] Mekhanika, teplota, molekuliarnaya
fizika. 1958. 523 p. Vol. 2. [Electricity and magnetism] Elektrichestvo
i magnetizm. 1958. 448 p. (MIRA 11:10)

(Physics)

AUTHORS: Vonsovskiy, S. V., Leontovich, M. A., SOV/53-65-4-12/13
Tamm, I. Ye.

TITLE: Semen Petrovich Shubin (On the Occasion of the Fiftieth Anniversary of His Birth and of the Twentieth Anniversary of His Death)(Semen Petrovich Shubin(K pyatidesyatiletuyu so dnya rozhdeniya i dvadtsatiletuyu so dnya smerti))

PERIODICAL: Uspekhi fizicheskikh nauk, 1958, Vol 65, Nr 4,
pp. 733 - 737 (USSR)

ABSTRACT: As introduction a short curriculum vitae of the scientist, who was born on July 31, 1908 in Liepaja(Latvia), is given. Subsequently his work is discussed in detail.
a) Publications on the classical theory of oscillation: "Some Problems in the Perturbation Theory of Linear Oscillation Systems" was the title of his first publication (Ref 1); a theoretical investigation of the oscillations of thin diaphragms fastened at a finite number of points followed one year later. b) Publications on the theory of solids: "On the Theory of the Photoeffect in Metals", "On the Transmission Band in Silver", "Concerning the Theory of Liquid Metals", "On the Possible Anomalies of Resistance at Low Temperatures",

Card 1/2

Semen Petrovich Shubin (On the Occasion of the Fiftieth SOV/53-65-4-12/13
Anniversary of His Birth and of the Twentieth Anniversary of His Death)

"On the Theory of Exchange Interaction", "Problems of the Quasiclassical Treatment of Ferromagnetism" and others.
c) Publications on physical statistics: A summary of statistical formulae is mentioned. d) Publications on quantum electrodynamics and theory of the quantized fields: "Classical Analog to the Dirac Theory of Emission", "On the New Dirac Theory of the Electromagnetic Field" and others. Finally a list of scientific papers published by Shubin is given (18 papers, written partly in German, English, and French). There are 1 figure and 26 references, 21 of which are Soviet.

Card 2/2

LEONTOVICH, M.A.

24.2/26 64/02
Gronovskiy, V.L., Luk'yanov, I.Yu., Spivak, G.V. and
Sirotenko, I.G.

Report on the Second All-Union Conference on Gas
Electronics

PERIODICAL: Radiotekhnika i elektronika, 1959, Vol 4, Nr 8,
pp 1359 - 1358 (USSR)

ABSTRACT: The conference was organized by the Acad. USSR, the
Ministry of Higher Education and Moscow State University.
It was opened by the chairman of the organizing committee,
M.A. Leontovich, Academician. During the plenary sessions
of the conference, a number of survey papers were delivered.
L.A. Arizimovich read a paper on "Production of Ultra-high
Temperatures in Plasma".
A survey of the optical method of measurements was given
in the papers by V.A. Abramov, I.M. Kuznetsov, and I. Pevko.
S. Brown of the Massachusetts Institute of Technology
gave a survey of the high-frequency methods of the investigation
of stationary and non-stationary plasma (see p 1344
in this issue of the journal).

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M.V. Fedorenko read a paper entitled "Ionisation and
Inelastic Scattering During Atomic Collisions". X

L.A. Sena and Ya.M. Kozin deal with "Elementary Processes
of Determining the Motion of Ions in Gas".

A paper by Ye. Medvedev (Rumania) dealt with "The Role of
Resonance Recharging in the Kinetics of Ions".

I.S. Skanlikov considered the initial stages of the
development of sparks (corona-leader, main channel and the
final channel).

R.M. Elyzfeldt gave a survey of the ignition processes
of the discharge in highly rarified gases.

The mechanism of the breakdown of a high-vacuum gap was
considered in the paper by G. G. Gerasimov and
L. Toth (USA) accompanied by the theory of motion of
electrons in a magnetic trap (see p 1316 of this journal).

Academician R. Kompf (Eastern Germany) described a number
of experiments on non-stationary plasma conducted by
himself.

M. Stobbeck (Eastern Germany) gave a generalized theory of
plasma. The conference was divided into six sections.
The first section was presided over by L.A. Sena and was
concerned with the elementary processes in gas discharges.

The following papers were read in this section:
M.K. Gerasimov - Transformation of Positive Ions into
Negative Ions in Rarified Gases.
Ye. P. Pecher, with Ya. A. Anshulnikov and D.M. Filipenko -
Mechanism of Spark Breakdown During the Collision of
Fast Atoms of Carbon and Hydrogen with the Molecules of
Gases.

M.V. Zadoranko et al. - "Dissociation of Molecular Ions
of Hydrogen During Collisions in Gas".

L.P. Flaks and Ya.S. Solov'ev - "Capture Cross-sections
of Electrons in Multicharge Ions in Inert Gases".

I.M. Kuznetsov et al. - "Experimental Investigation of the
Resonance Recharging in Certain Single-atom Gases and
Molecular Ions".

G.I. Gerasimov - Qualitative Investigation of Inelastic
Collisions of Atoms.

L.M. Volkova - Effective Excitation Cross-sections of the
Spectral Lines of Potassium and Arsenic.

Card 3/13
I.P. Zapevalov and S.M. Kishko - Some Results of the
Investigation of the Optical Functions of the Excitation
Bands of a Negative System.

A.A. Vorobyev and A.G. Vlasov - Investigation of the
Scattering of the Electrons in a Electron Chamber.

The second section was presided over by B.N. Klyavfel'd
and was devoted to the problems of the electrical break-
down in rarified gases and in high vacuum. The following
papers were read in this section:

G.I. Makar-linonov and Yu.A. Melititskiy - "Electrostatic
Breakdown of the Ignition of Glow-discharge Tubes" (see
p 1271 of the journal).

S.V. Pecher et al. were concerned with the breakdown
in a high-voltage mercury rectifier (see p 1278 of the
journal).

I.G. Guseva "Ignition of the Discharge in Non-uniform
Fields at low Gas Pressures" (see p 1260 of the journal).

A.S. Enboleva and B.N. Klyavfel'd - "The Discharge Phenomena
Between a Point and a Plane at Gas Pressures of
10⁻³ - 1 mm Hg".

COWLING, Thomas George; BURSTEYN, Ye.L. [translator]; LEONTOVICH, M.A.,
red.

[Magnetohydrodynamics] Magnitnaia gidrodinamika. Pod red.
M.A.Leontovicha. Moskva, Izd-vo inostr. lit-ry, 1959. 132 p.
(MIRA 15:3)

(Magnetohydrodynamics)

LEONTOVICH, M.A., akademik; GINZBURG, V.L.

Some problems in journal publishing in the field of physics. Vest.
AN SSSR 31 no.5:131-134 My '61. (MIRA 14:6)

1. Chlen-korrespondent AN SSSR (for Ginzburg).
(Physics--Periodicals)

LEONTOVICH, M.

Extension of the Kramers-Kronig formulae to spatial dispersion
media. Zhur.eksp.i teor.fiz. 40 no.3:907-912 Mr '61.

(Electric conductivity) (Relativity (Physics) (MIRA 14:8)

LEONTOVICH, M.A.

[Problems in the theory of plasma] Voprosy teorii plaz-
my. Moskva, Gos. izd-vo lit-ry po atomnoi nauke i
tehnike. Vols.1-3. 1963- . (MIRA 17:4)

LEONTOVICH, M.A., akademik

Systems of measures; with regard to the introduction of the
international unit system as a standard. Vest. AN SSSR 34
no.6:123-126 Je '64 (MIRA 17:8)

LEONTOVICH, M.A.

Evolution of the representations of magnetic and electric
lines of force. Usp. fiz. nauk 84 no.48715-721 D '64
(MIRA 1821)

ACCESSION NR: AP4041139

8/0020/64/156/004/0766/0769

AUTHOR: Arsenin, V. V.; Leontovich, M. A.

TITLE: Beam instability of a rarified inhomogeneous plasma

SOURCE: AN BSSR. Doklady*, v. 156, no. 4, 1964, 766-769

TOPIC TAGS: plasma beam instability, plasma rim instability, rarified inhomogeneous plasma, plasma, magnetic field

ABSTRACT: The author investigates the instability connected with the plasma inhomogeneity at the rim of a beam of finite width, in a magnetic field. The starting point is a system of linearized kinetic equations with self-sufficient field for electrons and ions, and the Maxwell field equations; collisions are disregarded. For simplicity, the cases of ionic and electronic inhomogeneity are considered separately. It turns out that the rims of the beam are unstable with respect to short wavelength perturbations which do not appear in a homogeneous plasma, even if the beam velocity is smaller than the thermal velocity of the particles. The typical size of the inhomogeneity is taken to be comparable to the average Larmor ionic radius. The author is grateful to V. I. Kogan for

Card 1/2

ACCESSION NR: AP4041139

discussions and valuable suggestions. Orig. art. has: no figures, 8 equations.

ASSOCIATION: Moscovskiy inzhenerno - fizicheskiy institut (Moscow Engineering
Physics Institute)

SUBMITTED: 10Jan64

SUB CODE: ME

NO REF SOV: 004

ENCL: 00

OTHER: 001

Card 2/2

ACCESSION NR: AP4041140

B/0020/64/156/004/0770/0773

AUTHOR: Voskresenskiy, G. V.; Bolotovskiy, B. M.; Leontovich, M. A.

TITLE: Field of a charged filament moving uniformly in the vicinity of a system of perfectly conducting semiplanes

SOURCE: AN SSSR. Doklady*, v. 156, no. 4, 1964, 770-773

TOPIC TAGS: moving charged filament, electromagnetic emission, linear periodic conducting media, diffraction grating, waveguide

ABSTRACT: The radiation by charged particles in linear periodic media has been investigated earlier by several authors using approximation methods. The present author considers a problem of this kind which permits a rigorous solution. A uniformly charged filament is assumed to move with a constant speed parallel to a system of perfectly conducting semiplanes. The electromagnetic field is described by a Hertz' vector, consisting of the field of the charged filament moving in empty space and of that due to the boundary conditions on metallic plates. The total energy flux emitted by this "waveguide" is computed. The frequency of the radiation is determined essentially by the number of plates passed by the source in

Card 1/2

ACCESSION NR: AP4041140

unit time, and its multiples. Orig. art. has: 21 equations.

ASSOCIATION: None

SUBMITTED: 29Oct63

SUB CODE: NP

NO REF SOV: 008

ENCL: 00

OTHER: 001

Card 2/2

L 15659-66 EWT(m)/T/EMP(t) JD

ACC NR: AP6000223

SOURCE CODE: UR/0056/65/049/005/1624/1630

AUTHOR: Leontovich, M.

ORG: none

TITLE: Diffusion in a solution near the critical point of vapor formation

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 49, no. 5, 1965, 1624-1630

TOPIC TAGS: critical point, vaporization, ~~thermal diffusion~~, Brownian motion, fluid diffusion, solution kinetics

ABSTRACT: An expression for the diffusion coefficient of dilute solutions near the critical point is derived and discussed on the basis of the general macroscopic diffusion equations and the thermodynamic solutions near the critical point. The description of the critical point used in this paper is based on the assumption that the free energy can be expanded in a power series in the neighborhood of the critical point. To check on the validity of the results in the

Card 1/2

L 15659-66

ACC NR: AP6000223

vicinity of the critical point, an analysis is made of the diffusion experiments and the results are compared with the derived equations. The connection between the results obtained on macroscopic diffusion of dilute solutions and Brownian motion of the individual particles is discussed. It is shown that the fact that the diffusion coefficient tends to zero at the critical point does not imply a reduction in the Brownian displacement of the particles, which is determined entirely by their mobility. The effect of viscosity is also discussed. Orig. art. has: 16 formulas.

SUB CODE: 20, 07 / SUBM DATE: 14 Jun 65 / ORIG REF: 007 / OTH REF: 001

PC

Card 2/2

KVITNITSKIY, M.Ye., kand.med.nauk; LEONTOVICH, N.A. (Kiyev)

The fourth lead of the electrocardiogram with old polarity in children. Vrach.delo no.12:1319-1320 D '56. (MIRA 12:10)

1. Dorozhnaya bol'nitsa No.2 Yugo-zapadnoy zheleznoy dorogi.
(ELECTROCARDIOGRAPHY)

LEONTOVICH, N.A.

Condition of the cardiovascular system in children with Botkin's disease [with summary in English]. *Pediatrics* 36 no.4:18-23 Ap'58

1. Iz kafedry detskikh bolezney (zav. - prof. R.Yu. Kol'ner)
Kiyevskogo ordena Trudovogo Krasnogo Znameni meditsinskogo instituta
imeni A.A. Bogomol'tsa (dir. - dotsent I.P. Alekseyenko) na baze
datskogo otdeleniya DB-1(nachal'nik Z.Z. Bokhanovich).
(CARDIOVASCULAR SYSTEM)
(HEPATITIS, INFECTIOUS)

LEONTOVICH, N. A.: Master Med Sci (disc) -- "The state of the cardiovascular system in Botkin's disease among children". Kiev, 1959. 14 pp (Kiev Order of Labor Red Banner Med Inst in A. A. Bogomolets), 200 copies (KL, No 17, 1959, 111)

SVESHNIKOVA, O.S. [Svieshnikova, O.S.]; LEONTOVICH, N.A. [Leontovych, N.A.]

Some characteristics of the course of hemorrhagic vasculitis in children. Ped., akush. i gin. 22 no.6:22-24 '60. (MIRA 14:10)

1. Klinika dityachikh khvorob (zav. - prof. R.Yu.Kol'ner) likoval'nogo fakul'tetu Kiivs'kogo ordena Trudovogo Chernogo Prapora medichnogo institutu im. akad. O.O.Bogomol'tsya (direktor - dotsent V.D.Bratus') na bazi dityachnogo viddilennya Kiivs'koi zaliznichnoi likarni No.1 (nachal'nik - Z.Z.Bakhanovich).
(PURPURA (PATHOLOGY)) (CHILDREN--DISEASES)

69493

S/020/60/131/04/07/073

16.3500

AUTHOR: Leontovich, N.M.TITLE: The Asymptotic Expansion of Boundary Value Problems for Partial Differential Equations ¹⁶

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol.131, No.4, pp.742-745.

TEXT: In the domain Q with the boundary Γ the author considers the problem

(1)
$$L_\varepsilon u \equiv \varepsilon^2 \Delta \Delta u + L_2 u = h$$

(2)
$$u|_\Gamma = 0$$

(3)
$$\Delta u|_\Gamma = 0,$$

where L_2 is an elliptic operator of second order:

(4)
$$L_2 = - \sum_{i,j=1}^n \frac{\partial}{\partial x_i} (a_{ij}(x) \frac{\partial}{\partial x_j}) + \sum_{i=1}^n b_i(x) \frac{\partial}{\partial x_i} + c(x), \quad x=(x_1, \dots, x_n).$$

It is assumed that the coefficients of the equation and the boundary of the domain have N derivatives; $h \in W_2^{2N+2}$.

For the approximate solution of the problem the author uses the method of

Card 1/2

LEONTOVICH, T. A.

LEONTOVICH, T.A. -- "Nerve Structure of the Striopallidal System
in Certain Mammals." Sub 6 Jan 53, Acad Med Sci USSR. (Dissertation
for the Degree of Candidate in Medical Sciences.)

SO: Vechernaya Moskva January-December 1952

ZHUKOVA, G.P.; LEONTOVICH, T.A.; SAVICH, K.V.

Differentiation of neurons of the cerebral hemispheres in mammals.
Arkh.anat.gist.i embr. 31 no.1:3-14 Ja-Mr '54. (MLRA 7:4)

1. Iz Instituta mozga Ministerstva zdra-ookhraneniya SSSK (direktor -
deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR professor S.A.
Sarkisov).

(Brain)

LEONTOVICH, T.A.

Fine structure of subcortical ganglia. Zhur.nevr.i psikh. 54 no.2:
168-178 F '54. (MLRA 7:3)

1. Laboratoriya nevrologologii Instituta mozga Ministerstva zdra-
vookhraneniya SSSR. (Nervous system, Sympathetic)

USSR/Medicine - Neurology

FD-2437

Card 1/1 Pub 17-20/21

Author : Leontovich, T. A.

Title : ~~On the experimental destruction of deep sections of the brain~~
On the experimental destruction of deep sections of the brain

Periodical : Byul. eksp. biol. i med. 39, 74-77, Jan 1955

Abstract : The article describes an electrolytic method for the destruction of deep sections of the brain without damage to more superficial tissues. Author reports that the method was developed during the last century by the Russian scientist F. F. Gol'tsinger but was adopted by foreign scientists. The instrument uses a BAS-80 storage battery, a milliammeter and potentiometer to control the current. The inert lead cathode is attached to the animal's paw; the anode consists of a silver or platinum wire covered with bakelite lacquer or a glass tube. The end (0.5-2 mm) remains uncovered depending on the extent of the injury contemplated. It is best to use platinum wire which does not corrode as easily as silver. References: 5 USSR, 3 since 1940. Illustrations.

Institution: Laboratory of Neurohistology (Head, Prof G. I. Polyakov) Institute of the Brain (Director, Prof S. A. Sarkisov) Ministry of Health USSR

Submitted : March 29, 1954

LEONTOVICH, T.A.; MERING, T.A.

Data on the topography of subcortical formations in the brain of dogs applicable to experimental surgery. Biul.eksp.biol. i med. 42 no.8: 71-78 Ag '56. (MLRA 9:11)

1. Iz Instituta nozga (dir. - deystvitel'nyy chlen AMN SSSR prof. S.A.Sarkisov) AMN SSSR, Moskva. Predstavlena deystvitel'nyy chlenom AMN SSSR S.A.Sarkisovym.

(BRAIN, anatomy and histology,
subcortical topography in dogs (Rus))

LEONTOVICH, T.A. (Moskva, D-43, 3-ya Tverskaya-Yamskaya, d.29/6, kv.9)

Particular features of the interneuronal connections in the subcortical ganglia of mammals [with summary in English]. Arkh.anat. gist. i embr. 35 no.2:17-25 Mr-Apr '58 (MIRA 11:5)

1. Laboratoriya neyrogistologii (zav. - prof. G.I. Polyakov)
Instituta mozga AMN SSSR.
(BRAIN, anatomy & histology
interneuronal relations in subcortical ganglia i mammals (Rus))

ADRIANOV, Oleg Sergeyevich; MERING, Tat'yana Aleksandrovna. Primal
uchastiye LEONTOVICH, T.A. BRAZOVSKAYA, F.A., red.; BEL'CHIKOVA,
Yu.S., tekhn.red.

[Atlas of the brain and spinal cord of the dog] Atlas mozga
sobaki. Moskva, Izd-vo med.lit-ry, 1959. 236 p. (MIRA 13:10)
(DOGS--ANATOMY--ATLASES) (NERVOUS SYSTEM--MAMMALS)

LEONTOVICH, T. A. and ZHUKOVA, G. P. (Moscow, USSR)

"The topography of the reticular formation in the brain
and spinal cord of carnivores"

Report submitted to the 7th International Congress of Neurology
Rome, Italy, 10-15 Sep 61

ZHUKOVA, G.P.; LEONTOVICH, T.A.

Characteristics of the neuronal structure and topography of the
reticular formation in Carnivora. Zhur.vys.nerv.deiat 14 no.1:
124-147 Ja-F '64. (MIRA 17:6)

1. Laboratoriya neyrogistologii Instituta mozga AMN SSSR.

LEONTOVICH, T. D.; ZHUKOVA, G. P. (Moskva)

Ob osobennostyakh struktury i svydzey retikulydrnoy formatsii

report submitted for the First Moscow Conference on Reticular Formation,
Moscow, 22-26 March 1960.

LEONTOVICH, V. A.

Determination of the female sex hormone by the colorimetric method. M. N. Lapina, V. A. Leontovich and E. E. Koshcheyeva. *Problemy Endokrinol.* 3, No. 1, 27-34 (1937); *Chem. Zentr.* 1938, I, 929. The reaction for folliculin given by Kober (cf. C. A. 25, 3686) is modified so as to permit the detn. of 2-20 μ g of substance with a limit of error of $\pm 20\%$. The method can be used directly on pure preps.; in the examn. of urine a preliminary purification is necessary. M. G. Moore

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ASB 514 METALLURGICAL LITERATURE CLASSIFICATION

Leontovich, V.A.

24

USSR / Russian and Animal Physiology (Normal and Pathological), Blood.

Author : Prof Zher - Zoologiya, No 13, 1956, No. 6004
Editor : Bogdanov, A. A.; Tsvetkov, B. I.; Vinogradov, I. I.;
J. R.; Mikhlin, E. A.; Leontovich, V. A.; Shapkin, S. B.
Title : Leukocyte Mass - A New Transfusion Medium
Orig Pub : V sb.: sovrem. probl. genet. i perelivaniya krovi.
Typ. Sp. s. 164-171, 1956, 13-13

Abstract : For obtaining a leukocyte mass (LM) from blood, prepared with a stabilizer (S) with the aid of ionogen, metaphase acids, sodium peroxide (S) and streptozin (ST). I was used for the sedimentation of erythrocytes (R). I in a concentration of 0.1% and II in 0.6 - 0.8% contained a suspension of plasma with 70 - 90% leukocytes (L) about in 30 - 40 minutes. From 100 ml. of donor's blood, about

Card 1/3

8 billion L were obtained. I and II did not produce any toxic reactions in rabbits. Patients responded favorably toward transfusions of LM, prepared in this way. The sedimentation of blood in a horizontal position with a subsequent change to a vertical one, increased the separation rate of R from 0.02% to 1%. For the maintenance of sterility, 0.02% of sodium salicylate and 0.002% of formalin was added to the solution of 0.6% of glucose. During the first few days, the leukocyte viability was maintained at 90 - 95%. For preserving the L with fibrinogen-containing plasma with the addition of glucose to the serum, in colloidal and even saline solution, a non-specific clumping occurred

Card 2/3

b3

on the 3 - 7th day. The largest number of viable L was obtained by keeping them at 6 - 10°; at 16 - 20° L were rapidly destroyed. The neutrophils degenerated the earliest (on the 10th day about 80% of them remained); erythrocytes were the most viable. Phagocytic activity dropped sharply with the aging of the LM. The ability to agglutinate the vital stain was preserved 50% of the leukocytes. Anticoagins did not affect the viability of the L. After removal of plasma the LM was placed into ampoules in the Central Institute of Blood Transfusion/ S. I. The transfusion was made from this ampoule by a stream with a reduced rate of speed. Moderate amounts of LM may be transfused with a syringe. The transfusion of LM within the first day produced no complications. -- A. D. Meloborova

Card 3/3

VINOGRAD-FINKEL', F.R., prof.; LEONTOVICH, V.A.; ABEZGAUZ, N.N.

Use of anticytolytic substances as a new method for prolonging
blood preservation. Probl.gemat.i perel.krovi 1 no.1:41-46
Ja-F '56. (MIRA 14:1)

1. Iz Tsentral'nogo ordena Lenina instituta gematologii i pereli-
vaniya krovi (dir. - chlen-korrespondent AMN SSSR prof. A.A.
Bagdasarov) Ministerstva zdravookhraneniya SSSR.
(BLOOD—COLLECTION AND PRESERVATION)

LEONTOVICH, V. A.

3

alex The use of anticytolytic substances for the purpose of increasing the period of blood preservation. F. P. Vinograd-Finkel, V. A. Leontovich, and N. N. Abergauz. *Problemy Genetiki i Pervoinykh Krov 1, No. 1, 41-44 (1966).*
—The synthesized substances citrin (I), diprosin (II), gepin, EN, aminazine, and diquadril were investigated. Except for gepin, EN, all substances tested formed white cryst. powders, sol. in H₂O. They are antihistamines and can be safely administered intravenously in therapeutic doses. Tests for the effects of I and II on the hydrolytic power of plasmin and of serum esterase showed them to be enzyme inhibitors; they reduced the activities of plasmin and serum esterase by 60%, but had considerably less antiproteolytic properties. The addn. of anticytolytic substances to preserved blood delayed the destruction of the erythrocytes, seemingly because of their antienzymic effects as related to aseptic autolysis and also due to their favorable effect on the utilization of glucose by the erythrocytes. With the aid of such substances transfusion-blood was preserved under storage conditions for 60-80 days longer than heretofore. D. S. Levine

USSR/Human and Animal Physiology - Blood.

T-4

Abs Jour : Ref Zhur - Biol., No 7, 1958, 31614

Author : Leontovich, V.A.

Inst : -

Title : Value of Sodium Citrate and of Some Other Electrolytes for the Preservation of Erythrocytes of Stored Blood.

Orig Pub : V sb.: Sovrem. probl. gematol. i perelivaniya krovi. Vyp. 32. M., Medgiz, 1956, 69-74.

Abstract : The increase of invisible hemolysis served as an indication of the destruction of erythrocytes (E); the hemolysis was determined colorimetrically. The preservation of E was examined in a physiological solution of NaCl, a balanced Tyrode solution, ultrafiltrated blood, in solutions which contain electrolytes of plasma and sodium citrate (I). I acted antihemolytically during addition to sugar -glucose and to the physiological solutions. The introduction of I into whole blood lengthened the period of its preservation,

Card 1/2

- 33 -

LEONTOVICH, V. A.

✓ Preparation of transfusion blood free from anticoagulants
 and of a leucocyte mass for clinical blood transfusion with
 the aid of cationic exchange sorbents. A. A. Bagdasarov,
 P. A. Rutberg, P. P. Vinograd-Pinkel, B. I. Terent'eva,
 V. A. Leontovich, S. B. Skoptsa, and G. M. Abdullayev.
Trudy Kazanskogo Universiteta. Seriya Meditsinskaya, No. 3, 38-42 (1956).
 —The blood was passed through a column of cation exchange
 resin, which removed most of the Ca. All the glass
 parts of the transfusion app. were coated with silicone.
 Blood treated this way was analogous to native blood in its
 biol., morphological, cytological, biochem., physicochem.,
 and electron microscopic properties. No hypocalcemia was
 detected in any of the test subjects. Unlike the case of
 citrated blood, the erythrocytes, leucocytes, and thrombo-
 cytes of cationized blood retained their normal survival
 properties, coagulation function, and their enzymic and
 complement activities. B. S. Levine

Med. 9
 —

Cent. Inst. Hematology & Blood Transfusion

TRANSLATION by NIH in /M

LEONTOVICH, V.A.; ABEZGAUZ, N.N.

Leukocyte metabolism during preservation. Vopr. med. khim. 5 no.3:
192-199 My-Je '59. (MIRA 12:7)

1. Central Institute for Hematology and Blood Transfusion, Moscow.
(LEUKOCYTES,
preserv., metab. changes (Rus))

LEONTOVICH, V.A.; ABEZGAUZ, N.N.

Conditions prolonging the storage period of living cells in a
leukocyte mass. Probl.gemat.i perel.krovi 5 no.6:44-50 Je '60.
(MIRA 13:12)

(BLOOD—COLLECTION AND PRESERVATION)

LEONTOVICH, V.A.; SUKHOVA, A.G.

Studies of the role of proteolytic enzymes in the blood in
destroying erythrocytes during the process of blood preservation.
Probl.gemat.i perel.krovi no.7:41-45 '61. (MIRA 14:9)

1. Iz Tsentral'nogo ordena Lenina instituta gematologii i pereli-
vaniya krovi (dir. - deystvitel'nyy chlen AMN SSSR prof. A.A.
Bagadasarov) Ministerstva zdravookhraneniya SSSR.
(BLOOD—COLLECTION AND PRESERVATION)
(HEMOLYSIS AND HEMOLUSINS) (ENZYMES)

LEONTOVICH, V.A.; SUKHOVA, A.G.

Mechanism of favorable action of substances from the phenothiazine series - diprazine and ethysine - on erythrocyte preservation in blood conservation. Probl.gemat.i perel.krovi no.11:47-52 '61. (MIRA 15:1)

1. Iz laboratorii konservirovaniya krovi (zav. - prof. F.R. Vinograd-Finkel') Tsentral'nogo ordena Lenina instituta gematologii i perelivaniya krovi (dir. - deystvitel'nyy chlen AMN SSSR prof. A.A. Bagdasarov [deceased]) Ministerstva zdravookhraneniya SSSR.

(BLOOD--COLLECTION AND PRESERVATION) (ERYTHROCYTES)
(PHENOTHIAZINE)

LEONTOVICH, V.A.; ABEZGANZ, E.A.

Test of some substrates and analogues of carbohydrate-phosphorus metabolism substances for prolonging the viability of leucocytes during their preservation. Probl. gemat. i persl. krovi 9 no.10: 36-42 0 '64. (ISSN 18:3)

1. laboratoriya konservirovaniya krovi (zav. - prof. F.K. Vinograd-Finkel') Tsentral'nogo ordena Lenina Instituta gematologii i pere-livaniya krovi (dir. - dotsent A.Ye. Kiselev) Ministerstva zdravo-okhraneniya SSSR, Moskva.

LEONTOVICH, V.A.; SUKHOVA, A.G.; DERVIZ, G.V., prof.

Role of some esterolytic enzymes of the blood plasma of healthy people in destroying erythrocytes in blood preservation. Probl. gemat. i perel. krovi 10 no.1:40-45 Ja '65.

(MIRA 19:1)

1. Tsentral'nyy ordena Lenina institut gematologii i perelivaniya krovi (dir. - dotsent A.Ye. Kiselev) Ministerstva zdravookhraneniya SSSR, Moskva.

ABEZGAUZ, N.N.; ANISOVA, A.A.; GORODNOVA, V.I.; ZHEBYDO, A.T.; LEONT'VICH, V.I.

Effect of C-vitaminization of donors on the preservation of the phagocytic reaction and the vitamin C level in leucocytes stored under refrigeration. Probl. gemat. i perel. krovi 10 no.1:46-47 Ja '65. (MIRA 19:1)

1. Laboratoriya konservirovaniya krovi (zav. - prof. P.V. Vinograd-Finkel') Tsentral'nogo instituta gematologii i perelivaniya krovi Ministerstva zdravookhraneniya SSSR i vitaminnaya laboratoriya (zav. - prof. S.N. Matsko) Instituta vitaminologii, Moskva.

LEONTOVICH, V. G.

Ukhod za geodezicheskiy instrumentami [handling geodetic instruments] Izd. 4. isprav.
i dopol. Kiyev, Izd-vo akademii arkhitektury ukraynskoy SSR, 1953.
226 p. Illus., diagrs.

"Literatura": p. 224-226.

SO: N/5
623.103
.L5
1953

LEONTOVICH, V.G., prof.

Calculating the inclination of plant chimneys caused by uneven
settling. Stroi.prom. 35 no.6:40-42 Je '57. (MIRA 10:10)
(Chimneys)

LEONTOVICH, Vladimir Grigor'yevich, prof.; LITVINOV, B.A., kand.tekhn.nauk,
red.; VASIL'YEVA, V.I., red.i zd-va; ROMANOVA, V.V., .tekhn.red.

[Leveling in engineering work] Nivelirovanie pri inzhenernykh
rabotakh. Moskva, Izd-vo geodes. lit-ry, 1959. 383 p.

(Leveling)

(MIRA 12:7)

LEONTOVICH, V.G.

Geodesy teaching in institutes of construction engineering.
Geod. i kart. no.9:69-70 S '61. (MIRA 12:9)
(Surveying--Study and teaching)

SPANGENBERG, Ye.P.; LEONTOVICH, Y.V.

Recent information on the geographical distribution and biology
of birds on the eastern shore of the White Sea. Probl.Sev.
no.2:194-202 '58. (MIRA 12:4)

1. Zoologicheskiy muzey Moskovskogo gosudarstvennogo universiteta.
(White Sea region--Birds)

BOGATSKIY, Georgiy Filippovich, kand. tekhn. nauk; BONDARENKO,
Boris Andreyevich, kand. arkhitekt.; LEONTOVICH, Vladimir
Vsevolodovich,, inzh.; SERYGINA, E., red.

[Course planning of populated places] Kursovoe proektiro-
vanie naselennykh mest. Kiev, Budivel'myk, 1964. 142 p.
(MIRA 17:10)

VITENBERG, A.S.; BAKHSHIYAN, TS.A.; LEONTOVICH, V.Ye.; LETNIKOV, Yu.S.

Gas furnace for the heating of tubular blanks. Stal' 22
no.3:279 № '62. (MIRA 15:3)
(Furnaces, Heating---Patents)

LECNTCVICH, Ye. A.

O trayektoriakh, opredelyayushchikh kachestvennuyu strukturu razlieniya sfery na trayektorii. DAN, 14(1937), 251-254.
Nekotoryye sluchai zavisimosti predel'nykh tsiklov ot parametra. Gor'kiy, uchen. Zap. Un-ta, 6(1939) 3-24.

SO: Mathematics in the USSR, 1917-1947
edited by Kurosh, A.G.
Markushevich, A.I.
Rashevskiy, I.K.
Moscow-Leningrad, 1948

LEONTOVICH, Ye.

184T66

USSR/Mathematics - Nonlinear Mechanics 1 Jun 51
Limit Cycles

"Generation of Limit Cycles From the Separatrix,"
Ye. Leontovich, Gor'kiy Res Physicotech Inst

"Dok Ak Nauk SSSR" Vol LXXVIII, No 4, pp 641-644

Considers 3d type of generation of limit cycles, namely, from closed curve J consisting of separatrices of cols and of cols themselves. Studies "changed syst" $dx/dt = P + p$ and $dy/dt = Q + q$; changed, namely, from $dx/dt = P(x,y)$, $dy/dt = Q(x,y)$, where p, q are as small as desired. Cf. Minorsky's "Nonlinear Mechanics." Submitted 31 Mar 51 by Acad A. A. Andronov.

184T66

Leontovich, E.A.
USSR/Mathematics

Card 1/1 Pub.22 - 1/63

Authors :Andronov, A.A., Academician; and Leontovich, E.A.

Title :Generation of limited cycles from a rather-precise focus of a center and from a rather-precise limited cycle

Periodical :Dok. AN SSSR 99/6, 885-888, Dec 21, 1954

Abstract :The possibilities of generating limited cycles from a rather-precise focus or a center or from a limited rather-precise cycle are discussed. The lemmas and theorems proved establish the basic ideas of such generations. Seven USSR references (1937-1954).

Institution:

Submitted:

ANDRONOVA, Ye. A.

LEONTOVICH, M.A., akademik, redaktor; GREKHOVA, M.T., professor, redaktor;
AYZERMAN, M.A., doktor tekhnicheskikh nauk, redaktor; GINZBURG, V.A.,
professor, redaktor; GORELIK, G.S., profesor, redaktor; LEONTOVICH-
ANDRONOVA, Ye.A., dotsent, redaktor; ZHELETSOV, N.A., dotsent, redak-
tor; PEROV, V.V., kandidat tekhnicheskikh nauk, redaktor; NIKOLAYEV,
Ya.N., dotsent, redaktor; AGITOVA, N.A., redaktor; PRILEYEV, A.M.,
redaktor; ALEKSEYEV, T.V., tekhnicheskij redaktor.

[Dedicated to the memory of Aleksandr Aleksandrovich Andronov] Pamiati
Aleksandra Aleksandrovicha Andronova. Moskva, 1955. 718 p.

1. Akademiya nauk SSSR. (MIRA 8:4)
(Mathematical physics)(Automatic control)(Astrophysics)

LEONTOVICH, Ye. A.

3000

Leontovič, E., and Maler, A. On a scheme determining the topological structure of the separation of trajectories. Dokl. Akad. Nauk SSSR (N.S.) 103 (1955), 557-560. (Russian)

11-5

2-E

Let (1) $\dot{x} = P(x, y), \dot{y} = Q(x, y)$ where P, Q are in $C^{(1)}$ in a closed bounded plane region G . The boundary of G is assumed to be a simple closed curve consisting of a finite

A-E

number of trajectories of (1) and a finite number of arcs without contact. A "singular" trajectory or semi-trajectory is one which is orbitally unstable or which passes through the common end of a boundary arc without contact and an arc of a trajectory. (Cf. Leontovich and Mayer, C.R. (Dokl.) Acad. Sci. URSS (N.S.) 14 (1937), 251-254; and Markus, Trans. Amer. Math. Soc. 76 (1954), 127-148; MR 15, 704.) The critical points of (1) are to be isolated and only a finite number of singular curves are assumed to exist. Theorem: In order that the topological structure of two differential systems of the form (1) be the same it is necessary and sufficient that their schemes of separation by singular trajectories be isomorphic. The definitions of "topological equivalence" and "isomorphism" are not very explicit in the paper.

L. Markus (Princeton, N.J.)

① RW
P. E. ...

Physics-Teach. Res. Inst., Bowling Green Univ.

SUBJECT USSR/MATHEMATICS/Differential equations CARD 1/2 PG - 757
AUTHOR ANDRONOV A.A., LEONTOVIC E.A.
TITLE The rise of limit cycles from a non-rough vortex or center and
a non-rough limit cycle.
PERIODICAL Mat.Sbornik, n.Ser. 40, 179-224 (1956)
reviewed 5/1957

The present paper has been written down already in 1937, its results in the meantime often have been used by the authors and others (e.g. Pontrjagin) (Doklady Akad.Nauk 14, 247-250; *ibid.* 21, 427; *ibid.* 78, No.4); therefore this publication gives partially well-known and obsolete results. The authors investigate the rise of limit cycles at the transition from the system

$$\frac{dx}{dt} = P(x,y), \quad \frac{dy}{dt} = Q(x,y)$$

to the variated system

$$\frac{dx}{dt} = P(x,y)+p(x,y), \quad \frac{dy}{dt} = Q(x,y)+q(x,y),$$

where $p(x,y)$ and $q(x,y)$ are arbitrarily small additional terms with arbitrarily small derivatives up to the order $r \geq 1$. Here the functions

ANDRONOV, Aleksandr Aleksandrovich, akademik [deceased]; VITT, Aleksandr
Adol'fovich [deceased]; KHAYKIN, Semen Emmanuilovich; ZHELEZTSOV,
N.A.. Prinizhala uchastiye: LEONTOVICH-ANDRONOVA, Ye.A.. GRIGOROVA,
V.A., red.; GAVRILOV, S.S., tekhn.red.

[Theory of vibration] Teoriia kolebani. Izd.2. Perer. i dop.
N.A.Zheleztsova. Moskva, Gos.izd-vo fiziko-matem.lit-ry, 1958.
915 p.

(MIRA 12:5)

(Vibration)

LEONTOVICH, Ye. A., Doc Phys-Math Sci (diss) -- "Special trajectories of dynamic second-order systems and their bifurcations". Gor'kiy, 1959. 15 pp (Gor'kiy Res Phys-Tech Inst of the State U im N. I. Lobachevskiy), 150 copies (KL, No 23, 1959, 159)

16(1)

AUTHORS:

Andronov, A.A. (Deceased), (Gor'kiy)
Leontovich, Ye.A.

SOV/39-48-3-4/5

TITLE:

On the Formation of Limit Cycles From a Separatrix Loop and
From the Separatrix of the State of Equilibrium of the Type
Saddle - Knot

PERIODICAL:

Matematicheskiy sbornik, 1959, Vol 48, Nr 3, pp 335-376 (USSR)

ABSTRACT:

The present paper written in 1937 is published for the first time. The results of the paper have already been used several times, e.g. [Ref 1,2,3,14].

The paper is a completion to [Ref 4]. The authors consider the cases already mentioned in [Ref 4], where in the transition from the system

$$(D) \quad \frac{dx}{dt} = P(x,y) \quad , \quad \frac{dy}{dt} = Q(x,y)$$

to the arbitrarily adjacent system

$$(\tilde{D}) \quad \frac{dx}{dt} = P(x,y) + p(x,y) = \tilde{P}(x,y)$$

Card 1/2

$$\frac{dy}{dt} = Q(x,y) + q(x,y) = \tilde{Q}(x,y)$$

On the Formation of Limit Cycles From a Separatrix SOV/39-48-3-4/5
Loop and From the Separatrix of the State of Equilibrium of the Type
Saddle - Knot

a limit cycle of the same class arises. Case I. The limit cycle arises from a separatrix loop. The authors give conditions which are sufficient for the stability (or instability) of the loop and simultaneously necessary for the formation of a unique stable (or instable) boundary cycle. Case II. The limit cycle arises from the separatrix of a state of equilibrium "saddle - knot" which tends to a saddle - knot for $t \rightarrow + \infty$ as well as for $t \rightarrow - \infty$ which, however, is a separatrix only for $t \rightarrow + \infty$ or only for $t \rightarrow - \infty$. It is stated that in this case always only one limit cycle is possible. Altogether there are seven theorems, eleven lemmata and several conclusions and remarks. - There are 4 figures, and 11 references, 8 of which are Soviet, 1 German, 1 French, and 1 Swedish.

SUBMITTED: October 15, 1957

Card 2/2

T6(1) 16.5620

66443
SOV/20-129-3-8, 70

AUTHOR: Leontovich, Ye. A.

TITLE: Certain Analogies Between Algebraic Curves and Algebraic Dynamic Systems on a Plane

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 129, Nr 3, pp 503-506 (USSR)

ABSTRACT: The author joins a paper of D.A.Gudkov [Ref 1] on the algebraic curves

$$(1) \sum_{i+j+k=n} A_{ijk} x^i y^j = 0$$

with real coefficients. To every point of the coefficient space R_n there corresponds an algebraic curve C_n . Introducing in the R_n

a metric one obtains the δ -neighborhood of the C_n in the R_n .

In [Ref 1] it is shown that if C_n^0 in the point (x,y) has a

double point, then the neighboring curves C_n in the neighborhood

of (x,y) have a certain behavior. The author of the present paper considers algebraic dynamic systems

$$(D_n) \quad \frac{dx}{dt} = P(x,y) = \sum A_{ijk} x^i y^j, \quad \frac{dy}{dt} = Q(x,y) = \sum B_{ijk} x^i y^k$$

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Card 1/2

ANDRONOVA-LEONTOVICH, YE. A. and PLYUSTINA, I. N.

"The theory of bifurcation of the dynamical systems of the second order and its application to the investigation of the nonlinear problems of the theory of oscillations."

Paper presented at the Intl. Symposium on Nonlinear Vibrations, Kiev, USSR, 9-19 Sep 61

Research Institute of Technical Physics, Larky State University, Gorky

LEONTOVICH, Ye.A. (Gor'kiy)

Letter to the editor concerning N.F. Otrokov's article
on "Multiple boundary cycles." Mat. sbor. 64 no.1:140-144
My '64. (MIRA 17:6)

PRIKHOCHENKO, V.M.; MAKUSHEVA, Ye.V.; KUBOVA, G.E.

Electrochemical behavior of calcium impurities on a mercury cathode
in the electrolysis of chloride solutions. Zhur. prikl. Khim. 32
no.1:87-92 Ja '65. (MIRA 19:3)

1. Kiyevskiy politekhnicheskiy institut.

L 25865-66 EWT(d)/EWP(1) LJP(c)

ACC NR: AP6008804

SOURCE CODE: UR/0039/65/068/003/0328/0372

AUTHORS: Andronov, A. A. (deceased)(Gor'kiy); Leontovich, Ye. A. (Gor'kiy) 18

ORG: none 5

TITLE: ¹⁶ Dynamic systems of the first order of refinement in the plane

SOURCE: Matematicheskiy sbornik, v. 68, no. 3, 1965, 328-372

TOPIC TAGS: dynamic system, system analysis, dynamic behavior, trajectory analysis

ABSTRACT: The class of simple refined systems called "systems of the first order of refinement" is considered. Systems of this type are found among the systems in the plane, that is, systems of the form

$$\frac{dx}{dt} = P(x, y), \quad \frac{dy}{dt} = Q(x, y),$$

where x and y are the Cartesian coordinates in the plane. The concept of the "coarseness" of dynamic systems is defined in terms of the variables and vector spaces involved. Conditions necessary for a system of the first order of refinement are established. Three conditions are stated; the violation of any one of these three conditions is necessary for the given system to be of the first order of refinement. The discussions are based on the theorem of "minor variation of the solution and derivatives from the solution according to initial values from the variation of the righthand side" (see A. A. Andronov and Ye. A. Leontovich (Rozhdeniye predel'nykh

Card 1/2

UDC: 517.925 2

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ACC NR: AP6008804

tsiklov iz negrubogo fokusa ili tsentra i ot negrubogo predel'nogo tsikla, Matem. sb., 40 (82) (1956), 179 - 224)). Fifteen theorems and several lemmas are stated and proved. The conditions established in these theorems are the first order of refinement conditions and are termed the Γ conditions. The proof that the Γ conditions are also sufficient conditions for a system of the first order of refinement is left for subsequent publication. Orig. art. has: 17 equations.

SUB CODE: 12/ SUBM DATE: 08Jun64/ ORIG REF: 011/ OTH REF: 006

Card 2/2 *Ha*

LEONTOVICH-ANDRONOVA , YE. A.

SEE LEONTOVICH, YE. A.

LEONTOVSKIY, M.P., kand.fiz.-mat.nauk

Table of elementary particles. Trudy MFTI no.4:131-143 '59.
(MIRA 13:9)
(Particles (Nuclear physics)--Tables, calculations, etc.)

LEONTOVSKIY, M. P.

Calculation of frequencies and intensities of the infrared
spectrum of propenyl bromide. Opt. i spektr. 11 no. 4: 471-477
0 :61. (MIRA 14:10)
(Bromopropene--Spectra)

LEONTOVSKIY, M.P.

Interpretation of charge space. Izv.vys.uncheb.zav.;fiz.no.2:177-178
'63.

(MIRA 16:5)

1. Moskovskiy geologorazvedochyy institut imeni Ordzhonikidze.
(Field theory)

CATEGORY : Plant Diseases. Forest Trees. 0

ABS. JOUR. : RZhBiol., No. 3, 1959, No. 11249

AUTHOR : Leontovyc, R.
INST. : ~~Research Institute of Forest Pathology and Plant Protection~~

TITLE : Infection of Individual Poplar Clones by the Fungus
Melampsora allii-populina in the Breeding Nursery of
Gabchikovo in 1956.

ORIG. PUB. : Lesn. casop., 1956, 4, No. 1, 30-45.

ABSTRACT : Most resistant to the poplar leaf rust proved to be:
Populus italia 214, P. italia 109, P. italia 501, P. mar-
ilandica, P. nigra v. typica, P. fremontii and P. mel-
rica, and the most susceptible - P. chevestina, P. rege-
nerata, P. robusta, P. vernicubans, P. bachelieri. The
outbreak of the disease was favored by the injuries of
the trees caused by frosts. Measures for the control of
the disease: elimination of the intermediate hosts of the
fungus, the use of appropriate fungicides, breeding of
poplars resistant to the disease. Observations on this
type of poplar disease were not previously conducted in
Czechoslovakia. -- Ye. A. Parshina

CARD: 1/1

HESKO, Jozef; LEONTOVYC, Roman

Health conditions of the beechnuts collected in 1958 in the area of the Zilina State Forest District Agency. Les cas 9 no.10:921-930 0 '63.

1. Vyskumny ustav lesneho hospodarstva, Banska Stiavnica.

LEONTOVIC, Roman, inz.; GEMERSKY, Vavro, inz.

Remarks on the decay of poplars after pruning. Les cas 16 no. 9:
811-818 S '64.

1. Research Institute of Forestry, Banska Stiavnica.

LEONTOVIC, Roman

Mass dying out of pines in Slovakia in 1960 and its causes. Les
cas 8 no.6:429-444 '62.

1. Vyskumny ustav lesneho hospodarstva, Banska Stiavnica.

LEONTOVYC, Roman

Second Congress of European Mycologists in Czechoslovakia. Biologia
16 no.8:626-627 '61.

(FUNGI)