

GURIL'OVA, M.A.

Winter hardiness of cultivated plants. Visnyk AN URSR 26 no.10:  
24-30 0 '55. (MIRA 9:1)  
(Plants--Frost resistance)

USSR/Cultivated Plants - General Problems.

M

Abs Jour : Ref Zhur Biol., No 18, 1958, 82243  
 Author : Fedorova, N.A., Gurileva, M.A., Kostlan, N.V.  
 Inst : -  
 Title : Methods of Determining the Viability of Winter Crops  
 Orig Pub : Byul. pofiziol. rasteniy, 1957, No 1, 29-33

Abstract : Direct growth is considered the primary method. However, the water method (M. Bugayevskiy), the sugar growth method (Kuperman and Kucheryavaya) and others belong to those techniques which speed up the process and are less laborious and still have not been widely utilized. At the Chair of Darwinism in Moscow University one has worked out a determination method on the basis of the condition of the apical cones (their turgescence, degree of browning and turbidity). Upon checking 316 specimens of those plants which proved to lack viability in the instance of direct growth, no

Card 1/2

USSR/Cultivated Plants - General Problems

M

Abs Jour : Ref Zhur Biol., No 18, 1958, 82243  
 APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000617430006-4

loss of turgor or occurrence of brown vegetative cones were observed. The Institute of Plant Physiology suggested that one use staining for the cones and shoot base sections, with a 0.1% sol. of acidic fuchsin. Non-viable cells are distinguished by their ability to be stained; in cases where only the shoot base cells stained, the plants belonged to the weakened group. Work has been started on applying the luminescent analysis method (by means of an L1-1 apparatus) and radio isotopes (on the basis of the speed and rate of P32 uptake by the plants).  
 The Bibliography lists 8 titles. -- B.Te. Kravtsova

Card 2/2

- 3 -

GURILEVA, M.A.AUTHORS: Fedorova, N. A.; Gurileva, M. A.TITLE: On the Determination of the Viability of Winter Crops by the Condition  
 (Osnovaniya dlya opredeleniya zhiznospособnosti ozimnykh kultur

On the Determination of the viability of Winter Crops  
by the Condition of the Growth Cone

The following conclusions were drawn: 1. Data derived by the method of fixing the viability of plants according to the state of growth cone with a consideration of the indexes recommended in the Chirkov article do not coincide with results of direct growth. 2. Considering the feasibility of developing a method of evaluating the viability of winter crops which (method) furnishes the chance of more widely taking advantage of the observations of productive plantings of kolkhozes and sovkhozes, more reliable indexes must be found which permit the objective recognition of the non-viability of plants. 3. In the group of indexes of the evaluation of the viability of plants, there should be included the coloration of the tissues of bases of shoots and of stalky cone growths, an examination of the plants under an apparatus for luminescent analysis, and a determination of the activity of absorption of marked phosphorus.

There are no graphics in the text; there is one reference, which is Slavic. Yu. I. Chirkov (1) is cited with respect to his article which recommends the replacement of the method of direct growth (monolithic) by the method of determining viability of winter crops by the state of the cone growth.

Card 2/3

On the Determination of the Viability of Winter Crops  
by the Condition of the Growth Cone

**ASSOCIATIONS:** The studies were conducted at the suggestion of the Ministry of Agriculture of the U.S.S.R., & the Ministry of Agriculture of the Ukrainian SSR by the Ukrainian Scientific-Investigatory Institute of Agriculture and the Ukrainian Scientific-Investigatory Institute of the Physiology of Plants in 1956.

**PRESENTED BY:**

**SUBMITTED:**

**AVAILABLE:**

Card 3/3

GURILEVA, M. A.

3(7) PHASE I BOOK EXPLOITATION SOV/2384

Konferentsiya po agrometeorologii i agroklimatologii Ukrainy SSR  
 Materialy konferentsii (Material of the Conference on Agricultural Meteorology and Climatology of the Ukrainian SSR) Leninskoye Gidrometeorolizdat, 1958. 247 p. Errata slip inserted. 700 copies printed.

Sponsoring Agencies: USSR. Glavmets upravleniy gidrometeorologicheskoy sluzhby, Mezhdunar. SSR Ministerstvo sel'skogo khozyaystva, Ukrainskiy nauchno-issledovatel'skiy gidrometeorologicheskiy institut, and Ukrainskaya akademiya sel'skokhozyaystvennykh nauk.

Resp. Ed.: G.F. Prikhot'ko; Ed.: V.D. Pisorovskaya; Tech. Ed.: M.I. Braylina.

PURPOSE: This book is intended for agriculturists, agrometeorologists, and instructors in related vuzes.

COVERAGE: This collection of articles deals with problems in agricultural meteorology in the Ukraine. Among the topics discussed are: wintering, planting time for winter crops, corn cultivation, potato degeneration, moisture supply, and adverse weather factors. References accompany individual articles.

TABLE OF CONTENTS:

Basov, I. I. [Deputy Minister of Agriculture, Ukr SSR] Introductory Word 3

Rogatsky', T. K. [Chief of the Hydrometeorological Service, Ukr SSR] Practical Hydrometeorological Service for Agricultural Production in the Ukraine 5

Kashch, A. M. [Ukrainian Scientific Research Hydromet. Institute] Regional Agroklimatological (Reference Books) of the Ukraine and Their Application in Production 10

Prikhot'ko, G. F. [Ukrainian Scientific Research Hydromet. Institute] The State of Agrometeorological Studies in the Ukraine 15

Kopachevskaya, M. M. [Ukrainian Scientific Research Hydromet. Institute] Organization and Utilization of Meteorological Observations of Departmental Stations in Scientific Work and Agricultural Practice 23

Vlasnik, P. A. and M. A. Guseleva [Ukrainian Scientific Research Institute for Plant Husbandry] Special Features of the Wintering Over of Winter Crops in 1955-56 in Various Regions of the USSR 31

Michkaki, V. M. [Ukrainian Scientific Research Hydromet. Institute] Agrometeorological Conditions of the Wintering of Winter Crops in the Ukraine 40

Michkaki, V. M. Agroklimatic Basis for the Planting Time of Winter Crops in the Ukr-SSR 60

Hlanova, Ye. S. [Central Institute of Prognoses] Relationship Between the Phase in the Development of Winter Crops and the Agrometeorological Conditions. Probability of Phase Development of Winter Crops as Related to the Different Planting Time in the Ukraine 69

3(7) PHASE I BOOK EXPLOITATION SOV/2384

Konferentsiya po agrometeorologii i agroklimatologii Ukrainy SSR  
 Materialy konferentsii (Material of the Conference on Agricultural  
 Meteorology and Climatology of the Ukrainian SSR) Leningrad,  
 Gidrometeoizdat, 1958. 247 p. Errata slip inserted. 700 copies  
 printed.

Sponsoring Agencies: USSR, Glavnoye upravleniye gidrometeorologich-  
 eskoy sluzhby, Ukrainian SSR, Ministerstvo sel'skogo khozyaystva,  
 Ukrainskiy nauchno-issledovatel'skiy gidrometeorologicheskiy in-  
 stitut, and Ukrainskaya akademiya nauk, Sibirskoye veyevnykh nauk.

Resp. Ed.: G.P. Fridol'tsov; Ed.: V.D. Pisonavskaya; Tech. Ed.:  
 M.I. Brazhina.

PURPOSE: This book is intended for agriculturists, agrometeorolo-  
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COVERAGE: This collection of articles deals with problems in agri-  
 cultural meteorology in the Ukraine. Among the topics discussed  
 are: wintering, planting time for winter crops, corn cultivation,  
 potato degeneration, moisture supply, and adverse weather factors.  
 References accompany individual articles.

TABLE OF CONTENTS:

Fedorova, M.A. [Ukrainian Scientific Research Institute for Agri-  
 culture] Significance of Planting Time for the Wintering of Winter  
 Crops Under Poles'ye (Woodlands) and Northern Lenostep (Forested  
 Steppes Regions) Conditions in the Ukr-SSR 76

Bucheryavva, M.I. [Ukrainian Scientific Research Institute of Crop  
 Science] Significance of Critical Temperatures in Forecasting the  
 Wintering Conditions 84

Orshileva, M.A. [Ukrainian Scientific Research Institute for Plant  
 Pathology] Forecasting the Reaction of the Various Grades of Winter  
 Wheat to the Intermittent Temperatures of the Winter and Early  
 Spring Periods 91

Gurilova, M.A. and M.A. Fedorova. Results of Checking the Method  
 for Determining the Viability of Winter Crops by the Conditions of  
 the Vegetative Cone 96

Kovanko, M.D. [Ukrainian Scientific Research Hydromet. Institute]  
 Moisture Reserves of Various Climatic Soil Zones of the Ukraine 100

Zumata, O.M. [All-Union Scientific Research Institute for Study of

Card 4/7

12

VLASYUK, P.A., akademik; GURIL'OVA, M.A. [Guryl'ova, M.A.], kand.biol.  
nauk

Winter hardiness of plants. Nauka i zhyttia 8 no.3:23-25  
Mr '58. (MIRA 12:9)

1. AN USSR i Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk  
im. Lenina (for Vlasyuk).  
(Plants--Frost resistance)

GURILEVA, M. A. [Huryl'ova, M.A.]

A.A.Sapegin's works on the morphogenesis of plants and its  
significance for plant growing. Ukr.bot.zhur. 19 no.5:107-115  
'62. (MIRA 16:1)

(Sapegin, Andrei Afanas'evich, 1883--)  
(Botany--Morphology)

GARANIN, B.A.; NESMELOVA, Z.P.; GURILEVA, N.P.; SOLOLOVA, F.G.

Results of using Ol'kenitskii's medium for the study of microbes  
of the Enterobacteriaceae family. Lab. delo no.8:498-500 '65.  
(MIRA 18:9)

1. Bakteriologicheskaya laboratoriya Infektsionnoy bol'nitsy  
No.23 (glavnyy vrach - zasluzhennyy vrach RSFSR S.M. Raskina)  
Avtozavodskogo rayona goroda Gor'kogo.

TSEYDLER, Aleksandr Al'bertovich, prof. doktor; SMIRNOV, V.I., prof., doktor;  
DIOMIDOVSKIY, D.A., prof.-doktor; DOBROKHOTOV, G.H., kand. tekhn.  
nauk; BULAKH, S.A., kand. tekhn. nauk; GURINA, N.V., red.;  
SMOLDYREVA, L.G., red. izd-va; VAYNSHTAYN, Ye.B., tekhn. red.

[Metallurgy of copper and nickel] Metallurgiya medi i nikelia.  
Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi  
metallurgii, 1958. 391 p. (MIRA 11:8)

1. Deystvitel'nyy chlen Akademii nauk KazSSR (for Smirnov).
2. Leningradskiy gornyy institut; kafedra metallurgii tyazhelykh  
i blagorodnykh metallov (for Diomidovskiy, Dobrokhotov, Bulakh).  
(Copper--Metallurgy) (Nickel--Metallurgy)

GURINOV, P.F., Cand Med Sci--(diss) "On the problem of therapy of progressive paralysis in connection with ~~the~~ peculiarities of neuro-syphilis of the post-war period." Dnepropetrovsk, 1953. 16 pp. Min of Health USSR. Dnepropetrovsk State Med Inst), 200 copies (KL, 43-53, 106)

KAZAKOVSKIY, D.A., prof., doktor tekhn.nauk; KROTOV, G.A., dots., kand.tekhn.  
nauk; GURIN, A.A., kand.tekhn.nauk

Use of acoustical equipment for solving of mine surveying problems.  
Nauch.dokl.vys.shkoly; gor.delo no.2:85-91 '59. (MIRA 12:7)  
(Mine surveying)  
(Ultrasonic waves--Industrial applications)

L 15661-66 EWT(1)/ETC(F)/EPF(n)-2/EWG(m)/T IJP(c) AT

ACC NR: AP6000219

SOURCE CODE: UR/0056/65/049/005/1591/1600

AUTHORS: Sitenko, A. G.; Gurin, A. A.

ORG: Institute of Physics, Academy of Sciences, UkrSSR (Institut fiziki Akademii nauk UkrSSR)

TITLE: Effect of <sup>21, 44, 55</sup>particle collisions on <sup>21, 44, 55</sup>plasma fluctuations

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 49, no. 5, 1965, 1591-1600

TOPIC TAGS: plasma oscillation, particle collision, temperature dependence, plasma temperature, plasma density, kinetic equation, collision integral

ABSTRACT: The authors studied the effect of binary collisions on plasma fluctuations, using a kinetic equation with a model collision integral in which the energy and momentum of the particles are conserved. The introduction of a model collision integral makes it possible to study plasma fluctuations for arbitrary values of the effective binary collision frequency, and not merely limiting low or high values, as in the past. A single component non-isothermal plas-

Card 1/2

L 15661-66

ACC NR: AP6000219

ma is investigated. The fluctuation-dissipation theorem is used to find a general expression for the correlation function of the random forces. Allowance for the binary collisions between particles leads to additional correlation of the random forces in velocity space. General expressions are obtained for the spectral distribution of the particle density fluctuations and for the temperature fluctuations and for the dependence of the fluctuation spectrum on the particle density, temperature, and binary collision frequency. The relation between fluctuations in a collisionless plasma and fluctuations in hydrodynamics is also studied as is the scattering of electromagnetic waves by fluctuations of density and temperature. It is shown that the temperature fluctuations exert an appreciable influence on the scattering with small change of frequency in the case of long wavelengths. Orig. art. has: 2 figures and 26 formulas.

SUB CODE: 20,12/SUBM DATE: 08Jun65/ ORIG REF: 003/ OTH REF: 003

PC

Card 2/2

ACC NR: AP7004570

SOURCE CODE: UR/0056/65/049/005/1591/1600

AUTHOR: Sitenko, A. G.; Gurin, A. A.

ORG: Institute of Physics, AN UkrSSR (Institut fiziki AN UkrSSR)

TITLE: Effect of particle collisions on fluctuations in a plasma

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki v. 49, no. 5, 1965, 1591-1600

TOPIC TAGS: particle collision, plasma physics

ABSTRACT: The authors use the kinetic equation with the Bhatnagar-Gross-Krook collision integral model as the basis for an investigation of the effect of pair collisions between particles on fluctuations in a plasma. The introduction of the model collision integral makes it possible to investigate plasma fluctuations for an arbitrary value of the effective pair collision frequency. The article investigates the case of a single-component, nonisothermal plasma. The fluctuation-dissipation relation is used to find a general expression for the correlation function of random forces. It is shown that allowance for pair collisions between particles leads to an additional correlation of random forces in the velocity space. General formulas are obtained for the spectral distributions of particle density fluctuations and temperature fluctuations. These formulas are used to investigate the effect of the magnitude of the effective pair collision frequency on the shape of the spectrum of particle density and temperature fluctuations, from the collisionless case to hydrodynamics. Orig. art. has: 2 figures and 26 formulas. [JPRS: 34,657]

SUB CODE: 20 / SUBM DATE: 08Jun65 / ORIG REF: 003 / OTH REF: 003

Card 1/1

3/035/62/000/007/065/083  
A001/A101

3.2200

AUTHORS: Qurin, A. I., Yudina, I. V.

TITLE: Vertical motion of a rocket in a non-uniform gravity field with allowance for medium resistance

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 7, 1962, 98, abstract 7A744 ("Uch. zap. Mosk. gor. ped. in-ta im. V. P. Potemkina", 1960, v. 86, 77 - 107)

TEXT: The authors derive a differential equation for the motion of the rocket mass center in a non-uniform gravity field with allowance for medium resistance during the vertical translational rocket motion, assuming the movements of gas particles in the rocket to be steady. They determine the law of rocket velocity variation for various sections of the rectilinear trajectory of the mass center, coinciding with the Earth radius direction. The trajectory mentioned is divided into 3 sections: The 40 - 50 km section where air medium resistance can not be neglected, a section where gravity field can not be neglected, and at last an ideal section of the trajectory without gravity and medium resistance. There are 5 references.

VB

Yo. Polyakhova

[Abstracter's note: Complete translation]

Card 1/1

GURIN, A.I., dotsent; YUDINA, I.V.

Vertical motion of a rocket in a nonuniform gravitational field  
taking the resistance of the medium into account. Uch. zap. Mosk.  
gor. ped. inst. 86:77-107 '66. (MIRA 16:3)  
(Rockets (Aeronautics))

GURIN, A. I.

Amputation of both legs for gangrene caused by acute aortic obstruction.  
Khirurgia 34 no.5:131-132 My '58 (MIRA 11:?)

1. Iz Brnilovskoy uchastkovoy bol'nitsy Zhmerinskogo rayona Vinnitskoy oblasti.

(LIMB, gangrene

bilateral amputation for gangrene caused by acute aortic obstruct (Rus))

(AMPUTATION,

legs, for gangrene caused by acute aortic obstruct (Rus))

(AORTA, diseases

acute obstruct. causing gangrene of legs, bilateral amputation (Rus))

GURIN, A.I.

Phlegmon of the vermiform appendix in an unusual location. Nov. khir.  
arkh. no.2:133 Mr-Ap '59. (MIRA 12:7)

1. Brailovskaya uchastkovaya bol'nitsa Vinnitskoy obl.  
(APPENDICITIS)

GURIN, A.I.

Clinical aspects of acute retroperitoneal apendicitis. Khirurgiia  
36 no.4:92-96 Ap '60. (MIRA 13:12)  
(APPENDICITIS)

GURIN, A.I. (Moskva)

Stability of the motion of a gyroscope in gimbels with spring  
limiters and a damper. Inzh.zhur. 3 no.4:619-627 '63.

(MIRA 16:12)

GURIN, A. I.

Gurin, A. I. "An investigation of the stability of motion of a shaft on which a disk has been placed", Trudy Seminara po teorii mashin i mehhanizmov (Akad. nauk SSSR, In-t mashi-novedeniya), Vol. VI, Issue 24, 1949, p. 5-26, - Bibliog:

SO: U-4630, 16 Sept. 53, (Letopis 'Zhurnal 'nykh Statey, No. 23, 1949).

SOV/24-57 7-7518

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 7, p 8 (USSR)

AUTHOR: Gurin, A. I.

TITLE: Some Problems of the Gyroscopic Stabilization of Instruments on Moving Supports (Nekotoryye voprosy giroskopicheskoy stabilizatsii priborov na podvizhnom osnovanii)

PERIODICAL: Uch. zap. Mosk. gor. ped. in-t, 1956, Vol 49, pp 17-60

ABSTRACT: The first two chapters formulate the laws governing the kinetics and dynamics of a rigid body and the equation of motion of universally mounted gyros. Chapter III, by means of the employment of the method of small amplitude oscillations, analyzes the stability of the axis of an astatic high-speed gyroscope universally mounted on a stationary support and subject to elastic, corrective, and damping moments. The second part contains a description and operational analysis of an indicating gyroscopic stabilizer. The instrument to be stabilized has a horizontal axis of rotation passing through its center of gravity and is mounted on a support which oscillates in a vertical plane. This apparatus is affected by frictional forces. The sensing element of the stabilizer consists of two rigidly interconnected

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SOV/124-57-7-7518

Some Problems of the Gyroscopic Stabilization of Instruments on Moving Supports

horizontal gyros - one free, the other damping. A formula for the amplitude of the forced oscillations of the apparatus is derived, which demonstrates that this type of construction considerably lowers the amplitude of oscillations of the instrument as compared to the amplitude of oscillations of the support. The formulas contain typographical errors.

V. N. Skimel'

Card 2/2

GURIN, A.I.

124-11-12419

Translation from: Referativnyy Zhurnal, Mekhanika, 1957, Nr 11, p 14 (USSR)

AUTHOR: Gurin, A. I.

TITLE: On the Stability of Stationary and Convergent Motions.  
(Ob ustoychivosti statsionarnykh i ustanovivshikhsya dvizheniy).

PERIODICAL: Uch. zap. Mosk. gor. ped. in-t, 1956, Vol 49, pp 69-97

ABSTRACT: In addition to a review of known scientific references, two problems in Mechanics are analyzed:

- 1) The stability of a gyroscopic monorail car. Solution by means of the customary method of the characteristic equations of motion.
- 2) The stability of the inertial motion of a rigid body having one fixed point about the minor diameter of its ellipse of inertia. The results obtained thereby are equivalent to Poinso't's results. The article does not contain the necessary indispensable references.

G. K. Pozharitskiy

Card 1/1

SOV/124-58-1-181

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 1, p 19 (USSR)

AUTHOR: Gurin, A. I.

TITLE: The Dynamic Balancing of Rotating Machine Parts (Dinamicheskaya balansirovka vrashchayushchikhsya chastey mashin)

PERIODICAL: Uch. zap. Mosk. gor. ped. in-ta, 1956, Vol 49, pp 99-111

ABSTRACT: The paper constitutes a methodical compendium on the balancing of machine rotors for students of pedagogical institutes engaged in a special physics lab course. The general principles of the balancing of an unbalanced rigid rotor are examined, and the general layout of a balancing machine is shown.

F. M. Dimentberg

Card 1/1

PHASE I BOOK EXPLOITATION

SOV/5499

Gurin, A. I.

Osnovy mekhaniki tel peremennoy massy i raketodinamiki; ch. I  
Uchebnoye posobiye (Principles of the Mechanics of Bodies With  
a Variable Mass and Rocket Dynamics; Pt. 1. Textbook). Moscow,  
1960. 225 p. Errata slip inserted. 1,000 copies printed.

Sponsoring Agency: Moskovskiy gorodskoy pedagogicheskiy institut  
imeni V. P. Potemkina.

Scientific Ed.: N. N. Nikitin.

PURPOSE : This textbook is intended for students of technical  
institutions of higher education. It may also be useful for  
self-instruction in theoretical mechanics.

COVERAGE: The book deals with the principles of mechanics of  
variable-mass bodies. In part it represents lectures given  
at the Moskovskiy gorodskoy pedagogicheskiy institut imeni  
V. P. Potemkina (Moscow City Pedagogical Institute imeni  
Card 1/6

Principles of the Mechanics (Cont.)

SOV/5499

V. P. Potemkin). Some data on the development of rocket dynamics are given. The author thanks Professors V. V. Dobronravov and I. A. Panichkin and Docent N. N. Nikitin. There are 33 references: 26 Soviet (including 4 translations), 4 English, 2 German, and 1 Rumanian.

TABLE OF CONTENTS:

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Introduction	5
Ch. I. Fundamentals of the Mechanics of Variable-Mass Bodies	9
1. Meshcherskiy's equation	13
2. Laws of the change of mass of a point	15
3. Motion of a rocket in interplanetary space	15
4. Physical meaning of Tsiolkovskiy's hypothesis on the uniformity of relative velocity of irradiated particles	27

Card 2/6>

USSR/Farm Animals. The Swine

Q-4

Abs Jour : Ref Zhur - Biol., No 11, 1958, No 50071

Author : Gurin A.I.

Inst : -

Title : Early Maturity of Swine and Their Assimilating of Mineral Substances.

Orig Pub : Vestn. s.-kh. nauku, 1957, No 6, 124-132

Abstract : Tests were performed with various groups of pure-bred large white sows and sows crossbred with boars of various breeds, such as Braith's breeds, Mangalica and Ukrainian steppe breeds, large black breeds, and Urzhum breeds. These tests were carried out during the time when the animals were fattened. They were started when the animals were 4 months old and were continued until the desired bacon, ham, and semilard stages were reached. Fracture strength of thigh bones was tested with the machine of Shopere. According to the indicators of bone strength it was established that

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GURIN, A.I., zootekhnik.

Year-round calving of cows. Nauka i pered.op.v sel'khoz. 7 no.7:21-22  
J1 '57. (MLRA 10:8)

(Calves)

GURIN, A. I.: *Master Agric Sci (disc) -- "Fattening of hybrid pigs on food scraps under the conditions of suburban farms". Moscow, 1959. 21 pp (Moscow Vet Acad of the Min Agric USSR), 200 copies (KL, No 10, 1959, 126)*

GURIN, A.I. (Moskva)

Stability of the motion of an unbalanced gyroscope placed on a rotating platform. Inzh.zhur. 5 no.2:338-341 '65.

(MIRA 18:4)

L 2785-66 EWT(d)/FSS-2/EEC(k)-2/EED-2/EWA(c) AST/EC

ACCESSION NR: AP5021522

UR/0258/65/005/004/0603/0607  
531.36

AUTHOR: Gurin, A. I. (Moscow)

2/  
B

TITLE: On the stability of gyroscopic and physical pendulums on a moving base

SOURCE: Inzhenernyy zhurnal, v. 5, no. 4, 1965, 603-607

TOPIC TAGS: gyroscopic pendulum, physical pendulum, gyroscopic pendulum stability, pendulum stability

ABSTRACT: The dynamic equations of motion for a gyroscopic pendulum (including the inertial effects of the Cardan supports), with its center of support moving along a sphere concentric with the earth sphere, are derived by the Lagrange method, and the stability criteria are established. Using the normal two moving rectangular coordinate systems, the total kinetic energy (including Cardan supports) and the potential energy function are evaluated, and the equations of motion are derived from the Lagrange equation in the form

$$\begin{aligned} & (A + A_1) \dot{p}_1 \cos \beta - (A + A_1) p_1 q_1 \sin \beta + C_1 r_1 \sin \beta + A_2 \dot{p}_2 + \\ & + (H_0 + C_1 r_1) q_1 \cos \beta + (C_2 - B) q_1 r_2 + (B_1 - C_2) r_1 \dot{\beta} - \\ & - m z_0 v r_2 \cos \beta - F z_0 \sin \alpha \cos \beta = 0, \\ & (A + B_1) \dot{q}_1 - [H_0 + (C_1 - A - A_1) r_1] p_1 + m z_0 v q_2 \sin \beta - \end{aligned}$$

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$$-Fz_0 \cos \alpha \sin \beta + mz_0 v \cos \beta = 0,$$

$$C \frac{d}{dt} (r_1 + \varphi) = 0,$$

where

$$H_0 = C (r_1 + \varphi) = \text{const.}$$

From the perturbed parameters, the Lyapunov functions are found in the form of linear combinations of the first integrals of the perturbed equations of motion, and the general sufficient conditions for stability with respect to all coordinates are established. These are simplified for the case of a balanced pendulum ( $z_0 = 0$ ) and for the case in which the Cardan support inertia effects are neglected. The results of the latter simplification agree with the results of D. M. Klinov (Ob ustoychivosti dvizheniya nevozmushchayemogo fizicheskogo mayatnika. Prikl. matem. i mekhan., t. XXVIII, vyp. 2, 1964). Orig. art. has: 1 figure and 17 formulas.

ASSOCIATION: none

SUBMITTED: 29Dec64

ENCL: 00

SUB CODE: ME, NG

NO REF SOV: 007

OTHER: 000

Card 2/2 *hd*

L 2944-66 EWT(d)/FSS-2/EEC(k)-2/EED-2/EWA(c) BC  
ACCESSION NR: AP5021445 UR/0146/65/008/004/0091/0096  
531.383

37  
35  
03

AUTHOR: Gurin, A. I. 44

TITLE: Stability of motion of a gyroscope mounted on a movable base

SOURCE: IVUZ. Priborostroyeniye, v. 8, no. 4, 1965, 91-96

TOPIC TAGS: gyroscope motion equation, motion stability

ABSTRACT: The author considers the motion of an unbalanced symmetric gyroscope in a Cardan suspension with spring-type limiters for the horizontal axle of the outside frame. It is assumed that the gyroscope is located on a movable platform which rotates with a constant angular velocity about the stationary vertical axis which passes through the bearing point of the gyroscope. The equation of motion for the gyroscope is given, taking consideration of the kinetic energy of the system and of the forced functions for gravity and for the elastic forces of the limiter springs. The stability of time-independent motion of the gyroscope is considered. The stability conditions are derived. The author solves the problem of the stability of

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L 2944-66

ACCESSION NR: AP5021445

motion of a gyroscopic pendulum in which the center of the Cardan suspension moves along the surface of the earth at a constant linear velocity. Orig. art. has: 1 figure, 24 formulas. 2

ASSOCIATION: Moskovskiy ordena Lenina aviatsionnyy institut im. S. Ordzhonikidze (Moscow "Order of Lenin" Aviation Institute)

SUBMITTED: 13Nov64

ENCL: 00

SUB CODE: ME, MA

NO REF SOV: 005

OTHER: 000

OC 2/2  
Card 2/2

L 15290-66 EWT(d)/ESS-2/EWT(1)/EEC(k)-2 BC  
ACC NR: AP6002624 SOURCE CODE: UR/0258/65/005/006/1098/1101

AUTHOR: Gurin, A. I. (Moscow)

ORG: none

TITLE: Stability of the motion of a gyroscope in a Cardan suspension with spring-loaded stops and damper located in a Newtonian central force field

SOURCE: Inzhenernyy zhurnal, v. 5, no. 6, 1965, 1098-1101  
21,44,55

TOPIC TAGS: gyroscope, gyroscope motion equation, motion stability, gyroscope suspension

ABSTRACT: The stability of the motion of a gyroscope in a Cardan suspension with spring-loaded stops and damper located in a Newtonian central force field is considered. The attracting center is assumed to lie on the line passing through the fixed axis of the outer frame at a distance  $R$  (much larger than the dimensions of the gyroscope system) from the fixed point of the gyroscope. The position of the gyroscope is determined by the three Euler angles:  $\psi$  - the precession angle,  $\theta$  - the nutation angle, and  $\varphi$  - the inherent rotation angle of the gyroscope, relative to the moving xyz coordinate system. The  $x$  and  $z$  axes are directed along the axis of the inner frame and along the gyroscope axis of symmetry such that the  $x$  axis always lies in the plane perpendicular to the fixed axis of the outer frame. The  $x$ ,  $y$ , and  $z$  axes are taken as the principal axes of both the gyroscope and the inner frame, whose

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L 1529C-66

ACC NR: AP6002624

moments of inertia are respectively  $A, B, C$  and  $A_1, B_1, C_1$  relative to the  $x, y, z$  axes. The moments of inertia of the outer frame are  $A_2, B_2,$  and  $C_2$  relative to the  $x$  axis, to the axis perpendicular to the plane of the outer frame, and to the fixed axis of rotation of the outer frame. After the force functions of the central force field and the elastic forces of the springs acting on the gyroscope in the Cardan suspension are determined, the equations of motion for the system are written. The particular solution of these equations corresponding to the steady motion of the gyroscope is

$$\theta = \frac{\pi}{2}, \psi = \frac{\pi}{2}, \dot{\theta} = 0, \dot{\psi} = 0, \varphi + \psi \cos \theta = \omega_0 t, \dot{\varphi} = \dot{\psi} = \text{const.} \quad (\text{for } \theta_0 = \frac{\pi}{2}, \psi_0 = \frac{\pi}{2}),$$

where  $\theta_0$  and  $\psi_0$  are the constant values of the corresponding angles for which the elastic forces are absent. It is shown that sufficient conditions for stability of this motion are

$$z_1 < 0, P^2 z_1 z_2 - \mu_2^2 > 0,$$

where

$$z_1 = z_0 + \frac{3g_0}{PR} (C + C_1 - A - B_1) - \frac{\mu_1}{P} = z_0' - \frac{\mu_1}{P}; P = Mg_0,$$

$$z_2 = z_0 + \frac{3g_0}{PR} (B_2 + C + C_1 - A - A_1 - A_2) - \frac{\mu_2}{P} = z_0'' - \frac{\mu_2}{P},$$

$g_0$  is the gravitational acceleration at the distance  $R$  from the attracting center,  $M$  is the mass of the gyroscope and inner frame, and  $\mu_1, \mu_2, \mu_3$  are constant coefficients satisfying the conditions  $\mu_1 > 0, \mu_1 \mu_2 - \mu_3^2 > 0,$

Card 2/3

L 15290-66

ACC NR: AP6002624

Consideration of a damper creating a braking torque about the axis of rotation of the outer frame leads to similar results. Orig. art. has: 21 equations.

SUB CODE: 17, 20/ SUBM DATE: 28Jun65/ ORIG REF: 003

Card 3/3

*mjs*

L 51456-65 EEO-2/EWT(d)/FSS-2/EEC(k)-2/ENG(v)/EED-2/EWA(c) Fr-4/  
Po-4/Po-5/Pq-4/Pg-4/PK-4/Pl-4 BC

ACCESSION NR: AP5011324

UR/0258/65/005/002/0138/0341  
531.383

43  
47  
B

AUTHOR: Gurin, A. I. (Moscow)

TITLE: The stability of motion of an unbalanced gyro mounted on a rotating base

SOURCE: Inzhenernyy zhurnal, v. 5, no. 2, 1965, 338-341

TOPIC TAGS: gyro motion stability, unbalanced gyro, rotating base, damping, gyro, spring arrester, horizontal housing frame, Cardan suspension, gyro motion equation, stability condition analysis

ABSTRACT: Expanding a previous report, the author analyzes the stability of motion of an unbalanced symmetrical gyro with a Cardan joint suspension, spring arresters, a damper and a horizontal axis of the housing frame, mounted on a platform revolving around a fixed vertical axis. Compiling the Lagrange function  $L=T+U$  ( $T$  = system's kinetic energy,  $U$  = force function), the author obtains an equation describing the gyro's motion. An analysis of the stability of a gyro's steady-state motion indicates that stability conditions for a fixed-base gyro do not embrace moments of inertia of the rotor or the suspension frame. For a gyro mounted on a permanently rotating base, they embrace all axes.

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L 51456-65  
ACCESSION NR: AP5011324

ments of inertia of the rotor and frame. A system of inequalities is evolved to describe conditions of asymptotic stability of a damping gyro in relation to several variables. "In conclusion, the author expresses sincere gratitude to V.V. Rummyantsev for reviewing the manuscript and valuable remarks." Orig. art, has: 1 figure and 17 formulas.

ASSOCIATION: None

SUBMITTED: 15Jun64

ENCL: 00

SUB CODE: NG, ME

NO REF SOV: 002

OTHER: 000

*ME*  
Card 2/2

GURIN, A. P.

USSR/ Engineering - Boat assemblies

Card 1/1      Pub. 128 - 12/31

Authors      : Gurin, A. P., Engineer

Title        : Block assembly of tug boats

Periodical   : Vest. mash. 35/5, 33-36, May 1955

Abstract     : A new technological method - block method - introduced in 1952 for the assembly of tug boats is described. The economical gains offered by this method are listed. Drawing; illustrations; table.

Institution   : .....

Submitted    : .....

GURIN, A.S.; DROZDOV, L.V.; MOGILEVSKIY, M.M.; SHAROGORODSKIY, S.G.,  
inzh.-podpolkovnik, red.; ZUDINA, M.P., tekhn. red.

[Telephony] Telefonija. Moskva, Voenizdat, 1963. 397 p.  
(MIRA 16:10)

(Telephone)

GURIN, A.V.

TOROPOV, Aleksandr Sergeyevich, kandidat tekhnicheskikh nauk; VOLCHANSKIY, P.A., nauchnyy redaktor; GURIN, A.V., redaktor; MATYSEVICH, N.L., tekhnicheskiy redaktor.

[Reinforcement work] Armaturnye raboty. Izd.2-oe, perer. i dop. Moskva, Vses.uchebno-pedagog.izd-vo Trudreservisdat, 1956. 247 p. (MIRA 10:5)

(Reinforced concrete constructions)

IZHIKOV, Aleksandr Andreyevich, inzhener; SIDOV, Aleksandr Pavlovich,  
inzhener; GURIN, A.V., redaktor; KUZ'MIN, D.G., tekhnicheskii redaktor

[Bricklaying and facing work] Kamennye i oblitsovochnye raboty.  
Moskva, Vses. uchebno-pedagog. izd-vo Trudrezervizdat, 1956. 262 p.  
(Bricklaying) (MLRA 9:12)

GURIN, A.V

VONOB'YEV, Vasilii Aleksandrovich, prof. doktor tekhn.nauk; KOLOKOL'NIKOV,  
Vadim Sergeyeovich, dots., kand.tekhn.nauk; SHCHEPETOV, A.M.,  
nauchnyy red.; GURIN, A.V., red.; RAKOV, S.I., tekhn.red.

[Textbook on materials for builders] Materialovedenie dlia  
stroitelei. Moskva, Vses. ucheb.-pedagog. izd-vo Trudrezervizdat,  
1957. 278 p. (MIRA 11:4)  
(Building materials)

00710, 11 v  
VOLCHANSKIY, Rostislav Andreyevich, kandidat tekhnicheskikh nauk; BESSER, Ya.R., nauchnyy redaktor; GURIN, A.V., redaktor; MATUSEVICH, N.L., tekhnicheskiy redaktor

[Manufacturing precast reinforced concrete elements] Izgotovlenie sbornykh zhelezobetonnykh konstruksii i detalei. Moskva, Vses. uchebno-pedagog. izd-vo Trudreservizdat, 1957. 291 p. (MIRA 10:11)  
(Precast concrete)

GURIN, A.V.

NARTSISSOV, Vladimir Semenovich; ANOKHIN, G.A., nauchnyy red.; GURIN, A.V.,  
red.; RAKOV, S.I., tekhn.red.

[Carpentry and joiner's work in collective farm building] Plot-  
nichnye i stollarnye raboty v kolhoznom stroitel'stve. Moskva,  
Vses.uchebno-pedagog.izd-vo "Tudrezervizdat," 1957. 279 p.  
(MIRA 10:12)

(Carpentry)

GURIN, A. V.

KUKSOV, Vasilii Alekseyevich; ORLOV, D.M., nauchnyy redaktor; GURIN, A.V.,  
redaktor; OSTRIROV, M.S., tehnichekiy redaktor

[General technology of woodworking; materials] Obshchaya tekhnologiya  
derevobrabotki; osnovy materialovedeniya. Moskva, Vses. ucheb.-  
pedagog.izd-vo Trudrezervizdat, 1957. 291 p. (MIRA 10:10)  
(Woodwork) (Wood)

KUKSOV, Vasilii Alekseyevich; ORLOV, D.M., nauchnyy red.; GURIN, A.V., red.;  
VLADIMIROVICH, A.G., red.; SAMUYLOVA, A.G., tekhn. red.

[Joinery] Stoliarnoe delo. Izd.2., perer. i ispr. Moskva, Vses.  
uchebno-pedagog. izd-vo Trudreservizdat, 1958. 522 p.  
(Joinery) (MIRA 11:10)

AVETIKOV, Aram Leonovich; SLUTSKIY, S.B., nauchnyy red.; GURIN, A.V.,  
red.; TOKER, A.M., tekhn.red.

[Filling materials and fabrics for upholstered furniture]  
Miaokie elementy mebeli. Moskva, Vses.uchebno-pedagog.izd-vo  
Proftekhizdat, 1960. 121 p. (MIRA 13:12)  
(Upholstery)

KUKSOV, Vasilii Alekseyevich; GURIN, A.V., red.; BAKOV, S.I., tekhnred.

[Training in carpentry] Prepodavanie stoliarnogo dela. Izd.2.,  
ispr. i dop. Moskva, Vses.uchebno-pedagog.izd-vo Proftekhizdat,  
1960. 319 p. (MIRA 13:5)  
(Carpentry--Vocational guidance)

OSTAPENKO, Nikolay Nikolayevich; KIRILLOV, Nikolay Pavlovich;  
DANILEVSKIY, Vladimir Viktorovich; BEYZEL'MAN, R.D., nauchnyy  
red.; GURIN, A.V., red.; KLIMOVICH, Yu.G., red.; PERSON, M.N.,  
tekh.n.red.

[General technology of metals] Obshchaya tekhnologiya metallov.  
Izd.3., ispr. i dop. Moskva, Vses.uchebno-pedagog.izd-vo Prof-  
tekhizdat, 1960. 367 p. (MIRA 14:2)  
(Metals) (Metalwork)

YELKIN, Nikolay Alekseyevich; TOSHCHAKOV, Lev Nikolayevich;  
TUDAROVSKIY, V.P., otv. red.; GURIN, A.V., red.;  
ROMANOVA, S.F., tekhn. red.

[Rectification using transistor devices] Detektirovanie  
na poluprovodnikovyykh priborakh. Moskva, Sviaz'izdat,  
1962. 55 p. (MIRA 16:4)  
(Radio detectors) (Transistor circuits)  
(Diodes)

BLOKHIN, A.S.; BORODZYUK, G.G.; LESHCHINSKIY, A.A.; OKSMAN, A.K.;  
KOSMINSKIY, O.F.; MANUSHKIN, A.Ye.; MILEVSKIY, Yu.S.;  
DRIATSKIY, N.M.; VASIL'YEV, V.V.; L'VOVICH, A.A.;  
ORLEYEVSKIY, M.S.; MOROZ, I.A.; OKSIAN, A.K.; KNEL', G.S.;  
SOROKIN, M.F.; BUTLITSKIY, I.M.; VASIL'YEV, L.N. [deceased];  
GINTS, Yu.R.; VASIL'YEV, G.K.; LUGOVSKOY, N.Ye.; KIRILLOV,  
Ye.V.; STRUYKINA, N.S.; LEVINOV, K.G.; BLOKHIN, A.S., *otv.*  
*red.*; GURIN, A.V., *red.*; SLUTSKIN, A.A., *tekh. red.*

[K-1920-frequency telephone system] Sistema vysokochastotnogo  
telefonirovaniya K-1920; informatsionnyi sbornik. [By] A.S. Blokhin  
i dr. Moskva, Sviaz'izdat, 1962. 319 p. (MIRA 16:4)  
(Telephone)

GURIN, A.S.; KUZ'MIN, A.A.; DROZDOV, L.V.; MOGILEVSKIY, M.M.; GOLOVESH-  
KIN, V.G. [deceased]; FROLOV, A.A.; GNUTIKOV, P.I., podpolkovnik;  
SOLOMONIK, R.L., tekhnicheskij redaktor.

[Telephone] Telefonija. Moskva, Voennoe izd-vo Ministerstva obo-  
rony SSSR, 1954. 583 p. [Microfilm] (MLRA 7:11)  
(Telephone)

MATVIYENKO, A.; GURIN, P.

Improve the design of drilling machines. Bezop.trudn v prom.  
2 no.3:38 Mr '58. (MIRA 11:3)

1. Glavnyy inzhener tresta Ukrvzryvprom (for Matviyenko). 2.Glavnyy  
mekhanik tresta Ukrvzryvprom (for Gurin).  
(Boring machinery)

GURIN, Fedor Vasil'yevich, kand. tekhn. nauk; ANAN'YEV, Nikolay  
Vasil'yevich; SEMOKHOTSKAYA, E.A., ved. red.

[Nonserial ground-type conveyors used in the instrument  
and machinery industries] Nesteriinye napol'nye konveiry,  
primeniayemye priborostroitel'noi i mashinostroitel'noi  
promyshlennostiami. Moskva, Gos.nauchn.-issl. in-t  
nauchn. i tekhn. informatsii, 1964. 39 p. (Mekhanizatsiia  
i avtomatizatsiia tekhnologicheskikh protsessov; materialy  
zavodskogo opyta, no.6) (MIRA 17:12)

GUR II, Fedor Vasil'yevich, kand. tekhn. nauk; OSTROVSKAYA, I.V.,  
ved. red.

[Feed mechanisms for semiautomatic machines and machine-  
tool units] Zagruzochnye ustroistva k poluavtomatam i agre-  
gatnym stankam. Moskva, [GOSINTI] 1964. 40 p. (Mekhani-  
zatsiia i avtomatizatsiia tekhnologicheskikh protsessov;  
materialy zavodskogo opyta, no.2) (MIRA 17:11)

GURIN, Fedor Vasil'yevich, kand. tekhn. nauk; OSTROVSKAYA, N.V.,  
ved. red.

[Feed mechanisms for grinding machines] Zagruzochnyye  
ustroystva k shlifoval'nyim stankam. Moskva, GOSINTI, 1964.  
44 p. (Mekhanizatsiya i avtomatizatsiya tekhnologicheskikh  
protsessov; materialy zavodskogo opyta, no.1)

(MIRA 17:9)

GURIN, Fodor Vasil'yevich, kand. tekhn. nauk; OSTROVSKAYA, N.V.,  
ved. red.

[Feed mechanisms for universal milling, screw- and gear-cutting machines] Zagruzochnye ustroistva k universal'nym frezernym, rez'bo- i zuboobrabatyvaiushchim stankam. Moskva, [GOSINTI] 1964. 38 p. (Mekhanizatsiia i avtomatizatsiia tekhnologicheskikh protsessov; materialy zavodskogo opyta, no.3) (MIRA 17:11)

GURIN, Fedor Vasil'yevich, kand. tekhn. nauk; OSTROVSKAYA, N.V.,  
ved. red.

[Feed mechanisms for lathes, drilling and broaching  
machines; materials on plant practice] Zagruzochnye  
ustroistva k tokarnym, sverlil'nym i protiazhnym stankam;  
materialy zavodskogo opyta. Moskva, Gos. nauchn.-issl.  
in-t nauchh. i tekhn. informatsii, 1964. 30 p. (Mekhani-  
zatsiia i avtomatizatsiia tekhnologicheskikh protsessov,  
no.4) (MIRA 17:12)

GURIN, Fedor Vasil'yevich, kand. tekhn. nauk; ANAN'YEV, Nikolay  
~~Vasil'yevich; SAMOKHOTSKAYA, E.A., ved. red.~~

[Overhead freight-carrying and freight-pushing conveyors  
used in the machinery industry] Podvesnye gruzonesushchie  
i gruzotolkaiushchie konveiry v mashinostroeni. Moskva,  
Gos. nauchno-issl. in-t nauchn. i tekhn. informatsii,  
1964. 37 p. (Mekhanizatsiia i avtomatizatsiia tekhnolo-  
gicheskikh protsessov; materialy zavodskogo opyta, no.10)  
(MIRA 18:3)

MASLOV, D.P., kand. tekhn. nauk, dots.; GURIN, F.V., kand. tekhn.  
nauk, dots.; KUZNETSOV, A.M., inzh.; VASIL'YEV, A.M., inzh.;  
LYKOV, A.G., inzh., retsenzent; PINSKER, A.L., inzh., red.;  
LESNICHENKO, I.I., red.; MODEL', B.I., tekhn. red.

[Technology in the motor-vehicle and tractor industry]Tehnologia  
avtotraktorostroenia.[By]D.P.Maslov i dr. Moskva, Mashgiz, 1962.  
432 p. (MIRA 16:2)

(Motor vehicles--Design and construction)  
(Tractors--Design and construction)

*С. С. 11, 1, 11*

**AUTHOR:** Gurin, I.A., Chief of Cutting Laboratory 130-8-15/20

**TITLE:** Improving the Operation of Tube Threading Dies (Uluchsheniye raboty trubonareznykh patronov)

**PERIODICAL:** Metallurg, 1957, No.8, pp. 35 - 36 (USSR).

**ABSTRACT:** The author gives a brief account of thread-cutting on tubes for the oil industry. The high-quality thread is produced with a special die (types TH4K, TH6K, TH8K, TH13K and TH16K) in a special machine tool in a single operation. Dies produced by the MIZ Works were found to clog frequently and were improved by providing openings round the circumference (Fig.2). An improvement in the arrangement for preventing excessive penetration of the coolant inside the tube was also effected (Fig.4). These measures enabled the capacity of a group of six machines to be increased by 150-160 tons per month. There are 4 figures.

**ASSOCIATION:** Works im. K Libknekht (Zavod imeni K. Libknekhta)

**AVAILABLE:** Library of Congress

Card 1/1

*Gurin, I. A.*

**AUTHOR:** Gurin, I.A.

130-12-19/24

**TITLE:** Thread Cutting on Tubes with Round Tapping Dies (Harezka rez'by na trubakh kruglymi plashkami)

**PERIODICAL:** Metallurg, 1957, No.12, p.31 (USSR).

**ABSTRACT:** The author outlines his investigation of the quality of round thread-tapping dies as used for threading the ends of tubes (6-13 inches in diameter) for the oil industry. Type TH8K and TH13K chucks are used. In the investigation, annual figures for the number of ends threaded by one set of dies were used, and these are tabulated by the author for 1949-1955. The table gives comparative data for 8 and 10-12 inch tubing, including die cost per end threaded. The table shows that 1955 die-set life was three times the 1949 life for 8 and twice the 1949 life for 10-12 inch tubes, the corresponding factors for the number of ends threaded between die-sharpening being 6.7 and 5.2. Soviet-made dies are said to have proved superior to imported ones. The author mentions some defects of die design.

**ASSOCIATION:** The imeni K. Libknekht Works (Zavod imeni K.Libknekhta)

**AVAILABLE:** Library of Congress  
Card 1/1

СИБИР, И.И.

"Pathoanatomical Changes in the Peripheral Nerves Distant From the Area of Their Trauma by Gunfire." Cand Med Sci, Kuybyshev State Medical Inst, Kuybyshev, 1955. (IL, No 14, Apr '55)

SC: Ser.No. 704, 2 Nov 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (16).

GRINBERG, Ya.M., dotsent; GURIN, I.L.

Infarcts perforating the ventricular septum. Klin. med. 32 no.10:  
77-79 0 '54. (MLRA 8:1)

1. Iz fakul'tetskoy terapevticheskoy kliniki (zav. prof. N.Ye. Kavetskiy) i kafedry patologicheskoy anatomii (zav. prof. N.F. Shlyapnikov) Kuybyshevskogo meditsinskogo instituta.

(MYOCARDIAL INFARCT, complications,  
interventric. septum rupt.)

(HEART,  
interventric. septum rupt. in myocardial infarct)

S

USSR / Human and Animal Morphology (Normal and Pathological).  
Histochemistry:

Abs Jour : Ref Zhur - Biologiya, No 1, 1959, No. 2910

Author : Gurin, I. L.  
Inst : Kuybyshev Society of Anatomicopathologists with Section  
of Pathophysiologicals

Title : A Histochemical Study of Sulfhydrylic Substances in  
Atherosclerosis and Hypertension

Orig Pub : Sb. nauchn. rabot Kuybyshevsk. o-va patologoanatomov  
s sektsiyey patofiziol. Kuybyshev, 1957, 112-118

Abstract : Thiolic substances were studied histochemically in  
the organs of 27 persons, 37 to 84 years of age, who  
died of hypertension and atherosclerosis of various  
types. The author concludes on the mosaicity in the  
distribution of sulfhydrylic substances among the  
various organs, their structural units and among

Card 1/2

Human and Animal Morphology (Normal and Pathological).  
Histochemistry.

Abs Jour : Ref Zhur - Biologiya, No 1, 1959, No. 2910

S

parenchymatous elements and blood. The observations made, as well as the literary data, show that the results of the histochemical reaction, which express the histo- and cyto-topography of thiolic substances may indirectly indicate the quantitative change of their content.

Card 2/2

GERMANOV, V.A.; GURIN, I.L.; PIKSANOV, O.N.

Case of eosinophilia in a patient with reticulosis. Probl. gemat.  
i perel. krovi 5 no. 10:55-57 '60. (MIRA 14:1)  
(RETICULO-~~ENDOTHELIAL~~ SYSTEM--DISEASES)  
(EOSINOPHILIAS)

GURIN, I.L.; ANIKANDROV, B.V.

Endothelioma of the thyroid gland. Probl. endok. i gorm. 11  
no.4:57-59 J1-Ag '65. (MIRA 18:11)

1. Kafedra patologicheskoy anatomii (zav.- prof. N.F. Shlyapnikov)  
i kafedra fakul'tetskoy khirurgii (zav.- prof. G.L. Ratner)  
Kuybyshevskogo meditsinskogo instituta.

GURIN, I.S.

Device for storing and dispensing rubber goods. Apt. delo 12  
no.6:59-60 N-D '63. (MIRA 17:2)

GURIN, Jozsef, dr.; LENART, Gyorgy, dr.

Evaluation of the Mayo operation in cases of hallux valgus.  
Magy. sebesz. 16 no.6:391-395 D '63.

1. A Budapesti Orvostudományi Egyetem Orthopaédiai Klinikájának  
közleménye Igazgató: Glauber Andor dr. egyet. tanár.  
(FOOT DISEASES) (HALLUX) (ARTHROPLASTY)  
(POSTOPERATIVE COMPLICATIONS)

HUNGARY

ASZODI, Karoly, Dr, HORVATH, Ferenc, Dr, GURIN, Jozsef, Dr; Medical University of Budapest, Orthopaedic Clinic (director: GLAUBER, Andor, Dr, professor) (Budapesti Orvostudományi Egyetem, Orthopaed Klinika).

"Chronic Osteomyelitis Cases Resembling the X-Ray Morphology of a Tumor."

Budapest, Magyar Radiologia, Vol XVIII, No 2, Apr 66, pages 86-93.

Abstract: [Authors' English summary modified] The osteomyelitic patient material of the Clinic is analyzed. Diagnostic difficulties are, in general, encountered in cases of the myelogenous group of chronic osteomyelitis. Seven cases are described which resembled in part osteogenous or medullogenous sarcoma and in part a cyst. The pathomechanism of the periosteal reaction and spicule formation, so important in bone tumor diagnostics, as well as of the moth-hole structure of bone is discussed. The decisive importance of a histological examination in these cases is stressed. 7 Eastern European, 12 Western references.

1/1

GURIN, L.P.

Shaping the occlusal surfaces of teeth in removable prostheses  
made of quick-hardening plastics. Stomatologiya 38 no.3:68-  
70 My-Je '59. (MIRA 12:8)

1. Iz kafedry ortopedicheskoy stomatologii (zav. - dotsent  
M.R.Marey) Khar'kovskogo meditsinskogo stomatologicheskogo  
instituta (dir. - dotsent G.S.Voronyanskiy), eksperimental'-  
noy laboratorii (zav. V.D.Bezuglyy, nauchnyy konsul'tant -  
dotsent A.E.Rofe) Khar'kovskogo zavoda zubovrachebnykh materialov  
(dir. Ye.G.Aronov).

(DENTAL PROSTHESIS)

GURIN, L.P. (Khar'kov)

Increase of the masticatory effectiveness of removable partial  
lamellar prostheses. Probl.stom. 6:297-303 '62.

(DENTAL PROSTHES)

(MASTICATION)

(MIRA 16:3)

MOROZOVA, Ye.M., dotsent; SLUTSKAYA, M.M., dotsent; GURIN, L.P., dotsent;  
ALKHAZOV, I.I., assistent

Organization and development of the Stomatological Faculty  
of the Stavropol Medical Institute. Uch. zap. Stavr. gos.  
med. inst. 12:430-431 '63. (MIRA 17:9)

GURIN, L.P. dotsent

Formation of occlusion surfaces of the teeth in removable  
bridges made from ACT-1-A plastics. Uch. zap. Stavr. gos.  
med. inst. 12:444-446 '63. (MIRA 17:9)

1. Kafedra ortopedicheskoy stomatologii (zav. dotsent L.P.  
Gurin) Stavropol'skogo gosudarstvennogo meditsinskogo instituta.

GUYTON, L.S.

When the  $\epsilon$  is small, the function  $f(x)$  is approximately equal to  $f(0)$ . In this case, the function  $f(x)$  is said to be continuous at  $x=0$ . If  $f(x)$  is not continuous at  $x=0$ , then  $f(x)$  is said to be discontinuous at  $x=0$ . The function  $f(x)$  is said to be continuous on the interval  $[a, b]$  if it is continuous at every point in the interval. If  $f(x)$  is not continuous on the interval  $[a, b]$ , then  $f(x)$  is said to be discontinuous on the interval. The function  $f(x)$  is said to be continuous at  $x=a$  if  $\lim_{x \rightarrow a} f(x) = f(a)$ . If  $\lim_{x \rightarrow a} f(x) \neq f(a)$ , then  $f(x)$  is said to be discontinuous at  $x=a$ . The function  $f(x)$  is said to be continuous on the interval  $(a, b)$  if it is continuous at every point in the interval. If  $f(x)$  is not continuous on the interval  $(a, b)$ , then  $f(x)$  is said to be discontinuous on the interval. The function  $f(x)$  is said to be continuous at  $x=a$  if  $\lim_{x \rightarrow a} f(x) = f(a)$ . If  $\lim_{x \rightarrow a} f(x) \neq f(a)$ , then  $f(x)$  is said to be discontinuous at  $x=a$ . The function  $f(x)$  is said to be continuous on the interval  $[a, b]$  if it is continuous at every point in the interval. If  $f(x)$  is not continuous on the interval  $[a, b]$ , then  $f(x)$  is said to be discontinuous on the interval.

BURIN, G.S.

00533

Gurin, I. On the permutability of averaging and trans-  
forming. *Uchenye Zapiski Kazanskogo Universiteta* 47:135

The author considers a given function  $y = f(x_1, \dots, x_n)$  a  
set of linear transformations

(\*)  $\tilde{x}_i = U(x_1, \dots, x_n), w_i(t), \tilde{x}_i = w_i(x_1, \dots, x_n)$ ,  
with suitable assumptions concerning differentiability and  
nonvanishing of Jacobians. He also defines an averaging  
process for sets  $(x_1, \dots, x_n), t_j = 1, \dots, N$  and values  $t_j$   
satisfying  $\sum_{j=1}^N t_j = 1$ , by

$$f(x_{1t_1}, \dots, x_{nt_1}) = \sum_{j=1}^N t_j f(x_{1t_j}, \dots, x_{nt_j})$$

where the  $x_{it}$  are fixed constants and the subscript  $t$  is  
used to denote the mean. It is shown that the averaging  
process commutes with the transformation  $f(x_{1t}, \dots, x_{nt})$   
exists a function  $\tilde{y}(x_{1t}, \dots, x_{nt})$  and thus  $f(x_{1t}, \dots, x_{nt})$   
 $\tilde{y}_1 = C\tilde{x}_1 + D, \tilde{w}_1 = w_1$ , where  $A, B, C, D$  are constants  
E. F. Beckenbach (Los Angeles, Calif.)

SPW

Source: Mathematical Reviews, Vol 13 No. 10

ACC NR: AP6033938

SOURCE CODE: UR/0280/66/000/004/0045/0055

AUTHOR: Likhterov, Ya. M. (Moscow); Gurin, L. S. (Moscow)

ORG: none

TITLE: Probability of segment overlap in a system of random segments

SOURCE: AN SSSR. Izvestiya. Tekhnicheskaya kibernetika, no. 4, 1966, 45-55

TOPIC TAGS: probability, detection probability, Poisson distribution, set theory, atmospheric cloud, cloud cover

ABSTRACT: The probability of overlapping a nonrandom line segment by a system of random segments is considered. The solution of this problem is applied to the calculation of the probability of object detection in clouds. The problems of overlapping may be different in terms of the properties of the random segments system, the meaning of the "overlapping" concept, and the properties of overlapping. The paper deals with one such problem. The origins of the segments form a Poisson set of points, the length of which are in agreement with a given arbitrary distribution. The properties of overlapping are defined by the probability that the conditions constituting overlapping are fulfilled. The mathematical techniques developed for the solution of this problem allow for generalization toward other definitions and other properties of the overlapping. The visual observation of above-ground and above-water objects remains, despite

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ACC NR: AP6033938

the availability of various technical aids, one of the main means for detection and recognition. The observation is always accompanied by the presence of one or another disturbance. With respect to the majority of factors causing disturbances in technical aids, the visual observation is disturbance-proof. There exist, however, factors which generate disturbances of visual observation. Such factors are fog, cloud cover, and various types of camouflage. The solution of the problem of overlapping is applied to the construction of a mathematical model of visual object observation under conditions of cloud cover. More precisely, a model which is designed for computation of detection probability of an aircraft in the presence of clouds. It is assumed that in the absence of clouds the probability of such detection equals one. Orig. art. has: 51 formulas.

SUB CODE: 12/      SUBM DATE: 17Feb66

Card 2/2

ACC NR: AP6028535

SOURCE CODE: UR/0280/66/000/003/0038/0045

AUTHOR: Gurin, L. S. (Moscow)

ORG: none

TITLE: Random search in the presence of noise

SOURCE: AN SSSR. Izvestiya. Tekhnicheskaya kibernetika, no. 3, 1966, 38-45

TOPIC TAGS: random process, optimal control, random noise signal, circuit design

ABSTRACT: In this article an analysis is made of one of the possible approaches to the solution of a problem involving the location of the global extremum of a function in a noise environment in the specific formulation of this problem as presented by D. B. Yudin (P. Izv. AN SSSR, Tekhnicheskaya kibernetika, 1966, No. 1). A method, originally proposed by I. Matyash (Avtomatika i telemekhanika, 1965, vol. XXVI, No. 2), is generalized to apply to a noise situation. A method is advanced for the optimization of multi-extremal functions with superposed additive noise. Only the convergence of the process is studied. Further investigation is recommended with respect to the optimal (in one sense or another) organization of this process, as well as the possible use of self-instruction techniques for this purpose. Orig. art. has: 32 formulas.

SUB CODE: 09,17/ SUBM DATE: 21Mar66/ ORIG REF: 002

Card 1/1

16(1)

AUTHOR: Gurin, L.S. (Moscow)

SOV/39-47-2-5/6

TITLE: On the Question Concerning the Interchangeability of Averaging and Reduction (K voprosu o perestanovohnosti osredneniya i privedeniya)

PERIODICAL: Matematicheskiy sbornik, 1959, Vol 47, Nr 2, pp 237-254 (USSR)

ABSTRACT: Let a random variable  $\xi$  with a certain, generally unknown law of distribution and a monotonely increasing function  $f(x)$  be given. The approximative value of the mathematical expectation of  $f(k\xi)$ , where  $k$  is given, is to be determined from the known mathematical expectation of  $f(\xi)$ . Let  $f(x)$  be defined on  $[0, a]$ ,  $a > 1$ ,  $f(0) = 0$ ,  $f(1) = 1$ ; furthermore let  $x_i$  ( $i = 1, 2, \dots, n$ ) be points of  $[0, 1]$  and

$t_i$  nonnegative numbers,  $\sum_{i=1}^n t_i = 1$ . The mean value  $\bar{x}$  is defined by

$$f(\bar{x}) = \sum_{i=1}^n t_i f(x_i). \text{ Let}$$

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On the Question Concerning the Interchangeability  
of Averaging and Reduction

SOV/39-47-2-5/6

$$\Delta_k^f = \sup \left| f(k\bar{x}) - \sum_{i=1}^n t_i f(kx_i) \right|$$

Theorem:  $\Delta_k^f$  vanishes for all  $k$  only if  $f(x) = x^n$ , where  $n$  is an arbitrary positive number.

Theorem: If  $f(x)$  is continuously differentiable on  $[0, a]$  and if there exist constants  $c$  and  $\delta$  with the property

$$\left| \frac{xf'(x)}{f(x)} - c \right| \leq \delta \text{ then it holds } \Delta^f \leq 2\delta,$$

where  $\Delta^f$  is the right derivative of  $\Delta_k^f$  with respect to  $k$  in the point  $k = 1$ .

There is 1 Soviet reference.

SUBMITTED: May 9, 1956

Card 2/2

GURIN, L.S. (Moskva)

Optimization in stochastic models. Zhur. vych. mat. i mat.  
fiz. 4 no.2:367-370 Mr.-Ap '64. (MIRA 17:7)

GURIN, L.S. (Moskva)

Problem of optimization in stochastic models. Zhurn. vych. mat.  
i mat. fiz. 4 no.6:1134-1137 N-D 1974.

(MIRA 18:2)

L 8201-66 ENT(d)/ENP(v)/ENP(k)/ENP(h)/ENP(l)  
ACC NR: AP5023114 SOURCE CODE: UR/0103/65/026/009/1546/1552

AUTHOR: Gurin, L. S. (Moscow, Riga); Rastrigin, L. A. (Moscow, Riga)

ORG: none

TITLE: Convergence of the random search method when noise is involved

SOURCE: Avtmatika i telemekhanika, v. 26, no. 9, 1965, 1546-1552

TOPIC TAGS: automatic control, automatic control design, automatic control system, automatic control theory

ABSTRACT: A linear form of the performance function of an optimized system is considered, and the rate of convergence of the random-search method is compared with that of the gradient method. The convergence of the search process is largely determined by this "desired-signal-to-noise ratio":  $\delta = \frac{|\text{grad } Q|g}{\sigma\sqrt{2}}$ , where  $Q(x)$  is

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UDC: 621.391.161

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ACC NR: AP5023114

the performance function,  $g$  is the dither in the parameter space, and  $\sigma$  is the dispersion. Formulas describing the algorithms for both methods are developed. It is found that, in the random-search method, the search loss is proportional to (a) the noise level and (b) the number of variables of the optimized system. The random-search method is found to be more efficient than the gradient method for 6 variables or less. Orig. art. has: 2 figures and 41 formulas.

SUB CODE: 09, 13 / SUBM DATE: 11Aug64 / ORIG REF: 001 / OTH REF: 001

Card 2/2 *PW*

GURIN, L.S., kand. tekhn. nauk, inzh.-podpolkovnik

Significance of the accuracy of initial probabilities  
in calculations of the effectiveness of means of combat.  
Mor. sbor. 48 no.2:28-34 F '65. (MIRA 18:11)

BAKAY, Endre, dr.; GURIN, Jozsef, dr.

Multiple bone necrosis due to caisson disease. Orv.hetil. 102 no.35:  
1653-1655 27 Ag '61.

1. Budapesti Orvostudományi Egyetem, Orthopaediai Klinika.

(DECOMPRESSION SICKNESS compl)  
(BONE DISEASES etiol)

GURIN, L., kand.ekon.nauk; YAKUSHENKOV, A., kand.tekhn.nauk

Introduce new specialties rather than redescribe the old. Mor.:  
flot 22 no.2:15 F '62. (MIRA 15:4)

(Merchant seamen)

KHABUR, B., starshiy nauchnyy sotrudnik; GURIN, L., kand.ekonomicheskikh nauk

Problems calling for solution. Mor. flot 22 no.7:15-17 J1 '62.

(MIRA 15:7)

1. Zamestitel' direktora TSentral'nogo nauchno-issledovatel'skogo instituta morskogo flota po nauchnoy rabote (for Khabur). 2. TSentral'nyy nauchno-issledovatel'skiy institut morskogo flota (for Gurin).

(Merchant seamen-labor productivity)

(Weekly rest-day)

GURIN, L. P.

Cand Med Sci - (diss) "Formation of occlusion surfaces of teeth in removable prosthesis made from rapid-hardening plastic AST-1." Khar'kov, 1961. 14 pp; (Ministry of Public Health Ukrainian SSR, Khar'kov State Med Inst); 200 copies; free; (KL, 7-61 sup, 258)

16,6500

40498

S/208/62/002/003/011/011  
1040/1219

AUTHOR Gurin, L. S. and Lobach, V. P.

TITLE: A combination of the Monte-Carlo and steepest descent methods for solving some extremum problems

PERIODICAL: Zhurnal vychislitel'noy matematiki i metematicheskoy fiziki, v. 2, no. 3. 1962, 499-502

TEXT: Given  $n \geq 3$  points  $(x_i, y_i)$  in the plane and  $n$  positive weights  $K_i$ , the problem is to minimize the function

$$f(a_1, b_1, a_2, b_2, \dots, a_m, b_m) = \sum_{i=1}^n k_i \sqrt{(x_i - a_{j(i)})^2 + (y_i - b_{j(i)})^2}$$

f

$m < n$ , where  $(x_i, y_i)$  is attached to the nearest point  $(a_j, b_j)$  denoted  $(a_{j(i)}, b_{j(i)})$ . For  $m = 1$  (Steiner problem) the algorithm proposed is based on the method of steepest descent. From the center of gravity we move in the antigradient direction successively with the same quantity  $\Delta_0$ . If the new point is not the solution, we continue either in the same direction or in a new one with rotation angle greater than  $45^\circ$ . For  $m > 1$ , the Monte-Carlo method is combined with the above method by choosing an initial point in a random method and proceeding from this point by the method of steepest descent until a local minimum is reached. Since this minimum depends upon the initial point, many trials are made with various initial points chosen at random and the minimum is chosen to be smallest of the local minima.

SUBMITTED: February 2, 1961

Card 1/1

GURIN, L.S.; RASTRIGIN, I.A.

Convergence of a random search method under noise conditions. Avtom.  
i telem. 26 no.9:1546-1552 S '65.

(MIRA 18:10)

GURIN, L.Ye.

[Labor organization and wages in industrial enterprises] Planirovanie truda i zarabotnoi platy na promyshlennom predpriiatii. Leningrad, Lenizdat, 1957. 82 p. (MIRA 12:4)  
(Efficiency, Industrial) (Wages)

GURIN, L.Ye.; TSVENEV, V.L., inzh., retirovannyy; PETROV, B.S., prof.,  
doktor ekonom.nauk, red.; MIROSHNICHENKO, E.A., red.izd-va;  
BORODULINA, I.A., red.izd-va; SPERANSKAYA, O.V., tekhn.red.

[Wage payment system in a machinery manufacturing enterprise]  
Organizatsiya zarabotnoi platy na mashinostroitel'nom pred-  
priyatii. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.  
lit-ry, 1960. 178 p. (MIRA 13:11)  
(Machinery industry) (Wage payment systems)

ZAYCHENKO, Petr Aleksandrovich; GURIN, L.Ye., kand. ekon. nauk, red.; FREGER, D.P., red. izd-va; BELOGUROVA, I.A., tekhn. red.

[Method for achieving high labor productivity in each job by the P.A. Zaichenko and A.F.Loginov method] Metod dostizhenia vysokoi proizvoditel'nosti truda na kazhdom rabochem meste, metod P.A.Zaichenko i A.F. Loginova. Leningrad, 1961. (Leningradskii Dom nauchno-tekhnicheskoi propagandy. Opyt novatora. Seria: Organizatsiia i ekonomika proizvodstva, no.5) (MIRA 14:8)

(Leningrad—Machinery industry—Labor productivity)  
(Socialist competition)