SVETKIN, Yu.V.; MINLIBAYEVA, A.N.

Interaction of ketene with nitrogen-containing bases. Part 16: Chloroacetylation of urea and its derivatives. Zhur.ob.khim. 34 no.1:44-47 Ja '64. (MIRA 17:3)

1. Bashkirskiy gosudarstvennyy universitet.

STETKIN, Yu.V.; MINLIBAYEVA, A.N.

Reaction of ketene with nitrogen-containing bases. Part 18: Chloroacetylation of acid amides and imides. Zhur. ob. khim. 35 no.5:836-838 My '65. (MIRA 18:6)

1. Moldavskiy nauchno-issledovatel'skiy institut pishchevoy promyshlennosti.

ZAGOREVSKIY, V.; DUDYKINA, N. V.; Prinimala uchastiye MINLIKEYEVA, G. I.

Ring expansion in the reduction of oximes. Zhur. ob. khim. 33 no.1:322-323 '63. (MIRA 16:1)

1. Institut farmakologii i khimioterapii AMN SSSR.

(Oximes) (Reduction, Chemical)

MINOR, B., inz.

Technical progress in electric traction of the Polish Railways.
Przegl kolej elektrotech 15 no.7:3 of cover Jl '63.

Minlos, R. A.

Minlos, R. A. **Plane variation of functions of two variables and the cylindrical measure of sets in three-dimensional space.** Doklady Akad. Nauk SSSR (N.S.) 81, 733–736 (1951). (Russian)

The author considers a measure $\mu(M)$ of a set M of points in the unit cube $J^{(3)}$: $0 \leqq x \leqq 1$, $0 \leqq y \leqq 1$, $0 \leqq z \leqq 1$, defined by

$$\mu(M) = \overline{\int_0^1} \phi(t, M)\,dt$$

where $\phi(t, M)$ is the Hausdorff linear measure of the intersection of M with the plane $z = t$, and upper Lebesgue integration is used. The expression for $\mu(M)$ was used by Kronrod [Uspehi Matem. Nauk 5, no. 1 (35), 24–134 (1950); these Rev. 11, 648] to define the "planar variation" of a one-valued function $f(x, y)$, with $0 \leqq f(x, y) \leqq 1$, over the unit square $J^{(2)}$: $0 \leqq x \leqq 1$, $0 \leqq y \leqq 1$, the set M then consisting of the points of $J^{(3)}$ at which $z = f(x, y)$. The author shows that when M is a Borel set $\mu(M)$ equals the "cylindrical measure" of M, which he defines like Hausdorff two-dimensional measure except that the covering sets are restricted to be right circular cylinders with axes parallel to the z-axis, the magnitude of each cylinder being taken to be the area of an axial section. *H. P. Mulholland* (Birmingham).

Reviews, Vol 13 No. 7

MINLOS, R. A.

USSR/Mathematics - Quantum - Physics

Card 1/1

Authors : Gel'fand, I. M., Memb. Corres. of Acad. of Sc. USSR. and Minlos, R. A.

Title : Solution of equations of quantized fields

Periodical : Dokl. AN SSSR, 97, Ed. 2, 209 - 212, July 1954

Abstract : A solution of equations of quantized fields. A somewhat new mathematical method, generally outlined in the article, has been applied to the solution of the quantized field equations. Two references.

Institution : ...

Submitted : April 28, 1954

GRADSHTEYN, I.S. (Moscow) ROYTE-BEKETOV, P.S. (Khar'kov); MINLOS, R.A. (Moscow) SKOPETS, Z.A. (Yaroslavl'); GEL'FOND, A.O. (Moscow); YAGLOM, A.M. (Moscow); ROBINSON, R.M. (SShA); DUBNOV, Ya.S. (Moscow); STECHKIN, S.B. (Moscow)

Problems of higher mathematics. Mat. pros. no.1:224-227 '57. (MIRA 11:7)

(Mathematics--Problems, exercises, etc.)

MINLOS, R.A., Cand Phys-Math Sci -- (diss) "Generalized [illegible] random [illegible] and their continuation to a degree." Mos, 1958. 7 pp. (Mos [illegible] Univ im M.V. Lomonosov), 110 copies (KL, 21-58, 117)

2.

MINLOS R.A.

16(1) PHASE I BOOK EXPLOITATION SOV/2242

Gel'fand, Izrail' Moiseyevich, Robert Adol'fovich Minlos, and Zorya Yakovlezna Shapiro

Predstavleniya gruppy vrashcheniy i gruppy Lorentsa, ikh primeniya (Rotation Group and Lorentz Group Representations and Their Applications) Moscow, Fizmatgiz, 1958. 368 p. 7,000 copies printed.

Eds.: F. A. Berezin and L. A. Stebakova; Tech. Ed.: S. S. Gavrilov.

PURPOSE: This book is intended for mathematicians and physicists and for students of mathematics and physics.

COVERAGE: This book is devoted to a detailed study of the representations of rotation groups in 3-dimensional space and to the Lorentz group. For the benefit of physicists and physics students the authors have included in the book all basic material on representation theory which is applicable to quantum mechanics. Mathematicians and mathematics students who are studying representation of Lie groups, may use the book as an introduction to the general theory of representations. In addition the material included

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in the book renders sufficiently clear the connection between representation theory and other branches of mathematics, such as spherical functions, tensors, differential equations, etc., which had not previously been analyzed in the general case. I. M. Gel'fand and Z. Ya. Shapiro wrote the first part of the book on rotation groups. K. A. Minlos wrote the second part on representations of the Lorentz group and relativistic-invariant equations. This part was based mainly on the work of I. M. Gel'fand and A. M. Yaglom "General Relativistic-invariant Equations and Infinite Dimensional Representations of a Lorentz Group" (Zhurnal eksperimental'noy i teoreticheskoy fiziki, Vol 18, No 8, 1948). The authors thank F. A. Berezin, editor of the book, for his assistance. There are 25 references: 23 Soviet, 1 German, and 1 English.

TABLE OF CONTENTS:

MINLOS, R.A.

p. 3

SOV/52-3-2-10/10

AUTHOR: None Given

TITLE: A Summary of Papers Presented at the Sessions of the Scientific Research Seminar on the Theory of Probability, Moscow, September-March 1957-1958 (Rezyume dokladov, sdelannykh na zasedaniyakh nauchno-issledovatel'skogo seminara po teorii veroyatnostey, Moskva, sentyabr'-mart 1957-58 g.)

PERIODICAL: Teoriya veroyatnostey i yeye primeneniya, 1958, Vol III, Nr 2, pp 212-216 (USSR)

ABSTRACT: A. N. Kolmogorov - Ergodic stationary random processes with a discrete spectrum. If S is a set of numbers and $\xi(t)$ is a stationary ergodic function defined for all random values of t as

$$\xi(t) = \sum_{\lambda \in S} \varphi(\lambda) e^{i\lambda t}$$

then $\rho(\lambda) = |\varphi(\lambda)|$ is not random. Therefore, the unit probability can be expressed as $\rho(\lambda) = +\sqrt{f(\lambda)} > 0$ and $\varphi(\lambda) = \rho(\lambda) e^{i\theta(\lambda)}$ where $\theta(\lambda)$ is defined as mod 2π and represents a random element of the space A_S of all the

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A Summary of Papers Presented at the Sessions of the Scientific Research Seminar on the Theory of Probability, Moscow, September-March 1957-1958

functions $\alpha(\lambda)$. The space A_S represents a compact group with a sub-group B_S . The factorial group

$\Gamma_S = A_S - B_S$ will determine the distribution of the function $\xi(t)$ becoming isomorphic of the other two.

Ye. B. Dynkin - Infinitesimal operators of "jump" Markov processes. Published in Vol III, Nr 1 of this journal.

V. A. Volkonskiy - A random change of time in strictly Markov processes. If $x_t = x(t, \omega)$ is a homogeneous Markov process on the space $\mathcal{E}$ and $\tau_t(\omega)$ is a function non-decreasing at all ω , and that $\tau_t(\omega)$ at all t is a random value not dependent on future, then the function $y(t, \omega) = x(\tau_t(\omega), \omega)$ is a process obtained from x_t with random change of time τ_t . At some conditions of τ_t the

A Summary of Papers Presented at the Sessions of the Scientific Research Seminar on the Theory of Probability, Moscow, September-March 1957-1958

the process y_t becomes a homogeneous strictly Markov process. In the case of a homogeneous process with a random change of time and a uniform deformation of space it is possible to obtain any continuous Markov process which will be regular in the interior and absorbed near the boundary.
R. L. Dobrushin - A statistical problem of detecting a signal in the noise of a multi-channel system reduced to stable distribution laws. Published in this issue.
V. M. Zolotarev - Some new properties of stable distribution laws. Published in Vol II, Nr 4 of this journal.
R. A. Minlos - On the extension of the generalized random process to additive measure. Any exact process, such as Gelfand's, based on the cylindrical set of numbers on linear topologic space E' and extended into a space E will retain its additive property defined as the set B on the space E' . (There are 2 references, 1 Soviet and 1 French).
→ D. M. Chibisov - Limit distribution for the number of runs in a Bernouilli Trials. If k represents a number of independent runs in two trials, the probability of a positive

A Summary of Papers Presented at the Sessions of the Scientific Research Seminar on the Theory of Probability, Moscow, September-March 1957-1958

trial being p and a negative trial being $q = 1 - p$, then at i-run ($i \geqslant r$) a series r can be found: i-r+1, i-r+2 ... The trial (i) will be positive and the trial (i-r) negative ($i \geqslant r + 1$). The number of series r is N. The conditions for p, q, r, $k \to \infty$ are given by (1) (2) and (3).

A. N. Kolmogorov - Spectra for dynamical systems generated by the stationary stochastic process. Displacements of a trajectory on the space of a random stationary process generate the dynamic systems for which the probability distribution is invariant. If the process is normal then the spectra of dynamical systems are homogeneous. In the case of discrete time its multiple for a separable process can be calculated. For the continuous time only some examples of calculated multiple are known. The above can be illustrated by the entropy per unit of time considered as a metric invariant of a dynamical system. As in the case of discrete

MINLOS, R.A.

SKOPETS, Z.A. (Yaroslavl'); OSTROVSKIY, A.I. (Moskva); BESKIN, L.N. (Moskva); BALK, M.B. (Smolensk); BORSUK, M.V. (L'vov); BYKOV, A.M. (Baku); CHANTURIYA, Z.A. (Tbilisi); NOVIKOVA, V.S. (Orekhovo-Zuyevo); DUBNOV, Ya.S. (Moskva); STECHKIN, S.B. (Moskva); KHAVIN, L.P. (Leningrad); ERDNIYEV, P., (Stavropol'); CHIAREULI, D.L. (GrüzSSR); ASEKRITOV, U.M. (Yaroslavl'); GOLUBEV, V.A. (Kuvshinovo); MALININ, V.V. (Leningrad); DAVYDOV, U. (Gomel'); ROZENBERG, V.I. (Leningrad); TIKHONOV, P.G. (Karaganda); ROMANCHUK, N.A. (Khar'kov); MINLOS, R.A. (Moskva); OGAY, S.V. (Frunze); ROFE-BEKETOV, F.S.; BERSHTEYN, A. (Moskva); ARLAZAROV, V.L. (Moskva)

Solutions to problems. Mat.pros. no.4:253-270 '59. (MIRA 12:11)

(Mathematics--Problems, exercises, etc.)

AUTHOR: ~~Minlos, R.A.~~

20-119-3-10/65

TITLE: Continuation of a Generalized Random Process to a Countably Additive Measure (Prodolzheniye obobshchennogo sluchaynogo protsessa do vpolne additivnoy mery)

PERIODICAL: Doklady Akademii Nauk, 1958, Vol 119, Nr 3, pp 439-442 (USSR)

ABSTRACT: In the linear space E let a topology be defined by denumerabl many scalar products (φ_1, φ_2) which satisfy the following conditions 1.) $(\varphi, \varphi)_{n+1} \geq (\varphi, \varphi)_n$ 2.) The sum of the squares of the axes of the ellipsoid $(\varphi, \varphi)_{n+1} = 1$ which ar measured in the n-th scalar product, converges. Let E' be the conjugate space to E. In E' let a generalized random process be defined in Gel'fand's sense [Ref 1] (i.e. as a measure $\mu(\mathcal{U})$ on the cylindric sets $\mathcal{U}$ of E'). Then the following fundamental theorem holds:
The generalized random process thus defined can be continued to a countably additive measure which is defined in the strong topology on the B-sets of E'.
Theorem: If in a space E_1' which is conjugate to a denumerable

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normalized space E_1, each generalized random process can be continued to a countably additive measure, then E_1 possesses the properties 1.) and 2.) of E (it is isomorphic to E). The proof of the fundamental theorem is based on four lemmata. There are 3 references, 1 of which is Soviet, and 2 American.

PRESENTED: December 24, 1957, by A.N. Kolmogorov, Academician

SUBMITTED: December 14, 1957

MINLOS, R.A.

Generalized random processes and their continuation to the measure. Trudy Mosk.mat.ob-va 8:497-518 '59. (MIRA 13:2)
(Probabilities)

S/056/61/041/006/029/054
B146/B102

AUTHORS: Minlos, R. A., Faddeyev, L. D.

TITLE: The three-particle problem with point interaction

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 41, no. 6, 1961, 1850-1851

TEXT: An integral equation derived by K. A. Ter-Martirosyan and G. V. Skornyakov (Ref. 1: ZhETF, 31, 775, 1956) for the wave function of a three-particle system with point interaction is considered on the basis of scalar and homogeneous particles. Besides a relation following from the asymptotic behavior and from the orthogonality of the solutions, this equation has solutions corresponding to an infinite set of bound states. The proof furnished for this is only applicable to spherosymmetric solutions. The work is based on the Ter-Martirosyan - Skornyakov model improved by G. S. Danilov (Ref. 2: ZhETF, 40, 498, 1961); a more general treatment in a mathematical paper by the authors (Ref. 4: R. A. Minlos, L. D. Faddeyev, DAN SSSR, 141, 6, 1961) is referred to. There are 4 Soviet references.

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S/056/61/041/006/029/054
B146/B102

The three-particle problem with ...

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: June 16, 1961

Card 2/2

MINLOS, R.A.; FADDEYEV, L.D.

Point interaction for a system of three particles in quantum mechanics. Dokl. AN SSSR 141 no.6:1335-1338 D '61. (MIRA 14:12)

1. Moskvoskiy gosudarstvennyy universitet im. M.V.Lomonosova. Predstavleno akademikom I.G.Petrovskim.
(Operators (Mathematics)) (Quantum theory)

L 22710-66 EWT(1) IJP(c) GG

ACC NR: AP6010985 SOURCE CODE: UR/0056/66/050/003/0642/0652

AUTHOR: Minlos, R. A.

24
B

ORG: Moscow State University (Moskovskiy gosudarstvennyy universitet)

TITLE: A superconductivity model with an exact solution

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 50, no. 3, 1966, 642-652

TOPIC TAGS: superconductivity, ~~BCS model~~, particle interaction, excitation spectrum

ABSTRACT: A system similar to the BCS model is analyzed using a simplified special case of the Hamiltonian of the BCS theory. In a very thin layer, the interaction function and the energy of the particles for the equivalent range of momenta are considered to be constant. An exact solution was obtained for the energy levels, including the ground state. Variation of the ground state with variation of density was studied. It was found that the system can be separated into two noninteracting parts (phases), and that at small densities (for certain values of the interaction parameter) only one phase is present in the ground state. A gap in the excitation spectrum was encountered in a certain density range; the nature of this gap is, however, different from that in the BCS model. The statistical sum of the system was calculated. Orig. art. has: 8 formulas.

[CS]

SUB CODE: 20/ SUBM DATE: 28Jul65/ ORIG REF: 004/ OTH REF: 001/ ATD PRESS: 4229

Card 1/1 BK

MINN, P. I.

Issledovanie volocheniia prutkov stali. Moskva, Mashgiz, 1948. 81 p. illus.,7 plates.

Study of Steel rod drawing.

DLC: TS320.M635

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

MINNIGERODE, G.; BUCKEL, W.; HILSCH, R.

"Effect of plastic deformation at low temperature on the superconductivity of gallium." In German. p. 5.

ACTA PHYSICA. (Magyar Tudomanyos Akademia). Budapest, Hungary, Vol. 8, No. 1/2, 1957.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 8, August 1959.
Uncla.

Minnik, S.L.

VASILENKO, D.A., prof., zasluzhennyy dyeatel' nauki USSR; MINNIK, S.L.

Case of lymphosarcomatosis with primary clinical manifestations in the thyroid gland. Probl.endok. i gorm. 3 no.5:118-120 S-O '57. (MIRA 11:1)

1. Iz kliniki obshchey khirurgii Dnepropetrovskogo meditsinskogo instituta (dir. - prof. D.P.Chukhriyenko)

(THYROID GLAND, neoplasms, lymphosarcomatosis (Rus))
(LYMPHOSARCOMA, case reports, thyroid gland (Rus))

MINNIK, S.L. (Dnepropetrovsk)

Rare complication caused by abdominal aneurysm. Vrach.delo no.6:643 Je '57. (MIRA 10:8)

1. Patologoanatomicheskoye otdeleniye Vtoroy gorodskoy bol'nitsy
(ANEURYSM, AORTIC)

MINNIK, S.L. (Dnepropetrovsk, pr.Kalinina, d.53, 2-ya gorodskaya [redacted]skaya bol'nitsa)

Penetration of a chronic gastric ulcer into the posterior wall of the left ventricle. Nov.khir.arkh. no.1:119-120 Ja-F '59. (MIRA 12:6)

1. Patologoanatomicheskoye otdeleniye 2-y Dnepropetrovskoy gorodskoy klinicheskoy bol'nitsy.
(STOMACH--ULCERS) (HEART--DISEASES)

MINNIK, S.L.

Some problems of the immunomorphology and pathophysiology of palatine tonsils. Zhur. ush., nos. i gor. bol. 24 no.1:92-95 Ja-F '64. (MIRA 18:3)

MINNULLIN, P.R., kapitan med.sluzhby

System for massive oxygen therapy. Voen.-med. zhur. no. 2:86 F '61. (MIRA 14:2)

(OXYGEN—THERAPY)

MINOC, G.

"On the Limiting Laws for Random Vectors Joined in a Markov Chain"

Teor. Ver. i Yeye Prim., 1, No. 1, 1956
Sum 1137, 28 Nov 56

MINOCHKIN, I.M. (Krasnotur'insk, Sverdlovskoy oblasti, Molodezhnaya ul., d.9, kv.53)

Case of compression fracture of the spine in hemangioma. Ortop., travm. i protez. 24 no.11:62-63 N '63. (MIRA 17:10)

1. Iz travmatologicheskogo otdeleniya (zav. - I.M. Minochkin) 2-y gorodskoy bol'nitsy Krasnotur'inska (glavnyy vrach - K.I. Bashko), Sverdlovskoy oblasti.

MINOCHKINA, T.P., aspirant

Studying the neural apparatus of the alimentary canal in lower amniotes. Uch. zap. Sar. gos. pedag. inst. no.28:115-123 '57. (MIRA 11:7)

(Serpents) (Alimentary canal--Innervation)

MINOCHKINA, T.P.

Morphology of the nervous apparatus of the stomach in reptiles. Nauch. dokl. vys. shkoly; biol. nauki no.2:64-67 '62. (MIRA 15:5)

1. Rekomendovana kafedroy zoologii Michurinskogo pedagogicheskogo instituta.
(STOMACH--INNERVATION) (NERVOUS SYSTEM--REPTILES)

MINOCHKINA, T.P.

Afferent innervation of the reptile esophagus. Nauch. dokl. vys. shkoly; biol. nauki no.3:47-50 '63. (MIRA 16:9)

1. Rekomendovana kafedroy zoologii Saratovskogo pedagogicheskogo instituta.
(Nervous system—Reptiles) (Esophagus—Innervation)

MINOIU, I.; TATU, N.; LUCA, V.; POPA, P.

Study on the functional behavior of some types used in tooth sprocket chain drives. Bul Inst Petrol Rum 9: 133-142 '63.

STAROBINSKAYA, N.G.; MINOKUR, M.M., red.; BOGDANOVA, L.D., tekhn. red.

[Use of current informational bibliography in technical libraries] Ispol'zovanie tekushchei informatsionnoi bibliografii v tekhnicheskikh bibliotekakh; metodicheskoe posobie. Moskva, 1963. 39 p. (MIRA 16:10)

1. Moscow. Gosudarstvennaya publichnaya nauchno-tekhnicheskaya biblioteka SSSR.
(Bibliography—Technology)

MIECZNIKOWSKI, Andrzej; MINOL, Eugeniusz; HALYS, Jozef

Prednisone therapy of adnexitis. Polski tygod.lek. 16 no.1:13-15 2 Ja '61.

1. Z II Kliniki Poloznictwa i Chorob Kobiecych A.M. w Krakowie; kierownik: prof. dr M.Seidler.
(ADNEXITIS ther)
(PREDNISONE ther)

IVANOV, A.; MINONOV, I.

Introduce technical books to the masses. Sov.profsoiuzy 17 no.4: 28-29 F '61. (MIRA 14:2)
(Technical libraries) (Trade unions)

BERG, P.A.; ORLOV, A.M.; MINOR, A.K.

Improved methods for transporting bricks piled "treelike" on extended trays. Suggested by P.A.Berg, A.M.Orlov, A.K. Minor. Rats.i izobr.predl.v stroi. no.12:48-51 '59. (MIRA 13:5)

1. Po materialam tresta Tagilstroy Sverdlovskogo sovnarkhoza, Nizhniy-Tagil, Sverdlovskoy oblasti.
(Bricks--Transportation)

MINOR V. L. Effect of bodily form on the sweat-pattern and significance of this factor in lesions of the peripheral nervous system Vop. Neirokhir. 1950, 1 (3-16) Tables I Illus. 9

Description of the normal sweat-pattern in man and of the pathological patterns seen in various diseases of the central nervous system.

Decker - Munich

So: Neurology & Psychiatry Section VIII, Vol. 4, No. 1-6

MINOR, V. L.

Sudiparous disorders in injuries of the sciatic nerve and their peculiarities in arterial damages and phlebitis related to trophic ulcer. Vopr. neirokhir. 15 no. 6:18-27 Nov.-Dec. 1951.
(CLML 21:3)

1. Of the Perspiration Laboratory, Institute of Neurosurgery imeni Academician N. N. Burdenko (Director -- B. G. Yegorov -- Corresponding Member of the Academy of Medical Sciences USSR) of the Academy of Medical Sciences USSR.

MINORANSKIY, V.A.

Expansion of the range of the European finch in Rostov Province. (MIRA 16:3)
Ornitologiia no.4:132-134 '62.
(Rostov Province--Greenfinch)

PETROV, V.S.; MINORANSKIY, V.A.

Summer ornithofauna of Lake Manych-Gudilo and adjacent steppes.
Ornitologiia no.5:266-275 '62. (MIRA 16:2)
(Manych-Gudilo Lake region—Birds)

MINORANSKIY, V.A.

Steppe eagle Aquila rapax orientalis L. Zool. zhur. 41 no.2: 295-296 F '62. (MIRA 15:4)

1. State University of Rostov-on-Don.
(Manych-Gudilo Lake region--Eagles)

MINORANSKIY, V.A.

Nesting of the pelican Pelecanus crispus Bruch. on Lake Manych-Gudilo. Zool.zhur. 41 no.7:1107-1108 Jl '62. (MIRA 15:11)

1. Biological and Soil Faculty, Rostov-on-Don University.
(Manych-Gudilo, Lake--Pelicans)
(Birds--Eggs and nests)

MINORANSKIY, V.A.

Nesting of herring gulls on Lake Manych-Gudilo. Nauch. dokl. vys. shkoly; biol. nauki no.3:51-53 '63. (MIRA 16:9)

1. Rekomendovana kafedroy zoologii pozvonochnykh Rostovskogo-na-Donu gosudarstvennogo universiteta.
(Manych-Gudilo, Lake--Herring gull)

MINORANSKIY, V.A.

Manych-Gudilo. Priroda 52 no.4:75-80 '63. (MIRA 16:4)

1. Rostovskiy-na-Donu gosudarstvennyy universitet.
(Manych-Gudilo, Lake--Description)

ZHITKEVICH, Ye.N., kand. biolog. nauk; MINORANSKIY, V.A., aspirant

Sugar beet leaf miner. Zashch. rast. ot vred. i bol. 8 no.6:29-31 Je '63. (MIRA 16:8)

1. Vsesoyuznyy institut sakharnoy svekly (for Zhitkevich).
2. Rostovskiy gosudarstvennyy universitet (for Minoranskiy).
(Sugar beets—Diseases and pests)
(Leaf miners—Extermination)

MINORANSKIY, V.A., aspirant; SOKOLOVA, T.A.; GAMPER, N.M., kand.sel'skokhoz. nauk; LESNIKOVSKAYA, A.Ya.; VLADIMIRSKAYA, N.S.; TELEYMANOV, N.K.; STADNITSKIY, G.V., nauchnyy sotrudnik; NAUMOV, P.V., nauchnyy sotrudnik

Practices in the use of new preparations. Zashch. rast. ot vred. i bol. 8 no.8:30-31 Ag '63. (MIRA 16:10)

1. Rostovskiy gosudarstvennyy universitet (for Minoranskiy). 2. Voronezhskaya stantsiya Vsesoyuznogo instituta zashchity rasteniy (for Sokolova). 3. Vsesoyuznyy institut zashchity rasteniy (for Gamper, Lesnikovskaya, Vladimirskaya). 4. Zaveduyushchiy entomologicheskim punktom Tetyushskogo rayona, Tatarskoy ASSR (for Teleymanov). 5. Nauchno-issledovatel'skiy institut lesnogo khozyaystva, Leningrad (for Stadnitskiy, Naumov).

MINORANSKIY, V.A.

Distribution of the stone marten (Martes foina Erxl.) in Rostov Province. Zool. zhur. 42 no.9:1423-1424 '63. (MIRA 16:12)

1. The State University of Rostov-on-Don.

MINORANSKIY, V.A.

More on the ornithofauna of Lake Manych-Gudilo. Ornitologiia no.6:475-476 '63. (MIRA 17:6)

MINORANSKIY, V.A., aspirant

Sugar beet pests in Rostov Province. Zashch.rast. ot vred. i bol. 9 no.11:41-44 '64. (MIRA 18:1)

1. Rostovskiy-na-Donu universitet.

MINORANSKIY, V.A.

Effect of hydraulic structures on the ornitofauna in the southeastern part of the U.S.S.R. Zool. zhur. 43 no.7:1047-1055 '64. (MIRA 17:12)

1. Biologo-pochvennyy fakul'tet Rostovskogo-na-Donu gosudarstvennogo universiteta.

KHARCHENKO, V.K.; MIKOLAYEVSKIY, V.N.

Take care of the flamingos. Priroda 54 no.12:76-78 D '65.
(MIRA 19:1)

1. Rostovskiy gosudarstvennyy universitet.

PEYVE, Ya.V., akademik, otv. red.; VLASYUK, P.A., akademik, red.; SIROCHENKO, I.A., prof., red.; VOYNAR, A.I., prof., red.; MINORIK, A.V., kand. biol. nauk, red.; OSTROVSKAYA, L.K., doktor biol. nauk, red.; ZADERIY, I.I., doktor sel'khoz. nauk, red.; KURINNAYA, M.F., dots., red.; KLIMOVITSKAYA, Z.M., kand. biol. nauk, red.; MITSYK, V.Ye., kand. vet. nauk, red.; KAPITANCHUK, V.A., red.; RAD'KO, M.K., red.

[Trace elements in agriculture and medicine; materials] Mikroelementy v sel'skom khoziaistve i meditsine; materialy. Kiev, Gossel'khozizdat USSR, 1963. 689 p. (MIRA 18:1)

1. Vsesoyuznoye soveshchaniye po voprosam primeneniya mikroelementov v sel'skom khozyaystve i meditsine, 4th, Kiev, 1962. 2. Ukrainskiy nauchno-issledovatel'skiy institut fiziologii rasteniy AN Ukr.SSR (for Ostrovskaya, Vlasyuk). 3. Institut biologii AN Latviyskoy SSR (for Peyve). 4. Kiyevskiy meditsinskiy institut (for Kurinnaya). 5. Donetskiy meditsinskiy institut im. A.M.Gor'kova (for Voynar). 6. Ukrainskiy nauchno-issledovatel'skiy institut fiziologii i biokhimii sel'skokhozyaystvennykh zhivotnykh (for Mitsyk). 7. Belotserkovskiy sel'skokhozyaystvennyy institut (for Zaderiy).

PARUKHIN, A.M.; MINOROV, V.A.; POLOSUKHIN, R.V.

Results of research on the biology of tapeworms in the Baikal region and role of fishes in their propagation. Trudy nov.Ikht. kom. no.9:214-216 '59. (MIRA 13:5)

1. Gor'kovskiy gosudarstvennyy universitet.
(Baikal region--Tapeworms)
(Fishes as carriers of disease)

MINORSKI, Sergiusz

Minorski, Sergiusz. Samolot, nowoczesna maszyna rolnicza. [Wyd. 1.] Warszawa, Wydawn. Komunikacyjne, 1953. 91 p. [The airplane as a modern agricultural machine. illus., bibl., diagrs.]

SO: Monthly Lists of East European Accessions, LC, Vol. 3, no. 5, May 1954/Uncl.

MINORSKI, S.

Lot Airlines works for Polish agriculture. p. 243. (SKRZYDLATA POLSKA, Vol. 10, No. 16, Apr. 1954, Warszawa, Poland)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 3, No. 12, Dec. 1954, Uncl.

MINORSKI, S.

Contest of leading glider pilotsof the world. p. 370. (SKRZYDLATA POLSKA, Vol. 10, No. 24, June 1954, Warszawa, Poland)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 3, No. 12, Dec. 1954, Uncl.

MINORSKI, S.

Leszno, the center of Polish gliding. p. 373. (SKRZYDLATA POLSKA, Vol. 10, No. 24, June 1954, Warszawa, Poland)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 3, No. 12, Dec. 1954, Uncl.

MINORSKI, S.

Civil aviation in the Polish People's Republic. p. 452. (SKRZYDLATA POLSKA, Vol. 10, No. 29, July 1954, Warszawa, Poland)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 3, No. 12, Dec. 1954, Uncl.

MINORSKI, S.

Visiting Marcelle Choisnet. p.3. (SKRZYDLATA POLSKA, Warszawa, Vol. 11, No. 11, Mar. 1955)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 6, June 1955, Uncl.

MINORSKI, S.

Polish air lines. Grazhd.av. 13 no.6:35-36 Je '56. (MLRA 9:9)

1.Direktor Upravleniya grazhdanskoy aviatsii Pol'skoy Narodnoy Respubliki. (Poland--Airlines)

MINORSKI, S., mgr inż.

Technical progress in the power industry. Energetyka Pol 14 no.1:1-2 '60. (EEAI 9:6)

1. Dyrector Techniczny Zjednoczenia Energetyki.
(Poland --Power (Mechanics))

MINORSKI, Sergiusz

The 1st International Congress for Automation and Control.
Przegl techn no.36:4 7 S '60.

MINORSKI, S., mgr inz.

On the threshold of a new five-year plan. Energetyka Pol 15 no.3: 65-67 Mr '61. (EEAI 10:5)
(Poland--Electric power)

MINORSKI, Sergiusz, mgr. inz.

Power engineering in the Chinese People's Republic. Energetyka 16 no.4:121-125 Ap '62.

MINORSKI, S., mgr inz.

Development problems in the field of power production in the Soviet Union until 1980. Energetyka Pol 16 no.10:295-298 O '62.

MINORSKI, S., mgr inz.

Current problems of Soviet electric power engineering during the 5th year of the 7-year plan. Enegetyka pol 17 no.10:289-291 O '63.

MINORSKI, Sergiusz, mgr inz.

World Power Conference in Lausanne. Gosp paliw 12 no.9/9:305 Ag-S '64.

MINORSKI, Sergiusz, mgr inz.

Quantity and quality control of the water supply in a city heating network. Gosp paliw 13 no.2:63-64 F '65.

MINORSKIY, V. P.

Vector analysis Izd. 2., perer. i dop. Moskva, Gos. izd-vo tekhniko-teoret. lit-ry, 1951. 77 p. (51-38342)

QA261.M53 1951

MINORSKIY, V. P.

Sbornki zadach po vysshei matematike [Collection of problems in higher mathematics]. Izd. 2-e. Moskva, Gostekhizdat, 1953. 352 p.

SO: Monthly List of Russian Accessions, Vol. 6 No. 12 March 1954.

MINORSKIY, Vasiliy Pavlovich; TSVETKOV, A.T., redaktor; MURASHOVA, N.Ya. tekhnicheskiy redaktor.

[Collection of problems in higher mathematics] Sbornik zadach po vysshei matematike. Izd.3-e. Moskva, Gos.izd-vo tekhniko teoret. lit-ry, 1955. 359 p; (MLRA 8:11)
(Mathematics--Problems, exercises, etc.)

MINORSKIY, Vasiliy Pavlovich; TSVETKOV, A.T., red.; MURASHOVA, N.Ya., tekhn. red.

[Problems in higher mathematics] Sbornik zadach po vysshei matematike. Izd.4., stereotipnoe. Moskva, Gos.izd-vo tekhniko-teoret. lit-ry, 1957. 359 p. (MIRA 16:8)
(Mathematics—Problems, exercises, etc.)

MINORSKIY, V.P.

16(1) PHASE I BOOK EXPLOITATION SOV/1818

Gurevich, Avigdor Berkovich (Viktor Borisovich), and Vasiliy Pavlovich Minorskiy

Uchebnik analiticheskoy geometrii dlya vtuzov (Textbook of Analytical Geometry for Vtuzes) Moscow, Fizmatgiz, 1958. 163 p. 35,000 copies printed.

Eds.: R.Ya. Shostak and V.A. Solodkov; Tech. Ed.: S.N. Akhlamov.

PURPOSE: The book is intended as a textbook on analytic geometry for students at vtuzes.

COVERAGE: The book is written according to teaching programs which include 360-400 teaching hours for mathematics. The book contains a brief, but complete and accurate, presentation of the methods of plane and solid analytic geometry. The fundamentals of determinants and vector analysis are presented, and are applied to the study of analytic geometry. No personalities are mentioned. There are no references.

~~Card 1/11~~

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D251/D302

AUTHOR: Minostsev, V.B.

TITLE: The flow of a hypersonic stream around an axisymmetric body flying below the angle of attack

SOURCE: Moscow. Fiziko-tekhnicheskiy institut. Trudy, no. 7, 1961. Issledovaniya po mekhanike i prikladnoy matematike, 136 - 151

TEXT: The author considers the flow past an arbitrary body, flying below the angle of attack of a stream of ideal gas moving at a high supersonic speed. Using a system of coordinates x, y, θ related to the surface of the body, the equations of motion of the gas are obtained in the form

$$\left.\begin{aligned}&\frac{u}{1+(y/R)}\frac{\partial u}{\partial x}+v\frac{\partial u}{\partial y}+\frac{w}{r}\frac{\partial u}{\partial \theta}\pm\frac{uv}{1\pm(y/R)}-\frac{w^2}{r}\sin\rho=\\&\qquad=-\frac{1}{\rho[1\pm(y/R)]}\frac{\partial p}{\partial x};\\&\frac{u}{1\pm(y/R)}\frac{\partial v}{\partial x}+v\frac{\partial v}{\partial y}+\frac{w}{r}\frac{\partial v}{\partial \theta}\mp\frac{u^2}{R[1\pm(y/R)]}-\end{aligned}\right| \qquad (2)$$

Card 1/8

The flow of a hypersonic stream ...

$$
\begin{aligned}
&-\frac{w^2\cos\delta}{r}=-\frac{1}{\rho}\frac{\partial p}{\partial y};\\
&\frac{u}{1\pm(y/R)}\frac{\partial w}{\partial x}+v\frac{\partial w}{\partial y}+\frac{w}{r}\frac{\partial w}{\partial\theta}+\frac{uw}{r}\sin\delta+\frac{vw}{r}\cos\delta=\\
&\qquad=-\frac{1}{\rho r}\frac{\partial p}{\partial\theta};\\
&\frac{\partial r\rho u}{\partial x}+\frac{\partial\rho rv[1\pm(y/R)]}{\partial y}+\frac{\partial\rho w[1\pm(y/R)]}{\partial\theta}=0;\\
&\frac{u}{1\pm(y/R)}\frac{\partial}{\partial x}\frac{p}{\rho^\gamma}+v\frac{\partial}{\partial y}\frac{p}{\rho^\gamma}+\frac{w}{r}\frac{\partial}{\partial\theta}\frac{p}{\rho^\gamma}=0.
\end{aligned}
\qquad (2)
$$

where u, v, w are the components of velocity in the x, y, θ - directions respectively, R is the radius of curvature of the body, r is the radius of the transverse section, ρ is the density, p - pressure, δ is the local angle of inclination formed by the axis of the body, γ is the adiabatic coefficient. By means of the transformation

$$\frac{u}{1\pm(y/R)}\frac{\partial\psi}{\partial x}+v\frac{\partial\psi}{\partial y}+\frac{w}{r}\frac{\partial\psi}{\partial\theta}=0 \qquad (3)$$

Card 2/8

The flow of a hypersonic stream ...

a new independent variable ψ is introduced, and θ is replaced by a new independent variable $\varphi(x, y, \theta)$ where

$$\frac{u}{1 \pm (y/R)} \frac{\partial \varphi}{\partial x} + \frac{w}{r} \frac{\partial \varphi}{\partial \theta} = \theta. \qquad (7)$$

The equation of the lines of flow is established and differentiated along the surface ψ = const giving

$$\frac{u}{1 \pm (y/R)} d\theta - \frac{w}{r} dx = 0. \qquad (8)$$

From the transform of the fourth equation of (2), formulae for the derivatives with respect to the new variables are obtained, and hence, by substitution in the transforms of (2),

$$\frac{u}{1 \pm (y/R)} \frac{\partial u}{\partial x} \pm \frac{uv}{R[1 \pm (y/R)]} - \frac{w^2}{r} \sin\delta = -\frac{1}{\rho[1 \pm (y/R)]} \frac{\partial p}{\partial x} + \\ + \frac{w}{ur\rho\theta_\varphi} \frac{\partial p}{\partial \tau} + \frac{y_x\theta_\varphi - \theta_x y_\varphi}{\rho[1 \pm (y/R)](y_\psi\theta_\varphi - \theta_\psi y_\varphi)} \frac{\partial p}{\partial \psi} - \\ - \frac{y_x\theta_\varphi - \theta_x y_\varphi}{\rho[1 \pm (y/R)](y_\psi\theta_\varphi - \theta_\psi y_\varphi)} \frac{\theta_\psi}{\theta_\varphi} \frac{\partial p}{\partial \tau}; \qquad (12)$$

Card 3/8

The flow of a hypersonic stream ...

$$\frac{u}{1\pm(y/R)}\frac{\partial v}{\partial x}\mp\frac{u^2}{R[1\pm(y/R)]}-\frac{w^2\cos\delta}{r}=$$

$$=-\frac{\theta_\varphi}{\rho(y_\psi\theta_\varphi-\theta_\psi y_\varphi)}\frac{\partial p}{\partial\psi}-\frac{\theta_\psi}{\rho(y_\psi\theta_\varphi-\theta_\psi y_\varphi)}\frac{\partial p}{\partial\tau};$$

$$\frac{u}{1\pm(y/R)}\frac{\partial w}{\partial x}+\frac{uw}{r}\sin\delta+\frac{vw}{r}\cos\delta=\frac{y_\varphi}{\rho r(y_\psi\theta_\varphi-y_\varphi\theta_\psi)}\frac{\partial p}{\partial\psi}$$

$$-\frac{1}{\rho r\theta_\psi}\frac{\partial p}{\partial\varphi}-\frac{y_\varphi\theta_\psi}{\rho r(y_\psi\theta_\varphi-\theta_\psi y_\varphi)\theta_\tau}\frac{\partial p}{\partial\tau};\qquad(12)$$

$$\theta_\varphi y_\psi-\theta_\psi y_\varphi=\frac{1}{\rho ur};$$

$$\frac{\partial}{\partial x}\frac{p}{\rho^\gamma}=0;$$

$$\frac{\partial y}{\partial x}=\frac{v[1\pm(y/R)]}{u};$$

$$\frac{\partial\theta}{\partial x}=\frac{w[1\pm(y/R)]}{ur}.$$

Card 4/8

The flow of a hypersonic stream ...

Boundary conditions are then considered. Components with suffixes n, τ_1, τ_2 indicating resolution in the directions of the normal and the two mutually perpendicular tangents to the shock-wave respectively, are considered. The equation of the unit normal to the shock-wave is

$$n=\frac{\operatorname{grad}[y-y^*(x,\theta)]}{|\operatorname{grad}[y-y^*(x,\theta)]|}=\frac{-\frac{1}{1\pm y/R}\frac{\partial y^*}{\partial x}\vec{e}_1+\vec{e}_2-\frac{1}{r}\frac{\partial y^*}{\partial\theta}\vec{e}_3}{\sqrt{\frac{1}{1\pm(y/R)^2}\frac{\partial y^*}{\partial x}+1+\frac{1}{r^2}\left(\frac{\partial y^*}{\partial\theta}\right)^2}}, \qquad (15)$$

where $\vec{e}_1$, $\vec{e}_2$, $\vec{e}_3$ are unit vectors in the x, y, θ directions respectively. Considering a vector

$$\tau_1 = X\vec{e}_1 + Y\vec{e}_2 + Z\vec{e}_3 \qquad (16)$$

lying in the tangent plane, then, assuming (without loss of generality) Z = 0, X = 1, the perpendicularity condition gives

$$Y=\frac{1}{1\pm(y/R)}\frac{\partial y^*}{\partial x}$$

Card 5/8

The flow of a hypersonic stream ...

and hence

$$\tau_2 = n \times \tau_1 = \frac{\frac{1}{1 \pm (y/R)} \frac{\partial y^*}{\partial x} \frac{\partial y^*}{\partial \theta} \vec{e}_1 - \frac{1}{r} \frac{\partial y^*}{\partial \theta} \vec{e}_2 - \left\{ \frac{1}{[1 \pm (y/R)]^2} \left(\frac{\partial y^*}{\partial x} \right)^2 + 1 \right\} \vec{e}_3}{|\operatorname{grad} [y - y^*(x, 0)]|}. \quad (17)$$

Hence it follows that

$$\left.\begin{aligned} \bar{u} &= U (\cos \alpha \cos \delta^* + \sin \alpha \sin \delta^* \cos \theta^*); \\ \bar{v} &= -U (\cos \alpha \sin \delta^* - \sin \alpha \cos \delta^* \cos \theta^*); \\ \bar{w} &= -U \sin \alpha \sin \theta^*. \end{aligned}\right\} \quad (18)$$

[Abstractor's note: The significance of $^-$ and * are not explained]. For high Mach numbers, the small parameter $\varepsilon = (\gamma - 1)/(\gamma + 1)$ may be used, leading to the expansion in series

$$\left.\begin{aligned} u &= u_0 + \varepsilon u_1 + \ldots; \\ v &= \varepsilon v_0 + \varepsilon^2 v_1 + \ldots; \\ w &= w_0 + \varepsilon w_1 + \ldots; \\ p &= p_0 + \varepsilon p_1 + \ldots; \end{aligned}\right\} \quad (19)$$

Card 6/8

The flow of a hypersonic stream ...

$$\left.\begin{aligned} \rho &= \frac{\rho_0}{\varepsilon} + \rho_1 + \ldots; \\ y &= \varepsilon y_0 + \varepsilon^2 y_1 + \ldots; \\ \theta &= \theta_0 + \varepsilon\theta_1 + \ldots. \end{aligned}\right\} \qquad (19)$$

Hence from (12) and the boundary conditions on the shock-wave

$$\left.\begin{aligned} w_0 &= \frac{\bar{r}}{r}\bar{w}_0'; \\ u_0 &= \left\{(\bar{u}_0')^2 + \left[1 - \left(\frac{\bar{r}}{r}\right)^2\right](\bar{w}_0')^2\right\}^{1/2}; \\ \frac{p_0}{\rho_0} &= (\bar{v}_0')^2\left[1 + \frac{2\bar{a}^2}{(\gamma-1)(\bar{v}_0')^2}\right], \end{aligned}\right\} \qquad (23)$$

where the bar indicates that the corresponding value occurs on the shockwave at the intersection ψ = const, φ = const. Hence, by integration θ_0, p_0 and y_0 may be evaluated. There are two worked out examples to illustrate the method. There are 2 figures and 5 refe-

Card 7/8

The flow of a hypersonic stream ...

rences: 3 Soviet-bloc and 2 non-Soviet-bloc. The references to the English-language publications read as follows: W. Chester, Supersonic Flow past a Bluff Body with a Detached Shock, Journal of Fluid Mechanics, v. I, 1956; N.C. Freeman, On the Theory of Hypersonic Flow Past Plane and Axially Symmetric Bluff Bodies, Journal of Fluid Mechanics, v. I, 1956.

Card 8/8

X

L 20235-65 EWT(1)/EWP(m)/EWA(d)/FCS(k)/EWA(1) Pd-1 AEDC(a)/
ASD(f)-3/ASD(p)-3/AFETR/AFTCA
ACCESSION NR: AP5002587 S/0179/64/000/005/0020/0024

AUTHOR: Zapryanov, Z. D.(Moscow); Minostsev, V. B.(Moscow) 11 B

TITLE: Method for calculating a three-dimensional supersonic gas flow over bodies

SOURCE: AN SSSR. Izvestiya, Mekhanika i mashinostroyeniye, no. 5, 1964, 20-24

TOPIC TAGS: supersonic flow, three dimensional flow, method of characteristic, supersonic flow region, flow over sphere

ABSTRACT: A difference scheme is presented which uses the method of characteristics for calculating the supersonic region of two- and three-dimensional ideal gas flows over axisymmetrical bodies of various shapes defined by analytical expressions of the form r=f(z) and z=f(x,y), respectively. This scheme makes use of a much simpler logic for programming and needs a substantially smaller amount of computer memory and lower computer speed than the ordinary method of characteristics. Data from numerical computations carried out according to this scheme are given in graphical form for flows

Card 1/2

L 20235-65
ACCESSION NR: AP5002587

cver a sphere and over a body whose contour is formed by a circle and cubic parabola, at an angle of attack $\alpha=5^{\circ}$ and M=20. A comparison of the results with those obtained previously by the method of nets shows a maximum discrepancy of the order of 1%. Orig. art. has: 7 figures and 6 formulas.

ASSOCIATION: none

SUBMITTED: 15Jul64 ENCL: 00 SUB CODE: ME

NO REF SOV: 007 OTHER: 003 ATD PRESS: 3163

Card 2/2

MINOS'YAN, A.; SAGAYDAK, N.

New meat products. Mias.ind.SSSR 30 no.2:19 '59.
(MIRA 13:4)

1. Dnepropetrovskiy myasokombinat.
(Dnepropetrovsk--Packing-house products)

Minosyan, I.

SINEL'NIKOV, N.; GOL'BETS, M.; PICHKOV, K.; DRAUSAL', A.; NEKRASOV, V.
SKRINNIKOV, Yu.; POGOSTKIN, S.; GARAYEV, V.; SMIRNOV, V.;
MINOSYAN, I.

Useful details. Za rul. 15 no.5:insert p.12-14 My '57. (MIRA 10:6)
(Automobiles)

AVAKYAN, V.A.; ANTONYAN, A.S.; MINOSYAN, R.A.

Results of observations on patients having had typhoid fever and bacterial carriers at the Sumgait Chemical Plant (1954—1964). Zhur. mikrobiol., epid. i immun. 42 no.11:135-136 N '65. (MIRA 18:12)

1. Mediko-sanitarnaya chast' Sumgaitskogo khimicheskogo zavoda, Azerbaydzhanskaya SSR. Submitted March 9, 1965.

MINOSYAN, V.D.

Reliable method of protecting platinum thermocouples. Stek. i ker. 20 no.9:38 S '63. (MIRA 17:6)

MINOV, D. K.

PA 9T104

USSR/Drives, Mechanical
Mechanics, Applied

Apr 1947

"The Part Played by the Slipping of Wheels in Obtaining Available Traction Effort and the Structure of the Adhesion Factor in Electric Traction," D. K. Minov, 26 pp

"Izv Ak Nauk Tekh Nauk" No 4 p.445-70

Graphs showing time, velocity, force, load, etc., relationships. Theoretical study with mechanical diagrams and mathematical statement of problem.

9T104

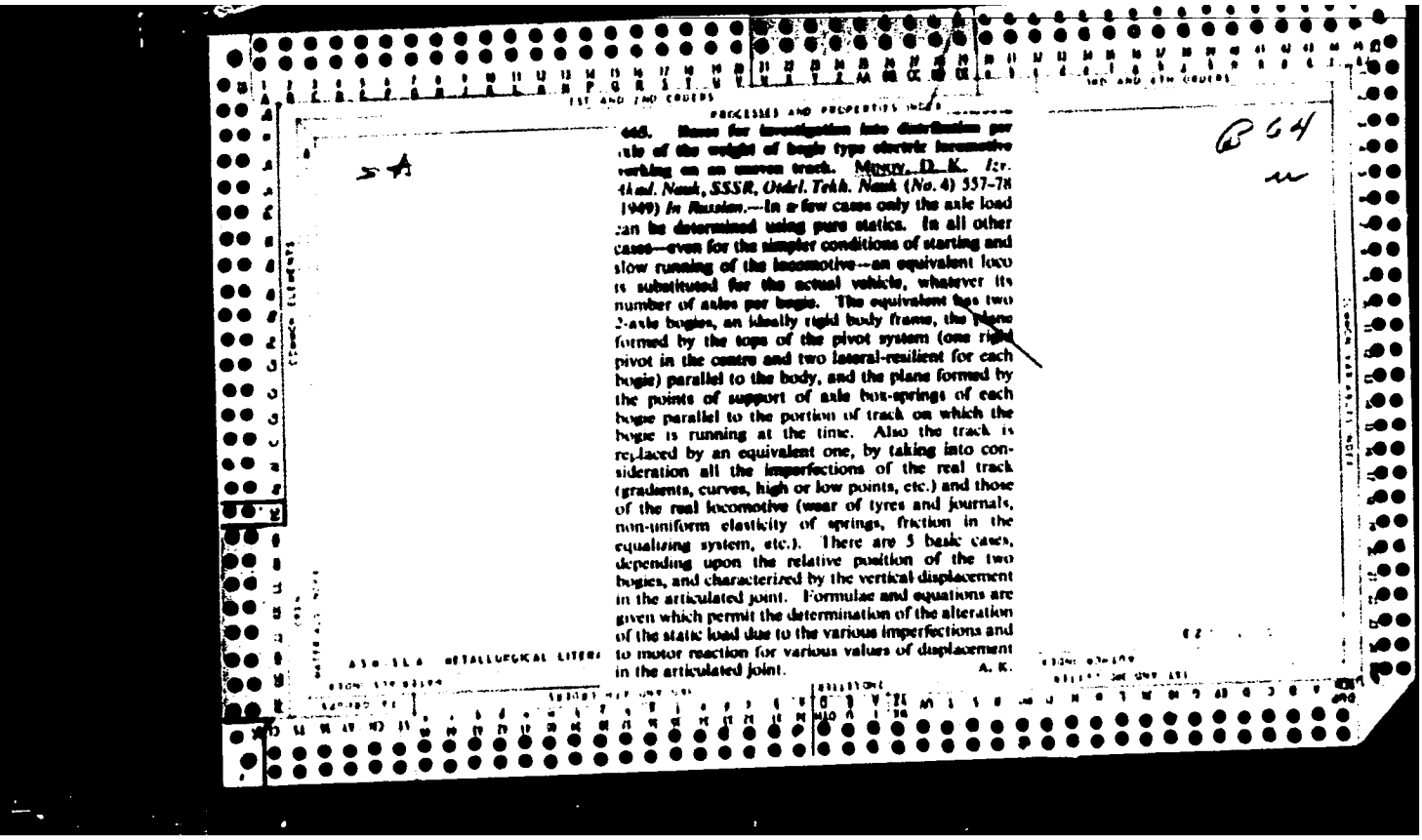
C2d.R
D4.R
C2q.R
E3.R

MIKOV, D. K.

In 1939 defended his thesis "Raschety nagruzok osey telezhechnykh elektrovozov s ploskimi pyatami" for degree of Doktor tekhnicheskikh nauk at Moskovskiy energeticheskiy institut imeni Molotova.

Source: Elektrichestvo, 1947, No. 12, p. 59

P-3[illegible]

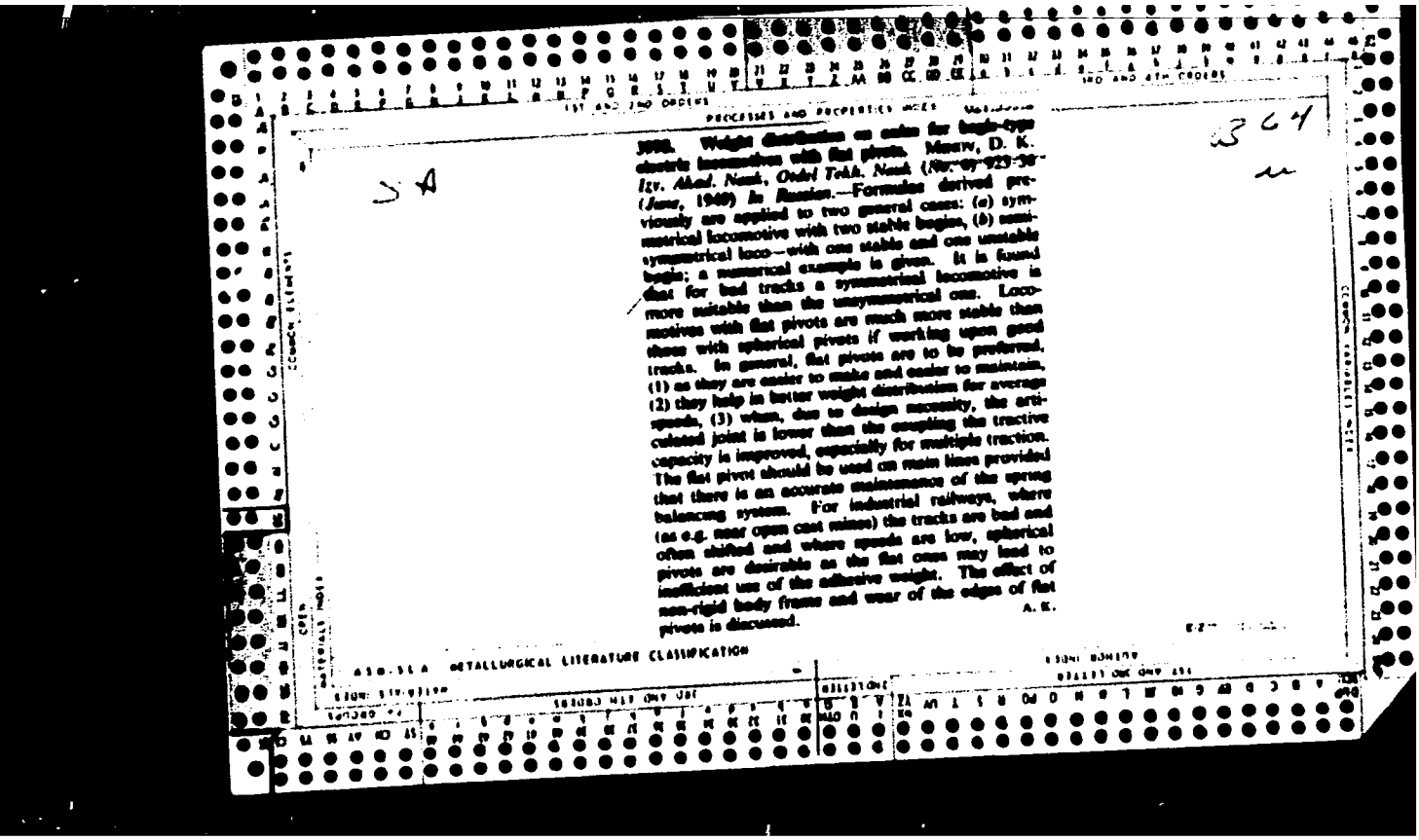


665. Bases for investigation into distribution per axle of the weight of bogie type electric locomotive working on an uneven track. Mikov, D. K. *Izv. Akad. Nauk, SSSR, Otdel. Tekh. Nauk* (*No.* 4) 557-78 1949) *In Russian.*—In a few cases only the axle load can be determined using pure statics. In all other cases—even for the simpler conditions of starting and slow running of the locomotive—an equivalent loco is substituted for the actual vehicle, whatever its number of axles per bogie. The equivalent has two 2-axle bogies, an ideally rigid body frame, the plane formed by the tops of the pivot system (one right pivot in the centre and two lateral-resilient for each bogie) parallel to the body, and the plane formed by the points of support of axle box-springs of each bogie parallel to the portion of track on which the bogie is running at the time. Also the track is replaced by an equivalent one, by taking into consideration all the imperfections of the real track (gradients, curves, high or low points, etc.) and those of the real locomotive (wear of tyres and journals, non-uniform elasticity of springs, friction in the equalizing system, etc.). There are 5 basic cases, depending upon the relative position of the two bogies, and characterized by the vertical displacement in the articulated joint. Formulae and equations are given which permit the determination of the alteration of the static load due to the various imperfections and to motor reaction for various values of displacement in the articulated joint. A. K.

MINOV, D. K.

20043 MINOV, D. K. Elektricheskoye sparivaniye osey pri elektricheskoy tyage. Elektrichestvo, 1949, No. 6, s. 14-23. — Bibliogr: 7 nazv.

SO: LETOPIS ZHURNAL STATEY, Vol. 27, Moskva, 1949.



3998. Weight distribution on axles for high-type electric locomotives with flat pivots. Mamaev, D. K. *Izv. Akad. Nauk, Otdel Tekh. Nauk* (No. 09-929-38-June, 1949) *In Russian.*—Formulas derived previously are applied to two general cases: (a) symmetrical locomotive with two stable bogies, (b) semi-symmetrical loco—with one stable and one unstable bogie; a numerical example is given. It is found that for bad tracks a symmetrical locomotive is more suitable than the unsymmetrical one. Locomotives with flat pivots are much more stable than those with spherical pivots if working upon good tracks. In general, flat pivots are to be preferred, (1) as they are easier to make and easier to maintain, (2) they help in better weight distribution for average speeds, (3) when, due to design necessity, the articulated joint is lower than the coupling the tractive capacity is improved, especially for multiple traction. The flat pivot should be used on main lines provided that there is an accurate maintenance of the spring balancing system. For industrial railways, where (as e.g. near open cast mines) the tracks are bad and often shifted and where speeds are low, spherical pivots are desirable as the flat ones may lead to insufficient use of the adhesive weight. The effect of non-rigid body frame and wear of the edges of flat pivots is discussed. A. K.

USSR/Electricity - Traction, Electric "Dinamo" Plant — Apr 51

178T58

"Development of Electric Traction in the USSR (Memorable Dates)," Prof D. K. Minov, Dr Tech Sci, Moscow Power Eng Inst imeni Molotov

"Elektrichestvo" No 4, pp 67-74

Lists important accomplishments, 1837 - 1950. Name of "Dinamo" Plant imeni Kirov figures prominently throughout. Two 1950 accomplishments were opening of Kursk Sta--Krymskaya Square line (1st sec of the Great Ring) of the Moscow subway and production by Riga Car Plant and "Dinamo"

178T58

USSR/Electricity - Traction, Electric (Contd) — Apr 51

Plant with tech help of Moscow Power Eng Inst of new trolley car with automatic control of starting and stopping using compd motors.

178T58

MINOV, D. K.

Minov, D.K.

112-3-5942

Translation from: Referativnyy Zhurnal, Elektrotekhnika, 1957, Nr 3, pp. 126-127 (USSR)

AUTHOR: Minov, D.K., Denisov, P.K.

TITLE: Technical and Economic Prerequisites for a New Electrification System of Railroads in the USSR (Tekhniko-ekonomicheskiye predposylki novoy sistemy elektrifikatsii zheleznykh dorog v SSSR)

PERIODICAL: In the sbornik: Novyye vidy tyagi na transporte, Moskva, AN SSSR, 1956, pp. 8-19

ABSTRACT: The characteristic features of electrical traction systems employing 3-kv direct current and single-phase standard-frequency current are presented. Even with conversion of all 3-kv substations to automatic and remote control operation and with a greater density of substations, the cross section of the contact wire is not reduced sufficiently if powerful electric locomotives are used. An increase in d-c voltage in the contact wire to 15-20 kv and transformation to three-phase or

Card 1/3

Technical and Economic Prerequisites for a New Electrification System of Railroads in the USSR

direct low-voltage current in the locomotives for feeding the traction motors requires complex devices. With the application of a-c, the value of the voltage in the contact network may be admitted within the limits of 22 to 27 kv, and for newly-built railroads - up to 35 kv, and this in accordance with specifications for the clearance of approach of the current-carrying portions to existing permanent structures. The results of comparing the two systems on the basis of capital expenditures and operating expenses are presented; the cost of electrical equipment for the single-phase system is less than that of the 3-kv direct-current system and the difference increases with greater power ratings of electric locomotives. Table 1 lists the capital expenditures in % in terms of freight traffic of 20 x 10^6 and 40 x 10^6 kilometer-tons per kilometer for a double track line.

Technical and Economic Prerequisites for a New Electrification System of Railroads in the USSR

112-3-5942

Capital expenditures for the direct-current system with freight traffic of 20 x 10^6 kilometer-tons per kilometer are taken as 100%. This table also gives electrical power consumption for both systems in the case of a double-track line. An equal number of electric locomotives was assumed in the calculations, although single-phase locomotives possess greater coupling coefficients and average speeds than d-c locomotives, with the result that fewer electric locomotives of the first type are required than of the second type of equal capacity. Table 2 lists preliminary estimates based on technical and economic factors (such as number of substations, amount of copper required for the contact network, capital expenditures in millions of rubles, etc.) involved in the electrification of a 1,850 km long railroad for the two distribution systems being compared. In calculations dealing with single-phase current, locomotives with electronic rectifiers were assumed.

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